Account of monetary policy

2024



Account of monetary policy

The Riksbank is an authority under the Riksdag, the Swedish Parliament, with responsibility for monetary policy in Sweden. Since 1999, the Riksbank has had an independent position with regard to the Riksdag and the Government. This means that the members of the Riksbank's Executive Board decide on monetary policy issues without seeking or taking instructions. Nor may any other authority determine how the Riksbank should decide on issues concerning monetary policy.

The way in which the Riksbank carries out its task is followed up in various ways by the Riksdag. For instance, every year the Riksdag Committee on Finance examines whether the General Council of the Riksbank and the Executive Board can be discharged from liability for their administration during the past year. Every year, the Committee on Finance also examines and assesses the monetary policy conducted by the Riksbank during the preceding year. Regularly or upon request, the Riksbank shall submit an account of monetary policy operations to the Riksdag Committee on Finance (Chapter 11, Section 1, Sveriges Riksbank Act [2022:1568]). These accounts are presented both in this Account of Monetary Policy and in the Monetary Policy Reports and Updates.

The Account of Monetary Policy is a basis for assessment – not an assessment in itself. On the other hand, this does not mean that it is a pure compilation of figures. The account also includes analyses of outcomes, forecasts and events as the Riksbank believes that those who evaluate monetary policy should have access to the Riksbank's interpretation of the material. It is then up to the Committee on Finance, and others who wish to assess the material, to concur with the Riksbank's conclusions or to make another interpretation.

Chapter 1 investigates target fulfilment in 2024, while Chapter 2 gives an account of the monetary policy conducted over the year. Chapter 3 analyses the accuracy of the forecasts made in 2022 and 2023, while Chapter 4 reviews important monetary policy issues. The report also contains an article on changes in the Riksbank's monetary policy communication and an article on the Riksbank's monetary policy development work.

The Executive Board made a decision on the Account of Monetary Policy in 2024 on 26 March 2025.

Monetary policy in Sweden – The Riksbank's strategy

- According to the Sveriges Riksbank Act, the overriding objective of monetary policy is to maintain sustainably 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 a long time before monetary policy has a full impact on inflation and the real economy,
 monetary policy is guided by forecasts of economic development. 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 can 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
 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 eight monetary policy meetings a year. After four of these
 meetings, a Monetary Policy Report with forecasts will be published. At the other four meetings, the
 Executive Board's assessments and motives for its monetary policy decisions are described in a
 shorter document, a Monetary Policy Update. Just under a week 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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1 Target fulfilment

After the steep downturn in 2023, inflation declined slightly further in 2024 and stabilised close to the Riksbank's target of 2 per cent. Annual average CPIF inflation was 1.9 per cent and long-term inflation expectations also remained stable at 2 per cent. The Riksbank assesses that target fulfilment was good in 2024.

Monetary policy has played an important role in stabilising inflation and inflation expectations. At the same time, the contractionary monetary policy has dampened economic activity and resource utilisation. The Swedish economy was in a mild recession in 2024. The labour market continued to slow down, employment decreased and unemployment increased. With lower inflation and a more stable inflation outlook during the year, the need for contractionary monetary policy gradually decreased and the policy rate was lowered relatively quickly from 4 to 2.5 per cent. This contributed to growth recovering during the year, after two years of roughly unchanged GDP, and GDP increased by 1.0 per cent in 2024 compared with 2023. Monetary policy affects the economy with a time lag, so it will take some time before the policy rate cuts have a full effect on the economy. By attaining sustainably low and stable inflation, monetary policy creates the conditions for long-term favourable economic development.

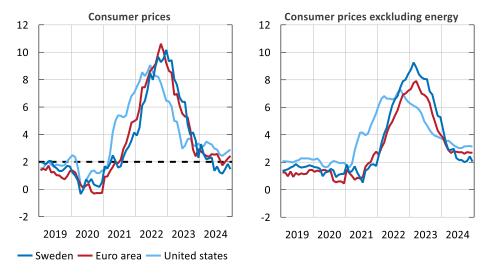
1.1 Inflation in 2024

Inflation close to target

Inflation abroad fell further in 2024 after the clear downturn in 2023 (see Figure 1). This was partly due to lower energy prices but monetary policy and waning supply shocks also contributed to a slowdown in inflation. However, CPI inflation started to rise again towards the end of the year, and in December, it stood at over 2 per cent in both the United States and the euro area. The rate of increase in consumer prices excluding energy decreased in both the United States and the euro area at the beginning of the year and then stabilised around 3 per cent. In particular, services prices increased much faster than normal in 2024 due to high wage increases. In the United States, high rent increases also contributed to higher-than-normal growth in services prices.

Figure 1. Consumer prices in various countries and regions

Annual percentage change



Note. Prices are measured using the CPIF for Sweden, the HICP for the euro area and the CPI for the United States.

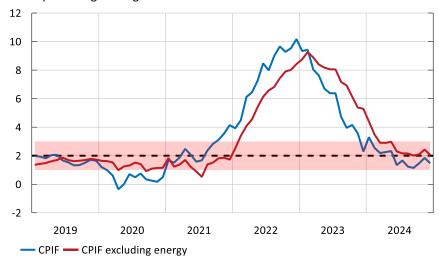
Sources: Eurostat, Statistics Sweden and U.S. Bureau of Labor Statistics.

Despite a steep decline in 2023, inflation in Sweden was still higher than the Riksbank's inflation target at the beginning of 2024. As in other countries, inflation continued to decline further in 2024 and CPIF inflation stabilised close to the target of 2 per cent (see Figure 2). Falling energy prices contributed to CPIF inflation falling rapidly during the spring and then being slightly below target in the second half of 2024. Lower energy prices contributed negatively to inflation throughout the year (see Figure 3). Inflation measured as the CPIF excluding energy was still high at the beginning of the year but this measure also gradually decreased and stabilised close to 2 per cent during the year (see Figure 2). In December, the rate of increase in the CPIF excluding energy was 2.0 per cent.

Services prices continued to increase rapidly during 2024 (see Figure 3 and Table 1). This was primarily explained by large rises in prices that are rarely changed, such as housing rents and monthly fees in owner-occupied flats, as well as administered prices such as fees for refuse collection and water. These prices were still being affected by the major cost increases that took place in 2022 and 2023, rather than by developments in demand and costs in 2024. The rate of increase in services prices decreased trend-wise during the year but was still higher than its historical average towards the end of the year. Food and commodity prices rose at a roughly historically average pace in 2024 (see Table 1). Compared with other countries, wage increases in Sweden have been relatively moderate, which has contributed to lower inflation.

Figure 2. CPIF, CPIF excluding energy and the variation band for the CPIF

Annual percentage change



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

Sources: Statistics Sweden and the Riksbank.

Table 1. Development of the CPIF and its components

Annual percentage change, annual average

	Weight (per cent)	2000–2023	2023	2024
Services	45.7	2.2	6.8	3.8
Goods	25.7	0.2	7.0	0.7
Food	16.6	2.5	11.1	2.0
Energy	8.1	4.5	-9.8	- 9.5
Capital stock	3.8	5.4	5.6	4.0
CPIF	100	2.0	6.0	1.9

Note. The weights are those for 2024.

Source: Statistics Sweden

12 10 8 6 4 2 O -2 -4 2019 2020 2021 2022 2023 2024 CPIF Food Services Energy Other goods Capital stock owner occupied housing

Figure 3. Contributions to CPIF inflation

Annual percentage change and percentage points

Note. The bars illustrate each price group's contribution to the rate of increase in the CPIF over the past twelve months. The contributions can be interpreted as the annual rate of increase in each group multiplied by the group's weight in the CPIF. See Table 1 for the weights of each group in 2024.

Sources: Statistics Sweden and the Riksbank.

According to the National Institute of Economic Research's Economic Tendency Survey, companies' pricing plans were close to their historical average in 2024 (see Figure 4). When inflation was high in 2022 and 2023, firms raised their prices much more frequently than they had done before. As inflation has fallen, companies have also started to change their prices less frequently. This indicates that pricing behaviour has normalised and that, during 2024, it was more in line with what it was before the period of high inflation. For services prices, however, the rate of price changes was still relatively high, and companies changed their prices more frequently than usual.

Measures of underlying inflation stabilised close to target

Individual monthly outcomes for inflation may be affected by prices that vary substantially. The Riksbank analyses several different measures of inflation to assess how persistent inflation is. Various measures of underlying inflation, which exclude or reduce the importance of widely varying prices, continued to decline in the first half of 2024 and then stabilised at a level slightly above 2 per cent in the second half of the year (see Figure 5).³ One factor that contributed to maintaining underlying inflation was prices that change rarely and that were still being affected by earlier cost increases, such as rents and administered prices. When adjusted for this, underlying

¹ See M. Klein, K. Strömberg and P. Tysklind (2024), "Inflation dynamics during the high inflation period: insights from microdata", *Economic Commentary* no 14, Sveriges Riksbank and M. Klein, E. Skeppås and O. Tysklind (2024), "Price changes on goods and services during the high inflation period: insights from microdata", *Economic Commentary* no 15, Sveriges Riksbank.

² See M. Klein, E. Skeppås and O. Tysklind (2024), "Price changes on goods and services during the high inflation period: insights from microdata", *Economic Commentary*, no. 15, Sveriges Riksbank.

³ For more information on different measures of underlying inflation, see the Riksbank's website https://www.riksbank.se/en-gb/statistics/macro-indicators/underlying-inflation/.

inflation was slightly below 2 per cent during the second half of 2024 (see Figure 5). All in all, the analysis of underlying inflation gives a picture of inflationary pressures in line with the target.

Net figures 100 80 60 40 20 0 -20 -40 2019 2020 2021 2022 2023 2024 Private service sector — Retail trade

Figure 4. Price plans in Economic Tendency Survey

Note. Seasonally adjusted data. The figure shows net balances of how many businesses responded that they plan to increase their prices compared with how many plan to reduce them in the coming three months. The dashed lines represent the average for the period 2000–2024.

Source: National Institute of Economic Research.

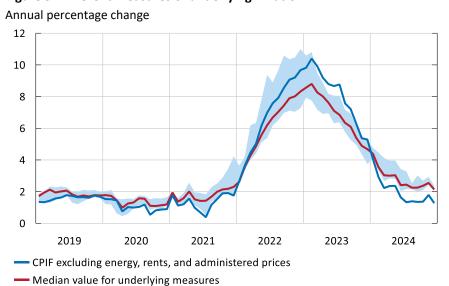


Figure 5. Different measures of underlying inflation

Note. Monthly data. The light blue area shows the highest and lowest outcome among 7 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.

Stable long-term inflation expectations

Monetary policy aims to stabilise inflation close to the target. The primary purpose of the inflation target is for it to act as a long-term benchmark for price setting and wage formation in the economy. When inflation does not vary so much and economic agents have a common perception of how prices will develop in the future, it becomes easier to plan for the long term. This, in turn, improves the conditions for favourable economic development with good growth. It is therefore important that households and companies trust the Riksbank to conduct a monetary policy that brings inflation back to the target when disturbances have caused it to deviate. The closeness of various measures of long-term inflation expectations to the target is an indication of such confidence in the Riksbank.

Long-term inflation expectations have remained stable and anchored at the inflation target, even in recent years when inflation has been historically high (see Figure 6).⁴ Survey-based long-term inflation expectations were close to 2 per cent throughout 2024. The Riksbank assesses that monetary policy has been important in stabilising long-term inflation expectations close to the target, both in the phase of raising the policy rate and the phase of cutting it.

Per cent 3.5 3.0 2.5 2.0 1.5 1.0 0.5 2010 2012 2014 2016 2020 2006 2008 2018 2022 2024 2026 – All, 5 year — Money market players, 5 year

Figure 6. Long-term inflation expectations

Note. Monthly data. Expectations refer to the CPI.

Source: Origo Group.

Deviation from the inflation target was small – good target fulfilment in 2024

Conducting a monetary policy that always keeps inflation at 2 per cent is neither possible nor desirable. Changes occur constantly in the economy that make inflation vary in a way that cannot be predicted with sufficient precision, or counteracted in

⁴ Long-term inflation expectations rose slightly at the beginning of 2022, but then they fell rapidly when the Riksbank began to raise the policy rate.

the short term. Deviations from the inflation target in individual years are therefore the rule rather than the exception.

After being at a high level for two years, inflation stabilised close to the target in 2024, while long-term inflation expectations also remained stable at 2 per cent. On average, CPIF inflation was 1.9 per cent. The fact that CPIF inflation was slightly lower than the inflation target in the second half of the year is largely due to unusually low energy prices. Excluding volatile energy prices, inflation gradually deviated less and less from 2 per cent. In December, CPIF inflation was 1.5 per cent, while CPIF inflation excluding the energy prices was 2.0 per cent. The Riksbank assesses that target fulfilment was good in 2024.

1.2 The development of the economy in 2024

Swedish GDP has recovered

Central bank interest rate hikes in 2022–2023 contributed to dampening global economic activity. Economic activity slowed in most parts of the world, although there were large differences both within and between regions. In the United States, GDP continued to grow strongly in 2024, while euro area GDP growth was weak (see Figure 7).

Index, 2019 Q4 = 100

115

110

105

100

95

90

85

2019

2020

2021

2022

2023

2024

— Sweden — Euro area — United States

Figure 7. GDP in Sweden and abroad

Note. Seasonally and calendar adjusted data.

Sources: Eurostat, Statistics Sweden and the U.S. Bureau of Economic Analysis.

⁵ Energy prices are volatile and could have been significantly higher. This was illustrated in an alternative scenario in the *Monetary Policy Report*, September 2024, Sveriges Riksbank.

After two years of roughly unchanged GDP, growth in Sweden recovered during the year and GDP increased by 1.0 per cent in 2024 compared with 2023.6 Net exports and public consumption made positive contributions to GDP growth. Even the interest-rate sensitive parts of the economy, such as household consumption and investments, developed more strongly towards the end of the year.

The employment rate decreased

However, the labour market continued to slow down. The employment rate decreased and unemployment increased, reaching 8.4 per cent in the fourth quarter of 2024 (see Figure 8). The labour force participation rate decreased but remained at a high level and contributed to high unemployment. Employment has declined in several sectors, including construction, the retail trade, and IT and corporate services. The number of redundancies was high during the year but, towards the end of the year, the number of redundancies fell slightly and recruitment plans in the business sector increased.

The labour markets in the United States and the euro area remained strong in 2024. In the United States, where GDP continued to grow at a healthy pace, the employment rate declined and the unemployment rate rose slightly. In the euro area, the employment rate rose and the unemployment rate fell marginally despite the subdued economic activity. However, the development of hours worked in the euro area was weak.

80 10 76 9 72 8 7 68 64 6 2019 2020 2021 2022 2023 2024 Labour force participation rate — Unemployment rate (right scale) **Employment** rate

Figure 8. Labour force participation rate, employment rate and unemployment rate Per cent of population and labour force respectively, 15-74 years

Note. Seasonally adjusted data. Labour force participation rate and employment rate are measured according to the left axis.

Source: Statistics Sweden.

⁶ GDP is revised afterwards. This chapter is based on Statistics Sweden's latest data publication (February 2025). See the Fact Box "Revisions of statistics are important to keep in mind when evaluating monetary policy".

Resource utilisation was lower than normal

Without neglecting the inflation target, the Riksbank shall also contribute to a balanced development of output and employment. The level of activity in the economy is often summarised with various measures of resource utilisation. What one tries to measure is to what extent the productive resources of the economy – labour and capital – are used in relation to what is sustainable in the long term. Furthermore, resource utilisation also affects the development of wages and prices. It is therefore important for the Riksbank to try to gain an impression of resource utilisation. However, it cannot be measured precisely and there is no single measure that perfectly captures resource utilisation in the economy. The Riksbank therefore makes an assessment on the basis of several different indicators. Such indicators include unemployment, industrial capacity utilisation and labour shortages in the business sector.

