



# Monetary Policy Report April 2018

S V E R I G E S R I K S B A N K



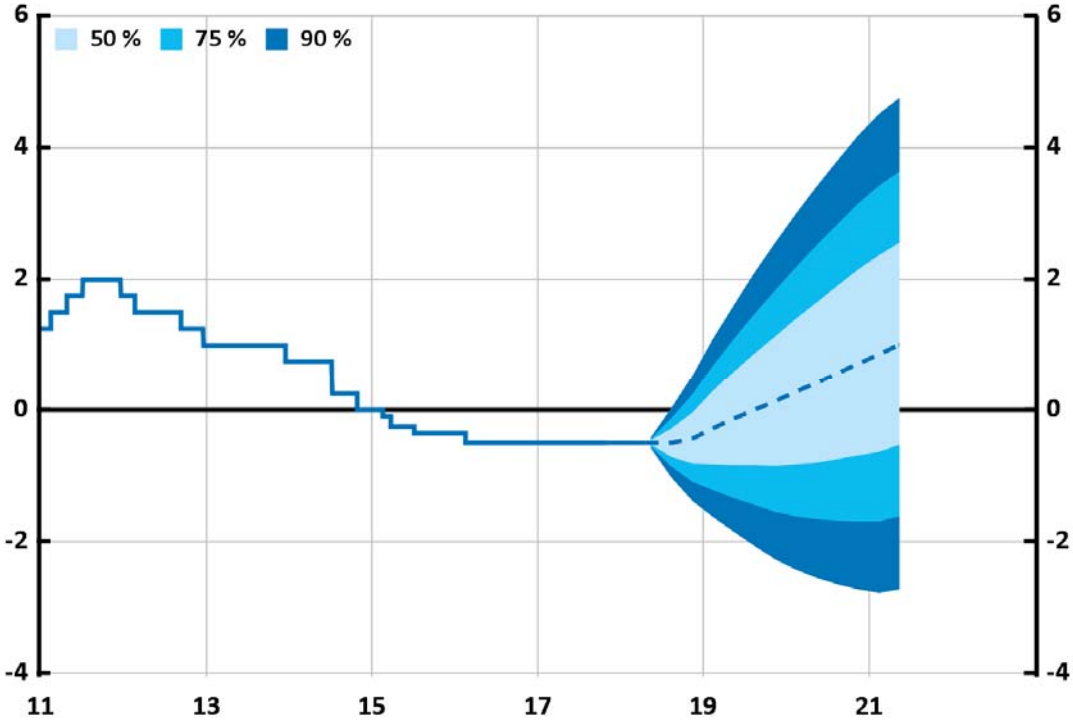
# Chapter 1

S V E R I G E S R I K S B A N K



# Figure 1.1. Repo rate with uncertainty bands

Per cent

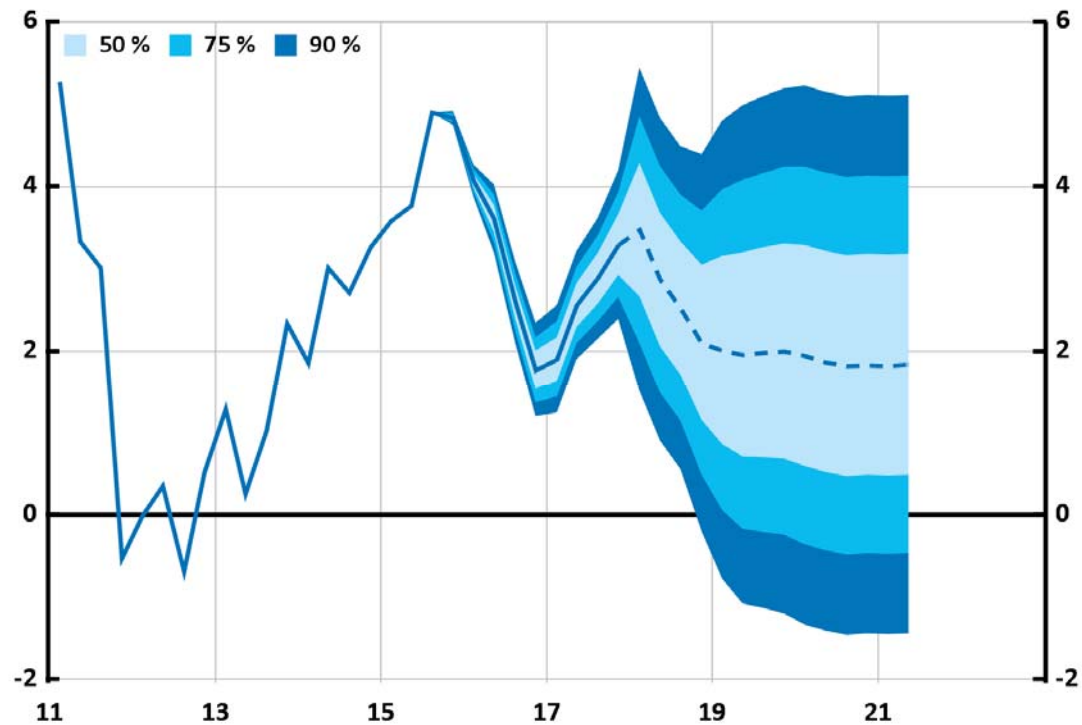


Note. The uncertainty bands for the repo rate are based on the Riksbank’s historical forecasting errors and the ability of risk-premium adjusted forward rates to forecast the future repo rate for the period 1999 up to the point when the Riksbank started to publish forecasts for the repo rate during 2007.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

Source: The Riksbank

# Figure 1.2. GDP with uncertainty bands

Annual percentage change, seasonally-adjusted data

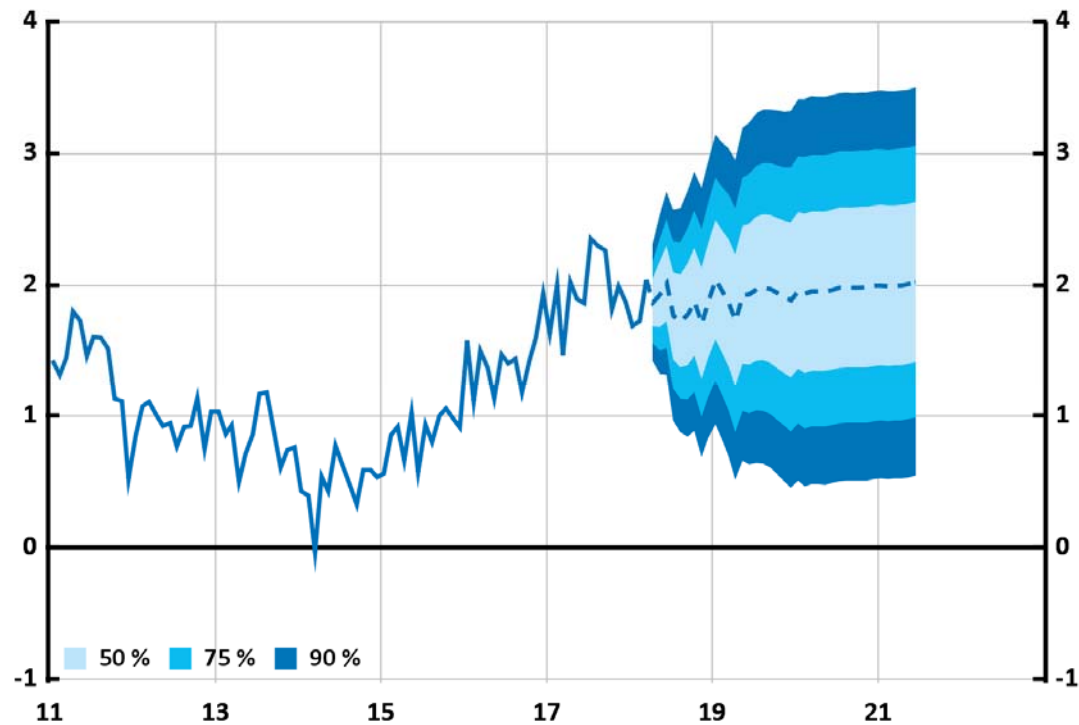


Note. The uncertainty bands are based on the Riksbank's historical forecasting errors. There is also uncertainty for the outcomes for GDP, as the figures in the National Accounts are revised several years after the preliminary publication.

Sources: Statistics Sweden and the Riksbank

# Figure 1.3. CPIF with uncertainty bands

Annual percentage change

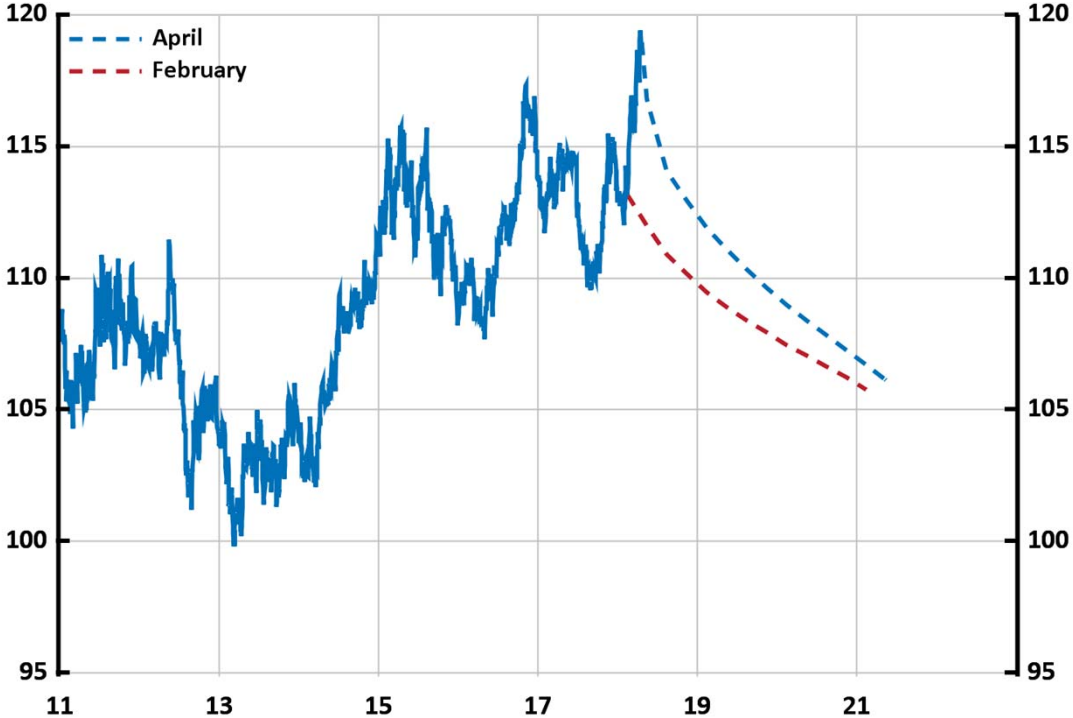


Note. The uncertainty bands are based on the Riksbank's historical forecasting errors.

Sources: Statistics Sweden and the Riksbank

# Figure 1.4. Competition-weighted nominal exchange rate, KIX

Index, 1992-11-18 = 100

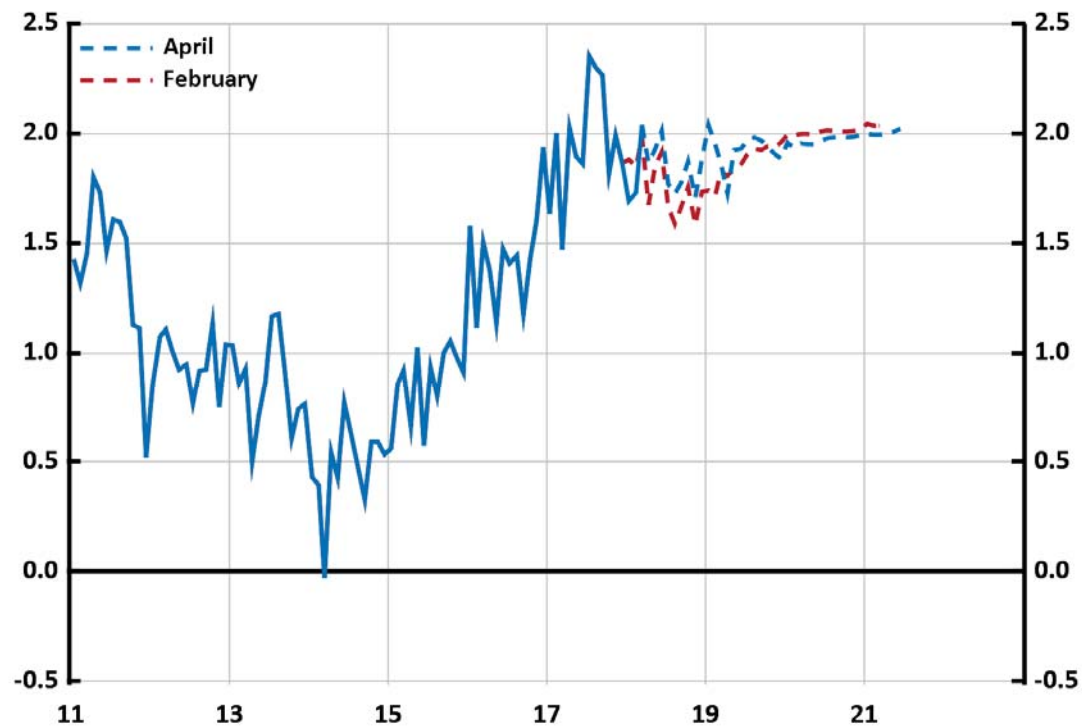


Note. Outcomes are daily rates and forecasts refer to quarterly averages. KIX refers to an aggregate of countries that are important for Sweden's international transactions.

Sources: National sources and the Riksbank

# Figure 1.5. CPIF

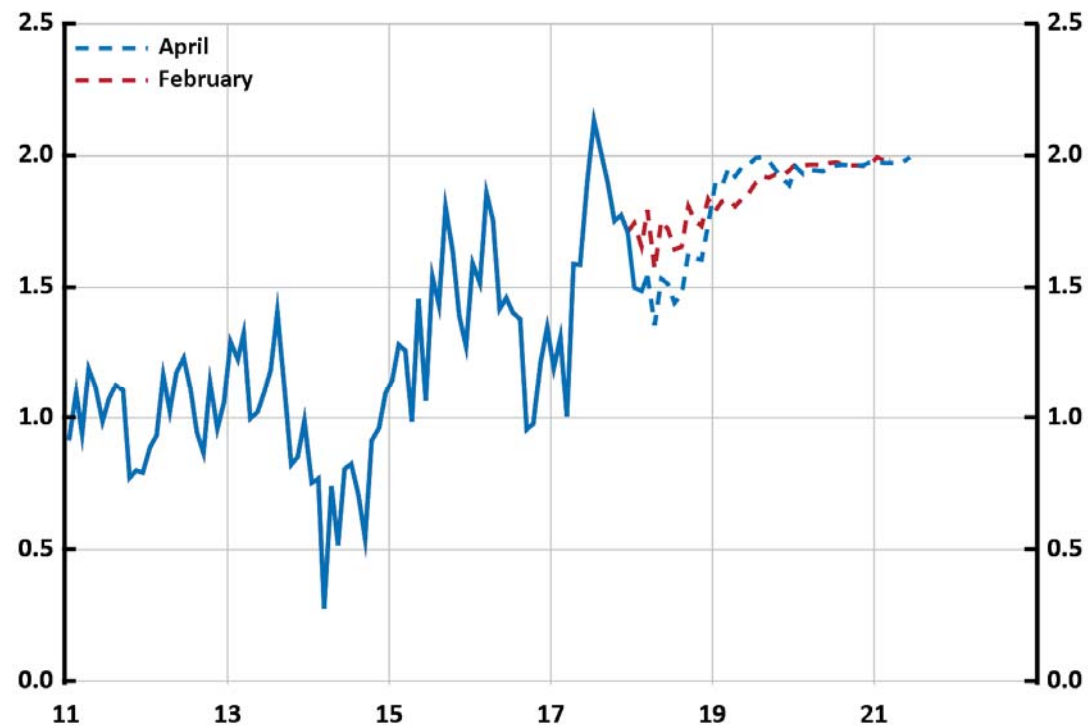
Annual percentage change



Sources: Statistics Sweden and the Riksbank

# Figure 1.6. CPIF excluding energy

Annual percentage change

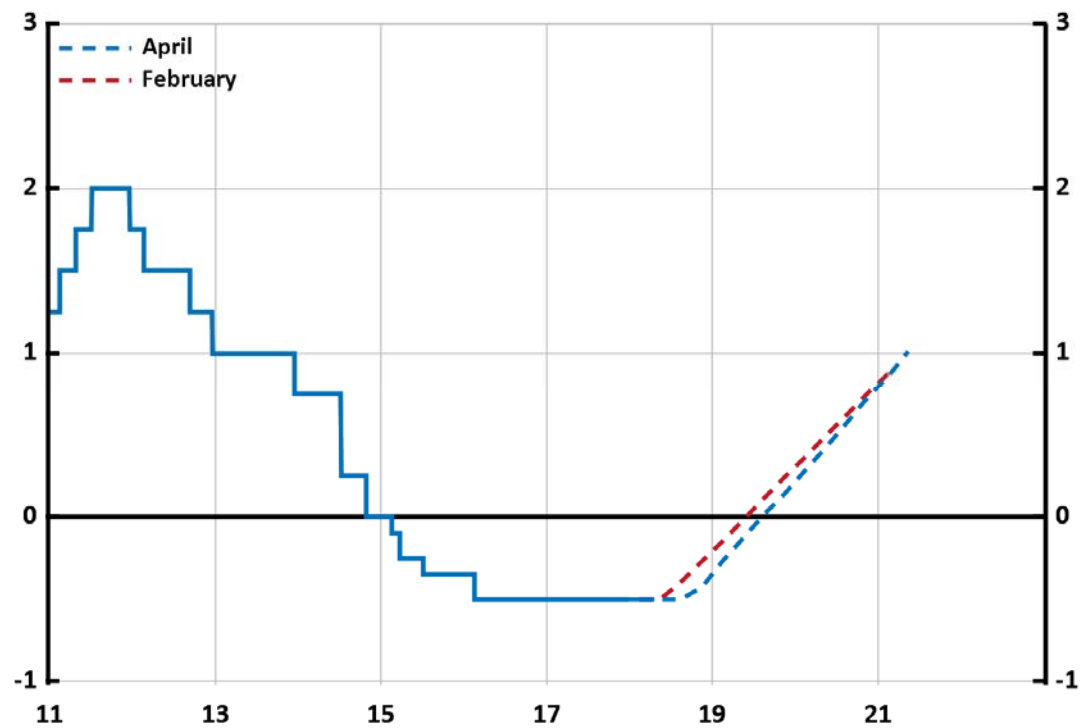


Sources: Statistics Sweden and the Riksbank



# Figure 1.7. Repo rate

Per cent

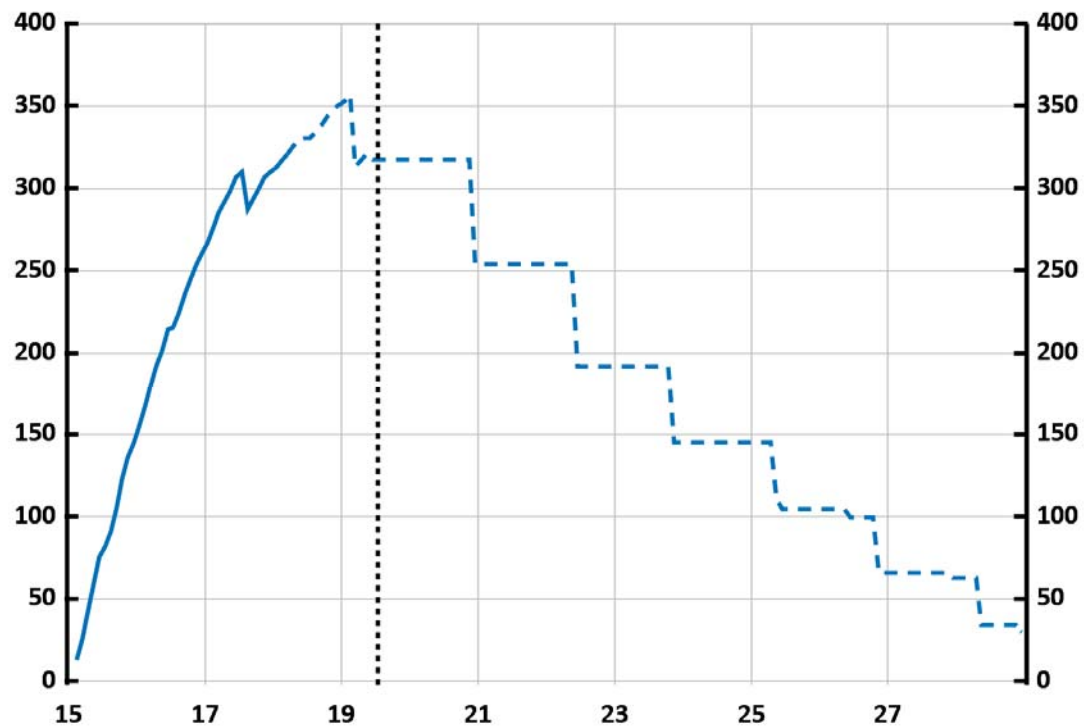


Note. Outcomes are daily data and the forecasts refer to quarterly averages.

