Monetary Policy Report

February 2023

SVERIGES RIKSBANK

Rectification 23 February 2023. Page 15 corrected. The word *and* added for clarification to match Swedish text.

Rectification 13 February 2023. Forecast table, table 7 corrected.

Rectification 9 February 2023. Forecast table, table 1 corrected.

Monetary Policy Report

Regularly or upon request, the Riksbank shall submit an account of monetary policy operations to the Riksdag's Committee on Finance (Chapter 11, Section 1, Sveriges Riksbank Act [2022:1568]). These accounts are presented both in specific material for assessing monetary policy and in the Monetary Policy Reports.

The Riksbank's Monetary Policy Report is published five times a year. The purpose of the report is to summarise the basis for the monetary policy decisions and the assessments made by the Executive Board of the Riksbank. The report describes the deliberations made by the Executive Board when deciding on 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 Executive Board currently considers to be well-balanced.

Through the Monetary Policy Reports, the Riksbank also informs the general public about monetary policy, which makes it easier for external parties to follow, understand and evaluate the Riksbank's actions.

The Executive Board made a decision on the Monetary Policy Report on 8 February 2023. The report can 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 – The Riksbank's strategy" 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 – The Riksbank's strategy

- According to the Sveriges Riksbank Act, the overriding objective of monetary policy is to maintain permanently low and stable inflation. The Riksbank has defined the objective as a target of 2 per cent for the annual change in the consumer price index with a fixed interest rate (the CPIF). The inflation target should function as a benchmark for price- and wage-setting in the economy.
- Without neglecting the inflation target, the Riksbank shall moreover contribute to a balanced development of production and employment. The Riksbank thus conducts a policy of flexible inflation targeting. In connection with each monetary policy decision, the Executive Board assesses which monetary policy is well-balanced. If inflation deviates from the inflation target, it is normally a question of finding a balance between how rapidly it shall be brought back to target and the effects on real economic developments.
- It is neither possible nor desirable to conduct a monetary policy that always keeps inflation at exactly 2 per cent. Changes occur constantly in the economy that make inflation vary in a way that cannot be predicted with sufficient precision, or counteracted in the short term. The important thing is that households and companies have confidence in the target. Prolonged deviations from the target risk affecting expectations of the normal level of inflation in the economy.
- As it takes time for monetary policy to impact fully on inflation and the real economy, monetary policy is guided by economic forecasts. There is no general answer to the question of how quickly the Riksbank aims to bring inflation back to 2 per cent if it deviates from the target. Too rapid a return may in some situations have very negative effects on production and employment, while too slow a return may weaken the credibility of the inflation target.
- The Riksbank can weigh risks linked to developments in the financial markets into its monetary policy decisions as long as confidence in the inflation target is clearly anchored, and expected and overall target achievement regarding inflation, production and employment is improved when viewed over a longer horizon. With regard to preventing an unbalanced development of asset prices and indebtedness, however, it is of prime importance that there is an efficient financial regulatory framework and effective supervision.
- The Riksbank's main monetary policy tool is the policy rate. When necessary, this can be supplemented with other measures, including purchases or sales of government securities, for example to ensure that monetary policy impacts effectively on the interest rates faced by households and companies. The Riksbank may buy and sell assets other than government securities if there are exceptional grounds. Such exceptional grounds may arise during times of financial turmoil or crisis, for example.
- The Riksbank strives for open and clear communication. This makes it easier for economic agents to make sound economic decisions and monetary policy will also be easier to evaluate. The Riksdag's Committee on Finance, the National Audit Office and the General Council of the Riksbank monitor and evaluate the conducted monetary policy in different ways within their respective remits.
- The Executive Board normally holds five monetary policy meetings a year. The monetary policy decision and Monetary Policy Report are presented together with a press release at 09.30 on the day following the monetary policy meeting. The Monetary Policy Report describes economic developments and justifies the monetary policy decision. The decision and press release make it clear how the individual Executive Board members voted and provide the main justification for any reservations entered. A press conference is held later the same day. Just under two weeks after each monetary policy meeting, minutes from the meeting are published, which set forth the reasoning of the different Executive Board members.

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High inflation creates problems in the economy. To bring down inflation and safeguard the inflation target, the Executive Board assesses that monetary policy needs to be tightened further. The Executive Board has therefore decided to raise the Riksbank's policy rate by 0.5 percentage points, to 3.0 per cent. The forecast for the policy rate indicates that it will probably be raised further during the spring. As complementary measures to the higher policy rate, the Executive Board has also decided to reduce the Riksbank's asset holdings at a more rapid pace, by selling government bonds and offering larger volumes of Riksbank Certificates in the weekly monetary policy operations.

Swedish inflation is very high. CPIF inflation rose to just over 10 per cent in December. Even disregarding the rapidly increasing energy prices, inflation was high and still rising. It is important for confidence in the inflation target that inflation falls back clearly this year and there are many indications that it will do so. But it is uncertain whether inflation will fall sufficiently quickly and far enough, not least given the fact that underlying inflation is still rising. Moreover, if the krona continues to be weak, it will be considerably more difficult for the Riksbank to return inflation to the target more permanently.

Although a tighter monetary policy means that economic activity will weaken further in the near term, achieving low and stable inflation within a reasonable period of time is a prerequisite for good growth in the Swedish economy. If inflation is persistently high, the negative consequences for Swedish growth and the labour market will be much greater in the long run. Tightening monetary policy more now reduces the risk of even more serious problems with inflation and greater monetary policy tightening further ahead, with more widespread negative consequences for the Swedish economy.

1 Tighter monetary policy for low and stable inflation

Swedish inflation is very high. CPIF inflation rose to just over 10 per cent in December. Even disregarding the rapidly increasing energy prices, inflation was high and still rising. Other underlying measures of inflation have also continued to rise. It is important for confidence in the inflation target that inflation falls back clearly this year and there are many indications that it will do so. However, it is uncertain whether inflation will fall sufficiently quickly and far enough, not least given the fact that underlying inflation is still rising. Moreover, if the krona continues to be weak, it will be considerably more difficult for the Riksbank to return inflation to the target more permanently.

To bring down inflation and safeguard the inflation target, the Executive Board assesses that monetary policy needs to be tightened further. The Executive Board has therefore decided to raise the Riksbank's policy rate by 0.5 percentage points to 3.0 per cent. The forecast for the policy rate indicates that it will probably be raised further during the spring. As complementary measures to the higher policy rate, the Executive Board has also decided to reduce the Riksbank's asset holdings at a more rapid pace, by selling government bonds and offering larger volumes of Riksbank Certificates in the weekly monetary policy operations.

Tightening monetary policy more now reduces the risk of even more serious problems with inflation and greater monetary policy tightening further ahead, which would have comprehensive negative consequences for the Swedish economy.

1.1 Slowdown in global economic activity this year

Interest rates rising and inflation falling

During 2021 and 2022, global inflation has risen to very high levels. The upturn in prices is broad and follows from supply not keeping pace with the strong recovery in demand in the wake of the pandemic. The upturn in inflation has been further reinforced by Russia's invasion of Ukraine, which has created uncertainty over the energy supply in Europe and explains the periodically extreme upturn in energy prices.

A relatively warm winter, energy savings and well-filled stocks of natural gas have caused European prices for both natural gas and electricity to fall rapidly since the end of last year. Expectations of these prices have also fallen considerably according to forward pricing. The price fall on energy commodities is assessed to contribute to the rate of inflation in Europe falling significantly this year. In the United States, inflation began to decline already last year, and the downturn is expected to continue.

Last year, central banks around the world raised their policy rates rapidly to bring down the very high inflation. In the euro area, as in Sweden, underlying inflation remains high and the European Central Bank, ECB, has clearly signalled that it will continue tightening its monetary policy through further increases in the policy rate. Several other central banks are stating that they are approaching a level for their policy rate where it may be appropriate to proceed more slowly or to wait before making further increases. The global economy has so far proved to be relatively resilient to rising prices and interest rates. Although the strong demand slowed down towards the end of last year, labour markets have in many areas continued to develop strongly with historically low unemployment figures. However, forward-looking indicators point to a slowdown during 2023.

The financial conditions have become much tighter both in Sweden and abroad since the beginning of 2022, mainly because the central banks have raised their policy rates. Both market rates and lending rates to households and companies have risen, at the same time as housing and equity prices have fallen. Price movements on the financial markets have periodically been very significant. The uncertainty regarding the development of interest rates and economic activity has led to further yield rises on riskier assets as investors' demand for these assets has declined. More recent developments have meant a recovery in prices of risky assets, following the sharp downturns during much of last year.

In Sweden, lending rates charged to households and companies have risen slightly less than the policy rate. The average interest rate in the stock of outstanding loans has risen by just over half as much as interest rates on new loans. The policy rate hikes have a relatively rapid impact as many loans have short interest-rate fixation periods. However, the hikes have not yet had a full impact on households' and companies' total interest expenditure.

Activity in the Swedish economy is slowing down but inflation is still very high

As in other countries, activity in the Swedish economy was at a high level at the beginning of last year and employment rose to a record high. However, according to the National Accounts' first compilation of GDP for the fourth quarter, demand took a significant downturn and there are still clear signals of a continued downturn this year. This applies not least to households. The Economic Tendency Survey shows that households' views of both their own finances and the Swedish economy are more pessimistic than ever before and that confidence in both the retail trade and the service sector is very weak. Retail trade sales have also fallen since spring 2022.

Inflation continued to rise towards the end of last year and amounted to 10.2 per cent as an annual rate in December, measured as CPIF inflation. It was primarily electricity prices that were higher than expected in December. But even disregarding energy prices, inflation is still rising and far too high at 8.4 per cent. Several indicators point to inflation beginning to fall back at the beginning of the year. Energy prices fell rapidly at the end of December and forward pricing indicates that they will continue to fall in the near term. Several of the disruptions and imbalances that have been important explanations for the upturn in inflation have begun to wane, which has contributed to global freight prices and several commodity prices falling back. Monetary policy tightening around the world is dampening demand, reducing companies' possibilities to raise prices. The fact that inflation is expected to fall back in the coming months does not mean that prices will fall, however. On the other hand, they are expected to rise at a slower pace than they have done over the past year.

Long-term inflation expectations remain stable close to 2 per cent

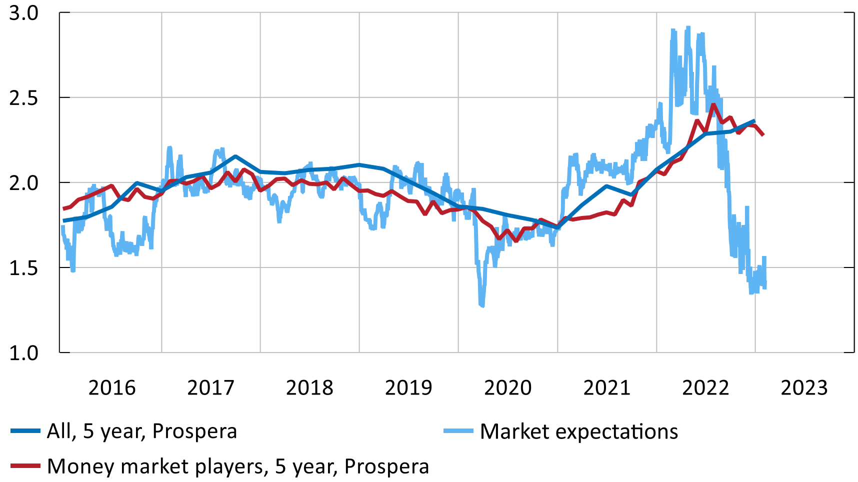
When economic agents have a collective picture of how prices will develop in the future, uncertainty is reduced and the conditions for favourable economic developments improve. The amount of monetary policy tightening the Riksbank needs to implement will depend among other things on how price-setters and wage negotiators expect future inflation to develop.

Inflation is expected to fall back over the year, but will nevertheless exceed the inflation target until the end of the 2023, according to the Riksbank's forecast. Various surveys of short-term inflation expectations indicated that this view is shared by other agents.

The long-term inflation expectations in surveys remain relatively stable and close to the inflation target of 2 per cent, albeit just above (see Figure 1). According to a market-based measure based on rates on nominal and inflation-linked government bonds, long-term inflation expectations fell sharply during the second half of last year. Market-specific circumstances have contributed to large movements in this measure since the beginning of 2022 and this should therefore be interpreted with caution.

Figure 1. Long-term inflation expectations

Per cent



Note. The market-based measure of inflation expectations refers to a 5-year period starting in 5 years' time, calculated on the basis of bond yields. Both market expectations and expectations from Prospera refer to the CPI.

Sources: Kantar Prospera and the Riksbank.

1.2 Tighter monetary policy to bring inflation to 2 per cent

The very rapid upturn in inflation last year has meant that CPIF inflation is now just over 10 per cent and thus far above the inflation target. The Riksbank underestimated the inflationary impulse in the wake of the pandemic and factors that were difficult to predict, such as Russia's invasion of Ukraine and the ensuing disruptions on the European energy markets, aggravated the situation further.

To bring down the high inflation, the Riksbank has raised its policy rate at every meeting since April 2022, in total from zero per cent to 2.5 per cent at the end of 2022. The increase has been rapid in relation to earlier phases of interest rate hikes and we are already seeing the effects on demand in the Swedish economy. As it takes time before monetary policy affects inflation, the effects will only become clear this year.

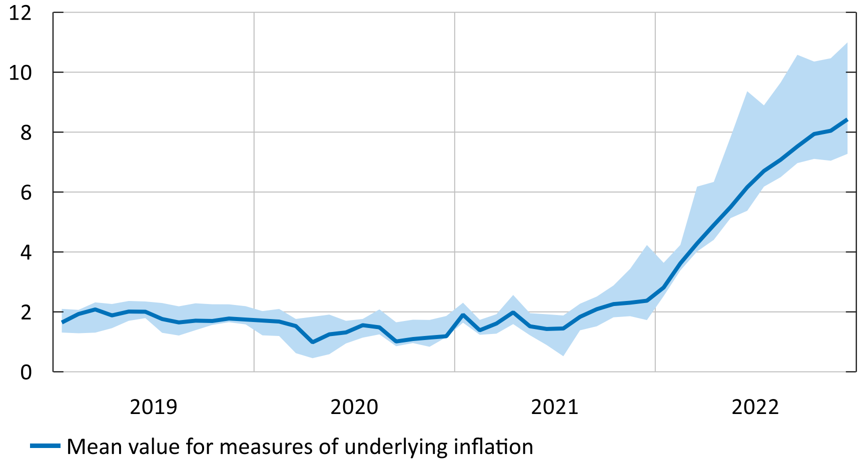
Monetary policy needs to be tightened further

A high rate of inflation creates problems in the economy and given the risk of inflation becoming entrenched, the Executive Board assesses that monetary policy needs to be tightened further. It is important that inflation shows a clear downturn this year and that it is not merely due to lower energy prices. There are many indications that this will happen. But it is uncertain whether inflation will fall sufficiently quickly and far enough. There is a risk that the recent rapid price rises will develop into a changed pricing behaviour and that inflation will then, even if it slows down somewhat, become entrenched at a level that is too high.

Although economic activity has begun to decline in the Swedish economy, the employment rate is still at a high level and underlying inflation, which increased unexpectedly much and fast last year, is far too high. Prices have risen on a broad front over the past year. The rate of price increase on food and other goods and services has been unusually high in relation to their historical averages. The broad upturn is confirmed by several measures of underlying inflation, and these have not yet shown any sign of a downward turn (see Figure 2). In addition, companies' pricing plans are also at elevated levels, according to the Economic Tendency Survey.

Figure 2. Different measures of underlying inflation

Annual percentage change



Note. The field shows the highest and lowest outcome among seven different measures of underlying inflation: CPIF excluding energy, UND24, Trim85, CPIF excluding energy and perishables, persistence-weighted inflation (CPIFPV), factors from principal component analysis (CPIFPC) and weighted mean inflation (Trim1).

Sources: Statistics Sweden and the Riksbank.

The weak krona makes monetary policy more difficult

The krona has shown a weakening trend over the past two years (see Figure 15). This development is in clear contrast to the Riksbank's forecasts for a gradually stronger krona. The weakening of the krona since the Riksbank's forecast in November is assessed to be partly due to market agents now expecting that the ECB will raise the policy rate faster, but also to other factors difficult to assess. The fact that the krona has been unexpectedly weak since November is contributing to a slightly higher underlying inflation in the coming months.

The krona exchange rate has not been a decisive factor behind the substantial rise in inflation over the past year, and it is not expected to be a decisive for the expected downturn in inflation this year. The fact that the krona has been weakening over a longer period of time increases the uncertainty regarding how companies take this into account when setting their prices and thereby how large the impact will be on inflation.[2] Moreover, if the krona continues to be weak, it will be considerably more difficult for the Riksbank to return inflation to the target more permanently. Nor is a lastingly undervalued krona beneficial for the Swedish economy in general. Tightening monetary policy more now will provide some support for the krona.

Policy rate raised by 0.50 percentage points to 3 per cent

The risks of tightening monetary policy too little in the near term are assessed to be greater than the risks of tightening too much. The Riksbank's tolerance for a continued high rate of inflation is thus low, not least in the light of unexpected unfavourable developments in inflation last year. A tighter monetary policy does mean that economic activity will weaken further, but attaining a low and stable rate of inflation within a reasonable period of time is a necessary condition for good development in the Swedish economy in the long run. If inflation is high for a long time, the negative consequences for Swedish growth and the labour market will be much greater. By raising the policy rate slightly more now, the risk of persistently high inflation is reduced and thus also the need for even greater monetary policy tightening further ahead.

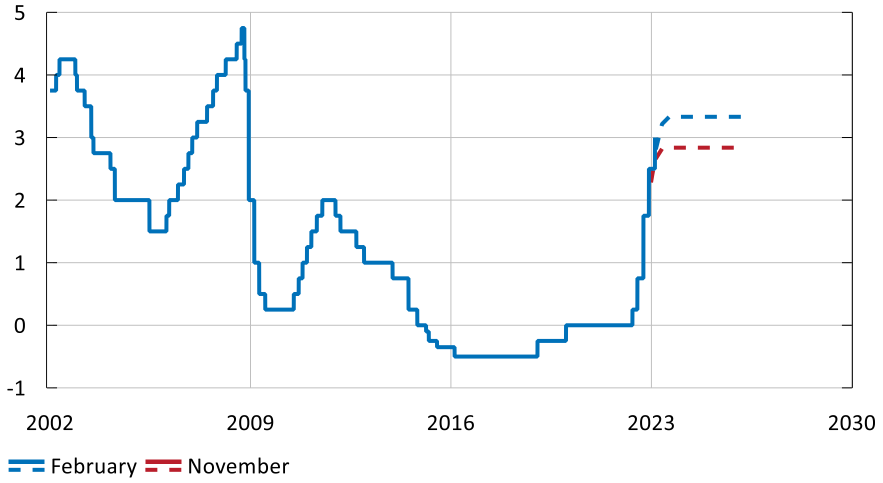
To stabilise inflation around the target within a reasonable time, the Executive Board has therefore decided to raise the Riksbank's policy rate by 0.5 percentage points to 3.0 per cent (see Figure 3).

The forecast for the policy rate has been revised up and indicates that the policy rate will probably be increased further in the spring. It is difficult to know exactly how rapid the impact of monetary policy will be and how large the effects on the real economy and inflation will be. This makes it difficult to know in advance how much the policy rate needs to be raised to bring inflation back to the target. Incoming data and their effect on the inflation outlook will thus continue to be important for the conduct of monetary policy.

[2] See the article “Why has the krona weakened this year?” in *Monetary Policy Report*, November 2022, Sveriges Riksbank.

Figure 3. The Riksbank's policy rate

Per cent



Note. Solid line refers to outcome, dashed line represents the Riksbank's forecast. Outcomes are daily rates and the forecasts refer to quarterly averages.

Source: The Riksbank.

