



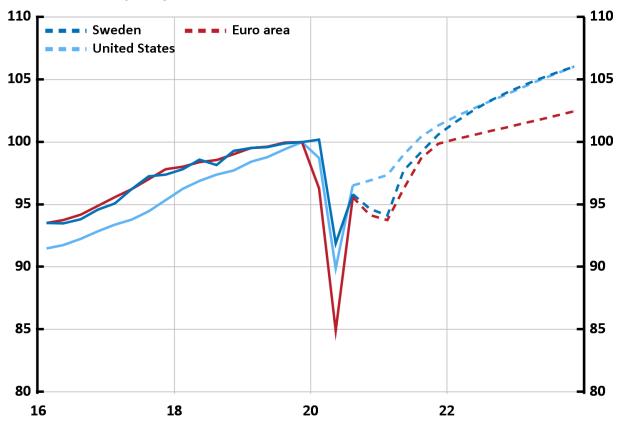






#### Figure 1. GDP in Sweden and abroad

Index, 2019 Q4 = 100, seasonally-adjusted data

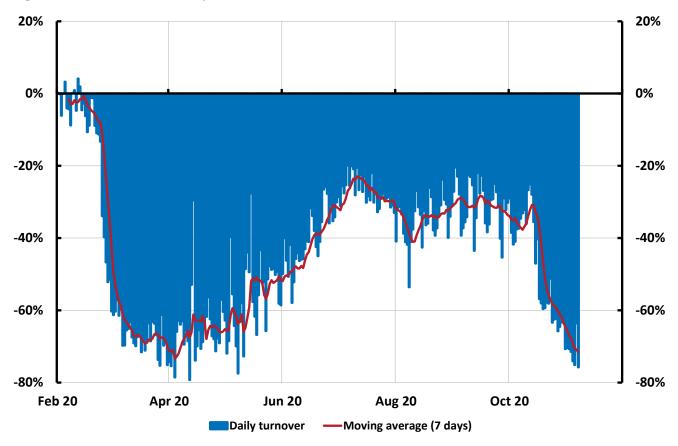


Note. Solid line represents outcome, broken line represents the Riksbank's forecast.

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

### Figure 2. Indicator for turnover in the restaurant industry

Percentage change in turnover compared to 2019



Note. The data consists of turnover on a daily level from about 600 establishments with an aver-age yearly turnover of SEK 18 million.

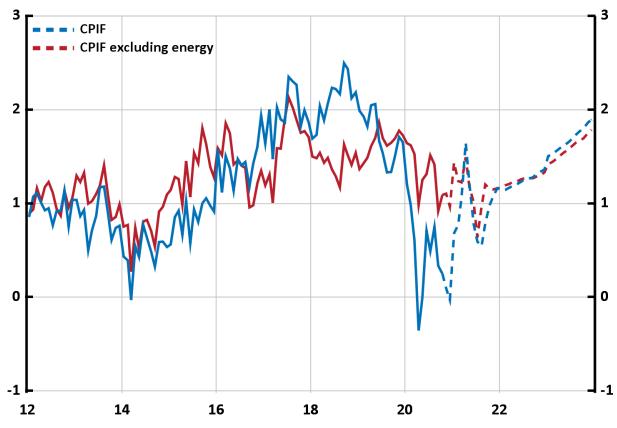


Source: Caspeco.se.



#### Figure 3. CPIF and CPIF excluding energy

Annual percentage change

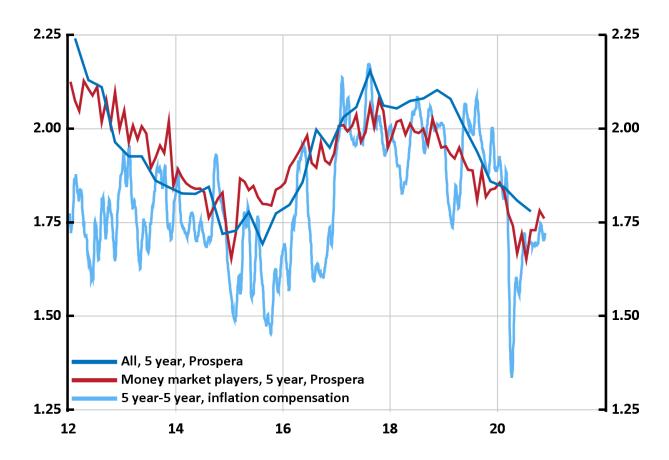


Sources: Statistics Sweden and the Riksbank.



#### Figure 4. Long-term inflation expectations

Per cent



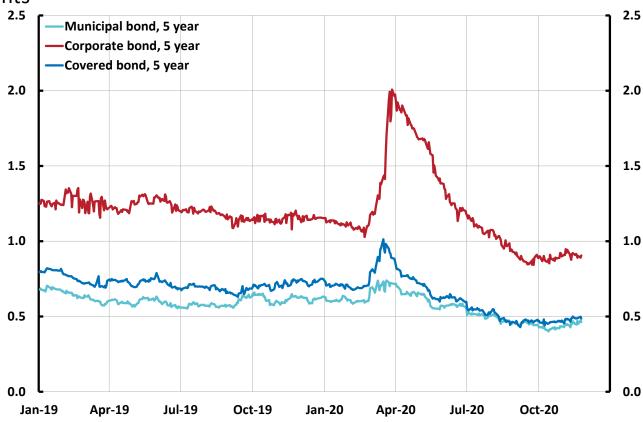
Note. Inflation compensation refers to a 5-year period starting in 5 years' time, calculated on the basis of bond yields, 15 days moving average.

Sources: Kantar Sifo Prospera and the Riksbank.

### Figure 5. Yield differential between different types of bond and government bonds







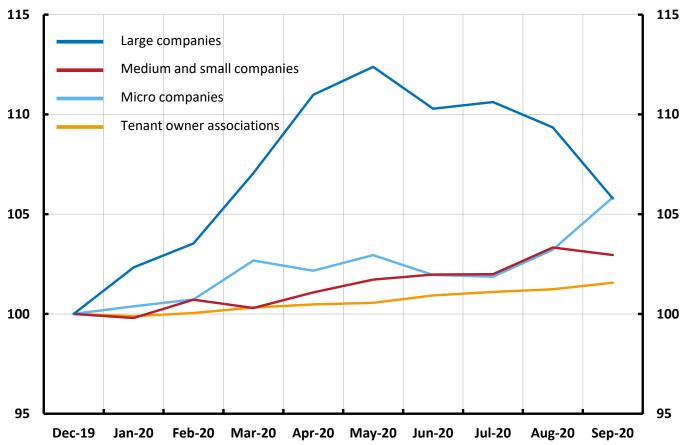
Note. Zero coupon rates calculated using the Nelson-Siegel method. The corporate bond series illustrates a heterogeneous group of bonds for companies with credit ratings of BBB or higher. Municipal bonds are issued by Kommuninvest i Sverige AB.

Sources: Macrobond, Refinitiv and the Riksbank





Index, December 2019 = 100



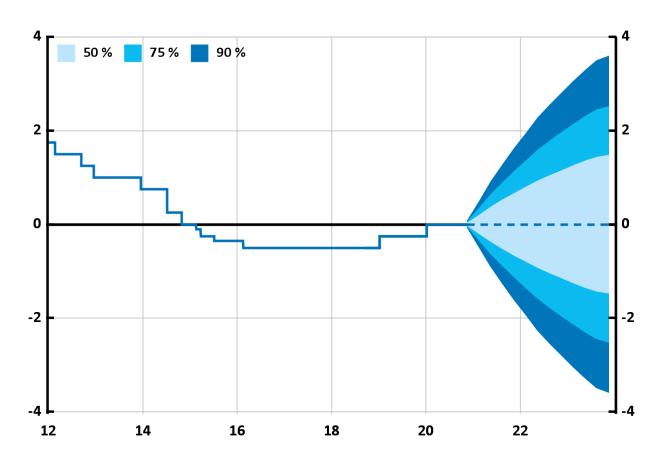
Note. Size categories in accordance with European Commission Recommendation (2003/361/EC), in which the combination of employees, turnover and assets determines the size classification.

Source: KRITA (Statistics Sweden).



