

Monetary Policy Report

July 2021



Monetary Policy Report

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

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

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

The Executive Board made a decision on the Monetary Policy Report on 30 June 2021. The report may be downloaded in PDF format from the Riksbank's website www.riksbank.se, where more information about the Riksbank can also be found.

¹ See "Monetary policy in Sweden" on the next page for a description of the monetary policy strategy and what can be regarded as an appropriate monetary policy.

Monetary policy in Sweden

Monetary policy strategy

- According to the Sveriges Riksbank Act, the objective for monetary policy is to maintain price stability. The Riksbank has defined this as a 2 per cent annual increase in the consumer price index with a fixed interest rate (the CPIF).
- At the same time as monetary policy is aimed at attaining the inflation target, it shall support the objectives of general economic policy for the purpose of attaining sustainable growth and a high level of employment. This is achieved by the Riksbank, in addition to stabilising inflation around the inflation target, endeavouring to stabilise production and employment around paths that are sustainable in the long term. The Riksbank therefore conducts what is generally referred to as flexible inflation targeting. This does not mean that the Riksbank neglects the fact that the inflation target is the overriding objective.
- It takes time before monetary policy has a full impact on inflation and the real economy. Monetary policy is therefore guided by forecasts for economic developments. The Riksbank publishes its own assessment of the future path for the repo rate. This repo-rate path is a forecast, not a promise.
- In connection with every monetary policy decision, the Executive Board makes an assessment of the repo-rate path needed, and any potential supplementary measures necessary, for monetary policy to be well-balanced. The trade-off is normally a question of finding an appropriate balance between stabilising inflation around the inflation target and stabilising the real economy.
- There is no general answer to the question of how quickly the Riksbank aims to bring the inflation rate back to 2 per cent if it deviates from the target. A rapid return may in some situations have undesirable effects on production and employment, while a slow return may weaken confidence in the inflation target. The Riksbank's general ambition has been to adjust monetary policy so that inflation is expected to be fairly close to the target in two years' time.
- To illustrate the fact that inflation will not always be exactly 2 per cent each month, a variation band is used that spans 1 to 3 per cent, which captures around three quarters of the historical monthly outcomes of CPIF inflation. The Riksbank always strives for 2 per cent inflation, regardless of whether inflation is initially inside or outside the variation band.
- According to the Sveriges Riksbank Act, the Riksbank's tasks also include promoting a safe and efficient payment system. Risks linked to developments in the financial markets are taken into account in the monetary policy decisions. With regard to preventing an unbalanced development of asset prices and indebtedness however, well-functioning regulation and effective supervision play a central role. Monetary policy only acts as a complement to these.
- In some situations, as in the financial crisis 2008–2009, the repo rate and the repo-rate path may need to be supplemented with other measures to promote financial stability and ensure that monetary policy is effective.
- The Riksbank endeavours to ensure that its communication is open, factual, comprehensible and up-to-date. This makes it easier for economic agents to make good economic decisions. It also makes it easier to evaluate monetary policy.

Decision-making process

The Executive Board of the Riksbank usually holds five monetary policy meetings per year at which it decides on monetary policy. A Monetary Policy Report is published in connection with these meetings. Approximately two weeks after each monetary policy meeting, the Riksbank publishes minutes from the meeting, in which it is possible to follow the discussion that led to the current decision and to see the arguments put forward by the different Executive Board members.

Presentation of the monetary policy decision

The monetary policy decision is presented in a press release at 9:30 a.m. on the day following the monetary policy meeting. The press release also states how the individual Executive Board members voted and provides the main motivation for any reservations entered. A press conference is held on the day following the monetary policy meeting.

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IN BRIEF – Monetary policy July 2021



The grip of the pandemic on the global economy has eased during the spring and early summer, and the recovery is well under way. More and more people have been vaccinated against COVID-19, the spread of infection has decreased significantly and restrictions have begun to be phased out. But the pandemic is not over. The recovery is proceeding at a different pace in different parts of the world, and new variants of the virus are creating continued uncertainty.



Outcomes and indicators over recent months confirm that the development of the Swedish economy, with the help of extensive economic policy support measures, is strong. Both in Sweden and abroad, the recovery is proceeding slightly faster than expected and the Riksbank's forecasts have been revised up somewhat.



Inflation has varied to an unusually large degree during the pandemic. This is partly due to energy prices but also to measurement problems and people's changed consumption patterns during the pandemic. Inflationary pressures are still deemed moderate and it is expected to take until next year before inflation rises more persistently.



The expansionary monetary policy is a prerequisite for inflation to be close to the target of 2 per cent more persistently. The Riksbank will continue to purchase securities and offer liquidity within all the programmes launched. The Executive Board has now decided that the Riksbank will buy bonds for an aggregate nominal amount of SEK 68.5 billion in the fourth quarter. This means that the pace of purchasing will continue to be tapered off but that the envelope for asset purchases of SEK 700 billion will be fully utilised up until the end of 2021. The Executive Board has also decided to hold the repo rate at zero per cent. The repo rate is expected to remain at zero per cent for the entire forecast period, which extends until the third quarter of 2024.

1 Monetary policy needs to be sustained for inflation to stabilise close to 2 per cent

The grip of the pandemic on the global economy has eased during the spring and early summer, and the recovery is well under way. More and more people have been vaccinated against COVID-19, the spread of infection has decreased significantly and restrictions have begun to be phased out. But the pandemic is not over. The recovery is proceeding at a different pace in different parts of the world and there are new variants of the virus, which is causing continued uncertainty with the risk of setbacks.

Outcomes and indicators over recent months confirm that the development of the Swedish economy, with the help of extensive economic policy support measures, is strong. Both in Sweden and abroad, the recovery is proceeding slightly faster than expected and the Riksbank's forecasts have been revised up somewhat. A brighter outlook for the economy and for inflation could suggest that there is less of a need for expansionary monetary policy. However, inflationary pressures are still moderate and they are rising against a backdrop of monetary policy continuing to be expansionary in the years ahead. Expansionary monetary policy is therefore a prerequisite for inflation to be close to the target of 2 per cent more persistently.

The Riksbank continues to purchase securities and offer liquidity within all the programmes launched. The Executive Board has now decided that the Riksbank will buy bonds for an aggregate nominal amount of SEK 68.5 billion in the fourth quarter. This means that the pace of purchasing will continue to be tapered off but that the envelope for asset purchases of SEK 700 billion will be fully utilised up until the end of 2021. The Executive Board has also decided to hold the policy rate at zero per cent. The repo rate is expected to remain at zero per cent for the entire forecast period, which extends until the third quarter of 2024.

1.1 Recovery well under way in the global economy

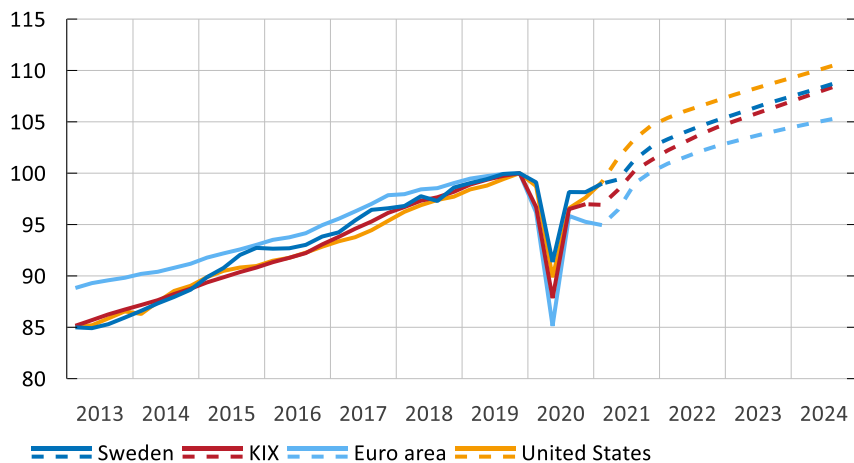
Rising optimism, but great difference in vaccination rates between countries

In developed countries, the pandemic's grip seems to have eased during the spring and early summer. More and more people have been vaccinated against COVID-19, the spread of infection has decreased significantly and restrictions have begun to be phased out. However, the pandemic is not over and there are new variants of the virus that are creating continued uncertainty with the risk of setbacks. The economic situation looks brighter; optimism among households has risen rapidly and confidence is also high among companies, even in the hard-hit service sector. Economic policy is still very expansionary and economic activity has picked up again in many countries.

The EU has agreed on a vaccine passport that will apply from 1 July. The aim is to facilitate free movement so that travel between Member States picks up as safely as possible. As movement in society increases and consumption and investment improve, growth in countries that are important for Sweden's trade may increase more rapidly. GDP abroad is expected to start growing again from the second quarter of 2021 onwards and towards the end of the year is projected to be back at pre-crisis levels (see Figure 1).

Figure 1. GDP in Sweden and abroad

Index, 2019 Q4 = 100, seasonally adjusted data



Note. KIX is an aggregate of the countries that are important to Sweden's international trade. Solid line refers to outcome, broken line represents the Riksbank's forecast.

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

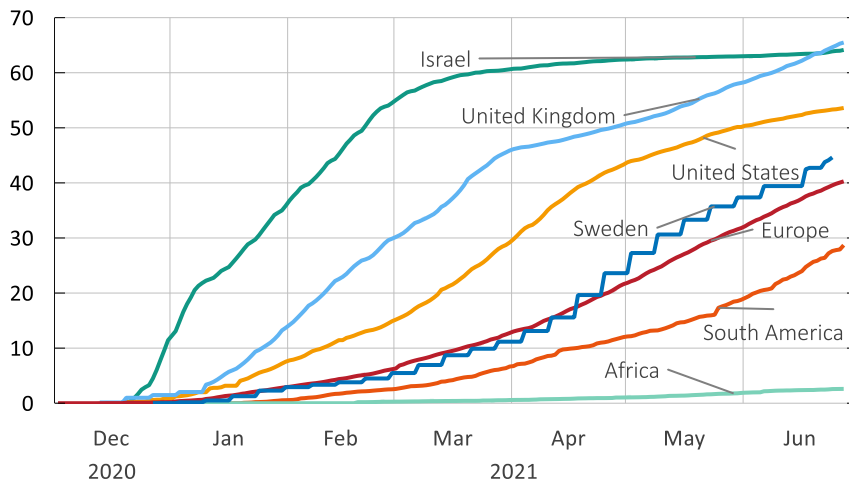
In some countries in Africa, South America and Asia, the vaccination process is going much slower (see Figure 2). Stimulation to the economy also varies from country to country and region to region. The fiscal policy measures in developed economies are extensive. This applies in particular to the United States, but also the majority of European countries have launched fiscal policy stimulation packages that are expected to

have significantly positive effects on demand, for example within the framework of the Next Generation EU recovery plan. The fact that the development of the pandemic is varying around the world, and that the conditions to mitigate its economic consequences are so different, mean that the global recovery is out of sync. The structure of economies also plays a role in how strong the recovery will be in different countries. As restrictions now start to be eased in the euro area, for example, this is happening from different initial positions, in both countries and sectors.

In those countries where GDP growth is rising rapidly, resource utilisation is also increasing, which is expected to contribute to gradually higher inflationary pressures. The rapid recovery has created bottlenecks and very rapid price rises for commodities, other input goods and transport. The reopening of economies is also contributing to severe fluctuations in some service prices and inflation has risen rapidly, particularly in the United States. In May, CPI inflation in the United States was 5.0 per cent. Adjusted for energy and food prices, inflation was 3.8 per cent, the highest reading since 1992. The Riksbank's assessment is that the upturn in inflation during the spring is temporary, both in the United States and in the euro area. Inflation abroad is expected to slow to just under 2 per cent in 2022 and 2023.

Figure 2. Vaccination rate

Percentage of total population



Note. Refers to the share of the total population, all ages, that have received at least one dose of vaccine.

Source: Our World in Data.

Relaxed restrictions and increasingly high activity in the Swedish economy

In Sweden, the Government has presented a plan for how the measures combating COVID-19 can gradually be withdrawn, depending on the situation.² The first phase of

² The plan is based on proposal for adjusted infection control measures presented by the Public Health Agency of Sweden on 12 May. The factors considered by the Public Health Agency in its overall assessment of the situation are the infection rate, pressure on the health service due to COVID-19, vaccination coverage and how stable developments are.

adjustments to the infection control measures began on 1 June with, for example, more people being allowed to attend some events and longer opening hours for restaurants.

Parts of the Swedish economy, such as the manufacturing sector, recovered the larger part of last spring's decline in output relatively quickly. But GDP is still being dampened as certain components of household consumption are limited by restrictions. After remaining unchanged in the last quarter of 2020, however, GDP picked up again and rose by 0.8 per cent in the first quarter, seasonally adjusted and compared with the previous quarter. Growth indicators are on very high levels. The National Institute of Economic Research's Economic Sentiment Indicator rose in May and June to its highest-ever levels, which indicates that both households and companies are more optimistic than usual about developments going forward. Once restrictions are lifted, consumption is therefore expected to pick up significantly.

Although the conditions for forming a government are currently uncertain, this is not expected to have a significant impact on economic developments in the short term. This year, the Swedish economy is expected to grow unusually rapidly and in the third quarter, GDP is projected to be back on the same level as before the outbreak of the pandemic (see Figure 1). But GDP usually grows over time and the pandemic has led to more than a year of lost growth. It will therefore take time before GDP returns to the trend development expected before the pandemic. The high growth means that spare capacity in the labour market will gradually be utilised. Rising demand in contact-intensive service sectors will lead to many companies rehiring staff, and conditions in the labour market will improve.

Still moderate cost pressures

Inflation has continued to be very volatile in 2021. Last year, CPIF inflation fell rapidly and this year, it has risen rapidly (See Figure 3). The substantial volatility is largely due to energy prices, but measurement problems and changed consumption patterns during the pandemic have also contributed.³ Even when adjusted for energy prices, CPIF inflation has therefore varied quite considerably. This development is expected to continue for the rest of the year. The unusually large change in CPI weights has contributed to a higher rate of increase in service prices at the beginning of 2021, but is expected to contribute to a fall in inflation over the summer. The Swedish krona, which affects inflation with a certain time-lag, strengthened for most of 2020 and is expected to dampen inflation this year. Cost pressures are still moderate and it is expected to take until next year before inflation, against a backdrop of higher resource utilisation, rises more persistently.

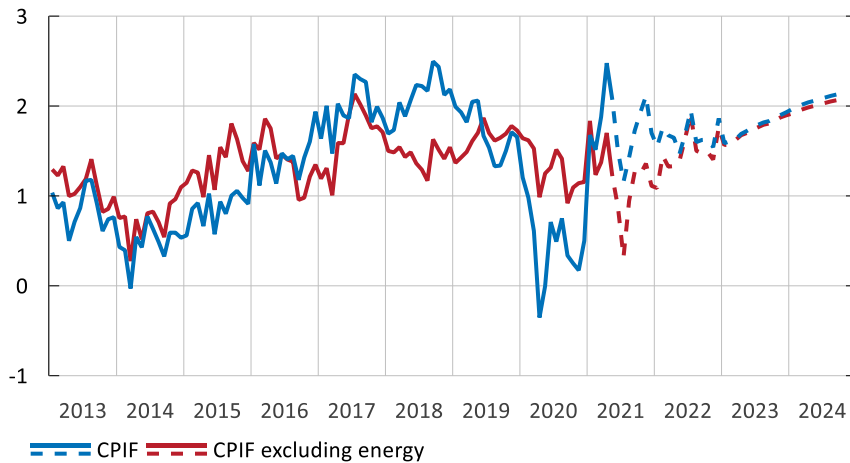
At the same time, prices of input goods have continued to rise and the shortage of semiconductors is still a problem, especially for the automotive industry, where it has

³ See the article "Changed consumption during the pandemic affects inflation" in *Monetary Policy Report*, February 2021, Sveriges Riksbank.

caused production stoppages in some areas.⁴ The situation in shipping also remains strained; many have to choose more expensive shipping options and delivery times have increased. Although the price indices for input goods are on a record-high level for both industrial and service companies, this seems to not yet have had any major impact on producer prices (see the article “How are higher commodity prices and freight costs affecting Swedish inflation?” in this report). The Riksbank’s assessment is that the upturn in prices of freight, commodities and input goods will gradually subside. The pass-through to consumer prices from movements in, for example, commodity prices is normally not so large and prolonged. This time, too, the movements are expected to have only a temporary and moderate effect on consumer prices.

Figure 3. CPIF and CPIF excluding energy

Annual percentage change



Sources: Statistics Sweden and the Riksbank.

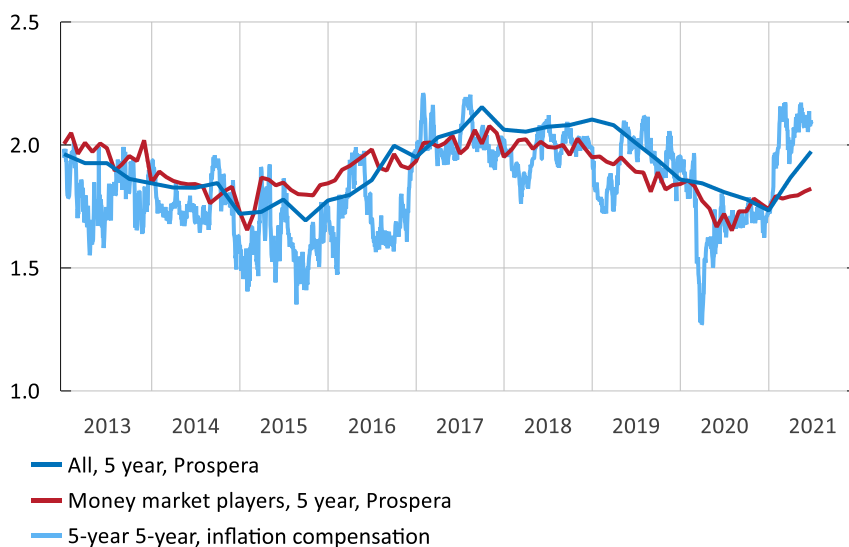
Long-term inflation expectations close to 2 per cent

Inflation expectations have also risen both abroad and in Sweden. Considering the dramatic downturn in economic activity and the rapid fall in inflation at the start of the crisis, various measures of long-term inflation expectations have been remarkably stable. The expectations measured via market pricing for various financial contracts fell in the initial stage of the crisis but recovered most of the fall quite rapidly and have been just over 2 per cent this year (see Figure 4). Even survey-based expectations fell in 2020 but have climbed back towards 2 per cent this year. The overall picture is that long-term inflation expectations are close to 2 per cent, although the expectations of money market participants according to Prospera are somewhat below 2 per cent.

⁴ In the Riksbank’s company survey, companies say that they are “much more concerned about the semiconductor shortage than about the pandemic right now”, see *the Riksbank’s Business Survey* “Demand is not the problem – the troubles are on the supply side”, May 2021, Sveriges Riksbank.

Figure 4. Long-term inflation expectations

Per cent



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

Sources: Kantar Sifo Prospera and the Riksbank.

Slightly faster recovery in the economy

Since the monetary policy meeting in April, the development of the pandemic has been slightly better than was assumed in the Riksbank's forecasts. Somewhat more favourable development in the spread of infection and the vaccination rate have contributed to this. In many countries, restrictions have started to be eased and thus enabled a more rapid economic recovery. Recent outcomes suggest that this development has had a positive impact on global economic activity. The global goods trade has continued to recover quickly in both emerging and developed economies and is now on a higher level than before the pandemic. Within the industrial sector, confidence is very strong, despite output being held back by a shortage of input goods and delivery problems. Optimism has also risen significantly among households and within the service sector. Growth in many countries that are important for Sweden's trade, such as the euro area and the United States, is now expected to be somewhat higher than in the Riksbank's forecast in April.

The picture of a clear and strong recovery in the Swedish economy has been confirmed in data published since the Monetary Policy Report in April. The recovery is now also proceeding somewhat faster compare with the previous assessment (see Figure 5). But developments in the Swedish labour market are difficult to interpret, due partly to the time series break in Statistics Sweden's official statistics.

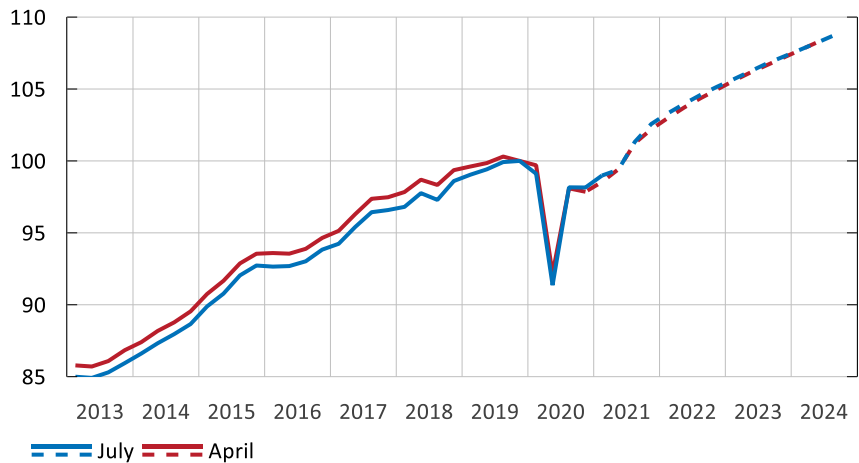
The overall picture from various statistical sources shows that the recovery in the number of employed persons slowed in the first quarter, in line with the Riksbank's April forecast. Although unemployment according to the Swedish Public Employment

Service's statistics has fallen since last summer, it remains high. However, forward-looking indicators point to an improved labour market situation. Rising demand and company recruitment plans indicate that the spare capacity can be utilised relatively quickly going forward. Due to the high growth, the Riksbank has revised down the forecast for unemployment somewhat (see Figure 6). The assessment is that overall activity in the Swedish economy will approach its pre-pandemic level more rapidly than expected. But resource utilisation is still significantly lower than normal in those sectors negatively affected by the pandemic. And there are groups for which the pandemic has made entry and re-entry into the labour market more difficult. The differences are expected to remain for a while longer but towards the end of the year, when restrictions have been eased more significantly, those sectors hit hardest by the pandemic are expected to have essentially recovered. Supported by expansionary economic policy, resource utilisation is expected to continue to rise and the economic situation is projected to be strong in the coming years.

It is still early to say what the long-term effects of the crisis will be. Compared with previous crises, the recovery has been usually rapid, which may mean that the longer-term negative effects will be less severe this time. However, the fall was both sudden and deep and although the economy will probably return to a more normal situation, its fundamental structures may have been affected in certain respects. The behaviour of households and companies has probably changed in the crisis and the composition of supply and demand may look different going forward.

Figure 5. GDP in Sweden

Index, 2019 Q4 = 100, seasonally adjusted data

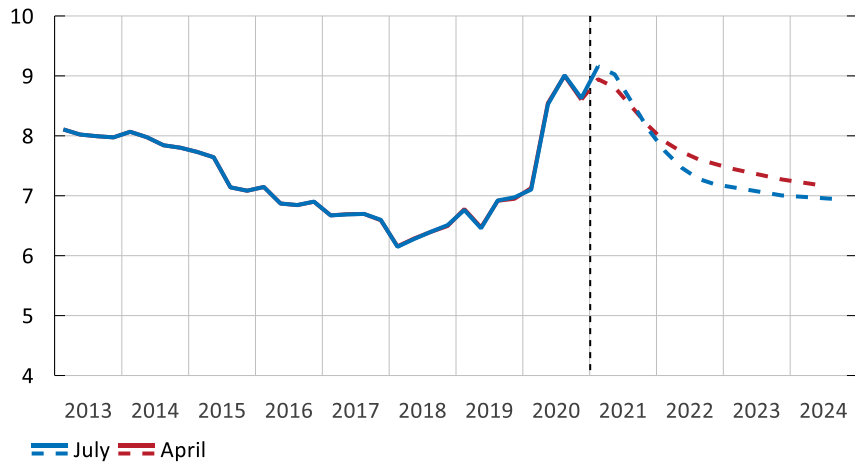


Note. Solid line represents outcome, broken line represents the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank.

Figure 6. Unemployment in Sweden

Percentage of labour force, 15–74 years, seasonally adjusted data



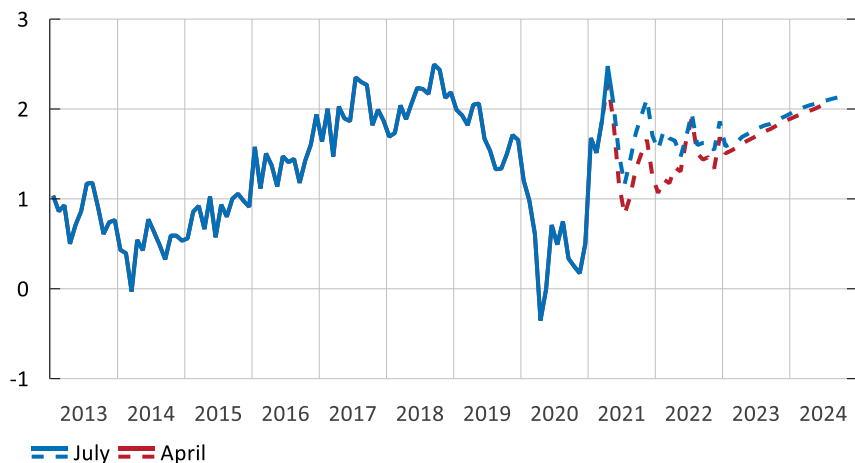
Note. Solid line refers to outcome, broken line represents the Riksbank’s forecast. The vertical line marks the date for the overhaul of the LFS (the labour force survey).

Sources: Statistics Sweden and the Riksbank.

The inflation prospects have also been revised up somewhat (see Figure 7). The outcomes in recent months have been slightly higher than expected and not all of the increase is assessed to be temporary. Factors contributing to the upward revision of the forecast are higher energy prices and higher inflation abroad, but the accelerated recovery also means slightly higher costs for companies. The high rate of increase in commodity prices and freight costs are also contributing to this. Overall, CPIF inflation is expected to be just over 2 per cent towards the end of the forecast period.

Figure 7. CPIF

Annual percentage change



Note. Solid line represents outcome, broken line represents the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank.

1.2 Expansionary monetary policy to give support to inflation

Faster recovery but still moderate inflationary pressures

A brighter outlook for the economy and for inflation could suggest that there is now less of a need for expansionary monetary policy. However, an ever-stronger economic situation in the coming years and increased cost pressures due to higher resource utilisation will occur against the backdrop of continued expansionary monetary policy. Expansionary monetary policy is therefore a prerequisite for inflation to be close to the target of 2 per cent more persistently.

In the Riksbank's forecast, inflation is now expected to be just over 2 per cent towards the end of the forecast period. However, this is not a reason to now make monetary policy less expansionary in different ways. There is still uncertainty about the strength of the inflation upturn. For the inflation upturn to be deemed persistent, it will be important that it is stable and reflected in both inflation outcomes and indicators of inflationary pressures. In recent decades, inflation has undershot the target on average. If inflation overshoots the target for a time, this could therefore help to more clearly anchor price and wage expectations in a way that is compatible with close-to-target inflation.