Sales of government bonds and larger volumes of Riksbank Certificates will complement the policy rate hikes

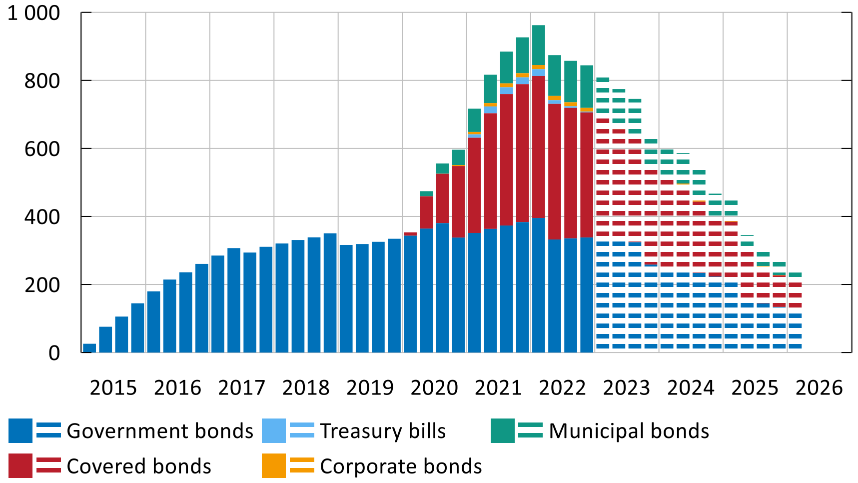
In addition to a higher policy rate, the Executive Board assesses it is also appropriate to reduce the Riksbank's holdings of government bonds through sales and offer larger issue volumes of Riksbank Certificates in the weekly monetary policy operations. These measures are a step towards normalisation of the Riksbank's balance sheet and operational framework now that support measures during the coronavirus pandemic have been phased out and monetary policy is being tightened by means of a higher policy rate.

The Riksbank's monetary policy motivated asset holdings have declined since the first quarter of 2022, as the total maturities have been greater than the purchases, and the Riksbank ceased purchasing assets entirely at the end of 2022. As the times to maturity of covered bonds, municipal bonds and corporate bonds are short, a large share of the Riksbank's holdings of these will be phased out through maturities during the forecast period (see Figure 4). The average time to maturity of government bonds is significantly longer.

The Executive Board has now decided to sell until further notice nominal and inflation-linked government bonds with longer times to maturity at a nominal value of SEK 3.5 billion every month, starting in April. If the sales of government bonds were to continue in the same way, the holdings of government bonds would decline at roughly the same pace as the holdings of non-government securities during the forecast period. As always, the Riksbank is carefully monitoring developments and will evaluate the effects of the sales regularly. The Riksbank may alter the volumes and terms if market conditions are unfavourable.

Figure 4. Riksbank's asset holdings

Nominal amounts, SEK billion



Note. The solid bars refer to executed and decided purchases, broken ones to forecasts for the holdings. The forecast is based on no further asset purchases being made after 2022. Thereafter the forecast includes the current decision to sell off government bonds, starting 1 April.

Source: The Riksbank.

The Riksbank issues Riksbank Certificates once a week to hold short-term market rates close to the policy rate (see Fact Box "The monetary policy operational framework and Riksbank Certificates" in this report). Since October 2019, the Riksbank has limited the offered issue volume to prevent interest-rate volatility in the overnight market when the Riksbank initiated the reform of the operational framework for monetary policy and during the turbulent economic conditions during the coronavirus pandemic. Going forward, the Riksbank will normally offer an issue volume equal to the entire banking system's liquidity position in relation to the Riksbank.

Both the sales of government bonds and the increased volume of Riksbank Certificates are expected to contribute to an increase in interest rates. However, the Executive Board assesses the impact on deposit and lending rates to households and non-financial companies to be limited. The effect on other market rates, on the other hand, is expected to be slightly greater, and both of these measures will increase the volume of safe and easily marketable assets in the Swedish market. This may make it easier for foreign agents to invest in Swedish assets and also improve the functionality of the financial markets. All in all, this can help strengthen the krona and improve the Riksbank's possibilities to reduce inflation.

The Riksbank is not planning to sell its holding of non-government bonds. As these bonds have a short time to maturity, the holdings will decline quickly through maturities. Moreover, the yield spreads on these bonds with regard to the expected policy rate have risen over the past year, unlike yield spreads on government securities that have been very low at times (see Figure 11). The Executive Board assesses that sales of the non-government bonds would entail risks and not contribute to an equally effective tightening of monetary policy. The policy rate is assessed to be a more appropriate tool if monetary policy needs to be tightened and interest rates in general raised.

Good prospects thanks to well-functioning institutional frameworks

In Sweden, there are good institutional conditions for avoiding prolonged high inflation in the form of our frameworks for monetary policy, fiscal policy and wage formation. When the economic policy makers and other agents act within the scope of these frameworks, there are good prospects for the Riksbank to be able to bring inflation back to target relatively rapidly and for the economy to otherwise develop favourably.

High inflation undermines households' purchasing power and makes it difficult for both households and companies to plan their finances. The situation entails a risk of short-term conflicts of interest between monetary policy and fiscal policy. The Riksbank's task is to bring inflation back to 2 per cent and safeguard confidence that any deviations from the target will not be too prolonged and affect agents' expectations of what is a normal level of inflation in the economy. Fiscal policy has other objectives and means and fiscal policy decisions on support measures can lead to monetary policy needing to be tightened even further. However, with good interaction between the policy areas, the short-term socioeconomic costs of bringing inflation back to the target can be kept down. The Riksbank assesses that fiscal policy during the forecast period is in line with normal fiscal policy, given the economic situation.

The higher prices, higher interest rates and weaker economic activity affect households and companies in different ways. However, fiscal policy has the possibility to aim support measures at groups that are particularly hard hit, without this needing to create any major conflict with the objectives of monetary policy. For example, targeted labour market measures can slow down the upturn in unemployment without having any significant effects on wages and prices.

Inflation expectations that are firmly anchored and well-functioning price- and wage-setting are of central importance for the Riksbank's capacity to bring inflation back to target. The high inflation and economic downturn provide a challenging environment for the ongoing wage bargaining rounds. However, parties have so far signalled that they are taking a long-term view and assume that inflation will soon be back on target.

Swedish economy cools down and inflation falls

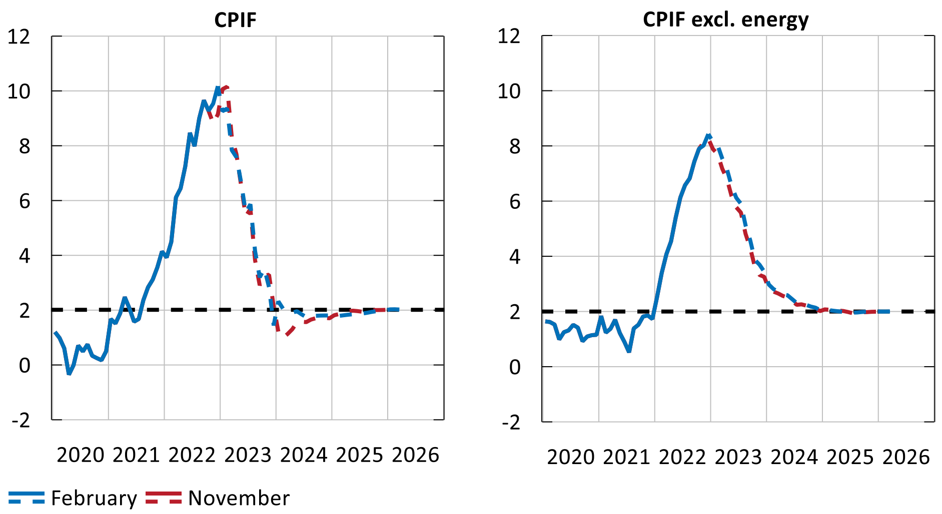
Although the policy rate is not particularly high in an historical perspective and in relation to other countries, it has been raised rapidly over the past year. The effects of monetary policy on the real economy and inflation occur with a certain time lag. Last year's rate hikes will therefore not make a clear impression on the inflation figures until this year. Many households and companies are continuing to face rapidly rising costs and demand is expected to slow down this year. With the monetary policy con-ducted, inflation is expected to fall back this year and to stabilise close to 2 per cent from 2024 (see Figure 5).

Over the coming year, economic activity will slow down both in Sweden and abroad. Weaker demand from abroad will reduce Swedish exports, at the same time as rising prices and interest rates will undermine households' purchasing power and lead to weaker consumption. Falling housing prices will lead to lower housing investment, which will reinforce the economic downturn. Companies' declining investment is also expected to contribute to the downturn. All in all, economic activity will slow down in 2023, weakening the labour market and leading to a lower employment rate (see Figure 6).

GDP will begin to rise again in 2024, when inflation is lower and households' purchasing power strengthens. Reduced uncertainty in the global economy, policy rates that are no longer being raised and a faster increase in real wages will contribute to demand increasing and GDP growing somewhat faster than the trend rate from 2025. However, resource utilisation will be low throughout the forecast period and unemployment is expected to amount to 8 per cent at the beginning of 2026.

Figure 5. The CPIF and the CPIF excluding energy

Annual percentage change

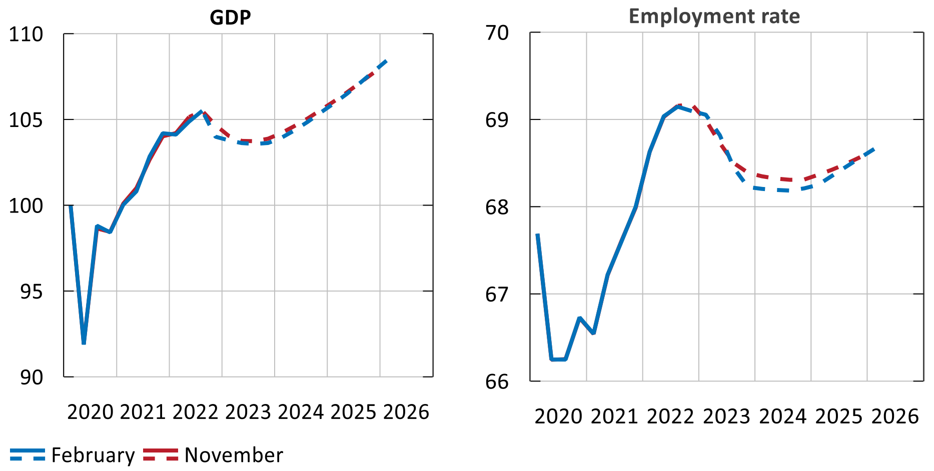


Note. Solid line refers to outcome, dashed line represents the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank.

Figure 6. GDP and the employment rate in Sweden

Index, 2019 Q4 = 100, seasonally adjusted data (left) and percentage of labour force, 15–74 years, seasonally adjusted data (right)



Note. Solid line refers to outcome, dashed line represents the Riksbank's forecast.

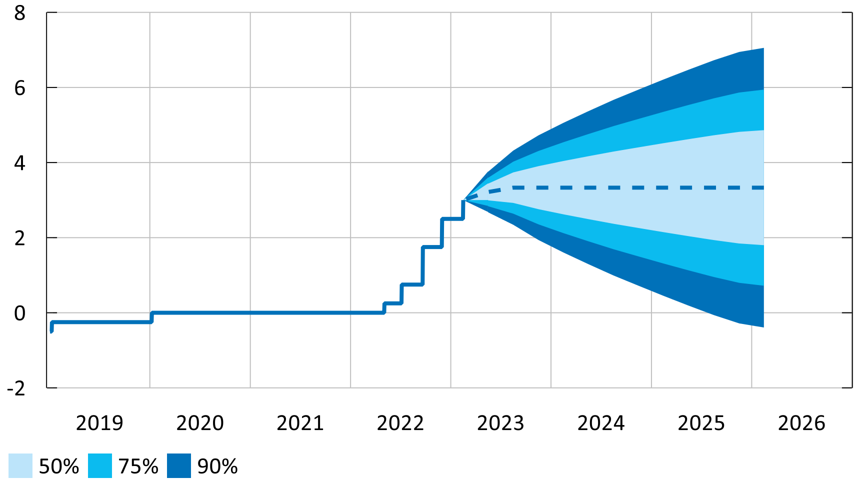
Sources: Statistics Sweden and the Riksbank.

1.3 Still considerable uncertainty

The Riksbank's forecast is that the policy rate will probably need to be raised somewhat further going forward. This is considered necessary to get inflation to fall back towards the target. There are several factors that make it difficult to determine how economic activity abroad and in Sweden will look. Ultimately, these factors can also affect Swedish inflation prospects and the Riksbank's monetary policy. The uncertainty regarding monetary policy is illustrated in Figure 7.

Figure 7. Policy rate with uncertainty band

Per cent



Note. The uncertainty bands are based on the Riksbank's historical forecasting errors and on risk premium-adjusted forward rates' forecasting errors for the period 1999 until the Riksbank began publishing forecasts for the policy rate in 2007. The uncertainty bands do not take into account the fact that there may be a lower bound for the policy rate. Outcomes are daily rates and the forecasts refer to quarterly averages.

Source: The Riksbank.

We are in a time of unusually severe geopolitical tension, which risks affecting the global economy, international trade and inflation. This applies primarily to Russia's invasion of Ukraine, but also to the risk of increased tension between the United States and China.

The development of the war in Ukraine – and its economic effects – is still very uncertain. The war contributes among other things to increasing volatility on the financial markets and hampering international trade. One effect of the war with direct bearing on inflation prospects is the disruptions to the energy markets in Europe, which resulted in sharply rising electricity prices last year. Food prices and delivery chains for goods have also been affected by the war. Even if the global prices of, for instance, natural gas and food have fallen quite a lot recently, developments going forward are very difficult to predict, and prices can be either higher or lower than the Riksbank's forecast. One reason for the considerable uncertainty over energy prices is that the systems for energy supply in the wake of the war have become less robust and thereby more sensitive to unexpected events, in the form of cold weather and operational disruptions to nuclear power stations. Fluctuations in energy prices can create unexpected variations in CPIF inflation going forward, via both direct and indirect effects.[3]

Since November, China has decided to open up large parts of its economy that were previously closed down as a result of the coronavirus pandemic. The Riksbank assesses that this will have some positive effect on growth abroad during the forecast period, for instance, with regard to euro area exports to China. However, it is difficult to predict these developments, and it cannot be ruled out that international growth

[3] See also the article "Alternative scenarios for inflation and monetary policy" in *Monetary Policy Report*, November 2022, Sveriges Riksbank.

will be stronger than in the Riksbank's forecast. Moreover, the total effects on inflation abroad are unclear: Reduced bottlenecks in global value chains tend to slow down inflation, while an increased demand for commodities from China is expected to have the opposite effect.

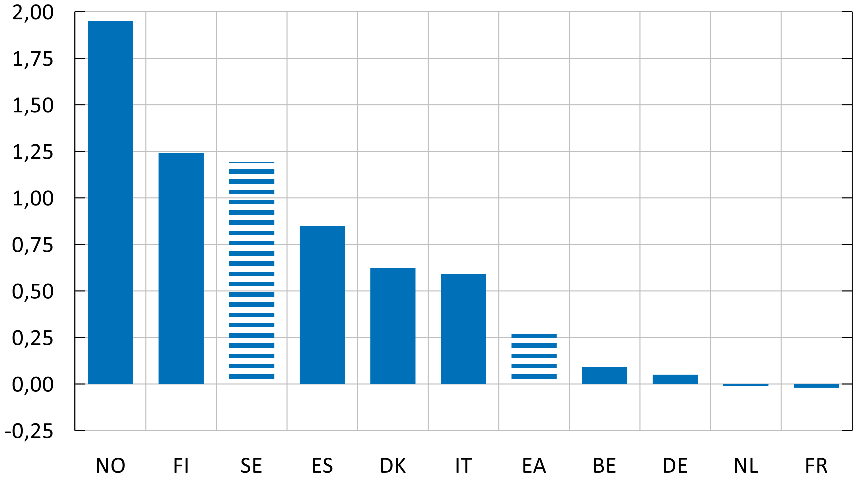
There are signs that inflation is about to slow down, and the prospects for a fall in inflation going forward look good. But it is still very uncertain how economic prospects abroad will be affected when the central banks raise their policy rates at roughly the same time, and moreover fairly quickly and rapidly. Demand could slow down more than expected, so that growth becomes lower than in the Riksbank's forecast. This can in turn mean that inflation will be lower than expected. As the rapid upturn in Swedish inflation was largely connected to rapid international price increases, a lower rate of inflation abroad than expected may also subdue inflation in Sweden by more than expected. So far, however, the real economy has withstood the interest rate increases well, at the same time as inflation is still very high. This could mean that more policy rate increases by central banks are needed than is reflected in the Riksbank's forecasts are needed to dampen inflation sufficiently.

In the Swedish economy, sensitivity to interest rates is higher than before, as a result of households' increased indebtedness and the short interest-rate fixation periods on their mortgages.[4] Even in an international perspective, is appears that sensitivity to interest rates is higher in Sweden than in many other economies. Figure 8 shows that households' average interest rates have so far risen relatively much in Sweden since the Riksbank and other central banks began to raise their policy rates. In addition, household indebtedness is higher in Sweden than in many other countries, which increases the impact on interest rate adjustments.

[4] See the article "Higher sensitivity to interest rates in the Swedish economy" in *Monetary Policy Report*, September 2022, Sveriges Riksbank.

Figure 8. Change in average lending rates charged to households since December 2021

Percentage points



Note. The change refers to the entire loan stock. EA refers to the euro area.

Source: Macrobond and Statistics Sweden.

However, despite the short interest-rate fixation periods, all of the Riksbank's rate increases last year have not yet had full impact on the mortgage rates charged to households.[5] As there is no up-to-date microdata on how households' savings are allocated, it is difficult to assess exactly how households will adapt their consumption to the rising interest rates. If the households with the highest debt are also those with the highest propensity to consume, the cash flow effects on consumption will be reinforced, so that it develops more weakly than in the Riksbank's forecast. There thus remains a risk that household demand may be dampened more than expected by the interest hikes implemented so far. This can reduce the need for further increases going forward.

At the same time, there are risks in the medium term that mean that underlying inflation can be lastingly high. This could mean that more interest rate hikes may be needed than are included in the Riksbank's forecast to bring inflation back on target.

One sector of the Swedish economy that has already been affected fairly substantially by the Riksbank's policy rate hikes is the housing market. Prices have fallen by around 15 per cent from the peak at the beginning of 2022. The Riksbank's forecast is that they will continue to fall over the coming year. But there is a risk that they will fall even more than is now being assumed. This could cause both housing investment and household consumption, and thereby also inflation, to be weaker than in the forecast.

The krona exchange rate comprises a further uncertainty factor. The krona has weakened substantially over the past year.[6] Going forward, the krona is expected to

[5] Chapter 2 contains a more detailed description of the impact of monetary policy on household mortgage rates.

[6] See the article "Why has the krona weakened this year?" in *Monetary Policy Report*, November 2022, Sveriges Riksbank.

strengthen, but there is always considerable uncertainty about exchange rate forecasts. Having said this, the krona exchange rate is not assessed to have been decisive in the substantial rise in inflation last year or in the expected fall in inflation during the forecast period. The size of the impact of the exchange rate on inflation will depend both on how much the krona rate changes and how lasting the change is.[7] Now that the krona has been weakening for a longer period of time, the risk of a greater impact increases. If the krona does not appreciate going forward, it may be more difficult to bring inflation down to target than it otherwise would have been.

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

FACT BOX – The monetary policy operational framework and Riksbank Certificates

The Riksbank's operational framework for the implementation of monetary policy steers short-term market rates. The instruments in the Riksbank's operational framework for the implementation of monetary policy consist of standing facilities and market operations. Monetary policy counterparties can either deposit or borrow liquidity overnight in the standing facilities to manage temporary surpluses or deficits in liquidity. The interest received by the monetary policy counterparties for deposits forms the floor of the operational framework for monetary policy's so-called interest corridor and the interest they pay for borrowing forms the roof.