#### Figure 7. Repo rate with uncertainty bands

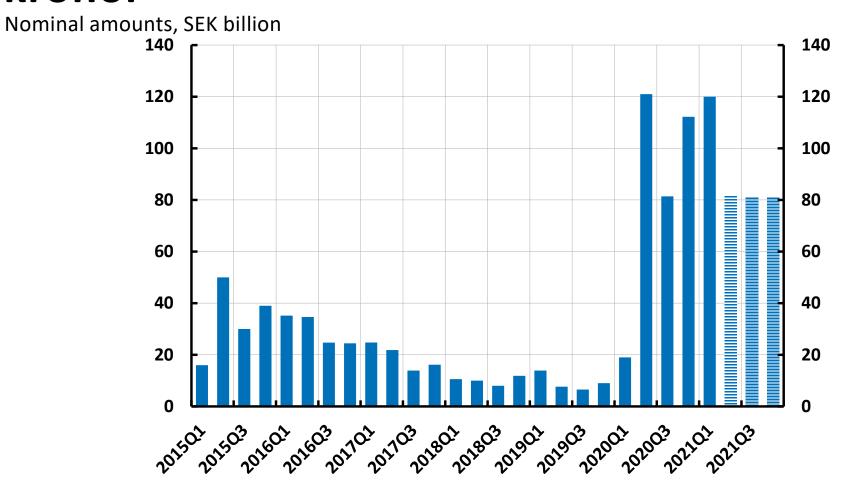
Per cent



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

### Figure 8. Purchases of bonds in Swedish kronor



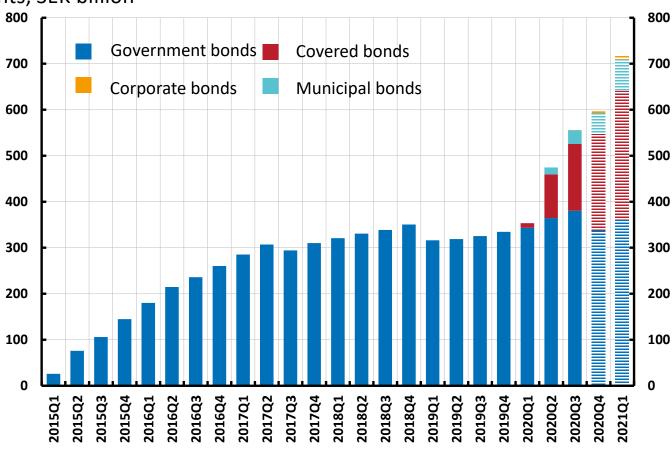


Note. The solid bars represent purchases that have been implemented or decided on with regard to government bonds, municipal bonds, covered bonds and treasury bills within the envelope of both the asset purchase programme introduced in February 2015 and the new asset purchase programme introduced in March 2020. Corporate bonds are also included, although only as forecasts for the final quarter of 2020 and the first quarter of 2021, as these purchases are not determined quarterly. The shaded bars illustrate an even purchase pace for the remainder of 2021.

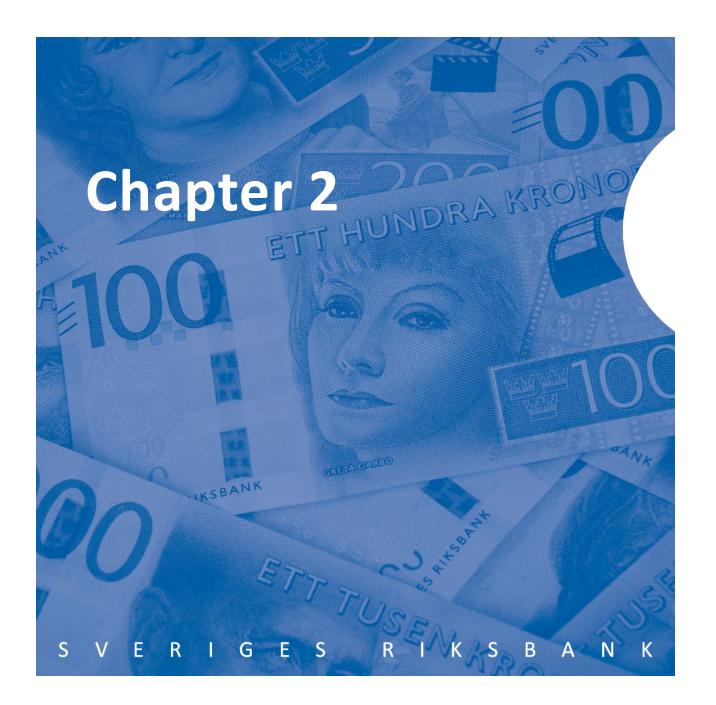


#### Figure 9. The Riksbank's bond holdings

Nominal amounts, SEK billion



Note. Holdings up to the first quarter of 2021 refer to decided purchases of government securities, municipal bonds and covered bonds. Government securities include both government bonds and treasury bills. For corporate bonds, the purchase decision covers the whole period up to 30 June 2021, without division into quarters. A forecast is shown for the final quarter of 2020 and first quarter of 2021.

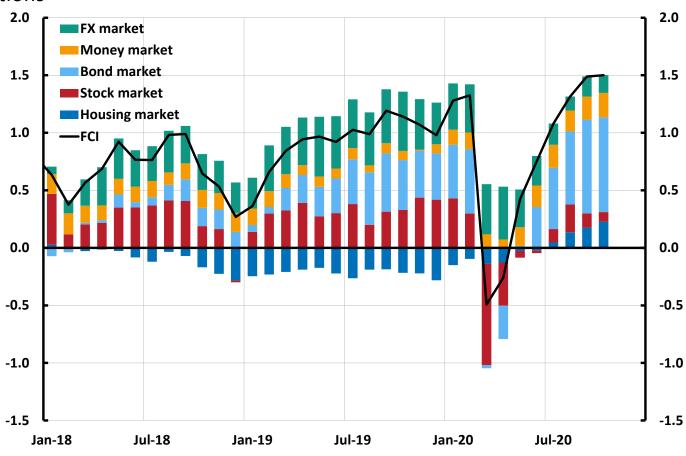




### Figure 10. Index for financial conditions in Sweden



Standard deviations

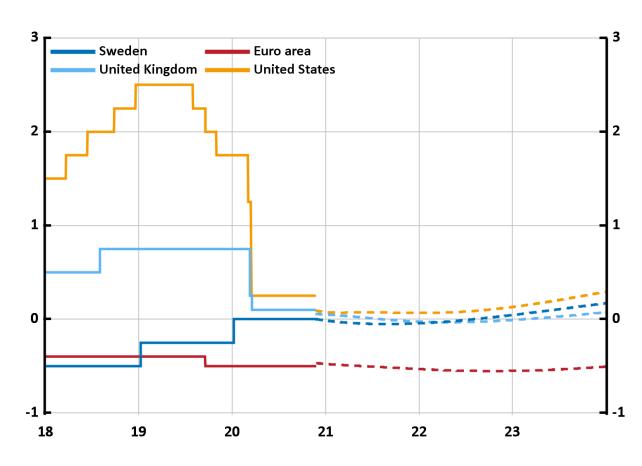


Note: A higher value indicates more expansionary financial conditions.





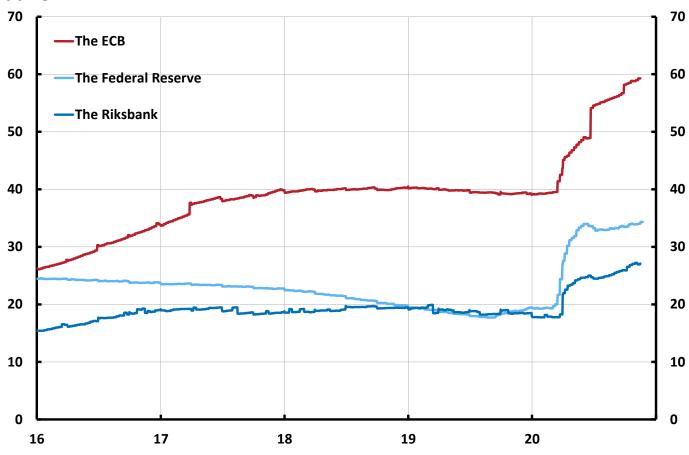
Per cent





### Figure 12. Central banks' balance sheet totals

Per cent of annual GDP



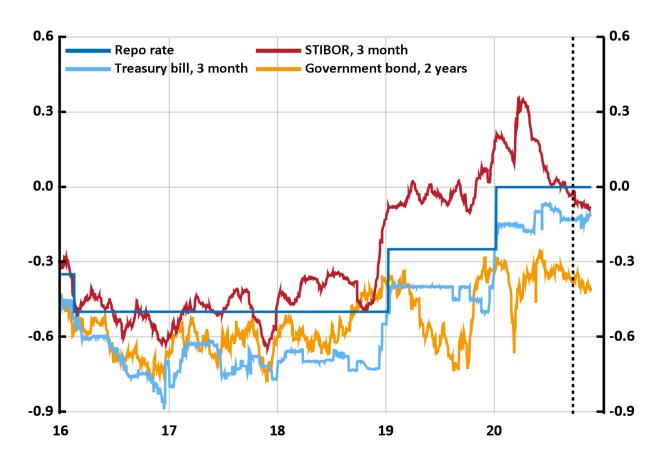
Note: Annual GDP is calculated as a total of the present quarter and the three previous quarters. For observations after 30 June 2020, annual GDP is the total of GDP for the third quarter of 2019 up to the second quarter of 2020.

Sources: Macrobond and the Riksbank.



