



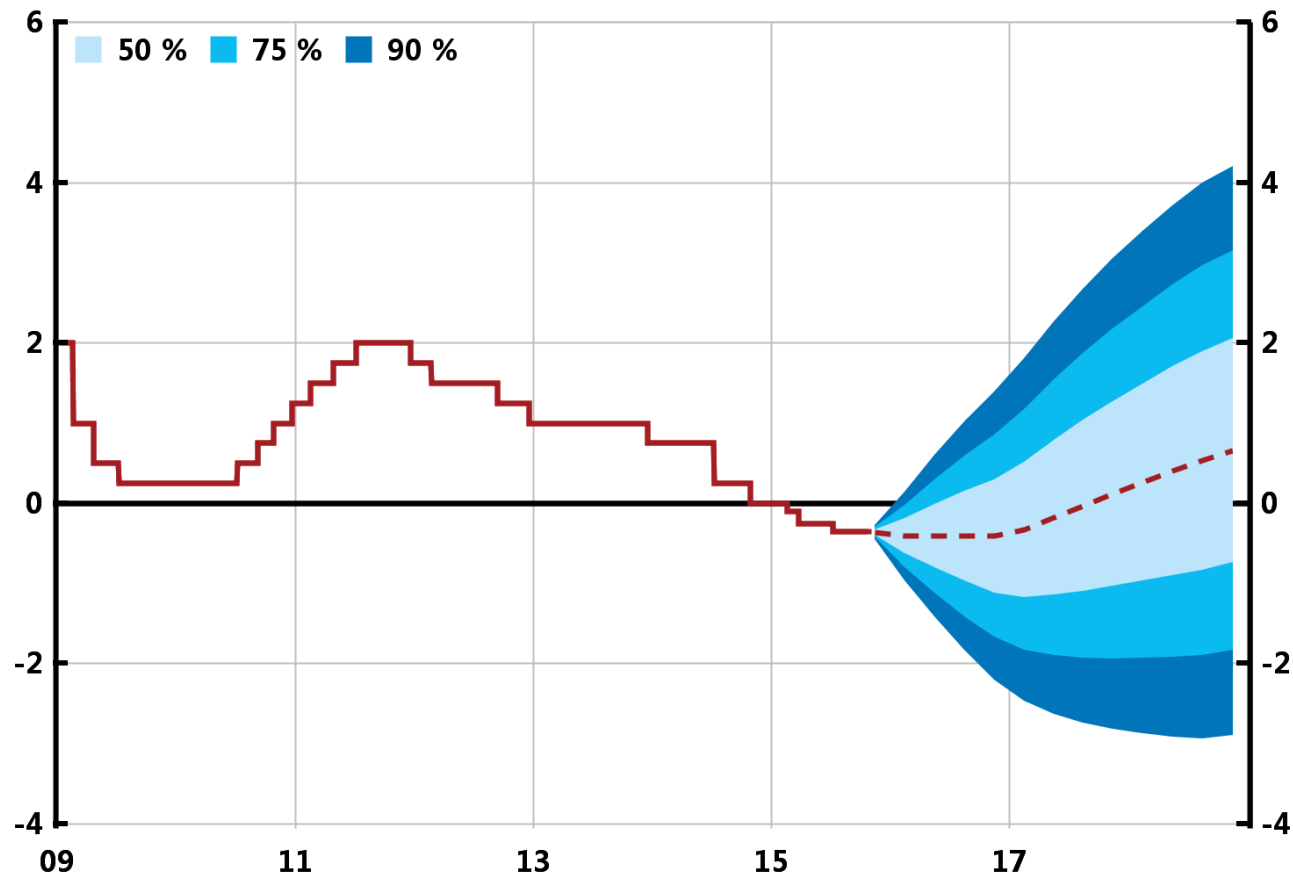
Monetary Policy Report October 2015



Chapter 1

Figure 1.1. Repo rate with uncertainty bands

Per cent

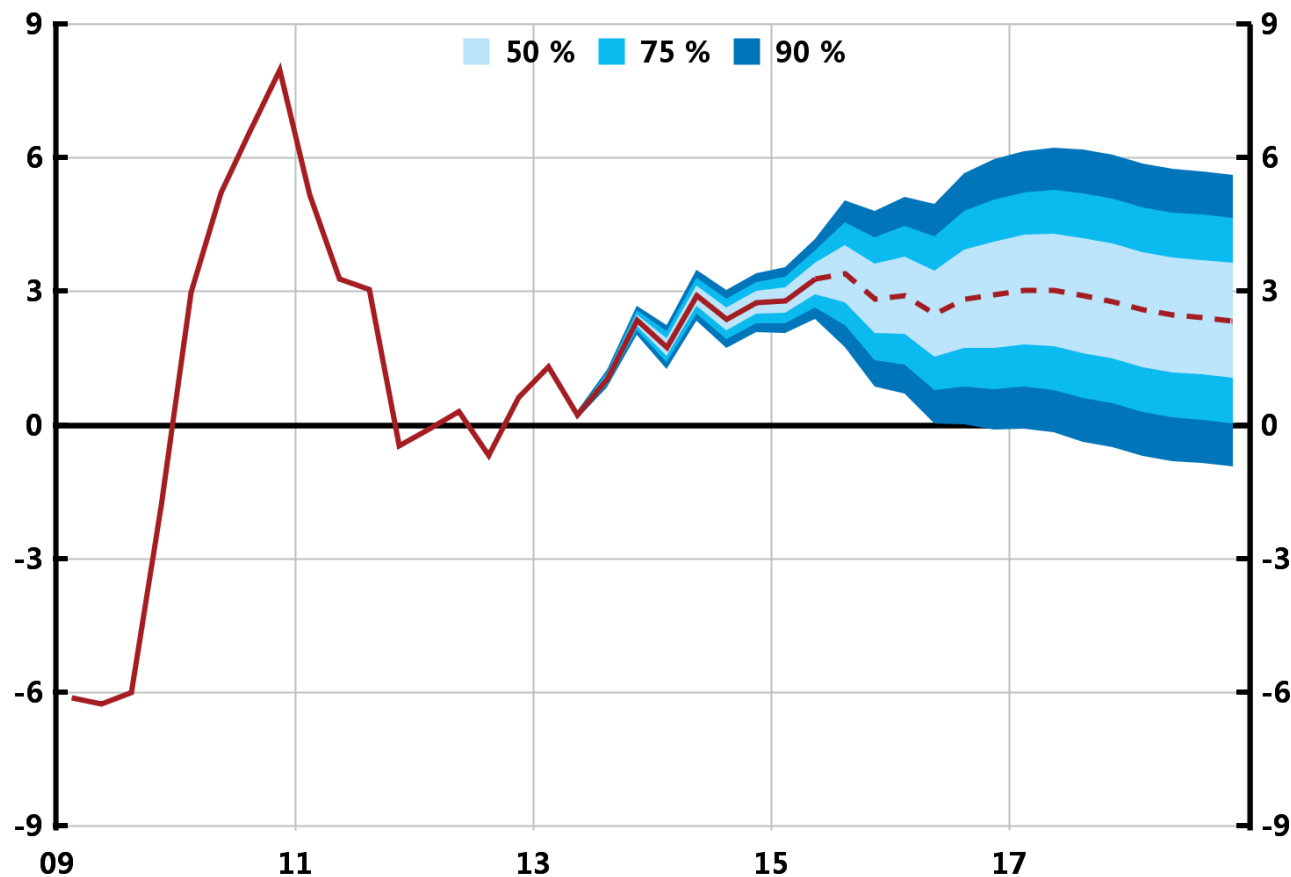


Note. The uncertainty bands for the repo rate are based on the Riksbank's historical forecasting errors and the ability of risk-premium adjusted forward rates to forecast the future repo rate for the period 1999 up to the point when the Riksbank started to publish forecasts for the repo rate during 2007. 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