Source: The Riksbank

# Figure 1.8. The Riksbank's holdings of government bonds

Nominal amounts, SEK billion

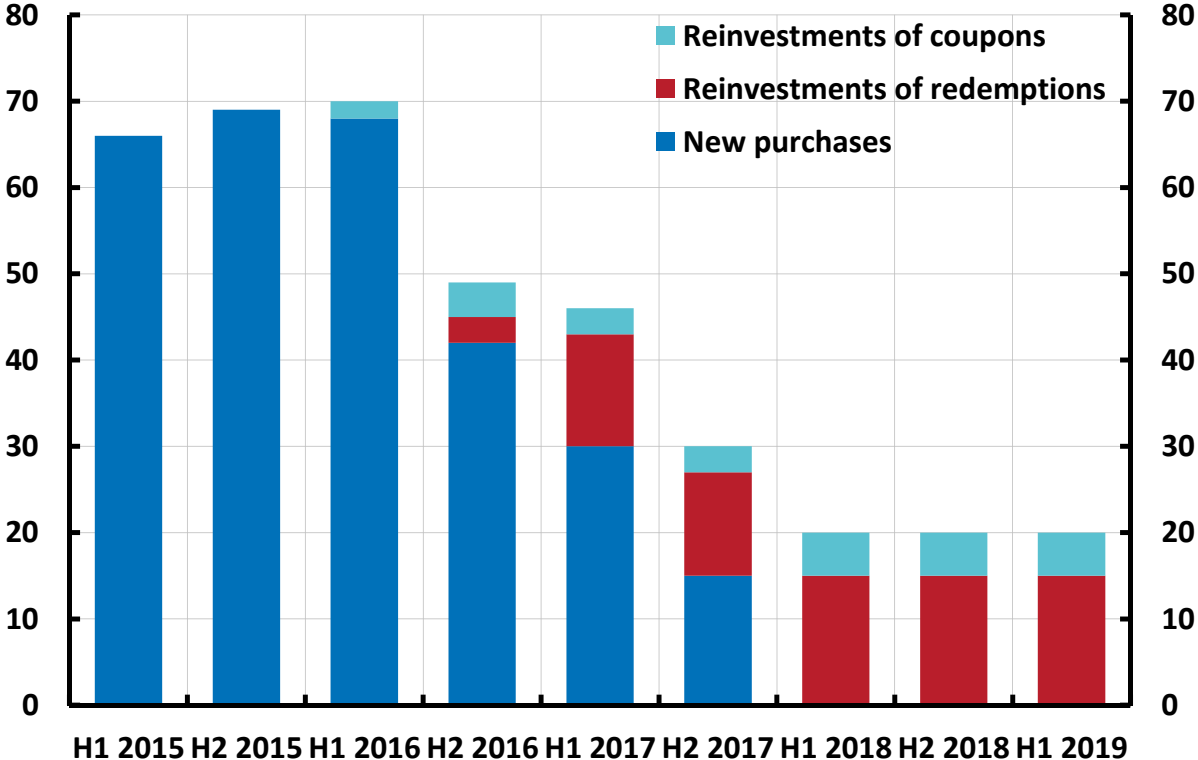


Note. Forecast up until June 2019, after that a technical projection with the assumption that no further reinvestments are made. The development of the holdings is also affected to a certain extent by the bonds' market prices and by which bonds the Riksbank chooses to reinvest in. The vertical line marks the shift between the forecast and technical projection.

Source: The Riksbank

# Figure 1.9. The Riksbank's purchases and reinvestments

Nominal amounts, SEK billion

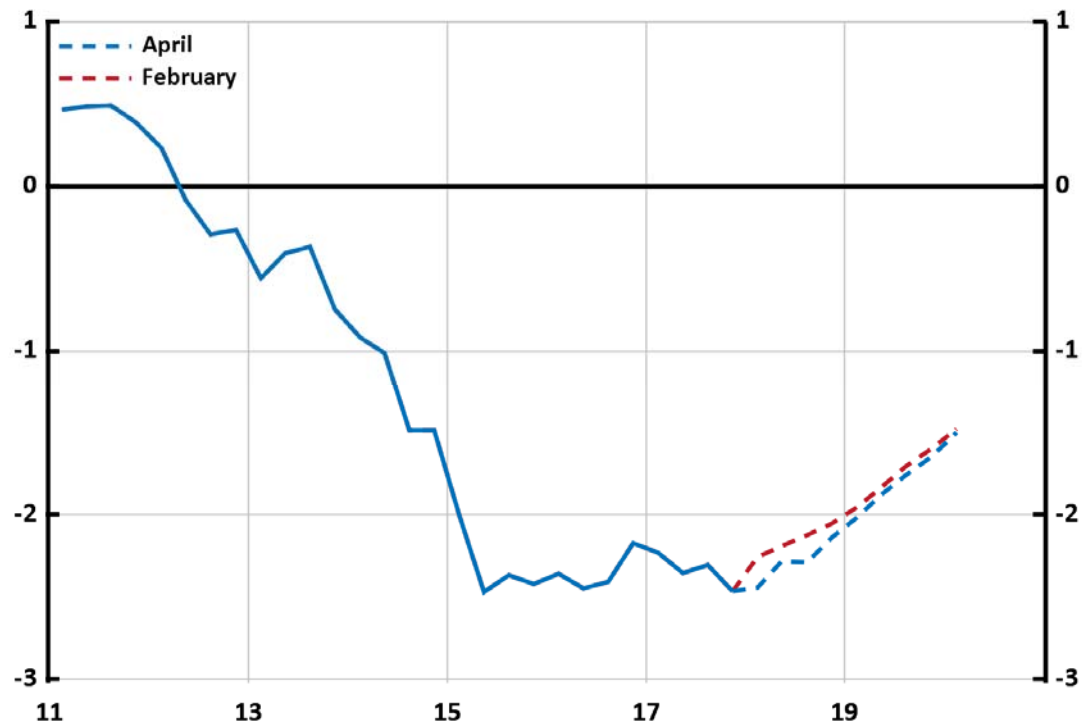


Note. The development for reinvestments from 2018 onwards is a forecast and refers to nominal amounts. The final amounts will depend on prevailing market prices.

Source: The Riksbank

# Figure 1.10. Real repo rate

Per cent, quarterly averages

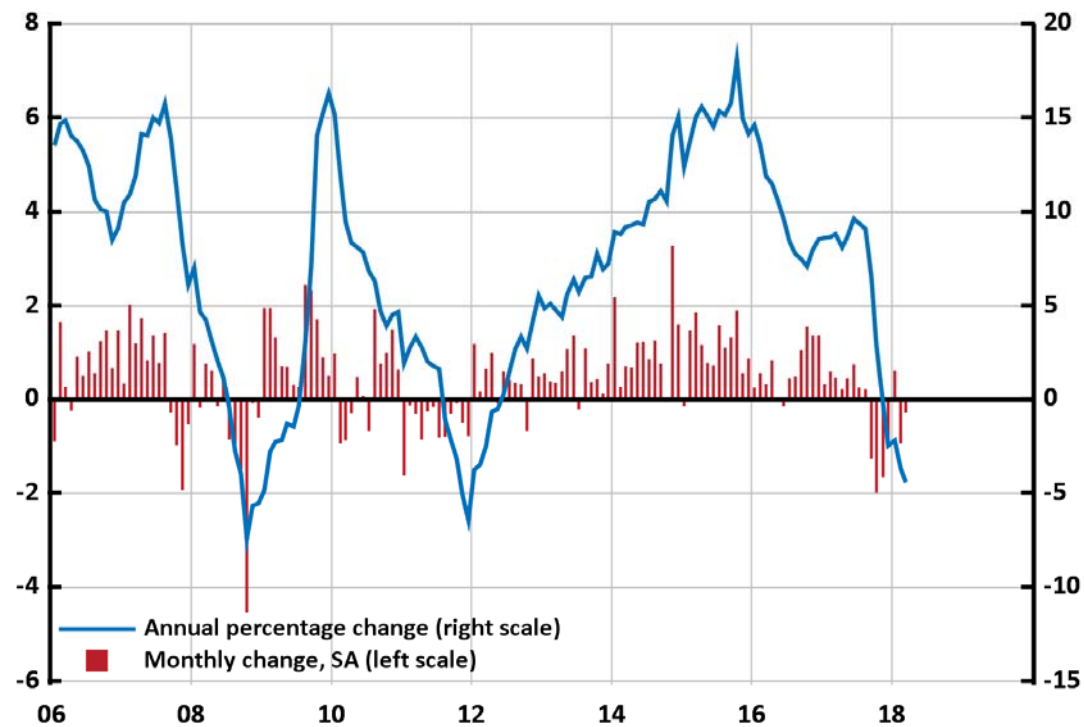


Note. The real repo rate is calculated as the mean of the Riksbank's repo rate forecast for the year ahead minus the inflation forecast (CPIF) for the corresponding period.

Sources: Statistics Sweden and the Riksbank

# Figure 1.11. House prices according to HOX Sweden

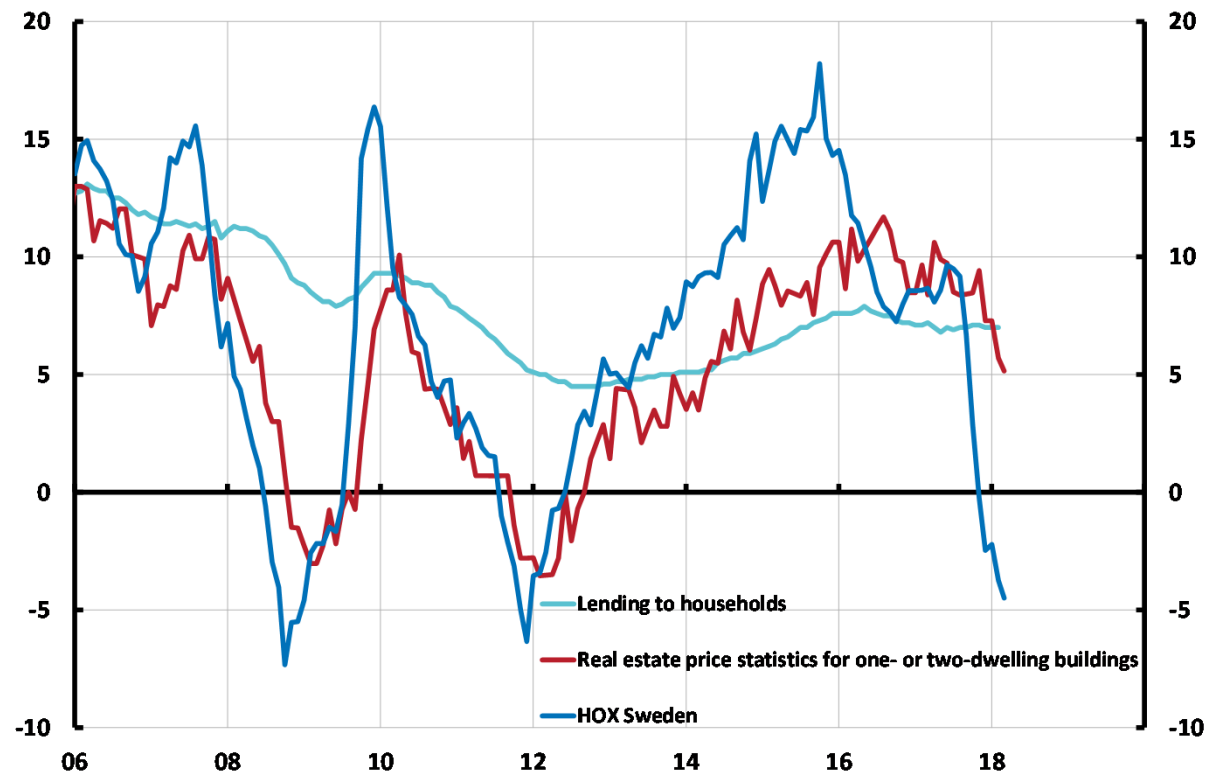
Per cent



Sources: Valueguard and the Riksbank

# Figure 1.12. Housing prices and lending to households

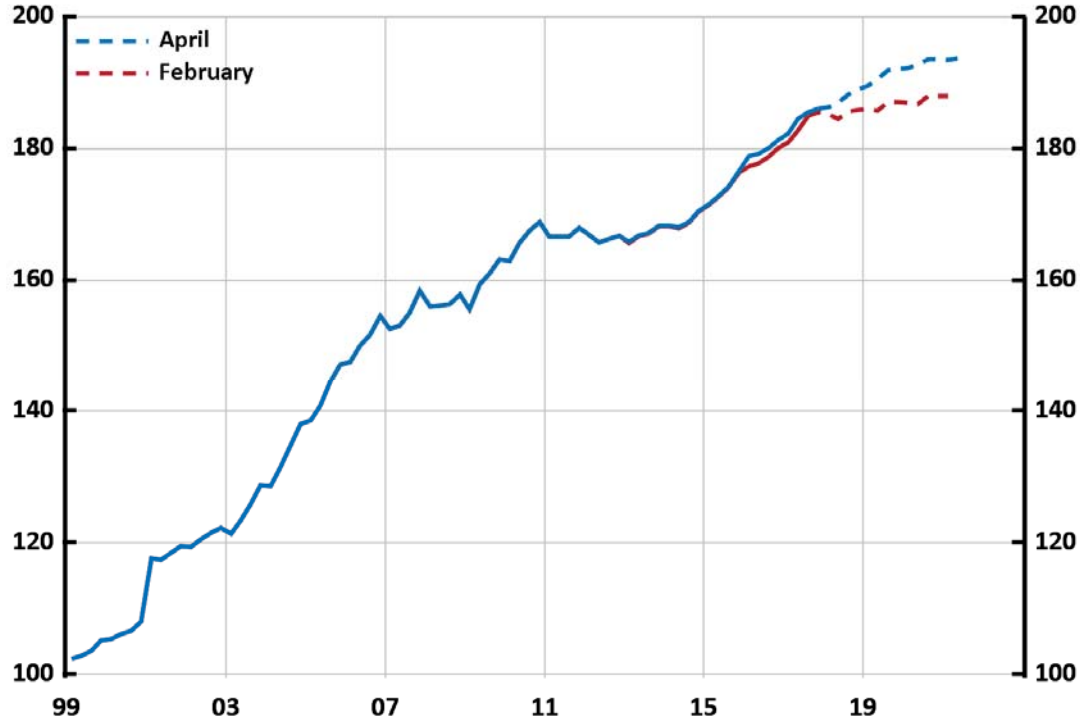
Annual percentage change



Sources: Statistics Sweden, Valueguard and the Riksbank

# Figure 1.13. Household debt ratio

Per cent of yearly disposable income



Note. Households' total debts as a share of their disposable income totalled over the past four quarters.