By determining the interest rate on deposits and borrowing with the Riksbank, the Riksbank steers the overnight rate, which in turn effects the pricing of substitutes for these investments on the market. The primary objective of the operational framework is to ensure short market rates are close to the Riksbank's policy rate. Changes in short market rates then transmit to other interest rates and ultimately affect economic developments in general.

Once a week the Riksbank issues Riksbank Certificates with a one-week maturity at an interest rate equivalent to the Riksbank's policy rate. This is a market operation which the Riksbank applies within the scope of the operational framework for monetary policy to hold short market rates close to the policy rate and balance the banking system's liquidity position in relation to the Riksbank on a daily basis.

Since October 2019, the Riksbank has limited the issue volume of Riksbank Certificates to prevent volatility in the interest on the overnight market, as the Riksbank initiated the reform of the operational framework for monetary policy. After that, the issue volume was limited further during the turbulent economic conditions resulting from the coronavirus pandemic.[8] As of May 2021, the Riksbank offers a volume equivalent to around half of the banking system's liquidity position in relation to the Riksbank. With effect from the issuance on 14 February, the Riksbank will offer an issue volume corresponding to the entire banking system's liquidity position in relation to the Riksbank, with the possibility of limiting the issue volume if necessary.

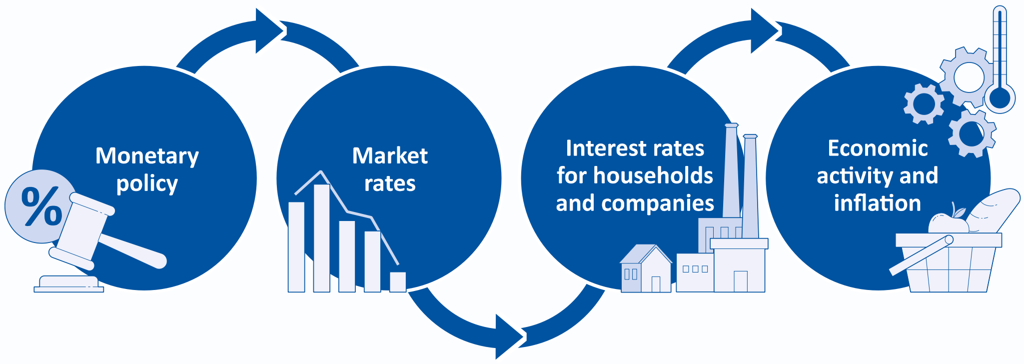
[8] See the article "The Riksbank's operational framework needs to be adjusted to new conditions" in *Monetary Policy Report*, June 2019, Sveriges Riksbank.

2 Rising interest rates for households and companies

The financial conditions both in Sweden and abroad have tightened since the start of 2022 because the central banks have raised their policy rates and have signalled further raises to bring inflation down. However, it remains difficult to say how inflation, interest rates and financial asset prices will develop in the period ahead. During 2022, the krona depreciated and yield spreads between more and less risky assets increased. The short interest rate fixation periods among households and companies in Sweden mean that increases in the policy rate have a relatively rapid impact on the economy. So far, about half of the total policy rate increase has been transmitted to household mortgage rates and the impact on companies' interest rates on bank loans has been even greater. On the whole, the transmission of the Riksbank's monetary policy is deemed to be functioning well.

Transmission – from monetary policy to inflation[9]

The policy rate has a direct effect on short-term market rates, such as the rates on interbank loans and treasury bills. However, expectations of the future policy rate also affect the development of longer-term market rates, such as the rates on government bonds, covered bonds and corporate bonds. The Riksbank's asset holdings affect both short- and long-term market rates. Some market rates affect the banks' funding costs and also, through that, the interest rates faced by households and companies. In turn, these interest rates affect consumption, investment and, ultimately, inflation.



[9] The fact box briefly describes how monetary policy affects inflation via the interest rates faced by households and companies. However, monetary policy also acts via other channels. One important such channel is the effect monetary policy has on inflation expectations, which, in turn, affect price- and wage-setting. Examples of other channels include the exchange rate and household wealth. For a more detailed description of the transmission mechanism, see: https://www.riksbank.se/sv/penningpolitik/vad-ar-penningpolitik/sa-paverkar-penningpolitiken-inflationen/.

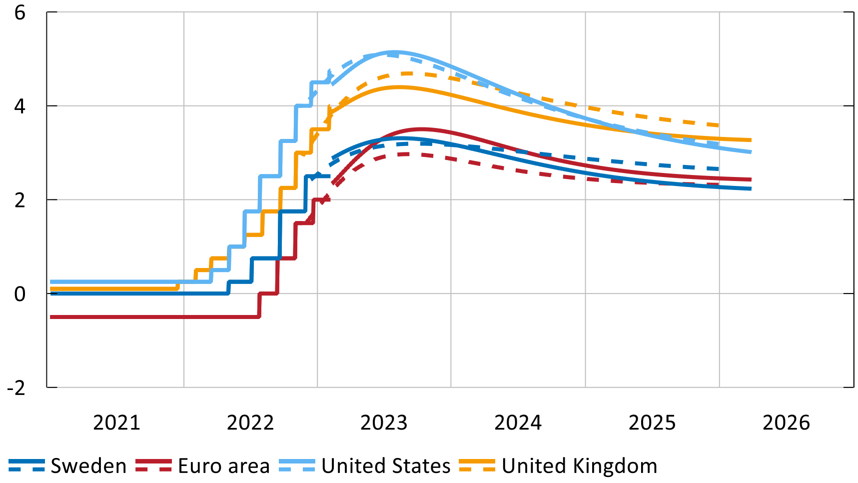
2.1 Continued great uncertainty on the financial markets

The central banks are continuing to tighten monetary policy

Like the Riksbank, many central banks have raised their policy rates rapidly over the last year (see Figure 9 and Table 1). In recent months, however, several central banks have implemented rate hikes at a slower pace. One reason for this is that their policy rates have already been raised to relatively high levels. According to market pricing, policy rates are expected to rise a bit more until mid-2023 but will fall again over the slightly longer term (see Figure 9).

Figure 9. Policy rates and policy rate expectations according to market pricing

Per cent



Note. The figure shows policy rates and market-based expectations of future policy rates. Solid lines represent expectations 2023-02-07. Dashed lines represent expectations immediately prior to the monetary policy meeting in November.

Sources: National central banks and Refinitiv.

Most central banks signal that the policy rate is the most important monetary policy tool. However, to cause market rates to rise further, several central banks have also reduced or entirely discontinued their asset purchases over the last year (see Table 1). The Bank of England is also selling its holdings of government bonds and corporate bonds.

Table 1. Monetary policy abroad

	Policy rate at the start of 2022	Current Policy rate	Expected policy rate by end of June 2023	Status of asset holdings
ECB	-0.50	2.50	3.3	Partly compensating for principal payments as of second quarter 2023
Federal Reserve	0–0.25	4.50–4.75	5.1	Partly compensating for principal payments
Bank of England	0.25	4.00	4.4	Initiated sales in autumn 2022
Norges Bank	0.50	2.75	2.9	Has not purchased any assets for monetary policy purposes
Bank of Canada	0.25	4.50	4.6	No compensatory purchases
The Riksbank	0	3.00	3.3	Initiating sales in April 2023

Note. Per cent. Expected policy rate according to market pricing, 07 February 2023.

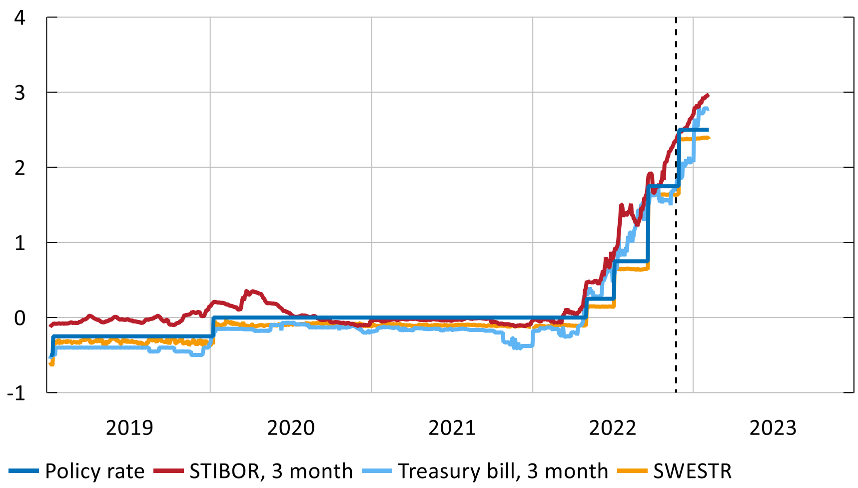
Sources: Bloomberg, national central banks and the Riksbank.

Continued rise in short-term market rates but a tempered upturn in government bond rates

The Riksbank's policy rate hikes, initiated in April 2022, have had an impact on short-term market rates (see Figure 10). Government bond yields have also risen clearly over the last year, both in Sweden and abroad (see Figure 11). The main reason for this is that market participants' policy rate expectations have gradually shifted upwards over the year.

Figure 10. The Riksbank's policy rate and short-term market rates

Per cent



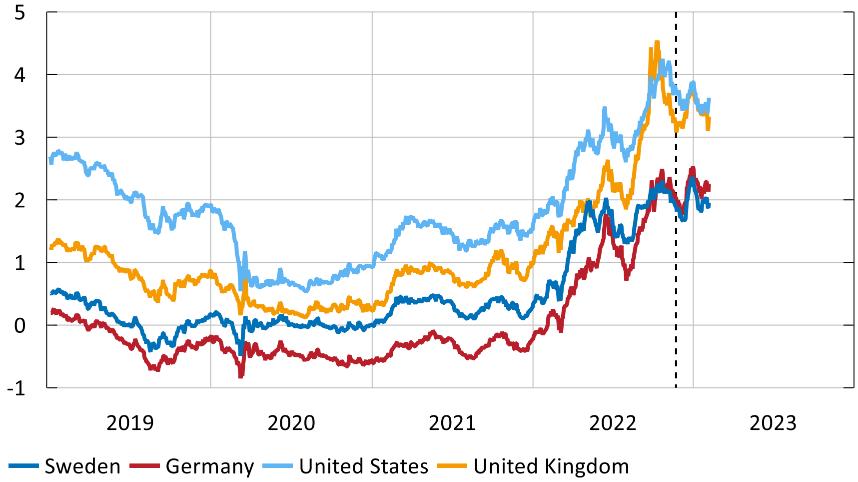
Note. SWESTR falls very sharply on the last banking day of each year, quotations that have been omitted from this figure. The dashed line marks the date of the monetary policy meeting in November.

Sources: Macrobond, Refinitiv and the Riksbank.

In recent months, however, the rise in government bond yields has slowed down and, in some countries, yields have even fallen slightly. One reason for this is that market participants' long-term expectations for policy rates have been approximately unchanged or have fallen slightly.

Figure 11. Yields on 10-year government bonds

Per cent



Note. Yields refer to zero coupon rates for Sweden, Germany and the United Kingdom, as well as benchmark rates for the United States. The dashed line marks the date of the monetary policy meeting in November.

Sources: Bank of England, Deutsche Bundesbank, Refinitiv, US Treasury and the Riksbank.

Yields on risky bonds have risen clearly over the last year

Over the last year, yields on risky bonds in Sweden have risen more than the expected policy rate, as measured using what are known as swap rates (see Figure 12 and the fact box "What is a swap rate?" in this report). However, this does not mean that the transmission of policy rate hikes is not working. Rather, it is common for yield spreads to increase when uncertainty is high and investors are turning to safe assets.[10]

It is primarily yield spreads on corporate bonds that have risen. One reason for this is that property companies make up a relatively large share of the Swedish corporate bond market. Many of these are heavily indebted and may therefore experience problems in the event of rising interest rates. Bond yields for property companies have increased a lot more than yields for companies in other sectors (see Figure 13). However, the spread is large between different property companies, which is mainly because some companies have a significantly lower debt-servicing ability than others.[11]

In recent months, however, the yield spreads on property companies' bonds have decreased (see Figure 13). The yield spreads on covered bonds and municipal bonds

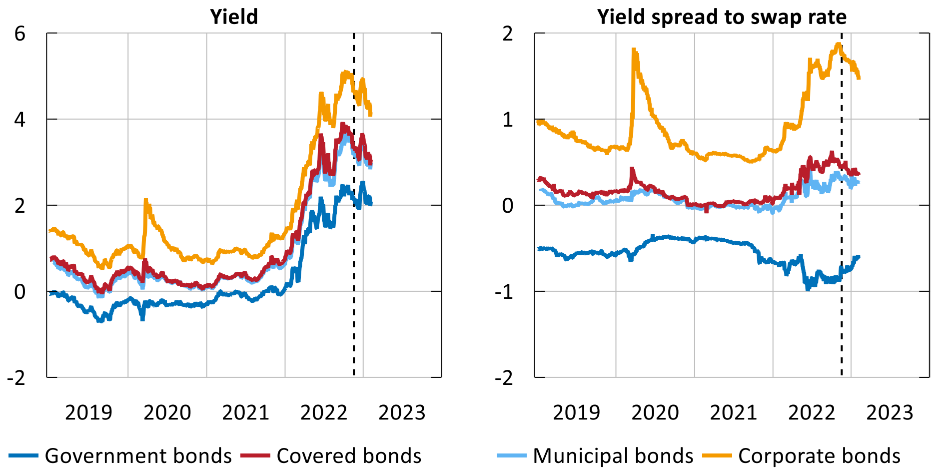
[10] Yields on covered bonds are important for the banks' funding costs and yields on corporate bonds are important end-rates for non-financial companies. The Riksbank therefore carefully follows the impact of policy rate rises on these yields.

[11] See *Financial Stability Report* 2022:2, Sveriges Riksbank.

have also decreased slightly (see Figure 12). This is in line with the development of equivalent yield spreads, for example in the United States and euro area.

Figure 12. Swedish yields for various types of bond, 5-year maturity

Per cent (left) and percentage points (right)

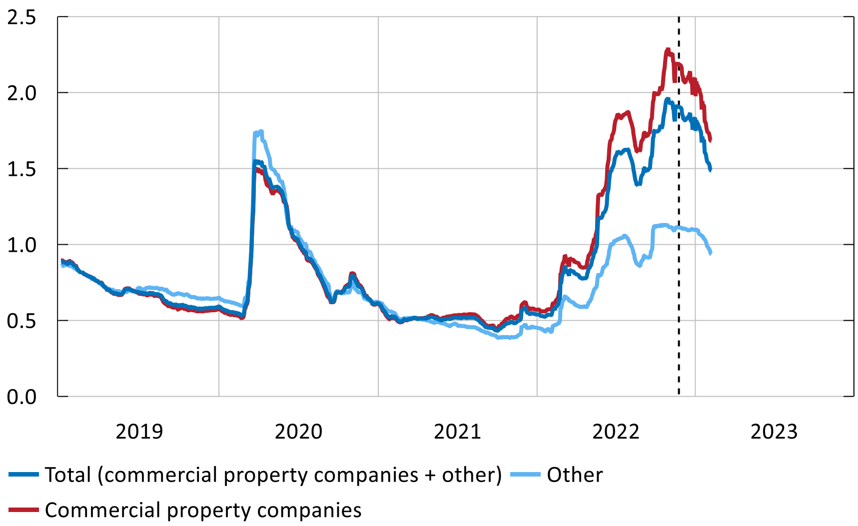


Note. Calculated zero coupon rate. Corporate bonds refer to bonds/companies with credit ratings corresponding to investment grade. Covered bonds refer to bonds issued by Stadshypotek, while municipal bonds are issued by Kommuninvest i Sverige AB. The dashed line marks the date of the monetary policy meeting in November.

Sources: Bloomberg, Macrobond, Refinitiv and the Riksbank.

Figure 13. Yield spreads against swap rates for bonds issued by Swedish companies

Percentage points



Note. Refers to average spreads between corporate bond yields and swap rates for bonds with varying maturities, issued in SEK by non-financial companies, with credit ratings corresponding to investment grade. The dashed line marks the date of the monetary policy meeting in November.

Source: Bloomberg.

FACT BOX – What is a swap rate?

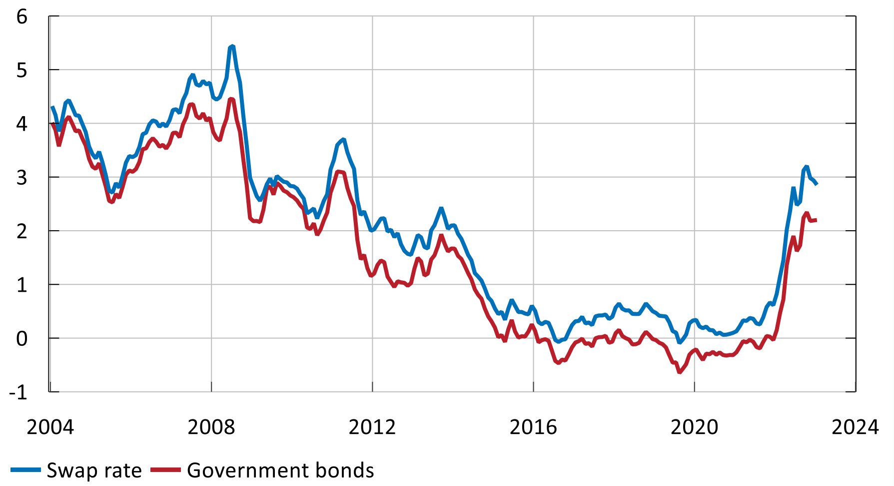
An interest-rate swap is a financial contract that makes it possible for two parties to exchange interest payments during a fixed period. One party pays an interbank rate (in Sweden, usually STIBOR with a 3-month maturity) to the other party, who, in turn, pays a fixed rate over the maturity of the contract. The fixed rate is determined when the contract is entered into. This rate is known as a swap rate. It reflects the market participants' expectations of what, in this case, the 3-month STIBOR will average over the duration of the contract. Interest rate swaps are primarily used by companies, banks and other participants to manage the risk of changes in short-term interest rates.

In times when the risks in the banking system are low, as has been the case in Sweden since the euro area debt in 2012, STIBOR is normally very close to the policy rate (see Figure 10). Swap rates can then be used to estimate market participants' expectation of the average policy rate in the period ahead. Swap rates thus also make good yard-sticks for calculating yield spreads between different bonds (see Figure 12).

It is also common to use government bond yields to estimate the expected policy rate, and the correspondence between swap rates and government bond yields is usually very good (see Figure 14). During the financial crisis (2007–2009) and the euro area debt crisis (2011–2012), risks increased in the banking sector, leading swap rates to rise more than government bond yields. Over the last year, the spreads between these yields have again increased. However, this is not connected to increased bank risk but rather the low supply of government bonds, which have contributed to government bond yields not rising to the same extent as swap rates (see Figure 12). At present, swap rates give a better picture than government bond yields of expectations of the policy rate.

Figure 14. Government bond yields and swap rate, 5-year

Per cent



Note. The government bond yield refers to the zero coupon rate.

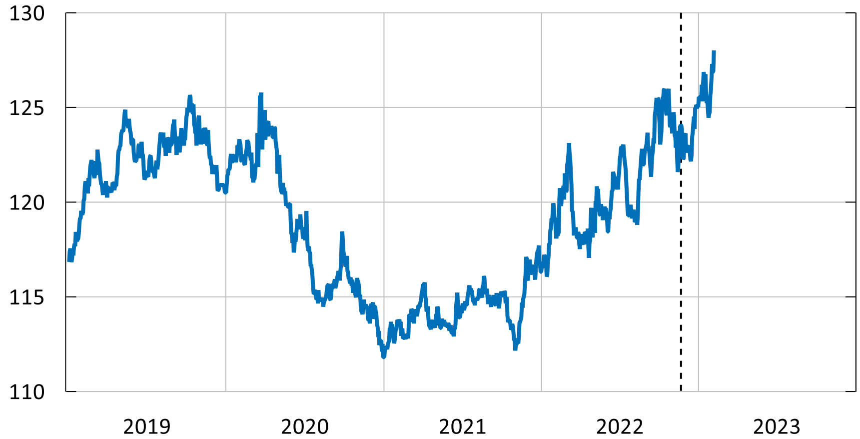
Sources: Macrobond and the Riksbank.