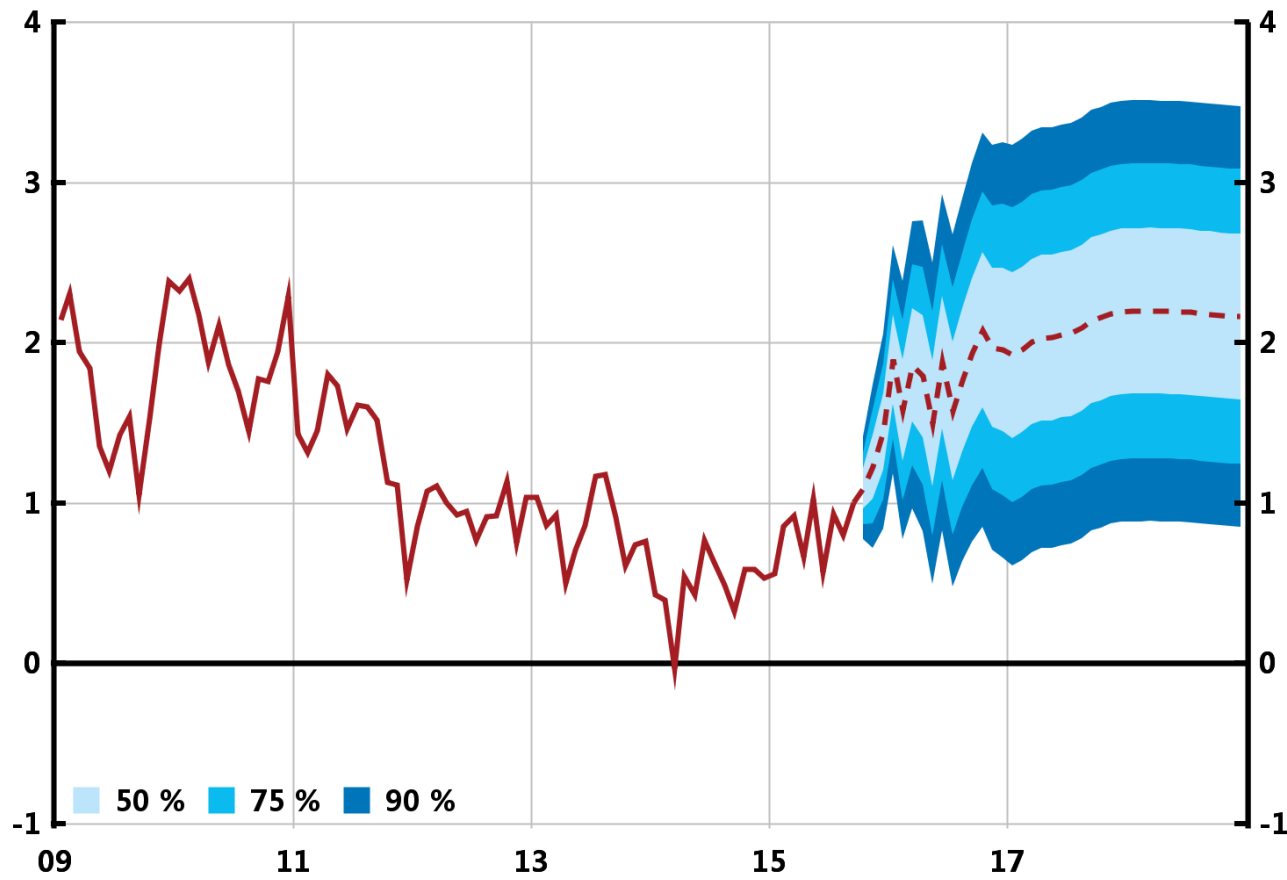


Note. The uncertainty bands are based on the Riksbank's historical forecasting errors. There is also uncertainty for the outcomes for GDP, as the figures in the National Accounts are revised several years after the preliminary publication.

Sources: Statistics Sweden and the Riksbank

Figure 1.3. CPIF with uncertainty bands

Annual percentage change

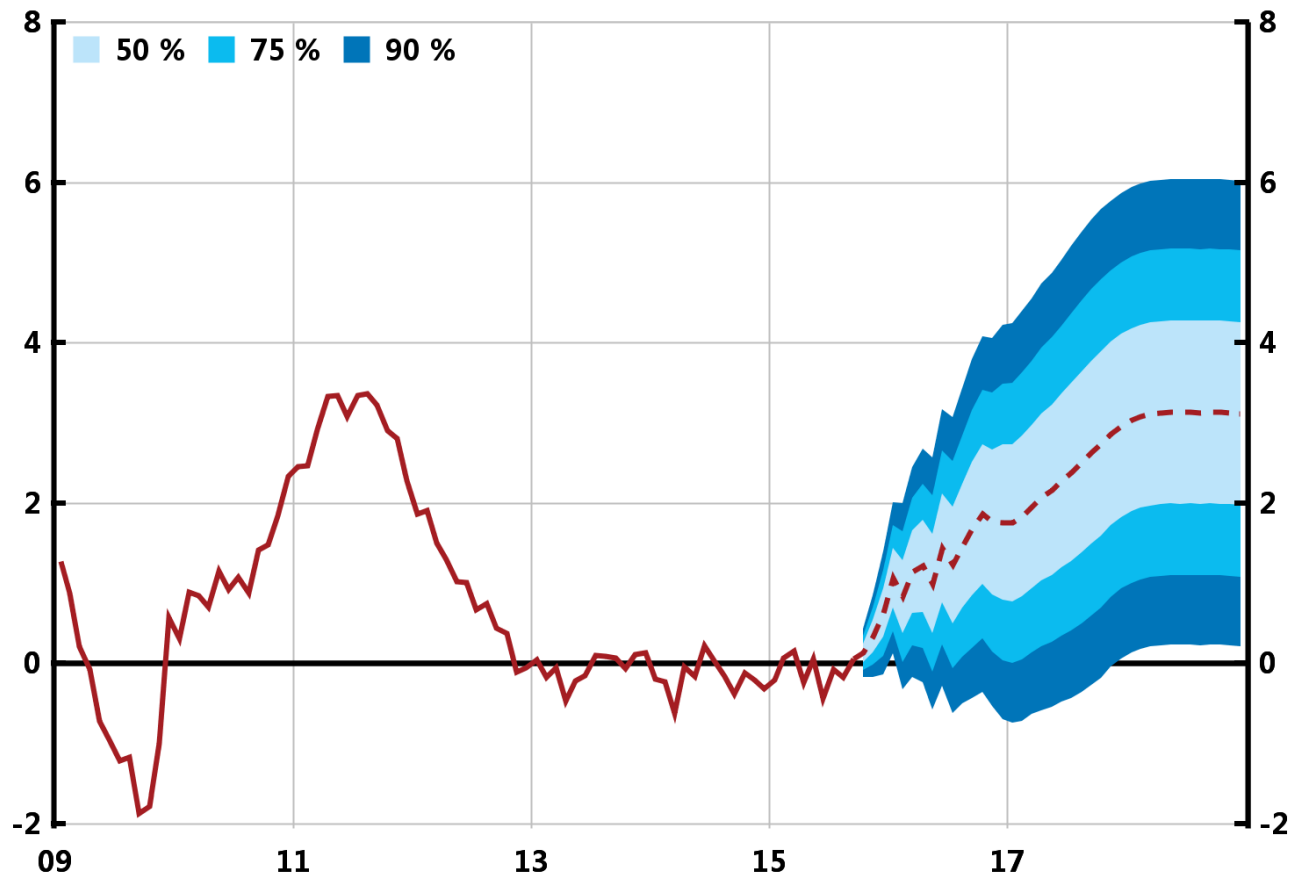


Note. The uncertainty bands are based on the Riksbank's historical forecasting errors. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Figure 1.4. CPI with uncertainty bands