The Riksbank's overall assessment is that financial conditions in Sweden are still expansionary. Economic activity is back close to its pre-pandemic level and at pace with increased optimism and higher inflation expectations, it is natural for long-term nominal interest rates also to rise somewhat. In order not to jeopardise the outlook for inflation, however, it is important that the financial conditions are not tightened too quickly. Making monetary policy less expansionary in the near term, by, for example, not utilising the whole envelope for asset purchases, could lead to such an undesirable tightening with interest rates in a worst-case scenario rising rapidly. Like many other central banks, the Riksbank deems that the risks associated with reducing stimuli too soon are greater than the risks of keeping them for too long.

Zero interest rate and continued asset purchases

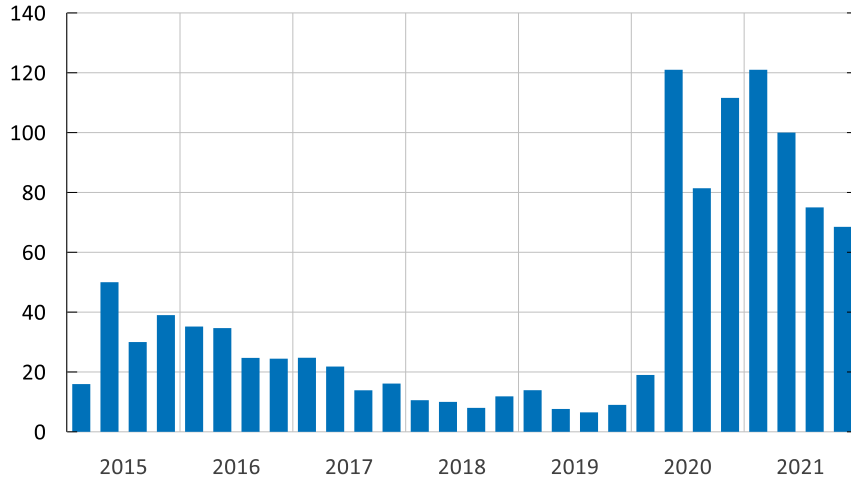
The Riksbank's measures have mitigate the effects of the crisis on the Swedish economy and facilitated a recovery. Although inflation has risen, inflationary pressures are still moderate and the Executive Board considers continued expansionary monetary policy in the coming years to be a prerequisite for inflation to be close to the target more persistently. The Riksbank is therefore continuing to purchase assets within the envelope of SEK 700 billion and to offer liquidity within all the programmes launched.

The Executive Board has decided that the Riksbank will buy bonds for an aggregate nominal amount of SEK 68.5 billion in the fourth quarter (see Figure 8). This means

that the purchasing rate will continue to be tapered off but that the envelope for asset purchases will be fully utilised up until the end of 2021.⁵ The Executive Board has also decided to hold the policy rate at zero per cent. The repo rate is expected to remain at zero per cent for the entire forecast period, which extends until the third quarter of 2024 (see Figure 9).

Figure 8. The Riksbank's purchase of securities in Swedish kronor

Nominal amounts, SEK billion

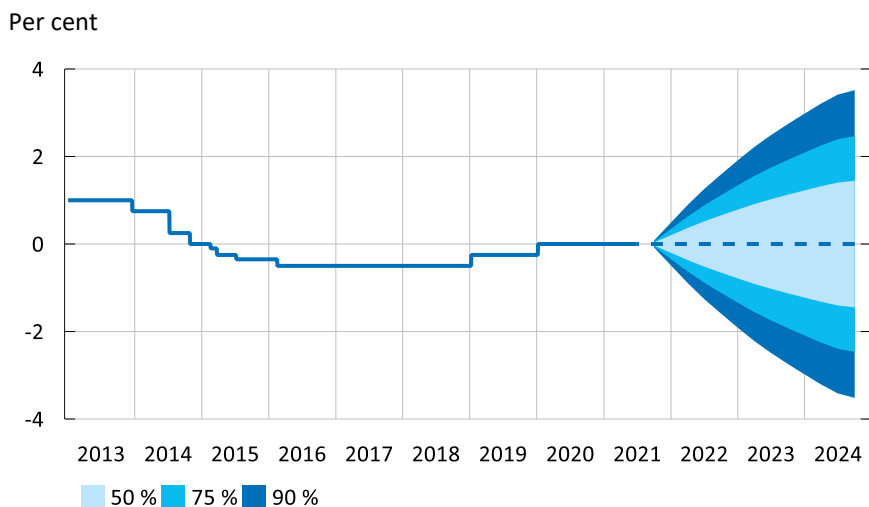


Note. The solid bars represent implemented or adopted purchases of government bonds, municipal bonds, covered bonds and corporate bonds within the envelope for both the asset-purchase programme initiated in February 2015 and the new asset-purchase programme initiated in March 2020. The purchase amount for 2021 also includes changes in the holdings of treasury bills.

Source: The Riksbank.

⁵ In the fourth quarter, redemptions will occur in the assets owned by the Riksbank. As a result, holdings will increase significantly more slowly than the purchase volume.

Figure 9. Repo rate with uncertainty bands



Note. The uncertainty bands for the repo rate are based on the Riksbank’s historical forecasting errors and the ability of risk-premium adjusted forward rates to forecast the future repo rate for the period 1999 up to the point when the Riksbank started to publish forecasts for the repo rate during 2007. The uncertainty bands do not take into account the fact that there may be a lower bound for the repo rate. Outcomes are daily rates and forecasts refer to quarterly averages.

Source: The Riksbank.

That the Riksbank continues to offer to purchase bonds, treasury bills and commercial paper is contributing to a broad pass-through of monetary policy on interest rate formation.

The Riksbank’s measures during the coronavirus crisis are summarised in Table 1. The table also shows that the demand for some of the Riksbank’s lending facilities is now very low. In the programme for corporate lending via banks, for example, a large proportion of the loans have fallen due and, at present, SEK 16 billion remains in this lending facility, through which banks can borrow up to SEK 500 billion. The Riksbank is also offering banks monthly loans in US dollars and in Swedish kronor in extraordinary market operations. Only SEK 3 billion is now outstanding in these facilities. It is natural for demand to decrease when the situation on financial markets normalises and the future optimism of market participants gradually strengthens. The composition of monetary policy is adjusted very gradually in line with the improvement in the Swedish economy.

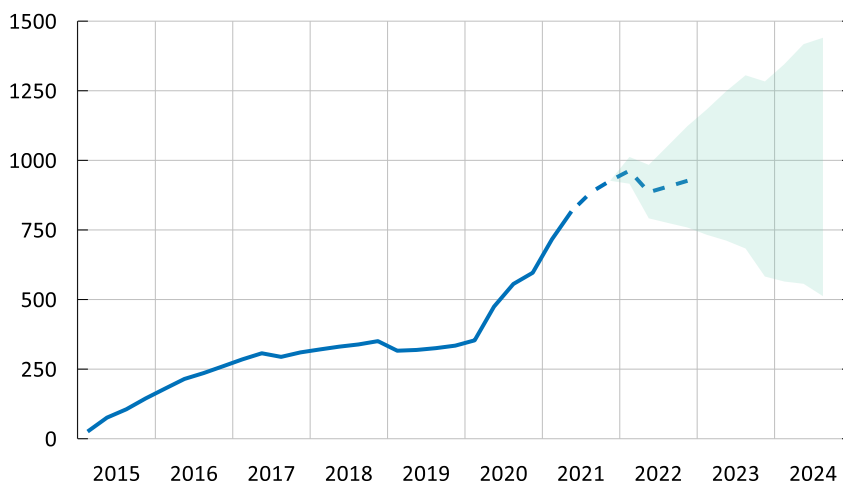
That the envelope for asset purchases is being fully utilised means that the Riksbank’s security holdings are expected to increase to almost SEK 927 billion at the end of the year.⁶ The holdings are expected to be maintained at this level at least until the end of 2022 by means of new purchases that compensate for redemptions in various asset types (see Figure 10). However, the redemptions are unevenly distributed over time, at the same time as purchases are expected to occur at a fairly even rate. This will

⁶ This also includes the holdings of government bonds built up by the Riksbank mainly in 2015–2017.

lead to some variations in the Riksbank’s asset holdings even during periods when the aim is to keep the holdings unchanged.⁷

Figure 10. The Riksbank’s holdings of securities in Swedish kronor

Nominal amounts, SEK billion



Note. Broken line shows a forecast for holdings up until the end of 2021 and thereafter a technical projection assuming an even purchase rate that will maintain the holdings at the same level at the end of 2022 as at the end of 2021. The lower interval limit is a projection of holdings assuming that no more asset purchases are made after 2021. Its upper limit reflects a development in which the Riksbank’s asset purchases continue at more or less the same pace as during 2021.

Source: The Riksbank.

The Riksbank’s plan for asset purchases during the fourth quarter of 2021

The Riksbank analyses and continuously adapts the purchases made within the Riksbank’s asset-purchase programme to make the pass-through to rate-setting as broad as possible and to maintain a presence on different markets. At the recent monetary policy meetings, the Executive Board has decided on quarterly purchase plans and this time the decision refers to distribution in the fourth quarter of 2021. If deemed appropriate, the Executive Board can adjust the plan for purchases at forthcoming meetings by raising or lowering the purchase amount for each type of asset.

The bond purchases during the fourth quarter are distributed between Swedish nominal and real government bonds and Swedish sovereign green bonds for an aggregate nominal amount of SEK 10 billion, bonds issued by Swedish municipalities and regions and by Kommuninvest i Sverige AB for a nominal amount of SEK 12.5 billion, covered bonds issued by Swedish institutions for a nominal amount of SEK 45 billion, and corporate bonds for an nominal amount of SEK 1 billion. In addition, the Riksbank will purchase treasury bills to maintain the holdings at SEK 20 billion over the quarter and

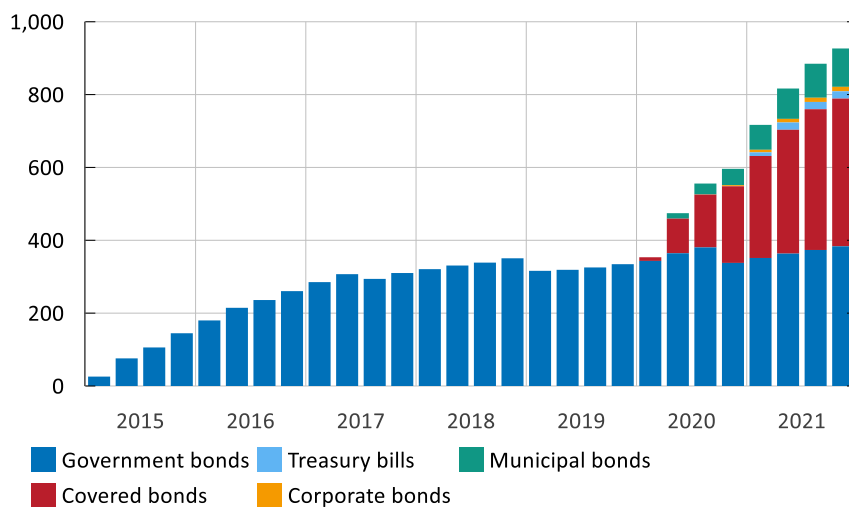
⁷ See also the article “Development of the Riksbank’s securities holdings” in the *Monetary Policy Report*, February 2021, Sveriges Riksbank.

will also offer to purchase commercial paper up to a possible holding of SEK 32 billion during the fourth quarter.

At the same time, redemptions will occur in the Riksbank's bond holdings. During the second quarter, corporate bonds for just under SEK 1 billion, municipal bonds for just over SEK 3 billion and covered bonds for just over SEK 29 billion will reach maturity. The bond holdings will not therefore increase as much as purchases (see Figure 11).

Figure 11. The Riksbank's holdings of securities by asset type

Nominal amounts, SEK billion



Note. Holdings of securities, excluding commercial paper, issued in Swedish kronor. Based on implemented and decided purchases.

Source: The Riksbank.

1.3 Uncertainty, risks and vulnerabilities

Continued uncertain development

Monetary policy needs to be constantly adapted to changes in the economic outlook and inflation prospects. The Executive Board may cut the repo rate or in some other way make monetary policy more expansionary if inflation prospects weaken. This applies in particular if confidence in the inflation target were to be under threat. A less expansionary monetary policy may be justified if inflation were to risk overshooting the target significantly and persistently.

International risks

It is still difficult to know how the pandemic will develop and what will happen to the global economy. Although reduced infections and rising vaccinations among the global population provide hope that the crisis is coming to an end, new, more infectious variants of the virus have evolved. That this will lead to new setbacks in the form of reintroduced lockdowns and restrictions in certain countries cannot be ruled out.

Imbalances and increased risks can emerge, especially in countries with considerable borrowing in foreign currency, if the recovery is too uneven among countries. Another uncertainty factor is the development of inflation, especially in the United States. If inflationary pressures were to be much stronger than expected, US interest rates might rise rapidly and thus cause problems, for both the United States and other countries. The direct economic consequences for Sweden of such a development would probably be limited but it cannot be ruled out that contagion effects via the financial markets may have relatively major consequences for the Swedish economy as well.

Vulnerabilities as a result of expansionary economic policy

It has been necessary to stimulate the economy by keeping interest rates low and facilitating credit supply in order to mitigate the crisis and support the recovery and inflation. But there are vulnerabilities and long-term risks that can be built up by very expansionary monetary policy. In combination with the support measures from governments, the monetary policy of central banks has led to many countries, companies and households increasing their debts substantially (see the article “Expansionary fiscal policies abroad are contributing to the recovery”). This may lead to future recessions being both deeper and more prolonged than would otherwise be the case.

Low interest rates can create incentives for excessive risk-taking, make housing and other assets become overvalued, lead to risks being incorrectly priced and to indebtedness among various economic agents increasing in an unsustainable manner. Vulnerabilities linked to the high indebtedness of Swedish households and the major exposures of banks to property have increased further during the pandemic, even though interest rates have not changed very much. Housing prices have risen sharply, something that is not normally expected when the economic situation deteriorates. The most important explanations probably have nothing to do with the expansionary monetary policy but with the unusual economic effects of the pandemic.⁸ The rapid rise in prices has meant that household debt has increased further, as housing purchases are largely financed by loans. Households are therefore more sensitive to both price falls in the housing market and rising interest expenses.

In discussions about the side-effects of monetary policy, the effects on income and wealth distribution are also discussed. Monetary policy is not particularly well suited for use in redistribution policy and neither is this the Riksbank’s task.⁹ Fiscal policy has the most effective redistribution policy tools at its disposal and can combat undesirable distributional effects.

Vulnerabilities and long-term risks that can be built up by the expansionary monetary policy have been subordinated to the need to counteract the economic effects of the pandemic. However, as the economy approaches more normal levels, it is reasonable

⁸ See the article “Rapidly rising housing prices despite the coronavirus crisis” in *Monetary Policy Report*, April 2021, Sveriges Riksbank.

⁹ See the article “Distributional effects of the Riksbank’s monetary policy” in *Monetary Policy Report*, November 2020 and “10 frequently asked questions about the distributional effects of monetary policy”, *Economic Commentaries* No. 11, 2021, Sveriges Riksbank.

to focus more on issues of how to best manage these vulnerabilities. In light of the risks posed by the high level of household indebtedness, the Riksbank supports Finansinspektionen's announcement not to extend the temporary exemption from the amortisation requirements. In order to increase resilience in the financial system, it is also desirable that Finansinspektionen, if the economic recovery continues, announces that the value of the countercyclical capital buffer will be increased, not least as increases are implemented with a time-lag of twelve months.¹⁰

Fiscal policy has important tools

Over the last year, monetary policy and fiscal policy both in Sweden and abroad have complemented each other and thereby been able to more effectively mitigate the crisis and facilitate the recovery. Fiscal policy measures have a greater effect on growth and resource utilisation if the policy rate is kept unchanged when they are implemented. Several central banks have also announced that they plan to continue to keep policy rates low and to purchase assets, even if inflation overshoots the target for a while. It is therefore probable that the fiscal policy measures currently being implemented in many countries are being strengthened by the expansionary monetary policy (see the article "Expansionary fiscal policies abroad are contributing to the recovery").

The low interest rates and strong public finances in Sweden make it possible to continue to give extensive economic policy support to the economy. In addition, fiscal policy has tools for managing the risks and vulnerabilities that the stimulation measures could build up in the Swedish economy. There is a need for reforms in many areas. First and foremost, housing and tax policy measures are required to, for example, mitigate the risks associated with household indebtedness. However, the government situation is creating considerable uncertainty with regard to the direction for fiscal policy and raising further questions about the implementation of desirable reforms.

¹⁰ See *Financial Stability Report 2021:1*, Sveriges Riksbank.

Table 1. The Riksbank's measures during the coronavirus crisis

Measure	Scope (Purchased/utilised so far up to 29 June)	Aim
Programme for funding to banks to support corporate lending	Up to SEK 500 billion (outstanding SEK 16 billion)	Support credit supply to non-financial corporations.
Envelope for the Riksbank's asset purchases	Purchase programme lasts until 31 December 2021. Envelope amounts to SEK 700 billion. Purchases 2021 Q4: SEK 68.5 billion (total holdings have increased by SEK 522.3 billion since the beginning of March 2020)	Contributing to low interest rates throughout the economy and a smoothly functioning credit supply, and in this way creating favourable conditions for the economy to recover and inflation to rise towards the target.
- Purchases of government bonds	Purchases 2021 Q4: SEK 10 billion (SEK 71 billion)	
- Purchases of municipal bonds	Purchases 2021 Q4: SEK 12.5 billion (SEK 83.5 billion)	
- Purchases of covered bonds	Purchases 2021 Q4: SEK 45 billion (SEK 340.0 billion)	
- Purchases of treasury bills	Purchases so that holdings are SEK 20 billion as of 30 December 2021 (holdings: SEK 17.5 billion)	
- Purchases of corporate bonds	Purchases 2021 Q4: SEK 1 billion (SEK 10 billion)	
- Purchases of commercial paper	Purchases up to holdings of SEK 32 billion during the rest of 2021 (holdings: SEK 0.3 billion)	
Interest rate in standing loan facility cut	Cut from 0.75 to 0.10 percentage points above the repo rate.	Ensuring that the overnight rate on the market for Swedish krona is close to the repo rate. Making it inexpensive for the banks to get access to overnight loans.
Weekly market operations whereby banks are offered loans against collateral at three and six months maturities at the repo rate.	Unlimited (outstanding SEK 3.0 billion)	Strengthening the banks' access to liquidity in Swedish kronor to facilitate their funding and their role as suppliers of credit for Swedish companies.
Eased collateral requirements when borrowing from the Riksbank	—	Reinforcing the banks' access to liquidity in Swedish kronor.
Loans in US dollars (current decision runs until 30 September)	Up to USD 60 billion (outstanding SEK 0.0 billion)	Reinforcing access to liquidity in US dollars in the Swedish financial system.

Note. Municipal bonds are bonds issued by Swedish municipalities, regions and Kommuninvest i Sverige AB. All of the bases for the decisions on various measures can be found on the Riksbank's website <https://www.riksbank.se/en-gb/press-and-published/updates-on-the-riksbank-and-the-coronavirus-pandemic/the-riksbanks-measures-in-connection-with-the-corona-pandemic/>.

2 Global recovery driving developments in financial markets

The global economic recovery is continuing, and developments on the financial markets have been stable since the monetary policy meeting in April. The rate increases on the US government bond market have slowed down since April and rates remain low globally. Yield spreads between government bonds and riskier bonds remain small and several large stock exchanges indices have attained new all-time highs during the spring. Recently, the focus of market participants has been on whether the high inflation outcomes during the spring, especially in the United States, are temporary or whether they are a signal that more lastingly high inflation can be expected, as well as on the actions taken by central banks.

In Sweden, market rates are very low, which contributes to cheap financing for households and companies. The Swedish stock market has been strong since the start of this year, while the krona has weakened somewhat. Growth in the corporate borrowing via bank loans and market financing has been subdued somewhat in recent months, but there are no signs that the banks has tightened their lending. The financial conditions in Sweden and abroad are assessed to remain expansionary as a result of more expansionary economic policy and optimism regarding the economic recovery.

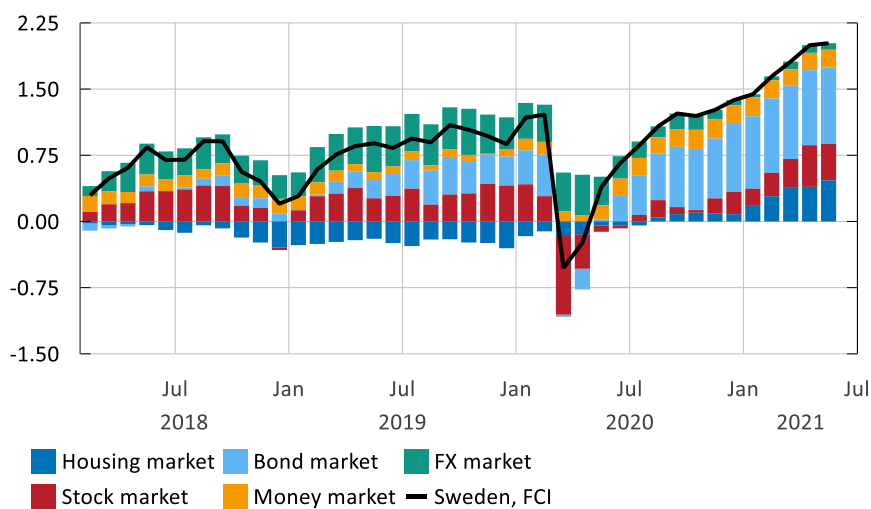
2.1 The economic recovery supports continued high willingness to take risks on the financial markets

The increasingly clear economic recovery, hopes that the continuing vaccination programme will curb the spread of inflation further and signals of continued expansionary economic policy contribute to the willingness to purchase risky assets remaining high on the financial markets. As a result of this, prices on the stock markets abroad have continued to rise during the spring, at the same time as interest rates remain low. The recent inflation outcomes have been high, particularly in the United States, and many market participants are therefore wondering whether the upturn in inflation is temporary or a sign that inflation is on the way to becoming lastingly higher. Market participants have focused on central bank actions in this environment, and particularly on how the US Federal Reserve interprets the upturn in inflation.

Financial conditions in Sweden have developed in line with those abroad. Long-term bond yields in Sweden have risen since the start of the year, but are still low in a historical perspective. The yield spread between riskier bonds, such as corporate bonds, and government bonds is small and has in principle remained unchanged since April. The low interest rates in Sweden are an important reason for financial conditions in Sweden remaining very expansionary (see Figure 12). Rising prices on Swedish housing and equity markets in the spring have also led to financial conditions being more expansionary than at the start of the year.

Figure 12. Index for financial conditions in Sweden

Standard deviations. A higher value indicates more expansionary financial conditions



Source: The Riksbank.

Continued very expansionary monetary policy abroad

The major central banks are continuing to conduct expansionary monetary policies via low policy rates, comprehensive asset purchases, and targeted credit lines. At its monetary policy meeting in June, the European Central Bank (ECB) decided to keep policy rates unchanged, meaning, among other things, that the deposit rate remains -0.5 per cent. The ECB also decided that the asset purchases within the scope of the special pandemic programme (PEPP) of EUR 1,850 billion would continue at the pace decided at its meeting in March. Furthermore, the programme for lending to households and companies via the banks (TLTRO-III) and net purchases of EUR 20 billion per month under the framework of the programme for asset purchases that was in place prior to the pandemic (APP) are continuing.

At its June meeting, the US central bank, the Federal Reserve, decided to keep the policy rate unchanged within the interval of $0-0.25$ per cent. Other monetary policy instruments were also kept unchanged. The message was nevertheless interpreted by the market as unexpectedly strict, as a majority of the FOMC members now assess that the policy rate interval will be raised twice by at least 0.5 percentage points dur-

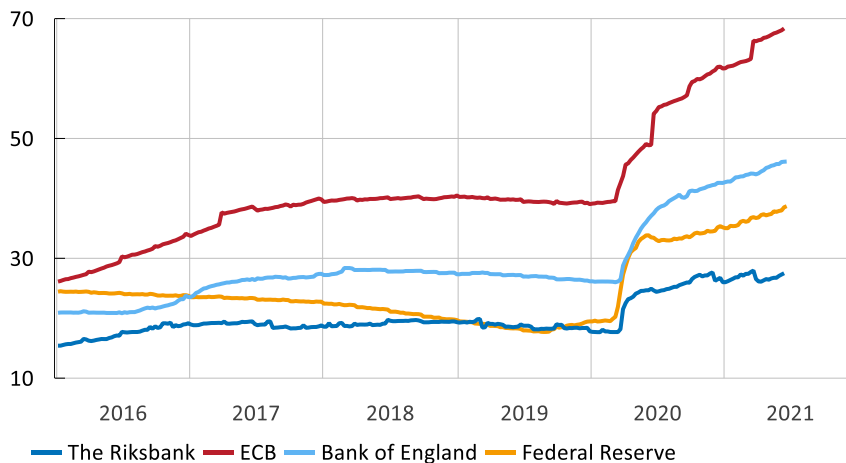
ing 2023. This is according to the Fed's 'dot plots', which show the individual members' expectations of the future policy rate path. The announcement followed on from several high inflation outcomes in the United States, and the bank also raised its inflation forecast for 2021. The forecasts for 2022 and 2023 were also raised, but to a much lesser extent. During the ensuing press conference, the bank communicated that it had begun a discussion on making monetary policy less expansionary by reducing its asset purchases. At the same time it emphasised that the US economy was still far from the conditions regarding significant further progress towards the targets for employment and inflation that have been set as requirements for the process to begin.

The UK central bank, the Bank of England decided at its meeting in June to keep both the policy rate and the framework for its asset purchase programme unchanged. The Norwegian central bank, Norges Bank also decided to keep its policy rate unchanged at its meeting in June, but indicated that it would probably raise the rate in September 2021.

Overall, the central banks' expansionary monetary policy measures during the pandemic have contributed to strong growth in their balance sheets as a proportion of GDP (see Figure 13).

Figure 13. Central banks' balance sheet totals

Per cent of GDP



Note. GDP is calculated as the sum of the present quarter and the three previous quarters. For quarters for which GDP has not yet been published, the most recently published GDP statistics are used.

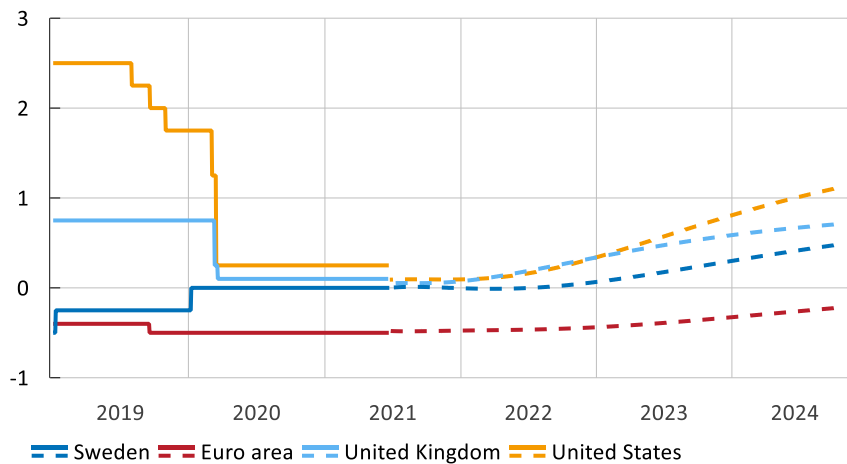
Sources: Bank of England, ECB, Federal Reserve, Macrobond and the Riksbank.