#### Figure 13. The repo rate and market rates

Per cent



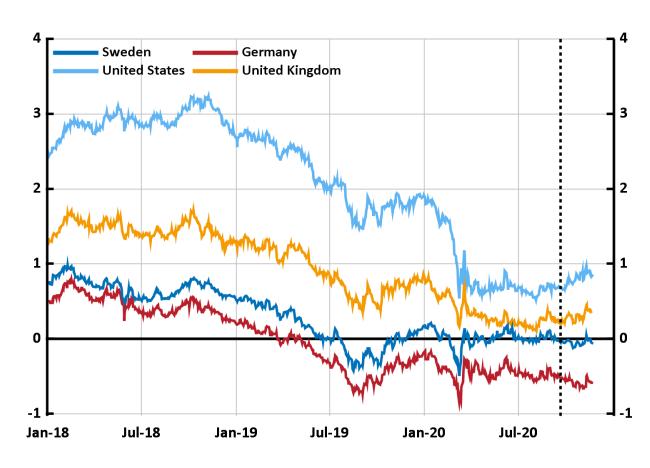
Note. The broken line marks the monetary policy meeting in September.

Sources: Macrobond, Refinitiv and the Riksbank.

### Figure 14. Government bond yields with 10 years to maturity



Per cent

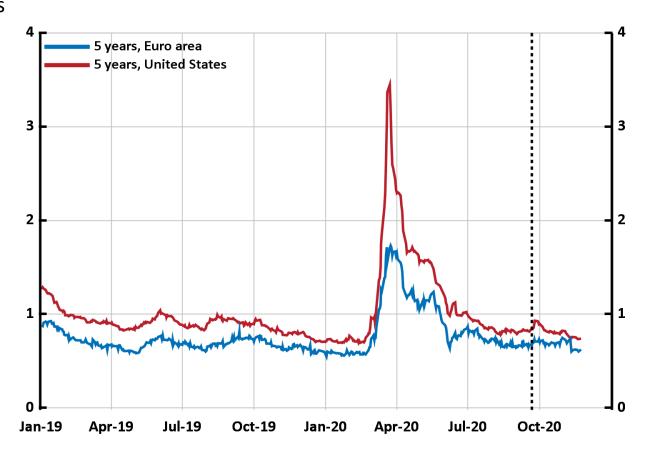


Note. Implied zero-coupon yields from government bonds for Sweden, Germany and United Kingdom. 10-year benchmark bonds for the United States. The broken line indicates the Monetary Policy meeting in September. Sources: The national central banks, US Treasury and the Riksbank.

## Figure 15. Difference between yields on corporate bonds and government bonds in the United States and euro area



Percentage points



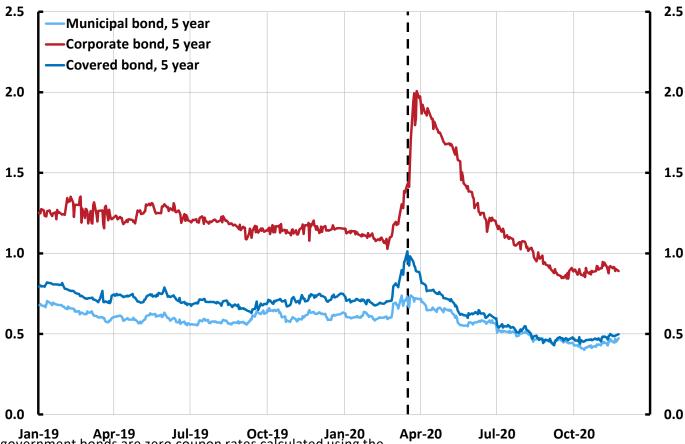
Note. Yield differentials refer to 5-year benchmark issued by companies with good credit ratings respectively benchmark sovereign bonds. The broken line indicates the Monetary Policy meeting in September.

Source: Macrobond.





Percentage points

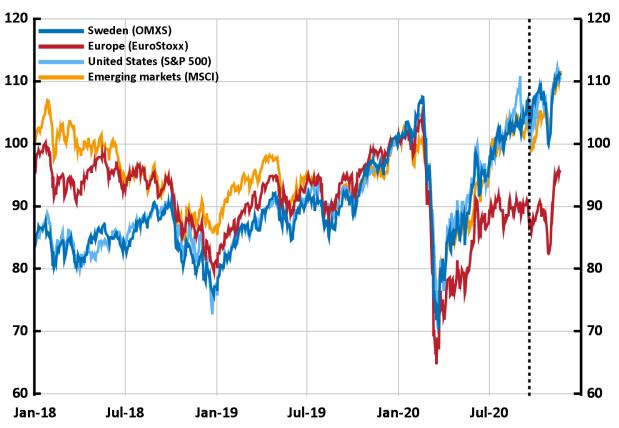


Note. Covered bonds, corporate bonds and government bonds are zero coupon rates calculated using the Nelson-Siegel method. Corporate bonds for companies with credit ratings of BBB or higher. Municipal bonds are benchmark bonds, issued by Kommuninvest i Sverige AB. The broken line marks 16 March 2020, when the Executive Board decided to extend the asset purchases to cover municipal bonds and covered bonds.

Sources: Bloomberg, Macrobond, Refinitiv and the Riksbank.

### Figure 17. Stock market movements in domestic currency

Index, 31 December 2019 = 100

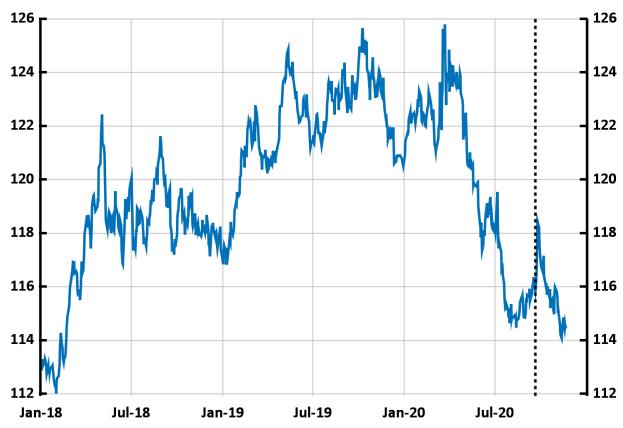






#### Figure 18. Nominal exchange rate, KIX

Index, 18 November 1992 = 100



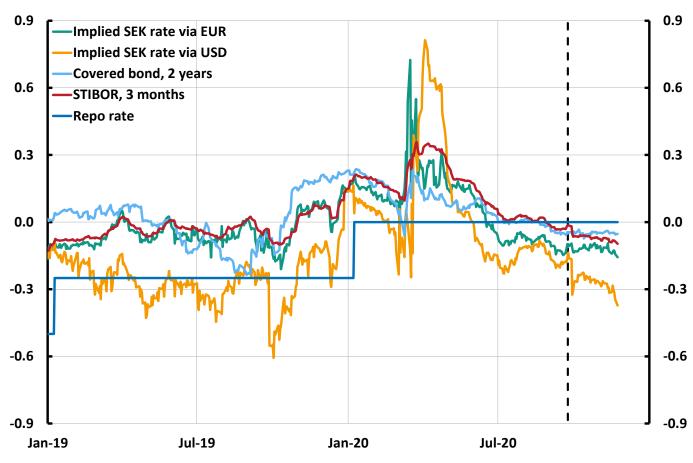
Note. The KIX (krona index) is a weighted average of the currencies in 32 countries that are important for Sweden's international trade. A higher value indicates a weaker exchange rate. The broken line indicates the Monetary Policy meeting in September.

Sources: National sources and the Riksbank.

### Figure 19. The repo rate and the banks' financing rates

SVERIGES RIKSBANK

Per cent



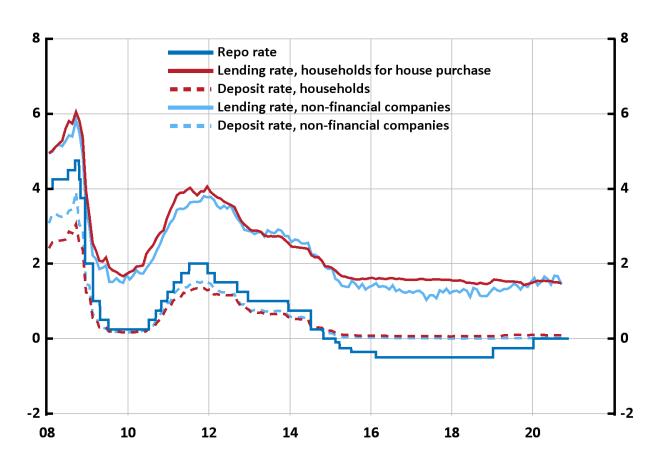
Note. The implied SEK interest rates are calculated using spot rates and forward exchange rates, as well as 3-month interest rates (EURIBOR and USD LIBOR). The broken line marks the date of the monetary policy meeting in September.

Sources: Bloomberg, Macrobond and the Riksbank.