Annual percentage change

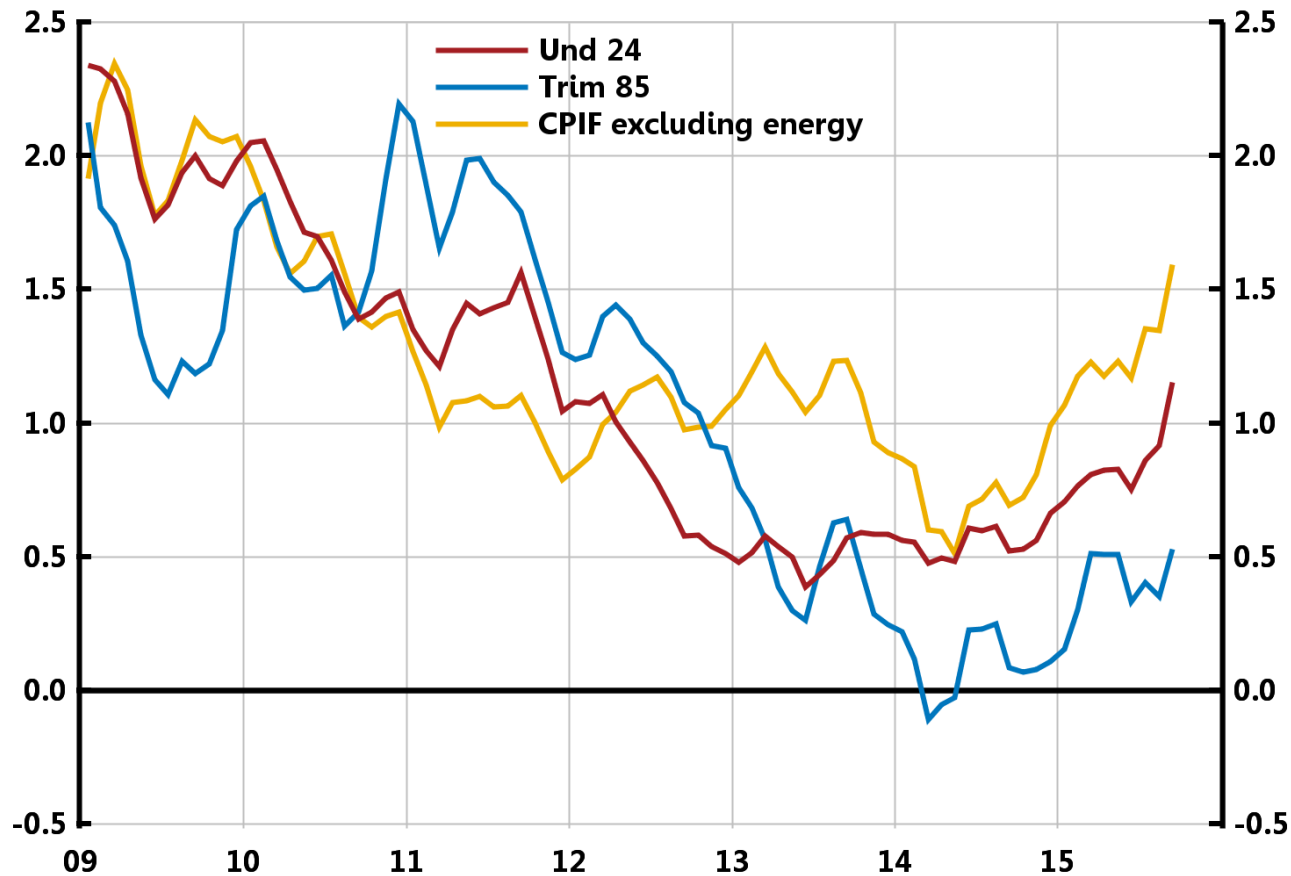


Note. The uncertainty bands are based on the Riksbank's historical forecasting errors.

Sources: Statistics Sweden and the Riksbank

Figure 1.5. Measures of underlying inflation

Annual percentage change, three months moving average

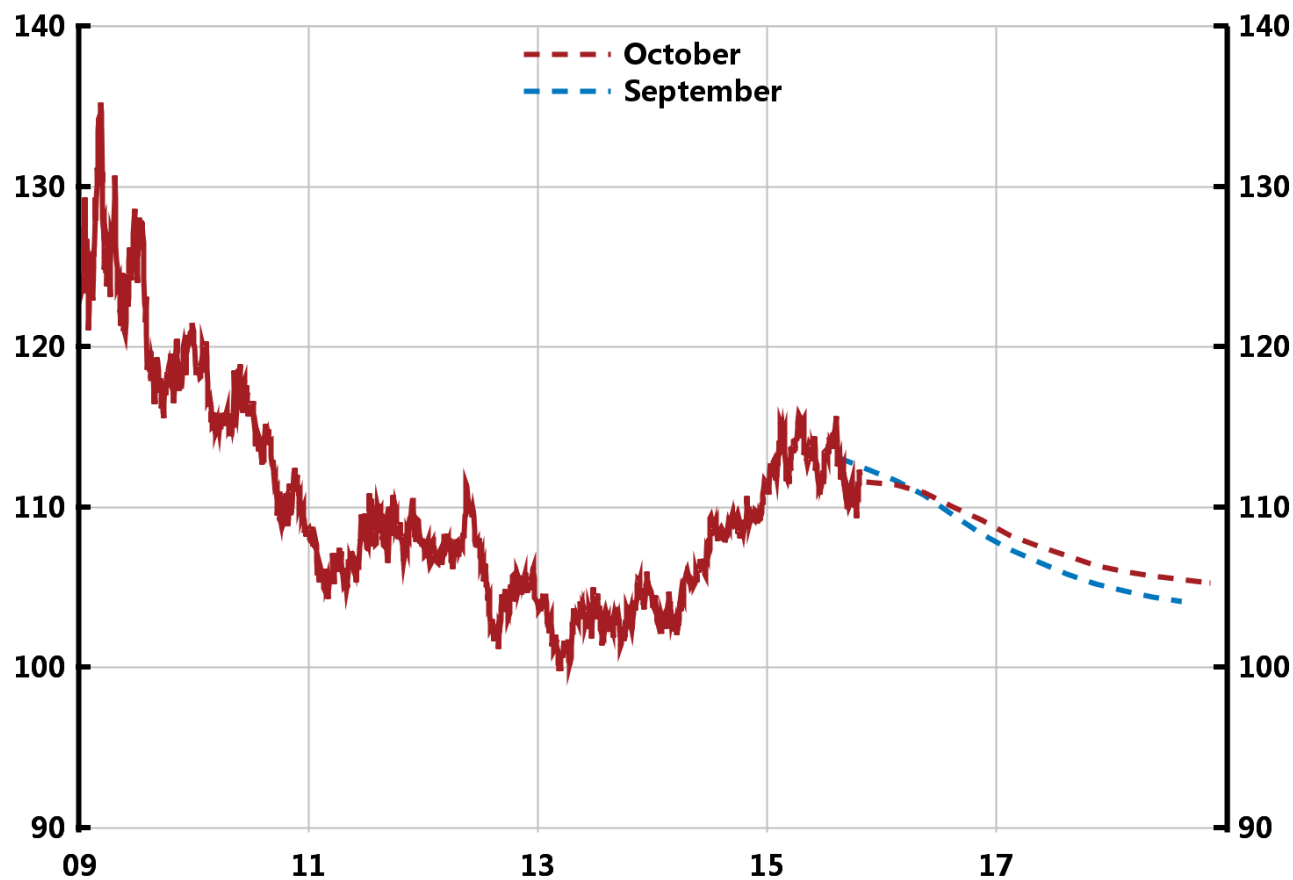


Note. Und 24 and Trim 85 are statistical measures calculated on the basis of the CPI divided into approximately 70 subgroups. Und 24 is weighted and adjusted for the historical standard deviation. In Trim 85 the 7.5 per cent highest and the 7.5 lowest yearly price changes have been excluded.