According to the Riksbank's resource utilisation indicator, which is an aggregate of different indicators, resource utilisation was lower than normal throughout 2024 (see Figure 9).⁷ Resource utilisation was also lower than normal when measured using the GDP and employment gaps. The Riksbank's overall assessment is that the Swedish economy was in a mild recession in 2024 and that resource utilisation was lower than normal.

4
2
0
-2
-4
-6
-8
2019 2020 2021 2022 2023 2024

= GDP gap = Employment gap — RU indicator

Figure 9. Measures of resource utilisation in Sweden

Standard deviation and per cent

Note. The gaps refer to the deviation in GDP and employment from the Riksbank's assessed long term trend. The RU indicator is a statistical measure of resource utilisation. It is normalised so that the mean value is 0 and the standard deviation is 1. The solid lines refer to outcomes, the dashed lines refer to the Riksbank's forecasts from the Monetary Policy Report, December 2024.

Sources: Statistics Sweden and the Riksbank.

⁷ For a description of the Riksbank's resource utilisation indicator, see H. Lovéus (2023), "New indicators of resource utilisation", *Economic Commentary* no. 4, Sveriges Riksbank.

At the beginning of 2024, the Executive Board judged that monetary policy needed to be contractionary to ensure that inflation would stabilise around the target. Monetary policy became gradually less contractionary over the year, but it dampened economic activity and resource utilisation and contributed to higher unemployment. But high inflation is harmful to the economy and the economic costs in the long run would have been greater if inflation had not fallen towards the target and stabilised there within a reasonable time. With lower inflation and a more stable inflation outlook in 2024, the need for contractionary monetary policy gradually decreased and the Riksbank started a series of policy rate cuts in May. Apart from a pause in June, the Riksbank subsequently cut the policy rate at each monetary policy meeting in 2024, by a total of 1.5 percentage points. Monetary policy affects the economy with a time lag, and it takes time before the policy rate cuts attain their full impact. By attaining sustainably low and stable inflation, monetary policy creates the conditions for long-term favourable economic development.

Fact Box – Revisions of statistics are important to keep in mind when evaluating monetary policy

The National Accounts describe the activities and development of the Swedish economy and include statistics on GDP. Statistics Sweden publishes estimates of GDP growth quarterly and annually as well as a monthly indicator. These statistics are important for monetary policy to obtain a picture of the current economic situation. However, quarterly GDP calculations are largely based on preliminary statistics and Statistics Sweden revises calculations as better statistical data become available. GDP revisions can sometimes be large and occur long after the outcomes were first published. Detailed annual calculations for the GDP level are published with a lag of two years. In addition, Statistics Sweden conducts a major review of the statistics every five years, with more extensive revisions of the time series. One such review took place in May 2024.

The GDP outcomes that are available afterwards therefore differ from the outcomes that the Riksbank has to use as a base in real time when the monetary policy decisions are made. Other statistics are also sometimes revised, for example, Statistics Sweden's Labour Force Survey (LFS) has been revised several times in recent years as a result of the changes introduced in January 2021. The fact that statistics are revised retrospectively makes it more difficult to evaluate monetary policy. Monetary policy decisions are made on the basis of forecasts and assessments that are based on statistics available at the time of the decision. Revisions of statistics mean that the information on which the forecasts were based changes. This affects how accurate the forecasts are, but also reflects information that was not available when the forecasts were made.

⁸ For more details, see Statistics Sweden (2020), "<u>Revideringar av NR0103 – Specificering av vissa tillämpningar inom Nationalräkenskaper, kvartals- och årsberäkningar – NR0103 – av SCB:s revideringspolicy</u>" (in Swedish).

In the Account of Monetary Policy, Chapter 1 is based on the outcomes according to Statistics Sweden's latest publication, that is including revisions, as the chapter aims to describe the most current picture of economic developments in 2024. Chapter 2 aims to describe the monetary policy decisions during the year and the motives and considerations behind them. The most recent published outcomes are presented in the figures, but the forecasts and motivations for the monetary policy decisions are based on the data available at the time of each decision. Since Chapter 2 focuses on 2024, it is revisions of the statistics that have taken place between each decision in 2024 until the publication of the latest outcome that may affect comparisons with the forecasts. As monetary policy affects the economy with a time lag, Chapter 3 focuses on the forecasts made by the Riksbank in 2022 and 2023. These forecasts were based on the outcomes available at each decision date, but they are compared with the outcomes from Statistics Sweden's most recent data publication. The comparison is thus affected by all revisions of the statistics that have taken place since 2022. Therefore, in Chapter 3 the data revisions are illustrated in figures with a range for the lowest and highest values for the outcomes.

2 Monetary policy 2024

During 2024, monetary policy was eased gradually, but at a rapid pace. At the beginning of the year, it remained uncertain whether inflation would stabilise at 2 per cent and the policy rate was kept at a tightening level. But as the inflation outlook became more stable, the Executive Board lowered the policy rate by a total of 1.5 percentage points before the end of the year. The Riksbank's holdings of securities decreased through maturity during the year, but also through selling government bonds to normalise the Riksbank's balance sheet more quickly.

Rapidly falling energy prices contributed to CPIF inflation returning to 2 per cent in the spring and then falling further in the second half of the year. The Riksbank's inflation forecasts were relatively accurate. However, the volatile energy prices fell unexpectedly quickly during the year, resulting in a lower-than-expected CPIF and a downward revision of the short-term forecasts. The revisions were relatively small, however, and the outlook for inflation being close to the target by 2025 remained broadly stable. Adjusted for energy prices, inflation remained high at the beginning of the year but gradually deviated less and less from 2 per cent.

Available statistics in 2024 indicated that the real economy was unexpectedly weak and growth forecasts were revised downwards. Although outcomes published in February 2025 show that GDP recovered, especially toward the end of the year, the Swedish economy was in a mild recession in 2024. The clear shift in the risk outlook for inflation and economic activity during the year meant that the Riksbank both cut the policy rate faster than expected and communicated that further cuts were expected in the near future.

2.1 The Riksbank's forecasts and monetary policy considerations

The monetary policy stance was changed in 2024

Central bank policy rate hikes in 2022-2023 helped to dampen global economic activity, and inflation fell during 2024. Economic activity slowed in large part of the world, although there were major differences both within and between regions. The US economy performed unexpectedly strongly in the first half of 2024, while other export markets important to Sweden, such as the euro area and China, showed clear

signs of weakness. Overall, economic developments abroad during the year were somewhat weaker than expected and new information also pointed to weaker growth prospects. Underlying measures of inflation in the euro area and the United States fell during the year and the prospects for inflation suggested a continued decline.

During the year, central banks moved from discussing further tightening to increasingly communicating the timing of, and then initiating, interest rate cuts (see Figure 10). In addition to the Riksbank, the central banks in the United States, the euro area, the United Kingdom, Canada, Iceland and New Zealand cut their policy rates during the year. The rates were cut the most in Sweden and Canada.

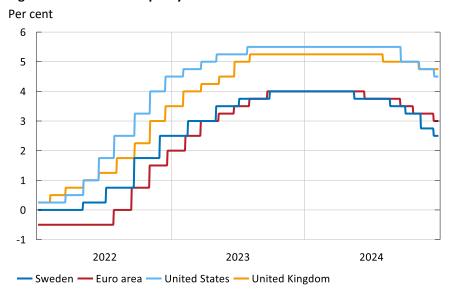


Figure 10. International policy rates

Sources: The respective central banks and the Riksbank.

What monetary policy would stabilise inflation in 2024?

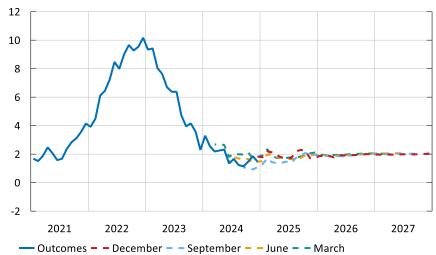
The Executive Board's discussions in 2024 focused on whether inflation would stabilise close to the 2 per cent target. It was well on its way to reaching 2 per cent at the beginning of the year, but there was considerable uncertainty as to whether it would also stabilise there. Rapidly falling energy prices contributed to CPIF inflation being close to 2 per cent in the spring, while underlying measures of inflation, such as the CPIF excluding energy, remained high (see Figure 11 and Figure 12). There were still concerns that inflation would remain at too high a level. Risks centred on renewed supply disruptions due to the geopolitical turmoil or a renewed sharp depreciation of the krona. Uncertainty about companies' costs and how they would be passed on to consumer prices remained a key issue in the discussions about risks to inflation. During the spring, this contributed to the Riksbank communicating that the adjustment of monetary policy needed to be cautious, to ensure that inflation would stabilise sustainably close to the target.

As it takes time for monetary policy to have a full impact on inflation and the real economy, monetary policy decisions are guided by economic forecasts. The Riksbank's

inflation forecasts for 2024 were relatively accurate. However, the volatile energy prices fell unexpectedly quickly during the year, resulting in a lower-than-expected CPIF and a downward revision of the short-term forecasts. In the second half of the year, CPIF inflation was below 2 per cent. However, forecast revisions were relatively small and the outlook for inflation to be close to the target in 2025 remained broadly unchanged (see Figure 11). Adjusted for energy prices, inflation developed well in line with the Riksbank's forecasts, which also contributed to the assessment that inflationary pressures would be in line with the target in the period ahead.

Figure 11. CPIF, 2024 forecasts

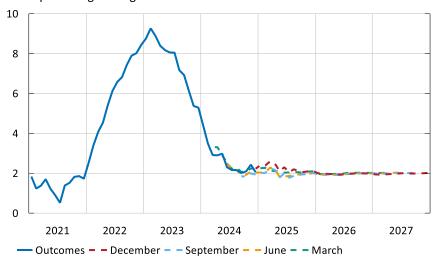
Annual percentage change



Sources: Statistics Sweden and the Riksbank.

Figure 12. CPIF excluding energy, 2024 forecasts

Annual percentage change



Sources: Statistics Sweden and the Riksbank.

Monetary policy has focused on bringing inflation back to the target within a reasonable period of time, without slowing down the economy unnecessarily. The Swedish economy is sensitive to interest rates, which means that the impact of policy rate increases on resource utilisation and inflation can be large and come quickly. The question of the impact of monetary policy on the economy was therefore continuously analysed. The economy coming out of recession was important in itself, but also a condition for inflation to remain sustainably close to the target.

The available statistics pointed to the economic recovery having taken longer than expected in 2024, which was a contributing factor to the Executive Board seeing an increased need to ease monetary policy over the year. While the labour market developed surprisingly strongly at the beginning of the year, there was a clear slow-down thereafter (see Figure 13 and Figure 14). The forecast for the employment rate was clearly revised downwards in December, while the Riksbank's unemployment forecast, which had indicated an unemployment rate of around 8.5 per cent, held during the second half of the year.

Figure 13. Employment rate, 2024 forecasts

71 70 69 68 67 66 2021 2022 2023 2024 2025 2026 2027

Outcomes - - December - - September - - June - - March

Percentage of population, 15–74 years

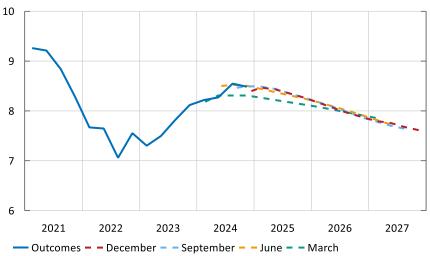
Note. Seasonally adjusted data.

Sources: Statistics Sweden and the Riksbank.

⁹ See the article "Higher sensitivity to interest rates in the Swedish economy" in *Monetary Policy Report*, September 2022, Sveriges Riksbank.

Figure 14. Unemployment rate, 2024 forecasts

Percentage of labour force, 15-74 years



Note. Seasonally adjusted data.

Sources: Statistics Sweden and the Riksbank.

The interest-rate sensitive parts of the Swedish economy, such as household consumption and housing investments, were clearly affected by the higher interest rates in 2023. As the monetary policy became less contractionary, economic activity was expected to rise again in 2024. However, available statistics showed that GDP growth did not pick up as expected during the year and the forecasts for GDP were revised downwards (see Figure 15). The outcome published by Statistics Sweden (including revisions to previous quarterly growth rates) at the end of February 2025 indicates that GDP recovered during the second half of the year.¹⁰

In particular, household consumption surprised on the downside during the year (see Figure 16). Despite real wages rising and indicators pointing to increasing optimism about the future among households, consumption did not increase until the third quarter.

 $^{^{10}}$ See also the Fact Box "Revisions of statistics are important to keep in mind when evaluating monetary policy".

Figure 15. GDP, 2024 forecasts

Index, 2019 Q4 = 100

115

110

105

100

95

2021 2022 2023 2024 2025 2026 2027

Outcomes - December - September - June - March

Note. Seasonally adjusted data. Current prices. GDP outcomes have been revised several times by Statistics Sweden since 2022.

Sources: Statistics Sweden and the Riksbank.

Figure 16. Household consumption, 2024 forecasts

Index, 2019 Q4 = 100

115

110

105

100

95

2021 2022 2023 2024 2025 2026 2027

— Outcomes — December — September — June — March

Note. Seasonally adjusted data.

Sources: Statistics Sweden and the Riksbank.

Given the firmly anchored inflation expectations and increasingly stable outlook for inflation, the policy rate could be lowered to provide more support to the real economy. From the summer, the Executive Board therefore discussed to a lesser extent the importance of easing monetary policy cautiously. The Executive Board discussed to a greater extent the more subdued inflationary pressures and the risk that the recession would be protracted and thus inflation would be too low.

It is difficult to know in advance how much the policy rate needs to be adjusted to stabilise inflation sustainably at the target, because monetary policy affects different parts of the economy at different speeds and to different extents. Therefore, it is natural that the policy rate sometimes deviates from forecasts. To provide more support to economic activity and ensure that inflation would stabilise at the target, monetary policy in 2024 needed to be eased more, especially in the second half of the year, than the Riksbank had assessed at the beginning of 2024 (see Figure 17). The clear shift in the risk outlook for inflation and economic activity during the year led the Riksbank to announce further cuts in the near term. This was done both via the interest rate path and verbally in the Monetary Policy Updates. Sweden's policy rate was cut sooner and more than in most other comparable countries in 2024 (see Figure 10).

Per cent

5
4
3
2
1
0
-1
2021 2022 2023 2024 2025 2026 2027

— Outcomes — December — September — June — March

Figure 17. Policy rate, 2024 forecasts

Note. Outcomes are daily rates and forecasts refer to quarterly averages. Source: The Riksbank.

2.2 Eight monetary policy meetings in 2024

Risks of inflation setback remain – policy rate left unchanged in February but forecast revised down

In the Monetary Policy Update in February, the Riksbank noted that inflation had continued to fall at the end of 2023. The slowdown in the Swedish economy with a weakening labour market continued in line with the Riksbank's forecast. However, adjusted for energy prices, inflation remained too high and the risk of a setback persisted. The Executive Board judged that a tight monetary policy stance was still necessary for inflation to stabilise close to the target and contribute to a favourable economic development going forward. The policy rate was held unchanged at 4 per cent, but the Executive Board considered that the risk of inflation becoming

¹¹ See Section 2.2 and the article "Changes in the Riksbank's monetary policy communication".

entrenched at too high levels had decreased. The members communicated that the policy rate would therefore probably be cut earlier than indicated in the previous forecast in November 2023. Indicators suggested that inflationary pressures would continue to slow down going forward and, if the outlook for inflation remained favourable, the Executive Board did not rule out the possibility of lowering the policy rate in the first half of 2024.

The Executive Board emphasised that the adjustment of monetary policy needed to be cautious, to ensure that inflation would be stabilised sustainably close to the target. New information and how it could be expected to affect the prospects for the economy and inflation would be decisive in determining future monetary policy.