During the spring, sentiment on the financial markets has been marked by some uncertainty as to whether the rapid upturn in inflation, particularly in the United States, is temporary or more persistent. A more lasting high inflation could mean that the central banks need to take measures to make monetary policy less expansionary. At the same time, market participants' expectations of future policy rates have been relatively unchanged during the spring, at least in the shorter term. Following the

Federal Reserve's announcement in June, however, the US forward rate curve soared, particularly in the longer run. Market pricing now indicates a high probability that rate hikes in the United States will begin in the second half of 2022. The Bank of England is also expected to begin raising its rate in the second half of 2022, according to market pricing, while the Riksbank and the ECB are expected to begin in 2023 (see Figure 14).

Figure 14. Policy rates and rate expectations according to forward rates

Per cent



Note. Forward rates describe the expected overnight rate, which does not always correspond to the policy rate. In Sweden the forward rate does correspond to the expected repo rate. Broken lines are forward rates on 2021-06-28.

Sources: Macrobond and the Riksbank.

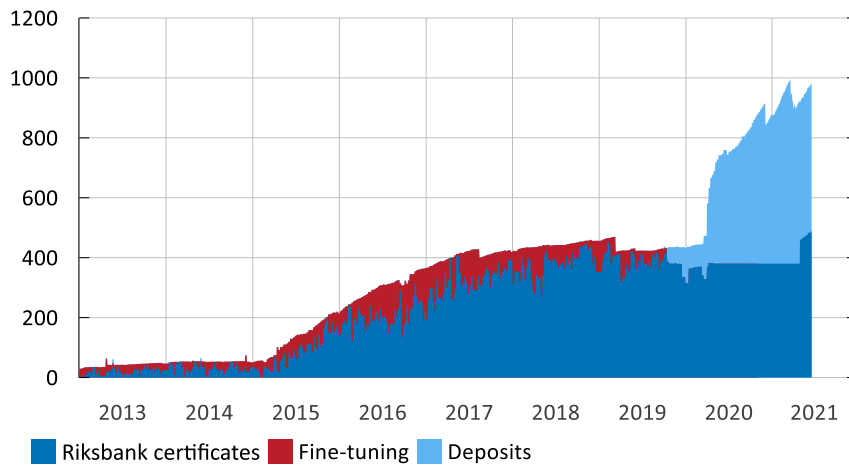
Low interest rates on the Swedish money market

In Sweden, too, market pricing indicates that the policy rate is expected to be unchanged for some time to come. According to this, the Riksbank is expected to raise the repo rate to 0.25 per cent during the second half of 2023. According to Kantar Sifo Prospera survey in June 2021, which was commissioned by the Riksbank, money market participants are expecting the repo rate to be raised on average by 0.25 percentage points within two years. However, there is a difference between the average and median outcomes for the survey. The median expectation is that the repo rate will remain unchanged two years ahead.

In addition to the market participants' expectations, the Riksbank's asset purchases are an important explanation for yields being low. The purchases of bonds for monetary policy purposes, initiated in 2015, have led to an increase in surplus liquidity in the banking system. The decisions on new asset purchases and lending programmes launched by the Riksbank when the pandemic broke out have strengthened this trend (see Figure 15). Rates on the Swedish money market have remained low and been in line with the repo rate (see Figure 16). Yields on government securities with maturities of up to 5 years are still lower than the repo rate.

Figure 15. Liquidity in the banking system, deposits and Riksbank certificates

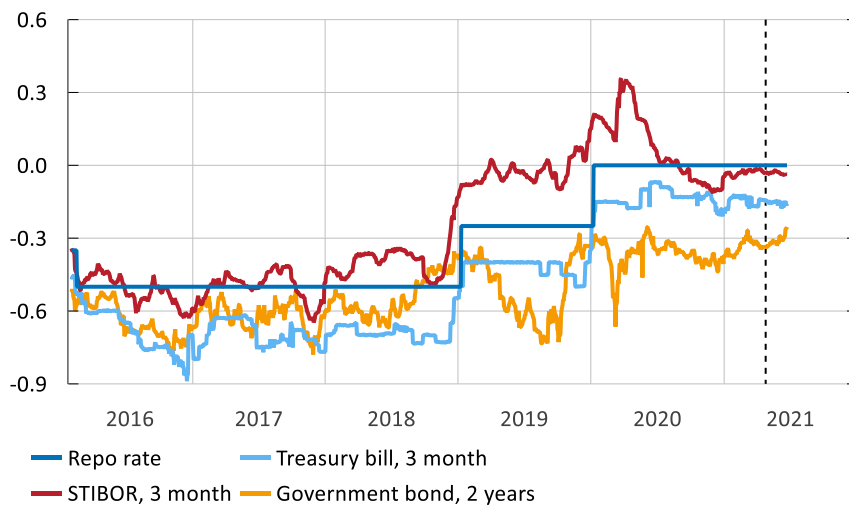
SEK billion



Source: The Riksbank.

Figure 16. The repo rate and market rates

Per cent



Note. The broken line marks the monetary policy meeting in April.

Sources: Macrobond, Refinitiv and the Riksbank.

Upturn in long-term bond yields has come to a halt in many countries

The fact that government bond yields around the world are still low is largely due to market participants expecting low policy rates and to central banks’ asset purchase programmes being completed. Since the start of the year, however, US government bond yields in particular have risen, partly due to extensive fiscal policy stimulation and partly due to an increase in economic activity.¹¹ The expansionary fiscal policy

¹¹ For more detailed reasoning on the causes of the upswing, see J. Alsterlind “Why have US long-term yields risen?”, *Economic Commentaries* No. 6, 2021, Sveriges Riksbank.

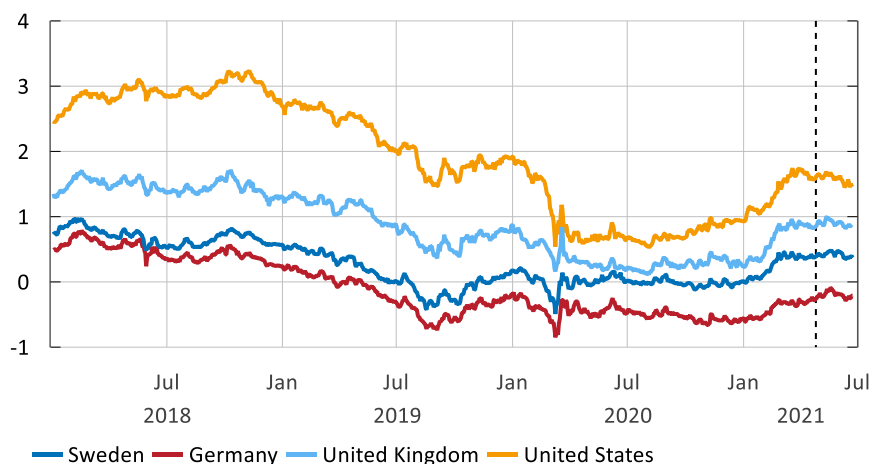
also means that the supply of US government bonds is increasing, which can in itself have contributed to the upswing. European yields have also risen, but to a lesser extent than the US ones.

The upswing in long-term rates at the start of the year came to a halt after the statements from the large central banks that they were expecting the upturn in inflation to be temporary and that monetary policy would therefore remain very expansionary for a long time to come (see Figure 17). This indicates that the central banks' perception of future inflation is very important for market expectations and that the market's overall assessment is that the upturn in inflation is temporary rather than lasting.

Swedish long-term government bond yields are roughly unchanged since the monetary policy meeting in April, in the same way as yields in the United Kingdom and Germany.

Figure 17. Government bond yields, 10 years to maturity

Per cent



Note. Implied zero-coupon yields for Sweden, Germany and the United Kingdom. 10-year benchmark bond yields for the United States. The broken line indicates the Monetary Policy meeting in April.

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

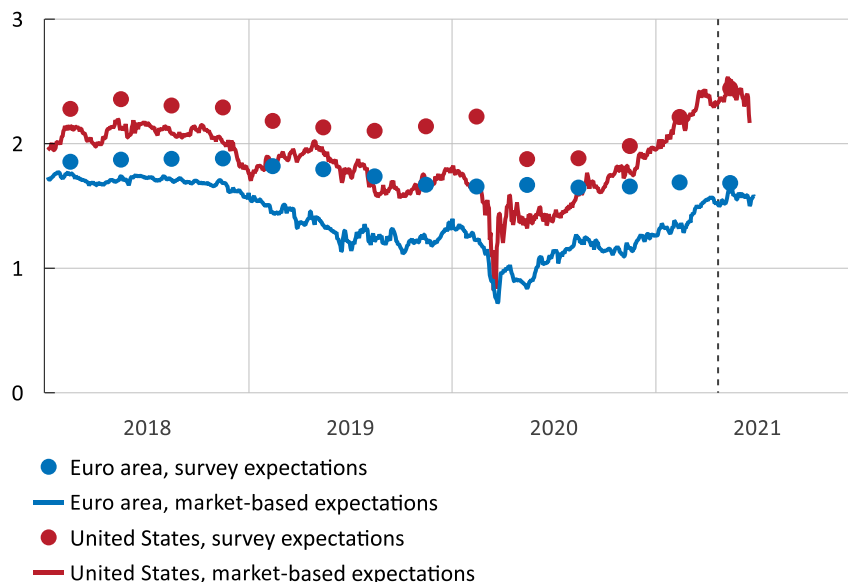
Market-based measures of long-term inflation expectations have risen

The market-based measures of long-term inflation expectations in both the United States and the euro area rose relatively rapidly at the beginning of 2021, after having fallen heavily when the pandemic broke out (see Figure 18). Continued expansionary fiscal and monetary policy, as well as the economic recovery that has become increasingly clear in recent months, and rising inflation have probably all contributed to inflation expectations as shown in market-based measures being at higher levels now than prior to the crisis. In the United States, the Federal Reserve's new monetary policy strategy may also have contributed to the upturn, as the market participants' interpretation of it is that the central bank will have greater tolerance than before for inflation temporarily overshooting the target, at least for some time to come.

Survey-based measures of long-term inflation expectations in the United States and the euro area are at approximately the same or higher levels than they were at before the pandemic (see Figure 18). This also means that the difference between expectations according to market-based measures and surveys has declined substantially in relation to recent years, particularly in the euro area. It is primarily the market-based measures that have come closer to the survey-based measures. The fact that these varied relatively substantially in relation to the corresponding survey-based measure can be due to market-based measures also reflecting changes in conditions on the markets. For instance, the supply of nominal and real government bonds can affect the market-based inflation expectations measured.¹²

Figure 18. Long-term inflation expectations in the euro area and the United States

Per cent



Note. Market-based measures of inflation expectations refer to a 5-year period starting in 5 years' time. For the United States, they are calculated using bond yields and refer to CPI. For the euro area, they are calculated using inflation swaps and refer to HICP. Survey-based expectations refer to the average inflation over the next 5 years (United States) and inflation 5 years ahead (euro area) according to the Federal Reserve Bank of Philadelphia and the ECB's Survey of Professional Forecasters. The broken line marks the time of the monetary policy meeting in April.

Sources: Bloomberg, Macrobond and the Riksbank.

Swedish inflation expectations have also risen during 2021 (see Figure 4). Market-based measures of long-term inflation expectations have risen slightly further since the monetary policy meeting in April. As for the foreign equivalents, the market-based measures can also reflect different market conditions, and the survey-based measures are somewhat lower. According to Kantar Sifos Prospera survey in June 2021, money

¹² See, for instance, "What drove the recent increase in the US inflation breakeven rate?" *Quarterly Review*, March 2021, pp. 12-13. Bank for International Settlements.

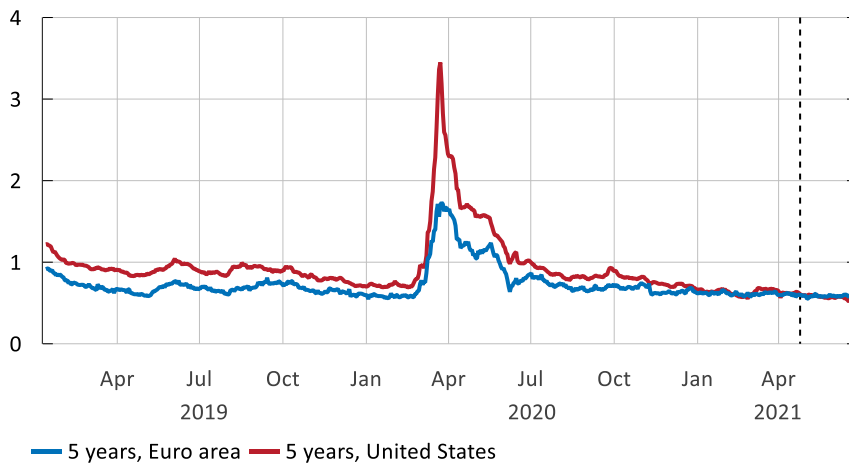
market participants are expecting long-term inflation to be just over 1.8 per cent according to the CPI. This is a marginally higher level than they expected in the corresponding survey in April, but significantly higher than the bottom levels in spring 2020.¹³

Risk premiums on other bond markets remain low

The yields on high-risk bonds have risen in line with the yields on government bonds since the start of the year. This has meant that, for instance, yield spreads between corporate bonds and government bonds, which are a measure of risk premiums on the market for corporate bonds, have in principle remained unchanged at very low levels in both the United States and the euro area (see Figure 19). A similar development can be seen in Sweden (see Figure 20).

Figure 19. Difference between yields on corporate bonds and government bonds in the euro area and United States

Percentage points



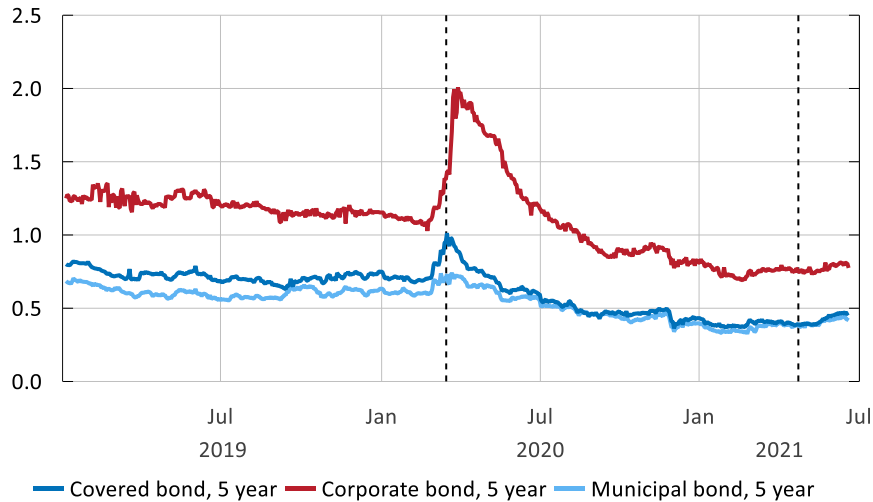
Note. Yield spreads refer to the difference between 5-year benchmark bonds issued by companies with good credit ratings and the government. The broken line indicates the Monetary Policy meeting in April.

Source: Macrobond.

¹³ For further analysis of inflation expectations pursuant to Kantar Sifo Prospera, see G. Lundgren "Survey-based inflation expectations", *Economic Commentaries* No. 7, 2021, Sveriges Riksbank.

Figure 20. Yield spread between different types of bond and government bonds in Sweden

Percentage points



Note. Yields on covered bonds, corporate bonds and government bonds are zero coupon rates calculated using the Nelson-Siegel method. Corporate bonds refer to companies with a high credit rating Covered bonds refers to bonds issued by Stadshypotek and municipal bonds are issued by Kommuninvest i Sverige AB. The broken lines mark 16 March 2020, when the Executive Board decided to extend the asset purchases to cover municipal bonds and covered bonds and the monetary policy meeting in April 2021, respectively.

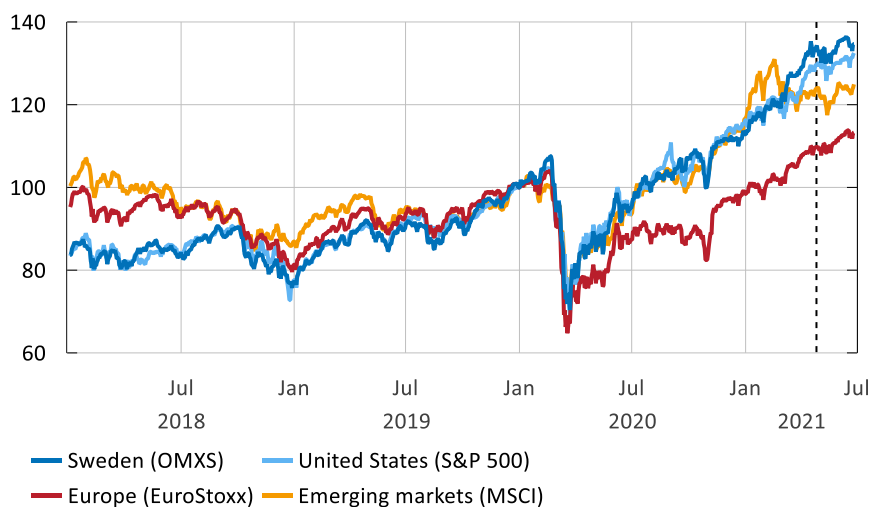
Sources: Bloomberg, Macrobond, Refinitiv and the Riksbank.

Continued upswing on many stock markets

Following the more acute phase of the crisis last spring, prices on many stock markets have soared. Growing optimism in the face of the global recovery and expectations of continued expansionary economic policy have contributed to equity prices developing very strongly since the start of the year, not least in Sweden. Both the Swedish equity index OMXS30 and several US indices have attained new all-time highs in June (see Figure 21).

Figure 21. Stock market movements in domestic currency

Index, 31 December 2019 = 100



Note. The broken line indicates the Monetary Policy meeting in April.

Source: Macrobond.

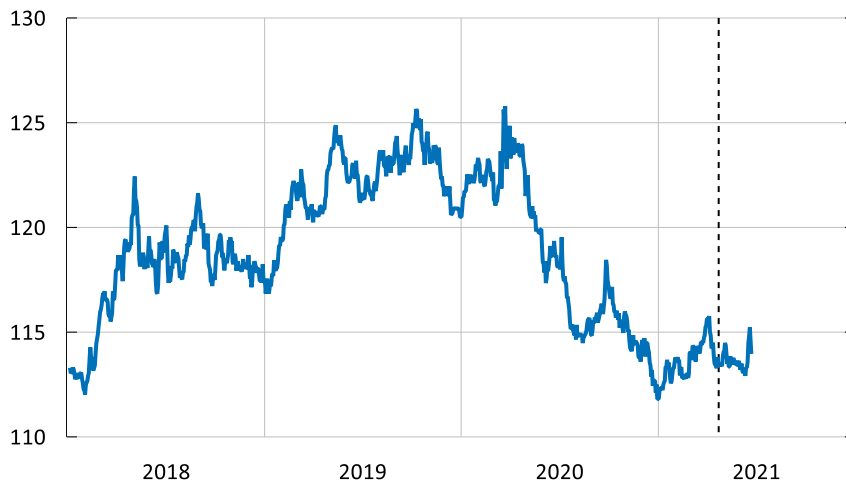
Recent inflation outcomes have been in focus on the stock markets, particularly with relation to how the central banks may act. A more lasting upturn in inflation could mean that the central banks need to make monetary policy less expansionary, resulting in higher market rates, which would probably have a dampening effect on equity prices.

The krona approximately unchanged compared to April

After the rapid crisis management in spring 2020, investors' risk propensity returned, and this, as described above, caused yields on higher risk bonds to fall and equity prices to rise. At the same time, the Swedish krona, which investors normally regard as a higher-risk currency than the dollar or euro, for example, appreciated significantly. However, measured in terms of the KIX, the krona has weakened since the start of the year (see Figure 22). The krona also weakened for a short period after the Federal Reserve's monetary policy decision in June, as a result of the dollar strengthening, but returned to approximately the same exchange rate as before the announcement in the following days. The krona is therefore approximately unchanged since the monetary policy meeting in April.

Figure 22. Nominal exchange rate, KIX

Index, 18 November 1992 = 100



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

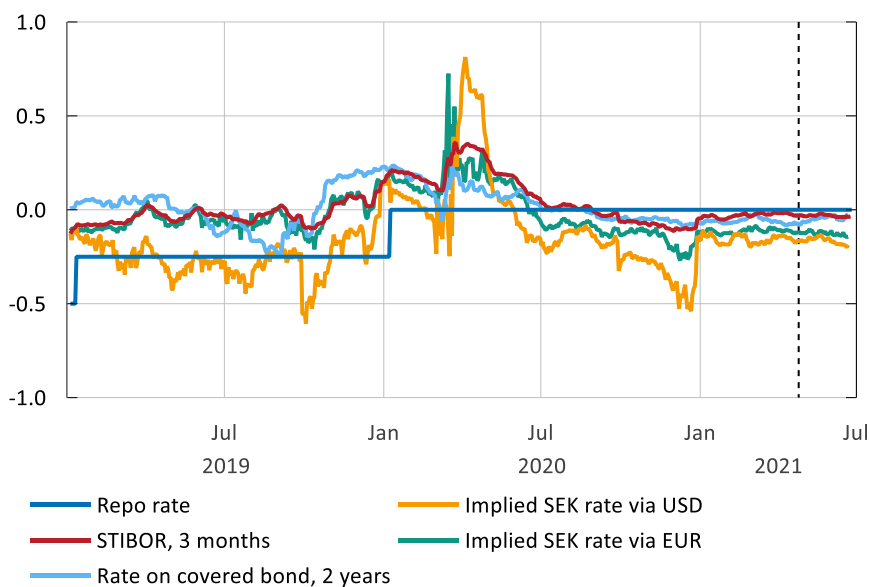
Sources: National sources and the Riksbank.

Low funding costs for Swedish banks

One important precondition for households and companies to obtain loans is that the Swedish banks are willing and able to lend money. Figure 16 shows that interest rates on the Swedish money market are very low, which means it is cheap for the banks to obtain financing. The banks' low funding costs make it possible for them to continue to offer low interest rates when lending to households and companies. Swedish banks do not just obtain short-term funding in kronor on the Swedish money market but also borrow in other currencies such as the US dollar and the euro. Their costs measured in Swedish kronor for obtaining funding in foreign currency can be illustrated by so-called implied SEK interest rates. This form of financing for the banks is also very cheap (see Figure 23).

Figure 23. The repo rate and the banks' most important funding rates

Per cent



Note. Zero coupon rate for covered bonds with 2-year maturities. The implied SEK interest rates are calculated using spot rates and forward exchange rates, as well as 3-month interest rates (EURIBOR and USD LIBOR). The broken line marks the date of the monetary policy meeting in April.

Sources: Bloomberg, Macrobond and the Riksbank.

The banks' more long-term funding largely takes place through the issue of covered bonds. Interest rates on this type of financing remain very low, partly as a result of the Riksbank's asset purchases (see Figure 20 and Figure 23). For example, the yield for a covered bond in Swedish kronor with a maturity of 2 years has been lower than the repo rate since the autumn of 2020.

Smoothly-functioning credit supply to Swedish households and companies

The purpose of many of the measures implemented by the Riksbank shortly after the outbreak of the pandemic last year was to maintain the supply of credit. This has been vital in avoiding an even steeper downturn in economic activity.

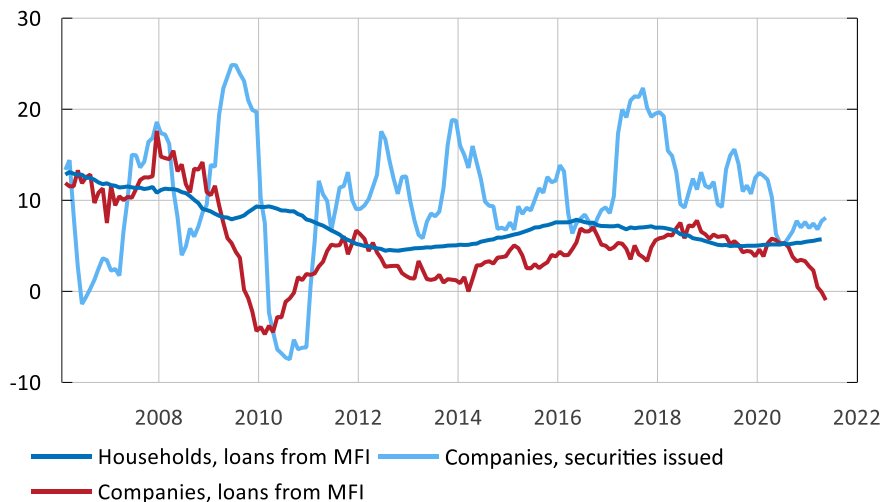
Around 80 per cent of the Swedish households' debt with MFIs (monetary financial institutions) consists of mortgages.¹⁴ Despite the coronavirus crisis, housing prices have risen rapidly and as households largely finance their housing purchases through mortgages, their debts have continued to rise. Annual growth was about 5.9 per cent in May, compared with just over 5 per cent growth at the start of 2020, before the crisis (see Figure 24). Households' unsecured loans have been characterised by a relatively

¹⁴ In May 2021, mortgages accounted for 82 per cent of households' loan stock with monetary financial institutions (MFIs), which include banks, mortgage institutions, finance companies, municipalities and corporate-financed institutions, monetary securities companies and money market funds. From April 2019, data from mortgage institutions and alternative investment funds has been included.

high growth in recent years, but have increased more slowly during the second half of 2020 and beginning of 2021. Unsecured loans, which grew by 5.2 per cent in May, account for a small percentage of households' total debts, but a relatively large share, around 30 per cent, of households' total interest expenditure.¹⁵ In May, the average interest rate on unsecured loans was 6.6 per cent.

Figure 24. Lending growth to households and companies

Annual percentage change



Note. Loans from MFI constitutes approximately two thirds of the total lending to companies while issued securities constitutes approximately a third.

Source: Statistics Sweden.

Swedish companies primarily use bank loans as a source of financing.¹⁶ However, in recent years, many companies, especially the larger ones, have chosen to use market financing to an increasing extent. In recent months, growth in outstanding volumes of securities issued has been relatively constant, while lending growth from MFIs has fallen (see Figure 24). All in all, this means that companies' total borrowing is growing more slowly now than prior to the crisis.

Lower growth in lending from MFIs may be due to companies demanding fewer loans or to credit institutions tightening their lending – or a combination of the two. The main reason for the decline in this case does not appear to be a credit tightening. This assessment is supported by the total volume of outstanding borrowing being around the same as prior to the crisis. On the other hand, borrowing was unusually high in spring 2020, and the current low growth in lending is probably more the result of a

¹⁵ For further details, see *Financial Stability Report 2021:1*, pp. 49-50, Sveriges Riksbank.