Sources: Statistics Sweden and the Riksbank

# Chapter 2

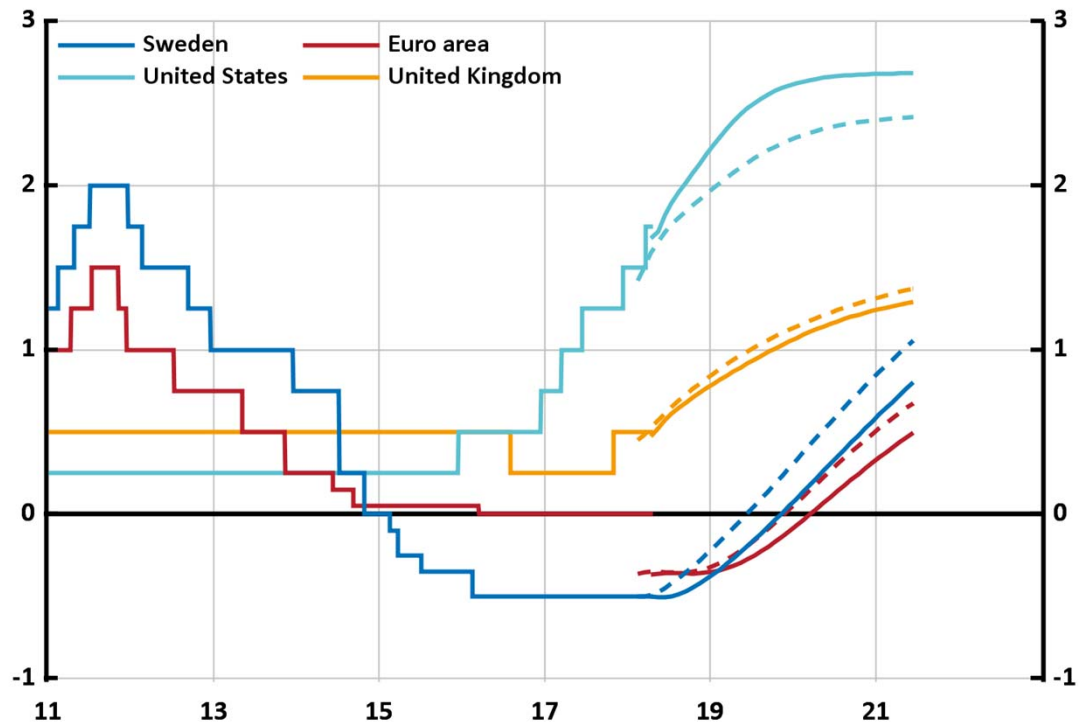
S V E R I G E S R I K S B A N K





# Figure 2.1. Policy rates and rate expectations according to forward rates

Per cent

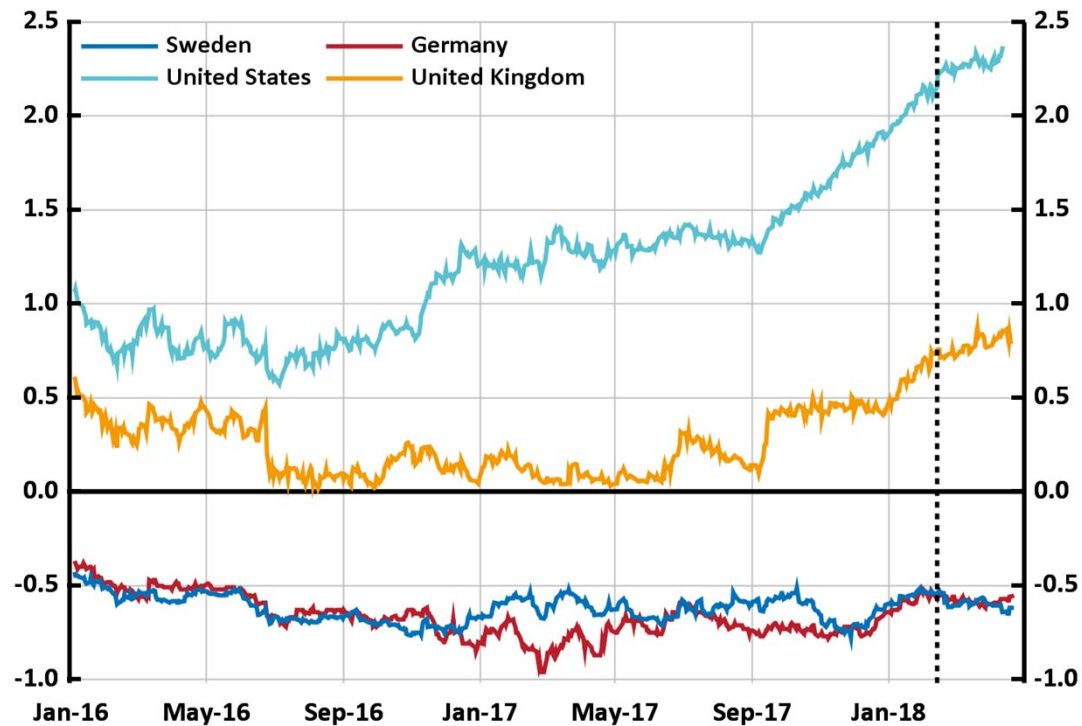


Note. Forward rates describe the expected overnight rate, which does not always correspond to the policy rate (the main refinancing rate for the euro area). Unbroken lines are estimated on 24 April 2018, broken lines are estimated on 9 February 2018.

Sources: The national central banks, Macrobond and the Riksbank

# Figure 2.2. Government bond yields with 2 years to maturity

Per cent

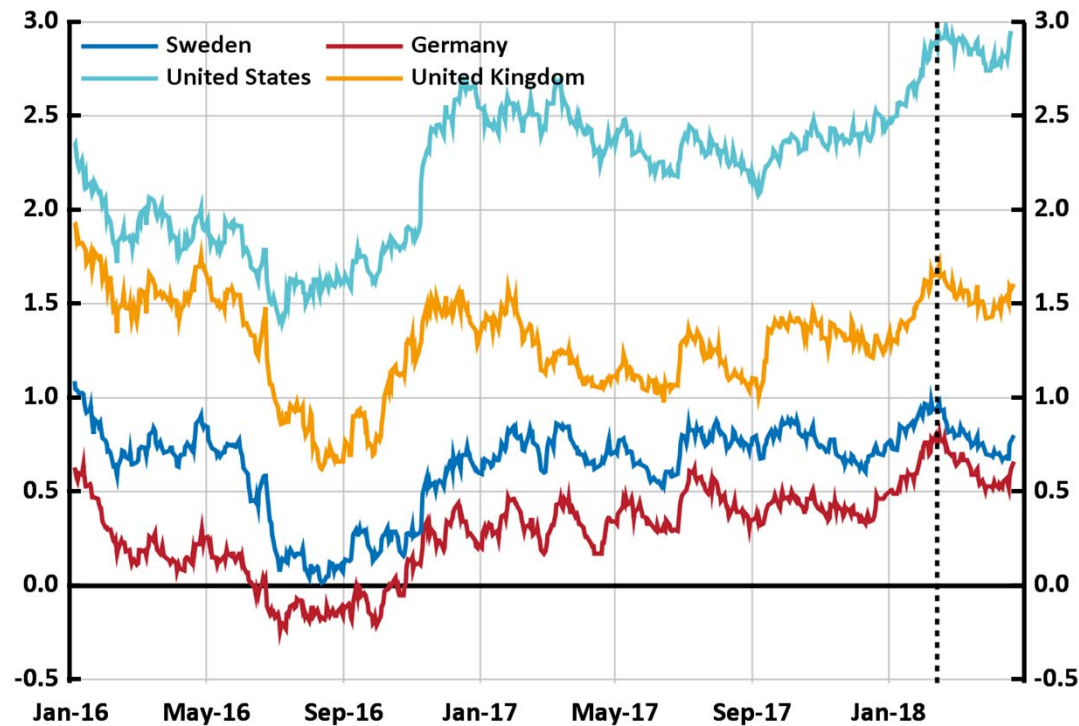


Note. Implied zero-coupon yields from government bonds. The vertical line indicates the Monetary Policy Meeting in February.

Sources: The national central banks and the Riksbank

# Figure 2.3. Government bond yields with 10 years to maturity

Per cent



Note. Implied zero-coupon yields from government bonds. The vertical line indicates the Monetary Policy Meeting in February.

Sources: The national central banks and the Riksbank

# Figure 2.4. Stock market movements in local currency

Index, 4 January 2016 = 100

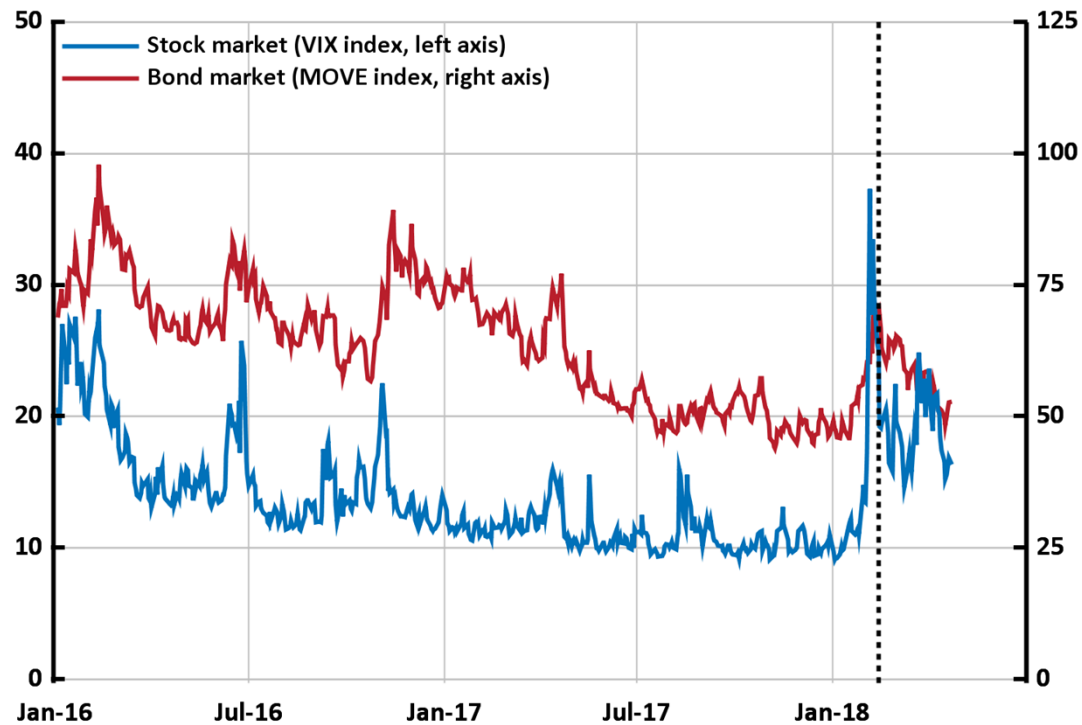


Note. The vertical line indicates the Monetary Policy Meeting in February.

Sources: Macrobond and the Riksbank

# Figure 2.5. Volatility Indices

Per cent and index respectively

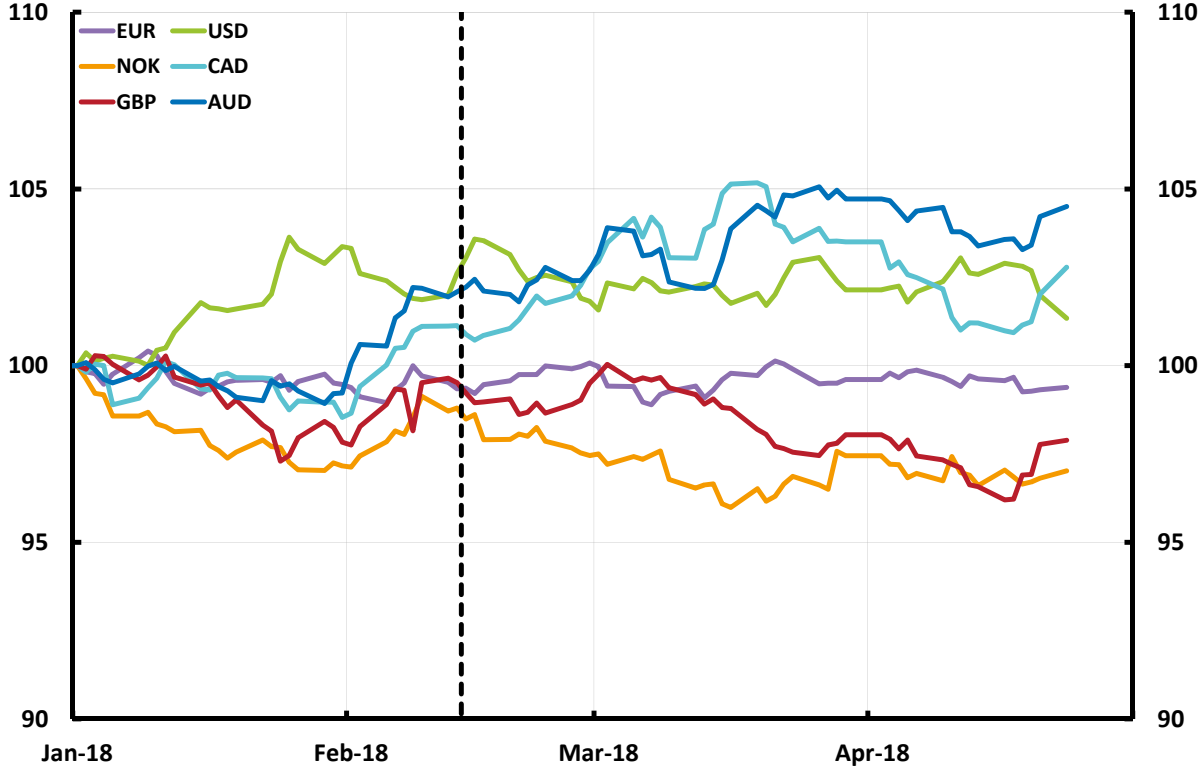


Note. Volatility Index (VIX) shows the expected volatility on the US stock market based on options prices. Merrill Lynch Option Volatility Estimate (MOVE) Index is a measure of the expected volatility of US government bonds based on options prices. The vertical line indicates the Monetary Policy Meeting in February.

Sources: Chicago Board Operations Exchange and Merrill Lynch

# Figure 2.6. Trade-weighted exchange rates

Index, 2018-01-01=100

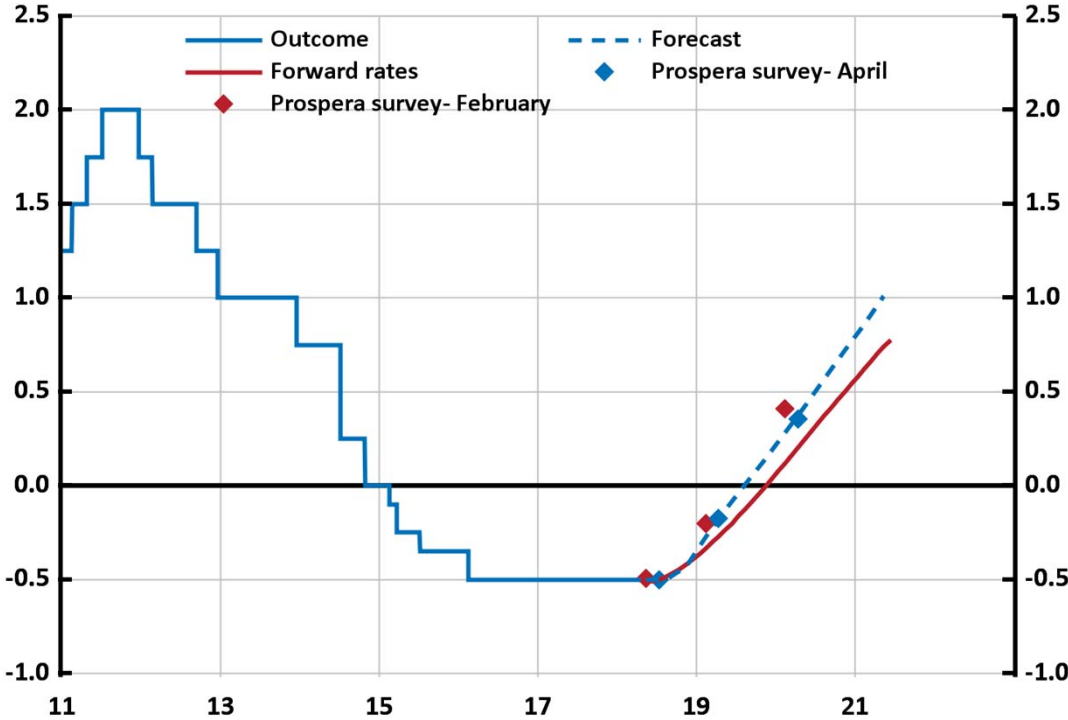


Note. A value higher than 100 indicates a weaker exchange rate. The vertical line indicates the Monetary Policy Meeting in February.

Sources: Bank of England and Riksbanken

# Figure 2.7. Repo rate and market expectations

Per cent, average

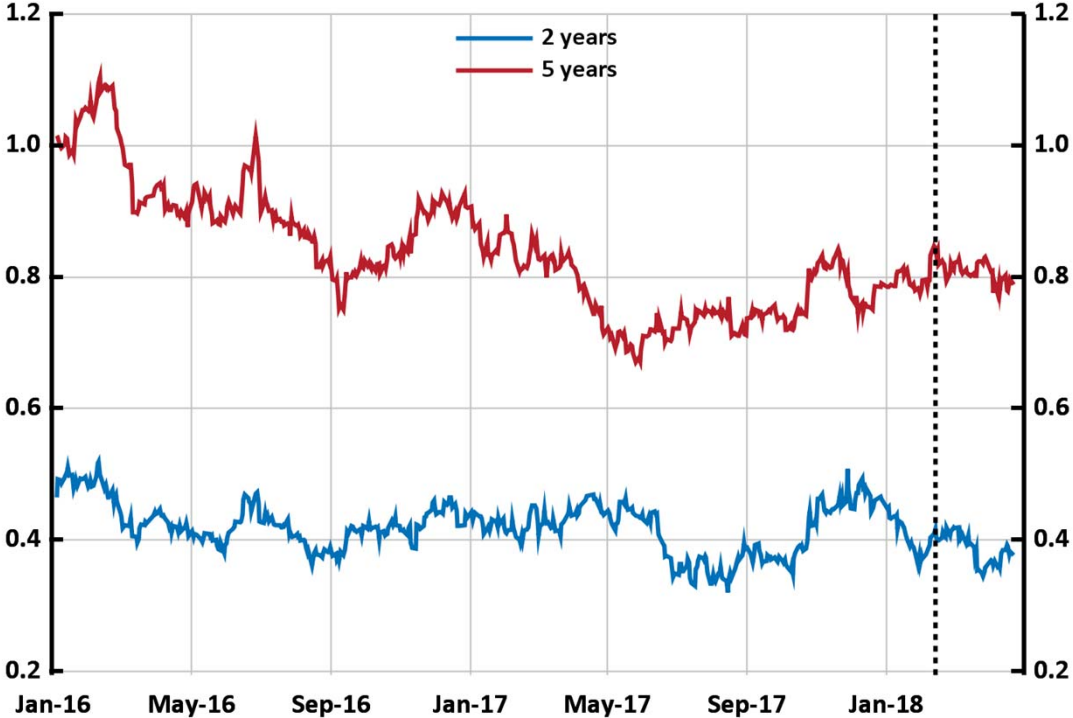


Note. The forward rate is estimated on 2018-04-24 and is a measure of the expected repo rate. The survey responses show the average for money market participants 2018-01-31 respectively 2018-03-27.

Sources: Macrobond, TNS Sifo Prospera and the Riksbank

# Figure 2.8. Yield spread between mortgage bonds and government bonds

Percentage points



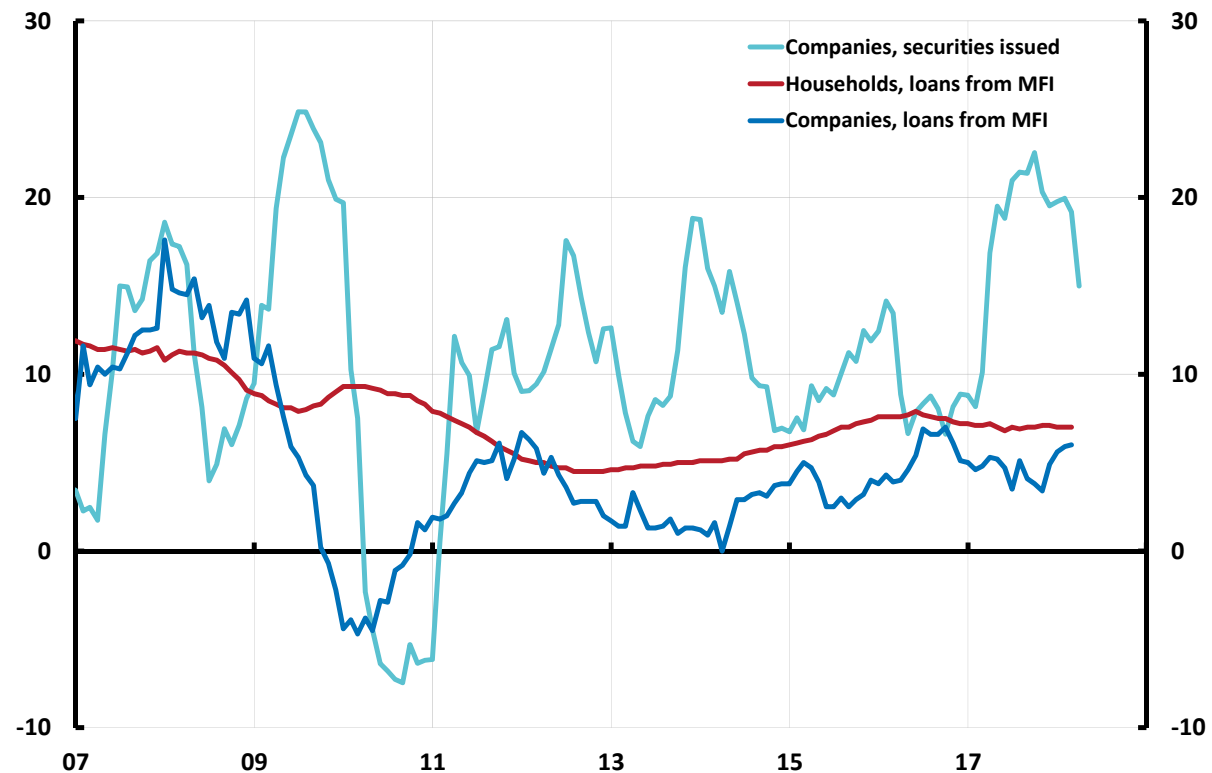
Note. Yields on mortgage bonds and government bonds are zero coupon yields calculated using the Nelson-Siegel method. The vertical line indicates the Monetary Policy Meeting in February.