The Executive Board also decided to increase the pace of government bond sales from SEK 5 billion to SEK 6.5 billion per month with effect from February 2024 (see the Fact Box "Normalisation of the Riksbank's balance sheet").

Inflationary pressures still slightly elevated – policy rate held unchanged in March but signals of a near-term cut

The Executive Board also decided to hold the policy rate unchanged in March. The Monetary Policy Report emphasised that inflationary pressures remained somewhat elevated but that monetary policy and diminishing supply shocks had contributed to their moderation. Inflation expectations were still firmly anchored and wage increases were moderate. Inflation had continued to fall and forward-looking indicators suggested that it would continue to approach 2 per cent. The risk of inflation becoming entrenched at too high a level had continued to decline. But given the very high inflation in recent years and changed pricing behaviour among companies, the Executive Board wished for further confirmation that inflation was on its way to stabilising close to the target.

However, the fact that inflation was now approaching the target at the same time as economic activity was weak meant that there was less need for a restrictive monetary policy. The Executive Board therefore communicated that if the prospects for inflation remained favourable, the policy rate could probably be cut in May or June. The members continued to emphasise that the adjustment of monetary policy going forward needed to be cautious and that the Riksbank's forecast indicated gradual policy rate cuts.

More stable inflation prospects – the policy rate was lowered in May and two further cuts were signalled for the second half of the year

Ahead of the Monetary Policy Update in May, the view that inflation would remain close to the target even in the slightly longer term was strengthened. Between February and March, CPIF inflation fell by almost 0.4 percentage points and the outcome for March, at 2.2 per cent, was lower than in the Riksbank's forecast. The decline was broad among the sub-groups and prices of both goods and services increased more slowly than expected. New information suggested that, later in 2024, CPIF inflation could temporarily undershoot the target slightly but this did not change the view of the outlook for inflation in the coming years. The Executive Board decided to cut the

policy rate by 0.25 percentage points to 3.75 per cent and communicated that if the inflation outlook still stood, the policy rate could be cut twice in the second half of the year, in line with the March forecast. However, risks that could challenge the favourable development of inflation persisted, primarily linked to the strong US economy, the geopolitical tension and the krona exchange rate. The Executive Board continued to emphasise that the adjustment of monetary policy going forward needed to be cautious, with gradual policy rate cuts.

Inflationary pressures dampen – the policy rate is held unchanged in June, but the forecast is revised down slightly

In June, inflationary pressures were largely judged to have developed as expected and the policy rate was held unchanged at 3.75 per cent, in line with the forecast in March and the communication in the May Monetary Policy Update. The inflation outcome in April was marginally higher than expected, as service prices increased unusually strongly. However, forward-looking indicators, such as companies' pricing plans, confirmed the picture of inflationary pressures painted in May. As inflation was essentially moving in the right direction, economic activity was assessed to be somewhat weaker and the krona exchange rate somewhat stronger, the forecast for the policy rate was adjusted down somewhat. The Executive Board now signalled that on condition that the outlook for inflation remained the same, the policy rate could be cut two or three times during the second half of the year.

Energy prices were expected to be lower than in 2023 and it was therefore predicted that CPIF inflation, in individual months, would be lower than the CPIF excluding energy. The Riksbank pointed to the risks that could cause inflation to deviate from the target and the uncertainty surrounding the inflation outlook that still suggested a gradual adjustment of monetary policy.

Weaker growth prospects – policy rate cut in August and two or three further reductions signalled before the end of the year

Prior to the Monetary Policy Update in August, inflation had developed as expected and economic activity was weak. The view of inflation stabilising close to the target had strengthened and the risk that inflation would become too high again had declined further. The Executive Board therefore decided to cut the policy rate by 0.25 percentage points to 3.5 per cent, in line with the June forecast. In addition, new information implied that growth prospects in Sweden and abroad were somewhat weaker than in the most recent forecast. The Executive Board therefore assessed in August that the policy rate could be lowered somewhat faster than it had assumed in June. If the inflation outlook were to remain the same, two or three more policy rate cuts could be expected before the end of the year.

The conditions for an inflation rate in line with the target also going forward were judged to be good. Long-term inflation expectations signalled strong confidence in the inflation target and wage increases were moderate. At the same time, the Executive Board emphasised that the adjustment of monetary policy needed to be gradual. This

would contribute to stability and predictability for households and companies when making financial decisions.

Clear shift in the risk outlook – policy rate cut in September and faster cuts signalled

In the September Monetary Policy Report, the Riksbank noted that the risk outlook for inflation and economic activity had clearly shifted since the spring. The risk of inflation becoming too high had gradually declined. At the same time, the recovery appeared to be slower than expected. There were also weaker economic signals in the rest of the world. It was important in itself that economic activity should strengthen but it was also a necessary condition for inflation to stabilise close to the target. The Executive Board therefore assessed that the policy rate would need to be cut at a faster rate than the Riksbank had previously communicated. In this way, monetary policy would provide further support to economic growth and thereby help to stabilise inflation close to the target.

The Executive Board decided to cut the policy rate by 0.25 percentage points to 3.25 per cent. The members also communicated that if the outlook for inflation and economic activity would remain unchanged, the policy rate could be cut at the two remaining meetings of the year and that a cut of 0.5 percentage points at one of the meetings was possible. The forecast for the policy rate was revised downwards and reflected that one or two further cuts could take place during the first half of 2025. Together, these changes signalled a relatively large shift of monetary policy in a more expansionary direction, which was expected to improve households' finances more quickly and make it easier for companies to invest.

Few signs of recovery – policy rate cut in November and a cut in December and in the first half of next year signalled

Despite an expectation among economic agents of better times ahead, there were few clear signs as yet of a recovery in the Monetary Policy Update in November. Economic developments were difficult to assess, especially those abroad and not least following the US election. The Swedish economy was still considered to be in a mild recession, domestic demand remained subdued and industrial activity appeared to be weakening. The risk of a weaker performance in global manufacturing activity was deemed to have increased and thus also the risk of weaker Swedish exports. The labour market had also developed somewhat weaker than expected. Together with other new information in the form of redundancy notices, recruitment plans and job vacancies, this indicated that the labour market would remain weak for the rest of the year. Unusually low energy prices had resulted in CPIF inflation being below 2 per cent and being expected to remain there for some time. However, measured as the CPIF excluding energy, inflation had remained close to 2 per cent and long-term inflation expectations were firmly anchored at the target.

The Executive Board assessed that the policy rate needed to be cut a little faster than previously expected to provide further support to economic activity and therefore decided to cut the policy rate by 0.5 percentage points to 2.75 per cent. The Board

members communicated that if the outlook for inflation and economic activity remained the same, the policy rate could be cut further at the next monetary policy meeting in December and during the first half of 2025, in line with what was communicated in September.

The Executive Board also decided to maintain a long-term holding of nominal government bonds of SEK 20 billion through trade (see the fact box "Normalisation of the Riksbank's balance sheet").

Important that economic activity strengthens – policy rate cut in December and a further cut in the first half of 2025 signalled

Despite some signs that economic activity was moving towards a rebound, it remained weak in December. The Executive Board judged that it was appropriate to lower the policy rate further to provide more support to the recovery and therefore decided to cut the policy rate by 0.25 percentage points to 2.5 per cent. It was emphasized that the policy rate had been cut quickly and that monetary policy affects the economy with a lag. This argued for a more tentative approach when monetary policy was formulated going forward. The lower policy rate was expected to provide an increasingly evident positive contribution to demand in the Swedish economy in 2025. The Monetary Policy Report stated that the Riksbank would carefully evaluate the need for future policy rate adjustments in light of the effect of earlier cuts and shifts in the risk profile regarding the outlook for inflation and economic activity. If the outlook were to remain unchanged, the policy rate could be cut once again during the first half of 2025.

2.3 List of monetary policy decisions 2024

The Executive Board of the Riksbank held eight monetary policy meetings during 2024, which is more regular monetary policy meetings than before (see further in the article "Changes in the Riksbank's monetary policy communication"). In conjunction with every second monetary policy meeting, a Monetary Policy Report was published, summarising the data on which the monetary policy decision was based. The Report includes forecasts for the policy rate, inflation and other economic variables, and these forecasts extend three years ahead. No new forecasts were published at the other meetings; instead a shorter document, a Monetary Policy Update, was published. The Update includes an assessment of the impact of new information on the outlook for economic activity, inflation and monetary policy, and the motives for the monetary policy decision. General economic and financial market developments are described in more detail in the Monetary Policy Reports and Updates.

1 February: The Executive Board decided to leave the policy rate unchanged at 4 per cent. The Board also decided to increase the pace of government bond sales from SEK 5 billion to SEK 6.5 billion per month with effect from February 2024.

27 March: The Executive Board decided to leave the policy rate unchanged at 4 per cent.

8 May: The Executive Board decided to cut the policy rate by 0.25 percentage points to 3.75 per cent.

27 June: The Executive Board decided to leave the policy rate unchanged at 3.75 per cent.

20 August: The Executive Board decided to cut the policy rate by 0.25 percentage points to 3.5 per cent.

25 September: The Executive Board decided to cut the policy rate by 0.25 percentage points to 3.25 per cent.

7 November: The Executive Board decided to cut the policy rate by 0.5 percentage points to 2.75 per cent. The Executive Board also decided to maintain a long-term holding of nominal government bonds through trade to a value of SEK 20 billion.

19 December: The Executive Board decided to cut the policy rate by 0.25 percentage points to 2.5 per cent.

Fact Box – Normalisation of the Riksbank's balance sheet

As part of normalising its balance sheet, the Riksbank has been selling Swedish government bonds since April 2023. In January 2024, the Executive Board decided to increase the sales of government bonds from SEK 5 billion to SEK 6.5 billion per month. The intention has been to continue with the sales and not to compensate for the maturing securities, so that the holdings are phased out. During 2024, the total holdings have declined by almost SEK 200 billion and the cut has contributed to the bond markets functioning better. ¹² A smaller holding of securities has also contributed to a reduced interest rate risk on the Riksbank's balance sheet.

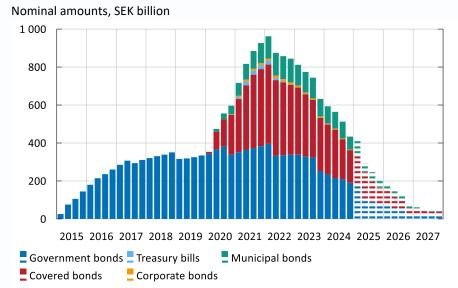
Experiences from both the financial crisis of 2008–2009 and the crisis following the pandemic outbreak of 2020 demonstrate how important it is for the Riksbank to be able to rapidly adopt appropriate monetary policy measures. The policy rate is the main monetary policy tool, but it cannot be ruled out that situations may arise again where it may be appropriate to buy securities, even if the Riksbank considers that the threshold for the purchase of private securities would be particularly high. In the event of shocks on the financial markets, a good operational capability will help the Riksbank maintain a well-functioning transmission process with the aim of achieving the monetary policy objective. To maintain this capacity, the Riksbank decided in November 2024 to establish a long-term holding that enables regular trading of nominal government bonds. This holding shall amount to a nominal total of SEK 20 billion. Market participants' knowledge that the Riksbank has good operational

¹² A majority of the respondents to the Financial Markets Survey assess that market liquidity for nominal government bonds has improved since the Riksbank started selling government bonds. In the free text responses, several respondents mention that the increased supply of government bonds on the market, partly due to the Riksbank's sales, has improved liquidity in the market.

capacity increases confidence in the Riksbank. This will improve the Riksbank's ability to maintain permanently low and stable inflation even in normal times when changes in the policy rate are the main tool.

The Riksbank shall continue with the ongoing sales of Swedish nominal government bonds until the holdings, excluding government bond 1059 and Green bond, amounts to SEK 20 billion. These sales of nominal government bonds are expected to be concluded at the end of 2025. Holdings of other Swedish bonds are continuing to decline as they mature and, in a few years, virtually all of these holdings will have been phased out (see Figure 18).

Figure 18. The Riksbank's asset holdings



Note. The striped bars are a projection of the Riksbank's securities holdings based on maturities, an assumption that sales of nominal government bonds will continue until December 2025 and then be concluded, as well as on a technical assumption regarding the sale of various issues of nominal government bonds.

Source: The Riksbank.

3 Evaluation of the Riksbank's forecasts from 2022 and 2023

Overall, the GDP growth in the rest of the world in 2023–2024 was roughly as expected. On the other hand, GDP growth in Sweden over the past two years was higher than the Riksbank expected in the forecasts made in 2022 and 2023. The decline in CPIF inflation was in line with the Riksbank's forecasts from the end of 2022 onwards. From spring 2023 onwards, CPIF inflation excluding energy also developed well in line with these forecasts. Employment fell less than expected and unemployment was in line with the Riksbank's forecasts.

The Riksbank's rapid cuts of the policy rate in 2024 were not in the forecasts that the Riksbank made in 2022–2023. Although inflation fell in 2023, there was considerable uncertainty about companies' pricing behaviour and the underlying inflation outlook. This in turn created considerable uncertainty about how much monetary tightening would be needed to stabilise inflation close to the 2 per cent target. The Executive Board judged that the policy rate needed to be sustainably contractionary. However, given the high uncertainty about the outlook, the Executive Board emphasised that other scenarios were possible, including scenarios where the interest rate began to be cut earlier. Such scenarios were also presented in the Monetary Policy Reports in 2023.

Monetary policy affects inflation and the rest of the economy with a certain time lag. This means that monetary policy decisions need to be based on forecasts of how the economy will develop in the future. When assessing the target fulfilment of monetary policy, it is therefore important to evaluate how well different forecasts – in particular the forecasts for inflation – were in line with the outcomes. It is also important to explain the reasons behind any forecasting errors. To evaluate how well the Riksbank's monetary policy decisions influenced inflation towards the inflation target in 2024, the forecasts from 2022 and 2023 are presented in this section.¹³

Although monetary policy normally operates with a time lag, some monetary policy measures can operate more quickly or entirely without a time lag. For example, the effects of monetary policy on the exchange rate can quickly have an impact on the prices of imported goods, which are a significant part of consumer prices. This means

¹³ For a comparison of the forecasts made by different Swedish forecasting institutes, the Riksbank refers to the National Institute of Economic Research's (NIER) annual evaluation, which is made available at www.konj.se. The NIER will publish its forecast evaluation for 2024 in spring 2025.

that monetary policy in 2024 may also have affected inflation in the same year. Monetary policy in 2024 is discussed in Chapter 2.

Depending on the nature and magnitude of the shock to the economy, it can take different amounts of time to bring inflation back to target. The forecasts for CPIF inflation show the pace at which the Riksbank intends to bring inflation back to the 2 per cent target after a shock. The Riksbank shall also contribute to a balanced development of production and employment in Sweden. The forecasts for these variables show how the Riksbank has taken into account developments in the real economy in its monetary policy decisions.

Thus, a deviation from the Riksbank's inflation target of 2 per cent does not always mean that monetary policy has been poorly balanced. Inflation is affected by various events and disruptions that can be difficult or impossible to predict, such as the pandemic or Russia's illegal invasion of Ukraine. These events have had a major impact on both inflation and economic developments in recent years and given rise to large forecasting errors. In addition, some statistics are revised afterwards, which means that the information on which the forecasts were based also changes. This is another source of error that means that forecasts can be wrong. For more about this, see the Fact Box "Revisions of statistics are important to keep in mind when evaluating monetary policy".