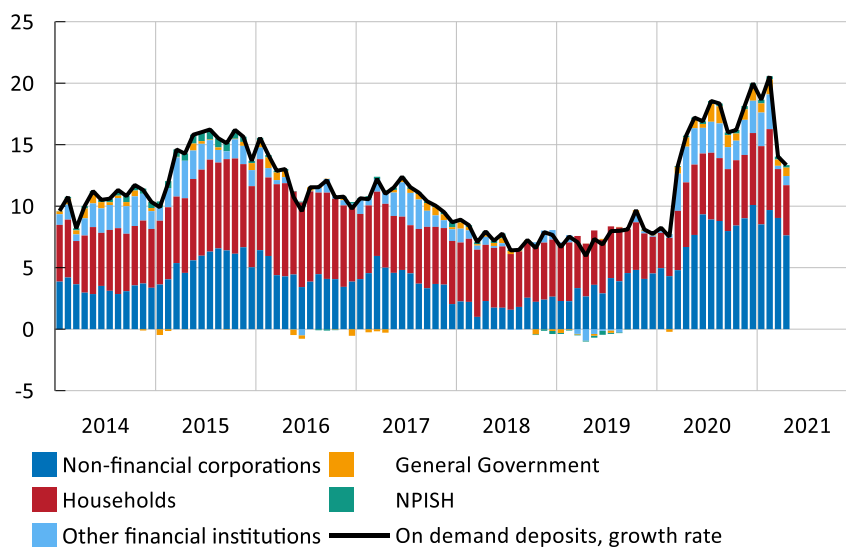
¹⁶ Bank loans comprise around two thirds of the companies' external funding. However, there are differences between different types of company. For example, housing cooperatives are counted as companies and obtain virtually all their funding via bank loans. In the manufacturing sector, however, wholesale funding is more common than bank loans. For further details of companies' funding and how this has developed during spring 2020, see E. Frohm, J. Grip, D. Hansson and S. Wollert, "Two-tier credit developments during the coronavirus pandemic", *Economic Commentaries* No. 6, 2020, Sveriges Riksbank.

high level of borrowing one year ago, rather than borrowing being at an unusually low level now. It is also primarily large, privately-owned companies that have reduced their borrowing in recent months in terms of annual growth rate, which is the same group of companies that increased their lending substantially during the first months of the crisis.¹⁷ The large companies' loans from MFIs are roughly the same size as prior to the crisis. Smaller companies have instead increased their loans in 2021, but account for a much smaller share of total lending than the large companies.

Another indication that companies' needs of external financing may have declined on average is that the banks' deposits from non-financial corporations are growing faster now than prior to the crisis, although the growth rate has declined in recent months (see Figure 25). Companies in some sectors have also utilised temporary support measures to reduce their running costs and/or have scaled their operations down, reducing the funding requirement. It is also conceivable that some companies may have chosen to wait before making investments, due to the uncertainty over economic developments.

Figure 25. Deposits and contributions to on-demand deposits in monetary financial institutions

Annual percentage change and percentage points



Note. Deposits refer here to on-demand deposits that constitute part of the M1 measure of money supply. Households refer to households excluding non-profit institutions serving households (NPISH). Financial companies refer to financial companies excluding MFIs.

Source: Statistics Sweden.

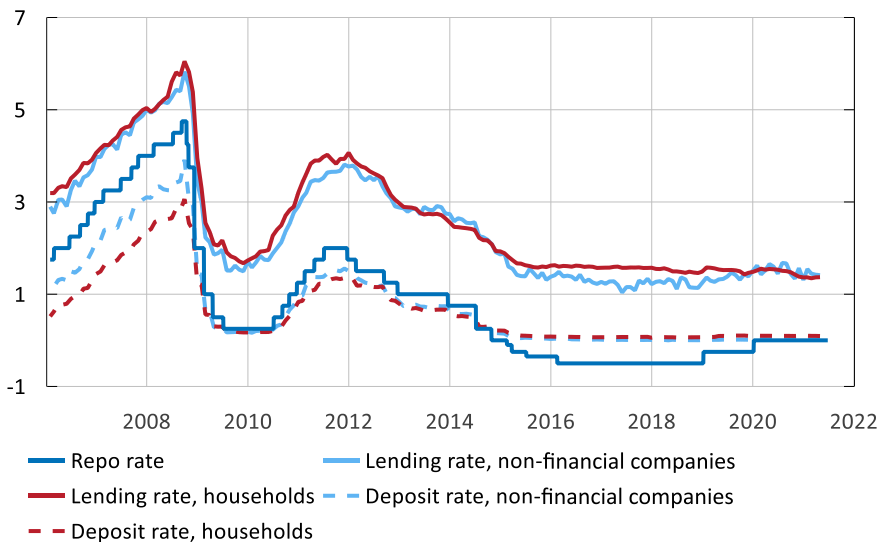
At the same time, lending rates to both households and companies have been largely unchanged over a longer period (see Figure 26). Yields on the certificate and bond markets rose when conditions on these markets deteriorated in spring 2020, but have since fallen (see Figure 20). The fact that banks' interest rates to companies have not

¹⁷ According to KRITA statistics, from a survey carried out by Statistics Sweden on behalf of the Riksbank.

risen provides further support for the assessment that credit institutions have not tightened their lending.

Figure 26. Repo rate and the average deposit and lending rate to households and companies, new and renegotiated loans

Per cent



Note. Monetary financial institutes' average deposit and lending rates are a weighted average of interest rates for all maturities

Sources: Statistics Sweden and the Riksbank.

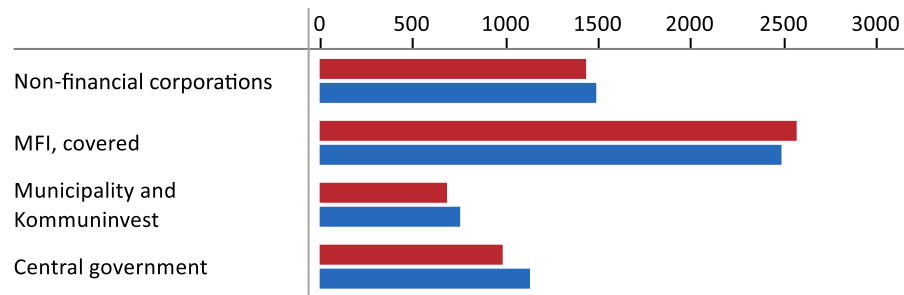
According to National Institute of Economic Research surveys, some sectors, particularly the service industry, still perceive their funding situation to be worse than prior to the pandemic, but the situation has shown a clear improvement since spring 2020. In the manufacturing sector, the financing situation is instead perceived as better than prior to the pandemic. In the Riksbank's Business Survey published in May 2021, large companies, which are the ones that have reduced their borrowing the most in 2021, reported that the financing situation was very good. Moreover, interest rates on loans from MFIs to both small, medium-sized and large companies have declined from the higher levels that prevailed at the beginning of the pandemic, and have remained low in 2021. The Riksbank's overall assessment is thus that there are no clear signs that the banks have tightened their lending, but it is important to monitor carefully how the credit supply to companies develops in the period ahead.

Total issues of securities slowed down over the autumn but have again increased slightly since the start of this year.¹⁸ During the pandemic, households and companies have increased their deposits in the banks, which has led to the banks gradually reducing their borrowing in covered bonds in Swedish krona (see Figure 27).

¹⁸ To a certain extent, this may be due to seasonal variations and variations in the krona exchange rate. For example, the Swedish krona appreciated in the autumn, meaning that securities borrowing in foreign currencies decreased in value.

Figure 27. Securities debt in different sectors in February 2020 and May 2021, respectively

Nominal amounts, SEK billion



Note. The red bar refers to February 2020, the red May 2021. The series for municipal securities debt refers to the borrowing of individual municipalities and the borrowing that occurs via Kommuninvest i Sverige AB. The statistics refer to securities debt in SEK and foreign currency.

Sources: Statistics Sweden and the Riksbank.

3 The recovery will pick up again this year

Economic policy abroad is still very expansionary and both households and companies express optimism in various confidence measurements. The spread of infection has decreased significantly and several countries have started to ease restrictions. GDP abroad is therefore expected to grow rapidly over the quarters to come, as mobility in society increases and consumption and investment pick up. As resource utilisation increases in the world economy, inflationary pressures are also expected to rise going forward. The pace of the economic recovery varies in different parts of the world as the vaccination process has reached different stages and the economic stimulus varies among countries.

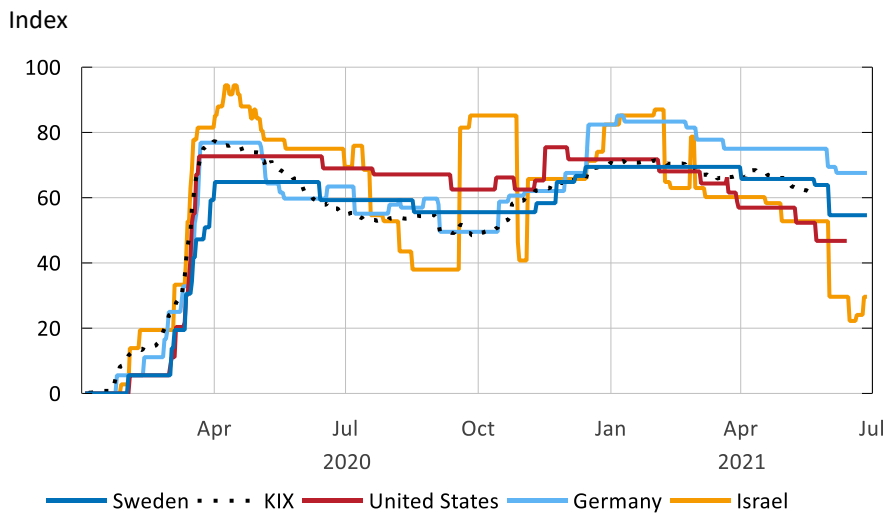
As in other countries, growth is expected to pick up in Sweden in the second half of the year and GDP will grow unusually quickly. This is mostly because vaccinations and the reduced spread of infection will lead to rapid recovery in consumption and production within the hardest-hit sectors. Forward-looking indicators point to the situation in the labour market also improving over the year, although some negative effects of the pandemic are expected to be more long-lasting. During 2021, inflation will be volatile. CPIF inflation reached 2.1 per cent in May and is expected to fall to a low of just over 1 per cent in July this year. From 2022, inflation is expected to rise gradually as demand strengthens and wages increase at a faster pace. Towards the end of the forecast period, inflation is estimated to be more persistently close to the target of 2 per cent.

3.1 More rapid growth in world economy when restrictions are eased

The spread of infection was still high at the beginning of the year and reached its peak in March or April in many countries. As infections have fallen since then, restrictions have also started to be lifted (see Figure 28). The rising percentage of people vaccinated means that the spread of infection is expected to continue to decline and restrictions to continue to be eased. However, the vaccination process is moving at different speeds in different countries; the percentage of the population that has received at least one dose is much higher in Canada, Israel, the United Kingdom and the United States than in Sweden and the euro area. The percentage is on the whole higher in advanced economies than in emerging and developing economies (see Figure 29). Particularly in South American countries such as Argentina, Chile and Brazil, but also in certain parts of Asia and Africa, infections are currently spreading rapidly

and some of these countries have limited vaccine supply. The economic recovery is also going faster in developed countries, as they have generally conducted more expansive fiscal policies and also have larger automatic stabilisers (see Figure 30). But there are also differences among these countries; the recovery is, for instance, expected to be faster in the United States than in the euro area.

Figure 28. Degree of government restrictions to reduce the spread of infection

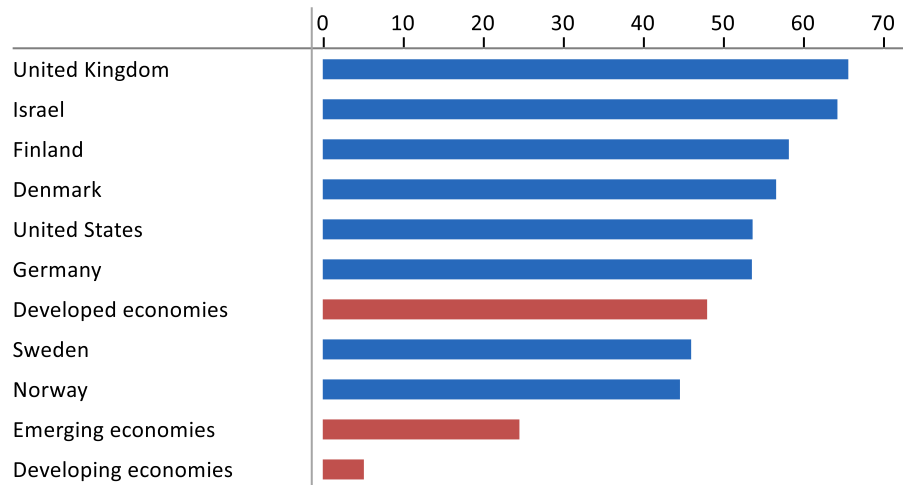


Note. The index measures the extent of measures to combat the spread of COVID-19. The index consists of nine components that describe different types of restrictions, such as closing of schools and travel bans. Each component usually has a three-point scale corresponding to “no measures”, “some kind of instruction” and “a ban”. The index corresponds to the average of all components. KIX refers to an aggregate of 32 countries that are important for Sweden’s international trade.

Sources: Oxford COVID-19 Government Response Tracker (OxCGRT) and the Riksbank.

Figure 29. Share of population that has received at least one dose of COVID-19 vaccine

Percentage of total population

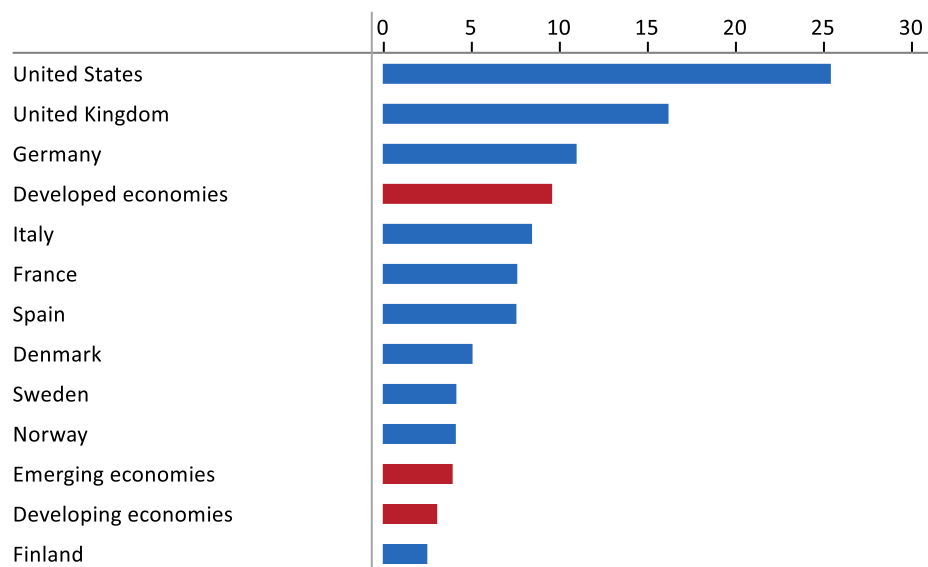


Note. Refers to share of the total population, all ages, that have received at least one dose of the vaccine as of 28 June 2021. Red bars refer to unweighted averages for developed, emerging and developing economies. Latest observation may vary.

Source: Our World in Data.

Figure 30. Fiscal policy stimulation with direct budget impact 2020–2021

Per cent of GDP in 2020



Note. Red bars refer to unweighted averages for developed, emerging and developing economies. Fiscal policy stimulation in the figure covers measures taken to counteract the negative effects of COVID-19 and does not include automatic stabilisers.

Source: IMF Fiscal Monitor April 2021.

Economic developments in 2021 will depend to a large degree on how the spread of infection develops, not least in the light of the new virus variants, and the extent to

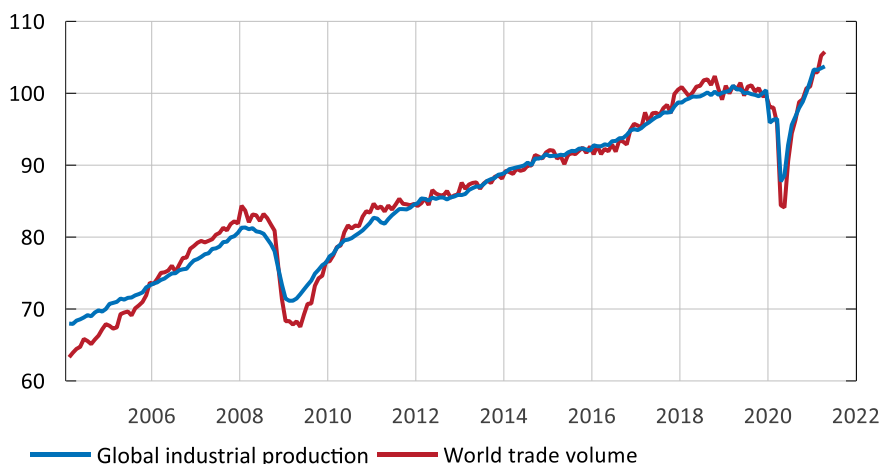
which governments gradually ease restrictions. How quickly the vaccination process progresses in different parts of the world will therefore be very important. For example, households and companies are more optimistic in countries where many have already been vaccinated. The Riksbank’s forecast assumes that the greater part of the adult population of Sweden and its most important trading partners will have been vaccinated towards the end of the summer. Although a certain level of restrictions will probably remain for a long time to come, it is assumed that the restrictions will be eased to a greater extent during the second half of the year. Mobility in society may then continue to increase gradually, which will support the recovery in the consumption of both goods and services.

Continued strong industrial production and global trade

Global industrial production has recovered quickly and is now higher than before the outbreak of the pandemic. At the same time, some service industries are still burdened by restrictions even though there are signs that demand may rise rapidly in the period ahead. For industry, however, difficulties in obtaining certain input goods may cause problems for the economic recovery. Due to the increased sales of, for example, home electronics, the demand for semiconductors has risen. This is a key component of virtually all electronic equipment and the increased demand has led to delivery problems in, for example, the motor industry. At the same time, high demand for freight services has entailed higher costs. Global trade in goods has continued to recover after the sharp downturn last spring and the level is now higher than before the pandemic began (see Figure 31). Global trade in goods increased by just under 4 per cent in the first quarter this year compared to the quarter before, driven in particular by emerging economies, not least China.

Figure 31. World trade volume and global industrial production

Index, 2019 Q4 = 100



Note. World trade refers to trade in goods.

Source: CPB Netherlands Bureau for Economic Policy Analysis.

The world market price of crude oil, which fell heavily last spring, has gradually risen. Over the past month, the price of Brent crude has been around USD 70 per barrel,

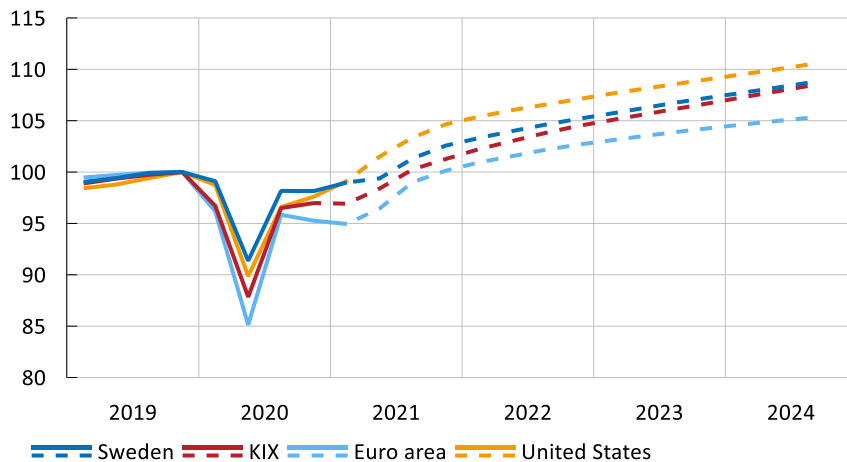
which is in line with the price level just before the crisis. At the end of May, the oil price fell as a result of progress in discussions on the nuclear arms agreement between Iran and the United States, which would allow Iran to resume its oil exports. The price has recovered after the fall in light of the strong demand and remaining issues in the negotiations between Iran and the United States. Forward prices for oil indicate that the oil price is expected to remain between 60 and 70 dollars a barrel in the next few years. The price of other commodities, such as industrial metals and food, has also risen sharply since last spring, and is now at a higher level than prior to the pandemic (see the article “How are higher commodity prices and freight costs affecting inflation in Sweden?”).

Due to the high spread of infection together with strict restrictions at the beginning of the year, aggregate GDP decreased somewhat in the first quarter in countries that are important for Sweden’s international trade (KIX). Once more people are vaccinated and restrictions have started to be eased, GDP is expected to rise again during the second quarter and then increase rapidly during the rest of the year. Overall, KIX-weighted GDP is expected to grow by approximately 5 per cent this year and just over 4 per cent next year, followed by a growth of just over 2 per cent in 2023 (see Figure 32).

Inflation is still low in the euro area while it has risen significantly in the United States. However, the upturn in the United States is largely deemed temporary. With rapid GDP growth, resource utilisation will rise, which is expected to contribute to gradually increasing underlying inflationary pressures. Inflation abroad will be just over 2 per cent this year and just under 2 per cent in 2022 and 2023. The fact that inflation will be higher this year is largely due to factors that are deemed temporary, where rising energy prices provide the largest contribution. Economic policy is expected to remain expansionary. Central bank policy rates are expected to be low for most of the forecast period. Central bank asset holdings are expected to remain extensive. Fiscal policy is also expected to be expansionary, at least until the end of 2021.

Figure 32. GDP in Sweden and abroad

Index, 2019 Q4 = 100, seasonally adjusted data



Note. KIX is an aggregate of the countries that are important to Sweden's international trade. Solid line refers to outcome, broken line represents the Riksbank's forecast.

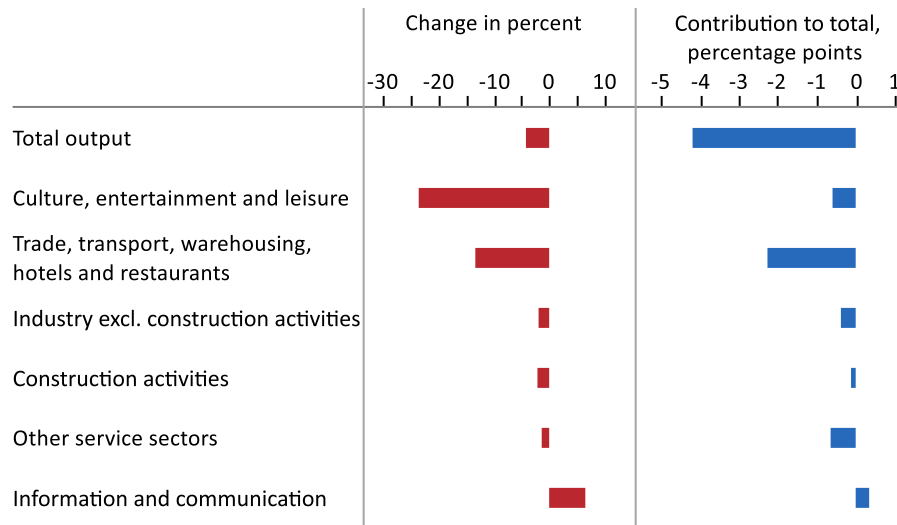
Sources: Eurostat, national sources, Statistics Sweden, U.S. Bureau of Economic Analysis and the Riksbank.

Eased restrictions lifting the economy in the euro area

GDP in the euro area fell by 0.3 per cent during the first quarter, compared with the fourth quarter. Restrictions are now starting to be eased in several euro countries but from different initial positions, both among countries and among sectors. Industry and the construction sector have more or less recovered the decline in production that has occurred during the pandemic. The total production of services, including the public sector, is around 4 per cent lower than its pre-pandemic level, but there are major differences between different service industries. Production, within the aggregate “trade, transport, warehousing, hotels and restaurants” was around 13 per cent lower than during the fourth quarter of 2019. For “culture, entertainment and leisure”, production was around 23 per cent lower. At the same time, other service industries have benefited from the increased digital activity, for example the information and communication sector, where production has instead risen and is now 6 per cent higher than before the pandemic. The hardest-hit sectors constitute a relatively small share of the economy and, in the first quarter, total production was just over 4 per cent lower than before the pandemic (see Figure 33).

Figure 33. Added value in different sectors in the euro area

Change between 2019 Q4 and 2021 Q1



Note. Agriculture is not included in the figure. The top blue bar shows the change in total production, as does the top red bar. Other blue bars shows the contributions to the total change.

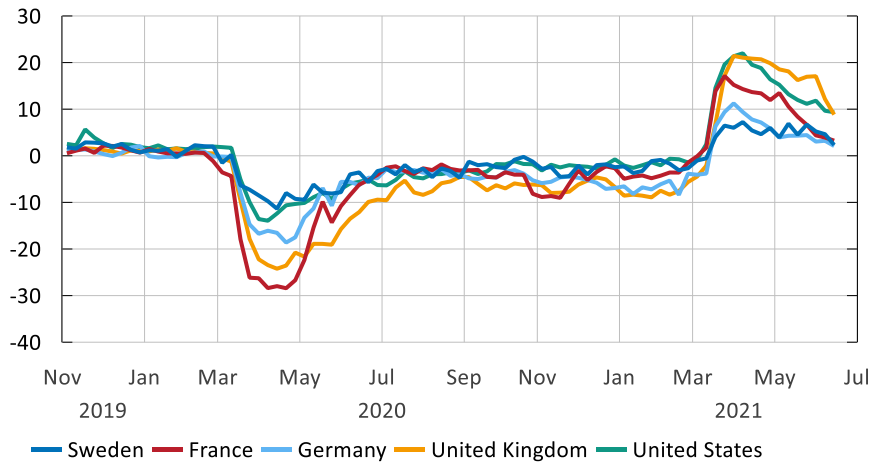
Source: Eurostat.

Data for production of goods and services during the second quarter is still scant. Industrial production increased in April. The increase was led by the production of consumption goods. For contact-intensive service industries, there are scattered signs of an increase but at a significantly lower level than before the pandemic. For example, the number of flight bookings according to sector analysts is expected to increase sharply over the next few months, but to a level that is deemed to be much lower than in the corresponding months in 2019.¹⁹ High-frequency indicators that provide a broad picture of activity in the economy have risen significantly in April and May (see Figure 34). The confidence of both households and companies has strengthened. Confidence among companies has risen to levels that indicate favourable growth in the service industries. Company investment plans and the strong growth in the manufacturing industry indicate significantly increased investment this year (see Figure 35).

Demand for bank loans increased in the first quarter. High capacity utilisation in industry in combination with low investment levels, favourable financial conditions and, to a certain extent, the investment plans in the EU fiscal policy programme Next Generation EU (NGEU) suggest high investment growth going forward. Higher consumer confidence makes it likely that service consumption will grow strongly when restrictions are eased.