# Figure 20. Repo rate together with the average deposit and lending rate to households and companies, new and renegotiated loans



Per cent

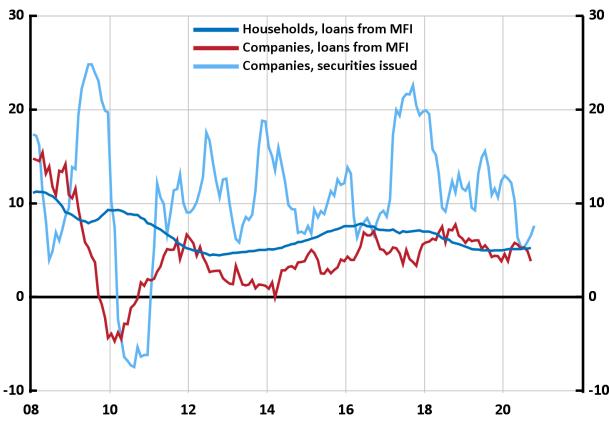


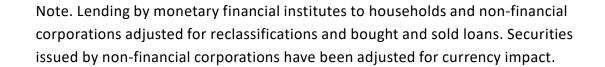
Note. Monetary financial instituts average deposit and lending rates are a weighted average of all interest rates for different maturities.

Sources: Statistics Sweden and the Riksbank.

### Figure 21. Lending to households and companies

Annual percentage change





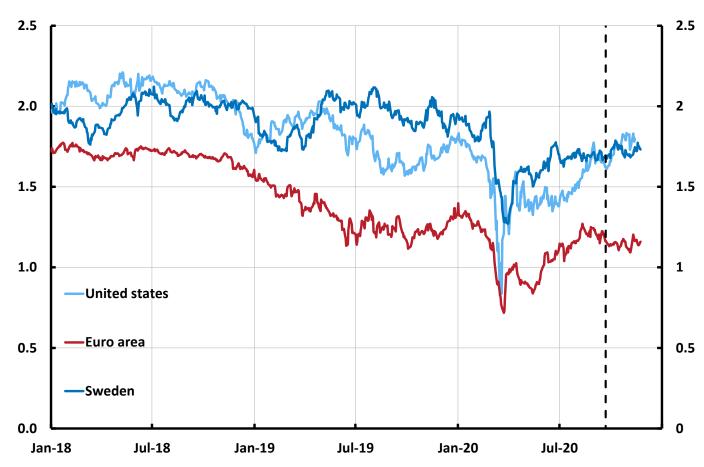


Source: Statistics Sweden.

### Figure 22. Market measure of long-term inflation expectations



Per cent



Note. Inflation expectations refer to a 5-year period starting in 5 years' time. For the United States and Sweden, these are calculated on the basis of bond yields and refer to the CPI. For the euro area, they are calculated on the basis of inflation swaps and refer to the HICP. The broken line marks the date of the monetary policy meeting in September.

Sources: Bloomberg, Macrobond and the Riksbank.

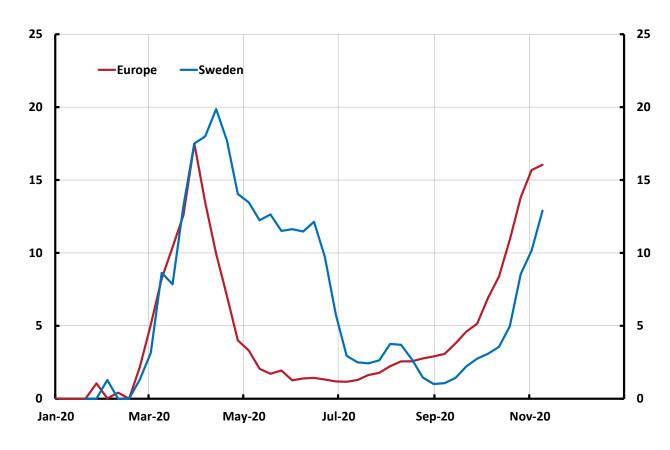








Percentage of those tested

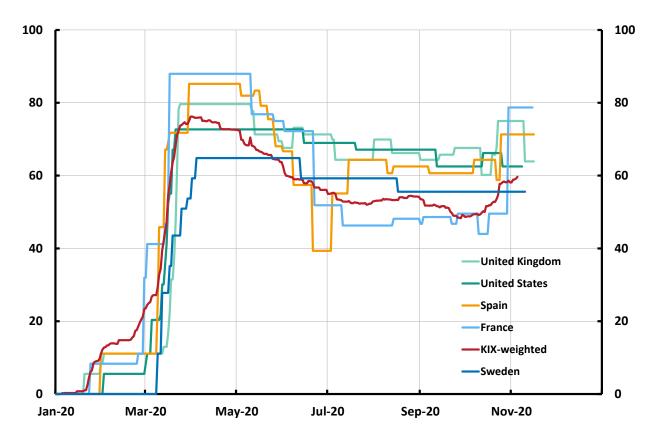


Note. The series show the percentage of positive tests for COVID-19 until the week ending on 15 November. The series for Europe includes 30 countries (EEA excluding Liechtenstein) and is weighted according to population size, 2019.

Sources: European Centre for Disease Prevention and Control (ECDC) and the Riksbank.



## Figure 24. Measures of the extent of government restrictions to reduce the spread of infection



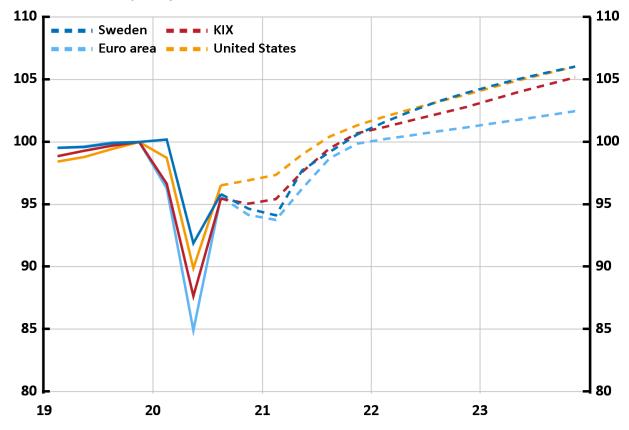
Note. The index measures the extent of measures to combat the spread of COVID-19. The index consists of nine components that describe different types of restrictions, such as closing of schools, travel bans, etc. Each component usually has a three-point scale corresponding to "no measures", "some kind of instruction" and "a ban". The index corresponds to the average of all components. The KIX is an aggregate of 31 countries that are important for Sweden's international trade.

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



#### Figure 25. GDP in Sweden and abroad

Index, 2019 Q4 = 100, seasonally-adjusted data



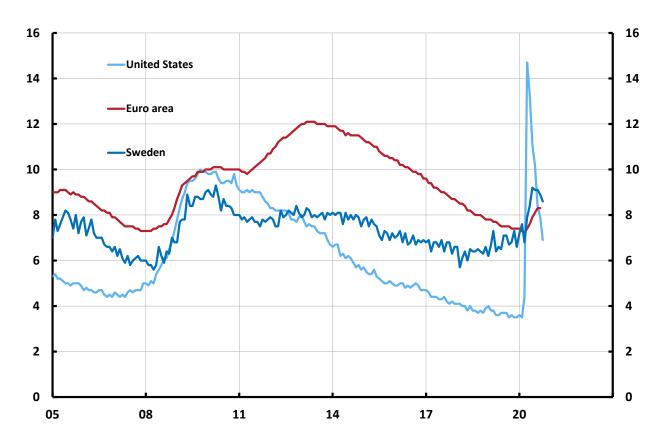
Note. KIX is an aggregate of the countries that are important to Sweden's international trade. Solid line represents outcome, broken line represents forecast.

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





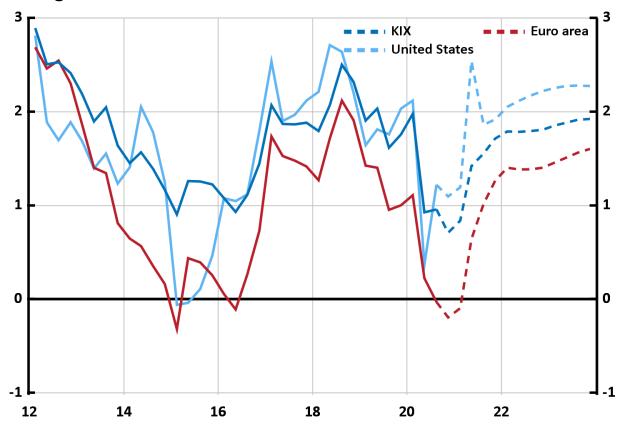
Percentage of the labour force, seasonally-adjusted data

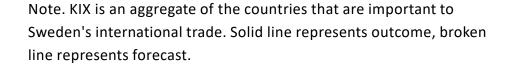


Sources: The Bureau of Labor Statistics, Eurostat and Statistics Sweden.