Sources: Statistics
Sweden and the Riksbank

Figure 1.6. KIX-weighted nominal exchange rate

Index, 1992-11-18 = 100

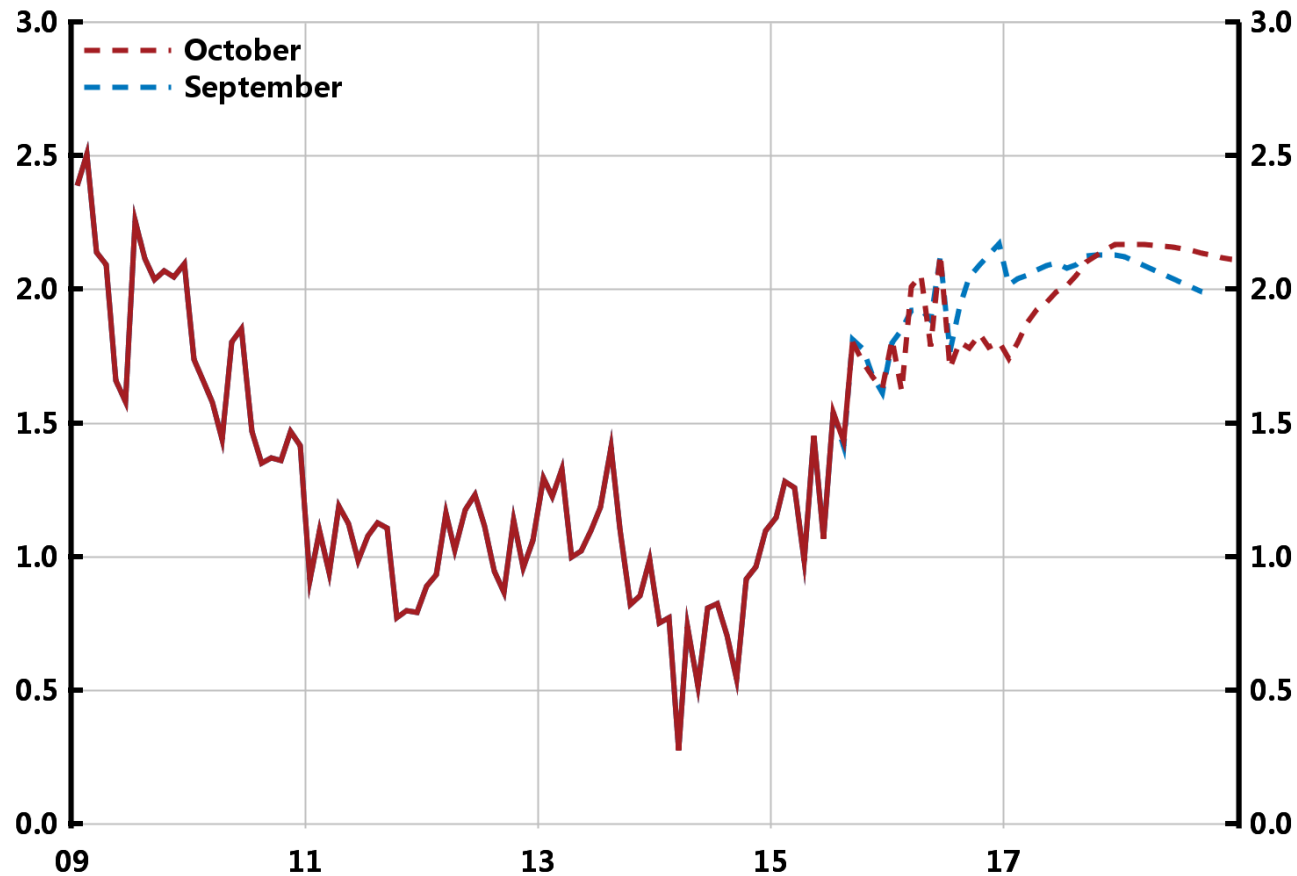


Note. Outcomes are daily rates and forecasts refer to quarterly averages. KIX refers to an aggregate of countries that are important for Sweden's international transactions.