¹⁹ See Airport Demand Analyzer, Air-line Route Analysis, OAG.

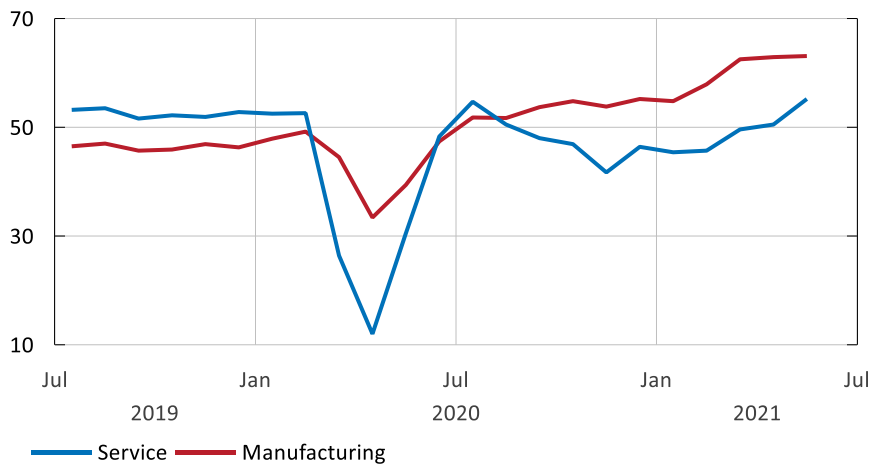
Figure 34. High-frequency indicators for GDP growth for Sweden and abroad
Annual percentage change, weekly data



Note. The figure shows the OECD's weekly real-time indicators for economic activity. They indicate the growth rate in GDP compared with one year earlier. The OECD applies a machine learning model on a panel with Google Trends-data for 46 countries and compiles information on search behaviour related to consumption, labour markets, housing, trade, industrial activity and economic uncertainty.

Source: OECD.

Figure 35. Euro area purchasing managers' index
Index



Note. The Purchasing Managers' Index for the euro area was published on 23/06/2021.

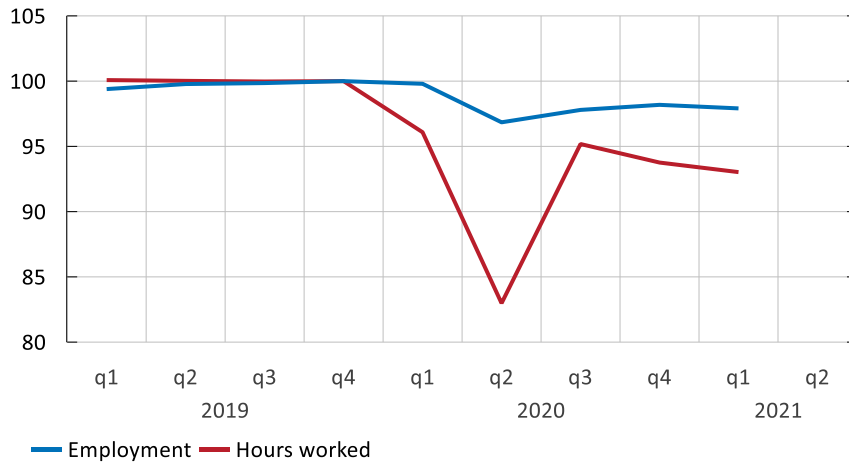
Source: IHS Markit.

With eased restrictions and increased activity in the society, labour demand will also rise in the euro countries. When the conditions in the labour market improve, crisis measures in the labour market, such as short-time working schemes, will be gradually phased out. The measures taken on the labour market have meant that the decline in

employment has been small in relation to the fall in production. But the working hours of those still in employment have decreased significantly and the number of hours worked is on a low level (see Figure 36). Some of the recovery in the labour market is therefore expected to be made up of more hours worked rather than increased employment for some time to come. At the same time, the labour force is expected to grow as some of those who left the labour force during the crisis are now starting to look for work again. Unemployment will therefore rise in the coming quarters (see Figure 37). The reason why unemployment is higher in Sweden than in the euro area is that labour force participation is also higher in Sweden (See Figure 38). Labour force participation did not fall as much in Sweden and has recovered since the start of the crisis.

Figure 36. Employment and hours worked in the euro area

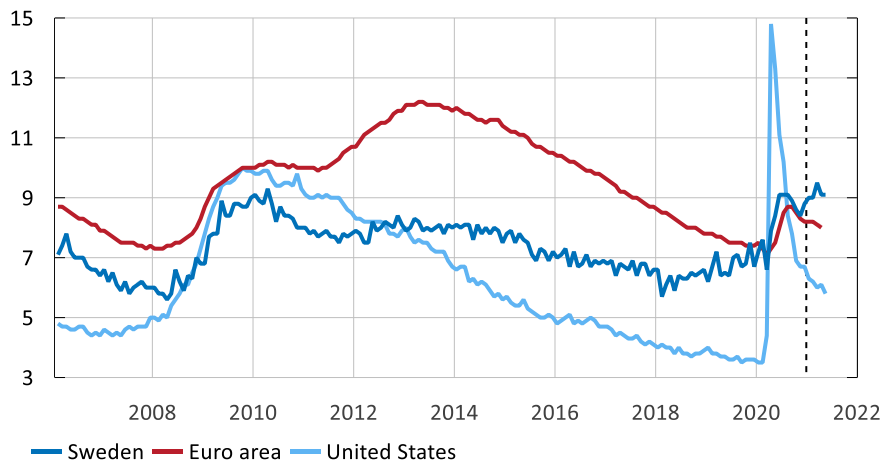
Index, 2019 Q4 = 100, seasonally adjusted data



Source: Eurostat.

Figure 37. Unemployment in Sweden, the euro area and the United States

Percentage of the labour force, seasonally adjusted data



Note. Refers to 15–74 years old in the euro area and Sweden and 16 years and older in the United States. The vertical line marks the date for the overhaul of the LFS (the labour force survey) in Europe.

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

Economic policy is expected to remain expansionary, which will stimulate consumption and investment. EU Member States have now submitted applications for subsidies and in some cases loans from NGEU. Although this is expected to benefit investment, most of the money is expected to be injected into projects that were already planned beforehand and where NGEU, for example, is replacing other EU funding. The fact that NGEU covers the whole of the EU and not just the euro area and that some of the measures stretch beyond the Riksbank’s forecast horizon also needs to be taken into account. The effects on GDP growth from NGEU will therefore be relatively minor and mostly concentrated to countries in southern Europe, which would otherwise have been forced to conduct a tighter fiscal policy. Overall, growth in the euro area is expected to be just under 5 per cent this year and then slow to just over 4 per cent next year and just under 2 per cent in 2023. There are expected to be significant differences in the level of growth in countries in the euro area. The pandemic primarily impacted countries with large tourist sectors, while countries with larger manufacturing sectors generally coped better. The countries that were impacted the hardest are expected to grow more quickly than average over the next few years.

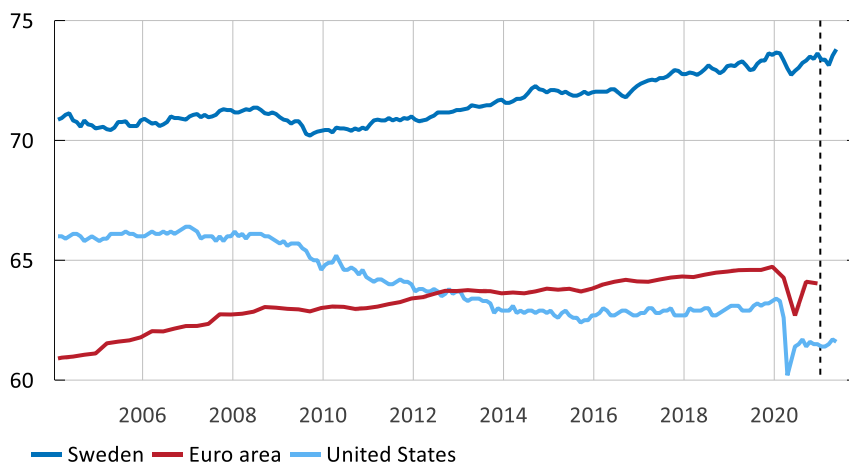
HICP inflation in the euro area rose to 2.0 per cent in May. Underlying HICP inflation – adjusted for energy, food, alcohol and tobacco – increased to 1.0 per cent. Much of the increase in inflation over recent months can be attributed to temporary factors such as rising energy prices and VAT changes in Germany. This year, HICP inflation is expected to be just under 2 per cent. When rising energy prices and other temporary effects fade, the annual change in HICP will fall-back to 1.4 per cent next year. The rising activity level in the economy with increased resource utilisation is contributing to inflation being expected to rise to 1.6 per cent at the end of the forecast period, i.e. the third quarter of 2024.

Fiscal policy giving a boost to US growth

The expansionary monetary and fiscal policy have helped the US economy remain relatively resilient to the consequences of the high rate of infection at the beginning of the year. GDP rose by 1.6 per cent in the first quarter, mostly driven by household consumption supported by the direct cheque payments sent out by the state to households at the turn of the year and in March respectively. The retail trade and industrial production have recovered well since the fall in April last year. Retail trade sales in particular have been strong and are now at significantly higher levels than prior to the pandemic. Confidence among households has also risen to its pre-crisis level, probably as a result of progress in the vaccination process and other measures to reopen the economy. In the corporate sector, confidence is strong both in the manufacturing industry and the service industries.

The situation in the US labour market has improved substantially since spring 2020, when unemployment increased heavily to a peak of almost 15 per cent. In May, unemployment stood at 5.8 per cent, which is still higher than before the pandemic. Some of the downturn in unemployment is due to many people leaving the workforce in the crisis. The low labour force participation rate is due to people having been at home with their children to a greater extent due to school closures, to disability pensions and to fear of the virus, to give a few examples (see Figure 38). The number of persons employed has increased from 133 million last April to almost 152 million this May, but is still on significantly lower levels than prior to the crisis. The number of persons employed is expected to increase in the period ahead, but development over the next few quarters may be dampened by difficulties in matching job seekers with vacancies.

Figure 38. Labour force participation in Sweden, the euro area and the United States
Percentage of population, seasonally adjusted data



Note. For the euro area, linear interpolated quarterly data is shown, for the United States, monthly data is shown and, for Sweden, a 3-month moving average is shown. Refers to 15–74 years old in the euro area and Sweden and 16 years and older in the United States. Labour force for the euro area has been seasonally adjusted by the Riksbank. The vertical line marks the date for the overhaul of the LFS (the labour force survey) in Europe.

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

The Riksbank expects economic activity in the service sector, above all, to gear up in the months ahead. When the recovery is on firmer ground, the situation on the labour market will also gradually improve. The latest fiscal policy stimulation package, the American Rescue Plan, which was approved by Congress at the start of March, will contribute to significantly increasing growth, particularly during the second half of the year. The stimulation package will also have positive growth effects in 2022 and 2023. Households, companies and local authorities will probably not use all of the amount paid out in 2021 but, instead, will use part of the money to repay loans or to save to even out consumption over time. The high growth during in particular the second and third quarters of this year mean that resource utilisation is assessed to be roughly normal during the autumn. All in all, growth in the United States is assessed to be 6.8 per cent this year and then to slow down to 4 per cent in 2022 and 2 per cent in 2023.

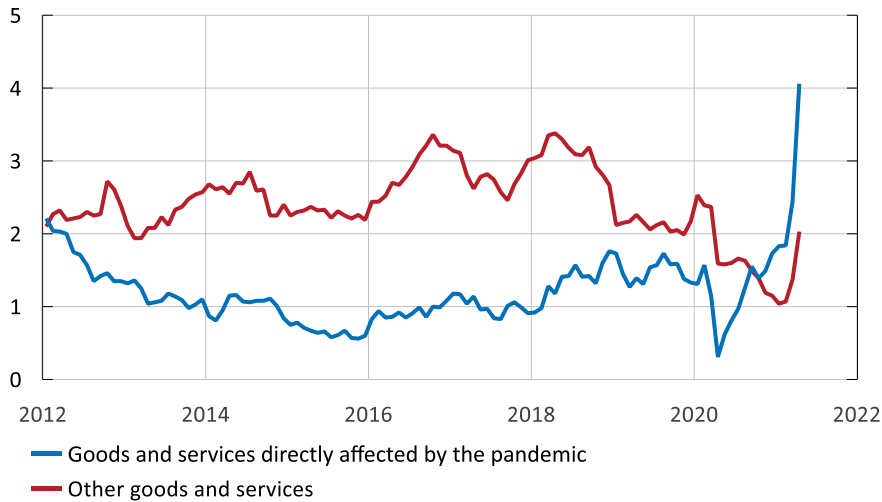
In addition to the American Rescue Plan, two more fiscal policy packages have been announced. The American Jobs Plan is intended to mainly contain investments in infrastructure and to be largely financed by increases in company taxes. The American Families Plan is intended to contain measures of a distribution of income nature, and is financed partly by tax increases aimed at high-income earners. The package has the potential to be far-reaching, but is expected to be divided over a period of up to around ten years. The negotiations between the Democrats and Republicans are expected to continue at least until the early autumn, and the final design and size of the two packages is still very uncertain. The Riksbank is therefore awaiting more clear signals regarding the final design before an assessment of how the packages might affect growth is included in the forecast.

US CPI inflation has increased significantly over the past two months. It rose from 2.6 per cent in March to 4.2 per cent in April and then to 5 per cent in May. This is the highest inflation rate since August 2008. Underlying inflation, measured as the CPI excluding energy and foods, rose from 1.6 per cent in March to 3.0 per cent in April and 3.8 per cent in May, which is the highest level since June 1992. Over the same period, inflation, measured in terms of the PCE, rose to 3.6 per cent in April and to 3.9 per cent in May. Underlying inflation, measured as the PCE excluding energy and food, rose to 3.1 per cent in April and to 3.4 per cent in May.

The measure of inflation compares prices now with prices one year ago. The large price increases during the spring shall therefore be regarded in the light of many prices having fallen to low levels at the start of the pandemic. As the economy has opened up again, demand has begun to normalise with regard to many of the services that could not be consumed during the pandemic. The rising inflation on services has been primarily driven by very large price increases for hotel stays and air travel, that is, services that have been substantially affected by the pandemic (see Figure 39). Inflation measured as a trimmed average, where the largest and smallest price increases are excluded, amounted to 2.6 per cent in May.

Figure 39. Prices of goods and services that have been directly affected by the pandemic and prices of other goods and services in the United States

Annual percentage change



Note. The data for these series is comprised of sub-groups in the underlying measure PCE (personal consumption expenditure), divided into components affected substantially and those affected only slightly by the pandemic. Pandemic-sensitive components are those whose prices or quantities have changed significantly at the start of the pandemic, between February and April 2020, which comprises around 2/3 of the weight in the PCE.

Source: Federal Reserve Bank of San Francisco.

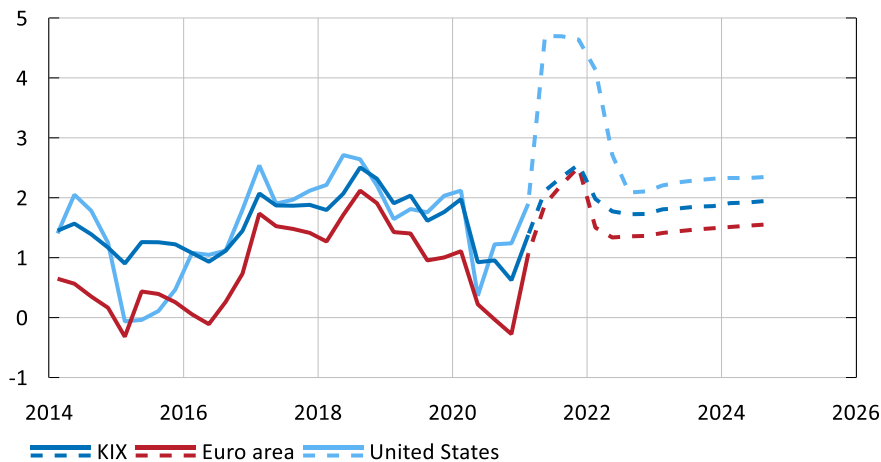
Strong price increases on used cars have contributed to higher goods inflation. The demand for second hand cars has increased in connection with disruptions to the production of new cars, which is linked to the problems with obtaining semiconductors that are a component in vehicle manufacture. An increased demand from car hire firms, which reduced their car fleets at the start of the pandemic, but now need to increase them again, and thus buy cars on the second hand market, also contributes to the higher prices for used cars.

The Riksbank's forecast assumes that CPI inflation will be high this year, as the reopening of the economy will continue to put upward pressure on the prices of certain categories of goods and services for some months to come. After that, price pressures are expected to gradually decline. Price pressures are also dampened by bottlenecks in the production chain disappearing as production begins to catch up with demand, probably towards the end of 2021 and the beginning of 2022. However, even if the price increases in recent months are assessed to be compatible with transitory inflationary pressures, there has been some increase in costs such as rents and housing. In addition, there has also been a general increase in goods other than used cars. The more underlying inflationary pressures have thus also risen somewhat and are expected to take over as the primary driving force behind inflation further ahead.

All in all, the Riksbank assesses that inflation in the United States will be 4 per cent this year, and then fall back to just over 2 per cent at the end of the forecast period (see Figure 40).

Figure 40. Consumer prices in various countries and regions

Annual percentage change



Note. KIX is an aggregate of the countries that are important to Sweden's international trade. Solid line represents outcome, broken line represents the Riksbank's forecast.

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

Uneven recovery in emerging economies

The spread of infection in Latin America is currently very high, particularly in countries such as Argentina, Brazil, Chile and Colombia. This is expected to imply that a clear economic recovery in this region will be delayed. The strong global demand for goods is continuing to support the recovery in China and export-dependent economies in Asia. However, some emerging markets in the region, such as Thailand, Vietnam and Malaysia, have a rapid spread of infection at present and limited supplies of vaccines, which will delay their recovery.

The Chinese economy has recovered rapidly and is back at pre-pandemic levels. GDP growth rose in the first quarter of this year, but the recovery in consumption slowed down as a result of tighter restrictions. However, consumption is expected to pick up again during the second quarter, as the spread of infection has fallen back and the restrictions are eased. Consumer confidence is back at high levels and the saving ratio is expected to return to more normal levels during the year, which will contribute to higher consumption growth. At the same time, tighter fiscal policy will slow down investment growth, which has been the driving force behind the recovery in the Chinese economy. The Riksbank assesses that GDP growth this year will be around 8.5 per cent. The annual growth in GDP is expected to be just under 6 per cent in 2022–2023, which is in line with the growth target that was reintroduced at the National People's Congress in March.

3.2 Restrictions are being eased and the Swedish economy is picking up speed

Strong growth in the Swedish economy as restrictions are eased

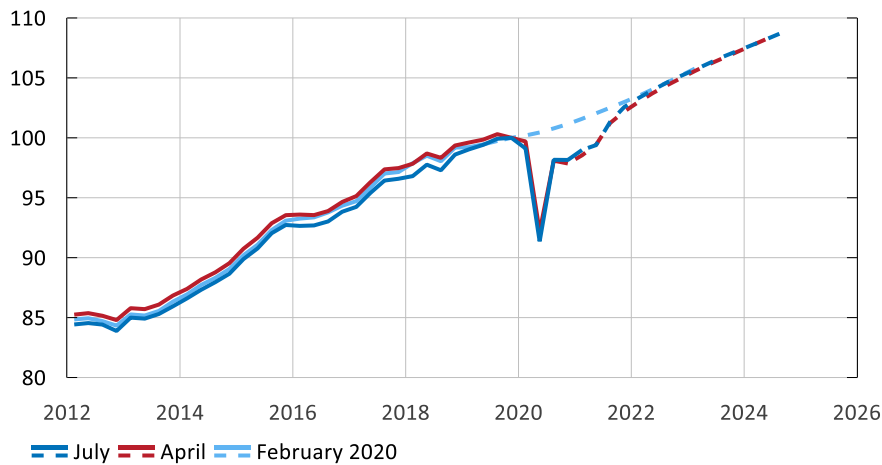
After remaining unchanged in the last quarter of 2020, GDP picked up again and rose by 0.8 per cent in the first quarter, seasonally adjusted and compared with the previous quarter. However, the Swedish economy is still being held back as the pandemic is restricting household consumption. Both people's own fear of being infected and the restrictions declared are directly impacting the consumption of services in which people come into close contact. However, as vaccination cover rises and the spread of infection falls, this consumption is expected to rise rapidly.

As more people get vaccinated and the weather gets warmer, the spread of infection and consequent pressure on the health service has fallen rapidly. The Government plans to open up society gradually by easing restrictions in Sweden in five steps. The first step was taken at the start of June and the second step is planned for the start of July. Most restrictions are expected to be gone in the autumn, although some general recommendations regarding, for instance, working from home, will probably remain for a longer period of time.

When the pandemic is no longer limiting economic activity, growth is expected to increase rapidly. The Economic Tendency Indicator rose in May and June to its highest-ever levels and both households and companies are more optimistic than usual about developments going forward. The Swedish economy has been growing unexpectedly rapidly this year and, by as soon as the third quarter, GDP is projected to be back on the same level as before the outbreak of the pandemic (see Figure 41). GDP is also expected to be close to the GDP level forecast prior to the pandemic at the end of this year.

Figure 41. GDP in Sweden

Index, 2019 Q4 = 100, seasonally adjusted data



Note. Solid line represents outcome, broken line represents the Riksbank's forecast.

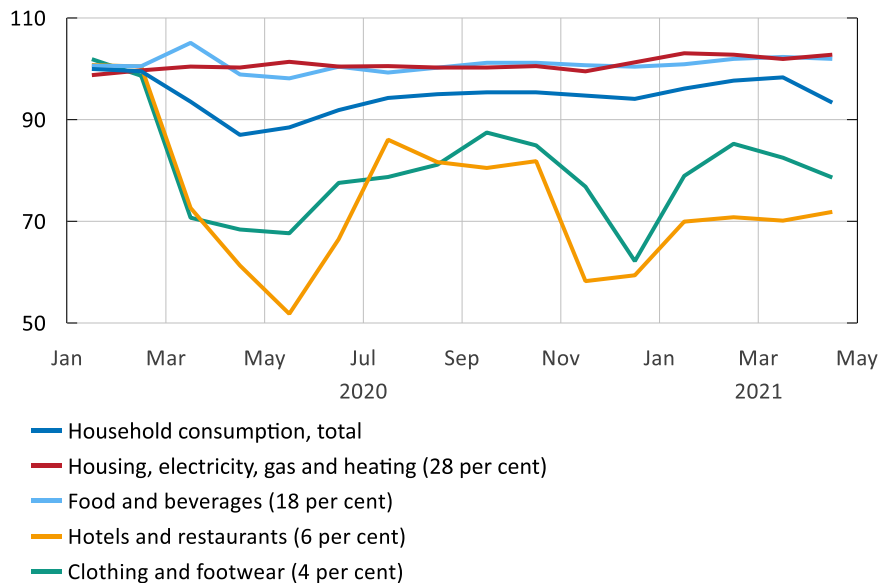
Sources: Statistics Sweden and the Riksbank.

Recovery in consumption

Consumption of goods and services that have been particularly affected by the pandemic remains subdued. In total, however, consumption has recovered a large part of the downturn in spring 2020. According to Statistics Sweden's monthly consumption indicator, consumption was almost 4 per cent lower than prior to the pandemic during the first four months of the year, which can be compared with April 2020, when the level was around 13 per cent lower. However, according to the same statistics, consumption of restaurant and hotel services and clothing and shoes was much lower than prior to the pandemic (see Figure 42). Household consumption abroad was, according to the National Accounts, around 45 per cent lower in the first quarter of 2021 compared with the same period in 2019.²⁰ The weak outcome is confirmed by statistics on card transactions from Swedbank, which show that turnover for travel agencies and taxis in May was just over 80 per cent lower than in the corresponding period in 2019.

²⁰ In the first quarter of 2020 it was around 12 per cent lower than in the first quarter of 2019.

Figure 42. Total household consumption and some selected subgroups
Index, 2019 Q4 = 100, seasonally adjusted data



Note. Percentages in brackets refer to the sub-groups' share of total household consumption expenditure (excluding foreign items) on average during 2020.

Source: Statistics Sweden.

However, other parts of household consumption are increasing rapidly. For example, according to the Retail Index, e-commerce grew by around 20 per cent in April last year and in May this year it was a good 40 per cent higher than before the pandemic. Consumption of leisure articles, construction materials, home electronics, furniture and interior décor has also increased at a good pace.

All in all, household consumption patterns indicate that it is primarily the continued spread of infection and restrictions that are dampening consumption. As households have acquired large savings, and also seen their assets, in the form of housing and equity, increase in value during the pandemic, one can expect a clear upturn in consumption when the spread of infection declines and the degree of vaccination increases. This will benefit demand in the hardest hit sectors in particular. During the second half of this year, households' consumption pattern is thus expected to gradually normalise.

Swedish exports growing rapidly

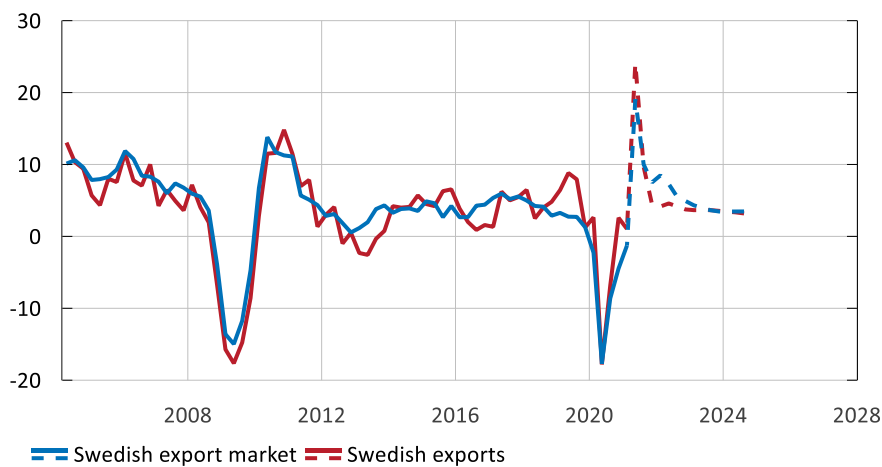
Exports have shown strong development in recent quarters, and indicators such as companies' export order intakes imply continuing high demand for Swedish exports. At the same time, there is a shortage of certain electronic components, primarily semiconductors, which has caused production stoppages in, for instance, the motor vehicle industry. Despite the high demand, exports may thus slow down somewhat.

Swedish exports are not expected to rise quite as quickly as international demand next year (see Figure 43). The countries that were hit hardest during the pandemic are

expected to grow the fastest going forward. This applies, for instance, to countries in southern Europe, where tourism and service industries comprise a large share of the economy. However, Swedish exports are not primarily to these countries. Among some of Sweden's most important trading partners, such as Germany and the Nordic countries, the manufacturing sector carries greater weight and the GDP fall in 2020 was not as far as for countries in southern Europe. The recovery has also come further there. But although Swedish exports are growing slightly more slowly than international demand, they will nevertheless increase rapidly going forward, and around 2023 exports will grow in line with international demand.