### Figure 27. Consumer prices in various countries and regions

Annual percentage change





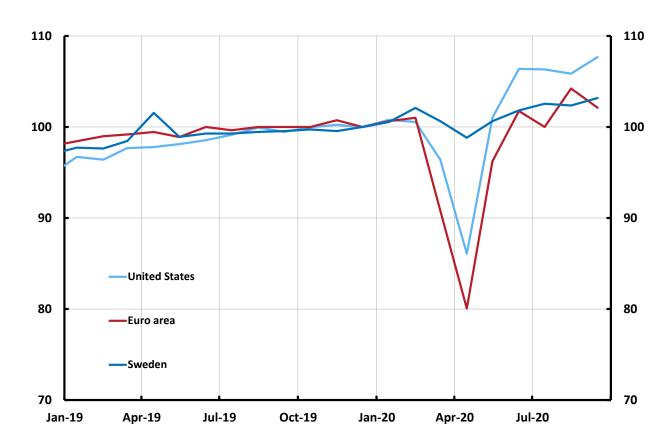








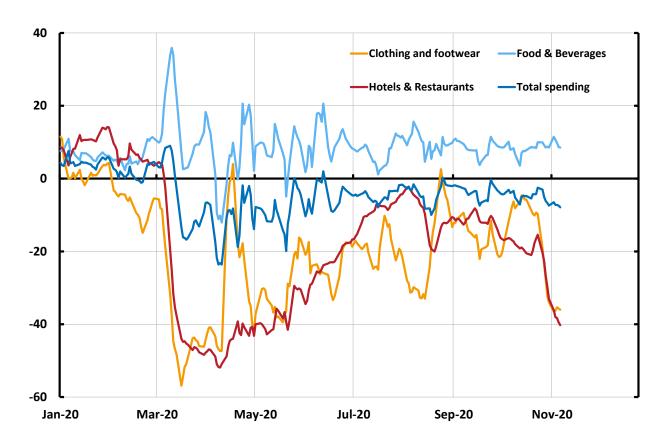
Index, December 2019 = 100, seasonally-adjusted data





#### Figure 29. Card payments

Annual percentage change, 7-year moving average

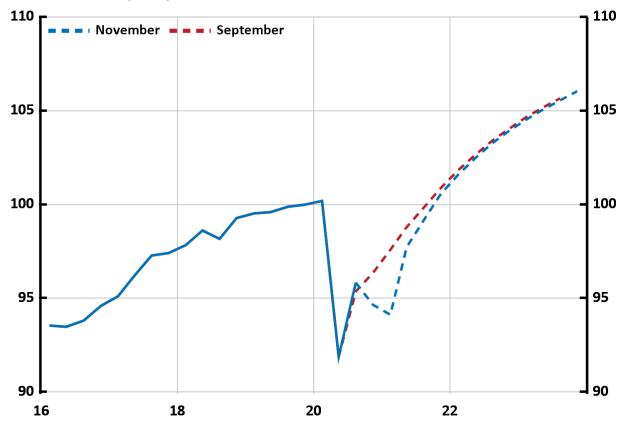


Source: Swedbank Pay.



#### Figure 30. GDP in Sweden

Index, 2019 Q4 = 100, seasonally-adjusted data



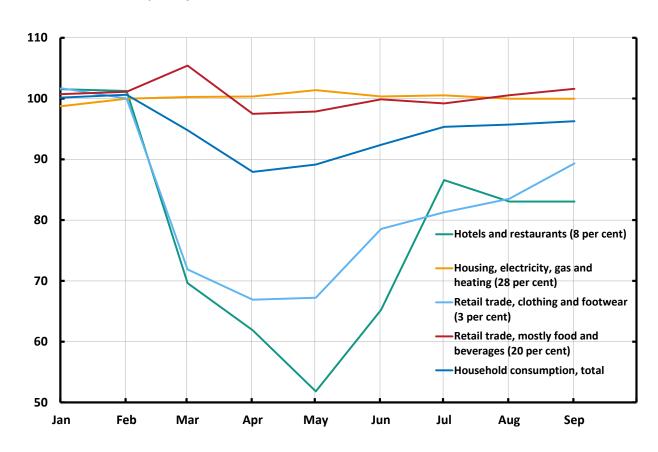
Note. Solid line represents outcome, broken line represents forecast.

Sources: Statistics Sweden and the Riksbank.





Index, 2019 Q4 = 100, seasonally-adjusted data



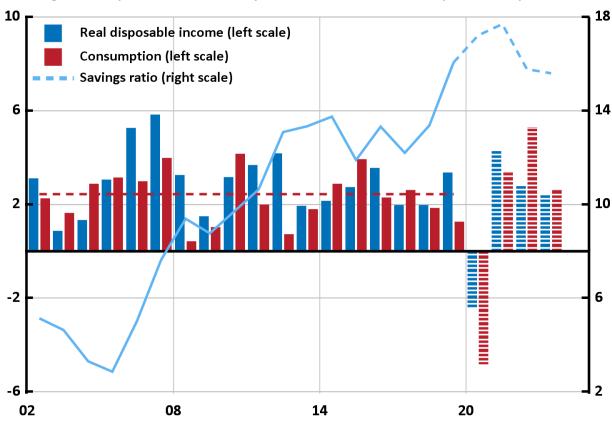
Note: The percentage in brackets refers to the subgroups' proportion of household consumption expenditure (excluding international items).

Source: Statistics Sweden.





Annual percentage change and per cent of disposable income, respectively



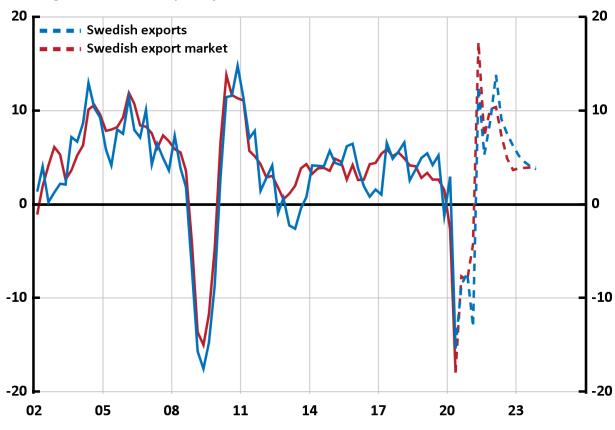
Note. Disposable income has been deflated using the household consumption deflator. Broken red line is the average of consumption growth 1994–2019. Solid line and solid bar represents outcome, broken line and broken bar represents forecast.

Sources: Statistics Sweden and the Riksbank.





Annual percentage change, seasonally-adjusted data

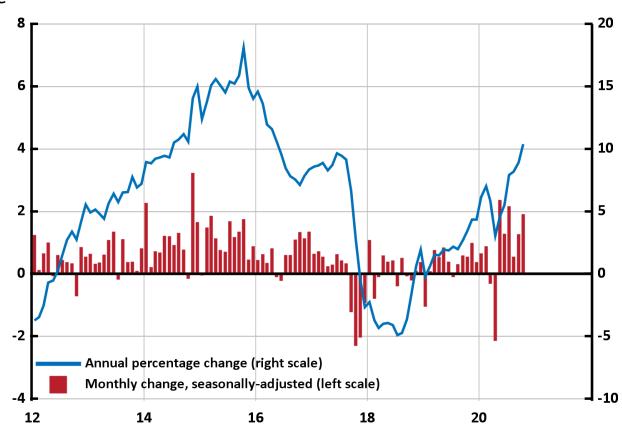


Note. The Swedish export market index measures import demand in the countries to which Sweden exports. This is calculated by aggregating imports in the countries included in KIX and covers around 85 per cent of the total Swedish export market. Solid line represents outcome, broken line represents forecast.





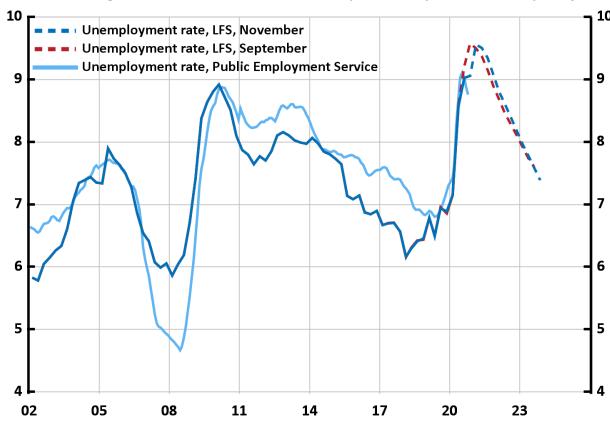
Percentage change







Per cent of the labour force, aged 15-74 and 16-64, respectively, seasonally-adjusted data



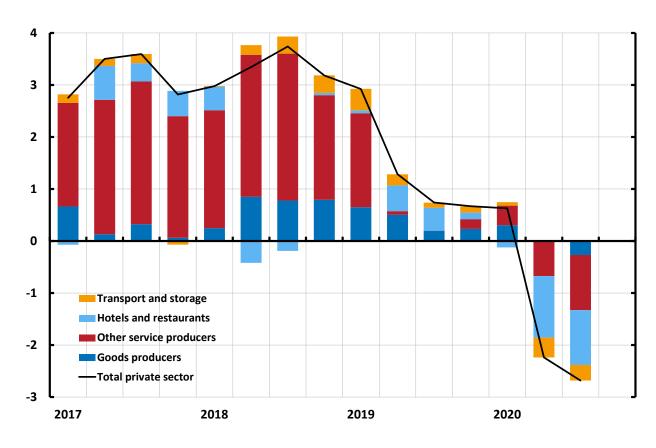
Note. Unemployed persons according to the Public Employment Service include openly unemployed and participants in labour market programmes. Solid line represents outcome, broken line represents forecast.