Sources: National sources and the Riksbank

Figure 1.7. CPIF excluding energy

Annual percentage change

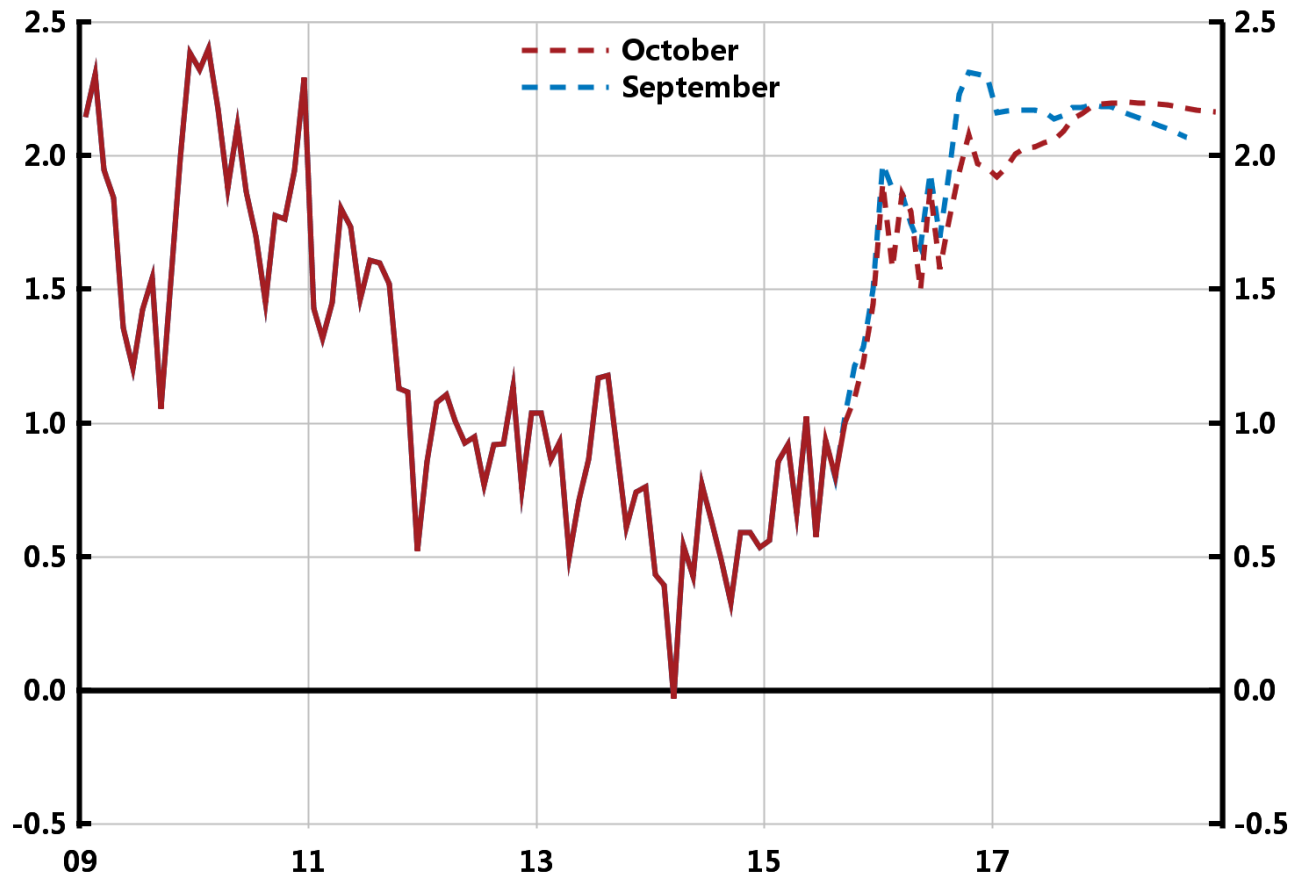


Note. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Figure 1.8. CPIF

Annual percentage change



Note. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Figure 1.9. CPI

Annual percentage change

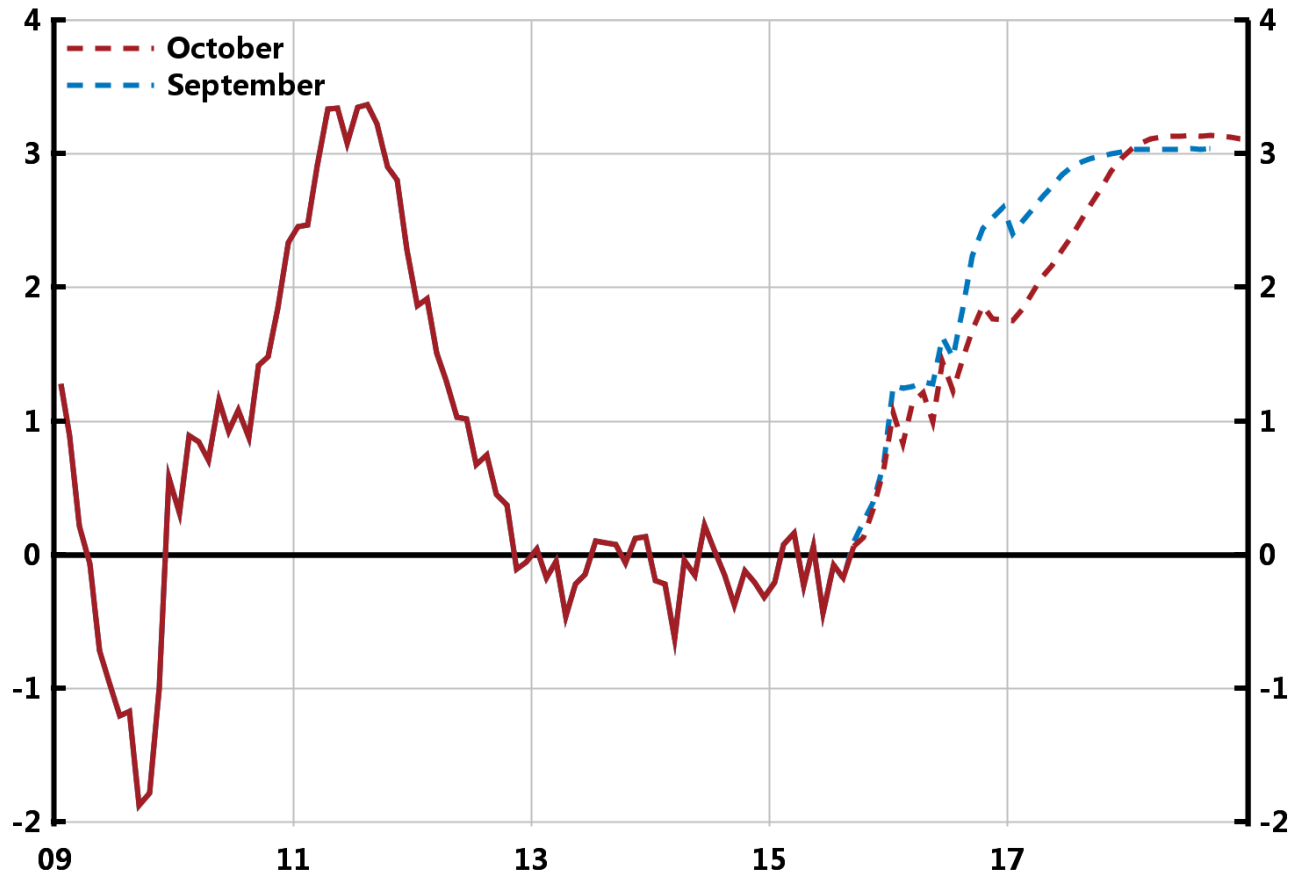
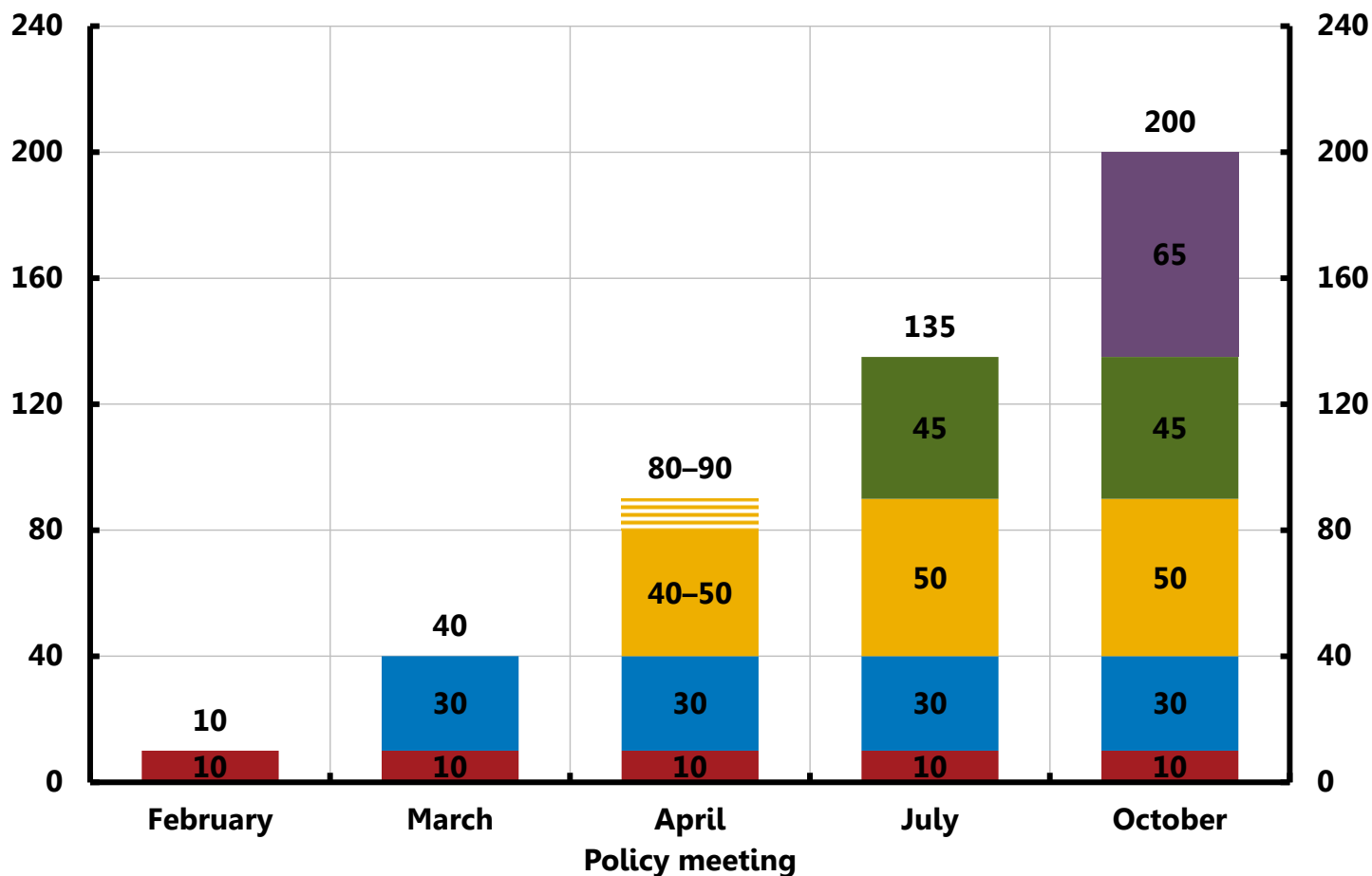


Figure 1.10. Purchases of government bonds decided by the Riksbank

SEK billion



Note. Government bond purchases will continue until 30 June 2016.