3.1 Economic developments in Sweden and abroad

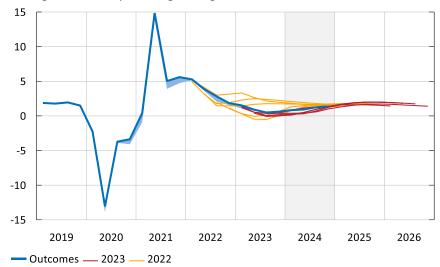
International developments in 2024 have been in line with the forecasts

Sweden is a small, open economy that is highly dependent on imports and exports. This means that international economic activity and price movements are of great significance for the Swedish economy. When the Riksbank formulates its monetary policy, it is therefore important to have an idea of the future development of GDP and inflation abroad. To obtain a summary measure of the external environment, developments in different countries can be weighted together to form an index based on the importance of each country's trade with Sweden. Figure 19 shows an index weighting together GDP in the euro area and the United States and Figure 20 shows the corresponding index for inflation. The figures also show the Riksbank's forecasts for GDP and inflation abroad.

Overall, GDP growth abroad in 2024 was close to the forecasts made by the Riksbank at the end of 2022 and during 2023 (see Figure 19). However, there was a difference between the forecasts for the euro area and for the United States. GDP growth in the euro area was more in line with the forecasts, while US growth was significantly stronger than expected. However, this affects the comparison in Figure 19 to a lesser extent, as the euro area has a greater importance for Swedish trade. After the sharp upturn in inflation in 2022, inflation abroad fell back in 2023 and fell further in 2024. However, it increased slightly towards the end of the year. Developments have been broadly in line with the Riksbank's forecasts from the end of 2022 (see Figure 20). Inflation in the United States was slightly higher than expected.

Figure 19. GDP growth abroad, outcomes and forecasts

KIX weighted, annual percentage change

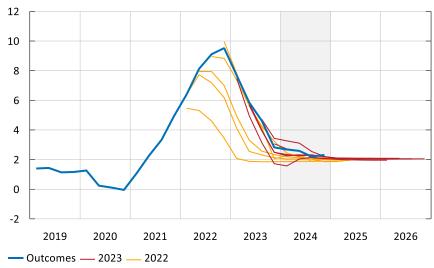


Note. The figure shows KIX2 weighted GDP growth. KIX2 is a weighted average of the euro area (85 per cent) and the United States (15 per cent). The light blue area is the range within which the outcome series has stayed according to various revisions made since 2022. At a given point in time the lower (upper) limit of the range shows the lowest (highest) value the outcome has had.

Sources: National sources and the Riksbank.

Figure 20. Inflation abroad, outcomes and forecasts

KIX weighted, annual percentage change



Note. The figure shows KIX2-weighted inflation. KIX2 is a weighted average of the euro area (85 per cent) and the United States (15 per cent).

Sources: National sources and the Riksbank.

Large fluctuations in the krona exchange rate

An important factor that affects price developments is the exchange rate. Changes in the exchange rate can have rapid and direct effects on some imported goods and services. However, it is difficult to determine with any great degree of certainty how fast and how large the pass-through from the exchange rate to prices is in general, as it varies over time, depending on the state of the economy and other factors. 14

The Riksbank makes forecasts for the KIX, which is a weighted index for the krona exchange rate against the currencies of countries that are important for Swedish trade. After weakening for some time, the KIX exchange rate strengthened in the latter part of 2023 (see Figure 21). This occurred in the context of falling inflation abroad and growing expectations that central banks would start to cut their policy rates sooner. The krona stabilised in early 2024 and during the rest of the year there were relatively large fluctuations, with periods of exchange rate depreciation followed by periods of exchange rate appreciation. Overall, however, the krona was relatively stable, albeit slightly weaker at the end of 2024 than at the beginning.

135 125 115 105 2019 2021 2024 2026 2020 2022 2023 2025 — Outcomes — 2023 — 2022

Figure 21. Nominal exchange rate, outcomes and forecasts

Index, 18 November 1992 = 100

Source: The Riksbank.

Note. The KIX (krona index) is a weighted average of exchange rates for currencies in 31 countries that are important for Sweden's international trade. On 28 March 2022, the Russian rouble was excluded from the index. A higher value indicates a weaker exchange rate.

The Riksbank's KIX-weighted exchange rate forecasts are based, among other things, on an assessment of the long-term level of the krona's real exchange rate and that the krona will begin to adjust towards this level in the not too distant future. In the longer run, the real exchange rate has a link to underlying economic developments in Sweden relative to the rest of the world. Based on this, the Riksbank has for some time assessed that the krona is undervalued and will therefore appreciate. 15 The fact that the krona weakened in 2022 and most of 2023 meant that the Riksbank overestimated the strength of the exchange rate. However, when the krona subsequently

 $^{^{14}}$ See, for example, the article "The pass-through of the krona to inflation appears to have been larger than usual" in Monetary Policy Report, November 2023, Sveriges Riksbank, where the results indicate that cost changes have a greater impact on prices when inflation is high than when it is low.

¹⁵ See the article "The krona will strengthen in the medium term", article in *Monetary Policy Report*, September 2023, Sveriges Riksbank.

appreciated at the end of 2023, it did so more quickly than the Riksbank had envisaged (see Figure 21).

The krona exchange rate is affected by the currency trading needed for trade in goods and services between Sweden and other countries. However, the krona is also affected by currency trading with other motives, for instance diversification of large funds' portfolios, hedging against losses due to exchange rate fluctuations and even pure speculation in how the krona will vary. The consequence of this is that trading in the krona is largely driven by purposes that do not necessarily place so much emphasis on the underlying development of the Swedish economy relative to the rest of the world. During periods, the exchange rate of the krona may therefore vary in a way that is difficult to explain by macroeconomic developments.

The volatile development of the exchange rate in 2024 is likely to have been driven more by changes in international factors than by news about the Swedish economy. The krona has often depreciated when geopolitical uncertainty has increased and, in 2024, this uncertainty remained high (see Chapter 2). The krona is also affected by expected interest rate differentials between Sweden and other countries. During the year, expectations of the policy rates of the major central banks varied widely, which affected the krona as well as many other currencies. This was particularly the case for expectations of the Federal Reserve's policy rate. These expectations shifted up and down in response to new signals on inflationary pressures and the strength of the US economy.

Higher Swedish GDP growth and employment than expected

After a slight decline in 2023, GDP increased by 1.0 per cent in 2024. Despite this relatively weak development, GDP growth was higher in both 2023 and 2024 than the Riksbank envisaged in the forecasts made in 2023 (see Figure 22). In May 2024, Statistics Sweden published revised outcomes for GDP and its components following a major review of the statistics. ¹⁶ The revision entailed, for instance, a relatively large downward revision of GDP growth in 2022. The Riksbank's forecasts from 2022 and 2023 thus assumed that the GDP level in 2022 was higher than it turned out to have been in retrospect.

¹⁶ Statistics Sweden carries out this type of revisions to the National Accounts once every five years. For further details on the results of last year's review, see Statistics Sweden (2024), <u>Kommentarer till BNP-beräkningarna Första kvartalet 2024 Detaljerad årsberäkning 2022</u> (in Swedish).

Annual percentage change

15

10

5

0

-5

-10

2019 2020 2021 2022 2023 2024 2025 2026

Figure 22. GDP growth, outcomes and forecasts

Note. GDP outcomes have been revised several times by Statistics Sweden since 2022. The light blue area is the range within which the outcome series has remained according to various revisions made since 2022. At a given point in time the lower (upper) limit of the range shows the lowest (highest) value the outcome has had. The interval extends to the end of the third quarter of 2024.

Sources: Statistics Sweden and the Riksbank.

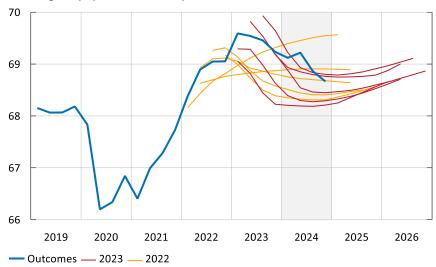
— Outcomes — 2023 — 2022

In 2024, the labour market continued to weaken slightly. The historical outcomes for employment and unemployment have changed in ways that make comparisons with the forecasts made in 2022 and 2023 difficult. But it is nevertheless clear that employment in 2024 was higher than the Riksbank generally envisaged in these forecasts (see Figure 23). Despite the underestimation of employment, the Riksbank's forecasts for unemployment from mid-2022 onwards were relatively accurate and the rise in unemployment in 2024 was well captured by the forecasts (see Figure 24). The fact that the forecast for unemployment was close to the outcome, while the development of employment was underestimated is because the forecasts also underestimated the development of the labour force.

 $^{^{17}}$ The reorganisation of the Labour Force Surveys (LFS) statistics in January 2021 led to several rounds of linkages and revisions of the statistics in 2022 and 2023. This complicated the labour market forecasting process.

Figure 23. Employment rate, outcomes and forecasts

Percentage of population, 15-74 years

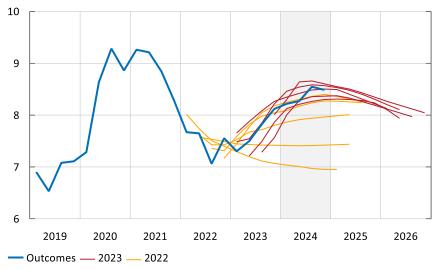


Note. Seasonally adjusted data. In October 2023, the series was relinked and revised by Statistics Sweden for the period 2005–2020 for the break in the LFS in January 2021. Outcomes after 2021 were also revised as a result of some corrections to the statistics.

Sources: Statistics Sweden and the Riksbank.

Figure 24. Unemployment rate, outcomes and forecasts

Percentage of labour force, 15-74 years



Note. Seasonally adjusted data. In October 2023, the series was relinked and revised by Statistics Sweden for the period 2005–2020 for the break in the LFS in January 2021. Outcomes after 2021 were also revised as a result of some corrections to the statistics.

Sources: Statistics Sweden and the Riksbank.

3.2 Inflation and the Riksbank's policy rate

Inflation on target in 2024, in line with the forecasts

In 2023, inflation came down from the high level to which it had risen as a consequence of supply constraints and strong demand following the pandemic. ¹⁸ The Riksbank underestimated the sharp rise in inflation in 2022 and revised its forecasts upwards as inflation rose. The decline in CPIF inflation from the beginning of 2023 onwards was in line with the forecasts made by the Riksbank in the latter part of 2022 and in 2023 (see Figure 25). The Riksbank assessed that inflation would continue to fall in 2024 and be close to the target of 2 per cent, which was also the case. It took somewhat longer than the Riksbank expected before underlying inflation measured in terms of the CPIF excluding energy prices began to fall (see Figure 26). However, from spring 2023 onwards, underlying inflation also developed well in line with the Riksbank's forecasts.

12
10
8
6
4
2

2022

2023

2024

2026

2025

Figure 25. CPIF, outcomes and forecasts

Annual percentage change

0

-2

2019

2020

Outcomes — 2023 — 2022

2021

Sources: Statistics Sweden and the Riksbank.

¹⁸ For more details, see for example the Analysis "What factors drove the surge in inflation?" in *Monetary Policy Report*, June 2024, Sveriges Riksbank.

Annual percentage change

10

8

6

4

2

2022

Figure 26. CPIF excluding energy, outcomes and forecasts

Sources: Statistics Sweden and the Riksbank.

2020

2021

2019

Outcomes — 2023 —

The Riksbank cut the policy rate faster than the forecasts made in 2022 and 2023 indicated

2023

2024

2025

2026

In 2024, the Riksbank cut the policy rate gradually but rapidly, from 4 per cent to 2.5 per cent. The forecasts made by the Riksbank during 2022 and 2023 did not include the start of policy rate cuts in 2024 (see Figure 27). The Riksbank's forecasts went from clearly underestimating the policy rate in 2022 and early 2023 to clearly overestimating it in 2024. Given that the forecasts for inflation in 2024 were in line with the outcomes, a natural question is why the forecasts for the policy rate, which the Riksbank published at the same time as the inflation forecasts, did not reflect the policy rate cuts.

¹⁹ The underestimation of the policy rate in 2022–2023 reflected the underestimation of inflation in those years – see *Account of Monetary Policy* 2023 for details.

Figure 27. Policy rate, outcomes and forecasts

Per cent 5 4 3 2 1 0 -1 2019 2020 2021 2022 2023 2024 2025 2026 — Outcomes — 2023 — 2022

Note. Outcomes are daily rates and forecasts refer to quarterly averages.

Source: The Riksbank.

One important explanation is the pronounced uncertainty about the inflation propensity of the economy in 2022–2023. In 2022, inflation rose rapidly as firms passed on their cost increases to consumer prices to an unexpectedly large degree and the Riksbank had to repeatedly adjust its inflation forecast upwards when the outcome became higher than expected (see Figure 25). In 2023, CPIF inflation started to fall, initially reflecting the fading contribution of energy prices to inflation. However, underlying inflation did not decline at the same pace and inflationary pressures remained too high, which was reflected, for instance, in the continued rapid rise in services prices. Moreover, the overall economic situation appeared to be stronger than expected. At the same time, the krona continued to depreciate in the first half of 2023, further pushing up firms' costs of imported goods. Analyses indicated that the pass-through of the exchange rate to price increases is greater in an environment where initial inflation is high.²⁰ There was therefore a clear risk that the weak krona would lead to an increase in inflation.

Thus, although inflation fell, there was considerable uncertainty in 2023 about firms' pricing behaviour and the underlying inflation outlook. This in turn created considerable uncertainty about how much monetary tightening would be needed to stabilise inflation close to the 2 per cent target. Given the uncertainty about the inflation outlook, the Board wanted to have certainty that inflation was about to stabilise at the inflation target. The Executive Board judged that the policy rate needed to be sustainably contractionary for inflationary pressures and firms' pricing behaviour to be consistent with an inflation that is lastingly close to target. As Figure 25 and Figure 27 illustrate, this meant that, according to the forecasts, the policy rate could only

²⁰ See the article "The pass-through of the krona to inflation appears to have been larger than usual" in *Money Policy Report*, November 2023, and M. Almgren and D. Stoyko (2024), "Is there state-dependence in the exchange rate pass-through to inflation in Sweden?", *Staff memo*, April, Sveriges Riksbank.

start to be cut once inflation had been close to the target for some time.²¹ However, given that it was so uncertain how inflation would develop, the Executive Board emphasised that other scenarios were possible, including scenarios in which interest rates started to be cut earlier. Such scenarios were also presented in the Monetary Policy Reports in 2023.

Although the alternative scenarios facilitated monetary policy communication, the Executive Board noted that it was difficult to provide households, companies and market participants with a picture of the interest rate outlook that clearly reflected the uncertainty surrounding the slightly longer-term projections. This difficulty was one of the motives for the change in communication regarding the interest rate path made by the Executive Board in 2024 (see also the article "Changes in the Riksbank's monetary policy communication").

Towards the end of 2023, the Riksbank assessed that inflationary pressures had eased more clearly and therefore held the policy rate unchanged. As inflation moved in line with forecasts, uncertainty about the outlook diminished, as did the risk that inflation would become entrenched at too high levels. The Executive Board kept the policy rate unchanged during the initial monetary policy meetings in 2024 but changed communication on the outlook. A significantly lower forecast with a faster decline in the policy rate was judged to be consistent with approximately the same inflation forecast as before (see Chapter 2 for details). The combination of interest rate and inflation forecasts was approximately in line with an alternative scenario in the Monetary Policy Report in November 2023.

With hindsight, interest rate developments tended to follow more optimistic scenarios, with the shift from high to more normal inflation propensity in the economy occurring relatively quickly. Household consumption also proved to be unexpectedly unresponsive to the fall in interest rates (see Chapter 2). Forecasting is an important element of monetary policy decision-making and a good forecast is of course better than a poor one. But perhaps the most important prerequisite for a successful monetary policy is that central banks remain nimble. They need to be agile and react to shifts in the economic environment by adapting decisions to new circumstances.

²¹ Such a combination of inflation and interest rate forecasts can result when the forecast is an average of different scenarios in which monetary policy brings inflation back to the target under different assumptions about the inflation propensity of the economy, see M. Flodén (2024), "Communicating future monetary policy – reflections after eleven years as member of the Executive Board of the Riksbank's Executive Board", speech 17 April, Sveriges Riksbank.