Sources: Macrobond and the Riksbank



# Figure 2.9. Bank lending to households and companies

Annual percentage change

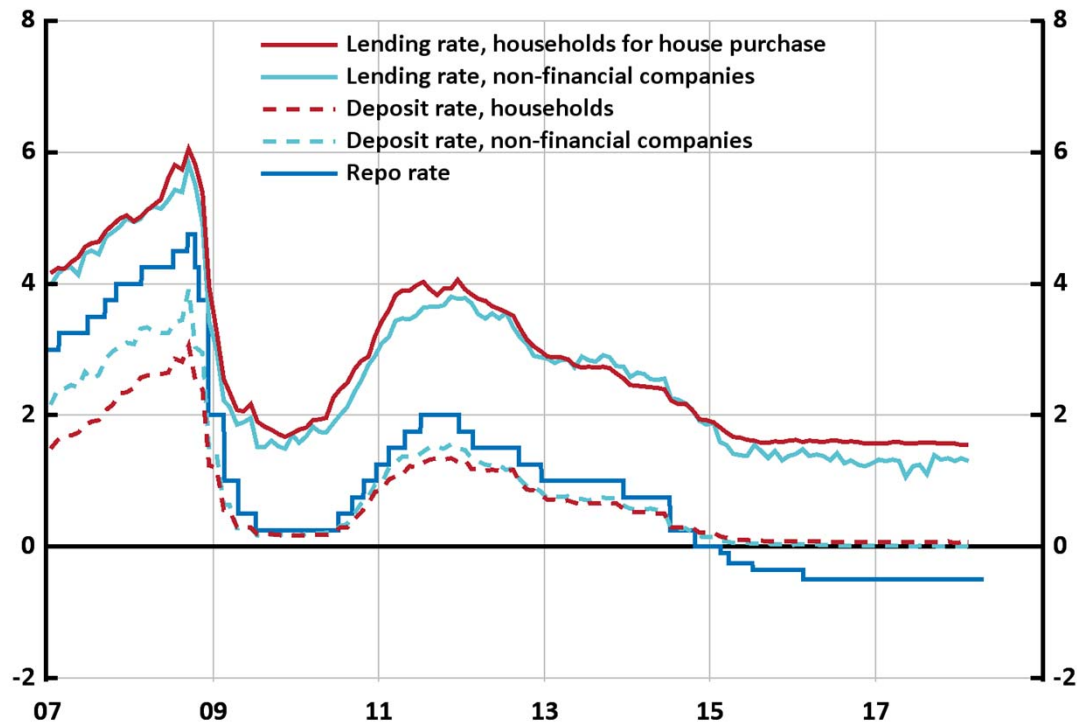


Note. Lending by Monetary financial institutions (MFI) to households and non-financial corporations adjusted for reclassifications and bought and sold loans, according to financial market statistics. The data extends until the end of February 2018. Securities issued by non-financial corporations have been adjusted for currency impact and extend until the end of February 2018.

Source: Statistics Sweden

# Figure 2.10. Repo rate together with the average deposit and lending rate to households and companies, new contracts

Per cent



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

Sources: Statistics Sweden and the Riksbank

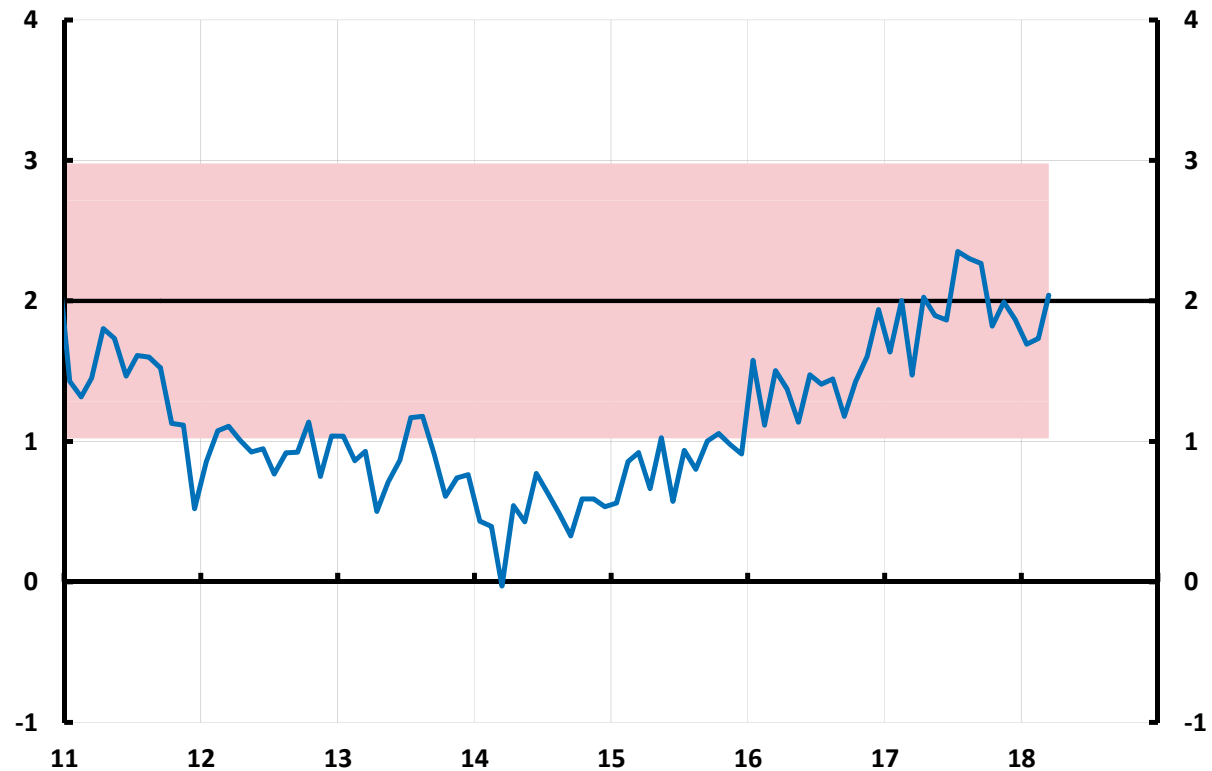
# Chapter 3

S V E R I G E S R I K S B A N K



# Figure 3.1. CPIF and variation band

Annual percentage change

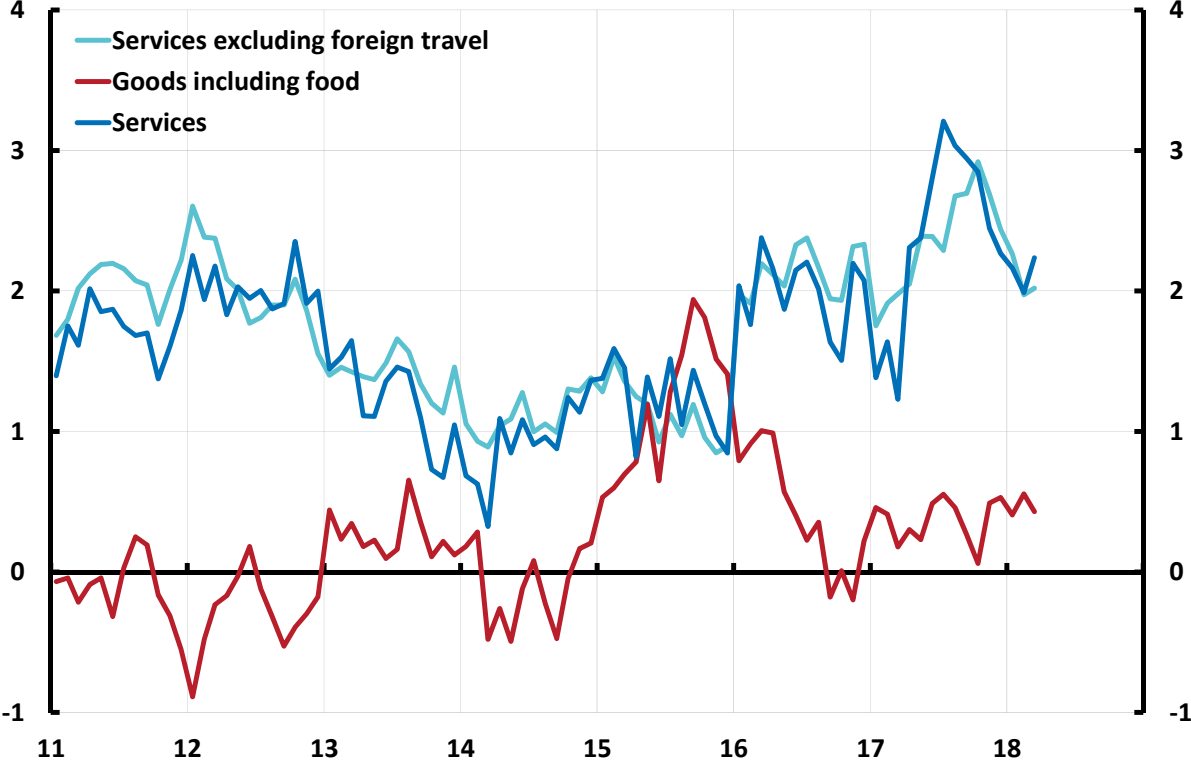


Note. The pink area shows the Riksbank's variation band and covers about three-quarters of the outcomes since January 1995. The variation band is a means of showing whether the deviation from the inflation target is unusually large.

Sources: Statistics Sweden and the Riksbank

# Figure 3.2. Prices of goods and services in the CPI

Annual percentage change

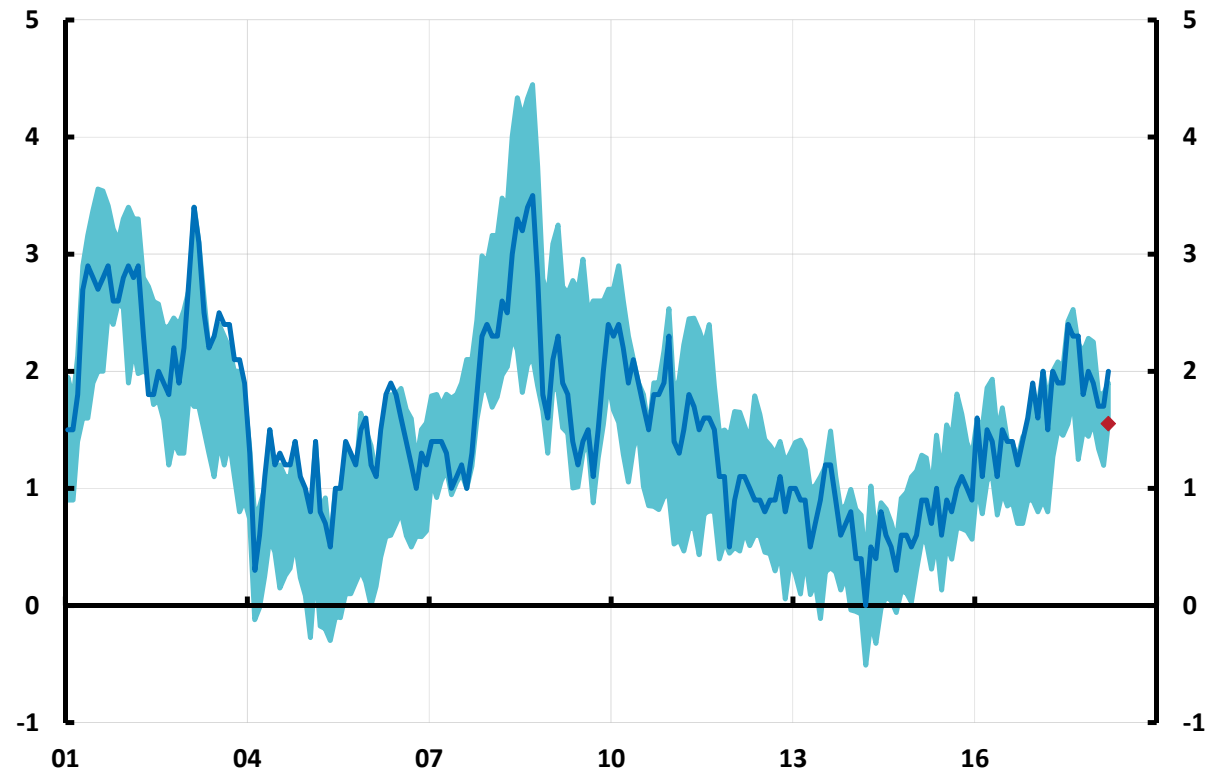


Note. Goods including food is a combination of the aggregate goods and food in the CPI. Together, these account for 45 per cent of the CPI. Service prices account for 45 per cent of the CPI.

Sources: Statistics Sweden and the Riksbank

# Figure 3.3. The CPIF and different measures of underlying inflation

Annual percentage change

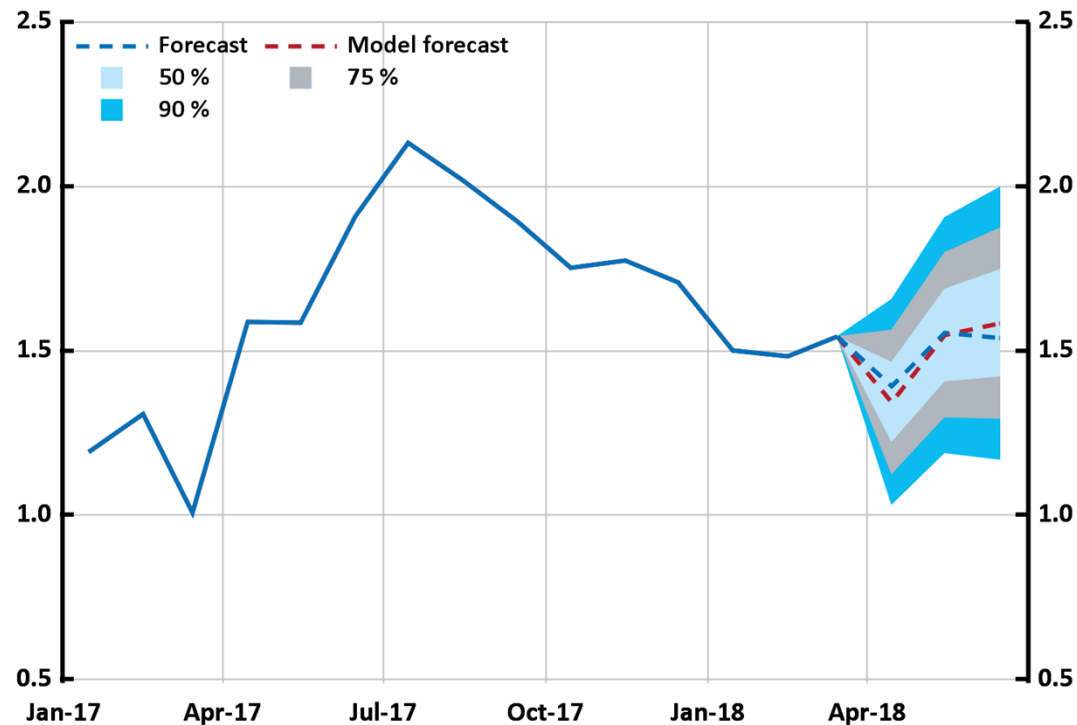


Note. The field shows the highest and lowest outcomes among different measures of underlying inflation. The measures included are the CPIF excluding energy, the CPIF with constant tax, UND24, Trim85, HICP excluding energy and unprocessed food, persistence-weighted inflation, factors from principal component analysis and weighted mean inflation. The red dot represent the median in March 2018 for all different measures of underlying inflation.

Sources: Statistics Sweden and the Riksbank

# Figure 3.4. CPIF excluding energy, model forecast with uncertainty bands

Annual percentage change

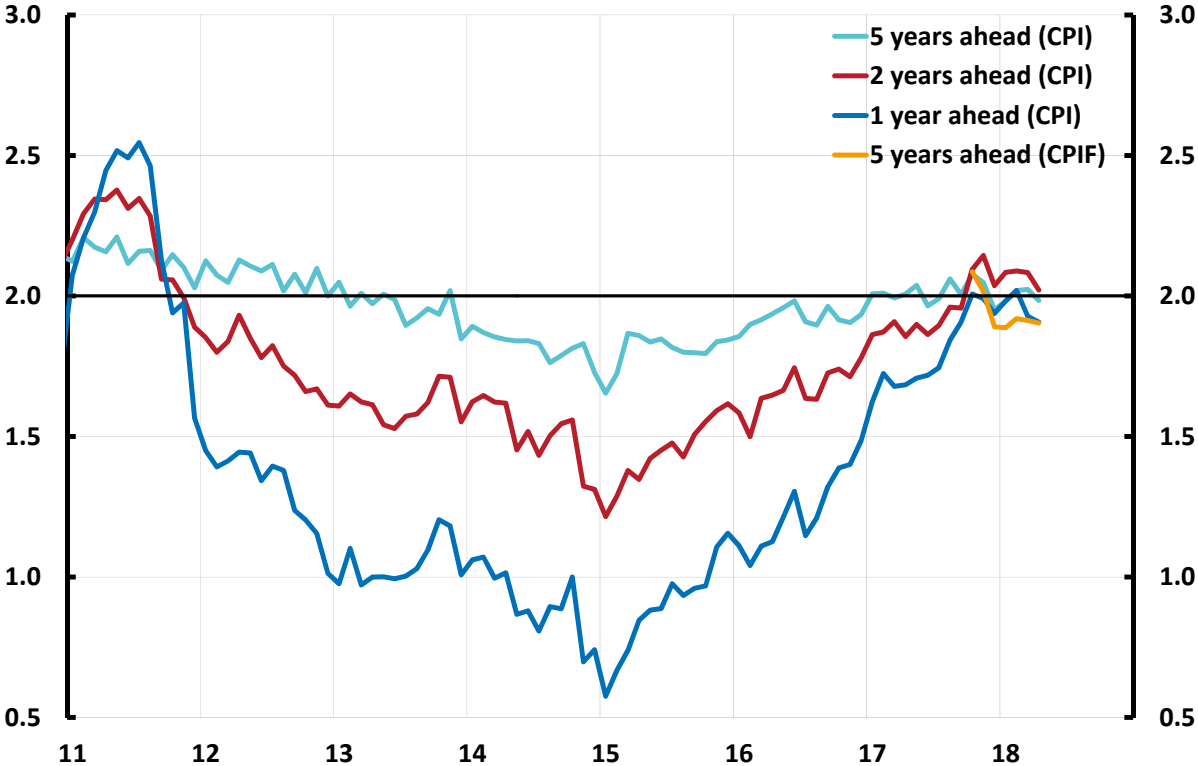


Note. The uncertainty bands are based on the models' historical forecast errors. The model forecasts are adjusted with regard to the new seasonal pattern following on from method changes in the calculation of the price index for package holidays.