Sources: The Swedish Public Employment Service and Statistics Sweden.





Annual percentage change and contribution in per cent

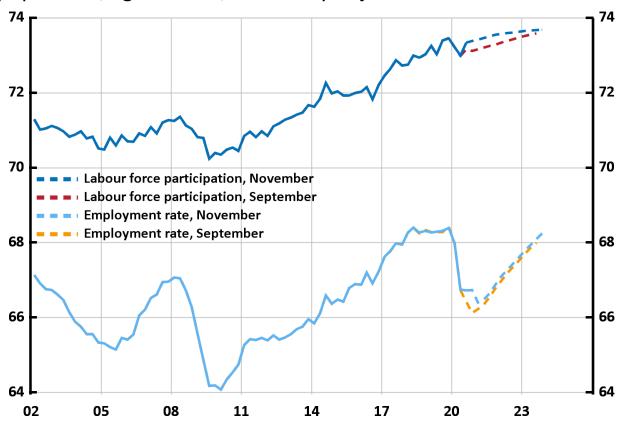


Source: Statistics Sweden (short-term employment).





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

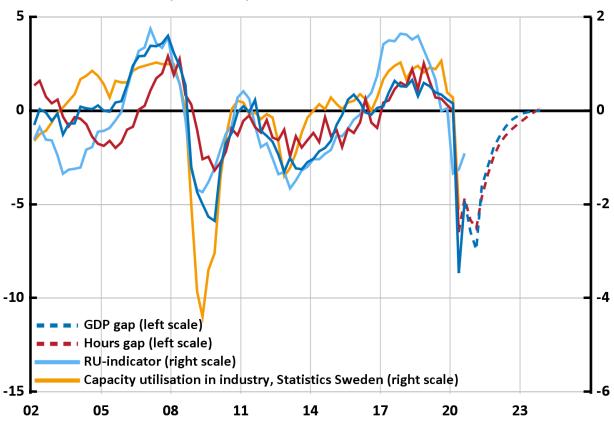


Note. Solid line represents outcome, broken line represents forecast.



### Figure 38. Measure of capacity utilization

Per cent and standard deviations, respectively

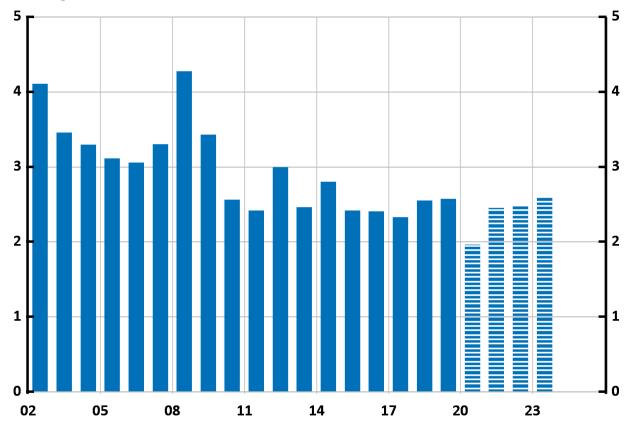


Note. The gaps refer to the deviation of GDP and number of hours worked from the Riksbank's assessed trends. The RU-indicator is a statistical measure of resource utilisation. The RU-indicator and the Capacity utilisation in industry are normalised so that the mean value is 0 and the standard deviation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





Annual percentage change



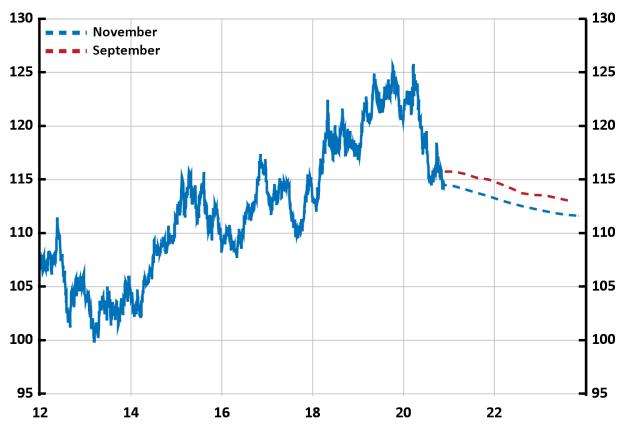
Note. Solid bar represents outcome, broken bar represents forecast.

Sources: Swedish National Mediation Office and the Riksbank.



### Figure 40. Nominal exchange rate, KIX

Index, 18 November 1992 = 100



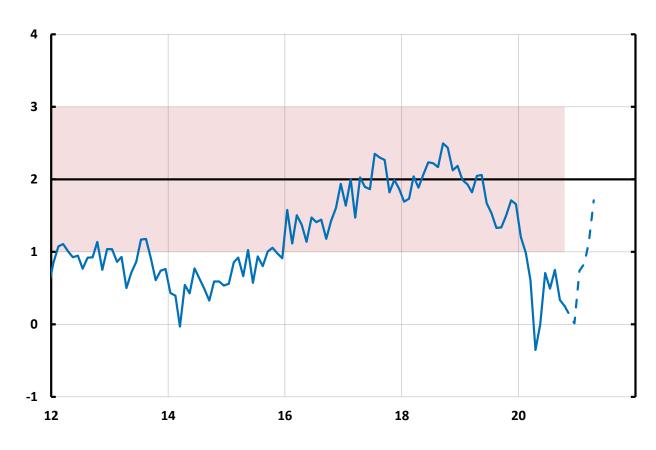
Note. KIX (krona index) is a weighted average of the currencies in 32 countries that are important for Sweden's international trade. A higher value indicates a weaker exchange rate. Outcomes are daily data and forecasts refer to quarterly averages. Solid line represents outcome, broken line represents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

Source: the Riksbank.



### Figure 41. CPIF and variation band

Annual percentage change

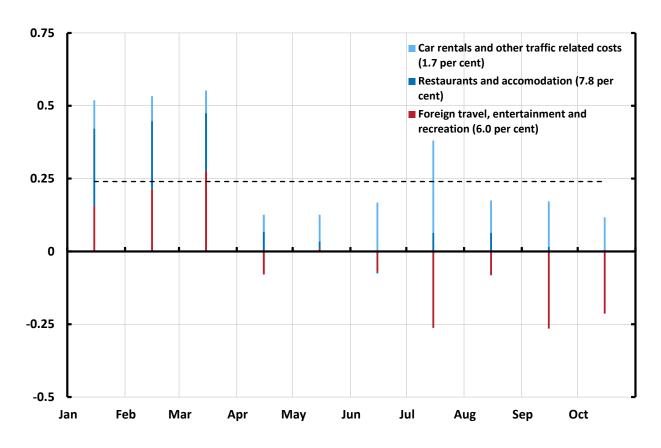


Note. The pink area shows the Riksbank's variation band and covers about three-quarters of the outcomes since January 1995. The variation band is a means of showing whether the deviation from the inflation target is unusually large. The solid line represents outcome, the broken line represents forecast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





Percentage points

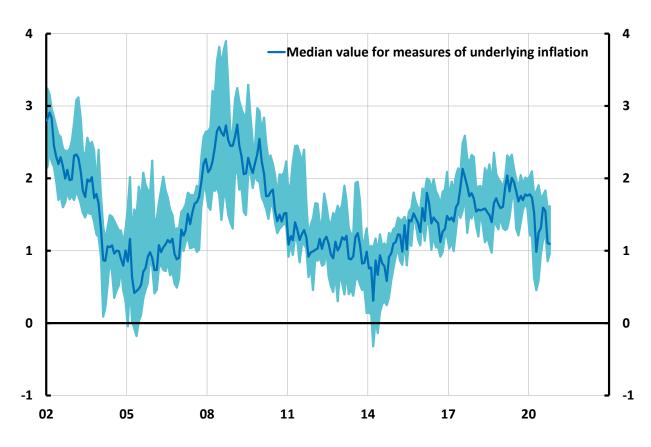


Note. The percentage in brackets refers to the product groups' weight in the CPIF. The broken line represents the mean value of the contributions from the three product groups since 2012.