Figure 43. Exports and the Swedish export market

Annual percentage change, seasonally adjusted data



Note. The Swedish export market measures import demand in the countries to which Sweden exports. This is calculated by aggregating imports in the countries included in KIX and covers around 85 per cent of the total Swedish export market. Solid line represents outcome, broken line represents the Riksbank's forecast.

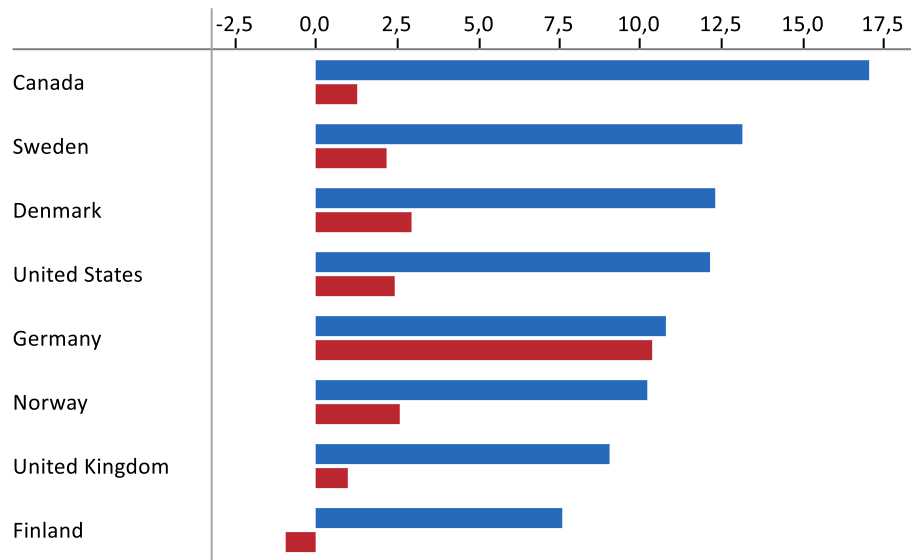
Sources: Statistics Sweden and the Riksbank.

Housing prices are rising rapidly

Housing prices have increased rapidly during the pandemic, both in Sweden and abroad (see Figure 44). In May, Swedish prices were on average 18 per cent higher than one year ago, and the price upturn has been particularly large for single-family dwellings (see Figure 45).

Figure 44. Housing prices in Sweden and other countries at the start of 2021 (blue columns) and during 2019 (red columns)

Annual percentage change



Note. The red columns show the annual average for 2019. The blue columns show the average rate of increase during the first quarter of 2021.

Sources: National sources and Valueguard.

Figure 45. House prices according to HOX, Sweden

Annual percentage change



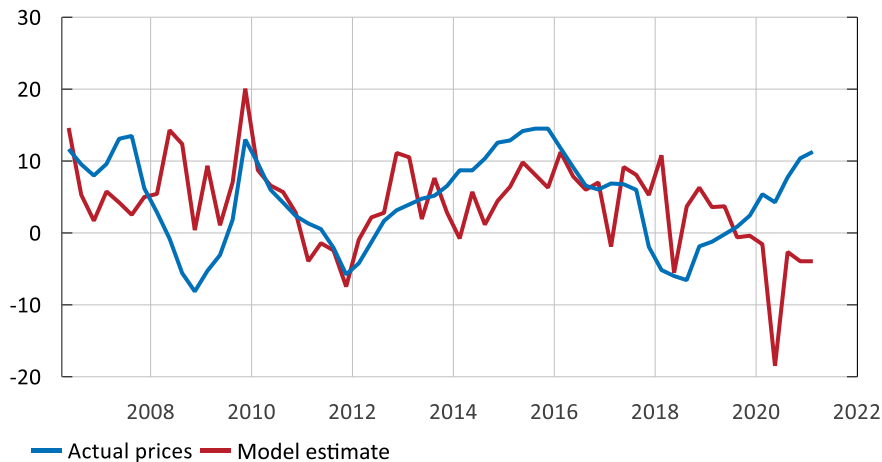
Source: Valueguard.

Prices have risen despite household incomes being subdued and mortgage rates remaining largely unchanged. A statistical analysis shows that housing prices during the pandemic have been unusually high in relation to mortgage rates and disposable household income (see Figure 46). Incomes and interest rates, which normally tend to

affect prices, are therefore not considered to be the main driving forces behind the upturn in housing prices in recent years.

Figure 46. Actual and estimated real housing prices

Annual percentage change



Note. In the model, housing prices are explained by household disposable income and a 3-month mortgage rate after tax and property tax. All variables are expressed in inflation-adjusted terms. The model is a modified version of the one used by C-A Claussen (2013), "Are Swedish houses overpriced?", *International Journal of Housing Markets and Analysis*, v. 6(2), pp.180–196.

Sources: Statistics Sweden, Valueguard and the Riksbank.

Instead, the most important explanations appear to be connected with the unusual economic effects of the pandemic.²¹ The fact that more people are working from home has increased demand for larger homes. It has also been possible for households to spend more on their homes when they have not been able to travel or, for instance, visit restaurants. Unemployment has not risen so much among those with permanent employment during this economic downturn, in relation to historical patterns. Instead, it is primarily people with fixed-term contracts that have become unemployed, people who had a weak position on the housing market prior to the pandemic and had difficulties obtaining a mortgage.

The high housing prices have also caused debts to increase at a faster pace over the past year. The slow development in incomes last year meant that the share of debts in disposable incomes, what is known as the debt-to-income ratio, rose to almost 200 per cent at the end of the year. In the coming years too, debts are expected to increase more rapidly than incomes and the debt-to-income ratio to rise further. The Riksbank assesses that the rate of increase in housing prices will slow down over the course of the year, when working from home declines and households' consumption of services rises again.

²¹ See also the article "Rapidly rising housing prices despite the coronavirus crisis" in *Monetary Policy Report*, April 2021, Sveriges Riksbank.

Recovery in the economy causes investment to increase

Both housing investment and business sector investment excluding housing have stood up well to the downturn in economic activity. One important reason for this is that it has been easy and cheap for companies to borrow money. Another could be that there are major investment decisions that are not so sensitive to economic activity, but which are linked to the long-term structural transformation to a more green industry. A third possibility is that most companies assessed that the crisis was temporary and that production would recover relatively rapidly. Willingness to invest in housing has been maintained by the high housing prices.

Optimism among companies has risen rapidly in recent months, according to various surveys. Confidence in the future is visible not least in the Riksbank's Business Survey in May, where companies state that they have gone back to their investment plans after the pause last year.²² Also contributing to the positive development is the high demand for housing and rising housing prices. This is expected to lead to further investment in new housing in the coming years. The number of housing starts has risen steadily since the middle of 2019, and in recent quarters the focus has been on multi-family dwellings. Thus, a lot of new housing will be built in the coming years.

The recovery in the economy will continue at a rapid pace during the remainder of the year. When the positive economic development begins to feel more secure and capacity utilisation rises, investment is expected to increase, and during the third quarter they should be back at the pre-pandemic levels.

Fiscal policy continuing to support the economy

During 2020, the Government implemented measures that are said to have cost the state SEK 170 billion to counteract the pandemic and alleviate its financial effects. The measures targeted companies, private individuals, municipalities and regions, and are assessed to have alleviated the financial consequences of the pandemic. Several of the support measures introduced last year have been extended during 2021. While the crisis measures have primarily been aimed at restricting the spread of infection and the consequences of low economic activity, the reforms in the Budget Bill for 2021 are to a greater extent aimed at stimulating demand in the economy, for instance through tax reductions and increased support to municipalities and regions. The cost of the measures is assessed to be around SEK 190 billion this year. Although the measures are substantial as a percentage of GDP, they are not exceptional compared with those in other countries. The measures Sweden has implemented are of roughly the same magnitude as those in Finland and Norway, but less than those in, for example, Germany, the United Kingdom and the United States.²³

²² See *the Riksbank's Business Survey* "Demand is not the problem – the troubles are on the supply side", May 2021, Sveriges Riksbank.

²³ It is difficult to compare the magnitude of fiscal policy between countries, because of institutional factors. In some countries, for instance, active decisions are required to pay support to the unemployed, while these payments increase 'automatically' in Sweden, for instance, as more people become unemployed. See also the article "Expansionary fiscal policies abroad are contributing to the recovery" in this report.

Last year the pandemic led to a deficit in public finances corresponding to 3 per cent of GDP. Despite considerable efforts this year, the deficit is expected to fall to 2 per cent of GDP, as a result of stronger economic development. In the coming years, the fiscal policy measures are expected to become much less, and this combined with the economy improving will mean that central government net lending as a percentage of GDP strengthens. Fiscal policy will therefore contribute less to growth in the coming years.

Rapid growth in the manufacturing sector

The recovery in the Swedish economy has so far been divided, with a rapid recovery in the manufacturing sector, but continued slow development in certain service industries. Manufacturing benefits from the good global manufacturing climate and the strong demand from abroad for Swedish goods. Demand is expected to remain high in the coming month, and there is much greater optimism in the manufacturing industry than normal. At the same time, the shortage of semiconductors has led to production stoppages in the motor vehicle industry during the spring, and this has dampened production during the second quarter. According to the Riksbank's Business Survey, other sectors are also affected by the shortage of semiconductors, both directly and indirectly, and the shortage is not expected to be remedied until next year.²⁴ Despite disruptions to supply, industrial production is expected to grow rapidly this year and then slow down somewhat during 2022–2023.

Production in the services sector has in total largely recovered the fall last year. However, there are considerable differences between different parts of the services sector. Services that do not require contact with others and thereby are not directly affected by the restrictions, for instance, corporate services, such as information technology, have managed relatively well or even benefited from the crisis. At the same time, production in other industries is still much lower than normal. Companies in the hotel, restaurant, culture, transport and some retail trade sectors are hit particularly hard by the restrictions. However, when the restrictions are lifted, demand and production are expected to rise rapidly in these sectors, and optimism regarding the future is much higher than normal. Growth in production of services is expected to be strong in both 2021 and 2022, and then slow down.

Recovery on the labour market

Developments in the Swedish labour market are difficult to interpret due to the time series break in Statistics Sweden's official statistics.²⁵ The overall picture from various statistical sources indicates, however, that the recovery in the number of persons employed was rather subdued in the first quarter, despite GDP increasing by 0.8 per cent

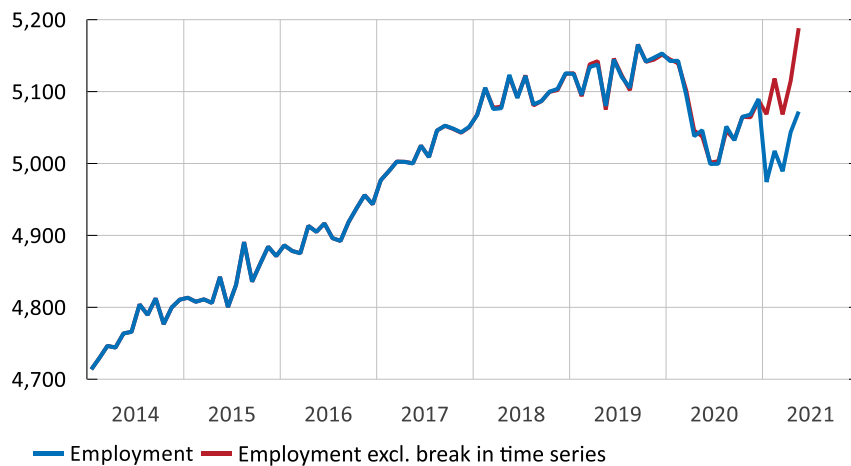
²⁴ See the *Riksbank's Business Survey* "Demand is not the problem – the troubles are on the supply side", May 2021, Sveriges Riksbank.

²⁵ In January, the LFS statistics were adapted to the EU's new regulation for labour market statistics. The new survey entails more changes, including a narrower definition of who is considered as employed. Moreover, Statistics Sweden changed over to using data from the employer's returns at individual level (AGI) from the Swedish Tax Agency instead of register-based labour market statistics (RAMS) to assist in calculations.

in relation to the previous quarter. The data published by Statistics Sweden, which tries to adjust for the effects of the changeover in statistics shows that employment has risen rapidly in recent months (see Figure 47).²⁶ Other sources of statistics also indicate that employment has gradually recovered after the dramatic fall last year, but the Riksbank's assessment is that the level is still somewhat lower than before the crisis.²⁷

Figure 47. Number of employed

Thousands, seasonally-adjusted data



Note. The series excluding the break in the time series is adjusted for the effects that Statistics Sweden estimates will ensue from the changeover in statistics.

Sources: Statistics Sweden and the Riksbank.

After the heavy fall at the start of the pandemic, the number of hours worked has recovered steadily. One contributing factor is that many employers have ended their short-term working schemes and that sick leave due to COVID-19 has declined. According to the Swedish Agency for Economic and Regional Growth, around 600,000 people were affected by the short-term working schemes at some point during 2020. The Riksbank's assessment, given the applications received so far, is that the number of people in the short-term working schemes during the first quarter of 2021 amounted to fewer than 100,000 per month and is assessed to have declined to on average 80,000 per month during the second quarter.

High demand for labour in the coming months

Indicators point to employment continuing to increase. More and more companies are planning to employ in the coming months. The employment plans are now much more extensive than normal in many sectors, according to the Economic Tendency

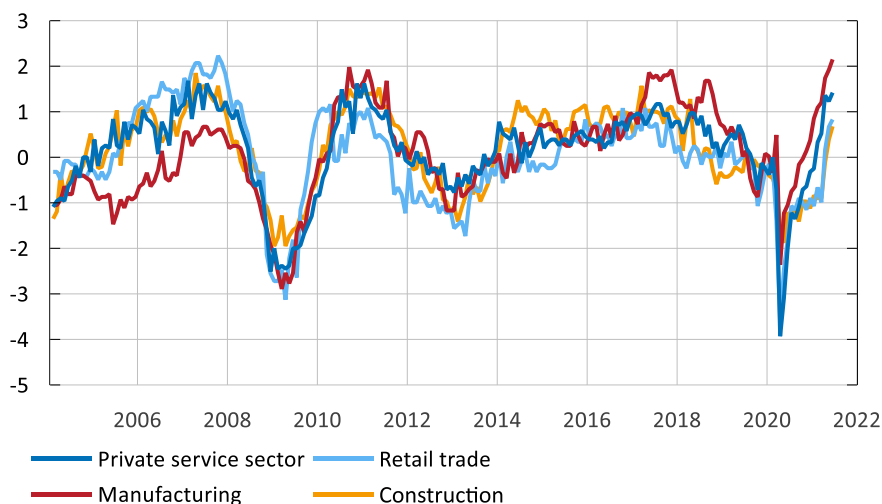
²⁶ Statistics Sweden has adjusted the currency survey with the estimated effect of the change in the definition of employment, used RAMS that was previously used to help instead of AGI and adjusted for changes in the target population. These adjustments are not all-inclusive, for instance no adjustments have been made for changes in the unemployment question.

²⁷ Examples of other statistical sources include short-term employment statistics, employer's returns at individual level and the National Accounts.

Survey (see Figure 48). The number of newly-registered jobs has also risen according to the Swedish Public Employment Service, and the number of redundancy notices is very low.

Figure 48. Recruitment plans in different sectors

Standard deviations, seasonally-adjusted net figures



Note. The series are normalised so that the mean value is 0 and the standard deviation is 1, since 2002.

Sources: National Institute of Economic Research and the Riksbank.

The indicators point to a broad upturn, although there are still major differences between how far the different sectors have left to go before they have recovered the large fall last spring. The fall was especially large in industries such as transport and storage, hotels and restaurants, and personal and cultural services. Despite all of these industries accounting for just below 16 per cent of all employees in the business sector prior to the crisis, they contributed to almost 90 per cent of the total fall in the number of employees in 2020. Compared to the fourth quarter of 2019, they still employ just over 60,000 fewer people.

Still difficult for certain groups in the labour market

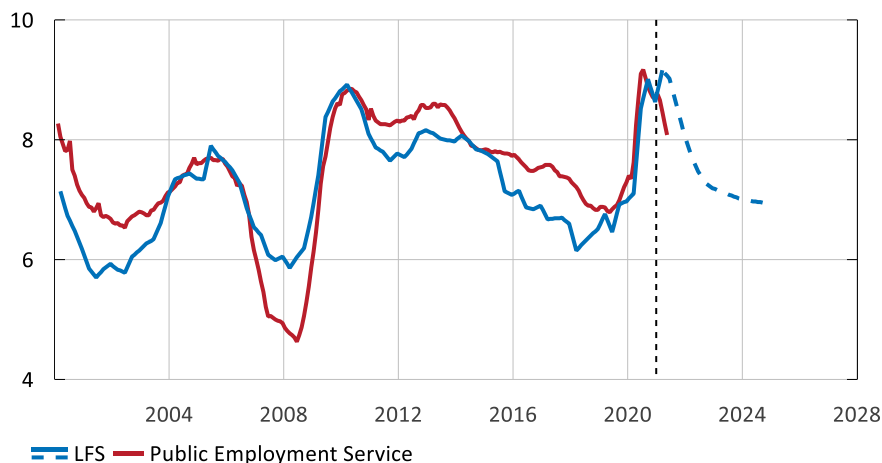
According to the Swedish Public Employment Service statistics, unemployment has fallen back since the highest level last summer and in May amounted to 8.1 per cent (see Figure 49).²⁸ According to the LFS, unemployment has risen since last autumn and was slightly more than 9 per cent in May. Differences in measurement methods and coverage are expected to largely explain the deviation. Unemployment according to the LFS has risen a lot among young people, and the LFS captures to a greater extent young people who are often not registered with the Swedish Public Employment

²⁸ A break in the time series of the Swedish Public Employment Service's statistics took place in July 2020. As of July 2020, it is possible for those registered with the Swedish Public Employment Service to de-register themselves, instead of a case worker doing it for them. This may have affected the development of unemployment according to the Swedish Public Employment Service over the past year.

service.²⁹ Regardless of which statistical source is used, unemployment is still high and the assessment is that there is spare capacity on the labour market.

Figure 49. Unemployment according to the LFS and Public Employment Service

Percentage of labour force, 15–74 years and 16–64 years respectively, seasonally adjusted data.



Note. Unemployed persons according to the PES include openly unemployed and participants in labour market programmes. Solid line represents outcome, broken line represents the Riksbank's forecast. The vertical line marks the date for the overhaul of the LFS (the labour force survey).

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

The hard-hit services industries employ many young people and many who were born abroad, and unemployment therefore rose in these groups in particular. On average, unemployment in the age group 15–74 amounted to 8.3 per cent last year, while unemployment among young people was 24 per cent. Among those born abroad, unemployment was 19 per cent.

When unemployment increases, there is a risk that it will become more difficult to find jobs for those who were unemployed before the crisis, as the competition for job openings will be greater. It will be particularly difficult for groups with weak competitiveness.³⁰ Even before the pandemic, the Riksbank assessed that long-term unemployment was relatively high as a result of structural problems on the labour market, including difficulties in matching unemployed people and job openings.

The economic recovery this year and next year will be important for the long-term development of the labour market. Unemployment is expected to fall gradually to around 7 per cent at the end of the forecast period. As there is no widespread structural transformation in the sectors hardest hit by the crisis, job openings are expected to return as the pandemic loosens its grip on the economy and demand returns. The

²⁹ See I. Häkkinen Skans (2019), "Developments on the labour market according to different statistical sources", *Economic Commentaries* No. 6, 2019, Sveriges Riksbank.

³⁰ Groups with poor competitiveness include those with only compulsory school education, persons with functional impairments that reduce their capacity to work, unemployed people over the age of 55 and people born outside of Europe.

requirements for education for employment in these sectors are in many cases relatively low.

Normalised resource utilisation in the Swedish economy this year

It is not possible to measure exactly the amount of spare capacity in the economy, but it is important for the Riksbank to try to get an idea of this, partly because resource utilisation affects how wages and prices develop, with some time lag. The Riksbank makes an assessment based on a number of different indicators, and these point to resource utilisation having continued to rise recently, but to it still being lower than normal.

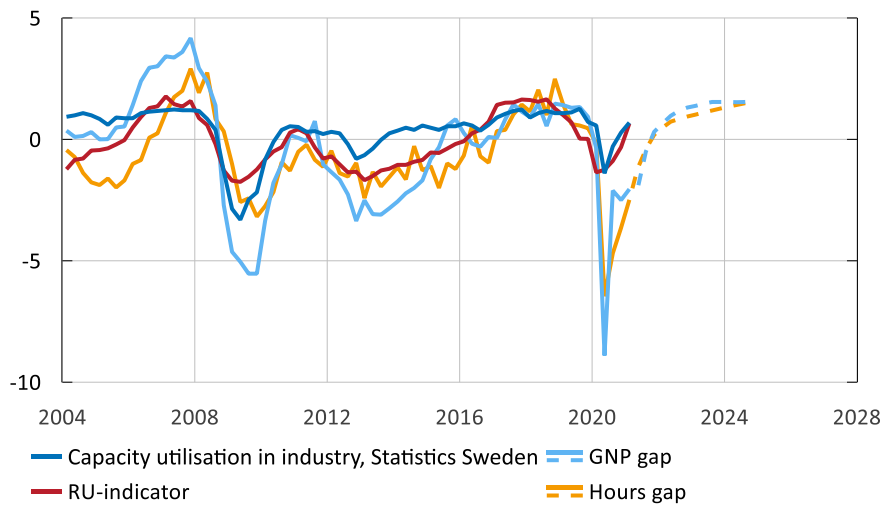
The Riksbank's resource utilisation indicator for the business sector as a whole is now higher than normal, and the manufacturing sector's capacity utilisation has also recovered, according to Statistics Sweden, and was above the historical average during the first quarter. But the resource utilisation indicator and other traditional survey measurements do not manage to significantly capture the parts of the service sectors that have been most exposed during this crisis, for instance within the hotel and restaurant industry.³¹ The amount of spare capacity differs from one sector to another. In the manufacturing sector, production and employment are close to or above their pre-crisis levels, while there is still spare capacity in some parts of the services sector. Above all, this is reflected in the production and employment levels in certain services sectors still being at very low levels. The Swedish Public Employment Service statistics on job seekers broken down into types of unemployment insurance also indicate that there are more people unemployed in these sectors than there were at the end of 2019.

The Riksbank's assessment is that total activity in the Swedish economy during the second half of the year is close to normal levels, but that it is still much lower than normal in the industries that were negatively affected by the pandemic. And there are groups for which the pandemic has made entry and re-entry into the labour market more difficult. The differences are expected to remain for a while longer, but towards the end of the year, when restrictions have been eased more, those sectors hardest-hit by the pandemic are expected to have recovered. Resource utilisation is expected to continue to rise, supported by the expansionary economic policy, and the economic situation is assessed to be strong in coming years. This is illustrated in measures of resource utilisation, such as the Riksbank's GDP and hours gaps (see Figure 50). However, the assessment of the level of resource utilisation is uncertain.

³¹ The resource utilisation indicator summarises data from several industries in the business sector, but the industries hit hardest in this crisis are not included there.

Figure 50. Measures of capacity utilization

Per cent and standard deviation, respectively



Note. The gaps refer to the deviation of GDP, the number of employed and number of hours worked from the Riksbank's assessed trends. The RU-indicator is a statistical measure of resource utilisation. The RU-indicator and the capacity utilisation in industry are normalised so that the mean value is 0 and the standard deviation is 1. Solid line represents outcome, broken line represents the Riksbank's forecast.

Sources: Statistics Sweden and the Riksbank.

Wage growth on the up

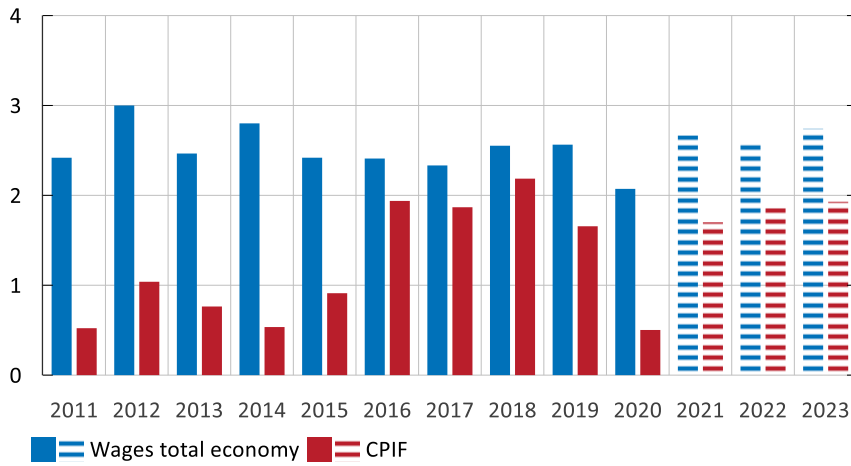
In the wage agreements negotiated during the winter, the social partners agreed that the centrally-agreed wages would increase by an average of about 2 per cent annually until the end of the first quarter of 2023. In addition, the agreements resulted in increased allocations to pensions corresponding to an increase in labour costs of a further couple of tenths of a percentage point a year.

Wage growth is not just determined by centrally-agreed wages but also by local pay reviews. The size of these is affected by the demand situation on the labour market. Wage increases in addition to the central agreements are expected to be close to the levels of recent years this year and next year.

When the agreements for 2023 and onwards are to be negotiated, the labour market situation is expected to be much better than when the current agreements were signed. As economic activity abroad is also improving, wages abroad are also expected to increase at a faster pace, which affects wage bargaining in Sweden. The rate of wage growth will therefore rise in the coming years. After having amounted to around 2 per cent in 2020, it is expected to amount to around 2.5 and 3 per cent in the coming years, according to the National Mediation Office's short-term wage statistics (see Figure 51). As inflation will rise during the same period, real wages, that is, wage growth minus inflation will increase moderately.

Figure 51. Wages according to short-term wage statistics in the economy as a whole and CPIF

Annual percentage change



Note. Solid bar represents outcome, broken bar represents the Riksbank's forecast. Outcome for 2020 is preliminary.

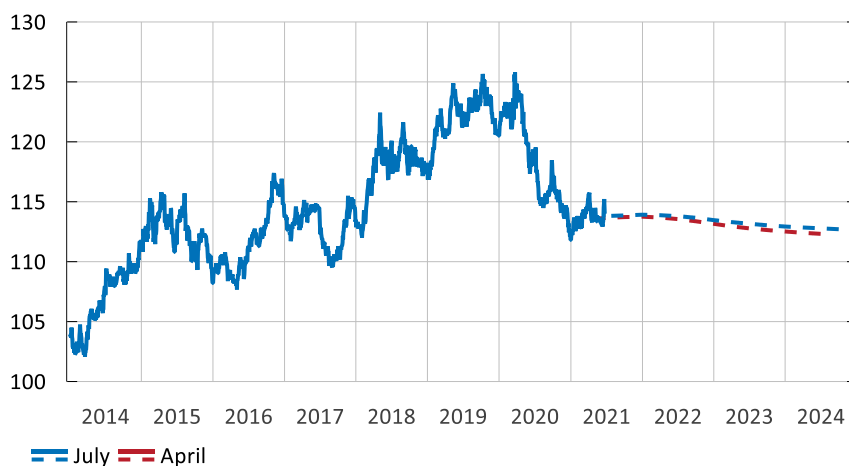
Sources: Swedish National Mediation Office and the Riksbank.