4 Important monetary policy issues

The debate in 2024 largely centred on whether the Riksbank should have pursued a less restrictive policy in recent years. However, the discussion seems to have mainly centred on marginal differences in opinion with regard to what was appropriate policy, rather than diametrically opposed views. One argument put forward was that monetary policy had been too tight because the Riksbank had not felt able to deviate from the ECB's policy. The criticism that the Riksbank's previous expansionary policy is the main cause of high house prices and high household debt also continued to be voiced during the year. The Riksbank's independence was also questioned, from different perspectives. The key monetary policy issue of how the neutral interest rate will develop in the future continued to be discussed internationally, along with how an interaction between monetary and fiscal policy can be achieved.

4.1 The purpose of the inflation target

According to the Sveriges Riksbank Act, the primary task of monetary policy is to maintain sustainably low and stable inflation. The current specification of the objective is an inflation target of 2 per cent as measured by the CPIF and it has explicit political support.

It is not possible or desirable to always keep inflation at 2 per cent, as the economy is constantly changing. Inflation therefore varies in a way that cannot be predicted 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.

Joint expectations contribute to favourable economic development

The inflation target is intended to act as a benchmark for price setting and wage formation in the economy – it constitutes what is usually referred to as a nominal anchor. When inflation does not vary so much and economic agents have a common perception of how prices will develop in the future, it becomes easier for them to plan for the long term. This, in turn, improves the conditions for favourable economic development with good growth.

High inflation is harmful in several ways. One obvious reason is that consumers get fewer goods and services for the same amount of money when shopping, unless incomes grow at the same pace as prices. This is something that everyone has noticed in their day-to-day lives in recent years. If high inflation is built into the expectations of households and businesses, this can lead to wage-price spirals causing inflation to become entrenched at a high level. It will then be difficult to bring it down again

without sharp policy tightening. When average inflation is high, it also tends to fluctuate substantially from one year to the next. This makes it more difficult to make economic decisions about the future. High and unexpected inflation also has a redistribution effect which generally favours borrowers at the expense of lenders, and generally those who can protect themselves against inflation in various ways over those who cannot. The experience of previous episodes of high inflation, such as the one in the 1970s and 1980s, shows that high inflation can be very costly for the economy.

The purpose of monetary policy independence

The Riksbank is a public authority under the Riksdag, the Swedish parliament. The Riksdag has given the Riksbank an independent status, in particular through amendments made in 1999 to the previous Sveriges Riksbank Act. These mean that no authority may determine the decisions made by the Riksbank on issues of monetary policy, among others. The Riksbank shall make monetary policy decisions without receiving or seeking instructions from external parties, known as the prohibition on instructions. At the same time, the objective of price stability was incorporated into the Act in order to provide a democratically anchored objective for operations. 22 The General Council of the Riksbank, which is appointed by the Riksdag and which took the monetary policy decisions before 1999, appoints the members of the Executive Board following an application procedure. If the Riksbank wishes to decide on a change to the price stability objective, this must first be approved by the Riksdag. The decision that the Riksbank shall be responsible for monetary policy independently on the basis of a given target has thus been taken by the Riksdag in good democratic order. Independence is enshrined at the EU level in the Treaty on the Functioning of the European Union (TFEU) and in the Instrument of Government.²³

The purpose of an independent central bank being responsible for monetary policy is that there are decisions that it may be necessary to make for the economy to function well in the long term. These decisions can be difficult for politicians to take as they have a negative impact on the electorate in the short term.²⁴ One such decision is to raise the policy rate, as a rate hike raises borrowing costs for households and companies and dampens demand and employment. This may be perceived negatively even if the purpose of the rate hike is to bring down inflation. The decision can be particularly difficult to take if inflation is rising at a time when economic developments are not particularly strong. A central bank with the explicit task of keeping inflation anchored to an inflation target is not under the same pressure as a government and can more easily make decisions that may be perceived as uncomfortable and unpopular.

Independence requires monitoring and evaluation of monetary policy

A natural consequence of independence is that the Riksbank's activities are monitored and evaluated. The General Council is responsible for overseeing and checking the work of the Executive Board. The Riksdag Committee on Finance

²² Government Bill 1997/98:40 p. 52.

²³ See Article 130 TFEU and Chapter 9, Sections 13 and 15 of the Instrument of Government.

 $^{^{24}}$ See, for example, *The Riksbank and price stability*, Report from the Riksbank Inquiry, SOU 1993:20, pp. 83–84

evaluates monetary policy every year in a special report and also organises open hearings on monetary policy several times a year. The Riksbank's most important basis for the annual assessment is the report "Account of Monetary Policy", i.e. this report. Some time after it has been published, the entire Executive Board participates in an open hearing at the Committee on Finance.

As a complement to its own evaluations, the Committee on Finance has around every five years or so also commissioned two foreign experts to evaluate the Riksbank's monetary policy in a written report. So far, four such evaluations have been carried out. Since 2023, the Committee on Finance also commissions external Swedish economists to evaluate monetary policy in a written report every year. The authors of the report take part in the annual hearing of the Committee on Finance. The Riksbank can also be scrutinised by the Swedish National Audit Office. There are thus extensive and well-established procedures for following up and evaluating the monetary policy conducted by the Riksbank.

4.2 The monetary policy debate in 2024

In addition to being discussed internally by the Executive Board (Chapter 2) and subsequently formally evaluated by the Committee on Finance, monetary policy is also discussed more or less regularly in the public debate. The fact that monetary policy arouses interest, engages people and is debated is of course positive. This section describes the various arguments put forward in the external debate during the year.

Difficult monetary policy assessments in recent years

The past three years have been special from a monetary policy perspective. Inflation first soared around the world to levels not seen for decades. Central banks raised their policy rates more or less in unison to counteract the rise in inflation and prevent inflation from remaining persistently high, as was the case in the 1970s and 1980s. Inflation then gradually started to fall back again and policy rates have been cut again, at slightly different speeds depending on the specific conditions in each country. We have not experienced a similar episode of inflation high above the target during the period of inflation targeting.

The Riksbank has had to make a number of difficult judgements regarding how quickly and by how much the policy rate would need to be raised, and how quickly it could then be lowered again and to what level. The purpose of the rate rises has been to bring inflation back to target within a reasonable time, without slowing the economy unnecessarily. Throughout this period, there has been a relatively lively debate on monetary policy.

 $^{^{25}}$ The most recent, by Karnit Flug and Patrick Honohan, concerned the monetary policy conducted 2015–2020 and was published in March 2022.

²⁶ Two such reports have thus far been published: J. Hassler, P. Krusell and A. Seim (2023), "Evaluation of monetary policy 2022", Reports from the Riksdag 2022/23:RFR5 and J. Hassler, P. Krusell and R. Westman (2024), "Sweden's monetary policy 2023", Reports from the Riksdag 2023/24:RFR15.

It is, of course, possible to make different assessments of exactly how much the policy rate needs to be raised when inflation exceeds the target as much as it did, and how quickly it can then be lowered. A somewhat different monetary policy than the one conducted by the Riksbank would of course have been possible and would probably have given a similar outcome. For example, in the evaluation of monetary policy in 2023, which was commissioned by the Riksdag Committee on Finance, the evaluators write that, in retrospect, the objection could possibly been raised that the rate increases could have been limited somewhat. At the same time, the evaluators understand the caution and concerns about persistent inflation that underpinned the decisions.²⁷ Overall, the monetary policy conducted appears to have achieved what it was intended to achieve.

Discussion of the Riksbank's gradual interest rate cuts

In 2024 the debate centred on whether interest rate cuts should have started slightly earlier and been implemented more quickly. Inflation had passed the peak and, at the beginning of the year, amounted to 3.3 per cent measured as the CPIF and 4.4 per cent measured as the CPIF excluding the surprisingly rapidly falling energy prices. As described in Chapter 2, the Riksbank judged in August that the prospects for inflation stabilising close to the inflation target had strengthened and that the risk of inflation becoming too high had declined. The uncertainty over inflation prospects nonetheless indicated a gradual adjustment of monetary policy. Very rapid and sharp interest rate cuts, for example of 0.75 or 1.0 percentage points, would risk creating disjointedness in policy if it were to turn out that inflation was too high and the interest rate needed to be raised again. As it became increasingly clear that inflation would stabilise around the target, the Riksbank stepped up the pace of cuts to provide further support to the economy.

But even though the adjustment was gradual, it was rapid from a historical perspective. In 2024, the Riksbank cut the policy rate by 1.5 percentage points, from 4 per cent in May to 2.5 per cent in December and also announced that the policy rate was likely to be cut further. This is the largest reduction in such a short period of time since the global financial crisis in 2008–2009, when the situation was very different.

When discussing whether monetary policy has been too contractionary (or too expansionary), one must primarily consider how inflation has developed, as the Riksbank's main task is to keep inflation stable at the target. Inflation measured by the CPIF target variable was indeed below target in the second half of 2024. However, this was largely due to the sharp fall in often highly volatile energy prices. Excluding energy prices, inflation slowed to close to 2 per cent much more evenly. In December, inflation excluding energy amounted to 2.0 per cent and measured by the CPIF to 1.5 per cent.

²⁷ J. Hassler, P. Krusell and R. Vestman (2024), "Sweden's monetary policy 2023", Reports from the Riksdag 2023/24:RFR15. However, the evaluators do not agree with the criticism that the last increase in the policy rate to 4 per cent was unnecessary and the cause of the recession.

Has monetary policy been unnecessarily tight because the Riksbank has followed the ECB?

One argument put forward in 2024 is that the Riksbank kept the policy rate unnecessarily high because it did not consider itself able to deviate from the European Central Bank (ECB).²⁸ A lower policy rate than the ECB's is assumed to have been justified because wage formation works better in Sweden than in the euro area and because Swedish households are relatively sensitive to interest rates in an international perspective. The Riksbank is aware of these two conditions and takes them into account in its monetary policy. The Riksbank has also often emphasised Swedish wage formation as a major advantage in keeping inflation low and stable.

But it cannot be assumed that wage formation will always work well, whatever happens. Well-functioning wage formation presupposes that the Riksbank lives up to its commitments to the social partners and the public at large, and acts to bring inflation back to target. If inflation were to be above the target for a long period, there is a major risk of higher demands for wage increases to be based on the high inflation rather than on the inflation target. Thus, the fact that wage formation has been so firmly anchored to the inflation target cannot be taken as a pretext for monetary policy not needing to react when inflation rises. Causality does not always go from wages to prices, it can also be the other way around, from prices to wages.

The ECB's monetary policy obviously affects the policy that the Riksbank can conduct, via various channels. For example, large differences in policy rates between the euro area and Sweden can affect the exchange rate in a way that eventually has an impact on inflation. However, this does not mean that the Riksbank is obliged to strictly follow the ECB. The Riksbank's monetary policy is based first and foremost on actual and expected developments in the Swedish economy. As Figure 28 shows, the differences in the policy rate between the Riksbank and the ECB have periodically been quite large.

The small differences in recent years are largely due to the fact that the rise in inflation was a global phenomenon, with all central banks raising interest rates more or less in unison. Figure 28 also shows that the Riksbank generally changed the policy rate before the ECB, both when raising and when cutting. In December 2024, the Riksbank's policy rate was half a percentage point lower than the ECB's policy rate.

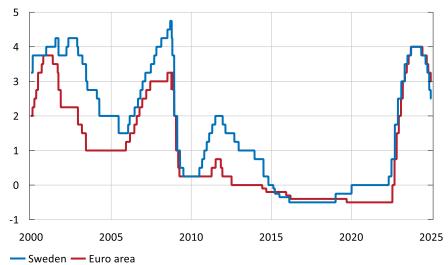
Nor was the Riksbank's policy rate raised to particularly high levels in an international perspective. Switzerland and Japan are the only OECD countries that have consistently had a noticeably lower policy rate than Sweden during the period (see Figure 29). These two countries also had significantly lower inflation rates.²⁹

²⁸ See, for example, T. Hållö (2024), "Riksbankens politik kan ha kostat Sverige 50 000 jobb" (in Swedish), guest column in Göteborgs-Posten editorial, 9 December.

²⁹ Inflation in Switzerland peaked at 3.3 per cent and in Japan at 4.3 per cent.

Figure 28. Policy rate in Sweden and the euro area 2000–2024

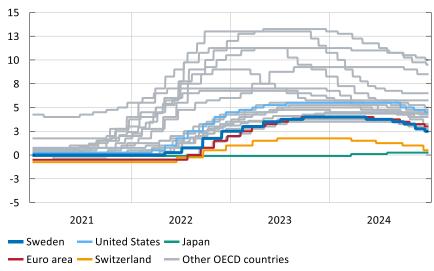
Per cent



Note. The euro area policy rate is illustrated by the ECB's deposit facility rate. Sources: The ECB and the Riksbank.

Figure 29. Policy rates in Sweden and other OECD countries

Per cent



Note. Grey lines refer to all OECD countries' policy rates, excluding Turkey. Many OECD countries belong to the euro area. The euro area policy rate is illustrated by the ECB's deposit facility rate.

Sources: The respective central banks and the Riksbank.

Debate on the independence of the Riksbank

There has been an international discussion about the central banks' independence. In Sweden, the debate has been limited, but it is still worthy of attention as it deals with fundamental issues related to the monetary policy framework. It should be emphasised that the discussion in recent years on how much the interest rate should

be raised and how quickly it should be lowered again, has for the most part been conducted without touching on the Riksbank's independence.

The purpose of delegating monetary policy to an independent central bank was described in Section 4.1 above. Essentially, a central bank is not under the same pressure to prioritise the short term as politically elected governments are. Short-term priorities could erode the role of the inflation target as an anchor in the economy and allow high inflation to become entrenched.

The view that the Riksbank should be made less independent is rooted in the view that this system is not sufficiently democratic, but it is based on different arguments. One is that the Riksbank is not assumed to have sufficient knowledge to fulfil its mandate. According to this view, monetary policy should therefore not be left to politically independent decision-makers. One example given of the Riksbank's lack of knowledge is that it has not succeeded in stabilising the value of the krona, nor has it communicated any clear explanations as to why the krona has developed in the way it has.

The Riksbank has a target for inflation, but no target for the krona exchange rate. The development of the krona can certainly affect inflation and must therefore be taken into account in monetary policy decisions. As regards the development of the krona, it is well recognised in economic research that currency developments are genuinely difficult to both predict and explain ex post.³¹ It is therefore natural that the Riksbank cannot give any clear and definite answers on this either.

Another argument is that independence no longer serves much of a purpose, since even a monetary policy subordinate to the government is assumed to be sufficiently responsible to keep inflation on target.³² Since independence is not perceived as sufficiently democratic, it can, according to this view, be reduced or abolished without causing problems in the economy.

It is true that there is currently broad political support in Sweden for the inflation target as an anchor for the economy. But this does not guarantee that a system in which the Riksbank is less independent and monetary policy is more politically controlled would work well. The basic rationale for delegating monetary policy to

³⁰ See, for example, B. Rothstein (2024), "Riksbankens oberoende bör ifrågasättas" (in Swedish), debate article Svenska Dagbladet newpaper, 24 August. However, this article has received a lot of criticism, see L. Calmfors (2024), "Statsvetares njutning av att hudflänga ekonomer leder debatten om Riksbanken fel" (in Swedish), editorial in Dagens Nyheter, 1 September, L. Calmfors (2024), "Kritiken mot en självständig riksbank bygger på missförstånd" (in Swedish), editorial in Dagens Nyheter, 4 September, and M. Persson (2024), "Rothstein om Riksbanken" (in Swedish), blog post on Ekonomistas, https://ekonomistas.se/2024/09/02/rothstein-om-riksbanken/.