Weaker krona during 2022

Since the start of 2022, the krona has weakened by about 10 per cent, measured as the KIX (see Figure 15).[12] One reason for this is that uncertainty has been great among investors in the financial markets, in part due to Russia's invasion of Ukraine and uncertainty over the future development of inflation and economic activity. In an uncertain environment, the krona usually depreciates. Another reason is that market rates in several countries have risen more than in Sweden (see Table 1 and Figure 11). However, it is difficult to understand why the krona has weakened as much as it has.[13] Over the last year, the development of the krona exchange rate has been consistently weaker than in the Riksbank's forecasts.

Figure 15. Nominal exchange rate, KIX

Index, 18 November 1992 = 100



Note. The KIX (krona index) is a weighted average of exchange rates for currencies in 32 countries that are important for Sweden's international trade. Since 28 March 2022, the index has been calculated against 31 countries as the Russian rouble has been excluded from it. A higher value indicates a weaker exchange rate. The dashed line marks the date of the monetary policy meeting in November.

Source: The Riksbank.

Since the monetary policy meeting in November, expectations of the ECB's policy rates have shifted clearly upwards in the short term (see Figure 9), which has contributed to weakening the krona against the euro. At the same time, the krona has strengthened slightly against several other currencies, including the US dollar. Measured as the KIX, the krona has weakened by about 3 per cent overall since the monetary policy meeting in November, meaning that the krona exchange rate is weaker than forecast by the Riksbank (see Figure 41).

[12] See the article "Why has the krona weakened this year?" in *Monetary Policy Report*, November 2022, Sveriges Riksbank.

[13] It is also difficult to explain the krona depreciation over a longer time perspective. In one study commissioned by the Riksbank, the authors demonstrate that the krona depreciation between 2013 and 2021 cannot fully be explained by common scientific models for exchange rate analysis. See P. Bacchetta and P. Chikhani (2021), "On the weakness of the Swedish krona", *Economic Review*, 2021:1, Sveriges Riksbank.

2.2 Swedish households and companies are facing rising interest rates

The banks’ net interest income has increased over the last year

The interest rates offered by the banks for loans to households and companies are largely determined by the cost of funding loans. The banks mainly finance themselves through deposits from the general public and by issuing bonds, such as covered bonds, on the financial markets. As mentioned above, bond yields have risen substantially over the last year, contributing to rising funding costs for the banks (see Figure 12). However, the interest rates that the banks have to pay on bonds are largely converted into short market rates like the 3-month STIBOR.[14] STIBOR has increased in line with the policy rate hikes (see Figure 10) and has thereby contributed to the banks’ funding costs increasing.

On the other hand, the policy rate hikes have not had such a clear impact on the deposit rates the banks offer households and companies (see Figure 16). As deposit rates have increased significantly less than the banks’ lending rates, the banks’ net interest income has increased as that the level of interest rates has risen.

Corporate loans are continuing to grow despite rising interest rates

Swedish companies mainly obtain funding via bank loans. Since the start of 2022, the average interest rate on new and renegotiated corporate loans has risen by about 2.5 percentage points (see Figure 16). Average interest-rate fixation periods on these bank loans are short, meaning that policy rate hikes rapidly affect companies.[15] The average interest rate on all outstanding loans has also risen clearly, by almost 2 percentage points over the same period (see Figure 16). This means that about one-fifth of the rate increase has yet to reach companies but can be expected to do so as loans are renegotiated.

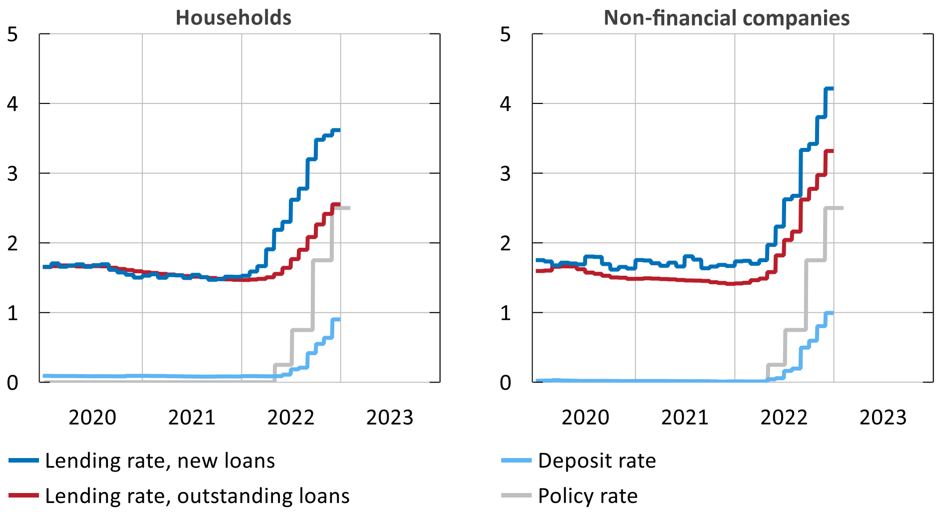
Swedish companies also obtain funding via the securities markets by issuing certificates and bonds. Since the summer of 2022, growth in the volume of debt securities issued has decreased, while bank lending has instead increased strongly (see Figure 17). One reason for this is that companies have been able to get more advantageous funding conditions from the banks than they have found on the securities market. This is especially true for property companies. The overall continued high borrowing by companies is probably connected to the rapid increase in their investments during 2022. The Riksbank’s credit database KRITA shows that it is primarily large corporations that are increasing their borrowing. However, growth in bank loans has fallen slightly in recent months (see Figure 17).

[14] The banks use what are known as interest-rate swaps to change the long-term yields on the bonds to short market rates (see the fact box “What is a swap rate?” in this report). The banks do this to achieve a better balance between their interest payments and the relatively short-term interest rates that households and companies pay to the bank.

[15] According to Statistics Sweden, about 90 per cent of bank loans have an original maturity of one year or less, which means that the interest-rate fixation periods for these loans are also one year or less.

Figure 16. Policy rate and average deposit and lending rates for new loans and outstanding loans, respectively

Per cent

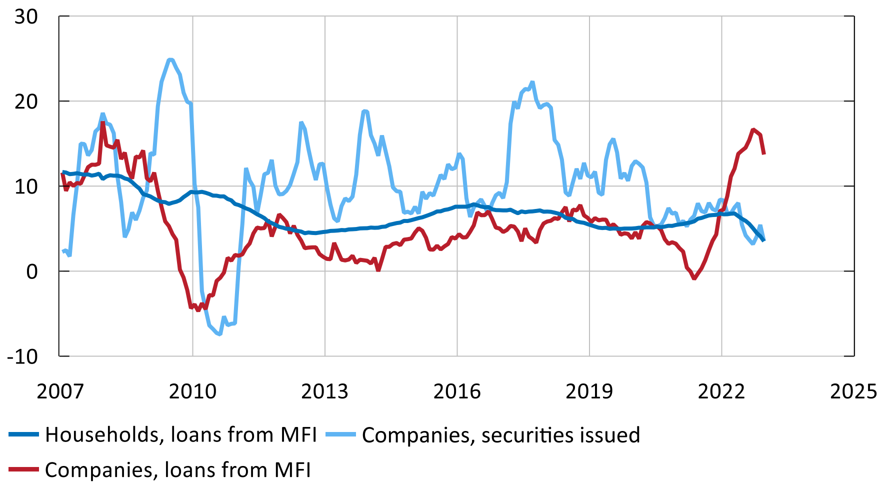


Note. Volume-weighted averages of monetary financial institutions' deposit and lending rates at all maturities. Household lending rate refers to loans for housing purposes. New loans also includes renegotiated loans.

Sources: Statistics Sweden and the Riksbank.

Figure 17. Household and corporate borrowing

Annual percentage change



Note. Lending by monetary financial institutions (MFIs) to households and non-financial companies adjusted for reclassifications and bought and sold loans. Securities issued by non-financial companies have been adjusted for currency impact. Loans from MFIs constitute about two thirds of total lending to companies, while securities issued constitute around a third.

Source: Statistics Sweden.

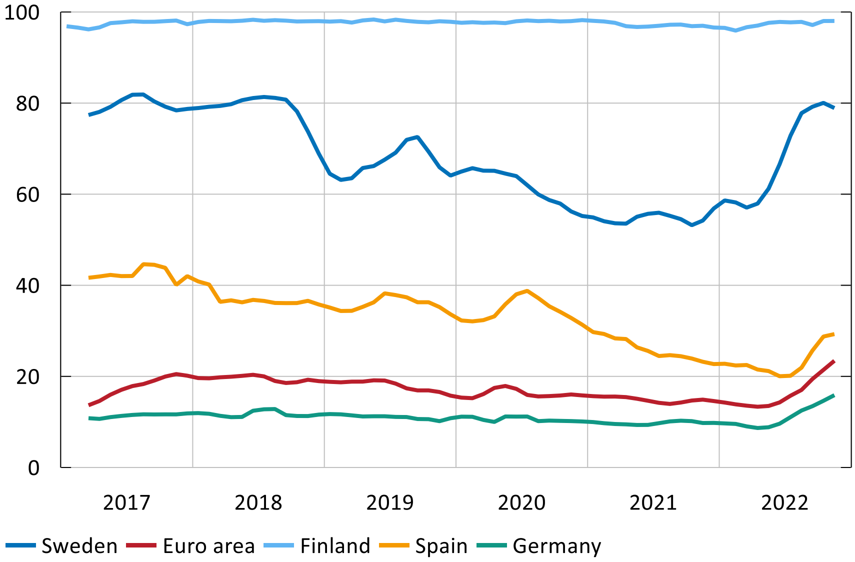
Households are facing rising interest rates and are borrowing less

On average, Swedish households have large loans in relation to their incomes, with mortgages making up about 80 per cent of the loan volume.[16] In addition, compared with many other countries, the interest-rate fixation period is short in Sweden (see Figure 18). Over 80 per cent of the loan volume has a remaining fixation period of 2 years or less (see Figure 19). This percentage increased clearly in 2022, which can probably be explained by the short-term interest rates being significantly lower than the long-term interest rates (see Figure 20). The short interest-rate fixation periods mean that policy rate rises impact household economies relatively rapidly.[17]

Households also have consumer loans. On average, these are not as large as mortgages but, as the interest rates are higher and amortisation payments greater, they may nevertheless stand for a large proportion of the loan expenditure for some households. This has been particularly clear in recent years when mortgage rates have been very low. However, now that interest rates are rising, expenditure for mortgage loans can be expected to form an increasing share of household loan expenditure.[18]

Figure 18. New mortgage loans with interest-rate fixation periods of 1 year or less

Per cent



Note. Three-month moving average.

Source: European Mortgage Federation.

[16] The household debt-to-income ratio, which is to say debt in relation to disposable income, amounts to about 200 per cent. The debt-to-income ratio has risen by just over 30 percentage points during the last ten years.

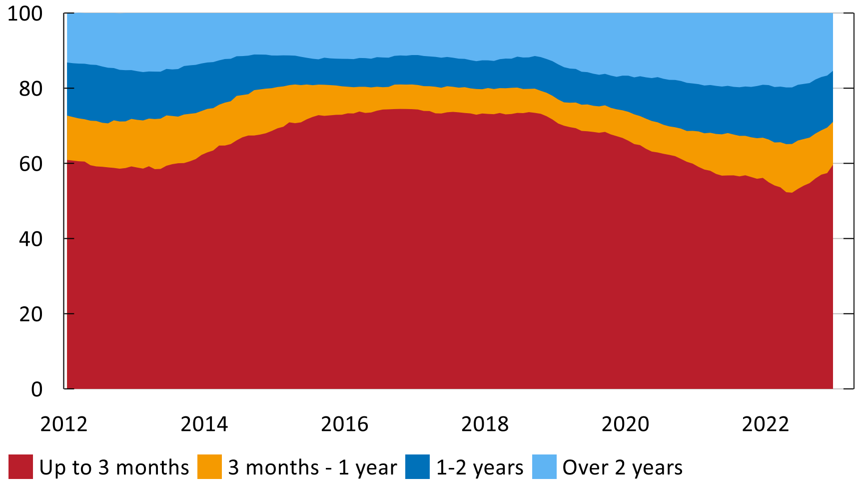
[17] See the article “Higher sensitivity to interest rates in the Swedish economy” in *Monetary Policy Report*, September 2022, Sveriges Riksbank.

[18] The following simple arithmetical example illustrates this. Assume that interest rates for mortgages and consumer loans are 1 and 6 per cent respectively, and that both interest rates rise by 3 percentage points. Mortgage rates then rise from 1 per cent to 4 per cent, meaning a 300 per cent increase in interest expenditure for a mortgage. At the same time, interest on a consumer loan rises from 6 per cent to 9 per cent, meaning only a 50 per cent increase in interest expenditure for a consumer loan.

In December, households' bank loans only increased by 3.5 per cent at an annual rate, a very low rate from a historical perspective (see Figure 17). This development was the same for mortgages, consumer loans and other loans. The rate of increase has fallen clearly over the last year. One explanation for this is that interest rates have risen, another is that housing prices have fallen. At the same time, this is reducing both the ability and the willingness to take out new mortgages.

Figure 19. Breakdown of households' remaining fixed-interest periods

Per cent



Note. Refers to the stock of outstanding loans from monetary financial institutions.

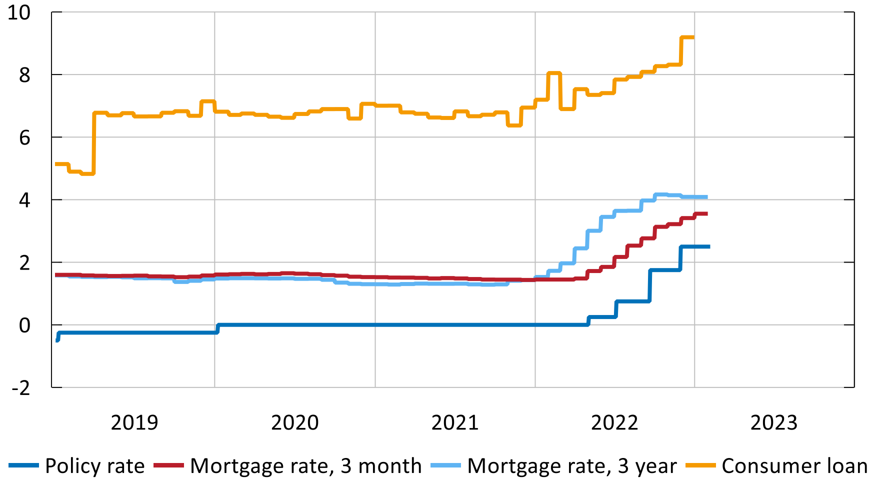
Source: Statistics Sweden.

Since the start of 2022, the average mortgage rate for new and renegotiated loans has risen by about two percentage points (see Figure 16). The average interest rate in the stock of outstanding loans has risen by about one percentage point. So far, about half of the rate increase has reached households. The impact has been large and can be explained by the short average interest-rate fixation period.

Mortgage rates with short maturities have risen slightly less than the policy rate has. This also applies to interest rates for consumer loans (see Figure 20). The impact of the policy rate on these interest rates is in line with earlier periods of policy rate hikes. Mortgage rates with longer maturities had already started to rise at the start of 2022 but have been more or less unchanged since the start of September (see Figure 20). This trend is also visible in bond rates (see Figure 12) and in market participants' expectations that policy rates will not rise significantly more in the period ahead (see Figure 9). During periods in which the policy rate is rising, it is normal for long-term yields to rise first, as these reflect expectations that the policy rate will be raised going forward. The difference between yields with long and short maturities usually increases but then decreases as the policy rate is increased.

Figure 20. The Riksbank's policy rate and lending rates to households

Per cent



Note. Mortgage rates are an average of actual mortgage rates from Länsförsäkringar Bank, Nordea, SBAB, SEB, SHB and Swedbank. Daily data for the policy rate, monthly data for other interest rates. From April 2019, the sample of institutions reporting interest rate statistics has been expanded, meaning that interest rates for consumer loans have increased notably.

Sources: Respective mortgage agents, Statistics Sweden and the Riksbank.

2.3 Slightly less tight financial conditions overall since November

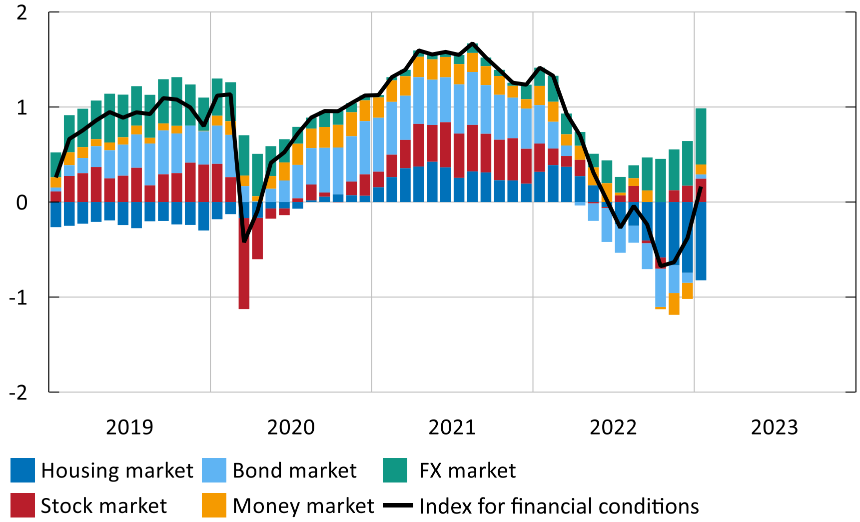
Since the start of 2022, the financial conditions have become significantly tighter (see Figure 21). Both market rates and lending rates to households and companies have risen, at the same time as equity prices have fallen. Price movements on the financial markets have periodically been very significant. In addition, Swedish housing prices have fallen by about 15 per cent since January 2022.[19] For many households and companies, this has meant that the value of assets such as equities and housing has decreased at the same time as interest expenditure has increased.

The krona has also depreciated during this period, meaning that purchasing prices for Swedish import companies have risen. On the other hand, export companies have benefited from the strengthened competitiveness brought by the weaker krona.

[19] According to the Valueguard HOX index for December 2022.

Figure 21. Index for financial conditions in Sweden

Standard deviations. A higher value indicates more expansionary financial conditions



Source: The Riksbank.

Since the monetary policy meeting in November, the financial conditions have become slightly less contractionary overall (see Figure 21). Among other things, yield spreads on the bond markets have decreased and the krona has weakened. For households and companies, on the other hand, most interest rates on bank loans have continued to rise, which is helping to restrain consumption and investment in the period ahead.

3 Inflation will fall this year and economic activity will slow down

The strong demand at the beginning of last year slowed down towards the end of the year and forward-looking indicators point to a further slowdown. The Riksbank's forecast is for resource utilisation in Sweden to fall significantly and be lower than normal. GDP growth will be negative in 2023, the employment rate will fall from a high level and unemployment will rise.

CPIF inflation was high throughout 2022. The high rate of inflation is partly explained by the rapid rise in energy prices. However, inflation excluding energy was high, partly as a result of pandemic-related supply shocks that remained, at the same time as demand rose rapidly. In addition, the high energy prices meant that many companies needed to raise their sales prices. This year, the supply side disruptions are expected to decline, at the same time as the increasingly tight monetary policy both in Sweden and other parts of the world subdue demand. Energy prices are also expected to fall clearly this year. This means that inflation will fall and from 2024 inflation is expected to be once again close to the target of 2 per cent.