Source: Sveriges Riksbank

Figure 1.11. Repo rate

Per cent

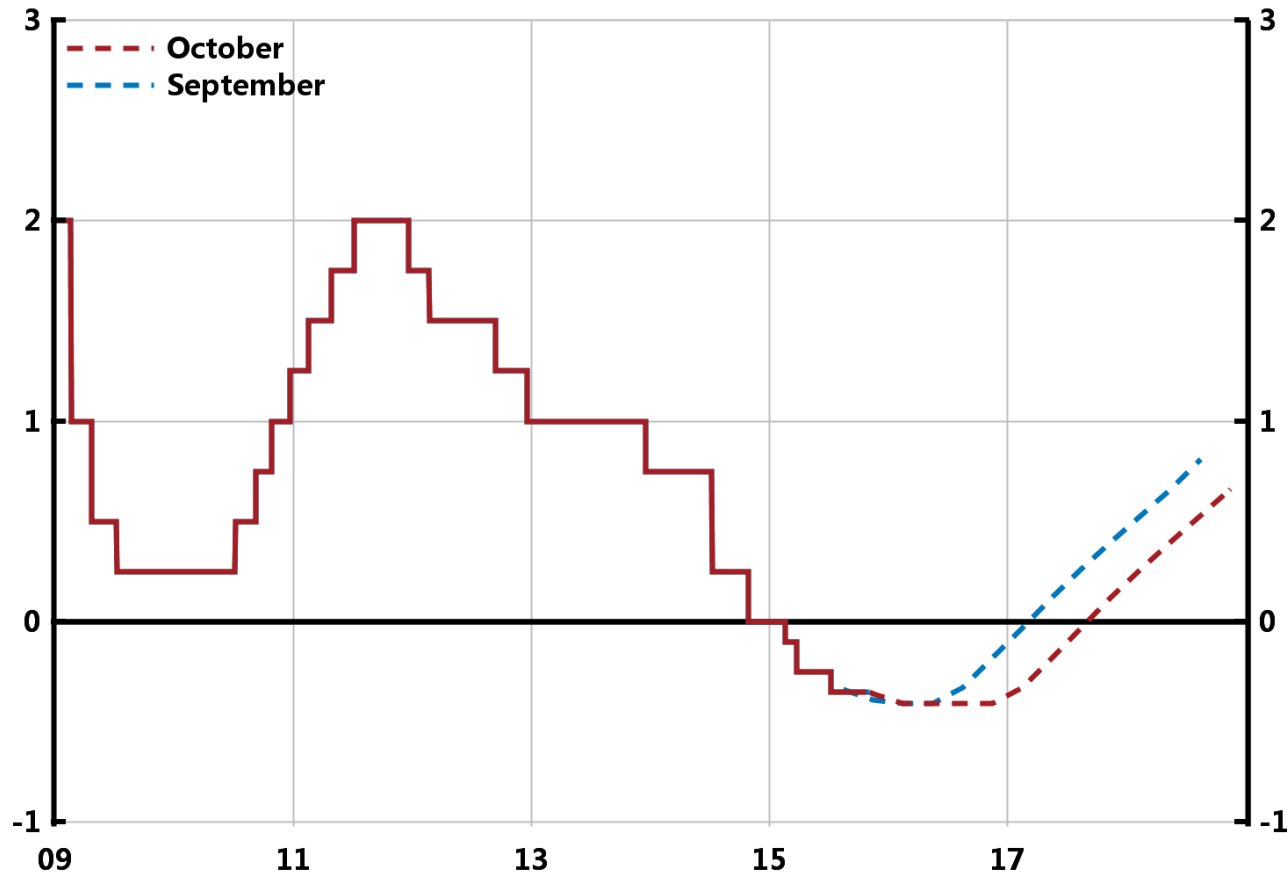
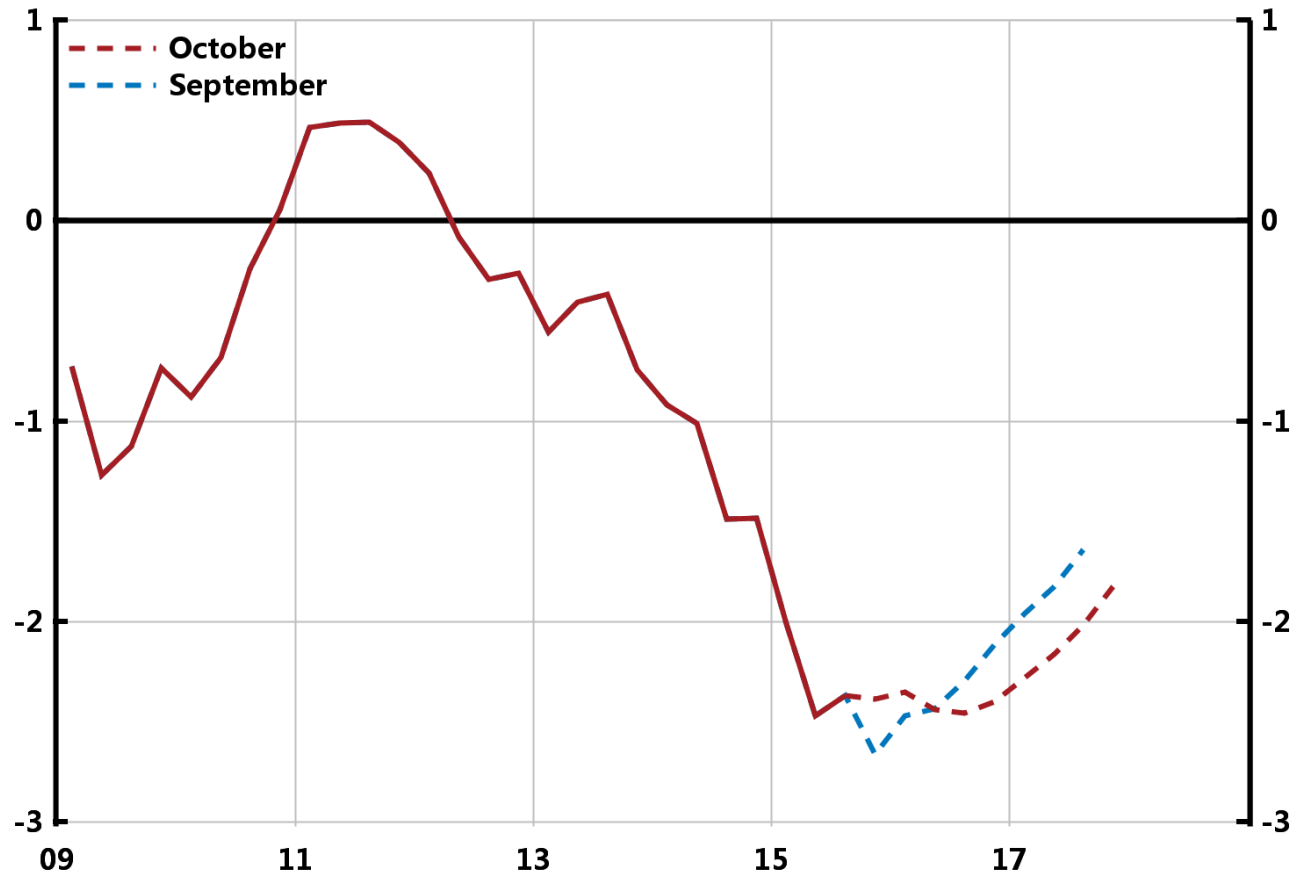


Figure 1.12. Real repo rate

Per cent, quarterly averages

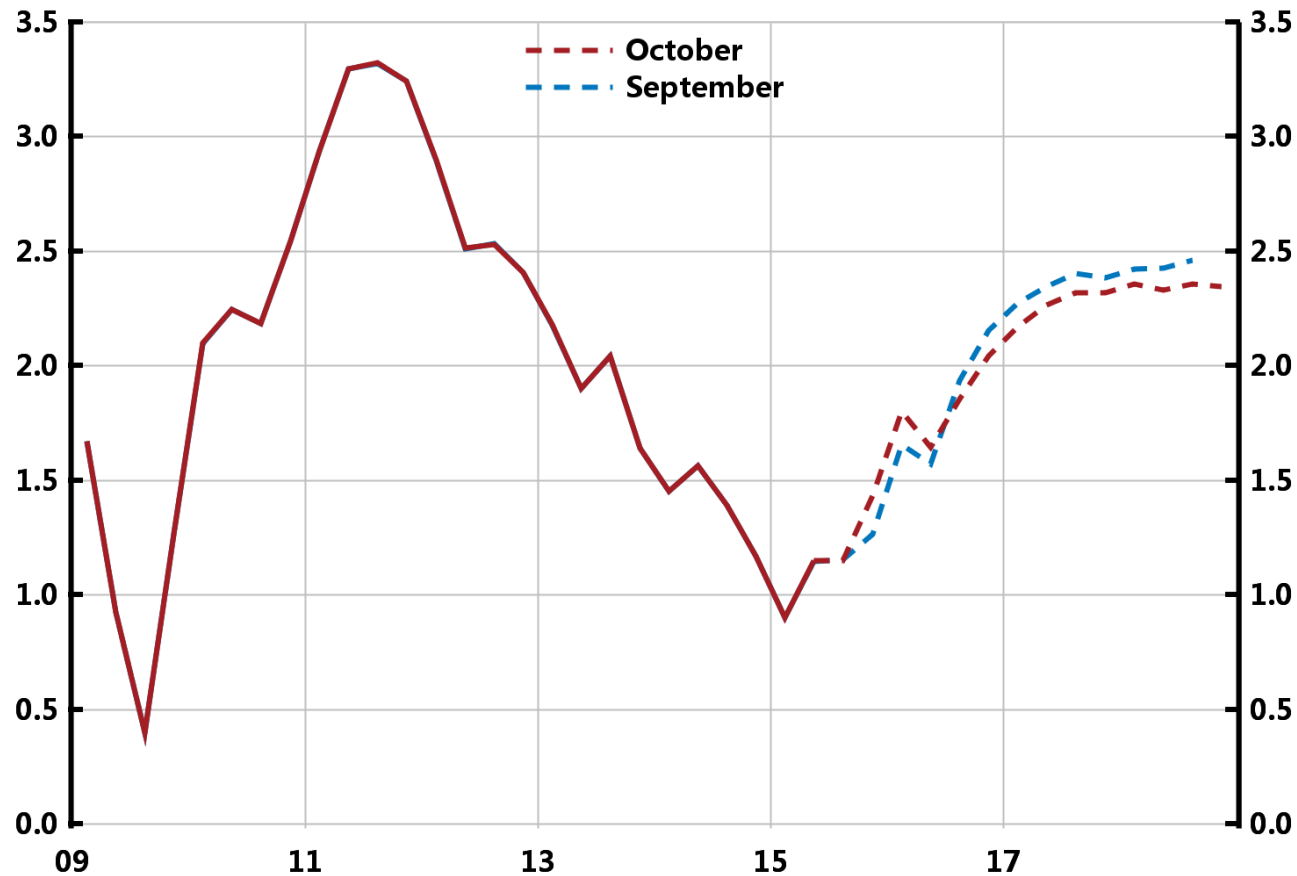


Note. The real repo rate is a mean value of the Riksbank's repo rate forecast for the year ahead minus the inflation forecast (CPIF) for the corresponding period.