³¹ See, for example, H. Flam and M. Persson (2024), "Right on track? A report on the Swedish exchange rate 1993–2024 to the Expert Group in Public Economics", *ESO report* 2024:4 (in Swedish, with a summary in English). The report also states, which is not always apparent in the debate, that the krona has not fallen very much if one looks at the krona exchange rate against an index of currencies, where the index weights correspond to the importance of different countries for Sweden's foreign trade.

³² See P. Molander (2024), "Calmfors har fel – och han vilseleder om penningpolitiken" (in Swedish), reply to editorial, Dagens Nyheter, 2 September. For counterarguments, see L. Calmfors (2024), "Statsvetares njutning av att hudflänga ekonomer leder debatten om Riksbanken fel" (in Swedish), editorial in Dagens Nyheter, 1 September, and L. Calmfors (2024), "Kritiken mot en självständig riksbank bygger på missförstånd" (in Swedish), editorial in Dagens Nyheter, 4 September.

independent central banks has hardly changed. In the debate on monetary policy in recent years, criticism has been levelled both at the interest rate increases made to dampen the rise in inflation and at the fact that the interest rate cuts have subsequently been too slow. These are examples of the pressures that a more politicised monetary policy would face.

As described in Section 4.1, the decision that the Riksbank shall independently conduct monetary policy on the basis of a given target was taken by the Riksdag in good democratic order. There are extensive and well-established procedures for following up and evaluating the policy conducted by the Riksbank, as required by this independence. The Riksbank is usually recognised as one of the most transparent central banks in the world and is also one of the most regularly evaluated.

One interpretation of the questioning of the Riksbank's independence is that the independence is believed to make the interaction between fiscal policy and monetary policy more difficult. An important and much-discussed question in this context is whether the economy would perform better if fiscal policy were to play a greater stabilisation policy role than it has done in recent decades. The interaction between fiscal and monetary policy is discussed in Section 4.3 "Questions for the future".

Discussion on companies' pricing

At the end of the year, a debate arose about the Riksbank's statements on pricing during the period of high inflation. The statements concerned cost increases, which were passed on to consumer prices unusually quickly and to a greater extent than usual. Representatives of the Swedish Food Federation, i.e. companies that produce food, argued that with these statements the Riksbank had discredited the entire food industry.³³

Pricing has been analysed by the National Institute of Economic Research (NIER) and the Swedish Competition Authority on behalf of the Government. The background of the task included the sharp rise in food prices, particularly following Russia's invasion of Ukraine in February 2022. The NIER report was published in December 2023, while the Swedish Competition Authority's more comprehensive report was published in June 2024.³⁴

The Competition Authority analysed price developments for seven key food products that make up a large part of the consumer basket. They found that the prices of these commodity groups rose more, and have remained high for longer, than was justified by the temporary, very sharp increase in agricultural input prices that took place in spring 2022.

³³ See B. Hellman and C. Eckerdal (2024), "Absurda utsagor från Riksbanken" (in Swedish), debate article in Svenska Dagbladet newspaper, 22 November.

³⁴ National Institute of Economic Research (2023), "Prissättning hos svenska företag 2023" (in Swedish), Special study, and Swedish Competition Authority (2024), "Stigande matpriser – vart tar pengarna vägen?" (in Swedish), Report 2024:3. The Competition Authority had already launched an investigation on its own initiative into food price increases and competition in the food supply chain in autumn 2002.

The NIER also estimated that consumer food prices increased more between the second quarter of 2019 and the second quarter of 2023 than can be explained by the increase in production costs. According to their calculations, food prices increased during this period by 6 percentage points more than what is explained by higher costs. However, due to a lack of data, the NIER found it difficult to assess where in the food chain prices increased most.

Based on these studies and others, the Riksbank has concluded that pricing during the period of high inflation deviated from the previous normal pattern. The Riksbank has also expressed concern in various contexts in 2024 that pricing may function in a similar way in the event of a future external inflationary impulse.³⁵ This would risk fuelling a rise in inflation, making it necessary to pursue a more contractionary monetary policy than would otherwise be needed.

As the inflation target relates to consumer prices, it is prices at the consumer level that the Riksbank is focusing on, not price formation at earlier stages in the food chain, for example. The Riksbank's arguments have also concerned pricing in general and not just food.

Continued debate on the role of monetary policy in housing prices

One criticism that has been made for a number of years is that the Riksbank, from around 2015 and for a number of years afterwards, pursued an overly expansionary policy. This policy is argued to be the main reason why debt and housing prices are currently high. In 2024, this debate took place partly in more academic-oriented forums, but the criticism was also voiced to a wider public in the media.³⁶

The criticism tends to overlook several important conditions. One such condition is the development of the neutral interest rate in recent decades and the role it has played. The neutral interest rate has been falling globally for a number of decades, to historically low levels. For monetary policy to keep inflation on target, policy rates around the world have therefore had to be reduced to lower and lower levels with each economic cycle. Of course, if the level of the neutral interest rate changes, this can affect housing prices and the effect is thus not channelled through monetary policy. The downward trend in general interest rates has probably played a greater role than limited periods of expansionary monetary policy in the rise in housing prices and indebtedness in Sweden. The decline in interest rates started around the mid-

³⁵ See, for example, Per Jansson's contribution to the monetary policy meeting on 6 November 2024, Monetary Policy Minutes November 2024.

³⁶ This was the main argument, for example, in the documentary "Skuldfeber", which was broadcast on Swedish Television (SVT) and SVT Play in the autumn. For a long exchange of words in the Swedish Economic Association's journal Ekonomisk Debatt on this argument, among others, see M. Apel and P. Jansson (2023), "Penningpolitik i forskningen och den allmänna debatten" (in Swedish), *Ekonomisk Debatt*, vol. 51, no. 7, F. N. G. Andersson and L. Jonung (2023), "Svar på kommentarer om penningpolitiken" (in Swedish), *Ekonomisk Debatt* vol. 51, no. 8, M. Apel and P. Jansson (2024), "Replik till Andersson och Jonung" (in Swedish), *Ekonomisk Debatt*, vol. 52, no. 1, F. N. G. Andersson and L. Jonung (2024), "Svar till Apel och Jansson" (in Swedish), *Ekonomisk Debatt*, vol. 52, no. 4, and M. Apel and P. Jansson (2024), "Svar till Andersson och Jonung" (in Swedish), *Ekonomisk Debatt*, vol. 52, no. 5.

1990s, and housing prices have been trending upwards more or less continuously since then.

The increase in housing prices is not a specifically Swedish phenomenon. According to OECD data, Swedish housing prices have not developed much differently from those in other countries since 2015, when the Riksbank's more expansionary policy began (see Figure 30).

Moreover, housing prices are affected by much more than monetary policy and general interest rates. One important factor is, of course, how well the housing market functions, i.e. basically how well the supply and demand for housing can be matched. Decisions on housing policy and tax policy are central to this. As shown in the figure, housing prices have not risen at all in the same way in Finland. Finland has to relate to the ECB's monetary policy, whose policy rate has almost systematically been lower than that of the Riksbank, and whose securities purchases have been more extensive.37

225 200 175 150 125 100 75 2018 2015 2016 2017 2019 2020 2021 2022 2023 2024 ■ Sweden — Euro Area — Finland — Other countries

Figure 30. Housing prices in Sweden and certain European countries Index, 2015-01-01 = 100

Note. Other countries include Norway, Denmark, Germany, the United Kingdom and the Netherlands.

Source: OECD.

The argument that monetary policy was previously too expansionary also tends to overlook the fact that the Riksbank's primary task is to maintain confidence in the inflation target, so that it can provide an anchor for price and wage formation in the economy. Inflation cannot then deviate from the target for long periods of time because economic agents may start to regard a different level of inflation as normal in the economy, or perceive that there is no normal level at all. During the period when

³⁷ It should also be noted that the evaluations of monetary policy commissioned by the Committee on Finance have not criticised the Riksbank for placing less emphasis on the inflation target, and for conducting a policy with a much higher policy rate than the policy conducted by the Riksbank from around 2015 and a few years onwards; see, for example, J. Hassler, P. Krusell and A. Seim (2023), "Evaluation of monetary policy 2022", Reports from the Riksdag 2022/23:RFR5, which provides a longer review of monetary policy.

the Riksbank pursued an expansionary policy with a very low policy rate, the problem was that inflation was systematically lower than the target, at times considerably lower. This problem was shared with many other central banks. If the policy rate had been kept higher to try to slow the rise in housing prices instead, inflation would have been even lower. Inflation that is significantly below the target over a long time period risks becoming permanent via the formation of expectations. Permanently low inflation reduces the scope for monetary policy to stimulate the economy in the same way as a very low neutral interest rate (see next section), i.e. the policy rate quickly hits its lower bound.

The above reasoning should not be interpreted as meaning that there were no elements in monetary policy from 2015 onwards that can be questioned. At the end of 2023, the Swedish National Audit Office published a review of the Riksbank's asset purchases 2015–2021, in which some criticism was highlighted.³⁸ This noted that the asset purchases at the beginning of the pandemic were effective in dampening the financial stress that had risen, but there is no evidence that the purchases aimed at affecting inflation had a substantial effect. In addition, as a result of the surprisingly rapid increase in inflation and interest rates, the purchases led to large losses that affect the Riksbank's earnings and central government finances. The asset purchases and the Swedish National Audit Office's report were discussed in detail in the Account of Monetary Policy 2023. In its comments on the Swedish National Audit Office's audit, the Riksbank concluded that asset purchases should primarily be seen as an alternative in unusually difficult monetary policy circumstances, but that the effects are uncertain in more normal times.³⁹ The threshold for such measures should therefore be high. This applies in particular to the purchase of private securities, for which the Sveriges Riksbank Act requires exceptional reasons.

4.3 Questions for the future

International discussion on the future development of the neutral interest rate

For some years, a lively international discussion has been under way about the likely development of the neutral interest rate in the period ahead. Because this is such a central issue, it has engaged many well-known economists, who often have different views. 40 Some believe that the structural forces that helped lower the neutral interest rate have not slowed down. 41 Others argue that the neutral rate has risen slightly, or will do so in the future. It is often argued that the global level of interest rates may be

³⁸ "The Riksbank's asset purchases - expensive experiences", RiR 2023:21, Swedish National Audit Office.

³⁹ "The Riksbank's statement on the Swedish National Audit Office's audit of the Riksbank's asset purchases", published 2 February 2024, Sveriges Riksbank.

⁴⁰ One example is the debate between Olivier Blanchard and Lawrence Summers at the Peterson Institute for International Economics, 7 March 2023, "Summers and Blanchard debate the future of interest rates", unedited transcript, Peterson Institute, https://www.piie.com/sites/default/files/2023-03/2023-03-07transcript-summers-blanchard.pdf.

⁴¹ See for example "The Natural Rate of Interest: Drivers and Implications for Policy", Chapter 2 in World Economic Outlook: A Rocky Recovery, April 2023, International Monetary Fund and M. Obstfeld (2023), "Natural and Neutral Real Interest Rates: Past and Future", NBER Working Paper 31949.

pushed up by major investments to cope with the climate transition and the need to increase defence spending in an increasingly uncertain world.

One reason why the issue is important is that a low neutral interest rate reduces the central bank's ability to conduct an expansionary monetary policy. If the neutral interest rate turns out to be higher in the future than it has been in the past decade, the risk of central banks' policy rates having to be lowered to zero or negative levels will decrease. This is how much policy rates have had to be cut in the past when inflation was very low or during deep recessions. However, if the neutral interest rate remains at historically low levels, the lower bound of the policy rate will continue to be a recurring challenge for monetary policy.

A relatively cautious summary of the international discussion and the current state of knowledge is that there is relatively little evidence indicating we are in a completely new world in which the neutral interest rate has risen sharply. At the same time, actual interest rates are now at a higher level than a few years ago and, for example, the increases in defence spending around the world, which are expected to push up the neutral interest rate, already seem to be beginning to materialise. The future development of the neutral rate will certainly continue to be discussed and analysed in the coming years.

How resilient is the Swedish economy in the event of normal interest rate rises?

The Swedish economy is usually described as sensitive to interest rates. This usually means that interest rate changes take effect quite quickly in household budgets, as households have high debts that largely run at variable interest rates. But there is also another aspect that has come into focus in recent years, namely the resilience of property companies to interest rate increases.⁴²

Over the past decade, the policy rate has varied between –0.5 per cent and 4 per cent, in other words a range of 4.5 percentage points. This is not a particularly wide range, especially as inflation has varied between around 0.5 per cent as an annual average in 2014 and the pandemic year 2020 to almost 8 per cent in 2022, measured by the CPIF.

The Riksbank cannot influence this interest rate interval very much. The variations in the policy rate required to maintain the inflation target depend on the strength of inflationary impulses, the overall functioning of the economy, other policies and the degree of confidence in the target. If the Riksbank were to choose to "react a little less", this would not be sustainable in the long run. For example, if interest rates are not raised sufficiently when inflation is rising sharply, inflation could become entrenched at a high level. This would mean that a much larger increase in interest rates would be required at a later stage, with greater costs in terms of increased unemployment and lost output.

⁴² This question was raised by, among others, A. Bunge (2024), "Light at the end of the tunnel – time to start thinking about next time?", speech at Fastighetsdagen Stockholm, 23 May.

During the years of low interest rates and very good access to finance, many property companies increased their borrowing substantially and expanded their property portfolios quickly through new acquisitions and new construction. In doing so, they took great financial risks. A large part of the expansion in credit took place through the bond market, where corporate bond funds invested more and more in new bonds. During this period, property companies' loans increased significantly in relation to their earnings.

When inflation and interest rates then increased, many property companies came under pressure. Financing costs increased and property values began to fall. At times, it was difficult for any but the strongest companies to issue bonds. Many property companies were forced to restructure their balance sheets and housing investments fell dramatically. But the outcome could have been even worse if the Swedish banking sector had not been in good enough condition this time to absorb a large part of the property companies' borrowing needs.

It cannot be ruled out that, in the future too, we may end up in a period of low inflation and low interest rates that is then broken off by rising inflation and a policy rate that needs to be raised sharply. It is therefore important that periods of low policy rates are not characterised by excessive risk-taking in certain sectors. This can create major problems when interest rates are eventually raised and, in the worst case, it could create risks for the financial system. In other words, the economy must be sufficiently resilient for monetary policy to be able to fulfil the task it is responsible for carrying out, that is, maintaining the inflation target.

In order to prevent a significantly worse outcome in similar situations in the future, resilience during interest rate hikes needs to be strengthened. This includes ensuring that credit rating agencies ensure that credit ratings are safe and robust, that there is a well-functioning macroprudential framework for actors in the bond markets other than banks, and that property companies are transparent about the way property is valued.

Interaction between monetary and fiscal policy

One issue that has been discussed for quite some time is how the interaction between monetary and fiscal policy can best be shaped. The discussion became particularly energised a number of years ago when policy rates in many countries were approaching their lower bounds and monetary policy opportunities to stimulate the economy began to dry up.⁴³

In these situations, an active fiscal policy can help to prevent the economy from being exposed to large losses in output and employment, while also helping monetary

⁴³ In Sweden, the question of whether the interplay of monetary policy and fiscal policy can be improved has been discussed in many contexts in recent years, for example, P. Jansson (2021), "Is it time to review the role of macroeconomic policy?" speech at the Riksbank, 8 December, L. Calmfors, J. Hassler and Anna Seim (2022), "Balance for stability – A report on the roles of fiscal and monetary policy to the Expert Group on Public Economy" (in Swedish, with a summary in English), ESO Report 2022:3, and Long-Term Survey 2023 – Fiscal policy stabilisation, SOU 2023:85. The question is also addressed in Från överskottsmål till balansmål (in Swedish), Report from committee of inquiry to review the target for general government net lending, SOU 2024:76.

policy to maintain confidence in the inflation target. To do this effectively, it is important to understand the impact of fiscal policy measures on inflation and the wider economy. Although the state of knowledge in this regard has improved recently, further research on this issue is desirable.