3.1 Lower inflation going forward in many parts of the world

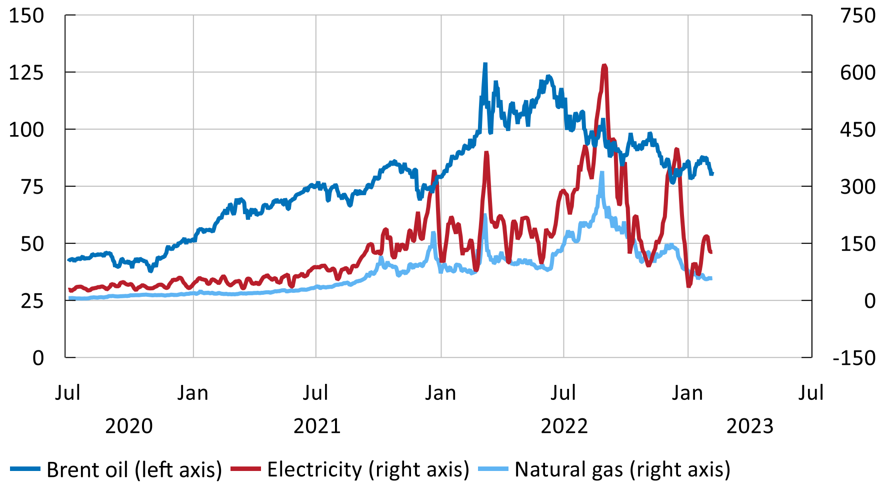
Inflation still high in many countries, but expected in the main scenario to fall rapidly

In connection with the rapid recovery following the pandemic, when supply in many areas failed to increase at the same pace as the strong demand, inflation rose in Sweden and abroad. The upturn in inflation was broad, but following Russia's invasion of Ukraine energy prices rose particularly quickly.

During the autumn and winter, the prospects for the energy supply in Europe improved significantly, however, as natural gas stocks increased to high levels thanks to unusually hot weather, greater energy efficiency among companies and a surprisingly rapid compensation for Russian gas of liquid gas from other countries. Moreover, the price of oil fell. All in all, this has led to a rapid fall in the price on the wholesale market for both natural gas and electricity in Europe since the end of last year (see Figure 22). Expectations of gas and electricity prices next winter have fallen significantly according to futures prices. However, this development will continue to be very uncertain.

Figure 22. Energy prices

USD/barrel (left axis) and EUR/MWh (right axis)



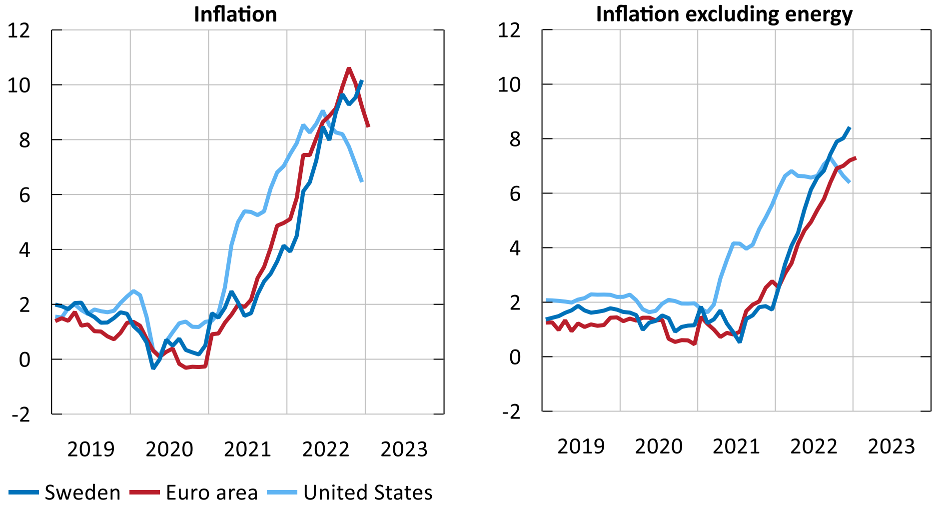
Note. Prices of electricity and natural gas for Germany. The electricity price refers to the spot price, 5-day moving average. Natural gas refers to the forward price for the coming month.

Sources: The Iberian Energy Derivatives Exchange and Intercontinental Exchange.

Inflation is still high, but the price fall on energy commodities is assessed to contribute to a clear slowdown in the rate of inflation in both Sweden and the euro area this year (see Figure 23). Inflation is also held back when monetary policy is tightened and economic activity weakens. This means that inflation excluding energy is also expected to fall significantly over the year. The lower energy prices are also expected to contribute to underlying inflation becoming lower as company costs decline. The fact that households and companies are expecting lower inflation in the long run affects price-setting and wage-formation. Figure 24 shows that both survey responses and market-based measures indicate that inflation in the slightly longer term is expected to have fallen to around 2 per cent, that is, close to the central banks' inflation targets and the Riksbank's forecast. However, underlying inflation has not yet begun to all, neither in Sweden nor the euro area, and there is considerable uncertainty over how much and how quickly it will fall (see Figure 23).

Figure 23. Consumer prices in various countries and regions

Annual percentage change

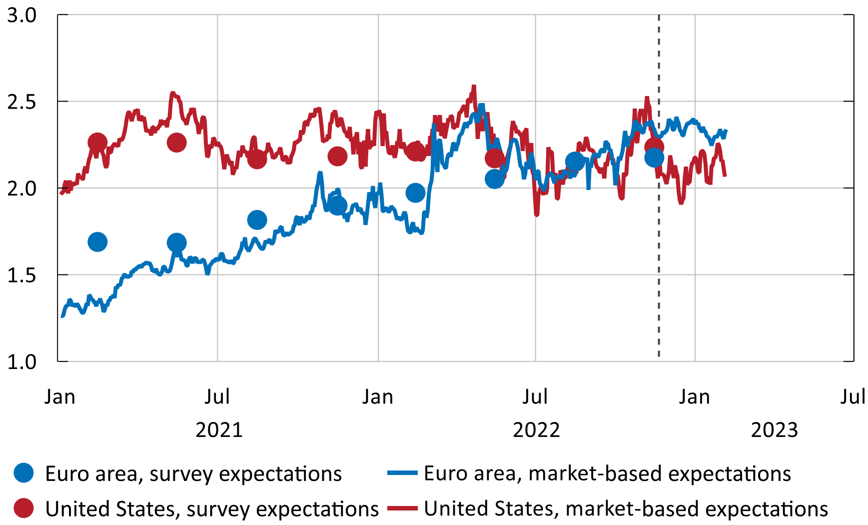


Note. Refers to the CPIF for Sweden, the HICP for the euro area and the CPI for the United States.

Sources: Eurostat, Statistics Sweden and the US Bureau of Labor Statistics.

Figure 24. Long-term inflation expectations in the euro area and United States

Per cent



Note. Market-based measures of inflation expectations refer to a 5-year period starting in 5 years' time. For the euro area, they are calculated on the basis of inflation swaps and refer to the HICP excluding tobacco. For the United States the market-based measure is calculated on the basis of government bond yields and refers to the CPI. Survey-based expectations refer to inflation 5 years ahead for the euro area (ECB Survey of Professional Forecasters), and average inflation 5-10 years ahead for the United States (Federal Reserve Bank of Philadelphia). The dashed line marks the date of the monetary policy meeting in November.

Sources: Bloomberg, Macrobond and the Riksbank.

Economic activity will slow down this year in Europe and the United States

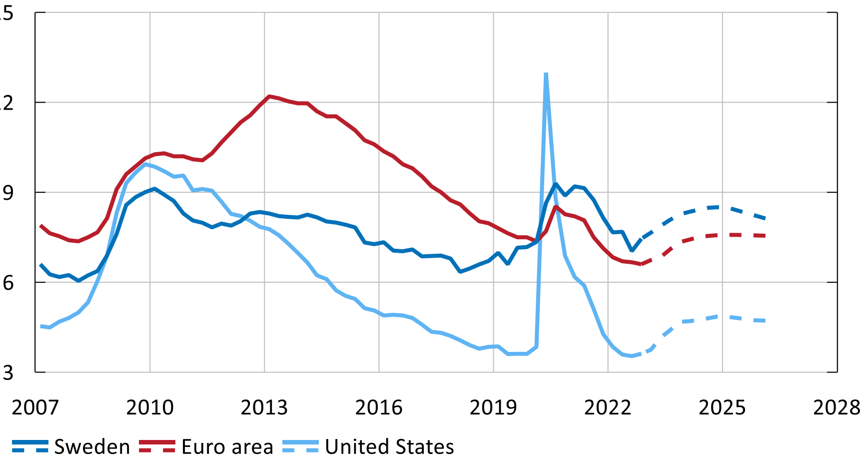
The high GDP growth in the past two years has led to a very strong development in the labour market. In the United States, unemployment is the lowest it has been since the 1960s and it is also at a record low level in Europe (see Figure 25). This has led to high wage increases in both the United States and the euro area. The labour market has also developed strongly in Sweden. The employment rate in Sweden is currently at a record-high level, but unemployment is not so low from a historical perspective. This is because the labour force has developed strongly in Sweden during and after the pandemic, much stronger than it has in the euro area and the United States. In Sweden, the strong situation on the labour market has not affected wages to the same extent as in the euro area and the United States, which could be partly due to institutional factors regarding wage formation.[20]

This year, however, economic activity is expected to show a downturn in the euro area and the United States. The high inflation erodes households' purchasing power. Moreover, both households' and companies' interest expenditure are expected to increase, both as a result of earlier policy rate increases and as a consequence of central banks continuing to raise policy rates. Even if the downturn in energy prices has caused an upswing in confidence in recent months, it is still low, and the confidence indicators point to economic activity weakening in both the euro area and the United States (see Figure 26).

[20] In countries where wages are set directly in negotiations between employers and employees, such as in the United States and United Kingdom, wage-setting is more flexible and wages can therefore vary more than in countries where wage formation is centralised to a larger degree, such as in many European countries, including Sweden. However, in some European countries wages are indexed, which means that they automatically rise faster when inflation is high. See also the article "Labour shortages and higher wage pressures abroad" in *Monetary Policy Report*, June 2022, Sveriges Riksbank.

Figure 25. Unemployment in Sweden, the euro area and the United States

Percentage of the labour force, seasonally-adjusted data

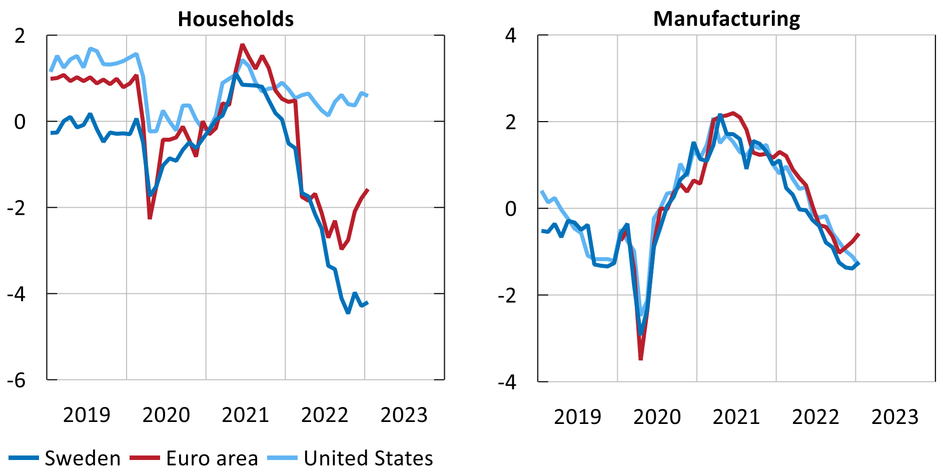


Note. Refers to 15–74 years in Sweden and the euro area and 16 years and older in the United States.

Sources: Eurostat, Statistics Sweden, U.S. Bureau of Labor Statistics and the Riksbank.

Figure 26. Confidence among households and in the manufacturing industry

Standardised data, mean = 0, standard deviation = 1

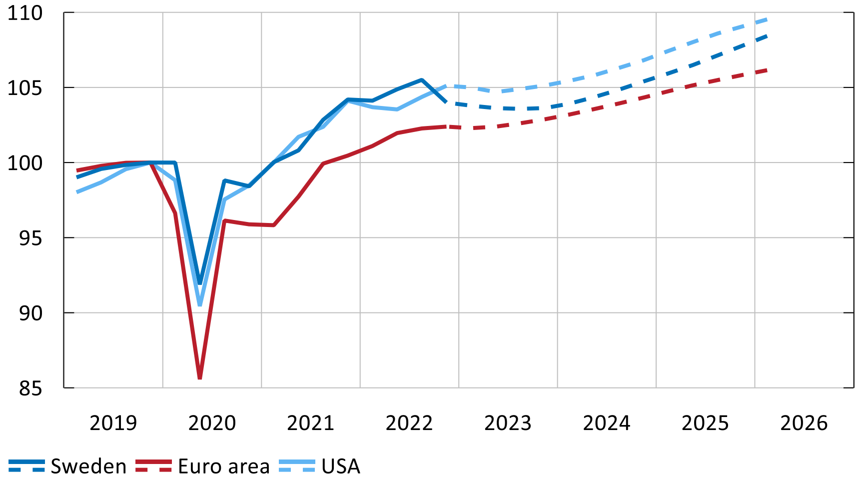


Note. All series have been standardised from 2004. The Purchasing Managers' Index for the euro area was published on 24 January.

Sources: Conference Board, European Commission, Institute for Supply Management, National Institute of Economic Research and S&P Global, Silf/Swedbank.

Going forward, falling inflation is expected to create more purchase scope for households and GDP will begin to rise again in both the euro area and the United States in the second half of 2023 (see Figure 27). Economic activity, not least in the euro area, is at the same time receiving support from growth in China, which is now rising after the political leaders have removed covid-related restrictions and sent signals regarding easing the regulation of the property and technology sectors.

Figure 27. GDP in Sweden and abroad
Index, 2019 Q4 = 100, seasonally adjusted data



Note. Solid line refers to outcome, dashed line represents the Riksbank's forecast.

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

3.2 Economic activity in Sweden will weaken this year and the high inflation will fall

Demand slowed down in the fourth quarter of 2022

The Swedish economy developed strongly at the beginning of 2022. Pent-up need to invest and consume following the pandemic caused demand to strengthen rapidly, which also meant that the labour market strengthened. The employment rate reached new record levels and many companies found it difficult to recruit people with the competence they needed.

The rapid upturn in demand contributed together with the supply restrictions to the rise in inflation. Russia's invasion of Ukraine aggravated the situation, and to counter-act the upturn in inflation monetary policy was tightened rapidly, also in real terms (see Figure 28). Large price increases and rising interest expenditure had a significantly adverse effect on households' purchasing power and meant that demand slowed down in the fourth quarter.[21]

[21] Previous quarters are also revised when the GDP indicator for the fourth quarter is published. The new seasonally-adjusted series indicates that the GDP level was lower in the second and third quarter of 2022 than previously published. Figure 27 shows the Riksbank's estimate of the new GDP level for the fourth quarter, which is based on the GDP indicator. However, the previous quarter corresponds to Statistics Sweden's publication of the National Accounts on 29 November 2022, which means that the quarterly change for the fourth quarter will be lower than the one published for the GDP indicator.

Figure 28. Real policy rate

Per cent

Note. The real policy rate is the Riksbank's expected real interest rate, calculated as a quarterly mean value of the Riksbank's policy rate forecast one year ahead minus the inflation forecast (CPIF) for the corresponding period. As the real interest rate is a forward-looking variable, the outcomes are also based on forecasts. The outcomes are calculated on the basis of the most recently published forecasts.

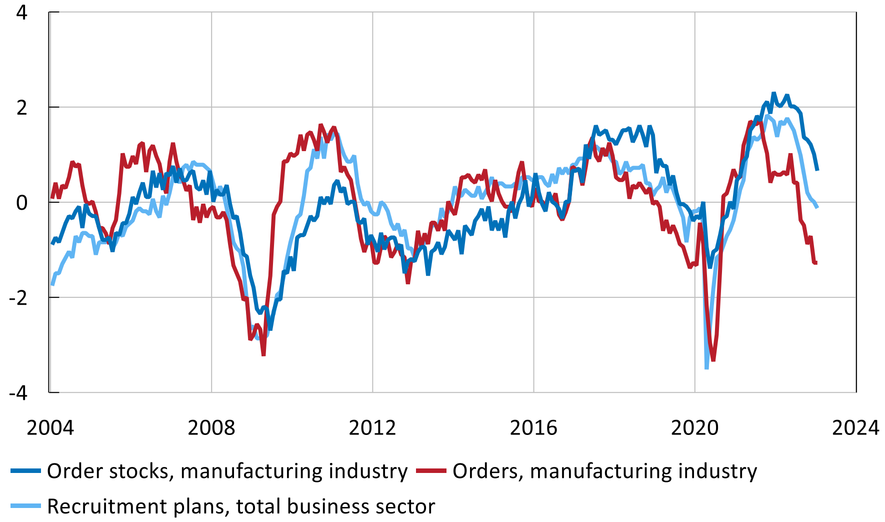
Source: The Riksbank.

Economic activity will weaken further this year

The manufacturing industry still has large order stocks, which keeps industrial production up in the short term, despite the rapid decline in orders (see Figure 29). The weaker krona also benefits exports. But as demand in Sweden and abroad is falling, industrial production and Swedish exports are expected to be significantly weaker going forward. Companies are then assessed to reduce their investments and no longer have the same need to build up stocks. Lower production at the same time means that imports will slow down.

Figure 29. Order stocks, orders and recruitment plans

Standardised data, mean = 0, standard deviation = 1



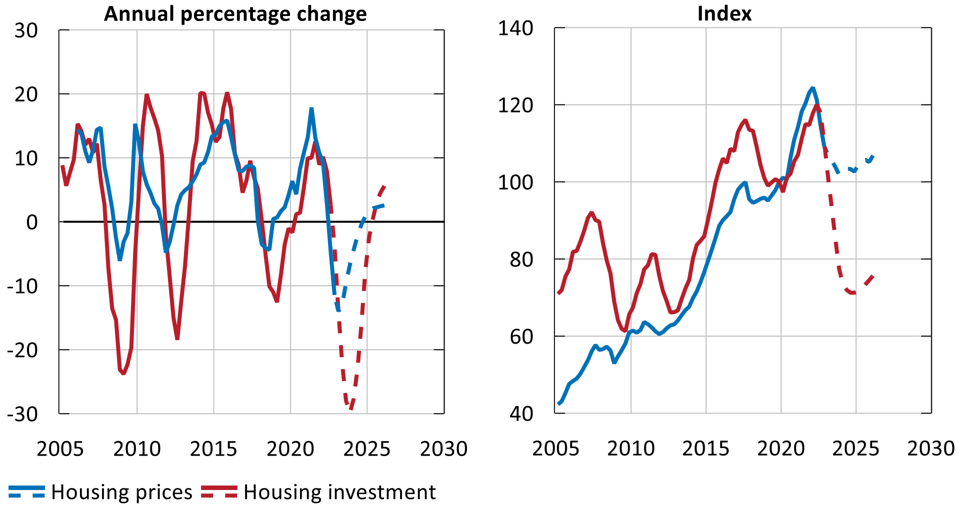
Source: National Institute of Economic Research.

At the same time, households' purchasing power deteriorates due to high inflation and tighter monetary policy. The fact that households are in a tough situation at present is also visible in surveys of their view of the economy. According to the Economic Tendency Survey's confidence indicator, households have never before been as pessimistic as they are now. The fact that households are in a more difficult situation now is also visible in the retail trade. Retail trade sales have fallen since spring 2022 and the situation in both the retail trade and the service sector is now said to be very weak, according to the Economic Tendency Survey. The tough situation means that households are expected to reduce their consumption.

The high inflation and tighter monetary policy are also evident in the housing market, where both prices and construction have declined, and are expected to continue to decline in 2023 (see Figure 30). All in all, housing prices are expected to fall by at most around 20 per cent from the peak in March 2022. During the pandemic, however, housing prices rose fairly substantially and the fall means that they are back at the level prevailing prior to the pandemic. Compared with the peak in 2021, around 50 per cent fewer homes are expected to be built in 2024 and housing investment will thus burden growth in total gross investment in both 2023 and 2024.