Annual percentage change

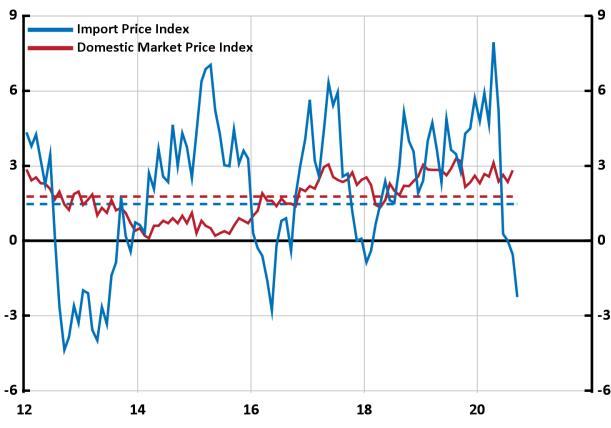


Note. The field shows the highest and lowest outcome among 7 different measures of underlying inflation: CPIF excluding energy, UND24, Trim85, CPIF excluding energy and perishables, persistence-weighted inflation (CPIFPV), factors from principal component analysis (CPIFPC) and weighted mean inflation (Trim1).



## Figure 44. Producer prices for consumer goods

Annual percentage change



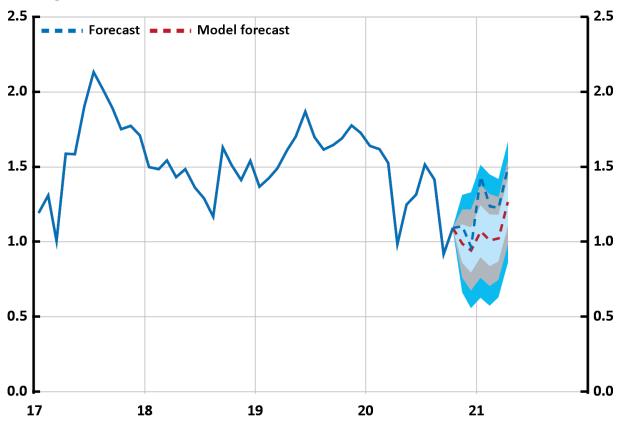
Note. The import price index measures how much Swedish importers pay for their goods at the border. Domestic market prices measure how much Swedish producers are paid when sales take place in Sweden. Broken line represents the average since 2000.

Source: Statistics Sweden.





Annual percentage change

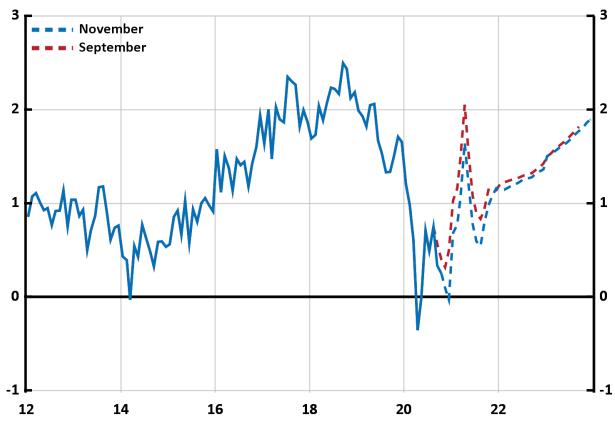


Note. The uncertainty bands 50, 75 and 90 per cent are based on the models' historical forecast errors. Solid line represents outcome, broken line represents forecast.



# Figure 46. CPIF

Annual percentage change



Note. Solid line represents outcome, broken line represents forecast.

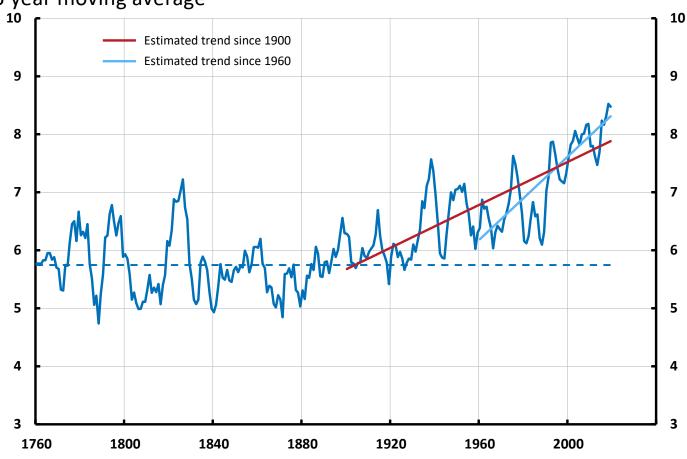




# Figure 47. Temperature in Stockholm since 1760



Degrees Celsius, 5 year moving average



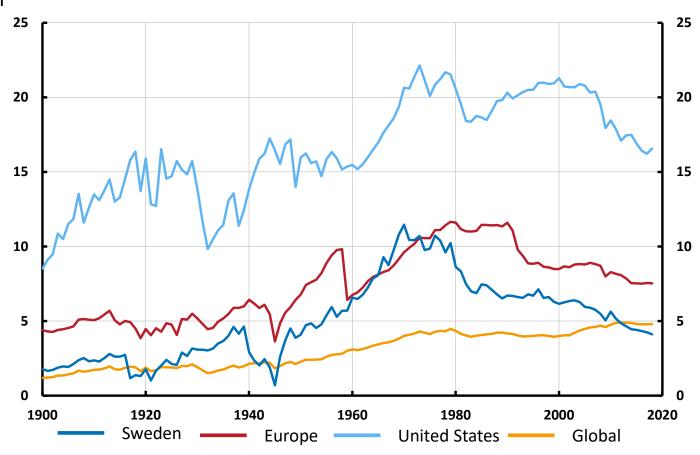
Note: The broken line shows the mean from 1760 to 1900.

Source: Stockholm University.





Tones per person

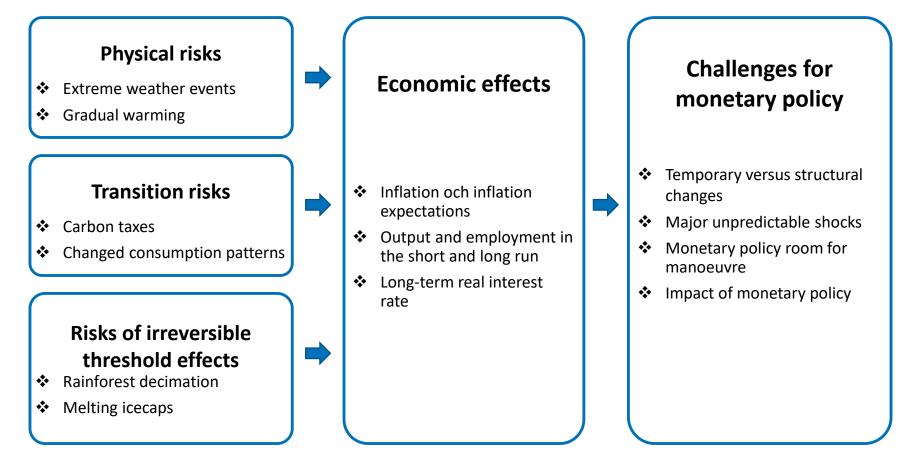


Note: Carbon dioxide emissions (CO2) refer to emissions from burning fossil fuels to produce energy and cement.

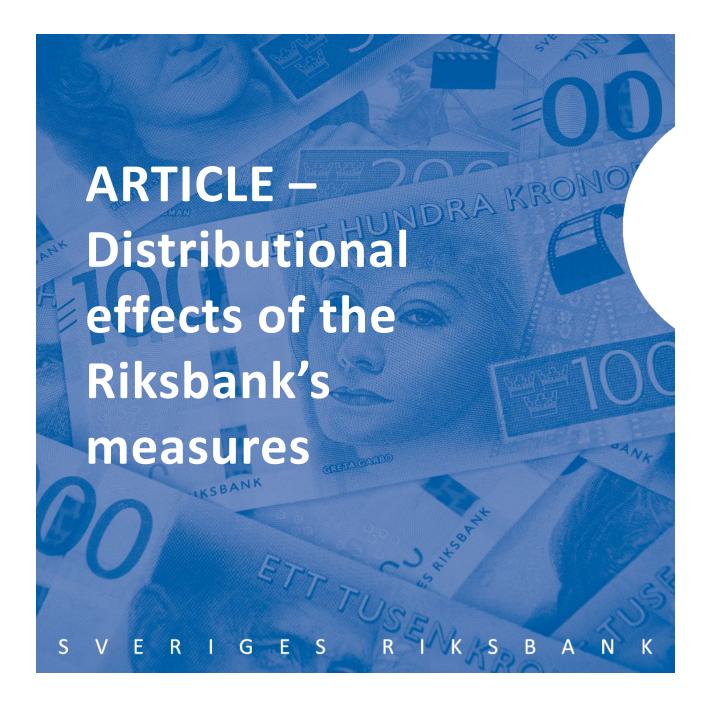
Source: Our World in Data (OWID).







Sources: Network for Greening the Financial System and the Riksbank.