There are also situations where the coordination of monetary and fiscal policies is hampered by conflicting objectives. In recent years, we have had a combination of high inflation and low resource utilisation. As a result of rapidly rising inflation, monetary policy was tightened, while economic activity was relatively weak.

From a fiscal perspective, there may be reasons to consider a more active fiscal policy if the recession is sufficiently deep. But at the same time, there is then a risk that the fiscal measures will make it more difficult to fight inflation. If fiscal policy intervenes in such a situation, it is important that this is done with targeted measures that do not unnecessarily fuel inflation.⁴⁴

In the reverse situation, when inflation is below target while resource utilisation is high, the objectives of the different policy areas may be in conflict. From a fiscal point of view, it may be time to start slowing down, but this would make it even more difficult for monetary policy to bring inflation back to 2 per cent. From a monetary policy perspective, it will therefore be problematic in such a situation if fiscal policy becomes tighter.

The prohibition on instructions means that no authorities may prescribe how the Riksbank should decide on monetary policy and that the Riksbank may not request or receive instructions. ⁴⁵ However, this need not be an obstacle to an open discussion of the economic situation between the government and the Riksbank. In the event of more dramatic economic developments, the need for active fiscal policy stabilisation increases and it is then particularly important that different policy areas exchange information. But even in normal times, it would be desirable to discuss the overall stabilisation policy more. Already established channels can be beneficially used for this.

⁴⁴ Studies of Swedish conditions indicate that fiscal policy stimuli normally have positive, but not particularly large, effects on inflation, see J. Almerud (2022), "Finanspolitikens effekt på inflationen – ett allmänjämviktsperspektiv" (in Swedish), NIER Commentary, December, National Institute of Economic Research. More studies that identify in more detail targeted fiscal measures that support the real economy without fuelling inflation would be valuable.

⁴⁵ Chapter 9, Sections 13 and 15, Instrument of Government.

ARTICLE – Changes in the Riksbank's monetary policy communication

Open and clear communication facilitates the evaluation of monetary policy. It also makes it easier for economic agents to understand and anticipate the Riksbank's actions, which in turn leads to a better pass-through of monetary policy. Based on the experience of the large up- and downturns in inflation in recent years, the Riksbank has made some changes in its communication of monetary policy. More specifically, the Riksbank divides the forecast for the policy rate into two time horizons. The Riksbank has also increased its use of alternative scenarios to illustrate that the forecast is uncertain and to make the decisions more robust. In addition, the assessment of the long-term level of the neutral interest rate has been updated. Other changes are that the Riksbank has increased the number of ordinary monetary policy meetings to eight, that the report has been redesigned and that the minutes of the meetings are published more quickly.

The Riksbank strives for open and clear communication

The Riksbank's decisions affect people's private finances and the national economy. At the same time, the Riksbank has strong constitutional independence, which makes it particularly important that its activities are characterised by a high degree of transparency. This is emphasised by the fact that the Sveriges Riksbank Act specifies the information that the Riksbank shall provide to the Riksdag and the public. ⁴⁶ As part of being transparent, the Riksbank strives for open and clear communication. ⁴⁷ This makes it easier for the Riksdag to scrutinise and evaluate the Riksbank's activities and for households and companies to make sound financial decisions. Clearly describing analyses, considerations and reasons for the Riksbank's monetary policy makes it easier for economic agents to understand and anticipate the Riksbank's actions. Good communication can improve the conditions for monetary policy. ⁴⁸ For this reason among others, communication is an integral part of the monetary policy strategy.

The communication of monetary policy takes place mainly in connection with monetary policy decisions. Previously, the Riksbank has held five ordinary monetary policy

⁴⁶ See Chapter 11 of the Sveriges Riksbank Act (2022:1568).

⁴⁷ The Riksbank's communication policy is described on the Riksbank's website (www.riksbank.se). The Riksbank was ranked the most transparent central bank out of more than a hundred in a recent survey, see N. Dincer, B. Eichengreen and P. Geraats (2022), "Trends in Monetary Policy Transparency: Further Updates", International Journal of Central Banking, vol. 18.

⁴⁸ See Y. Akkaya, L. Bitter, A. Grasso and B. Amorim Cabaco (2025), "From press conferences to speeches: the impact of the ECB's monetary policy communication", *ECB Economic Bulletin*, Issue 1 for a survey of how communication can affect the pass-through of monetary policy.

meetings per year and published a Monetary Policy Report in connection with them.⁴⁹ The reports describe the current macroeconomic situation and financial conditions in Sweden and abroad and include forecasts for important macroeconomic variables. The forecasts include an interest rate path that has been calculated on the basis of the Executive Board's assessment of how the policy rate needs to develop in order to achieve the inflation target, and to contribute to a balanced development of the real economy.⁵⁰ To emphasise that the interest rate path is a forecast, it was previously illustrated as the midpoint of an uncertainty range that grew over the forecast period as the forecast became increasingly uncertain. A separate section of the report discussed various risk factors that contributed to the uncertainty. How these might affect monetary policy was described qualitatively.

It is important that the risks and uncertainties about the outlook are clearly communicated

The large up- and downturns in inflation in recent years posed challenges for the communication of monetary policy. In 2022, it became increasingly clear that there had been a change in companies' pricing behaviour, with the pass-through from cost increases to price increases accelerating, partly via a weaker krona. In connection with the large and unexpected rise in inflation, the Riksbank had to revise its forecasts upwards several times and at the same time raise the policy rate more than previously announced. This was criticised both by those who believed that the Riksbank acted too slowly and was too optimistic about the inflation outlook, and by those who on the contrary argued that the Riksbank overreacted to the rise in inflation.

Although inflation started to fall back in 2023, there was still considerable uncertainty about the underlying inflation outlook and thus about the future course of monetary policy. The Riksbank's forecasts were, as usual, at the centre of the economic debate, but given the considerable uncertainty, longer-term developments and the link between inflation and interest rate forecasts received particular attention (see also Chapter 3). The discussion centred both on the plausibility of specific interest rate paths and, more generally, on the level to which the policy rate might return in the long term and the Riksbank's assumptions about this level.

Based on the experience gained in 2022 and 2023, the Executive Board concluded that there were opportunities to improve the communication of monetary policy in a few ways. The basic approach is to maintain a high degree of transparency, which includes publishing the Riksbank's own forecast for the policy rate. The challenge is to convey a message about monetary policy in a way that also clearly captures risks and uncertainty about the outlook. The Executive Board recognised that this part of the communication needed to be more nuanced and concrete. There was also reason to

⁴⁹ The number of ordinary meetings has varied. As has the appearance of the Monetary Policy Report. Prior to 2020, the Riksbank held six ordinary monetary policy meetings for many years. Between 2007 and 2014, a Monetary Policy Report was published at three of these meetings. On the other three occasions, a Monetary Policy Update, which contained forecasts but was shorter than the Report, was published. From 2015 to 2023, a Monetary Policy Report was published at each ordinary meeting.

⁵⁰ The Riksbank is one of the few central banks that publishes a forecast for its own policy rate (an interest rate path).

update and clarify the Riksbank's view of the long-term level of the interest rate. In addition, the Executive Board saw an advantage in having more regular monetary policy meetings per year. ⁵¹ With more meetings per year, the Riksbank can adjust monetary policy more quickly and improve the conditions for effective communication, at times when the situation changes rapidly.

The Riksbank has changed its communication in a few ways

This section describes in more detail how the Riksbank's communication has changed. All changes were implemented in 2024, with the exception of the publication of alternative scenarios, which was resumed in April 2023.⁵²

The Reports split the policy rate forecast into two time horizons

The future level of the policy rate is uncertain at any horizon. However, there is generally greater uncertainty about developments further ahead, as the likelihood of new shocks hitting the economy increases over time. The earlier uncertainty interval based on historical forecasting errors showed that the uncertainty increases over time, but failed to convey the uncertainty linked to inflation prospects at the specific time of the decision. Starting in the Monetary Policy Report in March 2024, the Riksbank began to communicate the forecast for the policy rate in a new way that clarifies the difference in how the Executive Board views the forecast for the policy rate in the near future and the forecast for the longer term. The purpose of the change is to increase the information value in communication about developments in the short term, where there is less uncertainty. At the same time, the greater uncertainty about developments in the longer term is evident.

More specifically, the first section of the report, "Monetary policy considerations", presents the considerations that are important for the current monetary policy decision. The section shows the entire interest rate path, but the focus is on the Executive Board's assessment of the policy rate for the next three quarters. ⁵⁶ As there is more information about economic developments in the near future, the Executive Board can forecast the near-term monetary policy decisions with somewhat more certainty than those further ahead. The final chapter of the Report contains a more detailed monetary policy analysis, which also discusses developments over the entire three-year forecast period.

⁵¹ While it is possible for the Executive Board to hold extraordinary monetary policy meetings, these have been reserved mainly for crises.

⁵² Until April 2015, the Monetary Policy Reports contained a separate chapter illustrating possible alternative scenarios

⁵³ There is a high degree of uncertainty in longer-term forecasts, see, for example, F. Petropoulos et al (2022), "Forecasting: theory and practice", *International Journal of Forecasting*, vol. 38.

⁵⁴ The most recent occasion the uncertainty interval was used was in the Monetary Policy Report in February 2023.

⁵⁵ The change was presented in a Fact Box in the Monetary Policy Report in March 2024.

⁵⁶ The interest rate path for the entire three-year forecast period is illustrated together with a close-up view of the forecast for the policy rate in the short term.

The Riksbank has updated its assessment of the neutral interest rate

The most common definition of the neutral interest rate is a policy rate level that has neither a stimulating nor a contractionary effect on the economy. It is an estimate of the interest rate level that is appropriate and consistent with a balanced real economy. In monetary policy, the neutral interest rate is therefore important as a benchmark for current monetary policy and also for the outlook. At the same time, there are factors that limit the usefulness of estimates of a neutral rate in practice. First, it varies over time, which means that a neutral level in the short term is different from a neutral level in the long term. A neutral rate cannot be seen directly in any statistics; one must instead try to assess its level using estimates of models and other relevant information. Assessments of a neutral rate level are therefore associated with a significant degree of uncertainty.

In 2024, the Riksbank presented an updated assessment of the neutral rate after reviewing international studies, assessments from other central banks, pricing and surveys from financial markets and estimating various models on Swedish data. Based on this analysis, the Riksbank assesses that the long-term neutral policy rate is probably between 1.5 and 3 per cent.⁵⁷

To illustrate uncertainty and make monetary policy more predictable, alternative scenarios are used to a greater extent in communication

From the Monetary Policy Report in April 2023 onwards, the Riksbank publishes continuously alternative scenarios in each Monetary Policy Report. The scenarios are alternative in the sense that they illustrate possible alternative developments of the economy compared to the forecast in the Report. Analysis of alternative scenarios is an important part of the basis for monetary policy decisions, for example to identify important risks that the Executive Board needs to take into account quantitatively in its forecasts and to weigh into its decisions. In addition, the scenarios indicate how the policy rate could change if the uncertainty factors materialise. The scenarios can thus make the Board's decisions more robust and improve its readiness to act in a situation where one of the scenarios is realised. Highlighting alternative scenarios in monetary policy communication helps to illustrate that developments are uncertain. It also helps to point to uncertainties that are highly likely to occur, and

⁵⁷ The new assessment was presented by Deputy Governor Anna Seim in her speech "Neutral interest rate - meaning, limitations and assessment" on 26 November 2024. See also the article "The Riksbank's monetary policy development work" for published background analysis. In addition to these references, a few more studies will shortly be published as *Staff Memos*: H. Lundvall, I. Strid and D. Vestin, "The neutral rate of interest – theory and evidence for Sweden", and V. Corbo and I. Strid, "Forecasts and narratives for the policy rate in a macroeconomic model with a real interest rate trend".

⁵⁸ The use of alternative scenarios was one of the recommendations in Ben Bernanke's evaluation of the forecasting process at the Bank of England, see B. Bernanke (2024), "Forecasting for monetary policy making and communication at the Bank of England: a review", Bank of England. CeMoF has also suggested that scenarios can be used to facilitate communication regarding uncertainty, see J. Hassler, P. Krusell and A. Seim (2023), "Evaluation of monetary policy 2022", Reports from the Riksdag 2022/23:RFR5. However, communication using alternative scenarios had already been proposed by E. Leeper (2003), "An Inflation Reports Report", Economic Review 2003:3, Sveriges Riksbank.

⁵⁹ The forecast in the Report is often referred to as the "main scenario" but should not be interpreted as the scenario that the Executive Board considers most likely. Rather, the forecast should be seen as an average of many different scenarios that have been weighted together according to how likely they are deemed to be.

which the Riksbank has particular focus on at the time of the decision in question. The scenarios also provide economic agents with more guidance on how the Riksbank might act if various risks should occur.⁶⁰

The number of meetings has increased from five to eight, the Report has been redesigned and the minutes of the meetings are published more quickly

At the beginning of 2024, the Riksbank switched from having five regular monetary policy meetings per year to having eight meetings per year.⁶¹ More opportunities for decision-making make it easier for the Riksbank to quickly adapt monetary policy to the prevailing situation and to more frequently communicate a collective view of economic developments. It provides more information about monetary policy and can make it more predictable. The changeover also means that the Riksbank is following a practice that exists at other similar central banks.

At four of the eight monetary policy meetings, the Riksbank publishes a Monetary Policy Report. This means that the number of reports with forecasts has decreased from five to four per year. To justify a new set of forecasts, it is important that there is enough new information and, under normal circumstances, the added value of making five full forecasts per year is not obvious. At the remaining four meetings, the Riksbank publishes a Monetary Policy Update – a shorter document that does not contain any new forecasts. In other ways, there is no difference between the meetings and the Executive Board can adjust the policy rate even with the shorter Update as its decision guidance. ⁶²

To facilitate comparability between the different documents, the Riksbank has also changed the format of the Monetary Policy Reports as from March 2024. The reports now start with a section on monetary policy considerations. In this section, the Executive Board summarises the majority's assessment of how new information affects the outlook for economic activity, inflation and monetary policy. In the section, the Executive Board also summarises its reasons for the monetary policy decision. This section is structured in the same way as in the Monetary Policy Updates, allowing for comparability over time. The reports then include a chapter on the economic situation. The chapter describes the current state of the global and Swedish economy based on macroeconomic statistics and information from financial markets. The forecasts are presented in a separate chapter and the reports conclude with a chapter on monetary policy analysis. The analysis consists of a more detailed discussion of the monetary policy decision and the Executive Board's trade-offs and standpoints. This final chapter also discusses risks and uncertainties and presents alternative scenarios.

A further change in the Riksbank's communication in 2024 was to shorten the time between a monetary policy meeting and the publication of the minutes of the meeting to around five working days. The minutes are important for the communication of

 $^{^{60}}$ See the article "Alternative scenarios in the Monetary Policy Report" in *Account of Monetary Policy 2023*, Sveriges Riksbank.

 $^{^{\}rm 61}$ Decision 2023- 01059, "Eight monetary policy meetings per year".

⁶² As in the past, the Riksbank can also hold extraordinary monetary policy meetings if necessary.

monetary policy, as it is in their contributions at the monetary policy meetings that the members of the Executive Board document their views on the economic situation and their own monetary policy positions. The contributions provide the Executive Board members with the opportunity to add nuance to their reasoning regarding various trade-offs and risks. The individual considerations also help to create a clearer picture of how monetary policy might develop in the future. The change in the timing of the publication of the minutes provides economic agents and those who scrutinise monetary policy with faster information on these positions. ⁶³

Positive experience so far of the new communication on the interest rate path

Most of the changes described above were implemented by the Riksbank in 2024 and it is still too early to say with certainty how they have worked. So far, however, the experience is positive.