Sources: Statistics Sweden and the Riksbank

# Figure 3.5. Inflation expectations among money market participants

Per cent, mean value

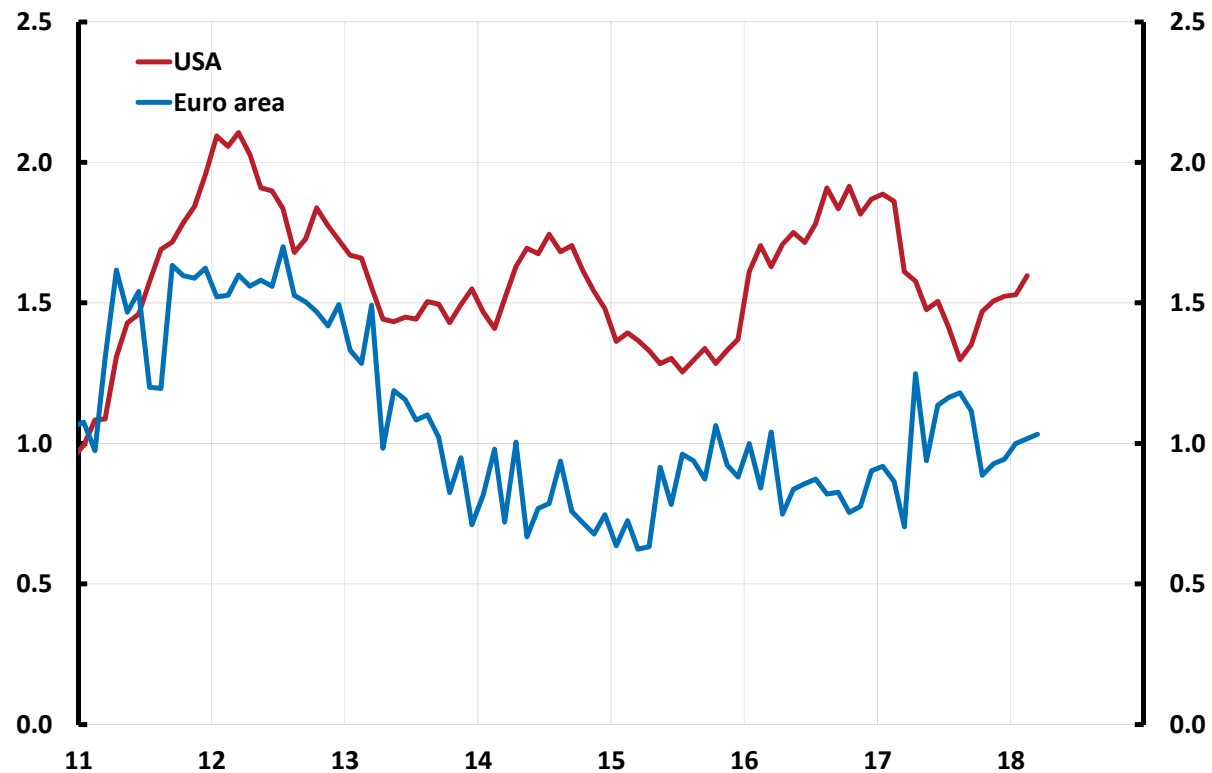


Source: TNS Sifo Prospera



# Figure 3.6. Underlying inflation abroad

Annual percentage change

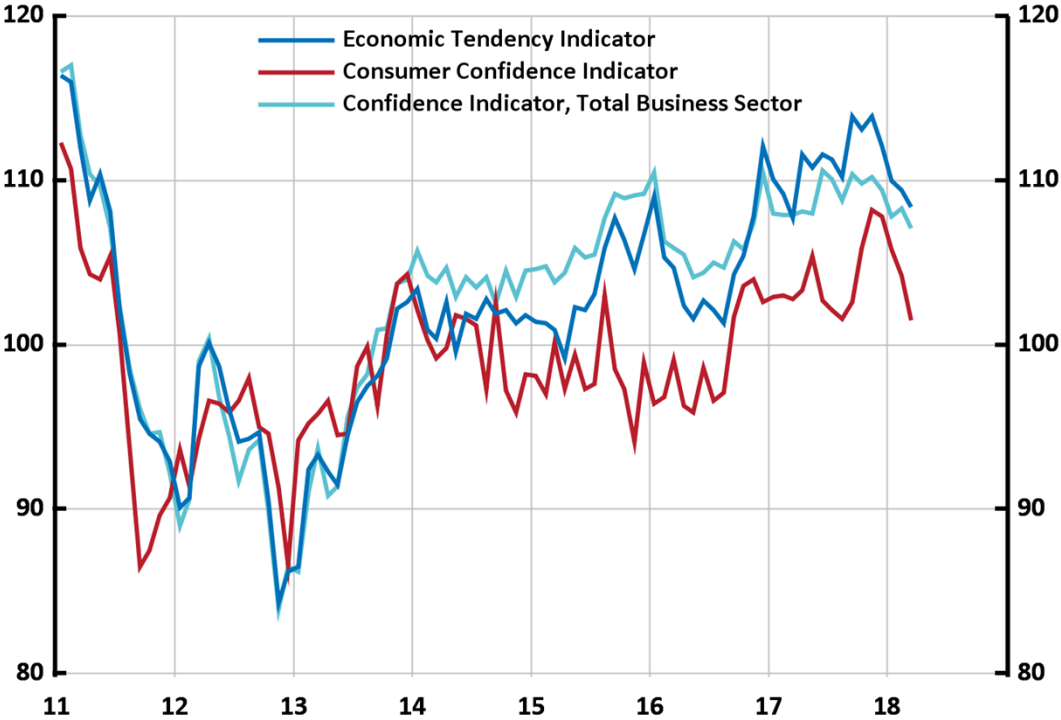


Note. HICP excluding energy, food, alcohol & tobacco is shown for the euro area. Deflator for PCE excluding energy and food is shown for the United States.

Sources: Bureau of Economic Analysis and Eurostat

# Figure 3.7. Confidence indicators

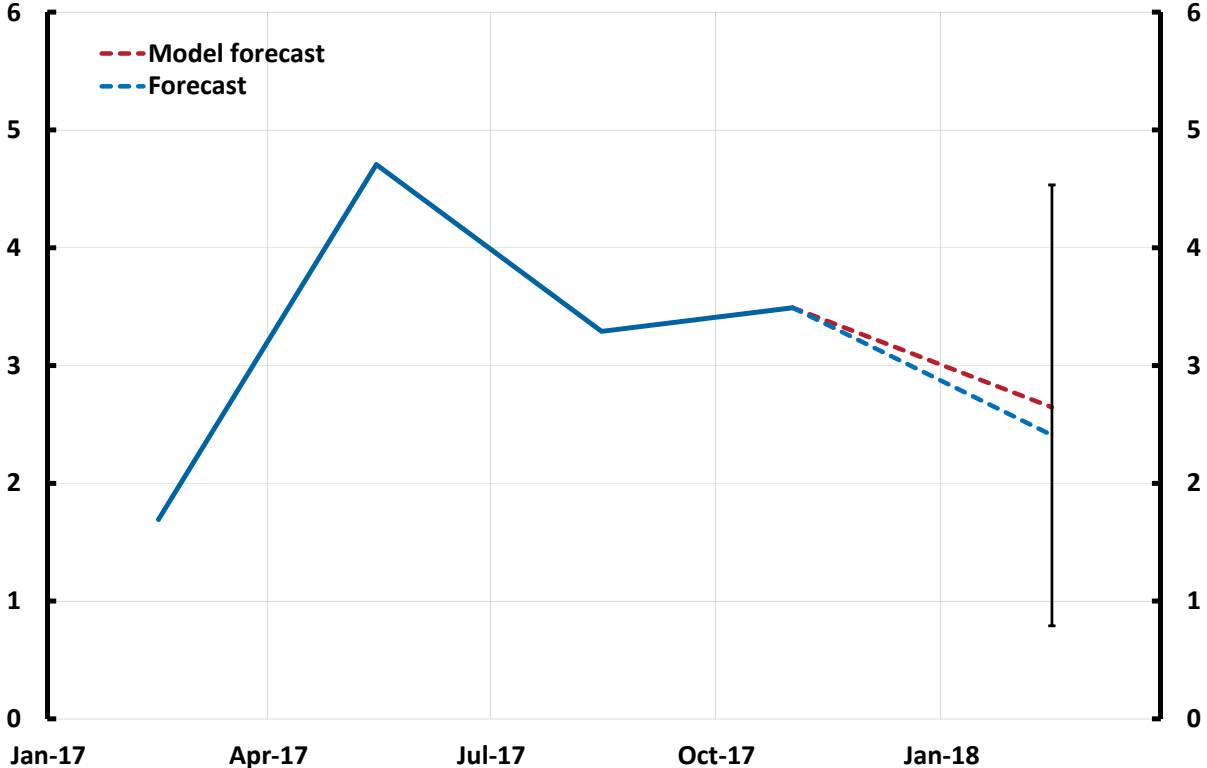
Index, average = 100, standard deviation = 10, seasonally-adjusted data



Source: National Institute of Economic Research

# Figure 3.8. GDP, model forecast with uncertainty bands

Quarterly change in per cent, calculated as an annual percentage change, seasonally-adjusted data

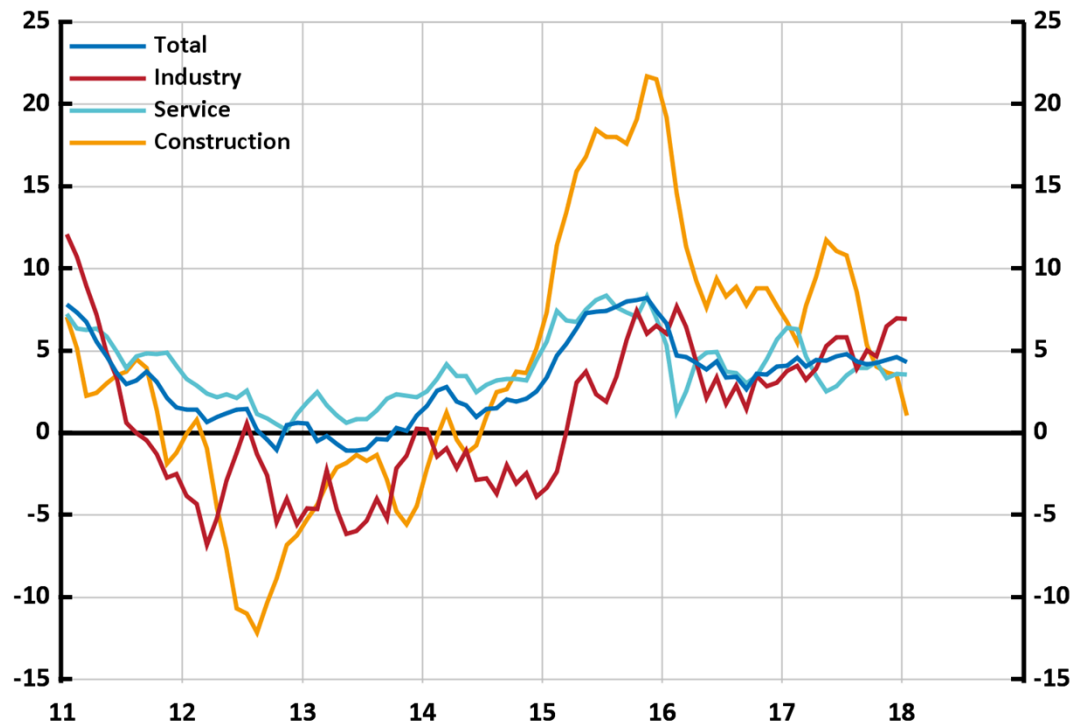


Note. The model forecast is an average of forecasts from different statistical models. The vertical line refers to a 50 per cent uncertainty band based on the models' historical forecast errors.

Sources: Statistics Sweden and the Riksbank

# Figure 3.9. Monthly indicators for production

Annual percentage change, calendar-adjusted data

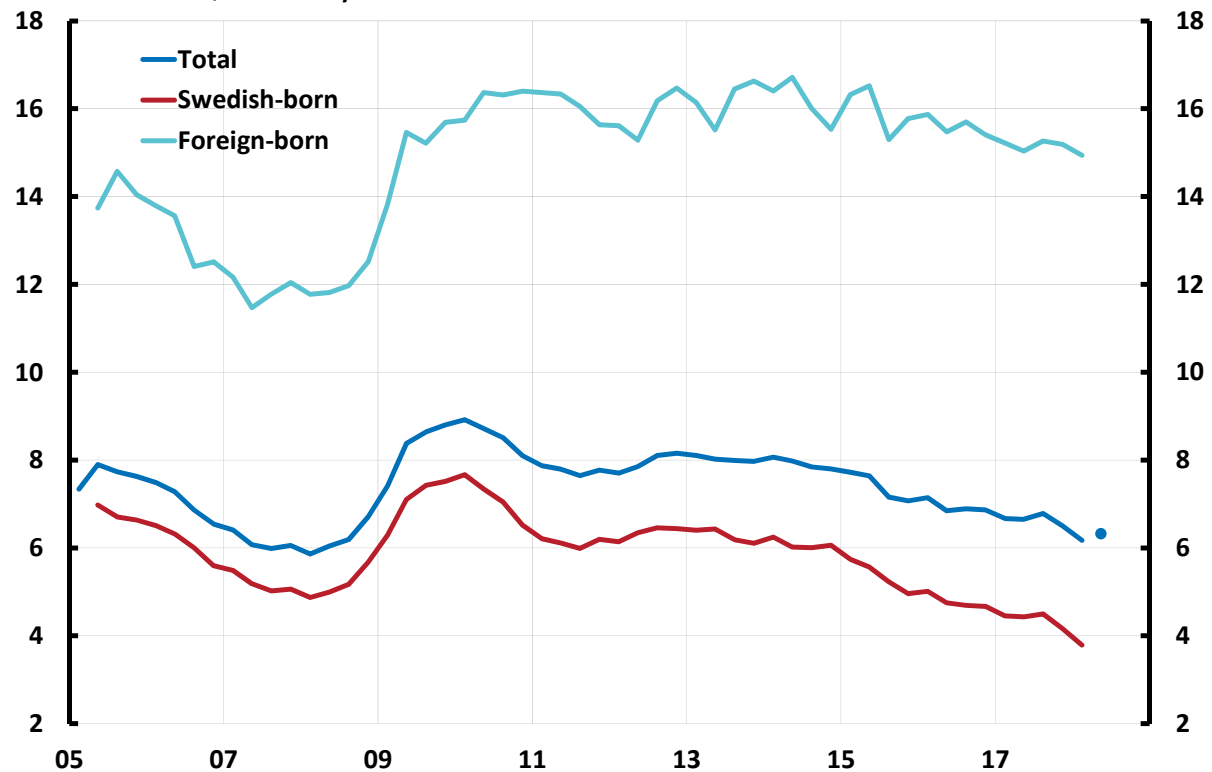


Note. Production value index with three-month moving average

Source: Statistics Sweden and the Riksbank

# Figure 3.10. Total unemployment, and unemployment among Swedish-born and foreign-born

Per cent of the labour force, 15-74 years

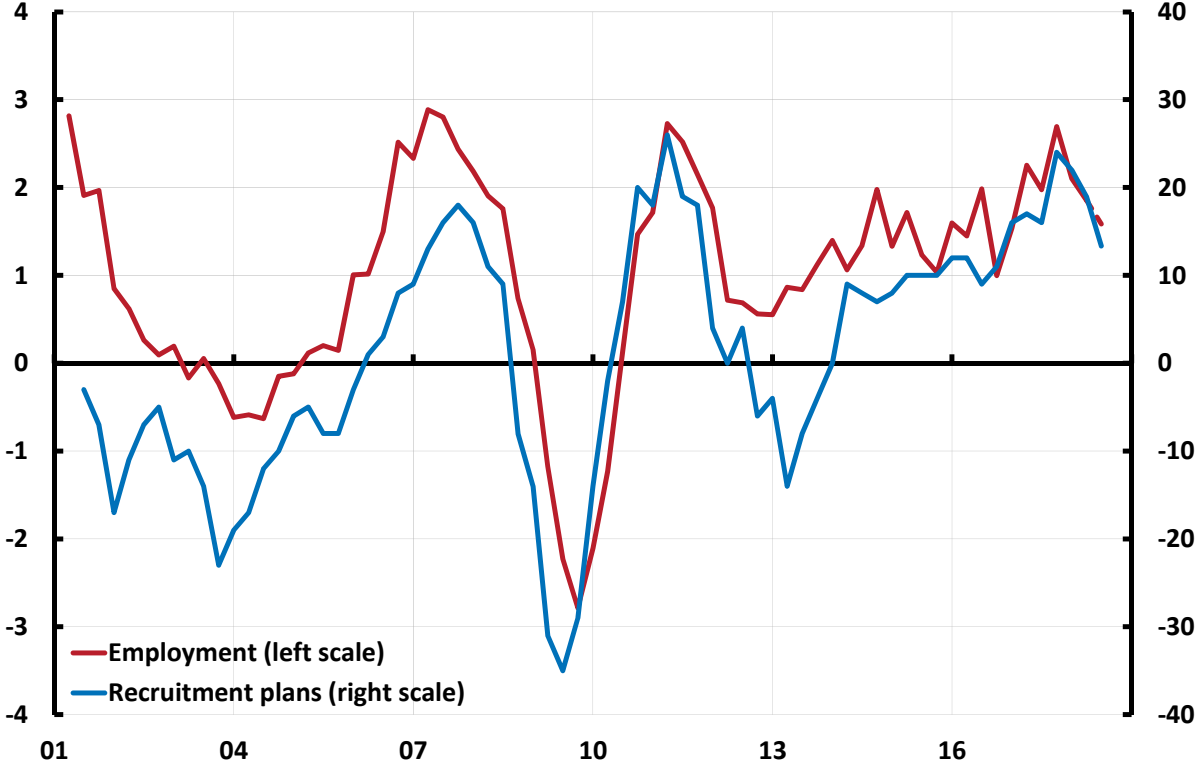


Note. The dot refers to the forecast for unemployment.