Krona still at today's level in the coming years

The Swedish krona appreciated last year. Explanations for this could be a high risk propensity and a strong development on the financial markets. The real exchange rate is still assessed as marginally weaker than can be expected, given Swedish productivity in relation to the rest of the world. This year the exchange rate has been relatively stable. However, in trade-weighted terms the krona is expected to remain at more or less the current level for the coming three years (see Figure 52).

Figure 52. Nominal exchange rate, KIX

Index, 18 November 1992 = 100



Note. KIX (krona index) is a weighted average of the currencies in 32 countries that are important for Sweden's international trade. A higher value indicates a weaker exchange rate. Outcomes are daily data and forecasts refer to quarterly averages. Solid line represents outcome, broken line represents the Riksbank's forecast.

Source: The Riksbank.

Major fluctuations in inflation this year

CPIF inflation amounted, on average, to 0.5 per cent in 2020. The low rate of increase was primarily due to weak demand and subdued energy prices. Inflation rose relatively quickly at the start of 2021, from 0.5 per cent in December last year to 2.5 per cent in April this year, measured in terms of the CPIF. The most important explanation for this is that energy prices are much higher this year than they were last year, when both electricity and fuel prices fell rapidly. The upturn can also be explained by new weights in the CPI. Consumption patterns have changed during the pandemic, which has changed the weights in the CPIF. This in turn has contributed to the service prices measured growing faster, particularly at the start of the year.³²

CPIF inflation was 2.1 per cent in May, which was 0.2 percentage points higher than the assessment in the April Monetary Policy Report. The forecasting error was primarily due to energy prices, and in particular electricity prices, being higher than expected. When energy prices are excluded, CPIF inflation was 1.2 per cent, which was in line with the forecast.

After being low in 2020 and higher at the start of 2021, inflation is expected to become lower again during the second half of 2021, being at a lowest figure of 1 per cent in July. Energy prices and the changed weights, which raised inflation at the beginning of the year, will contribute to this. The new weights also affect the inflation

³² See the article "Changed consumption during the pandemic affects inflation" in the February 2021 *Monetary Policy Report*, Sveriges Riksbank and J. Johansson, M. Löf, O. Tysklind "Changed consumption during the pandemic affects inflation", *Economic Commentaries*, No. 14, 2020, Sveriges Riksbank.

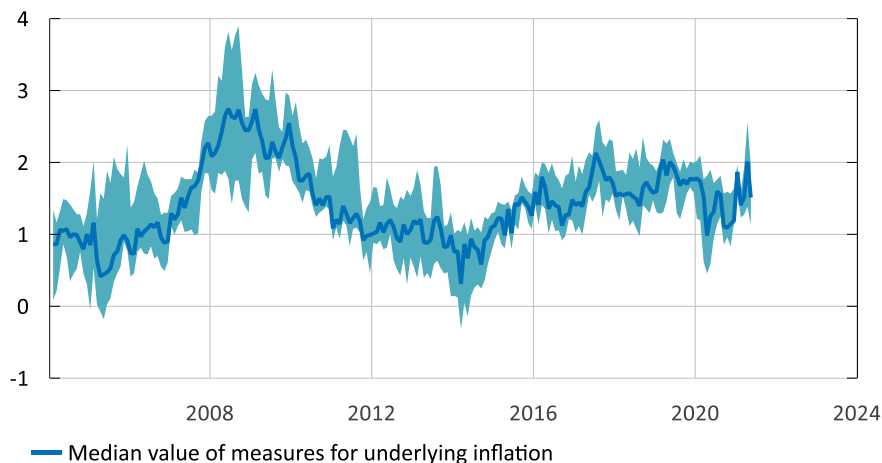
measured going forward. For instance, the price increases on foreign travel that usually occur during the summer months will have a smaller significance this year than last year, as they have a smaller weight now. The krona also appreciated during most of 2020, which continues to hold back inflation with some time lag.

In 2021, commodity prices for metals and food have risen rapidly. Freight prices have also soared, as a result of disruptions in global trade.³³ Some of the price increases will probably be passed on to the consumers and lead to a somewhat higher rate of price increase on certain goods and thus contribute to keeping up CPIF inflation with a couple of tenths of a percentage point this year and next year.

Like many other central banks, the Riksbank calculates and publishes various different measures of so-called core inflation. These measures, which exclude or reduce the significance of prices that have previously varied substantially, indicate that more persistent inflation is around 1.5 per cent at present. The measure of underlying inflation fell somewhat in May and the median of the various measures amounted to 1.5 per cent (see Figure 53). The measures that have proved best in surveys (UND24 and CPIFPC) differ and are at 1.7 and 1.1 per cent respectively. The picture of underlying inflationary pressures at present being around 1.5 per cent is reflected in the forecast that predicts CPIF inflation will on average be around 1.5 per cent in the coming year.

Figure 53. Different measures of underlying inflation

Annual percentage change



Note. The field 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.

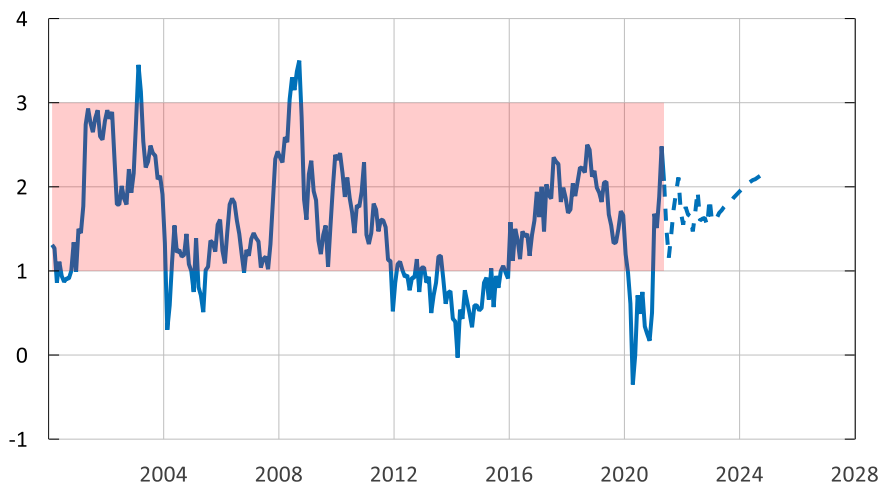
³³ See the article “How are higher commodity prices and freight costs affecting inflation in Sweden?” in this report.

Inflation approaches target in 2023

From 2022 onwards, inflation will rise more continuously as demand strengthens, wages increase faster and inflation abroad rises (see Figure 54). In the period ahead, the krona is expected to remain relatively unchanged and to no longer affect inflation to the same extent. The CPIF will increase somewhat faster than the CPIF excluding energy towards the end of the forecast period as a result of political decisions, which mean that energy prices are assessed to increase somewhat faster than other prices (see Figure 3 in Chapter 1).³⁴

Figure 54. CPIF and variation band

Annual percentage change



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

Sources: Statistics Sweden and the Riksbank.

³⁴ The Riksdag, the Swedish parliament, decided in June to introduce an increased reduction obligation regarding fuel. In brief, the decision means that fuel suppliers must gradually increase the mixture of renewable or other fossil-free fuels in petrol and diesel. This is expected to lead to the price of petrol and diesel rising faster than would otherwise have been the case. All in all, this is expected to contribute around one half of a tenth of a percentage point per year to CPIF inflation during the entire forecast period.

ARTICLE – Expansionary fiscal policies abroad are contributing to the recovery

In the United States and several European countries, major fiscal policy measures have been put in place to support households and companies, thereby mitigating the economic damage caused by the crisis. Estimates suggest that these measures succeeded in dampening the fall in GDP during the most acute stage of the crisis, when the closures hit economic activity hardest, and that they are now accelerating the recovery. In addition, several countries are discussing further fiscal packages that could lead to even higher growth and, overall, there seems to be a new political will to implement major general government stimulus.

The expansionary fiscal policy abroad means that Swedish export companies are facing higher demand, thus strengthening economic activity in Sweden too. However, the public spending increases also entail risks. The reforms and investments now being planned will take time to implement. Going forward, it may therefore be difficult to rapidly to adjust the degree of fiscal policy stimulus to changes in the economic outlook, thereby creating a risk of overheating. In many countries, public indebtedness is also increasing substantially. This may limit the scope for action in any future crisis, particularly if interest rates were to rise more than expected.

Extensive fiscal policy support during the crisis

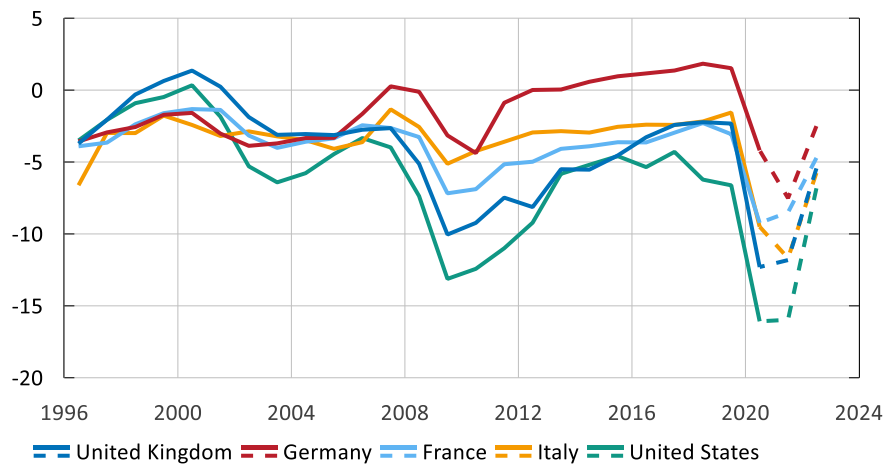
During the coronavirus crisis, public expenditure has risen sharply in most developed economies and in several of the major emerging economies, such as China. A large part of the expenditure increases have been used to support households and firms in various ways. This includes unemployment and sickness benefits, for example. In the United States, large sums have also been paid out in direct cash transfers to households. Companies hit by large revenue losses have received grants and, in many countries, thanks to public guarantee schemes, they have also been able to raise loans at relatively low expense. In addition, many wage-earners in Europe have been saved from dismissal thanks to public short-time work allowance.

At the same time as expenditure has increased, tax revenues from household incomes, companies' profits and elsewhere have fallen. Overall, this has meant that general government net lending has declined substantially. Figure 55 shows net lending as a proportion of GDP for France, Italy, Germany, the United States and United Kingdom. Last year's deficit in the United States, which corresponded to approximately 16 per cent of GDP, is the largest measured in the past 60 years. The deficit was also unusually large in the United Kingdom and the largest euro area economies.

In the Nordic countries, too, extensive measures have been taken to protect businesses and households that have been financially affected by the crisis. Overall, however, the financial effects of the crisis have been smaller in the Nordic countries than in many countries on the Continent and the deficit has also been smaller here (see Figure 56).³⁵

Figure 55. General government net lending

Per cent of GDP



Note. The forecasts for net lending are based on the Commission's May 2021 forecast.

Source: European Commission.

The measures have mitigated the downturn and accelerated the recovery

How great an effect have the various support measure had on GDP, employment and unemployment? An extensive body of empirical research literature documents that GDP rises when expenditure for public sector consumption increases and when taxes are cut. Significantly fewer studies have investigated how economic activity is affected by increased transfers to households, but those published show a positive effect.³⁶ It is difficult to say how large the effects of different fiscal policy initiatives will be, particularly under the special conditions that have prevailed during the present crisis, with large parts of the economies being closed.

Nevertheless, calculations based on US data show that last year's fall in GDP was significantly counteracted by the support measures. During the second quarter of 2020,

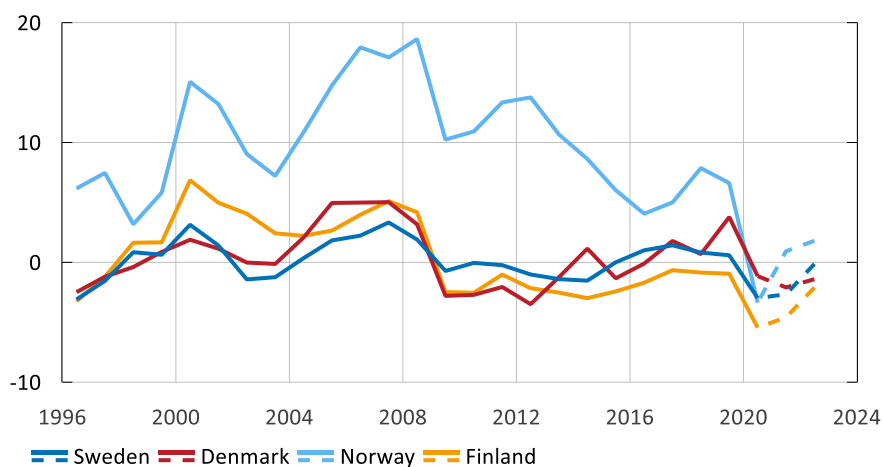
³⁵ In Norway, general government net lending fell last year by slightly more than NOK 340 billion compared to the level in 2019. A significant part of the decline is explained by a fall in tax revenues from the petroleum sector. See the Article "Government deficit continues" from March 2021 and Table 10721 in the StatBank of Statistics Norway.

³⁶ For an overview of the empirical literature, see V. Ramey (2019), "Ten years after the financial crisis: what have we learned from the renaissance in fiscal research?", *Journal of Economic Perspectives*, vol. 33, No. 2. The effects of increased public sector investment are analysed by C. Boehm (2020), "Government consumption and investment: does the composition of purchases affect the multiplier?", *Journal of Monetary Economics*, vol. 115. For estimates of fiscal policy multipliers on Swedish data, see G. Hjelm and P. Stockhammar (2016), "Short run effects of fiscal policy on GDP and employment: Swedish Evidence", *Working Paper* No. 147, National Institute of Economic Research.

the GDP of the United States fell by 9 per cent compared to the level in the preceding quarter. Estimates indicate that the fall in GDP would instead have been between 12.5 and 16 per cent if fiscal policy had not restrained the negative effects of the crisis.³⁷ In March of this year, the US Congress voted through a new, major stimulus package including money for expanded unemployment benefits, direct cash support for households, tax relief for companies offering their employees sickness benefits and other measures. Calculations taking these measures into account indicate that fiscal policy will continue to have a decisive effect on economic activity in the United States over the first six months of this year.³⁸

Figure 56. General Government net lending in the Nordics

Per cent of GDP



Note. The forecasts for net lending in Denmark, Finland and Norway are based on the European Commission's May 2021 forecast. For Sweden, the Riksbank's forecast is used.

Sources: European Commission, Statistics Sweden and the Riksbank.

In Europe too, the support measures contributed to restraining last year's fall in GDP.³⁹ This year, several euro area countries decided to extend the support and also to implement new initiatives.⁴⁰ The fiscal policy packages in Europe are certainly

³⁷ The Hutchins Center on Fiscal and Monetary Policy at the Brookings Institution in the United States makes regular calculations of the effects of fiscal policy on US GDP growth. According to their method, which does not take account of so-called multiplier effects, fiscal policy contributed to raising GDP growth in the second quarter of 2020 by 3.4 percentage points (see Hutchins Center Fiscal Impact Measure). Chudik et al. (2021) uses a VAR model to estimate the effects on GDP of discretionary fiscal policies in 33 countries. Their results show a contribution to US GDP growth of just over 7 percentage points in the second quarter of last year. See A. Chudik, K. Mohaddes and M. Raissi (2021), "COVID-19 Fiscal Support and Its Effectiveness", *Globalization Institute Working Paper No. 408*, Federal Reserve Bank of Dallas.

³⁸ See Hutchins Center Fiscal Impact Measure.

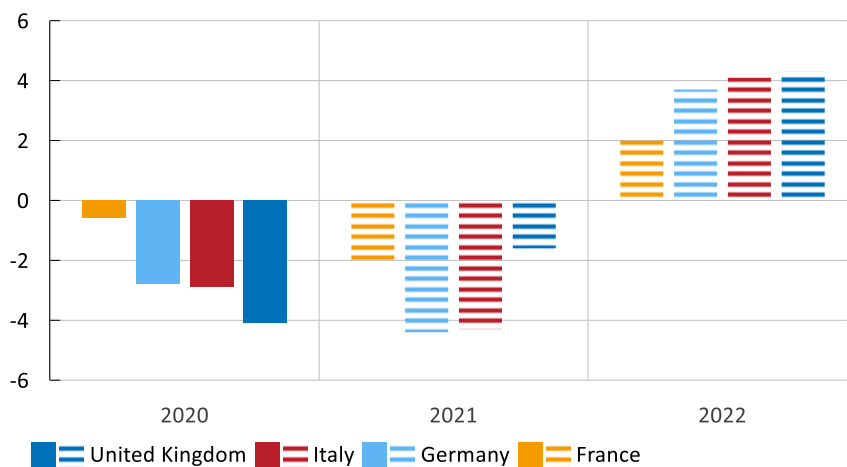
³⁹ See reference to Chudik et al. (2021) in footnote 37.

⁴⁰ An overall description of the fiscal policies of the EU Member States is given in the European Commission's forecast from May of this year (see *European Economic Forecast*, Spring 2021). More detailed information can be found in the national stability programmes. In Germany, the increased deficit in 2021 is primarily due to increased appropriations for various types of support payment to companies and households. Italy's new government has proposed changes to this year's budget entailing increased support measures to households and companies, investment initiatives and other measures. In the stability programme adopted in April, the Italian government expects a deficit of 11.8 per cent of GDP this year, which can be

smaller than those in the United States, even taking the respective size of the economies into account. Even so, the measures are expected to provide significant support to demand this year. Figure 57 shows the European Commission’s calculation of the change to the cyclically-adjusted general government net lending for Germany, France, Italy and the United Kingdom. The downturns in the cyclically-adjusted balance this year give an idea of how important the fiscal policy initiatives are for demand.⁴¹ In addition, there are the stimulus measures paid for by grants from the EU's joint recovery fund, Next generation EU (NGEU). They are expected to represent several per cent of GDP per year for some countries.

Figure 57. Change in cyclically adjusted net lending

Per cent of potential GDP



Note: The forecasts for cyclically-adjusted net lending are based on the European Commission's May 2021 forecast.

Source: European Commission.

Fiscal and monetary policy are pulling in the same direction

During the crisis, monetary policy has also been made more expansionary, both abroad and in Sweden. In addition, several central banks have announced that they plan to continue to keep policy rates low and to purchase interest-bearing assets, even if inflation risks being above the target for a while. There is therefore reason to assume that the fiscal policy measures now being implemented in the United States and Europe are strengthened by the expansionary monetary policy.⁴² There are also

compared with a deficit of 7 per cent of GDP in the last government’s draft budget act for 2021 from last autumn.

⁴¹ The calculation for this year and next year is based on the European Commission’s forecasts and on fiscal policy measures that either have been agreed or for which credible detailed plans have been published. See *European Economic Forecast*, Spring 2021, published by the European Commission in May.

⁴² Both empirical and theoretical studies show that fiscal policy initiatives have a greater effect on growth and resource utilisation if the policy rate is held unchanged when the initiatives are implemented, compared with a situation in which the policy rate is instead raised. See V. Ramey and S. Zubairy (2018), “Gov-

many indications that the European Central Bank’s crisis programme for asset purchases (the Pandemic Emergency Purchase Programme or PEPP) and the EU joint fiscal policy initiative (NGEU) have been of great importance for restraining interest rates on government loans in the euro area’s most heavily indebted countries. In this context, it is remarkable that the gross public debt in Italy increased last year by over EUR 160 billion (9.9 per cent of GDP) at the same time as the average interest on the outstanding promissory notes fell.⁴³

Economic policy thus managed to restrain the fall in GDP during the most acute phase of the crisis and the Riksbank’s assessment is that both fiscal and monetary policies are now accelerating the recovery. Higher demand abroad means that Swedish export firms are also facing higher demand, thus strengthening economic activity in Sweden too. The size of the estimated effects on GDP growth abroad, as cited above, also gives an indication of the significance that fiscal policy will have in the period ahead, when support is eventually discontinued. How rapidly general government net lending will increase over the coming years will have important implications for growth prospects in both the United States and the euro area. In its latest forecast for the euro area, the European Commission assumes that fiscal policy will become contractionary as of next year. As yet, however, we know fairly little of the various governments’ concrete budget plans for 2022 and it is possible that this tightening will occur at a slower pace, compared with the assumptions in the forecast. Overall, there seems to be a new political will to implement major fiscal policy initiatives. The United States is debating two extensive new packages that the government has put forward, while several EU countries have published ambitious, multi-year recovery packages, parts of which will be funded by NGEU.

Difficult to calibrate the size of new initiatives

In most cases, the new packages planned have a different focus from the acute support measures taken last year, which largely consisted of transfers to households and companies. In the period ahead, there will instead be a greater focus on reforms, public sector investment and green transition. These efforts will take a longer time to implement, sometimes several years, and it may therefore be difficult to adjust the degree of fiscal policy stimulus to changes in the economic outlook. The strength and speed of the recovery that has now begun is difficult to assess. If the economic outlook is overestimated and the decision is taken to reduce public expenditure too

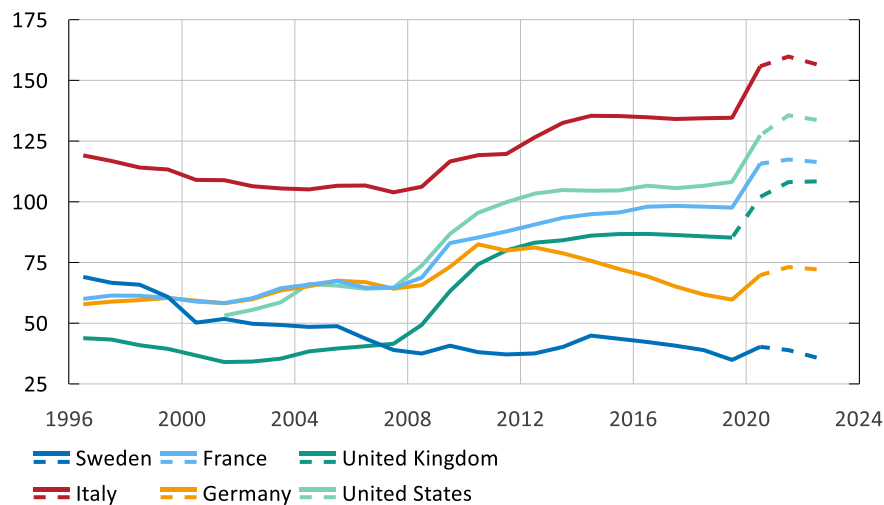
ernment Spending Multipliers in Good Times and in Bad: Evidence from US Historical Data” in *Journal of Political Economy* 126(2) and G. Coenen et al. (2012), “Effects of Fiscal Stimulus in Structural Models”, *American Economic Journal: Macroeconomics*, 4 (1).

⁴³ During the first weeks of March 2020, it became increasingly clear that the pandemic would have serious economic consequences and at that point in time the world’s financial markets were hit by heavy turbulence. Interest rates on government loans rose in several of the euro area’s most indebted countries. On 18 March, the ECB made public a new, comprehensive programme for purchases of assets, PEPP, and, over the following trading days, interest rates fell back. In April and May, the turbulence returned, with new rapid rises in interest rates for Italian government securities, for example. However, this development was reversed on Monday 18 May, when the German Chancellor and French President presented a proposal for a joint EU recovery fund of EUR 500 billion. The Franco-German initiative became the start of the 750 billion euro recover plan named Next Generation EU. As of 18 May and during the following months, interest rates on government loans fell back and, since the turn of the month August/September 2020, the Italian government has been able to raise loans at interest rates that have been lower than those prevailing before the outbreak of the crisis.

quickly, there is a risk that the recovery would slow down too strongly and that unemployment would remain high for a longer period. However, if the strength of the recovery is instead underestimated, the new fiscal policy package now being debated may lead to an increased risk of overheating in the long term. However, it is worth mentioning that the new packages have a more structural than cyclical aim, which reduces the risk that they will overheat the economies.

Figure 58. Consolidated gross debt in the public sector

Per cent of GDP



Note. The forecasts for France, Germany, Italy, the United Kingdom and United States have been taken from the European Commission's forecast from May 2021 and refer to unconsolidated gross debt in the public sector. For Sweden, the Riksbank's forecast is used.

Sources: Eurostat, European Commission and the Riksbank.

Larger public sector debts entail a risk of reduced scope for action

The large budget deficits and the rapidly growing national debts have breathed new life into discussions of which level of public sector loans is sustainable (see Figure 58). During the crisis, the rules of the EU's Stability and Growth Pact have been temporarily suspended. Of course, the forecast for the general government primary balance is an important factor in the assessment of what is a sustainable level of debt.⁴⁴ However, the sustainability assessment is also affected by the rate of growth in the economy and by the interest rate on the central government debt. The lower the interest rate is in relation to the growth rate, the smaller the budget surplus that is needed to stabilise a given debt-to-income ratio.⁴⁵ In recent decades, interest rates have fallen and, in several developed economies, the average government borrowing rate since

⁴⁴ The primary balance is net lending excluding capital income and interest expenses.

⁴⁵ For more detailed discussions of the factors affecting the debt-to-income ratio, see O. Blanchard, Á. Leandro and J. Zettelmeyer (2021), "Redesigning EU fiscal rules: from rules to standards", *Peterson Institute for International Economics Working Paper*, and O. Blanchard (2019), "Public debt and low interest rates", *American Economic Review* vol. 109(4).

the start of the millennium has been lower than the average growth rate.⁴⁶ This has led many economists to reassess their view of what a sustainable level of debt is.

Central bank communication indicates that policy rates will remain low for several years, which suggests that interest rates on government loans will also remain low. The direction of monetary policy is determined by the prospects for inflation, and the rate of price increases has certainly risen recently in the United States and a number of countries in the EU, but the upturns are viewed as temporary. Most forecasts indicate that policy rates will remain low and that inflation will then be close to the inflation targets a few years ahead. In addition, policy rates are affected by the global trend that, for several decades has pushed down real interest rates.⁴⁷ Consequently, even if monetary policy in the period ahead will be less expansionary, this need not mean that policy rates will be raised to the levels that prevailed during previous economic upturns.

However, economic forecasts are uncertain and inflation prospects can change, particularly if private consumption grows faster than expected and bottlenecks arise in production. In such a scenario, the central banks may be forced to raise their policy rates to defend their inflation targets. There is also disagreement among economists concerning the exact causes behind the trend in global real interest rates and the required rates of return may start to rise again. With the large public debt that has arisen in several countries, even a comparatively modest increase in interest rates may lead to high borrowing costs and a shrinking scope for further borrowing. Such a reduction of the scope of fiscal policy action may have substantial consequences, for example if a new crisis should occur or a government should be forced to assume responsibility for debts that have arisen in the private sector. In addition, if interest rates were to rise more than expected, investors could reconsider the assessment of what debt levels are sustainable, which in turn could lead to even higher government lending rates and more directly force fiscal policy to be tightened and hence lead to weaker economic development.