In recent years, several central banks, including the Riksbank, have emphasised more than before that monetary policy will be determined by new information on the economic and inflation outlook. The reason for this is the considerable uncertainty about the inflation propensity. While some central banks have simultaneously chosen to tone down their communication about future interest rate decisions, the Riksbank has continued with such guidance, with the change described above. In 2024 expectations about central bank policy rates shifted quite considerably in line with new information on the economic and inflation outlook, particularly in the United States. In Sweden, however, expectations were comparatively stable. This can be partly explained by the fact that new information pointed relatively clearly to a stable decline in underlying inflation. At the same time, the Executive Board's continued guidance and a clearer focus on the development of the interest rate in the coming quarters should have helped to reduce near-term interest rate uncertainty. This is particularly true in the light of the increased risks to the global economic outlook last year.

Despite the fact that a shorter Monetary Policy Update is published at every other monetary policy decision, the possibilities for effective monetary policy communication do not seem to have been affected. For example, an Update was published in February 2024 when the Riksbank reorganised its monetary policy communication, and in May of the same year when the Riksbank started to cut the policy rate. Financial market reactions did not indicate any greater surprise on these occasions than at previous monetary policy decisions. ⁶⁴

⁶³ Other central banks that publish similar monetary policy minutes to the Riksbank usually publish them with a long time delay, often five or ten years. A short summary of the discussion at the meeting may be published shortly after the monetary policy meeting, but usually without reproducing what each member said.

⁶⁴ However, it should be noted that the decisions, based on the February and May 2024 Updates, were in line with market expectations in both cases. A database of changes in interest rates and other financial prices during a short time window in connection with the publication of the Riksbank's monetary policy decisions, known as monetary policy surprises, is available on the Riksbank's website. See also J. Almerud, D. Krygier, H. Lundvall and M. Njie (2024), "Measuring Riksbank Monetary Policy: Shocks and Macroeconomic Transmission", Working Paper Series 445, Sveriges Riksbank.

The alternative scenarios have been useful in the monetary policy analysis and have facilitated and clarified the communication of monetary policy. In 2024 the alternative scenarios illustrated, among other things, that monetary policy could react differently to higher domestic inflationary pressures depending on what happens to companies' pricing behaviour. Uncertainty about developments abroad was also illustrated, with scenarios showing, among other things, a possible monetary policy response to shocks caused by geopolitical turmoil or trade tariffs.

ARTICLE - The Riksbank's monetary policy development work

In 2024, the Monetary Policy Department has concentrated its resources on analytical work, both with regard to important themes in the monetary policy drafting process and more strategic analytical issues. The analytical work also reflects what has been formulated in the overall strategic plan for the entire Riksbank, for example, to harness the potential of data and to establish partnerships to strengthen our strategic shifts. Key issues have been the drivers of inflation, the transmission of monetary policy, the assessment of the neutral policy rate level, companies' pricing behaviour, and the effects of geopolitical uncertainty and increased trade barriers. Increased focus has been placed on developing and expanding the use of modelling in analytical work in general. The Riksbank also continued to deepen its analytical work through international cooperation.

Resource mobilisation around analytical work

Important monetary policy themes

As of 2024, the Riksbank switched to having eight regular monetary policy meetings, which meant that the drafting work was expanded. Understanding the drivers of inflation and the implications for, but also the effects of, monetary policy is at the core of the continuous analytical work that precedes these decisions. Important monetary policy analysis themes are identified and analysed based on their implications for inflation, the real economy and monetary policy in Sweden.

Supply shocks have been important in recent years and are expected to remain important in the future. We have seen increased geopolitical tensions and, in addition, shocks to supply chains, mainly during and immediately after the pandemic. The overarching theme of how changes in the supply side of the economy affect monetary policy ties together several of the analytical projects that the Riksbank has worked on during the year, such as trade barriers, demographics, labour market matching and pricing patterns.

The issue of the possible implications of increased protectionism became increasingly relevant in 2024. The Riksbank's analysis indicated that increased trade barriers would have a negative impact on global economic activity and this is an important issue for an export-dependent country like Sweden. Import tariffs lead to higher costs for households and companies, especially in the country that has raised them. They also hamper trade and restrict competition, the pace of innovation and the opportunities to benefit from economies of scale. Overall, this ultimately leads to lower productivity

and GDP than would otherwise have been the case. The effects on inflation are more uncertain; there are factors indicating both lower and higher inflation.

Lessons learnt from the period of high inflation were accumulated during the year, including the methods developed to estimate whether inflation is driven by supply or demand shocks. The Riksbank also continued to monitor companies' pricing behaviour, including in a research project analysing microdata. Past results indicate that it is primarily the frequency, rather than the magnitude, of price changes that correlate with the aggregate rate of price change. This was particularly evident during the period of high inflation. In early 2024 companies changed their prices less frequently again, indicating that pricing behaviour was more in line with what it looked like before the period of high inflation. For goods and food, prices changed less frequently, while companies in the services sector continued to change their prices more often than usual. Analyses of the exchange rate also continued, as the development of the krona has an impact on inflation. These included a study on whether exchange rate pass-through differs when the krona depreciates against the dollar and the euro respectively.

What is usually referred to as the transmission mechanism - the effects of monetary policy on financial markets, inflation and the rest of the economy - is naturally something that the Riksbank needs to have a good understanding of. In the monetary policy work, it is an important focus area to constantly improve the understanding of the transmission mechanism in Sweden. It is essential for calculating the effects of various possible decisions on the policy rate. But it is also important for constructing alternative scenarios, which the Riksbank does in connection with monetary policy decisions to evaluate different policy alternatives and assess risks. The Riksbank continuously reviews the analysis on which the assessments of the effects of monetary policy are based, and in 2024 a number of projects were carried out with a particular focus on this. Part of the work involved the Riksbank estimating effects using new methods and new data, which were compared with updated estimates using more traditional methods. Although the results are relatively concordant, it is important to be aware of the uncertainty that is always present in empirical estimates. The uncertainty is considerable and the estimated effects are affected by a number of different assumptions. The calculations are part of the Riksbank's overall assessment of the effects of monetary policy on the Swedish economy.

One tool for communicating monetary policy is to publish forecasts of the policy rate, something the Riksbank has done since 2007. Forecasts of the policy rate several years ahead are associated with considerable uncertainty. At the same time, however, they provide an indication of the expected neutral level of the policy rate in the long term. During the year, the Riksbank has reviewed its assessment of the long-term neutral interest rate.

A new assessment was produced on the basis of international studies, assessments from other central banks, information from financial markets and by the Riksbank estimating leading models in the literature using Swedish data. The Riksbank's new assessment is an interval between 1.5 and 3 per cent (see Figure 31).

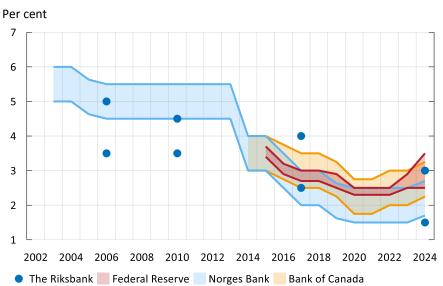


Figure 31. The Riksbank's and other central banks' assessments of neutral interest rates

Sources: National central banks and the Riksbank. The assessment for Norges bank is from the article "Anslag på nøytral realrente" in the Monetary Policy Report 2/2023. For the Bank of Canada, the estimates come from the publications "Potential output and the neutral rate in Canada", "The neutral rate in Canada" and "Monetary Policy Report". For the Federal Reserve, the range is calculated as the difference between the highest and lowest assessments of the long-term policy rate made by the members of the Federal Open Market Committee (the so-called dot plots), with the three highest and the three lowest assessments excluded. The Riksbank's earlier estimates come from the articles "What is a normal level for the repo rate?", 2006:2, "What is a normal level for the repo rate?", February 2010, and "The repo rate in the long run", February 2017 in Monetary Policy Reports.

Strategic analysis issues

In addition to the increased drafting work with analyses linked to monetary policy decisions, the Monetary Policy Department also mobilised its resources around more strategic analytical work. The strategy work generally focused on developing and expanding the use of modelling in the analyses. The aim was to estimate the effects of monetary policy using new methods and new data, and to update existing macro models in the light of events in recent years. Experience showed that supply shocks may continue to be more relevant in the future and that these effects may vary over time, depending on the state of the economy. There was a clear need to find a flexible way of working with models, in order to deal more easily with such situations. To achieve this, both new models and new ways of working need to be explored.

Many other central banks, such as the Bank of England, the Bank of Canada and Norges Bank, are making similar changes. In the work on formulating a strategy for developing the models and working with them more flexibly, the Riksbank has had exchanges with other central banks during the year and shared experiences. Two specific areas of modelling development during the year were the Riksbank's review of the neutral interest rate assessment and the estimated effects of monetary policy.

The development work included re-estimating the Riksbank's structural macro-economic model Maja.

In the Riksbank's overall strategic plan, one of the shifts is to harness the potential of data. ⁶⁵ The monetary policy data team is working to streamline and create better conditions for working with data, both in the forecasting work and other monetary policy analysis projects.

One way to harness the potential of data is to explore how new data sources can help us understand the economy in new ways. One concrete project initiated during the year was the development of AI models for short-term forecasting, exploring the application of machine learning models, in particular random forests and neural networks. The advantages of such models are that they can effectively capture nonlinearities in economic data and that they can be easily estimated on large volumes of odd data, without encountering the challenges that befall more common methods. Working with these models thus provides the conditions for incorporating new data into the drafting process in an efficient and structured manner. A comparison of the forecasting performance of these AI-based models with traditional benchmark models suggests that the Riksbank's forecasts for 1–12 months ahead can be improved by using machine learning methods. The study also highlights the importance of nonlinear models over merely the expansion of datasets.

The Riksbank's other development work during the year included sustainability and monetary policy. Research on how society's transition to a sustainable economy can affect monetary policy is under development and staff at the Riksbank have contributed to this growing research literature.

International cooperation

The Riksbank's overarching strategic plan states that the Riksbank's strategic shifts shall be strengthened by establishing and developing cooperation projects, both within Sweden and internationally. This allows us to learn from others and in this way find new solutions to complex problems. The Riksbank's international work aims, among other things, to exchange information with other central banks and international organisations. This work continued in 2024. During the year, the Riksbank deepened its cooperation with Norges Bank, for instance in connection with estimates of the neutral interest rate and the analytical shift in the monetary policy drafting process. The Riksbank's geo-economics network also invited the Institute for Emerging Economies at the Bank of Finland to a seminar and round table discussion on economic developments in China and Russia.

Since 2018, the Riksbank has participated in the Network for Greening the Financial System (NGFS), a global network of central banks and supervisory authorities with a focus on climate aspects in the work of these authorities. The Riksbank contributed by

⁶⁵ See the Riksbank's website, <u>https://www.riksbank.se/globalassets/media/riksbanken/lagar-regler-policy/the-riksbank-strategic-plan-2024-2027.pdf</u>.

raising issues such as the design and analysis of climate scenarios, biodiversity and nature-related risks, and the impact of climate change on monetary policy.⁶⁶

The Riksbank also organised several scientific conferences during the year. A conference was organised with researchers from the IMF and Stockholm University to discuss lessons learned from three decades of inflation targeting. Another conference was organised jointly with researchers from the Federal Reserve Bank of New York and Uppsala University. Papers on macroeconomics and financial economics with a historical perspective were presented at the conference.

Much of the analytical work carried out in the Monetary Policy Department is documented in publications published on the Riksbank's website. Table 2 summarises the studies published in 2024.

Table 2. Monetary policy-related studies in 2024

Year of publication 2024

In-depth analyses in Monetary Policy Reports

Structural factors determine interest rates in the longer run, March

Relationship between producer and consumer prices, March

Transmission of monetary policy to the money market, June

What factors drove the surge in inflation?, June

Microdata gives insights into how companies adjust their prices, September

Effects of monetary policy, September

Macroeconomic effects of higher US import tariffs, December

The Riksbank's assessment of the long-term neutral interest rate, December

Economic Commentaries

- C. Håkanson and S. Laséen, "Cruising to victory or a dead heat? Central Bank Championships in forecasting ability 2021 and 2022", No. 1
- J. Johansson and O. Tysklind, "Evaluation of measures of core inflation", No. 3
- C. Flodberg, "Structural factors determine interest rates in the longer run", No. 5
- A. Breman and B. Lagerwall, "Monetary policy and behavioural economics" No. 6
- H. Armelius, S. Laséen and S. Mammos, "A surprising pattern is hidden behind the trend in long-term interest rates", No. 7
- O. Tysklind and J Johansson, "Price changes at different time horizons", No. 8
- O. Tysklind and J Johansson, "Characteristics of subgroups in the CPIF", No. 9
- O. Tysklind, "Nya datakällor i prognosarbetet högfrekvent data för livsmedel", No. 10
- C. Flodberg and P. Wasén, "Lower response rates implies challenges for monetary policy in several countries", No. 11
- S. Mammos and D. Stoyko, "Exchange rate pass-through to consumer prices in Sweden: the case of bilateral exchange rates", No. 12
- B. Petersson, "What does an increased share of products with low import content mean for inflation?", No. 13
- M. Klein, E. Skeppås and O. Tysklind, "Inflation dynamics in the high inflation period: insights from microdata", No. 14

⁶⁶ See "The green transition and the macroeconomy: a monetary policy perspective", technical document, October 2024, Network for Greening the Financial System.

- M. Klein, E. Skeppås and O. Tysklind, "Price changes on goods and services during the high inflation period: insights from microdata", No. 15
- B. Andersson and H. Lundvall, "Effects of monetary policy" No. 16

Economic Review

A. Breman, M. Eriksson and C. Kahn, "The Riksbank and changes in financial markets, a 30-year perspective", No. 1

Staff Memos

- S. Laséen and C. Nilsson, "How does the Riksbank's monetary policy affect the Swedish economy: does inflation rise when the policy rate is raised?", January
- I. Häkkinen Skans, D. Lööv and A. Westermark, "Effekter av prisregleringar" (in Swedish), February
- B. Petersson, I. Strid and A. Österberg, "What is the relationship between Swedish and global inflation?", April
- M. Almgren and D. Stoyko, "Is there state-dependence in the exchange rate pass-through to inflation in Sweden?", April
- P. Kaplan and M. Njie, "What drives variable mortgage rates?", May
- M. Löf and P. Stockhammar, "What drove the surge in inflation?", June
- E. Berggren, S. Mammos and I. Strid, "The effects of monetary policy in Sweden during the inflation targeting period: estimates with structural VAR models", August
- M. Löf and P. Stockhammar, "Indicators for short-term forecasting", October
- M. Jonsson, C. Kamanzi, P. A. Kwizera and J. C. Niyonsenga, "Adverse weather shocks and monetary policy in Rwanda", November

Working papers

- N. Amberg and B. Becker, "Banking Without Branches", No. 430
- C. Bertsch, I. Hull, R. L. Lumsdaine and X. Zhang, "Four Facts about International Central Bank Communication", No. 432
- R. Billi, J. Galí and A. Nakov, "Optimal Monetary Policy with r* < 0", No. 433
- J. H. E. Christensen and X. Zhang, "Quantitative Easing, Bond Risk Premia and the Exchange Rate in a Small Open Economy", No. 434
- M. Lenza and E. Savoia, "Do we need firm data to understand macroeconomic dynamics?", No. 438
- G. Linderoth and M. Meuller, "Inflation-Dependent Exchange Rate Pass Through in Sweden: Insights from a Logistic Smooth Transition VAR Model", No 439.
- J. H. E. Christensen, N. N. Mirkov and X. Zhang, "Quantitative Easing and the Supply of Safe Assets: Evidence from International Bond Safety Premia", nr 440
- D. Finocchiaro and P. Weil, "A Traffic-Jam Theory of Growth", No 442
- T. Jappelli, E. Savoia and A. Sciacchetano, "Intertemporal MPC and Shock Size", No. 443
- J. Almerud, D. Krygier, H. Lundvall and M. Njie, "Measuring Riksbank Monetary Policy: Shocks and Macroeconomic Transmission", No. 445



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

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