Sources: Statistics Sweden and the Riksbank

Figure 1.13. Inflation abroad

KIX-weighted, annual percentage change

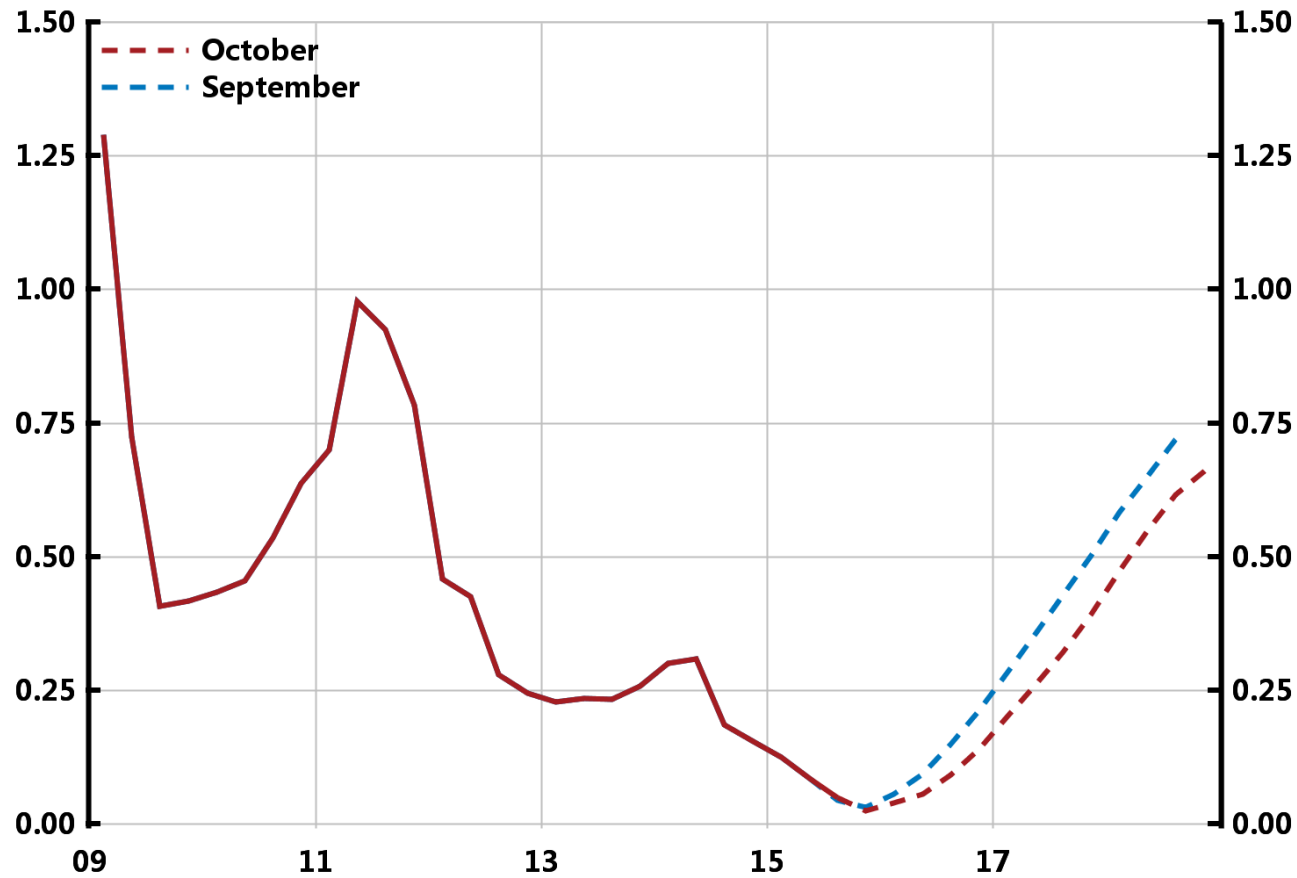


Note. KIX is an aggregate of countries that are important for Sweden's international transactions.

Sources: National sources, OECD and the Riksbank

Figure 1.14. Policy rate abroad

KIX-weighted, per cent, quarterly averages



Note. When weighing together policy rates abroad KIX-4 is used. This includes the euro area, Norway, the United Kingdom and the United States.