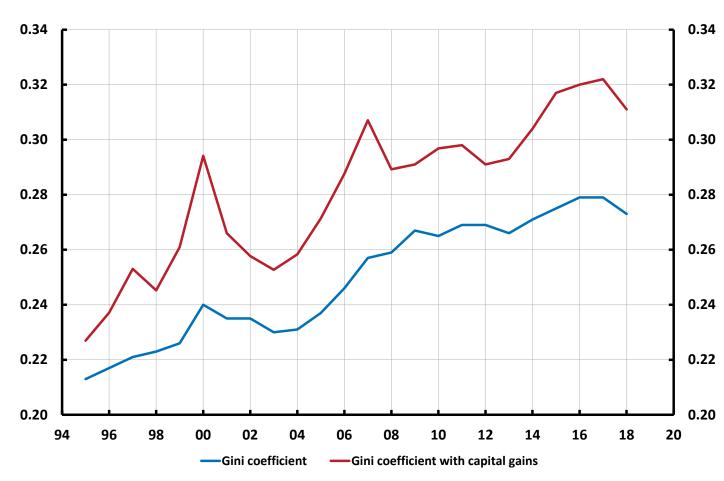




# Figure 50. Gini coefficient for disposable household income



Gini index



Note: The calculations are based on Statistics Sweden's surveys Household finances (HEK) 2005–2012 and Income and tax statistics (IoS) 2013–2018. The calculations take account of the varying compositions of different households.

Source: Statistics Sweden.

#### **Tables**

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

Table 1. Repo rate forecast

Per cent, quarterly averages

	Q3 2020	Q4 2020	Q1 2021	Q4 2021	Q4 2022	Q4 2023
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: Riksbanken.

**Table 2. Inflation** 

Annual percentage change, annual average

	2019	2020	2021	2022	2023
CPIF	1.7 (1.7)	0.4 (0.5)	0.9 (1.2)	1.2 (1.3)	1.7
CPIF excl. energy	1.6 (1.6)	1.3 (1.4)	1.2 (1.2)	1.3 (1.2)	1.6
СРІ	1.8 (1.8)	0.4 (0.6)	0.8 (1.1)	1.2 (1.3)	1.8
НІСР	1.7 (1.7)	0.6 (0.7)	0.7 (1.2)	1.2 (1.2)	1.6

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

Sources: Statistics Sweden and the Riksbank.

**Table 3. Summary of financial forecasts** 

Per cent, unless otherwise stated, annual average

	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
Yields on 10-year government bonds	0.1 (0.1)	0.0 (0.0)	0.3 (0.4)	0.7 (0.7)	1.0
Exchange rate, KIX, 18 November 1992 = 100	122.1 (122.1)	118.6 (118.7)	113.9 (115.4)	112.7 (114.0)	111.8
General government net lending*	0.5 (0.4)	-4.4 (-4.5)	-3.6 (-2.6)	-1.2 (-0.6)	-0.4

<sup>\*</sup> Per cent of GDP

**Table 4. 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)	-7.1 (-8.5)	4.7 (5.6)	3.7 (3.8)	1.3
USA	0.16	0.08	2.2 (2.2)	-3.7 (-4.3)	4.2 (4.4)	3.4 (3.4)	2.2
Japan	0.04	0.02	0.7 (0.7)	-5.1 (-5.5)	3.1 (2.5)	1.4 (1.4)	1.1
China	0.17	0.09	6.1 (6.1)	1.6 (2.0)	9.1 (9.4)	5.7 (5.7)	5.5
KIX-weighted	0.75	1.00	2.1 (2.0)	-5.8 (-6.2)	4.9 (5.6)	3.8 (4.3)	2.3
World	1.00	_	2.8 (2.9)	-4.4 (-3.0)	5.2 (5.8)	4.2 (3.6)	3.8

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.

КРІ	2019	2020	2021	2022	2023
Euro area (HICP)	1.2 (1.2)	0.3 (0.4)	0.7 (1.0)	1.4 (1.4)	1.5
USA	1.8 (1.8)	1.2 (1.2)	1.9 (1.9)	2.1 (2.0)	2.3
Japan	0.5 (0.5)	0.0 (-0.1)	0.1 (0.1)	0.4 (0.4)	0.4
KIX-weighted	1.8 (1.8)	1.1 (1.2)	1.4 (1.5)	1.8 (1.9)	1.9

	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)	-0.3
Crude oil price, USD/barrel Brent	64.1 (64.1)	42.3 (43.4)	42.7 (46.8)	44.8 (48.8)	46.2
Swedish export market	2.5 (2.5)	-9.1 (-10.2)	7.2 (8.3)	6.5 (7.1)	3.9

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 5. GDP by expenditure

Annual percentage change, unless otherwise stated

	2019	2020	2021	2022	2023
Private consumption	1.3 (1.3)	-4.8 (-4.5)	3.4 (4.5)	5.3 (3.7)	2.6
Public consumption	0.1 (0.1)	0.1 (0.2)	2.3 (2.9)	2.3 (2.1)	1.1
Gross fixed capital formation	-1.0 (-1.0)	-3.8 (-3.5)	1.2 (2.3)	5.2 (4.0)	2.3
Inventory investment*	-0.1 (-0.1)	-0.8 (-0.7)	0.1 (0.2)	0.2 (0.0)	0.0
Exports	3.3 (3.3)	-6.7 (-7.3)	3.1 (6.5)	9.0 (7.0)	3.9
Imports	1.1 (1.1)	-7.1 (-7.8)	3.3 (7.0)	8.4 (6.5)	3.9
GDP	1.3 (1.3)	-4.0 (-3.6)	2.6 (3.7)	5.0 (3.7)	2.2
GDP, calendar-adjusted	1.3 (1.3)	-4.2 (-3.9)	2.5 (3.5)	5.0 (3.7)	2.4
Final domestic demand*	0.3 (0.3)	-3.1 (-2.8)	2.4 (3.4)	4.3 (3.2)	2.0
Net exports*	1.0 (1.0)	-0.1 (-0.1)	0.0 (0.1)	0.5 (0.5)	0.2
Current account (NA), per cent of GDP	4.2 (4.1)	4.7 (4.8)	4.6 (4.6)	4.9 (4.8)	4.9

<sup>\*</sup>Contribution to GDP growth, percentage points

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

Sources: Statistics Sweden and the Riksbank.

**Table 6. Production and employment** 

Annual percentage change, unless otherwise stated

	2019	2020	2021	2022	2023
Population, aged 15–74	0.7 (0.7)	0.4 (0.4)	0.4 (0.4)	0.4 (0.4)	0.4
Potential hours worked	0.8 (0.8)	0.7 (0.7)	0.6 (0.6)	0.5 (0.5)	0.5
Potential GDP	1.7 (1.7)	1.6 (1.6)	1.6 (1.6)	1.6 (1.6)	1.7
GDP, calendar-adjusted	1.3 (1.3)	-4.2 (-3.9)	2.5 (3.5)	5.0 (3.7)	2.4
Number of hours worked, calendar-adjusted	-0.3 (-0.3)	-4.3 (-4.1)	0.6 (1.9)	3.6 (2.2)	1.6
Employed, aged 15–74	0.7 (0.7)	-1.5 (-1.8)	-0.3 (-0.1)	1.5 (1.6)	1.4
Labour force, aged 15–74	1.2 (1.1)	0.3 (0.2)	0.7 (0.6)	0.6 (0.6)	0.5
Unemployment, aged 15–74 *	6.8 (6.8)	8.4 (8.6)	9.4 (9.2)	8.5 (8.4)	7.7
GDP gap**	0.9 (0.9)	-4.8 (-4.6)	-4.1 (-2.7)	-0.8 (-0.6)	-0.1
Hours gap**	0.8 (0.8)	-4.2 (-4.0)	-4.2 (-2.7)	-1.2 (-1.1)	-0.2

<sup>\*</sup> Per cent of the labour force \*\*Deviation from the Riksbank's assessed potential level, per cent

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

Table 7. 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)	2.0 (1.7)	2.5 (2.3)	2.5 (2.7)	2.6
Hourly wage, NA	3.9 (3.9)	4.4 (4.3)	1.0 (0.4)	1.7 (2.5)	2.6
Employers' contribution*	0.1 (0.1)	-1.1 (-1.2)	1.0 (0.9)	0.0 (0.0)	0,0
Hourly labour cost, NA	4.0 (4.0)	3.3 (3.2)	1.9 (1.4)	1.7 (2.5)	2.6
Productivity	1.6 (1.6)	0.1 (0.2)	1.8 (1.6)	1.4 (1.5)	0.8
Unit labour cost	2.5 (2.5)	3.2 (3.0)	0.1 (-0.3)	0.3 (1.0)	1.7

<sup>\*</sup> 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 costs per hour are defined as the sum of actual wages, social security charges and wage taxes (total labour cost) divided by the total number of hours worked for employees. Unit labour costs are defined as the total labour cost divided by GDP at fixed prices. Via the short-time work scheme, companies can reduce the number of hours with government support while payroll expenses will not decrease as much. This means that the measured growth in hourly wages according to NA and unit labour costs will rise this year. However, companies' costs are also expected to increase more slowly than the statistics will show, as the government is providing support through the short-time work scheme.

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