Figure 30. Housing prices and housing investment

Annual percentage change (left) and index respectively, 2019 Q4 = 100 (right)



Note. Housing prices refer to HOX Sweden price index for tenant-owned apartments and houses, the dashed line refers to the Riksbank's forecast.

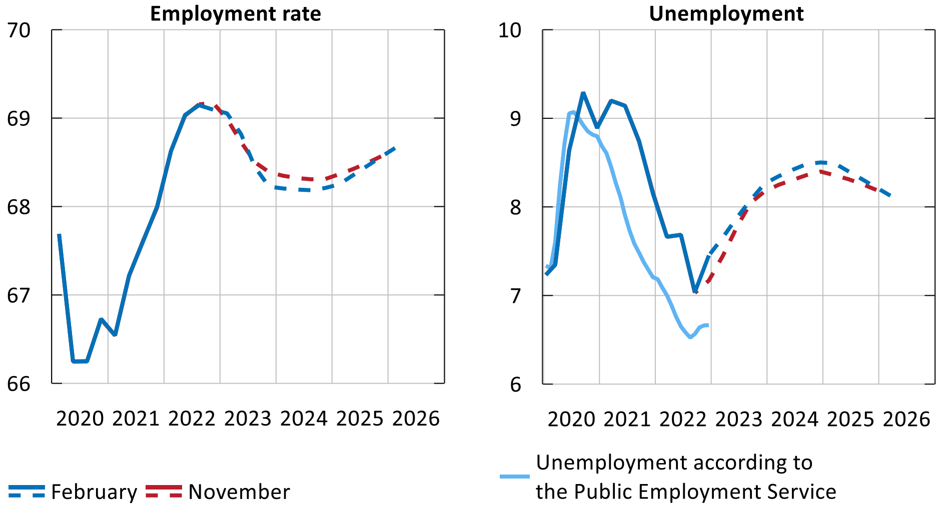
Sources: Statistics Sweden, Valueguard and the Riksbank.

As a result of consumption and housing investment falling, GDP is expected to decline in 2023 (see Figure 27). When GDP declines, this in turn means that the demand for labour declines, after being very high for the whole of 2022. Recruitment plans according to the Economic Tendency Survey and the number of newly-registered vacancies at the Swedish Public Employment Service have fallen in recent months. During the current year, employment will fall gradually and unemployment will rise (see Figure 31).

However, fiscal policy will contribute positively to growth in the coming years through increased public sector consumption and investment, partly due to investments in defence. The Government will also compensate households and companies in southern Sweden retroactively for the high electricity prices during the period October 2021 to September 2022. Payments to households will begin to be made on 20 February. They are financed by the capacity charges that have been paid to Svenska kraftnät and thus do not affect general government net lending. Since the Monetary Policy Report in November, the Government has notified further support regarding November and December 2022 which will cover the whole of Sweden. Unlike several other European countries, the Swedish electricity price compensation is not included in inflation, as it is paid retroactively. The dampening effect of the support on inflation is therefore not felt in Sweden, which makes it more difficult to directly compare inflation between countries. However, the compensation will contribute positively to household income and thus contribute to dampening the downturn in consumption.

Figure 31. Employment rate and unemployment in Sweden

Percentage of population (left) and percentage of labour force (right)



Note. Seasonally adjusted data. Employment rate and unemployment according to LFS in dark blue and red line refer to age 15–74 years; unemployment according to the Swedish Public Employment Service refers to age 16–64 years. Solid line refers to outcome, dashed line represents the Riksbank's forecast.

Sources: Swedish Public Employment Service, Statistics Sweden and the Riksbank.

Gradual recovery in production and employment with effect from 2024

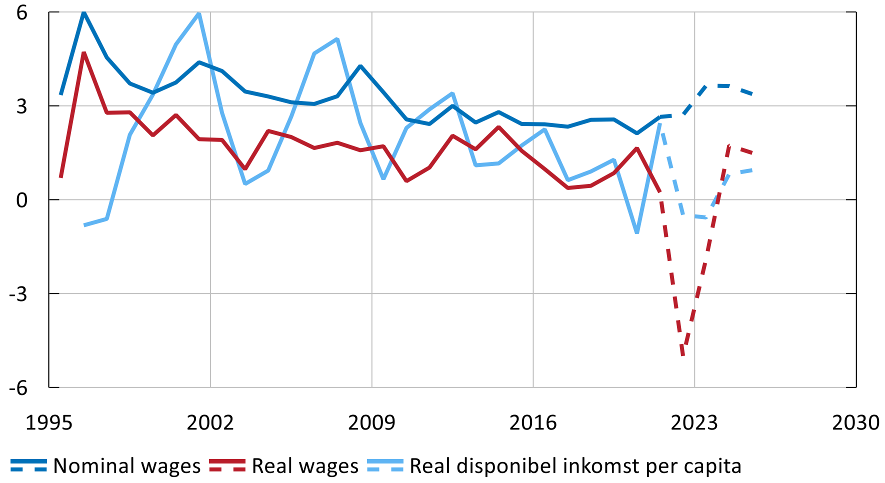
During 2024 and 2025, households' real disposable incomes will improve and both consumption and the housing market will recover. Demand abroad will also rise gradually from 2024, which increases Swedish export and companies' willingness to invest. GDP growth is rising and from the middle of 2024 will grow somewhat faster than the long-term trend. As economic activity strengthens, the demand for labour will rise. Unemployment will peak at the end of 2024, and then begin to fall when employment begins to increase again at a faster pace (see Figure 31).

Major differences between real wages and real disposable incomes

The strong demand and the increasingly high inflation contributed to wages rising faster during 2022. However, the high inflation meant that real wages declined and they are also expected to fall this year (see Figure 32). Next year, when inflation is expected to be back around the target, real wages are assessed to rise again.

Figure 32. Nominal and real wages, as well as real disposable income per capita

Annual percentage change



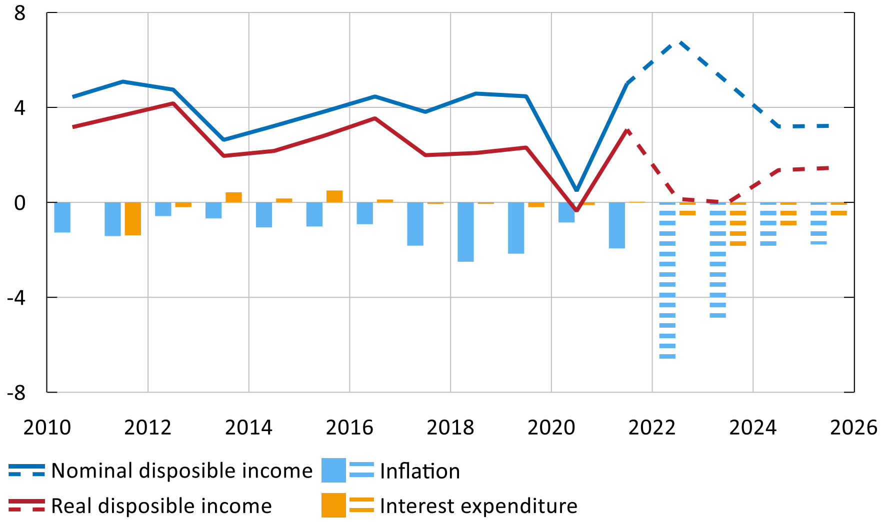
Note. Real wages are calculated as the difference between wage growth and the rate of increase in the CPIF. Real disposable income is calculated using the deflator for households' consumption expenditure, which usually increases at about the same rate as the CPIF. Solid lines refer to outcomes, dashed lines to the Riksbank's forecasts.

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

Real wages will fall in 2022 and 2023, but households real disposable incomes per capita are not expected to fall as much. Last year, rising employment and lower taxes contributed to higher disposable incomes. This year, lower taxes and large transfers, including support for electricity, are expected to counteract the effect of rising interest rates and falling employment. After that, the Riksbank assesses that wages will increase more than prices, which means that households' real disposable incomes will also increase faster. When employment increases at the same time as the policy rate hikes ends, real disposable incomes will increase somewhat faster. The rising interest rates dampen households' disposable incomes, but will have less significance than the high inflation in 2022 and 2023 (see Figure 33). Lending rates to households have so far not risen as much as expected and are therefore not assessed to dampen the development of disposable incomes as much as was earlier forecast.

Figure 33. Disposable income and the contribution of inflation and interest rates to annual growth

Annual percentage change and percentage points respectively



Note. Real disposable income is calculated with the deflator for households' consumption expenditure. The contribution from inflation refers to the difference between nominal and disposable incomes. Interest expenditure is stated excluding FISIM, after 30 per cent tax deduction and as a contribution to nominal disposable income. Solid line and bars refer to outcome, dashed line and bars represent the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank.

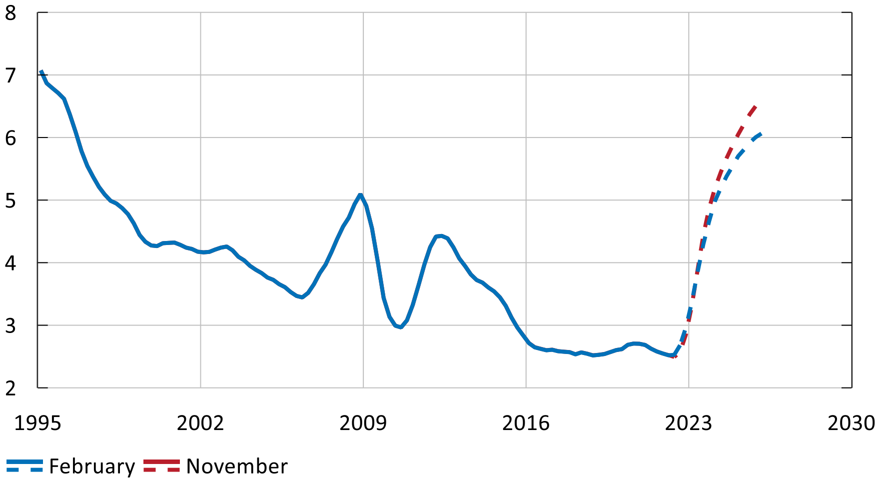
Swedish households have relatively short interest rate fixation periods on their loans, but the interest rate hikes have not yet affected everyone (see Figure 16). Compared with other countries, Swedish households have a higher level of indebtedness and shorter interest rate fixation periods on their loans (see Figure 18). This means that Swedish households are affected sooner and more by higher interest rates. As earlier fixed interest rate contracts expire and more people sign new agreements at higher interest rates, households' interest expenditure as a percentage of their disposable incomes, what is known as the interest-to-income ratio, will increase. During the third quarter of last year, the interest-to-income ratio was 2.7 per cent. In the coming years, the interest-to-income ratio is expected to rise sharply and amount to around 6 per cent at the beginning of 2026 (see Figure 34).[22] For an average mortgagor with SEK 1.3 million in mortgage loans, this means that interest expenditure after tax relief will be around SEK 2,300 higher per month at the beginning of 2026, compared with when the Riksbank began to raise the policy rate in April 2022.[23] However, households also have large financial savings that can dampen the effect of rising interest rates somewhat.

[22] The Riksbank now assesses that the upturn in mortgage rates will be slightly lower in the short term, compared with the forecast in the November Monetary Policy Report. The change is partly due to mortgage rates not having risen as much as expected, and partly due to a general review of the forecast.

[23] New mortgagors have in general higher loans than the average mortgagor, SEK 2.8 million instead of SEK 1.3 million. For new mortgagors, interest expenditure after tax relief is expected to be around SEK 4,800 per month at the beginning of 2026, compared with when the Riksbank began to raise the policy rate in 2022.

Figure 34. Interest-to-income ratio

Percentage of disposable income



Note. Solid line refers to outcome, dashed line represents the Riksbank's forecast

Sources: Statistics Sweden and the Riksbank.

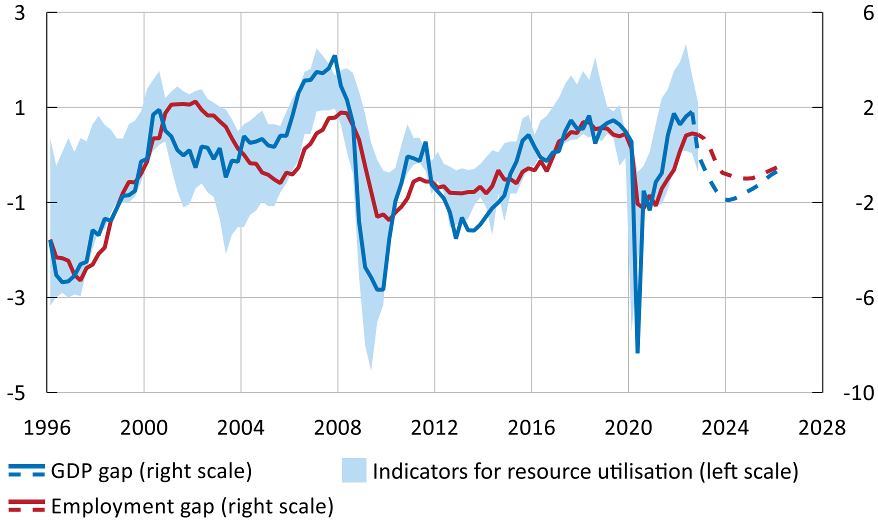
Resource utilisation assessed to fall

Resource utilisation affects the development of wages and prices and is therefore of interest for monetary policy.[24] Resource utilisation cannot be measured exactly and the Riksbank therefore makes an assessment based on a number of different data sources. The overall assessment is that resource utilisation has begun to fall and is now close to normal. This is illustrated by the Riksbank's estimated GDP gap declining to zero during the fourth quarter, while the employment gap is still slightly positive (see Figure 35). As monetary policy becomes tighter, demand slows down and resource utilisation is expected to be lower than normal from mid-2023.

[24] Without neglecting the price stability objective, the Riksbank shall contribute to a balanced development in production and employment according to the new Sveriges Riksbank Act that came into force on 1 January 2023. The change has no practical significance for monetary policy, as the Riksbank has also previously conducted so-called flexible inflation targeting. For further information, see the article "The new Riksbank Act and the monetary policy framework" in this report.

Figure 35. Measures of resource utilisation

Standard deviation and per cent



Note. The field shows the highest and lowest outcomes for indicators of resource utilisation (standardised). Series included are: unemployment (inverted) according to LFS, and according to the Swedish Public Employment Service; capacity utilisation in the industrial and manufacturing sector according to Statistics Sweden and the Economic Tendency Survey respectively; the Economic Tendency Survey series for the business sector on shortages, profitability assessment and demand. The gaps refer to the deviation in GDP and employment from the Riksbank's projected trends. Solid line refers to outcome, dashed line represents the Riksbank's forecast.

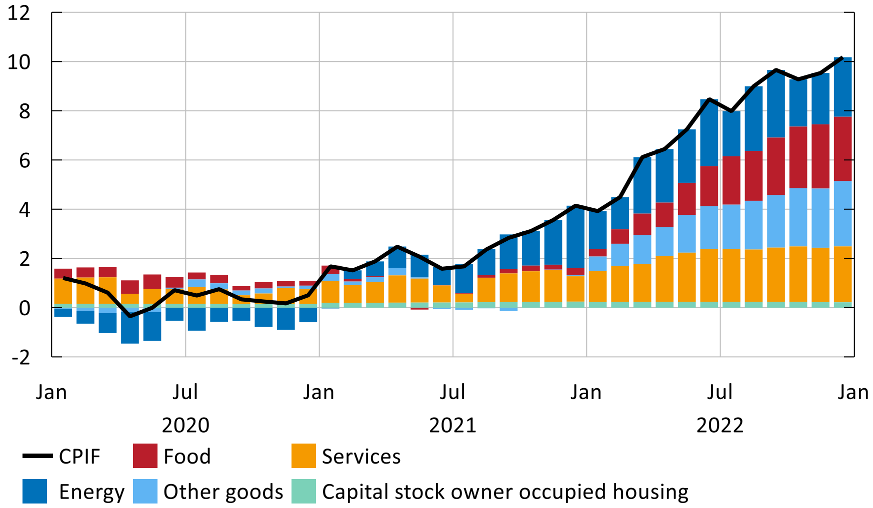
Sources: Employment Service, National Institute of Economic Research, Statistics Sweden and the Riksbank.

The high inflation rate will decline in 2023

CPIF inflation has continued to rise in recent months and amounted to 10.2 per cent in December. This was one percentage point more than in the Riksbank's most recent assessment and it was above all electricity prices that were higher than expected. Excluding energy prices, CPIF inflation amounted to 8.4 per cent in December, which is only marginally higher than the forecast in the November Monetary Policy Report. Prices have risen on a broad front and rapidly over the past year (see Figure 36). The assumption that the upturn is broad is supported by several measures of underlying inflation (see Figure 2).

Figure 36. Contributions to CPI inflation

Annual percentage change and percentage points respectively



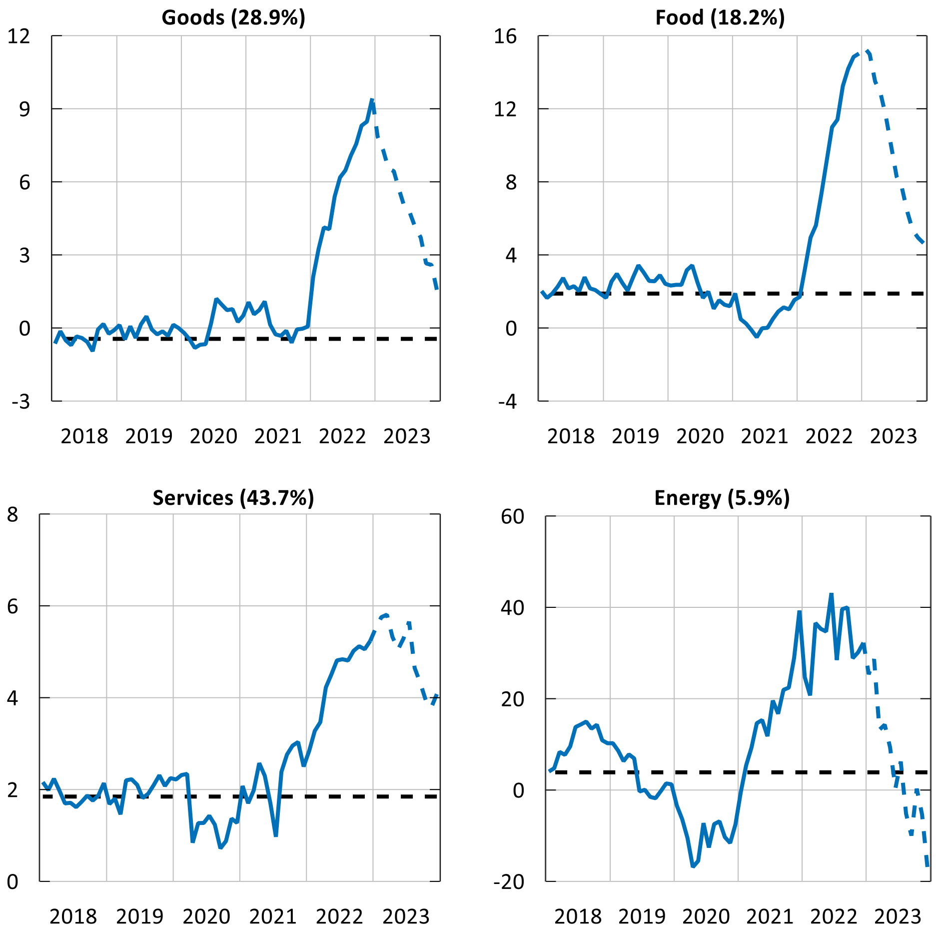
Sources: Statistics Sweden and the Riksbank.

The Riksbank's forecast is for CPIF inflation to fall back in the coming months, partly due to electricity prices ceasing to rise. However, other prices are expected to rise more slowly (see Figure 37). This means that CPIF inflation excluding energy is expected to fall in the coming months, albeit not as quickly. However, inflation falling does not necessarily mean that prices begin to fall, but that they rise at a slower pace than they have done over the past year.