Sources: Statistics Sweden and the Riksbank

# Figure 3.11. Employment and recruitment plans

Annual percentage change and net figures respectively, seasonally-adjusted data

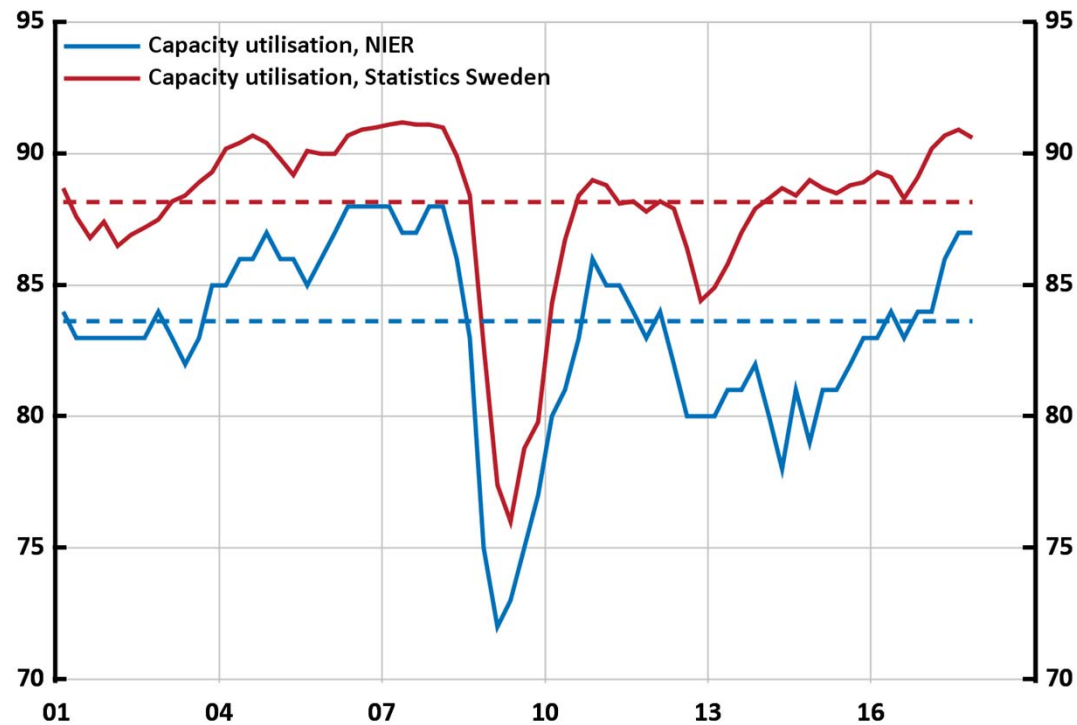


Note. Recruitment plans refer to expectations of the number of employed in the business sector three months ahead, moved forward one quarter. Recruitment plans for Q1 2018 refer to an average of the monthly outcomes for January-March 2018.

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

# Figure 3.12. Capacity utilisation in manufacturing industry

Per cent



Note. Both the NIER's and Statistics Sweden's measure of capacity utilisation is seasonally adjusted. With regard to Statistics Sweden, the series is also calendar-adjusted. The mean value since 1996.

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

# Chapter 4

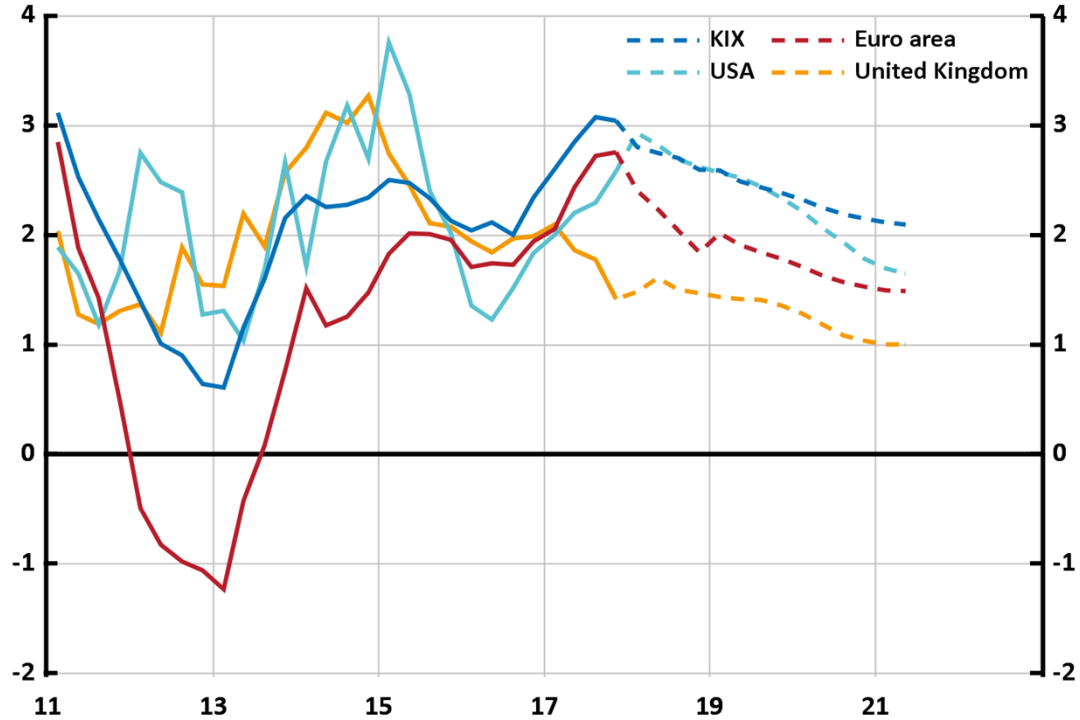
S V E R I G E S R I K S B A N K





# Figure 4.1. GDP in various countries and regions

Annual percentage change

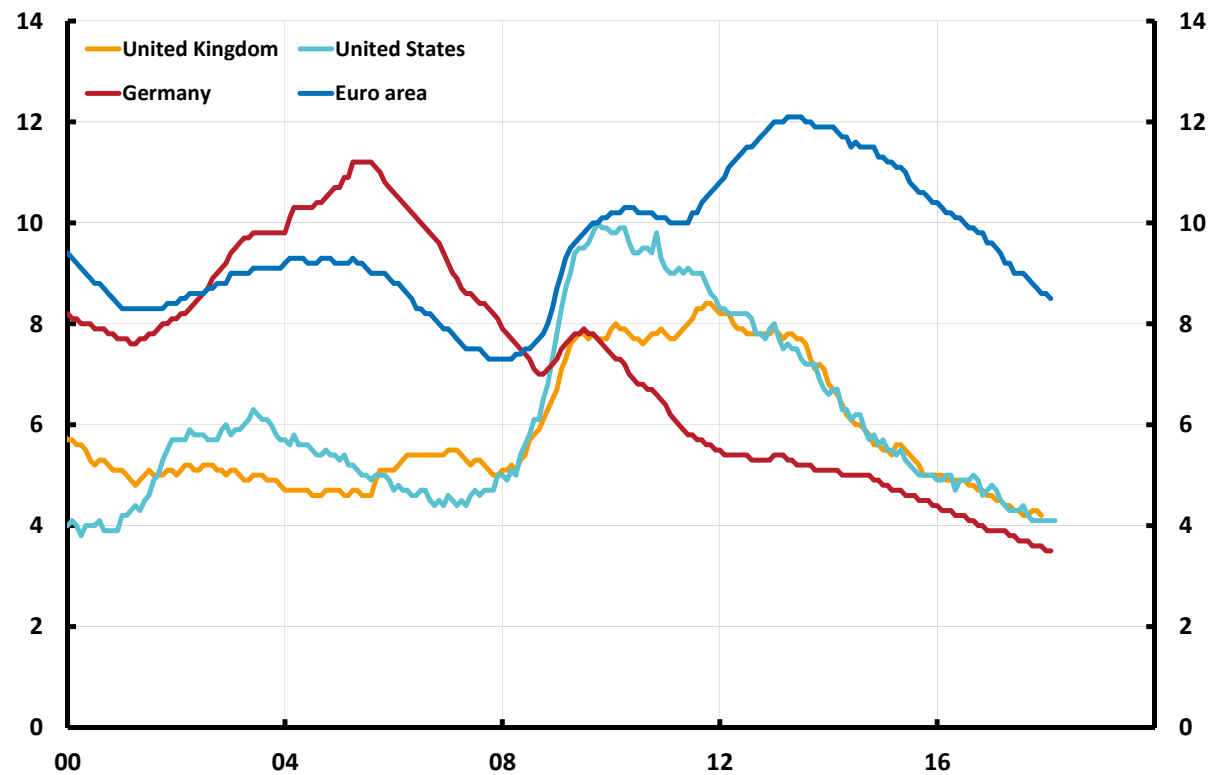


Note. KIX is an aggregate of the countries that are important to Sweden's international transactions.

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

# Figure 4.2. Unemployment abroad

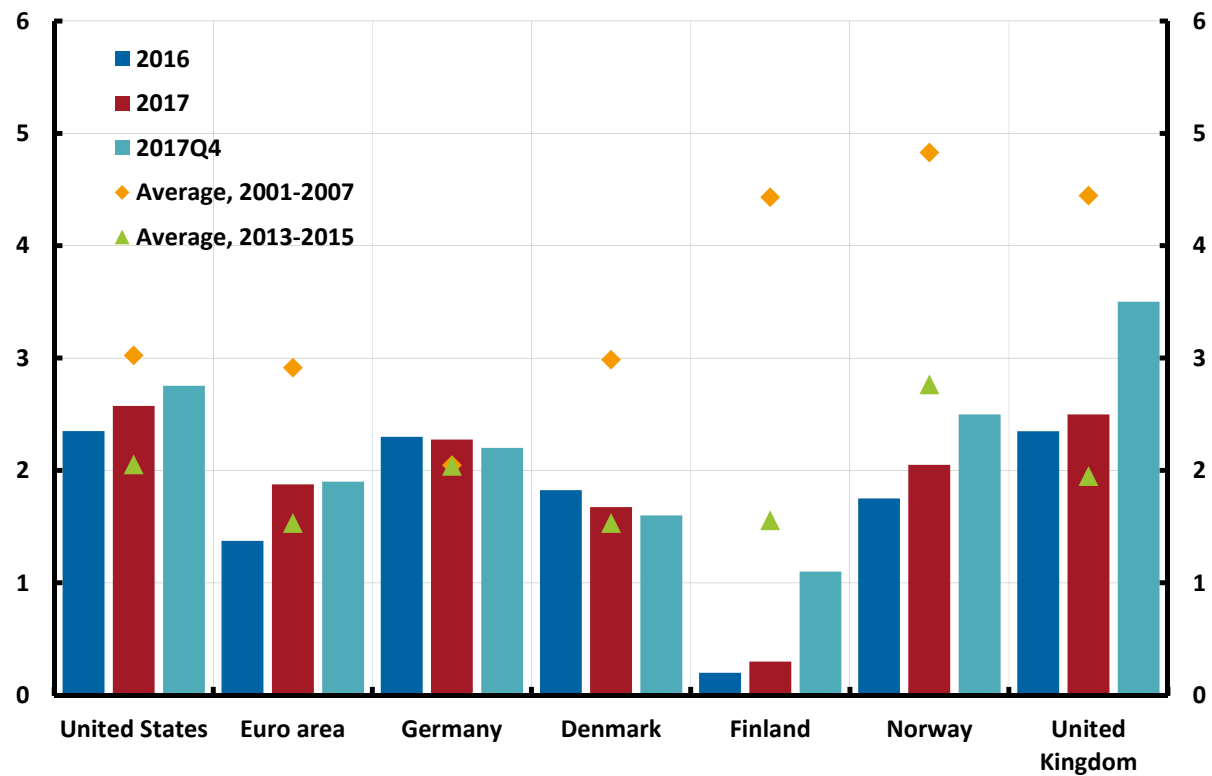
Per cent of labour force



Source: OECD

# Figure 4.3. Wages abroad

Annual percentage change

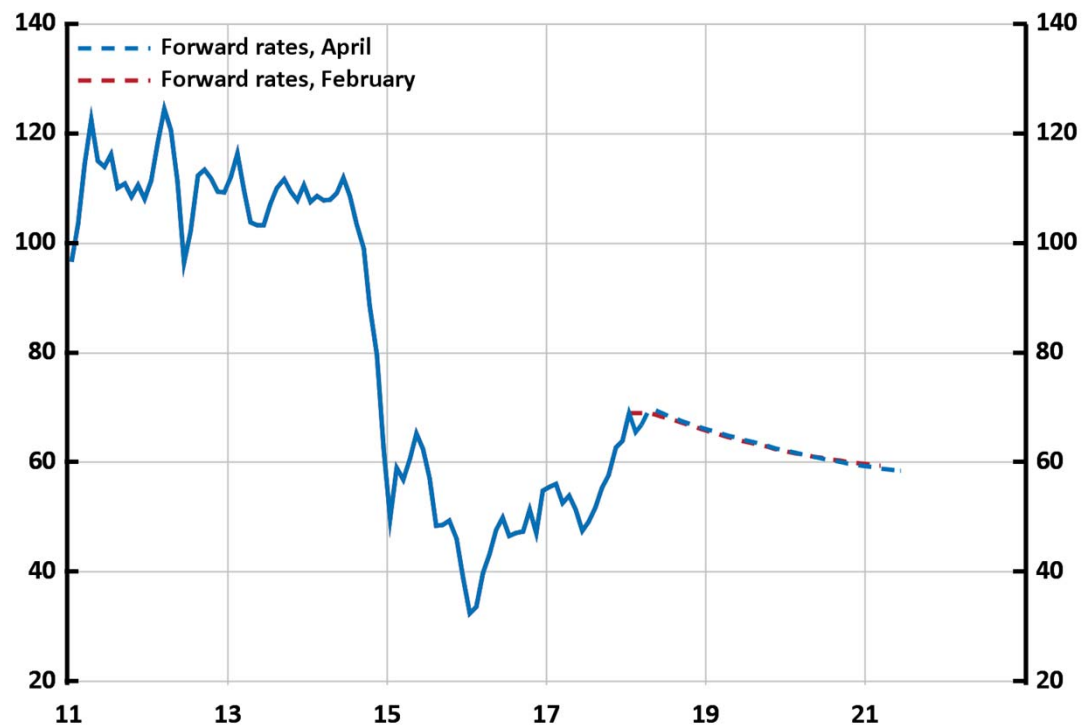


Note. Refers to wages per hour in the business sector.

Sources: The Bureau of Economic Analysis and Eurostat

# Figure 4.4. Price of crude oil

USD per barrel, Brent oil

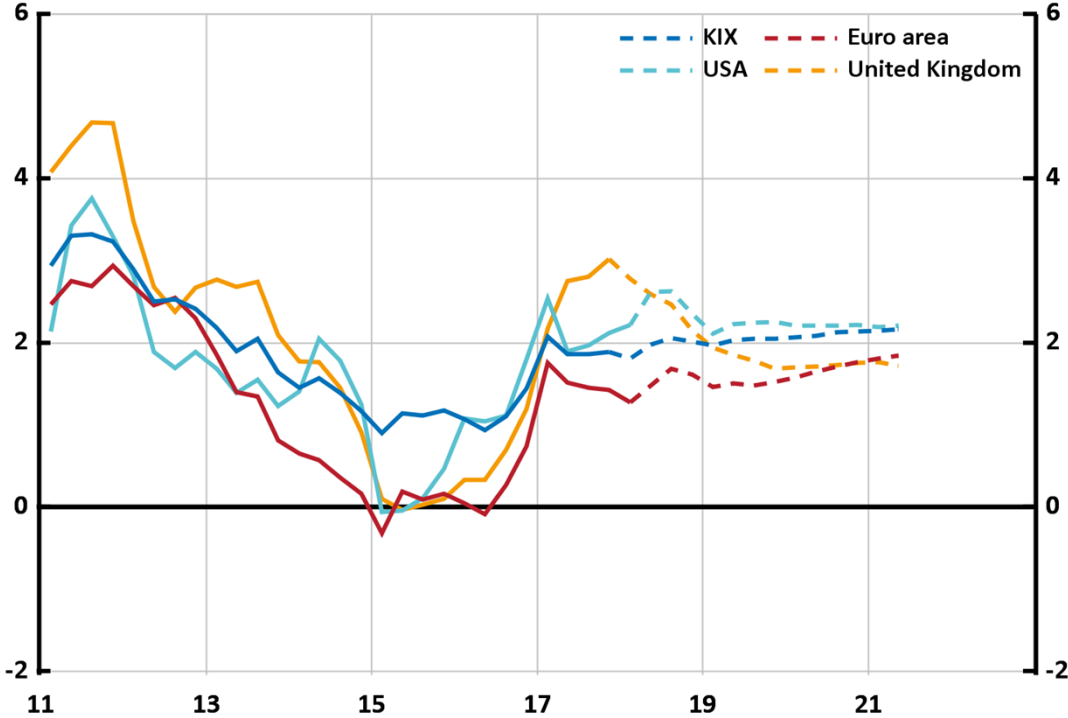


Note. Forward rates are calculated as a 15-day average. The outcome refers to monthly averages of spot prices.

Sources: Macrobond and the Riksbank

# Figure 4.5. Inflation in various countries and regions

Annual percentage change

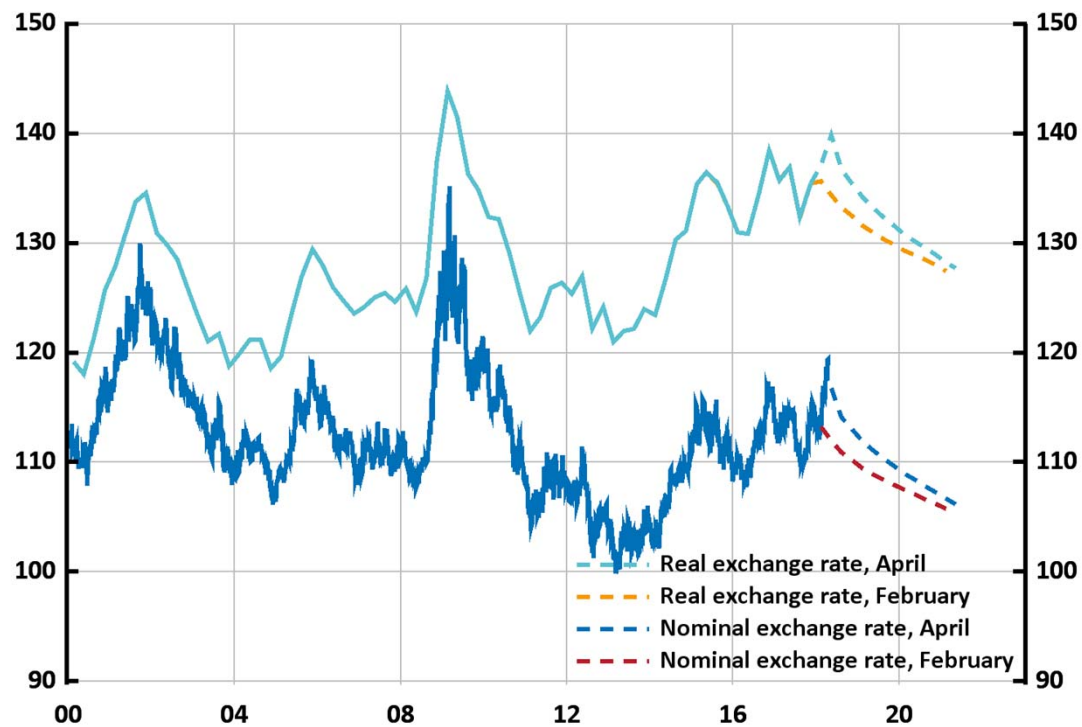


Note. KIX is an aggregate of the countries that are important to Sweden's international transactions.