⁴⁶ P. Barrett (2018), "Interest-growth differentials and debt limits in advanced economies", *IMF Working Paper* No. 18/82.

⁴⁷ For an overview and discussion of the research literature that has studied the trend towards lower required rates of return, see H. Lundvall (2020), "What is driving the global trend towards lower real interest rates?", *Sveriges Riksbank Economic Review*, Sveriges Riksbank.

ARTICLE – How are higher commodity prices and freight costs affecting inflation in Sweden?

In 2021, commodity prices, and especially prices of metals and food have risen substantially. Costs for sea freight have also increased rapidly. Increasingly strong global demand, combined with supply problems, lies behind this development. Previously, rises in commodity prices have most frequently led to relatively modest effects on consumer prices. Now, however, commodity prices, and also freight costs, have risen rapidly over a short period of time. Consequently, it cannot be ruled out that the current situation may have a greater than normal impact on inflation expectations and consumer prices. In its forecast in April, the Riksbank already expected rising commodity prices and freight costs to contribute to slightly higher inflation over the coming year. The effect is now expected to be a little greater this year and next year but, nevertheless, the assessment remains that the high rates of increase in commodity prices and freight costs will slow down fairly rapidly.

Many commodity prices have risen sharply in 2021. Price increases for metals, industry-related commodities and food products are now taking place at a significantly higher rate than during the economic upturn in the years preceding the pandemic (see Figure 59). The reasons are many, but the main and overall one is the ever-brighter economic situation, which, in turn, is being fed by strong fiscal policy measures, monetary policy stimulation measures, rapid decreases in the spread of infection in several regions and the launch of vaccination programmes around the world.

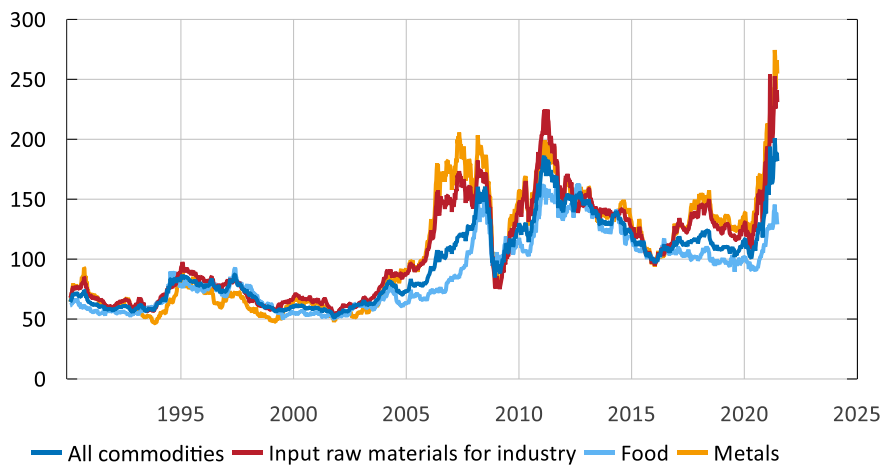
In addition to the improved global economic outlook, the rise in metal prices is being driven by particularly high demand in China, supply shocks and a stronger exchange rate for the US dollar in relation to other currencies. Expectations of high future demand for metals, linked to the gradual shift away from fossil fuels, also explains the trend. The price increases for agricultural and food products are due to pent-up demand for certain products in China and to various supply problems in South America and the United States.⁴⁸

⁴⁸ Many of the disruptions in South America are linked to the weather phenomenon La Niña. See for example “Causes and Consequences of Metal Price Shocks”, World Bank Group (2021), “Commodity Markets Outlook, April 2021.

The costs of sea freight have also risen dramatically recently (see Figure 60). In particular, prices on routes from Asia to Europe have increased rapidly.⁴⁹ The costs of freight in the opposite direction have not increased as much, which indicates major imbalances in the transport chains (compare the dark blue and red lines in Figure 60).⁵⁰ Rising demand also lies behind the development of sea freight, combined with bottlenecks in the global supply chain, such as overloaded ports and an undersized cargo fleet.⁵¹

Figure 59. Commodity prices in US dollars

Index, 2015 week 52 = 100



Source: The Economist.

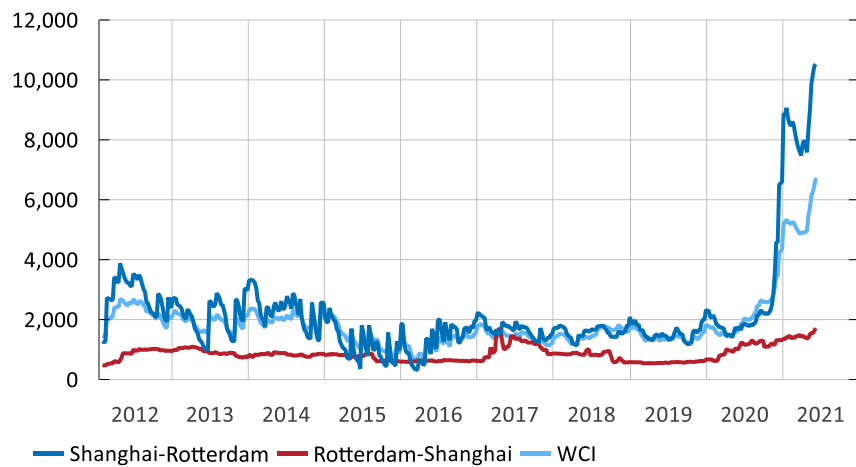
⁴⁹ Freight prices to developing regions have risen the fastest, however. Freight costs are currently highest to South America and West Africa. One explanation is that these routes are longer.

⁵⁰ However, freight from Europe to Asia always seems to be on a lower price level. Among other reasons, the imbalances depend on differences in import demand and on how fully loaded the return containers are.

⁵¹ However, the causes are many. Demand for container shipping has increased steadily, following the rapid slowdown in the spring of 2020. The pandemic has contributed to changes in consumption patterns and increased e-Commerce. Gradually changed trade patterns are another cause, as are cancellations in air freight. See, for example, H. Ren (2021), "Higher Shipping Costs Are Here to Stay, Sparking Price Increases", <https://www.bloomberg.com/news/articles/2021-04-12/>.

Figure 60. Freight costs

USD/container



Note. The light blue line (WCI) shows an aggregate index for different tradelines.

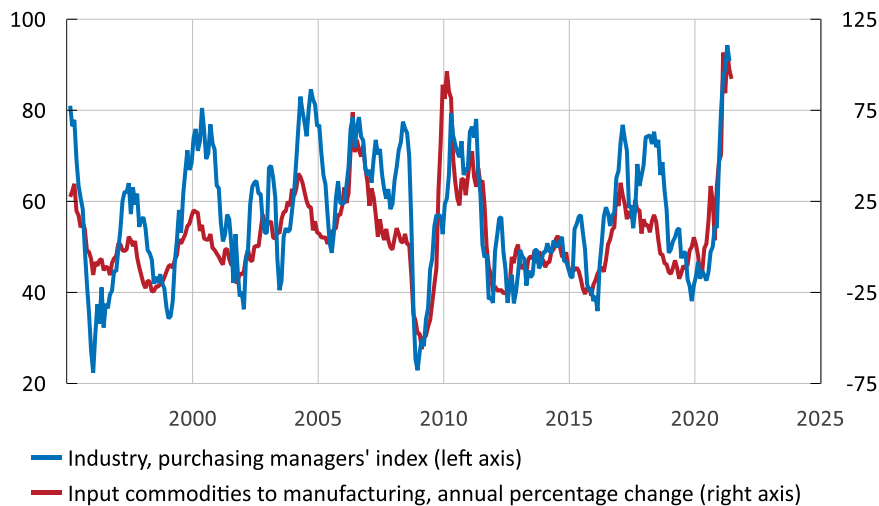
Source: Drewry.

The sub-index for prices for input goods in the Purchasing Managers' Index for the manufacturing sector in Sweden also shows that prices have risen significantly recently (see Figure 61) and that this trend can be explained by movements in commodity prices. The covariation with the annual percentage change in the price index for input goods for the manufacturing sector (shown as the level in Figure 59) is also clear. However, from April to May, the sub-index for prices of input goods fell slightly to 90.8, which is still a record high level. The last time it was over 80 was in autumn 2004. The corresponding index for the service sector has also risen rapidly.⁵²

⁵² The sub-index for suppliers' delivery times also shows the same development over the last six months.

Figure 61. Prices for input goods according to the Purchasing Managers' Index in Sweden and for input commodities to manufacturing

Index and annual percentage change



Sources: Silf/ Swedbank and the Economist.

How long could the rise in commodity prices and freight costs last?

Commodity prices have risen since mid-2019 and the upturn has been particularly rapid since the summer of 2020. Previously, such upturn phases in commodity prices have varied in length from barely a year to about two and a half years.⁵³

Fluctuations in raw material prices seem to co-vary with global economic activity relatively well. The correlation between different measures of commodity prices and KIX-weighted growth is also clear. The relationship with economic activity is strongest for metal prices and weaker for food prices.⁵⁴ If the Riksbank's assessment of KIX-weighted growth is used to forecast developments in metal prices, the rate of price increases will quite rapidly be restrained.⁵⁵ This trend tallies quite well with the commodity price forecasts from other analysts. According to a report from the World Bank, published in April this year, the rate of price increases for metals and minerals is expected to slow down from 30.5 per cent this year to -12.4 per cent in 2022. Part of

⁵³ An upturn phase in prices is measured here as the distance, in months, from the lowest listing in the annual percentage change for metal prices to the highest listing before the rate of increase begins to slow down again. If it is established that the most recent upturn phase began in May 2019, metal prices have been rising for more than two years. If developments were to follow historical patterns, prices should therefore be restrained soon. However, uncertainty is particularly great now, as the pandemic is deviating strongly from historical cyclical patterns.

⁵⁴ Here too, it should be mentioned that the last year and a half have been exceptional and that other driving forces than normal fluctuations in economic activity have affected developments.

⁵⁵ A simple time series model is used here, where the quarterly percentage change in metal prices is explained by the quarterly development of KIX-weighted GDP. The equation also includes some lags of the variables included.

the price fall in 2022 is linked to demand being expected to fall when China starts phasing out various stimulation measures.⁵⁶

According to time series of freight costs, the current situation is particularly extreme. It is therefore difficult to draw any conclusions from earlier episodes of higher costs. The co-variation with economic activity is also less clear. Some analysts expect the problems to be corrected relatively quickly once supply has adjusted to demand, while others say that the difficulties in sea freight will be difficult to resolve and that various bottlenecks will remain for a good time to come.⁵⁷

Weak connection with producer and consumer prices

The relationship between commodity prices and prices of consumer goods in the producer channel is not particularly clear, even if one controls for changes in the exchange rate.⁵⁸ Neither is it easy to see any systematic time lag in the relationship, which is to say producer prices rising or falling after a certain period of time following the movement of commodity prices in any direction. At present, prices are falling for imported consumer goods in the producer channel. The rate of price increase for consumer goods produced and sold in Sweden remains somewhat higher than its historical average, but has not risen significantly recently.

There are also surveys that ask companies how they plan to change their prices. According to the Economic Tendency Survey, price plans have become normalised recently. Seen across the whole of the business sector, more companies are now planning price rises, but the proportion is increasing from extremely low levels. The proportion of companies in the retail trade planning price rises fell at the beginning of the pandemic but it has since risen and is now at a relatively high level (see Figure 62). However, according to the Riksbank's latest business survey, there are also tendencies towards higher sales prices.⁵⁹

⁵⁶ See "Causes and Consequences of Metal Price Shocks", pages 3 and 45, *Commodity Markets Outlook*, April 2021, World Bank Group.

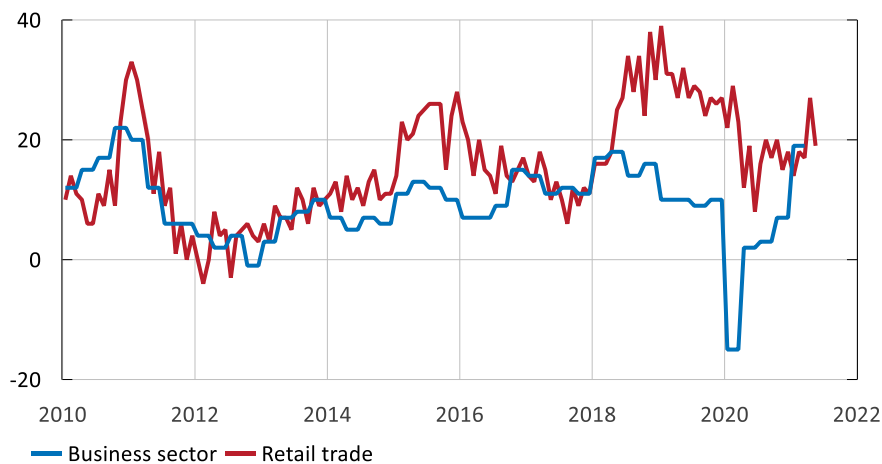
⁵⁷ See *the Riksbank's Business Survey*, May 2021 "Demand is not the problem – the troubles are on the supply side", Sveriges Riksbank and H. Ren (2021), "Higher Shipping Costs Are Here to Stay, Sparking Price Increases", <https://www.bloomberg.com/news/articles/2021-04-12/> and Box 1 "What is driving the recent surge in shipping costs?", *ECB Economic Bulletin*, 3/2021.

⁵⁸ Commodities are usually priced in dollars, while producer prices have been converted into kronor.

⁵⁹ Both in the trade sector and among service companies, there are plans to raise sales prices to compensate for increased costs; see *the Riksbank's Business Survey*, May 2021 "Demand is not the problem – the troubles are on the supply side", Sveriges Riksbank.

Figure 62. Price plans according to the National Institute of Economic Research

Net balance



Note. The net balance is the difference between the percentages of companies responding higher and lower selling prices respectively.

Source: National Institute of Economic Research.

The direct relationship between commodity prices and consumer prices has not been particularly strong over the past twenty years. Commodity prices have been able to rise or fall quite a lot without this actually having been noticed in the consumer channel.

However, there are significant links between commodity prices and some of the 70 sub-indices which together make up the CPIF.⁶⁰ According to a simple time series analysis, at least 14 sub-indices out of 70 appear to be sensitive to fluctuations in commodity prices and their combined weight in the CPIF is close to 19 per cent.⁶¹ As in the analysis of the relationship between commodity prices and producer prices, this is also checked for exchange rate changes. One explanation for the weak link between commodity prices and the CPIF is that the goods that are clearly affected by commodity prices only form a small part of the CPI basket.

The relationship between freight costs and consumer prices should also probably not be very clear, at least during more normal times. The freight cost is usually a fairly small part of the actual sales price and any increases can probably be managed without having to be passed on to the consumer channel. The result of an analysis of US data also indicates relatively limited impact.⁶² Although the price of containers has

⁶⁰ According to this analysis, it primarily seems to be various food prices that are affected. Examples include flour, grains and bread, milk, eggs and cheese, cooking fat, vegetables and fruit, coffee, and cocoa.

⁶¹ Quarterly data are used in the analysis and, for each sub-index in the CPIF, the quarterly percentage change is modelled. In a first step, three different models for each price aggregate are estimated to allow the optimal time lag for the resource utilisation (RU indicator), exchange rate (KIX) and commodity price index of the explanatory variables to be identified. A model is then estimated for each sub-index where all explanatory variables are included at the same time. If commodity prices are significantly different from zero at the 10 per cent level and have a positive sign, the index is sorted into the group of consumer prices which appear to be sensitive to fluctuations in commodity prices.

⁶² See T. Herriford, E. Johnson, N. Sly and A. Lee Smith (2016), "How Does a Rise in International Shipping Costs Affect U.S. Inflation?" *Macro Bulletin*, December 2016, Federal Reserve Bank of Kansas City.

risen dramatically in recent times, the impact on most physically small consumer goods, such as telephones, should be relatively limited, as each load contains many units. The effect on larger consumer goods, such as white goods, should be greater, but production is often closer to the end market for such products, precisely in order to minimise transport costs.

Earlier periods of rapidly rising commodity prices and freight costs have led to moderate effects on inflation, but the recent upturn is exceptional. Consequently, conclusions drawn from the previous co-variation with consumer prices may be mistaken and there is a risk of underestimating the effects.⁶³

The effect on inflation depends on whether the rise in commodity prices and freight costs is temporary or more permanent

The effect commodity or freight prices ultimately have on inflation expectations and consumer prices depends on whether the increase is temporary or more permanent. If cost increases for companies are short-term, they may not have to be passed on to consumers. On the other hand, if the increases in costs are prolonged, it is more likely that this will affect expectations and pricing through delayed effects. One example could be that higher prices for base metals, which are important input goods in various parts of the manufacturing sector, will impact companies' costs. Such a development would probably lead to consumers having to pay higher prices in the end. It is also possible that the delayed effects will be channelled through higher inflation expectations, which, in turn, will generate higher prices and wages. So far survey-based measures of inflation expectations have risen relatively slightly, while market-based measures have moved more. This time aspect may be particularly important now, when other inflationary risks are also being discussed in the media and research circles.⁶⁴

The Riksbank's overall assessment remains that the upturn in commodity prices and freight costs is temporary and will lead to moderate effects on inflation over the next few years. In its forecast in April, the Riksbank already expected developments to contribute to slightly higher inflation over the coming year. The effect is now expected to be slightly higher in 2021 and 2022 before it subsides.

⁶³ See, "From Supply to Price Pressures—A Flashing PMI Signal?", *News Letter*, 2021, Goldman Sachs.

⁶⁴ For a discussion of these, see the article "Inflation outlook during the corona crisis" in *Monetary Policy Report*, July 2020, Sveriges Riksbank.

Tables

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

Table 1. Repo rate forecast

Per cent, quarterly averages

	Q1 2021	Q2 2021	Q3 2021	Q3 2022	Q3 2023	Q3 2024
Repo rate	0,00 (0,00)	0,00 (0,00)	0,00 (0,00)	0,00 (0,00)	0,00 (0,00)	0,00

Source: The Riksbank.

Table 2. Inflation

Annual percentage change, annual average

	2019	2020	2021	2022	2023
CPIF	1,7 (1,7)	0,5 (0,5)	1,8 (1,5)	1,7 (1,4)	1,8 (1,7)
CPIF excl. energy	1,6 (1,6)	1,3 (1,3)	1,2 (1,1)	1,5 (1,4)	1,7 (1,7)
CPI	1,8 (1,8)	0,5 (0,5)	1,6 (1,4)	1,7 (1,5)	1,8 (1,7)
HICP	1,7 (1,7)	0,7 (0,7)	2,0 (1,7)	1,6 (1,4)	1,7 (1,6)

Note. HICP is an EU harmonised index of consumer prices.

Sources: Statistics Sweden and the Riksbank

Table 3. GDP by expenditure

Annual percentage change, unless otherwise stated

	2019	2020	2021	2022	2023
Private consumption	0,7 (1,2)	-4,8 (-4,7)	4,0 (4,7)	5,2 (4,7)	2,6 (2,5)
Public consumption	0,3 (0,3)	-0,5 (-0,5)	2,3 (2,1)	1,6 (1,8)	0,4 (0,8)
Gross fixed capital formation	-0,3 (-3,1)	-0,5 (0,6)	3,3 (2,1)	4,3 (3,6)	2,4 (2,4)
Inventory investment*	-0,1 (-0,1)	-0,6 (-0,8)	0,2 (0,1)	0,0 (0,1)	0,0 (0,0)
Exports	6,0 (4,8)	-4,6 (-5,2)	9,5 (7,2)	4,1 (4,6)	3,2 (3,2)
Imports	2,1 (1,3)	-5,7 (-5,8)	8,5 (7,0)	5,0 (4,8)	3,5 (3,2)
GDP	2,0 (1,4)	-2,8 (-2,8)	4,2 (3,7)	3,7 (3,6)	1,9 (2,0)
GDP, calendar-adjusted	2,0 (1,4)	-3,0 (-3,1)	4,1 (3,6)	3,7 (3,7)	2,1 (2,3)
Final domestic demand*	0,3 (-0,2)	-2,4 (-2,1)	3,2 (3,2)	3,8 (3,4)	1,9 (1,9)
Net exports*	1,8 (1,6)	0,3 (0,0)	0,8 (0,4)	-0,1 (0,1)	0,0 (0,1)
Current account (NA), per cent of GDP	5,2 (5,1)	5,7 (5,4)	6,4 (5,9)	6,0 (5,8)	5,8 (5,7)

*Contribution to GDP growth, percentage points

Note. The figures show actual growth rates that have not been calendar-adjusted, unless otherwise stated. NA is the National Accounts.

Sources: Statistics Sweden and the Riksbank

Table 4. Production and employment

Annual percentage change, unless otherwise stated

	2019	2020	2021	2022	2023
Population, aged 15–74	0,7 (0,7)	0,4 (0,4)	-0,2 (0,1)	0,2 (0,4)	0,2 (0,4)
Potential hours worked	0,8 (0,8)	0,6 (0,6)	0,4 (0,5)	0,4 (0,5)	0,5 (0,6)
Potential GDP	1,9 (1,7)	1,7 (1,5)	1,6 (1,5)	1,5 (1,6)	1,7 (1,8)
GDP, calendar-adjusted	2,0 (1,4)	-3,0 (-3,1)	4,1 (3,6)	3,7 (3,7)	2,1 (2,3)
Number of hours worked, calendar-adjusted	-0,2 (-0,3)	-3,8 (-3,8)	3,2 (2,1)	2,1 (2,9)	0,9 (1,2)
Employed, aged 15–74 ***	0,7 (0,7)	-1,3 (-1,3)	-0,2 (-0,6)	1,7 (1,6)	0,6 (0,8)
Labour force, aged 15–74 ***	1,1 (1,1)	0,3 (0,3)	0,3 (-0,3)	0,3 (0,6)	0,2 (0,5)
Unemployment, aged 15–74 *,***	6,8 (6,8)	8,3 (8,3)	8,7 (8,6)	7,4 (7,7)	7,1 (7,4)
GDP gap**	1,2 (0,9)	-3,4 (-3,6)	-1,1 (-1,7)	1,0 (0,3)	1,5 (0,8)
Hours gap**	0,8 (0,7)	-3,7 (-3,8)	-1,0 (-2,2)	0,7 (0,2)	1,1 (0,7)

* Per cent of the labour force **Deviation from the Riksbank's assessed potential level, per cent *** As a result of the overhaul in the LFS (labour force survey), the forecast for primarily 2021 is affected by a break in the time series. For further information, see the article "The LFS reorganisation and the Riksbank's analysis of the labour market" in the February Monetary Policy Report.

Note. Potential hours refer to the long-term sustainable level for the number of hours worked according to the Riksbank's assessment.

Sources: Statistics Sweden and the Riksbank

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

Annual percentage change, calendar-adjusted data unless otherwise stated

	2019	2020	2021	2022	2023
Hourly wage, NMO	2,6 (2,6)	2,1 (2,0)	2,7 (2,6)	2,6 (2,5)	2,7 (2,6)
Hourly wage, NA	3,7 (3,9)	4,8 (5,0)	1,6 (1,4)	2,2 (2,1)	2,7 (2,6)
Employers' contribution*	0,1 (0,2)	-1,2 (-1,2)	0,7 (0,7)	0,0 (0,0)	0,0 (0,0)
Hourly labour cost, NA	3,9 (4,1)	3,7 (3,8)	2,3 (2,1)	2,2 (2,1)	2,7 (2,6)
Productivity	2,2 (1,7)	0,9 (0,8)	0,9 (1,4)	1,5 (0,7)	1,2 (1,1)
Unit labour cost	1,7 (2,5)	2,9 (3,1)	1,6 (0,7)	0,7 (1,4)	1,5 (1,5)

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

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

Sources: National Mediation Office, Statistics Sweden and the Riksbank

Table 6. International conditions

Annual percentage change, unless otherwise stated

GDP	PPP-weights	KIX-weights	2019	2020	2021	2022	2023
Euro area	0,12	0,49	1,3 (1,3)	-6,7 (-6,7)	4,9 (4,0)	4,3 (4,1)	1,8 (1,7)
USA	0,16	0,08	2,2 (2,2)	-3,5 (-3,5)	6,8 (6,5)	4,0 (3,4)	2,0 (1,6)
Japan	0,04	0,02	0,3 (0,3)	-4,9 (-4,9)	2,8 (2,8)	2,4 (2,4)	1,8 (1,8)
China	0,17	0,09	6,1 (6,1)	2,0 (2,0)	8,5 (8,5)	5,6 (5,6)	5,6 (5,7)
KIX-weighted	0,75	1,00	2,1 (2,1)	-5,0 (-5,0)	5,0 (4,6)	4,2 (4,1)	2,4 (2,3)
World (PPP-weighted)	1,00	—	2,8 (2,8)	-3,3 (-3,3)	6,2 (6,0)	4,5 (4,4)	2,7 (2,6)

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

CPI	2019	2020	2021	2022	2023
Euro area (HICP)	1,2 (1,2)	0,3 (0,3)	1,9 (1,8)	1,4 (1,3)	1,5 (1,5)
USA	1,8 (1,8)	1,2 (1,2)	4,0 (2,8)	2,7 (2,2)	2,3 (2,3)
Japan	0,5 (0,5)	0,0 (0,0)	0,2 (0,0)	0,5 (0,5)	0,4 (0,4)
KIX-weighted	1,8 (1,8)	1,1 (1,1)	2,1 (2,0)	1,8 (1,7)	1,8 (1,8)

	2019	2020	2021	2022	2023
Policy rates in the rest of the world, per cent	0,1 (0,1)	-0,3 (-0,3)	-0,3 (-0,3)	-0,3 (-0,3)	-0,2 (-0,2)
Crude oil price, USD/barrel Brent	64,1 (64,1)	43,3 (43,3)	67,5 (62,7)	67,1 (60,0)	63,6 (57,9)
Swedish export market	2,5 (2,5)	-8,3 (-8,7)	8,4 (7,8)	6,5 (6,5)	3,8 (3,7)

Note. Policy rates in the rest of the world refer to a weighted average of USA, the euro area, Norway and the United Kingdom.

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

Table 7. Summary of financial forecasts

Per cent, unless otherwise stated, annual average

	2019	2020	2021	2022	2023
Repo rate	-0,3 (-0,3)	0,0 (0,0)	0,0 (0,0)	0,0 (0,0)	0,0 (0,0)
10-year rate	0,1 (0,1)	0,0 (0,0)	0,4 (0,5)	0,8 (0,8)	1,1 (1,1)
Exchange rate, KIX, 18 November 1992 = 100	122,1 (122,1)	118,5 (118,5)	113,8 (113,7)	113,7 (113,4)	113,1 (112,7)
General government net lending*	0,6 (0,6)	-3,0 (-3,1)	-2,0 (-3,0)	-0,3 (-0,5)	0,4 (0,2)

* Per cent of GDP

Sources: Statistics Sweden and the Riksbank



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