The rapid upturn in inflation last year was a surprise to the Riksbank. There is also considerable uncertainty over exactly when and how quickly inflation will fall back. It is assumed in the forecast that companies' pricing behaviour has not changed in any decisive way over the past year, which means that normal historical correlations between changes in companies' costs and their prices are expected to continue to apply. A change in pricing behaviour would risk inflation failing to fall as forecast.

Figure 37. Forecasts for various sub-indices in the CPIF 2023

Annual percentage change



Note. Goods refers to prices of goods excluding energy and food. Weight in the CPIF according to the Riksbank's classification shown in brackets. The capital stock index, which has a weight of 3.4 per cent, is not shown here. Horizontal dashed lines represent mean values for the period 2000–2019. Solid line refers to outcome, dashed line represents the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank.

FACT BOX – The basket effect

The consumer price index (CPI) measures price developments on a basket of goods and services, where the weight for each product is based on how much of each product or service households buy. As data for this is available with some time lag, the weights are in practice based on consumption in a year prior to the year that prices are measured. Normally, the CPI weights are based on consumption shares two years prior to the year of measurement. As of 2021, however, Statistics Sweden has abandoned this rule, as the pandemic led to the realisation that these weights were not sufficiently representative. Instead, they have chosen to base the weighting on the most up-to-date data available for household consumption expenditure, that is, during the first to third quarter of the previous year.

Prior to the CPI outcome for January every year, Statistics Sweden updates these weights. This is done to ensure that the most up-to-date weights possible are used in the calculations. As households tend to replace products that have become relatively more expensive with products that have become relatively cheaper, updating the weights usually leads to CPI falling by a tenth of a per cent or so, all else being equal. This is thus a result of having overestimated from the start how large a volume would be consumed with regard to products whose prices rose a lot during the year, but having underestimated how much was actually consumed of products with a weaker price development. This is compensated for when new, more up-to-date weightings can be made.

The basket effect is difficult to forecast and varies from year to year. The updating of the weighting in January 2022 contributed positively to inflation for instance, which on the margin contributed to the unusually high outcome for inflation last year. The prevailing situation with high inflation, but also large relative price changes, together with the shift in the composition of consumption driven by both the pandemic and the high inflation, means that the basket effect is even more difficult than usual to predict. This contributes to the uncertainty over inflation in the near term.[25]

Several factors indicate that inflation will fall in the period ahead

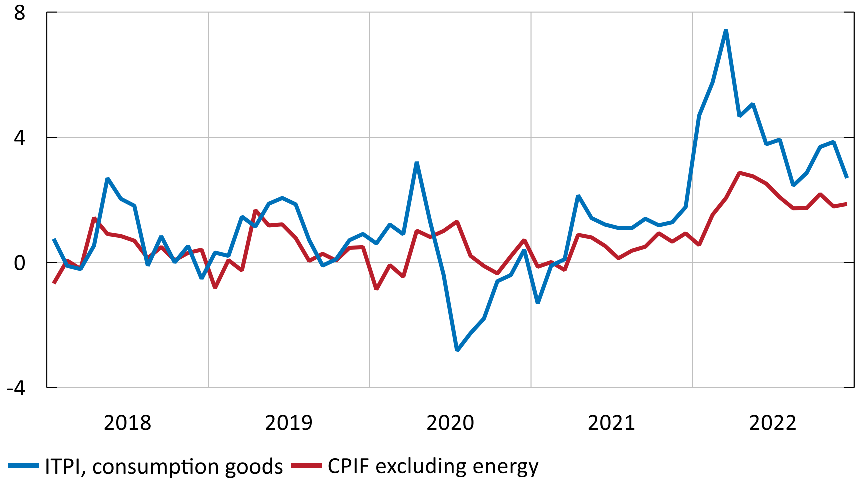
Several factors indicate that the largest price increases may be behind us. For instance, global freight prices have fallen and several commodity prices have also gradually fallen back from the extremely high levels noted particularly in 2021 and after the outbreak of war in spring 2022.

This picture is also supported by the monthly rates of increase for both consumer goods in the producer channel and in the CPIF excluding energy having slowed down since the peak levels noted at the beginning of 2022 (see Figure 38).

[25] For a somewhat more detailed description of the basket effect, see J. Johansson, M. Löf, O. Tysklind "Changed consumption during the pandemic affects inflation", *Economic Commentaries*, No. 14 2020, Sveriges Riksbank.

Figure 38. Producer prices and consumer prices excluding energy

Percentage three-month change



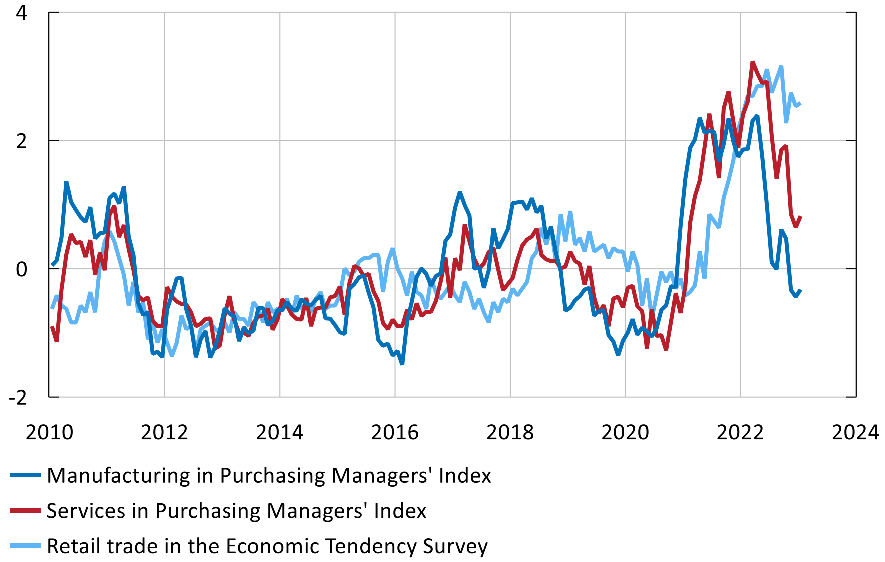
Note. ITPI refers to the price index for Sweden's domestic supply, which is a composite of import prices and domestic market prices (prices of goods manufactured and sold in Sweden).

Source: Statistics Sweden.

However, despite there being several signs that inflation will fall going forward, there are still risks that it will not slow down sufficiently fast. Companies' price plans are still at elevated levels according to the Economic Tendency Survey, although they have slowed down in recent months. In addition, the Purchasing Managers' Index for service companies shows that price plans there also remain relatively high (see Figure 39).

Figure 39. Companies' price plans

Standardised data, mean = 0, standard deviation = 1



Note. The question to the manufacturing industry concerns how they will adjust prices over the next few months. The question to service companies concerns how they consider that intermediate goods prices have changed in recent months. The question to the retail trade concerns how these companies plan to adjust prices over the next three months.

Sources: National Institute of Economic Research and Silf/Swedbank.

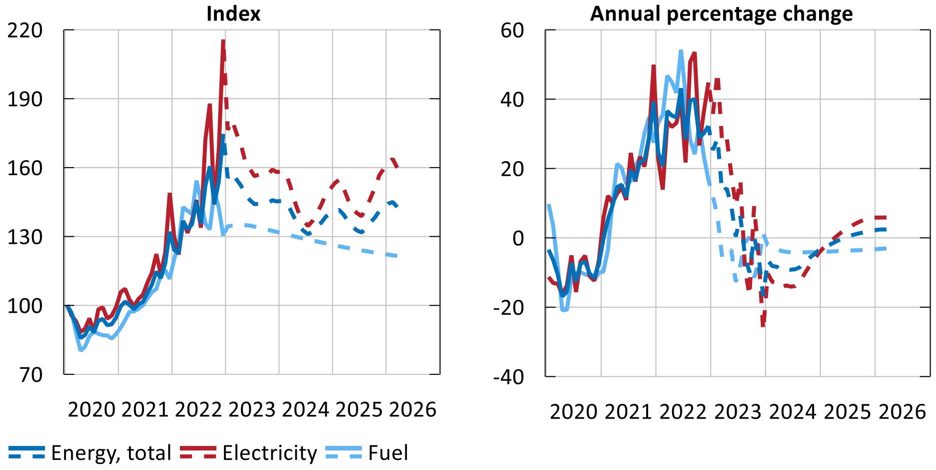
In recent months, electricity prices have been very volatile, both on the spot and futures markets. After rising significantly during the late summer, they gradually fell back until the middle of November. After that, they once again rose rapidly, which contributed to the surprisingly high CPIF inflation in November and December. Since the end of December, however, electricity prices in Sweden, as in the rest of Europe, have fallen substantially (see Figure 40).[26]

The Riksbank bases its forecast for electricity prices on pricing on the forward market and according to this, electricity prices are expected to be lower in the coming year than during the past year, but this development is very uncertain. Fuel prices are also expected to increase more slowly going forward, which is in line with pricing on the futures market for oil. The forecast means that the rate of increase in energy prices will slow down significantly, which contributes to CPIF inflation falling rapidly this year.

[26] For a description of how pricing on the electricity market functions, see the article "What effect can measures to dampen the price of electricity have on inflation?" in *Monetary Policy Report*, September 2022, Sveriges Riksbank.

Figure 40. Energy prices in the CPIF

Index, January 2020 = 100 (left), and annual percentage change (right)



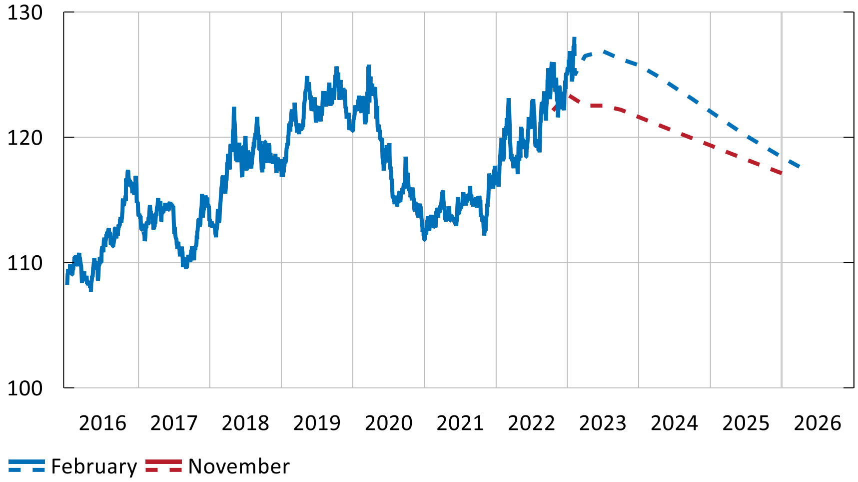
Note. Solid line refers to outcome, dashed line represents the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank.

The past year has been characterised by high volatility on the financial markets and increasingly tight monetary policy abroad. In this type of environment, the krona tends to depreciate, which is also the case now. This contributes to slightly higher inflation in the near term. The krona is expected to slowly strengthen in the coming years (see Figure 41).

Figure 41. 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. Since 28 March 2022, the index has been calculated against 31 countries since the Russian rouble has been excluded. A higher value indicates a weaker exchange rate. Outcomes are daily rates and forecasts refer to quarterly averages. Solid line refers to outcomes, dashed line to the Riksbank's forecast.

Source: The Riksbank.

Inflation close to target from 2024

The slowing down of inflation going forward is to a significant degree due to monetary policy continuing to be tightened in Sweden, which holds back demand. In addition, the pandemic-related supply shocks have abated, which, taken together, means that the rate of price increase for companies' input goods will slow down.

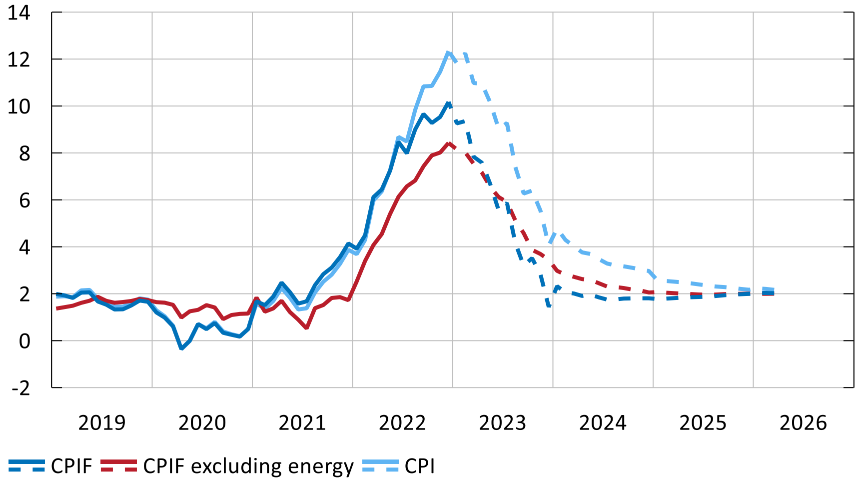
The upturn in service prices, which has also been due to the rapid increase in demand for some contact-intensive services after the pandemic, is also expected to decline when demand becomes lower. It will make it more difficult for companies to pass on their cost increases as quickly as they have done in the past year. However, rents and housing cooperative fees are expected to increase more rapidly in the next few years, which is expected to contribute to holding inflation up instead. Nevertheless, there is considerable uncertainty as service prices are not being dampened quickly enough.

When mortgage rates rise, household interest expenditure will increase, causing CPI inflation to be higher than CPIF inflation.[27] However, the differences in the forecasts are greatest in 2023 and, towards the end of the forecast period, CPI inflation will also be close to 2 per cent (see Figure 42).

All in all, the tighter monetary policy, waning supply shocks and lower demand will mean that CPIF inflation is close to the target with effect from 2024.

Figure 42. CPIF, CPIF excluding energy and CPI

Annual percentage change



Note. Solid line refers to outcome, dashed line represents the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank.

[27] The Riksbank assesses that the upturn in mortgage rates will be a little lower in the short term than was forecast in the November Monetary Policy Report, which means that the CPI is expected to increase somewhat less.

ARTICLE – The new Riksbank Act and the monetary policy framework

Under the new Riksbank Act, which came into force at the turn of the year, the main task of the Riksbank, as previously, is to ensure low and stable inflation. The act clarifies that the Riksbank shall take account of developments in the real economy. It also details the circumstances under which the Riksbank may use certain monetary policy tools and the information the Riksbank shall submit to its principal, the Swedish Riksdag, and to the general public. In several respects, the new act is compatible with how the Riksbank already conducts monetary policy and therefore does not change the substance of the monetary policy framework. The act gives the Riksbank a strong and clear mandate to continue to conduct independent monetary policy in the future.

A new Riksbank Act entered into force on 1 January 2023.[28] Under the new act, the Riksbank's main tasks remain the same. As previously, price stability is the overriding objective and without neglecting it, the Riksbank shall take account of developments in the real economy. The Riksbank shall also contribute to the stability and efficiency of the financial system and ensure that the public can make payments. But the new act changes the conditions for the Riksbank's various work areas to a certain extent and gives the Riksbank a new, important responsibility for ensuring that it is also possible to make payments during peacetime crisis situations and times of elevated preparedness. This article focuses on the monetary policy area and goes through the main changes in the new act and what they mean for the Riksbank's monetary policy work in practice.[29]

The objective is low and stable inflation

The new Riksbank Act stipulates that "the overriding objective of the Riksbank is to maintain permanently low and stable inflation (the price stability target)."[30] The previous act formulated this objective as the Riksbank "maintaining price stability". With this change, the wording is now more appropriate and it is now clearer that the objective concerns inflation.[31] The new act also makes it clearer that monetary policy shall be conducted so that the inflation target is credible in the longer term, as such

[28] Sveriges Riksbank Act (2022:1568).

[29] The description of the Riksbank's Monetary Policy Report strategy, Monetary policy in Sweden – The Riksbank's strategy, which is at the beginning of each Monetary Policy Report has been updated to reflect the provisions of the new act.

[30] Chapter 2, Section 1, Sveriges Riksbank Act.

[31] It was clear from the preparatory work history of the old act that the aim of the wording "price stability" was a target for inflation, rather than a price level target (Government Bill 1997/98:40 p. 53).

confidence is a prerequisite for permanently low and stable inflation. Low and stable inflation is a prerequisite for good growth in the Swedish economy.

The Riksbank specifies the inflation target and the Riksdag shall approve this specification

A slightly more significant change in the act concerns the specification of the inflation target – its level and the measure of inflation it shall relate to. The act now states that "The Riksbank shall, with the approval of the Riksdag, decide on the specification of the price stability target".[32] As before, the Riksbank shall take the initiative to the specification. The difference is that the Riksdag shall approve this specification before it applies. Until further notice, the same specification as previously applies, i.e. that the annual change in the consumer price index with a fixed interest rate (CPIF) is to be 2 per cent.[33]

The Riksbank continues to have strong independence

Decisions on monetary policy measures to achieve the specified target are subject to a ban on taking instructions in the new act, just as in the old act. This means that no public authority may determine how the Riksbank is to decide in issues concerning the formulation and implementation of monetary policy and neither may the Riksbank request or accept instructions from anyone on this. This does not prevent the Riksbank engaging in dialogue with the Government, administrative authorities and organisations on monetary policy issues.[34]

Monetary policy considers the real economy

The new Riksbank Act states that the Riksbank shall take account of the real economy in its monetary policy decisions: "Without neglecting the price stability objective, the Riksbank shall also contribute to a balanced development of production and employment (consideration for the real economy)".[35] Consideration of the real economy was not written into the earlier act. But the preparatory work history of the old act makes it clear that the Riksbank, as an authority under the Riksdag, should have an obligation to support general economic policy goals and that monetary policy can help to fulfil the objectives of sustainable growth and full employment.[36] For this and other reasons, the Riksbank already previously considered the development of production and employment – this is normally referred to as flexible inflation targeting.

The Riksbank assesses that the wording on balanced development of production and employment in the act has in practice the same implication as the earlier wording:

[32] Chapter 2, Section 3, Sveriges Riksbank Act.

[33] If the Riksdag were not to approve the Riksbank's specification of the target, the Riksbank's most recently adopted specification would continue to apply. In the Government Bill proposing the new Riksbank Act, the Government considered that a target for the annual change in the CPIF of 2 per cent could be a suitable specification for the meantime (Government Bill 2021/22:41, Chapter 8.1.4).

[34] Government Bill 2021/22:41, p.174.

[35] Chapter 2, Section 1, Sveriges Riksbank Act.

[36] Government Bill 1997/98:40, p. 53ff. From Article 127.1 of the Treaty on the Functioning of the European Union and Article 3.3 of the Treaty on European Union it is also clear that central banks shall consider developments in the real economy.

that the Riksbank strives to stabilise production and employment around development paths that are sustainable in the long term. The change therefore has no practical significance for the monetary policy strategy.

Flexible inflation targeting presumes confidence in the inflation target

The Riksbank's inflation target shall act as a benchmark for price- and wage-setting in the economy – it shall constitute what is usually referred to as a nominal anchor. When inflation does not vary so much and economic agents have a collective picture of how prices will develop in the future, it becomes easier to plan for the long term. This, in turn, improves the possibility of achieving favourable economic developments with good and stable growth. The Riksbank's task is to ensure that inflation is close to 2 per cent and if inflation deviates from 2 per cent, the Riksbank shall adjust monetary policy so that inflation returns to close to 2 per cent within a reasonable time.

It is neither possible nor desirable to conduct monetary policy aimed at always maintaining inflation at exactly 2 per cent. Constant changes occur in the economy that make inflation vary in a way that cannot be predicted with great precision, or counteracted in the short term. As it also takes time before monetary policy has its full effect on the economy, monetary policy is guided by economic forecasts.

Under the act, monetary policy shall also consider the development of production and employment and thus be conducted flexibly. In many cases, the real economy and inflation move in the same direction; strong demand in an economic boom increases production and employment and inflation rises, while the opposite happens in an economic recession. Changes in monetary policy then help to stabilise both the real economy and inflation – there is no conflict between monetary policy that brings inflation back to target and one that provides a balanced development of the real economy. But in certain situations, economic shocks can cause the real economy and inflation to go in different directions.