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

# Figure 4.6. Real and nominal exchange rate, KIX

Index, 18 November 1992 = 100

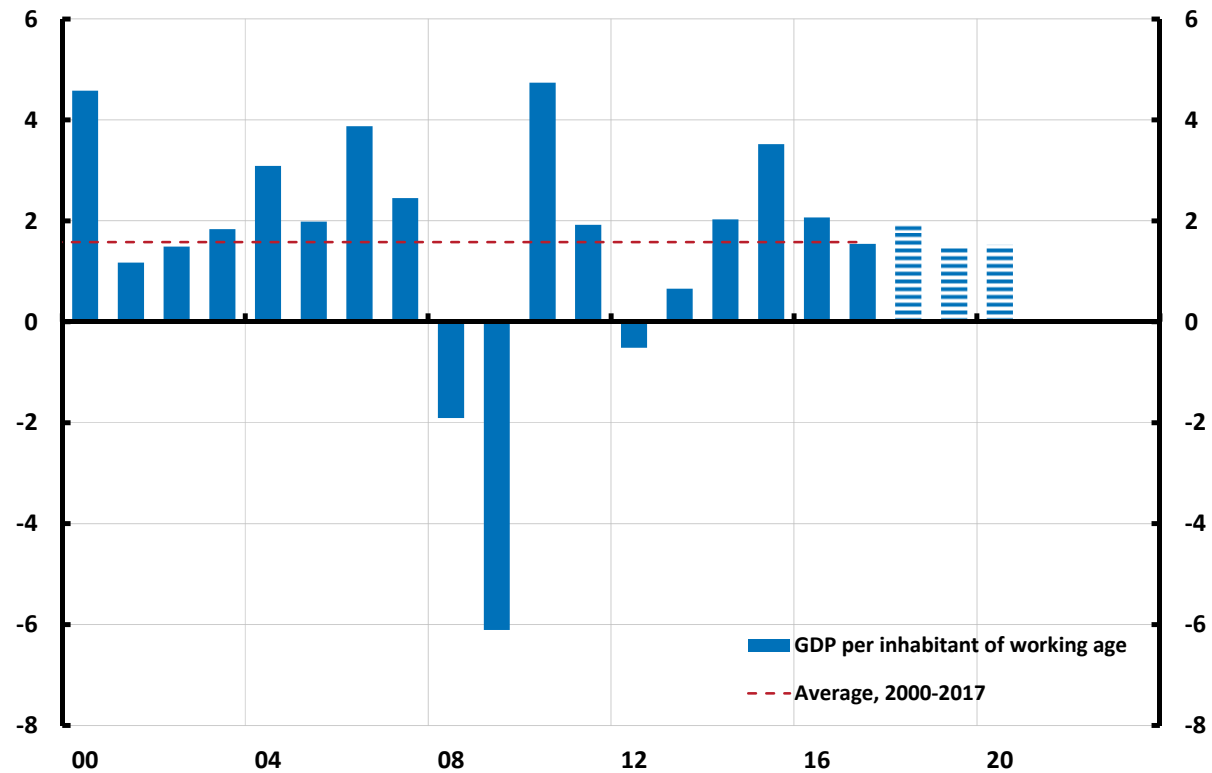


Note. The real exchange rate is calculated using the CPI for Sweden and the CPI for the rest of the world. Outcomes are daily data for the nominal exchange rate, outcomes for the real exchange rate and forecasts refer to quarterly averages. The KIX is an aggregate of 32 countries that are important for Sweden's international transactions.

Sources: National sources, Statistics Sweden and the Riksbank

# Figure 4.7. GDP per inhabitant of working age, 15-74 years

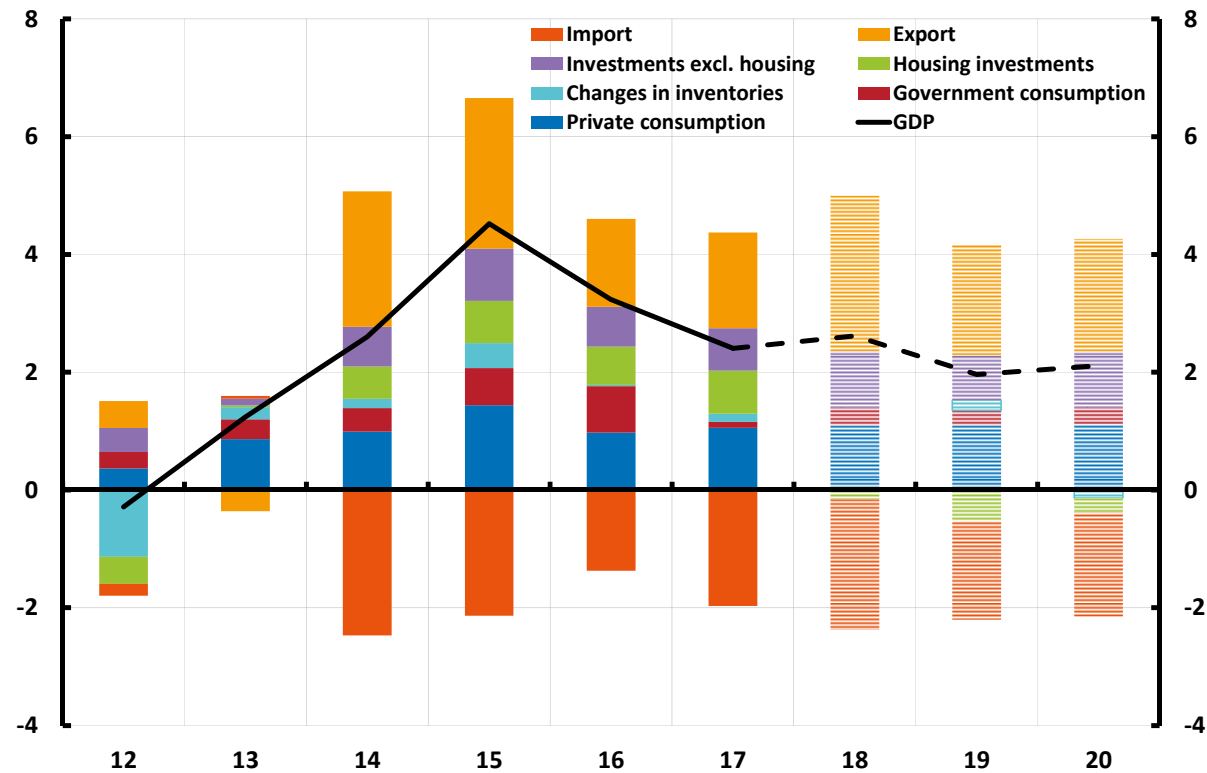
Annual percentage change, calendar-adjusted data



Sources: Statistics Sweden and the Riksbank

# Figure 4.8. Contribution to GDP growth

Annual percentage change and contribution to annual GDP growth

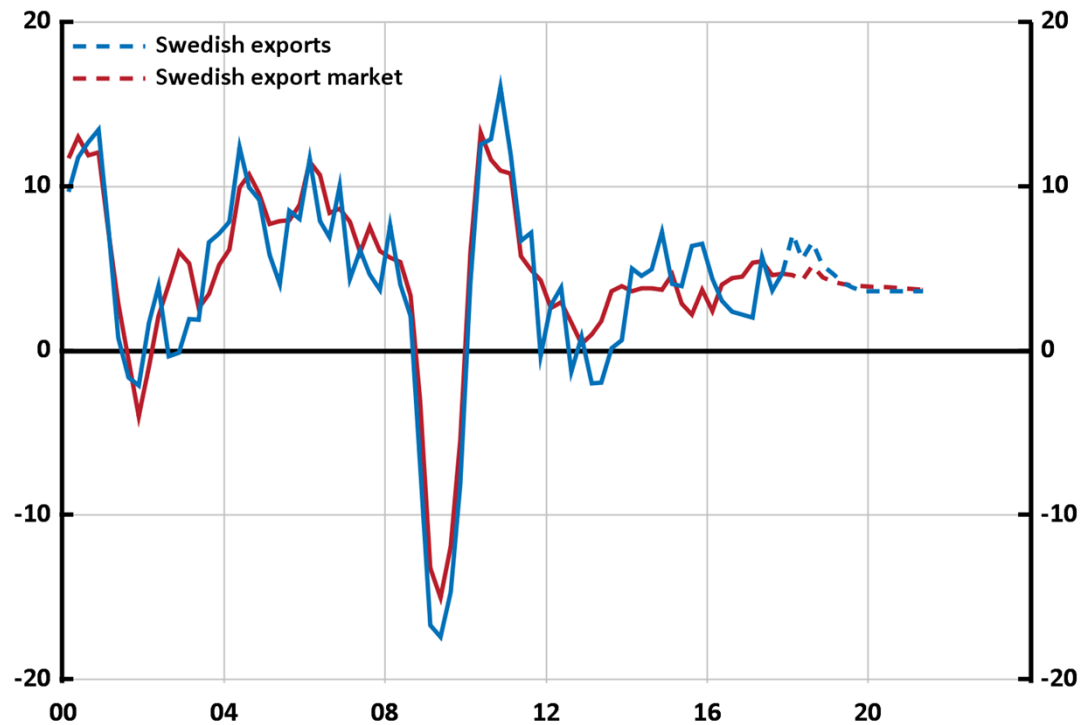


Sources: Statistics Sweden and the Riksbank



# Figure 4.9. Exports and the Swedish export market

Annual percentage change, calendar-adjusted data

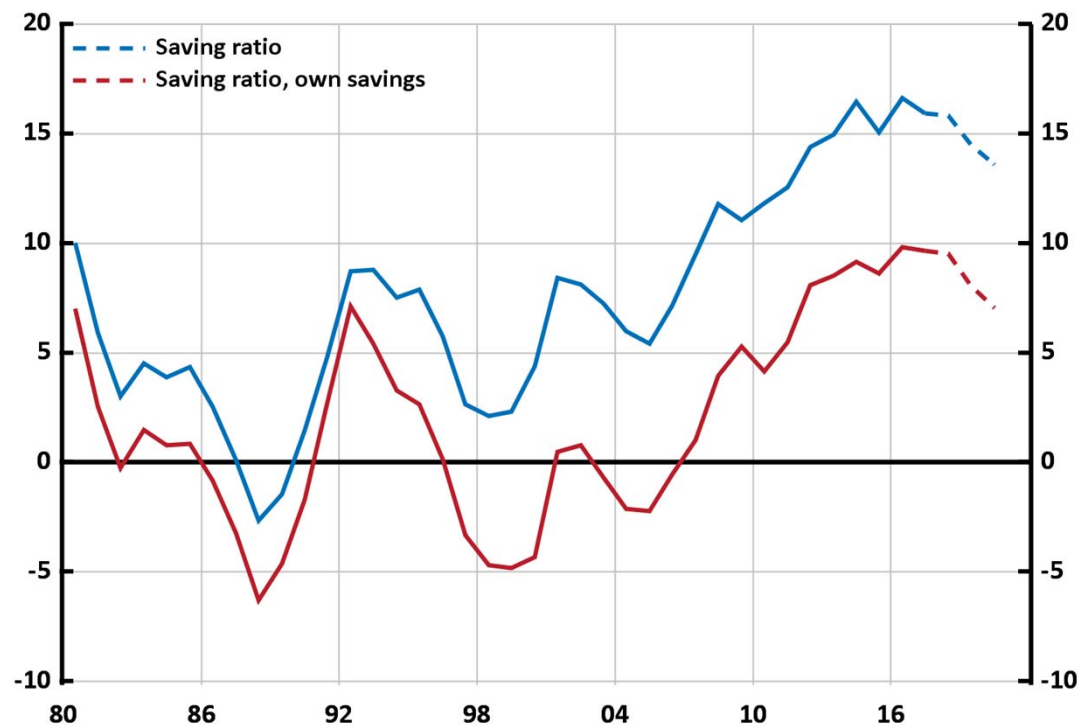


Note. The Swedish export market index aims to measure import demand in the countries to which Sweden exports. This is calculated by aggregating imports in the countries included in KIX and covers around 85 per cent of the total Swedish export market.

Sources: Statistics Sweden and the Riksbank

# Figure 4.10. Household savings ratio with and without collective insurance savings

Percentage of disposable income

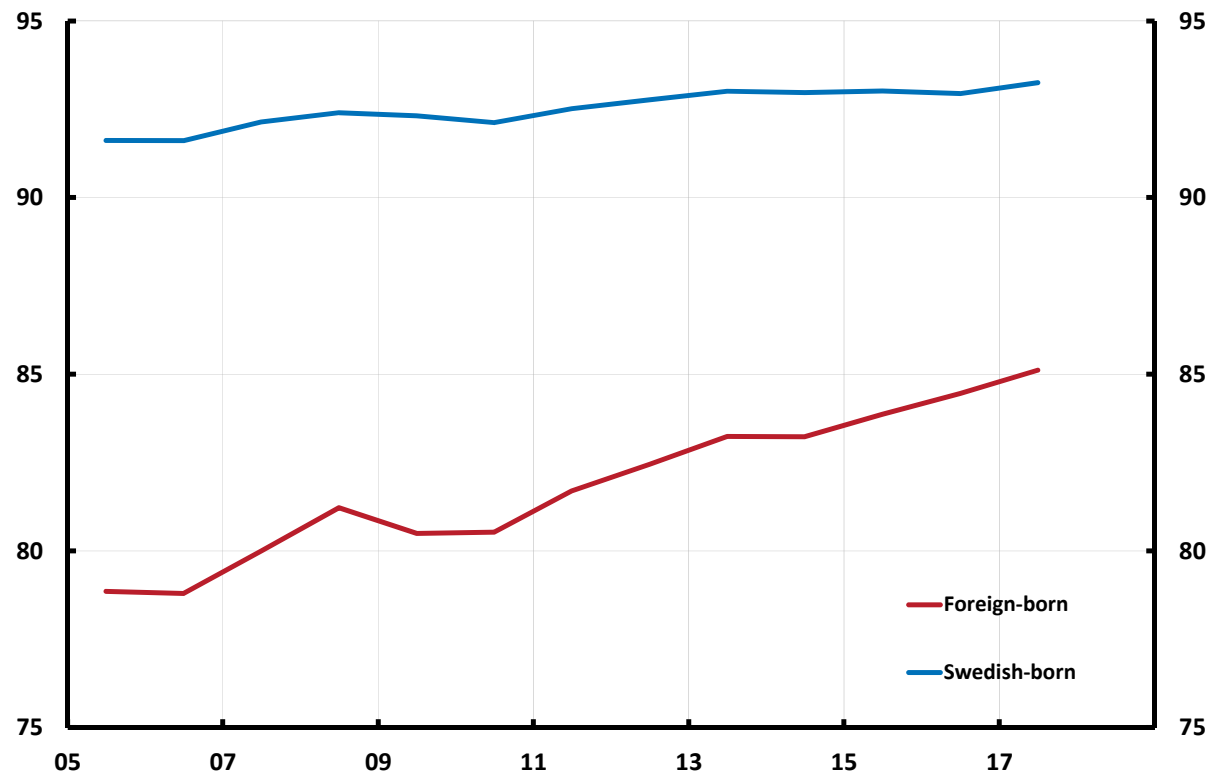


Note. Total household savings include collective insurance savings. The former definition, which is here termed 'total household saving', excluded collective insurance savings and the savings are the difference between income and consumer expenditure.

Sources: Statistics Sweden and the Riksbank

# Figure 4.11. Labour force participation rate among Swedish-born and foreign-born persons, 25-54 years

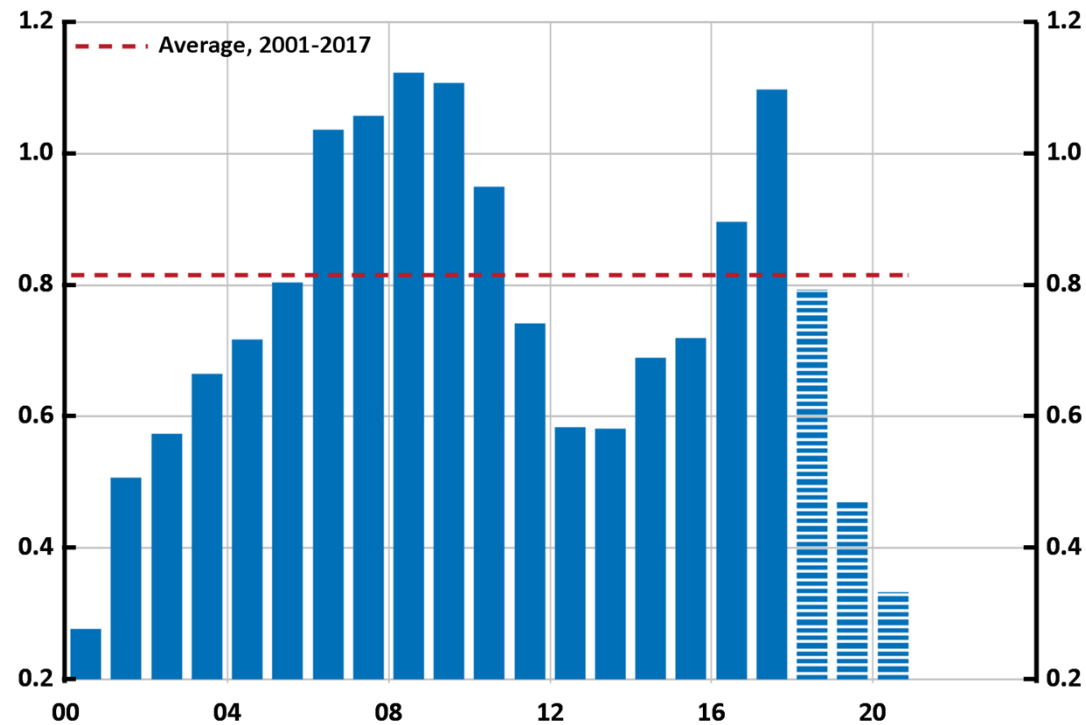
Per cent of the population



Source: Statistics Sweden

# Figure 4.12. Working-age population, 15–74 years

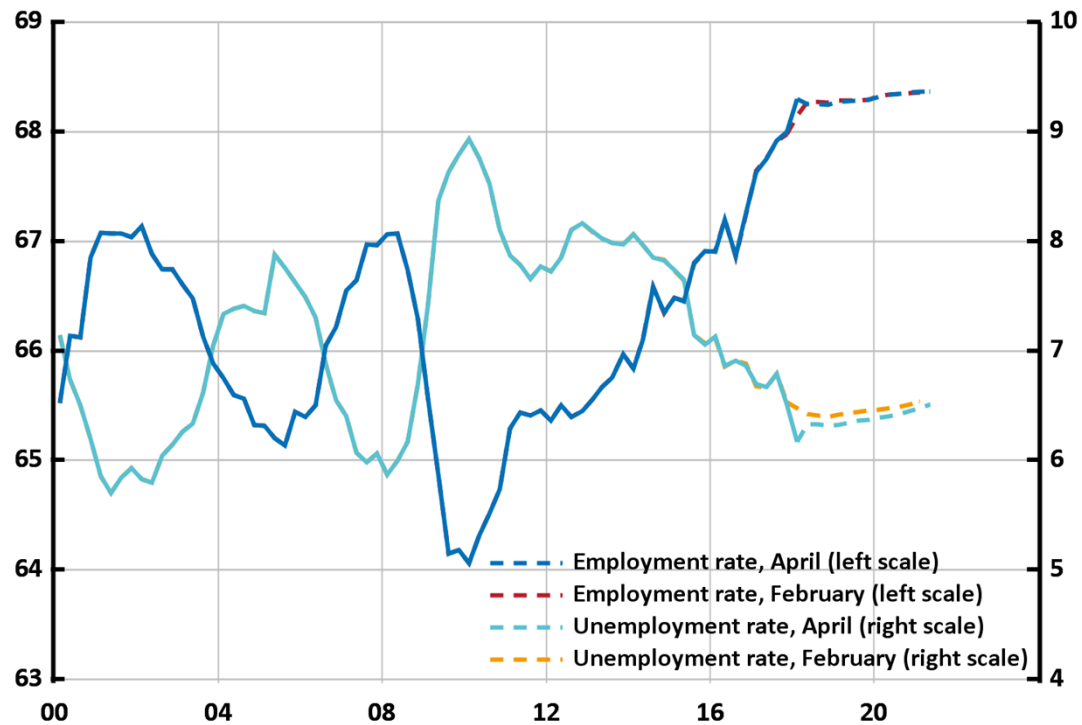
Annual percentage change



Sources: Statistics Sweden and the Riksbank

# Figure 4.13. Employment rate and unemployment

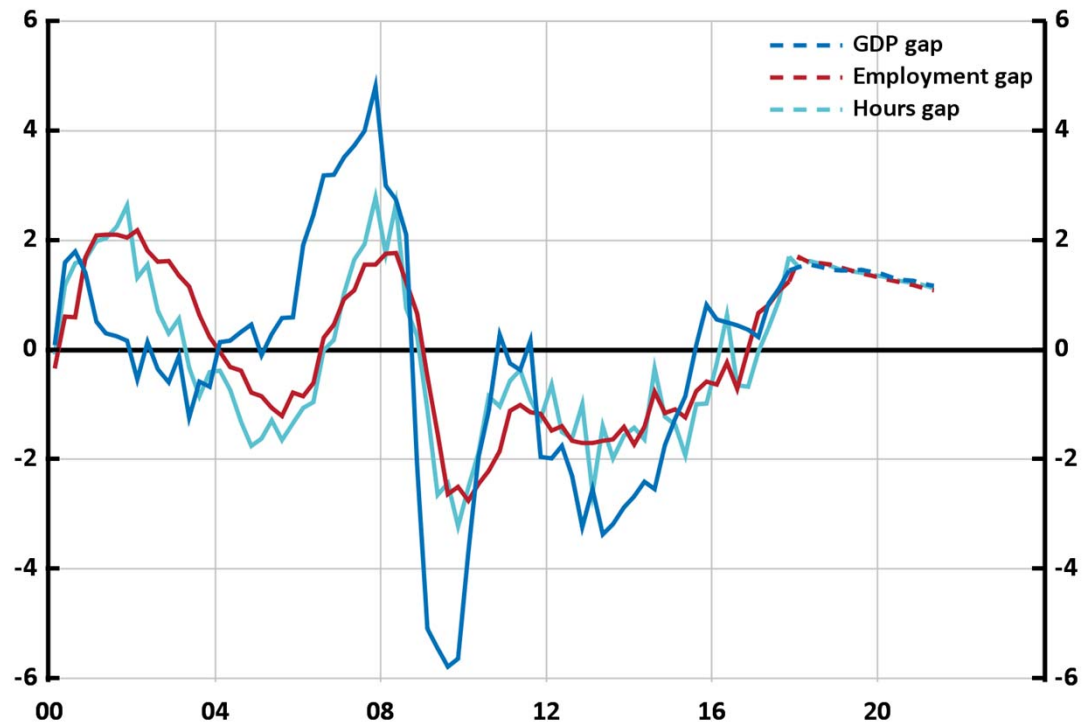
Percentage of population and labour force respectively, aged 15-74 years, seasonally-adjusted data



Sources: Statistics Sweden and the Riksbank

# Figure 4.14. GDP gap, employment gap and hours gap

Per cent

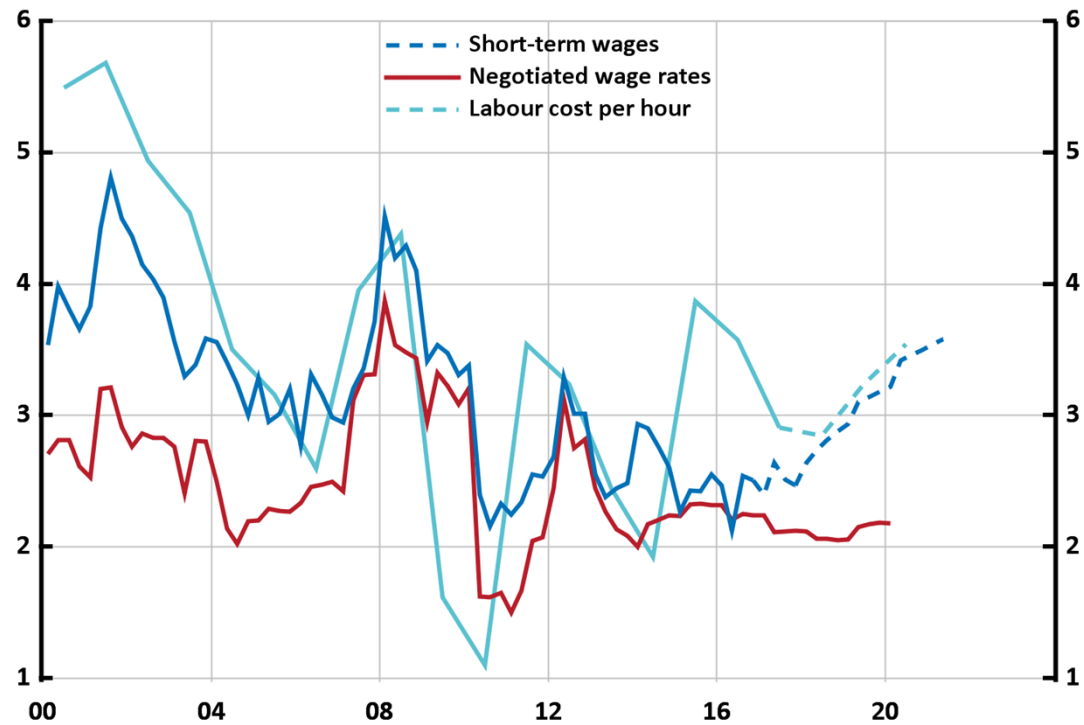


Note. The gaps refer to the deviation in GDP, the number of those employed and the number of hours worked from the Riksbank's assessed trends.

Sources: Statistics Sweden and the Riksbank

# Figure 4.15. Wages and labour costs in the whole economy

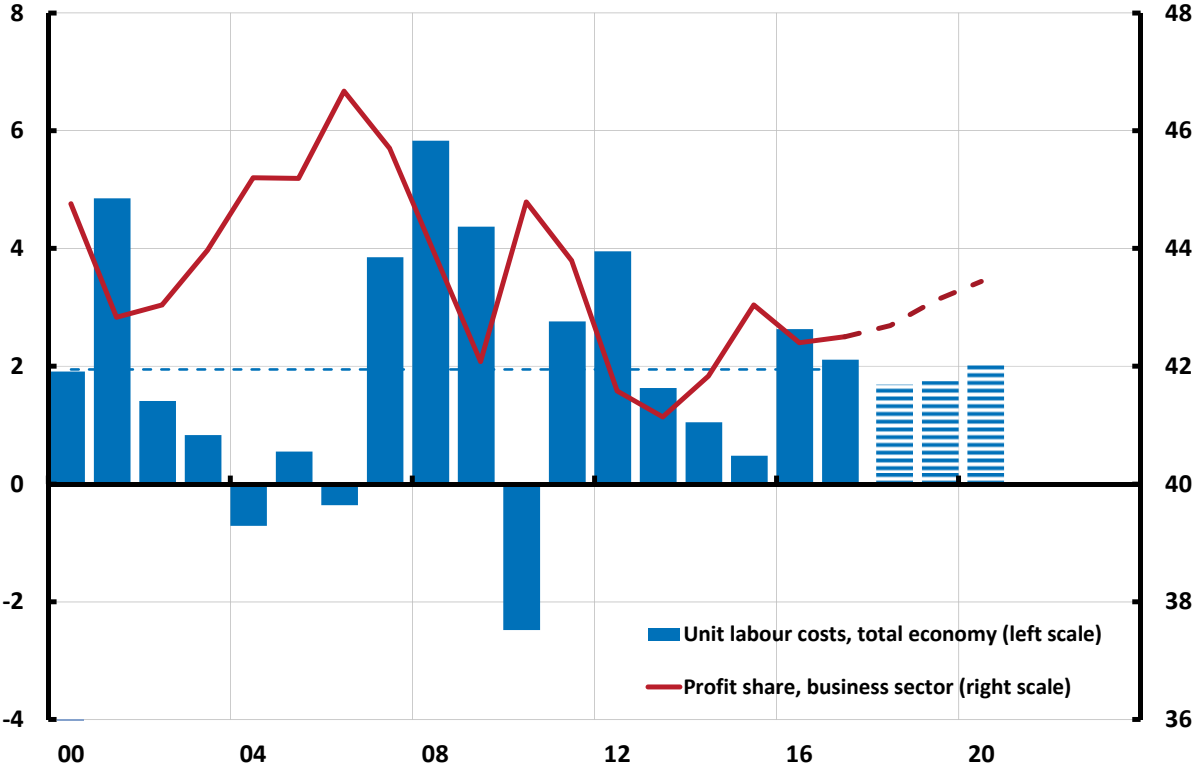
Annual percentage change



Sources: Statistics Sweden and the Riksbank

# Figure 4.16. Unit labour costs and profit share

Annual percentage change and per cent of added value respectively



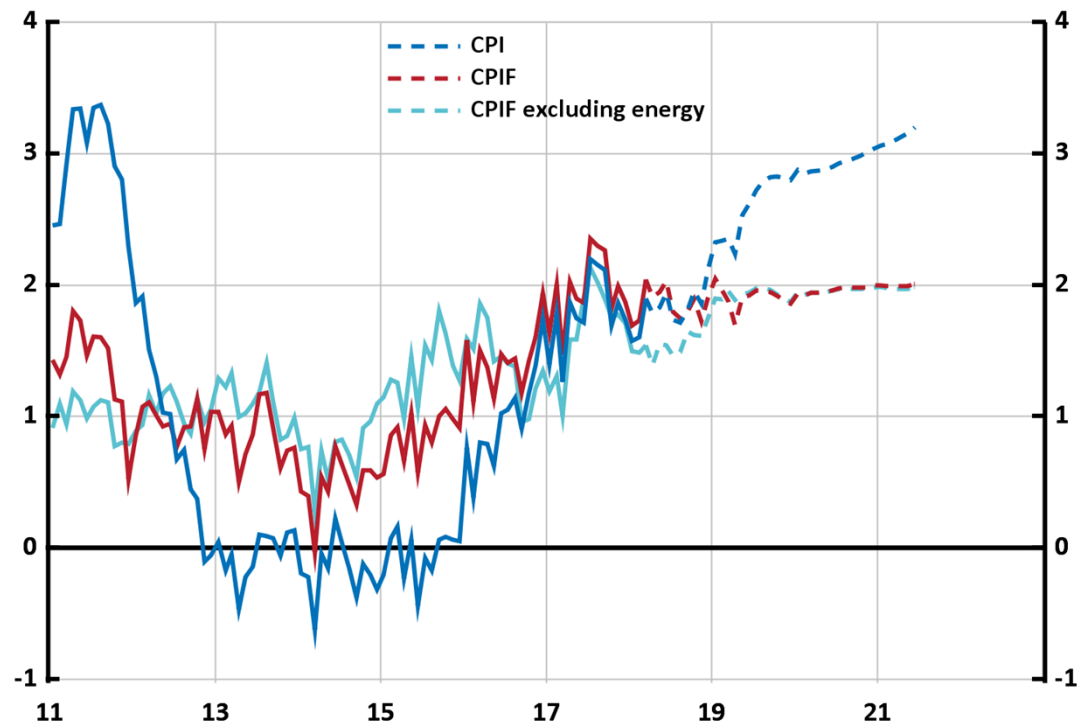
Note. Profit share refers to operating surplus as a percentage of total value added in the business sector. The broken line refers to the average rate of increase in unit labour costs (entire economy) since 1994.

Sources: Statistics Sweden, the NIER and the Riksbank



# Figure 4.17. CPI, CPIX and CPIX excluding energy

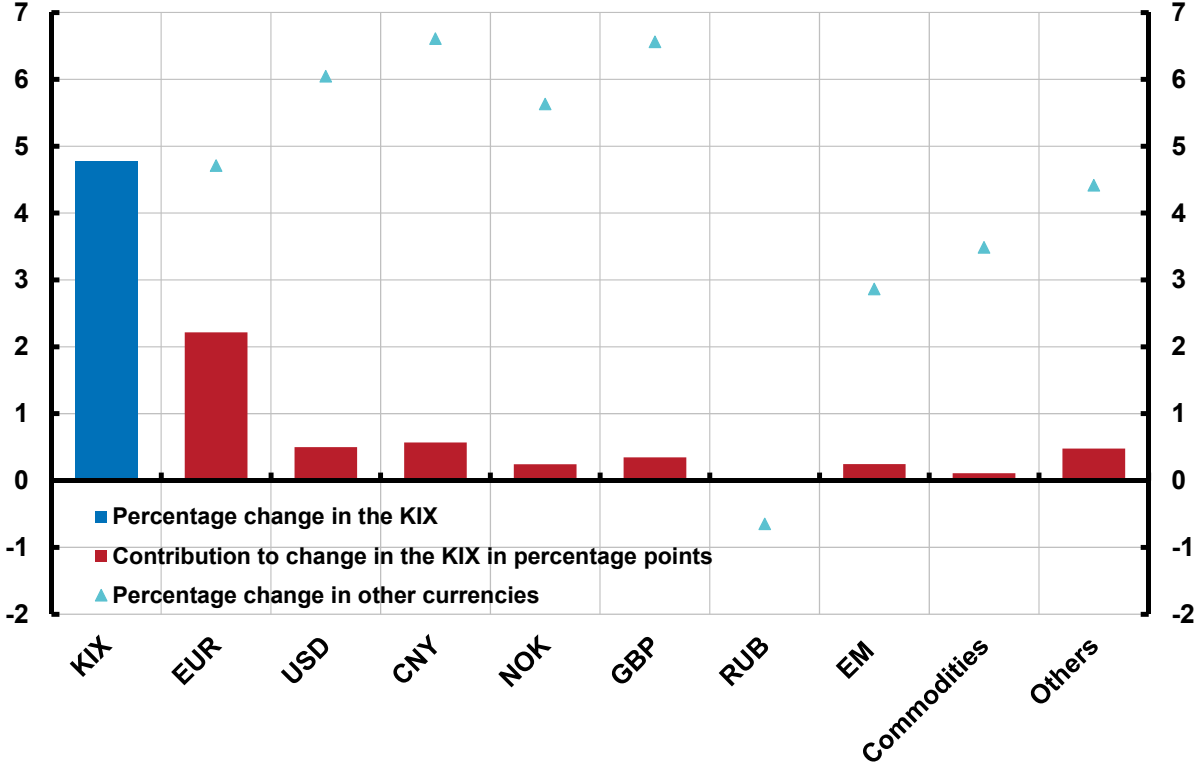
Annual percentage change



Sources: Statistics Sweden and the Riksbank

# Figure 4.18. Changes to KIX exchange rates

Per cent and percentage points

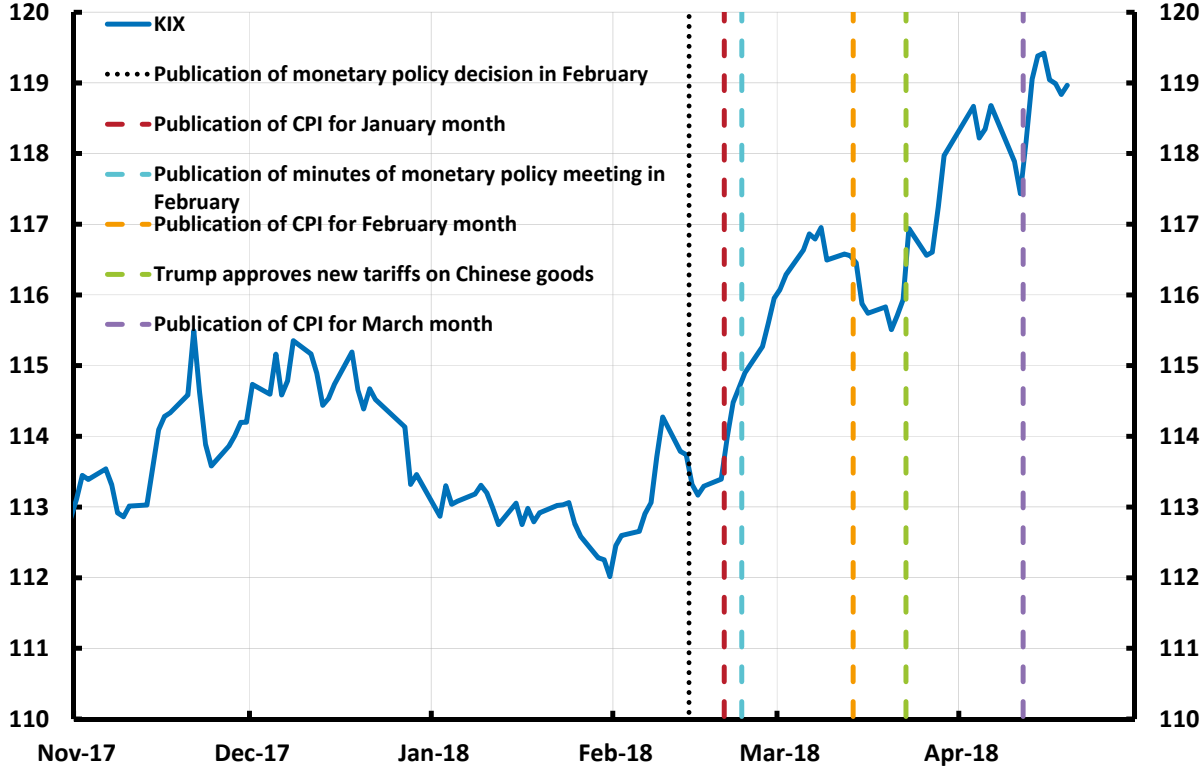


Note. The figure shows changes in KIX and contributions from different currencies between 14 February 2018 and 24 April 2018. EM refers to Brazil, Hungary, India, Mexico, Poland and Turkey. Commodities refer to Australia, Canada and New Zealand. Other refers to Czech Republic, Denmark, Iceland, Japan, South Korea and Switzerland

Sources: Thomson Reuters and the Riksbank

# Figure 4.19. Developments of the krona linked to some events

Index, 18 November 1992 = 100



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

Sources: National sources and the Riksbank