In connection with each monetary policy decision, the Executive Board assesses which monetary policy is well-balanced. If inflation deviates from the inflation target, it is normally a question of finding a balance between how rapidly it shall be brought back to target and the effects on real economic developments. What is well-balanced can depend on factors such as the reasons why inflation deviates from the target, by how much and how long it has deviated and what the prospects are for the real economy. There is thus no general answer to the question of how quickly the Riksbank aims to return inflation to 2 per cent.[37]

But a prerequisite of flexible monetary policy is that there is confidence among households, companies and financial agents that deviations from the target will not be too prolonged and that inflation will return to target within a reasonable time perspective. The possibility for the Riksbank to maintain the inflation target is dependent on

[37] The forecasts for inflation show the horizon over which inflation is expected to be on target given the monetary policy the Riksbank assesses to be well-balanced in connection with individual monetary policy decisions. According to the preparatory work of the new act, the Riksbank shall present the time frame within which the price stability target can be expected to be achieved (Government Bill 2021/22:41).

the existence of such confidence, and price stability is the overriding objective for monetary policy. If there is a risk of the confidence in the target being eroded, it may be necessary to direct monetary policy towards bringing inflation close to the target of 2 per cent rather quickly.

As before, the Riksbank takes into consideration risks associated with developments in the financial markets

In its monetary policy, the Riksbank takes into consideration risks associated with developments in the financial markets. A source of such risks is imbalances in the financial markets that can contribute to longer-term unsustainable development in asset prices and the indebtedness of economic agents. This can create risks of sharp price movements and change agents' economic conditions. This in turn can have major negative consequences for economic developments in general and also lead to inflation being far from the target. Financial crises tend to create long and extended recessions.

To counteract the build-up of financial imbalances, well-functioning regulatory frameworks and efficient supervision of financial companies play a central role. According to the Government's proposal for the new Riksbank Act, the Riksbank should, within the framework of monetary policy, take account of financial imbalances in the credit market and, if necessary, adjust the time frame within which the inflation target is to be attained.[38] A pre-condition is that the Riksbank can maintain credibility in the inflation target. Another pre-condition is that the Riksbank can justify such a policy by stating that expected and overall target achievement regarding the inflation target including real economic consideration will be better.

If a risk materialises and shocks in the financial markets emerge, there is also a risk of serious consequences for the real economy and for attainment of and confidence in the inflation target. The Riksbank may then need to take monetary policy measures to mitigate or counteract such a development. At the same time, the new Riksbank Act provides scope for taking measures to counteract a severe shock in the financial system. In the event of major shocks in the financial markets, the Riksbank therefore needs to take a stand on the purpose of the measure.[39]

Requirement for exceptional grounds when trading assets other than government securities

Like the previous Riksbank Act, the new act specifically states which tools the Riksbank may use for monetary policy purposes. However, the provisions were worded more generally in the previous act. One reason for the change is that the legislator has chosen to clarify the boundaries for the objectives, the tasks and powers

[38] Government Bill 2021/22:41, Chapter 8.1.2.

[39] Government Bill 2021/22:41, p. 74 and p. 177.

within the Riksbank's various spheres of responsibility, both in relation to each other and in relation to the remits of other authorities.[40]

In relation to financial companies, the Riksbank may, under the new act, accept deposits, provide credit against adequate collateral and enter into repurchase agreements in financial instruments.[41] The Riksbank shall determine the policy rate for such transactions. The Riksbank may also enter into repurchase agreements in foreign currency and buy and sell Swedish government securities.[42] In addition, the Riksbank may carry out foreign exchange interventions, issue and renew debt instruments in Swedish krona and, if there are exceptional grounds, buy and sell financial instruments other than Swedish government securities.[43]

In practice, the Riksbank can use the same tools as previously but, according to the new act, there must be exceptional grounds for the Riksbank to be able to buy and sell financial instruments other than Swedish government securities for monetary policy purposes.[44] In the Government Bill containing the draft legislation, the Government justifies this by stating that this type of trading involves a much greater financial risk for the Riksbank and for state finances than changes in policy rates and purchases of government securities. Purchases of assets other than government securities should therefore only occur in exceptional circumstances, i.e. when there are exceptional grounds.[45]

The requirement for exceptional grounds means at the same time that purchases and sales of assets other than government securities may continue to be an option if, for example, the Riksbank considers that policy rate changes and the purchase of government securities, if they had been implemented, would not have the desired impact on the economy in the current situation.

The Riksbank's measures shall be appropriate and proportionate

A new feature of the Riksbank Act is that it now includes a so-called principle of proportionality for the Riksbank's decisions, including its monetary policy decisions.[46] According to the principle, the Riksbank may take a measure only if it can be assumed to lead to the intended result, is not more far-reaching than needed and if the

[40] Government Bill 2021/22:41, p. 72.

[41] A repurchase agreement is a contract for the purchase of securities with a simultaneous agreement that the purchase will be reversed at a certain later date at a predetermined price. The transaction is similar to a collateralised loan.

[42] See Chapter 2, Section 4, Sveriges Riksbank Act for the exact wording.

[43] Chapter 2, Section 5, Sveriges Riksbank Act.

[44] Some of the limitations to the monetary policy toolbox in the Riksbank Inquiry's proposal for a new Riksbank Act, and which the Executive Board of the Riksbank objected to in its consultation response, were not included in the final version of the act. This means, for example, that it is still possible for the Riksbank to decide to lend to banks on condition that the banks increase their lending to companies, which was one of the Riksbank's measures during the pandemic.

[45] Government Bill 2021/22:41, p. 95ff.

[46] If a measure entails an intervention in a private interest, the principle of proportionality in Section 5, third paragraph of the Administrative Procedure Act (2017:900) is applied.

intended result stands in reasonable proportion to the costs and risks that the measure entails for the finances of the Riksbank and the State.[47]

In the preparatory work of the act, the Government writes that there is a similar principle of proportionality in EU law (Article 5.4 in the Treaty on European Union) and that in Swedish law it can be said to be a general principle that administrative authorities shall not take more far-reaching or intrusive measures than are required to achieve a desired objective.[48] The principle is expressed in the Administrative Procedure Act, but there it is limited to interventions in private interests. Normally, monetary policy has limited effects on many areas of the national economy and these effects cancel each other out across an economic cycle. But the Government notes that certain measures that change the size and composition of the Riksbank's balance sheet may have major and rapid consequences. In light of this, a principle of proportionality has been introduced in the Riksbank Act.

According to the preparatory work of the act, risk-taking in the context of a financial crisis may be compatible with the principle of proportionality, given the high socio-economic values at stake. The proportionality assessment becomes relevant, for example, in the choice between different measures, or combinations of measures, which essentially lead to the same goal achievement. When making this choice, the Riksbank shall choose the least risky alternative from a public finances perspective.[49]

Transparency, analysis and communication remain in focus

The Riksbank has a substantial independence that is specifically highlighted with regard to monetary policy. This places demands for transparency and openness in relation to the Riksdag, the Riksbank's principal, but also in relation to the general public. Furthermore, the communication of monetary policy can affect its impact on the economy at large and on inflation. The Riksbank therefore endeavours to ensure that its communication is open and clear.[50] This makes it easier for economic agents to make sound economic decisions and monetary policy will also be easier to evaluate.

The new Riksbank Act establishes that the Riksbank shall continue to conduct external monitoring, i.e. monitor general economic developments and developments in the financial markets.[51] This has always been an extensive and natural part of the drafting process leading up to monetary policy decisions. It includes monitoring and analysing different types of risk, including the risk of the economy developing in a way that is

[47] Chapter 1, Section 8, Sveriges Riksbank Act.

[48] Government Bill 2021/22:41, p. 81.

[49] Government Bill 2021/22:41, p. 210.

[50] In "Review of the Riksbank's monetary policy 2015–2020" (2021/22:RFR4), Karnit Flug and Patrick Honohan state that the Riksbank's monetary policy documents and official statements are clear and well suited to the wide range of target groups. They also note that the Riksbank has been at the top of the central bank rankings according to a transparency index.

[51] Chapter 1, Section 9, Sveriges Riksbank Act.

unsustainable, from an environmental perspective, for example, and that can in turn give rise to major negative effects on the economy further ahead.

Climate change and measures to promote the transition to a sustainable economy have consequences for all economic agents in society. They can affect both the efforts to achieve the price stability target and the task of contributing to stability and efficiency in the financial system, and thus the Riksbank's ability to fulfil its mandate. This is therefore an important issue for the Riksbank to monitor and analyse. However, the responsibility for putting in place policy measures against climate change lies primarily with the world's politicians.[52]

Chapter 11 of the new act specifies the information that the Riksbank shall submit to the Riksdag's Committee on Finance and to the general public. There was no equivalent provision in the old act. The new act establishes in principle the forms for and content of the information to the public and the reports to the Riksdag in accordance with the practice developed by the Riksbank.[53] In addition to the specification of the information that the Riksbank shall share with the Riksdag and the general public, the new act also increases the resources for scrutiny of the Riksbank. The scope of the Riksdag to monitor and evaluate the conducted monetary policy was already considerable but has been strengthened somewhat. The Riksdag Committee on Finance, the National Audit Office and the auditors of the Riksbank's General Council all receive increased funds.

The new Riksbank Act gives the Riksbank a continued strong mandate

In summary, the new Riksbank Act changes the wording of the monetary policy mandate somewhat: for example, the objective for monetary policy is worded differently, and consideration for the real economy has been written into the act, the Riksbank's specification of the monetary policy objective shall be approved by the Riksdag and there is a requirement for "exceptional grounds" before the Riksbank is allowed to buy and sell assets other than government securities. On the whole, however, the new act does not change the substance of the monetary policy framework, as it is compatible with the way the Riksbank already conducts monetary policy in several respects. The act gives the Riksbank a strong and clear mandate to continue to act independently regarding monetary policy in the future.

[52] In general, the new act has clarified the Riksbank's scope for contributing to Sweden's climate transition, see the Riksbank's Climate Report, January 2023.

[53] Chapter 11, Section 1 specifies when the Riksbank shall submit a report to the Riksdag's Committee on Finance and what the report shall contain in particular. Chapter 11, Section 3 specifies what the Riksbank shall inform the public about. The Riksbank currently provides information in accordance with these provisions in, for example, its publications Account of Monetary Policy and Monetary Policy Report. The Riksbank also publishes the minutes from the monetary policy meetings with content in accordance with Chapter 11, Sections 5 and 6.

Forecast tables

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

Table 1. Policy rate forecast

Per cent, quarterly averages

	2022Q4	2023Q1	2023Q2	2024Q1	2025Q1	2026Q1
Policy rate	2.01 (2.00)	2.75 (2.64)	3.21 (2.82)	3.33 (2.84)	3.33 (2.84)	3.33

Source: The Riksbank.

Table 2. Inflation

Annual percentage change, annual average

	2021	2022	2023	2024	2025
CPIF	2.4 (2.4)	7.7 (7.6)	5.5 (5.7)	1.9 (1.5)	1.9 (2.0)
CPIF excl. energy	1.4 (1.4)	5.9 (5.9)	5.8 (5.5)	2.4 (2.4)	2.0 (2.0)
CPI	2.2 (2.2)	8.4 (8.3)	8.6 (9.3)	3.6 (3.0)	2.3 (2.4)
HICP	2.7 (2.7)	8.1 (7.9)	5.8 (5.8)	1.9 (1.5)	1.8 (1.9)

Note. The HICP is an EU-harmonised index for consumer prices.

Sources: Statistics Sweden and the Riksbank.

Table 3. GDP and demand

Annual percentage change unless otherwise specified

	2021	2022	2023	2024	2025
Household consumption	6.0 (6.0)	2.8 (3.7)	-0.6 (-0.8)	1.4 (1.6)	2.0 (1.9)
Public consumption	2.8 (2.8)	-0.3 (-0.2)	1.3 (1.4)	1.7 (1.4)	1.3 (0.9)
Gross fixed capital formation	6.4 (6.3)	5.7 (5.0)	-3.6 (-4.3)	-2.2 (-1.3)	2.0 (1.9)
Inventory investments*	0.4 (0.4)	1.0 (1.1)	-0.8 (-0.5)	0.0 (0.0)	0.0 (0.0)
Exports	7.9 (7.9)	4.5 (4.6)	0.5 (0.4)	1.8 (1.8)	2.4 (2.4)
Imports	9.6 (9.6)	7.9 (8.1)	-0.9 (-0.5)	0.9 (1.4)	2.3 (2.3)
GDP	5.1 (5.1)	2.5 (2.7)	-1.1 (-1.2)	0.9 (1.0)	1.9 (1.7)
GDP, calendar-adjusted	4.9 (4.9)	2.5 (2.7)	-0.9 (-1.0)	1.0 (1.0)	2.1 (1.9)
Final domestic demand*	5.0 (5.0)	2.6 (2.8)	-0.9 (-1.1)	0.5 (0.8)	1.7 (1.6)
Net exports*	-0.3 (-0.3)	-1.2 (-1.2)	0.6 (0.4)	0.5 (0.2)	0.1 (0.1)
Current account (NA), percentage of GDP	6.4 (5.4)	4.0 (3.3)	4.6 (3.8)	5.4 (4.5)	5.9 (4.9)

*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 4. Production and employment

Annual percentage change unless otherwise specified

	2021	2022	2023	2024	2025
Population, aged 15–74	0.0 (0.0)	0.3 (0.3)	0.4 (0.3)	0.4 (0.4)	0.4 (0.4)
Potential employment	0.8 (0.8)	0.7 (0.7)	0.7 (0.7)	0.6 (0.6)	0.6 (0.6)
Potential hours worked	-0.2 (-0.2)	0.6 (0.6)	0.6 (0.6)	0.6 (0.6)	0.6 (0.6)
Potential GDP	1.7 (1.7)	1.6 (1.6)	1.5 (1.5)	1.5 (1.5)	1.5 (1.5)
GDP, calendar-adjusted	4.9 (4.9)	2.5 (2.7)	-0.9 (-1.0)	1.0 (1.0)	2.1 (1.9)
Hours worked, calendar-adjusted	2.2 (2.2)	2.3 (2.2)	-0.1 (-0.1)	0.1 (0.0)	0.8 (0.7)
Number of employed	1.0 (1.0)	2.7 (2.7)	-0.1 (-0.2)	-0.3 (-0.1)	0.7 (0.6)
Labour force	1.2 (1.2)	1.3 (1.2)	0.5 (0.4)	0.3 (0.4)	0.6 (0.6)
Unemployment*	8.8 (8.8)	7.5 (7.4)	8.0 (7.9)	8.4 (8.3)	8.4 (8.3)
Employment gap**	-1.3 (-1.3)	0.7 (0.7)	0.0 (-0.1)	-0.9 (-0.9)	-0.8 (-0.9)
Hours gap**	-1.4 (-1.4)	0.2 (0.1)	-0.4 (-0.6)	-0.9 (-1.2)	-0.7 (-1.1)
GDP gap**	0.2 (0.2)	1.2 (1.5)	-1.3 (-1.0)	-1.8 (-1.5)	-1.1 (-1.1)

* Per cent of labour force
** Percentage deviation from the Riksbank's assessed potential levels

Note. Potential hours worked and potential GDP refer to the long-run sustainable level according to the Riksbank's assessment.

Sources: Statistics Sweden and the Riksbank.

Table 5. Wages and labour costs in the economy as a whole

Annual percentage change, calendar-adjusted unless otherwise specified

	2021	2022	2023	2024	2025
Hourly wage, NMO	2.6 (2.6)	2.7 (2.8)	3.6 (3.7)	3.6 (3.6)	3.4 (3.4)
Hourly wage, NA	2.6 (2.7)	3.9 (4.0)	3.6 (3.7)	3.6 (3.6)	3.4 (3.4)
Employer's contributions*	0.7 (0.7)	-0.4 (-0.2)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Hourly labour costs, NA	3.4 (3.4)	3.5 (3.8)	3.6 (3.7)	3.6 (3.6)	3.4 (3.4)
Productivity	2.6 (2.6)	0.1 (0.5)	-0.8 (-0.9)	0.9 (1.0)	1.3 (1.2)
Unit labour costs	1.6 (1.6)	3.4 (3.3)	4.5 (4.6)	2.7 (2.6)	2.0 (2.1)

* Difference in rate of increase between labour cost per hour, NA and hourly wages, NA, percentage points

Note. NMO is the National Mediation Office's short-term wage statistics and NA is the National Accounts. Labour cost per hour is defined as the sum of actual wages, social-security charges and wage taxes (labour cost sum) divided by the number of hours worked by employees. Unit labour cost is defined as labour cost sum divided by GDP in fixed prices.

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

Table 6. International forecasts

Annual percentage change unless otherwise specified

GDP	PPP weights	KIX weights	2021	2022	2023	2024	2025
Euro area	0.12	0.46	5.3 (5.3)	3.5 (3.3)	0.6 (-0.2)	1.2 (1.3)	1.5 (1.6)
United States	0.15	0.08	5.9 (5.9)	2.1 (1.8)	0.7 (0.2)	1.1 (1.5)	2.1 (2.3)
China	0.19	0.10	8.9 (8.6)	3.1 (3.3)	5.1 (4.4)	4.8 (4.5)	4.7 (4.6)
KIX weighted	0.75	1.00	5.7 (5.7)	3.0 (2.9)	1.3 (0.9)	1.8 (1.9)	2.1 (2.2)
The World (PPP)	1.00	—	6.0 (6.0)	3.3 (3.3)	2.7 (2.4)	3.1 (3.1)	3.3 (3.4)

Note. Calendar-adjusted growth rates. PPP weights refer to purchasing-power adjusted GDP weights in the world for 2023, according to the IMF. KIX weights refer to weights in the Riksbank's krona index (KIX) for 2023. 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 latest five years.

CPI	2021	2022	2023	2024	2025
Euro area (HICP)	2.6 (2.6)	8.4 (8.5)	4.4 (5.0)	1.9 (2.1)	1.9 (2.1)
United States	4.7 (4.7)	8.0 (8.1)	3.8 (4.0)	2.4 (2.3)	2.3 (2.3)
KIX weighted	3.1 (3.1)	8.0 (8.1)	4.9 (5.1)	2.5 (2.5)	2.3 (2.3)

	2021	2022	2023	2024	2025
International policy rate, per cent	-0.3 (-0.3)	0.5 (0.5)	3.3 (2.9)	3.3 (2.8)	2.9 (2.5)
Crude oil price, USD/barrel Brent	70.7 (70.7)	98.6 (99.9)	84.3 (88.2)	79.5 (80.4)	75.2 (76.0)
Swedish export market	9.2 (9.1)	8.5 (7.8)	2.4 (1.4)	2.8 (3.0)	3.1 (3.2)

Note. The policy rate abroad is an aggregate of rates in the US, the euro area, Norway and the United Kingdom. In the euro area, the overnight rate ESTR has replaced EONIA as the reference rate since 1 January 2022.

Sources: Eurostat, IMF, Intercontinental Exchange, national sources, OECD and the Riksbank.

Table 7. Summary of financial forecasts

Per cent unless otherwise stated, annual average

	2021	2022	2023	2024	2025
The Riksbank's policy rate	0.0 (0.0)	0.8 (0.7)	3.2 (2.8)	3.3 (2.8)	3.3 (2.8)
10-year rate	0.3 (0.3)	1.5 (1.5)	2.2 (2.3)	2.5 (2.5)	2.7 (2.7)
Exchange rate, KIX, 18/11/1992=100	114.3 (114.3)	121.1 (121.0)	126.3 (122.2)	123.5 (120.2)	119.7 (118.0)
General government net lending, percentage of	-0.1 (-0.1)	0.6 (0.6)	-0.3 (-0.2)	-0.7 (-0.5)	-0.8 (-0.3)

Sources: Statistics Sweden and the Riksbank.

SVERIGES RIKSBANK
Tel +46 8 - 787 00 00
registratorn@riksbank.se
www.riksbank.se

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