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

Figure 1.15. Inflation expectations among money market participants

Per cent

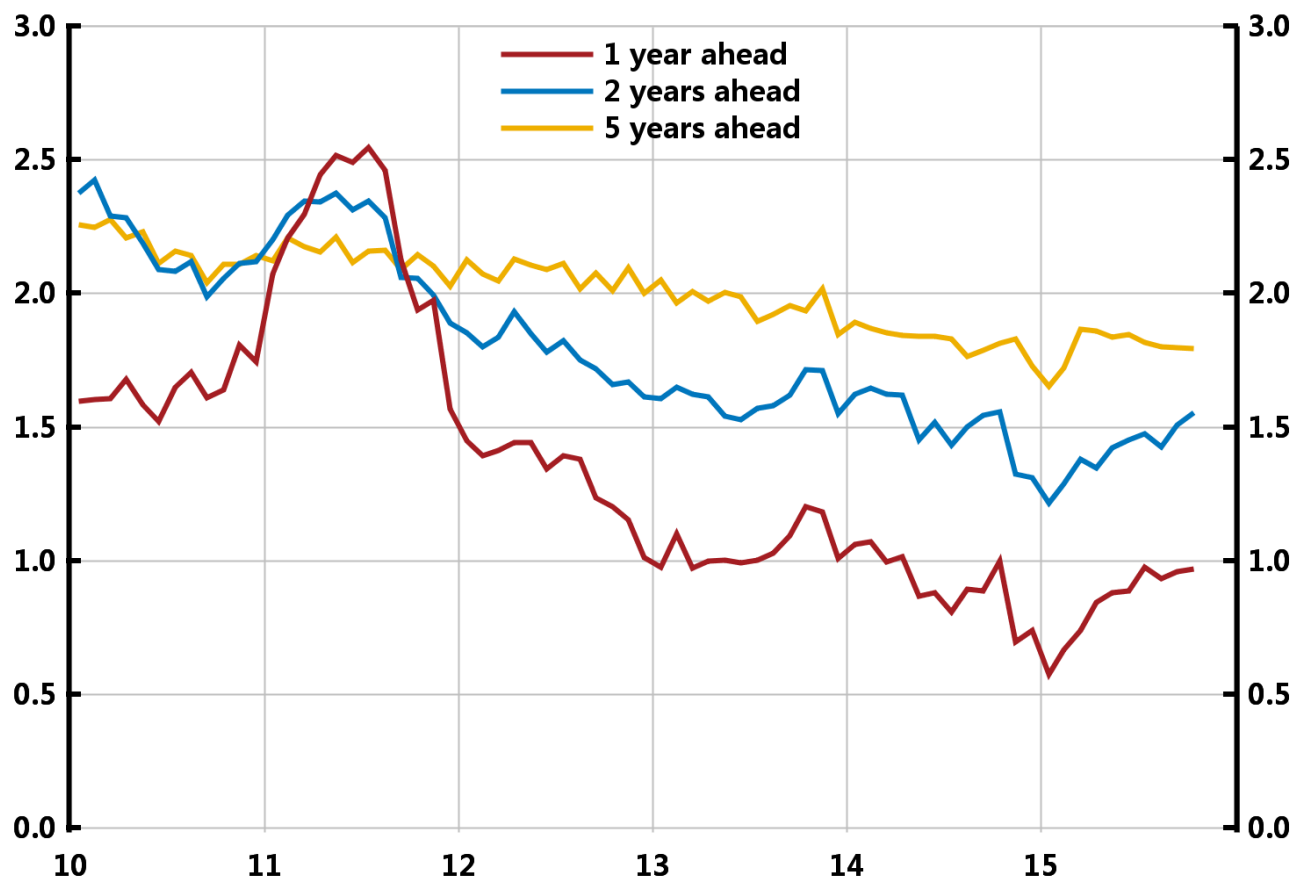


Figure 1.16. Housing prices

Annual percentage change

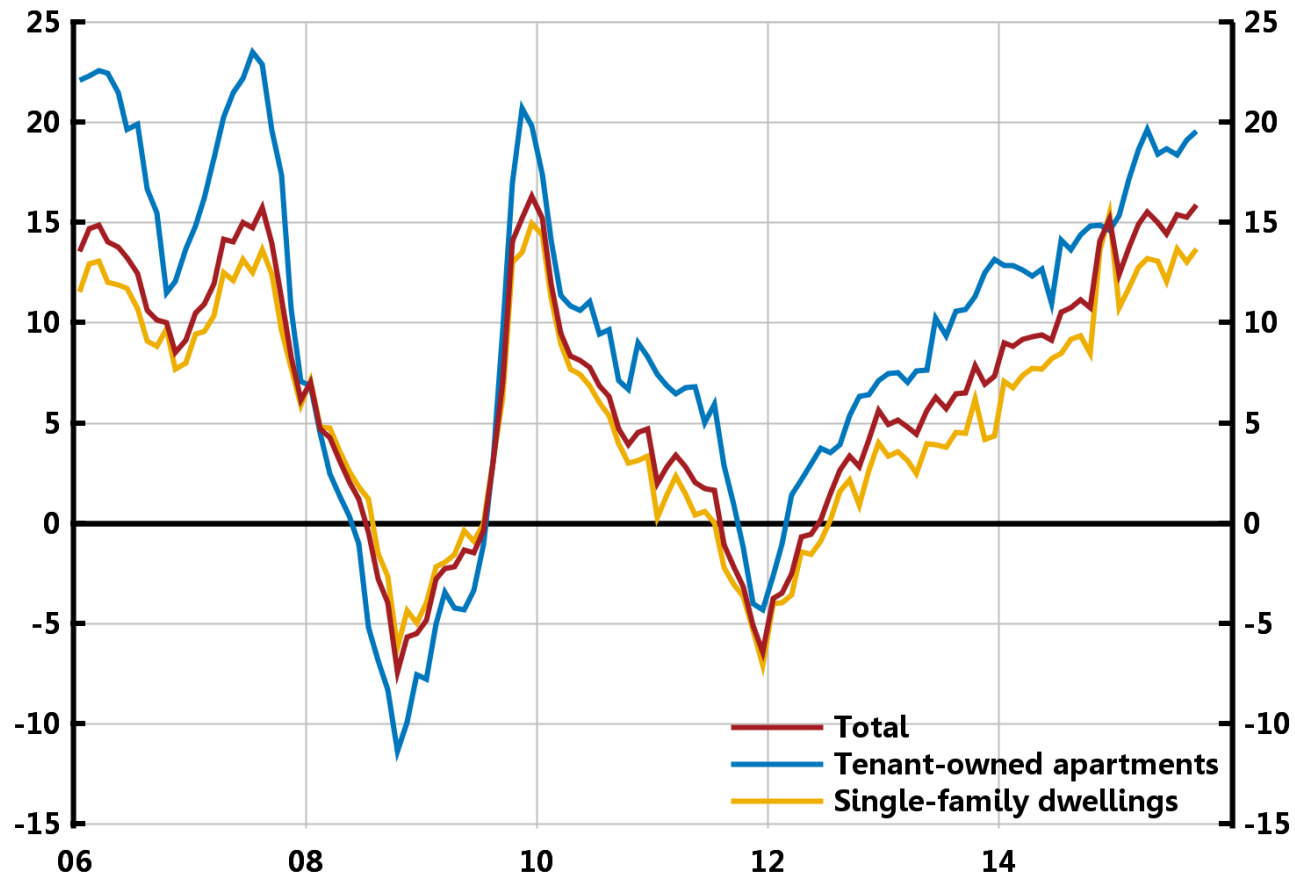
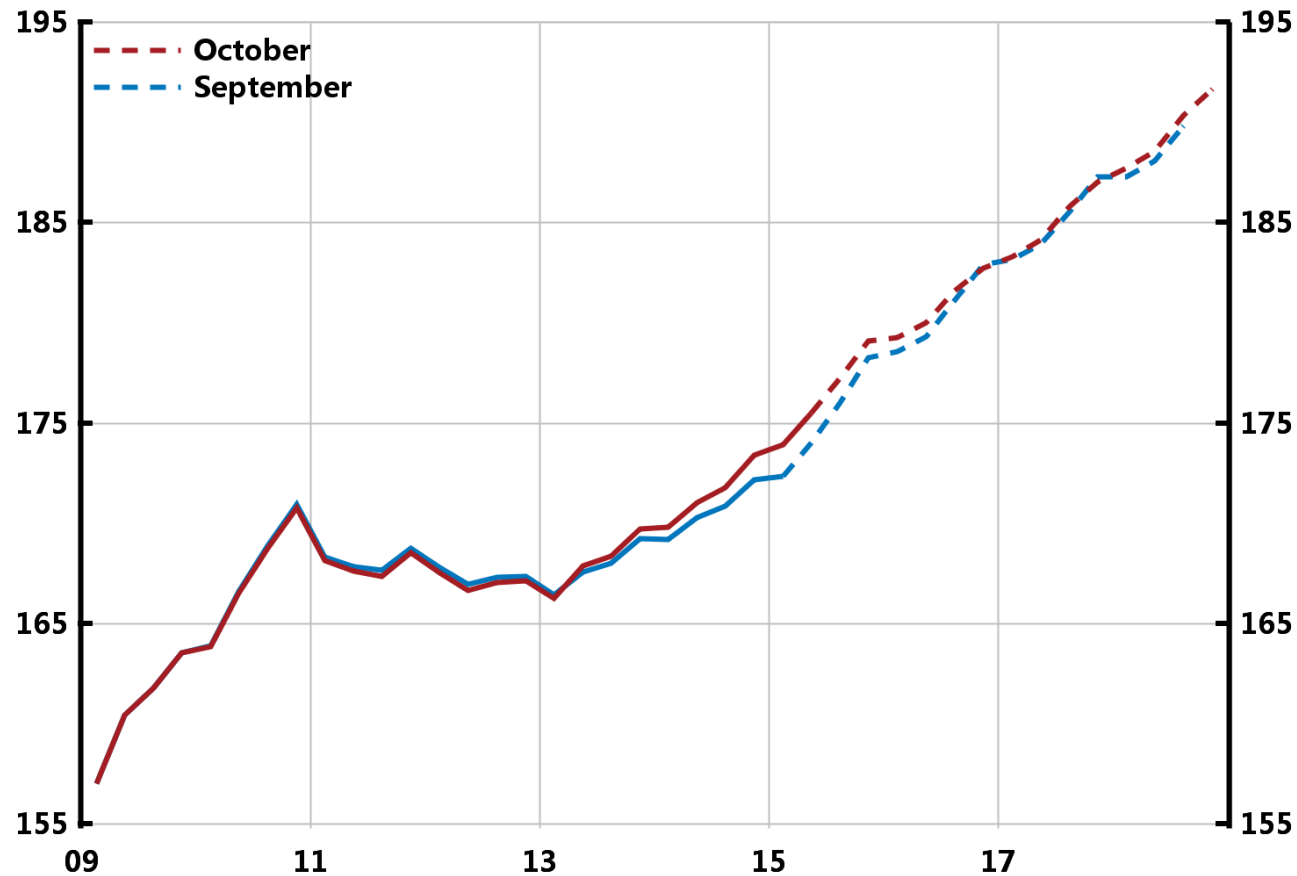


Figure 1.17. Household debt ratio

Per cent of disposable income



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

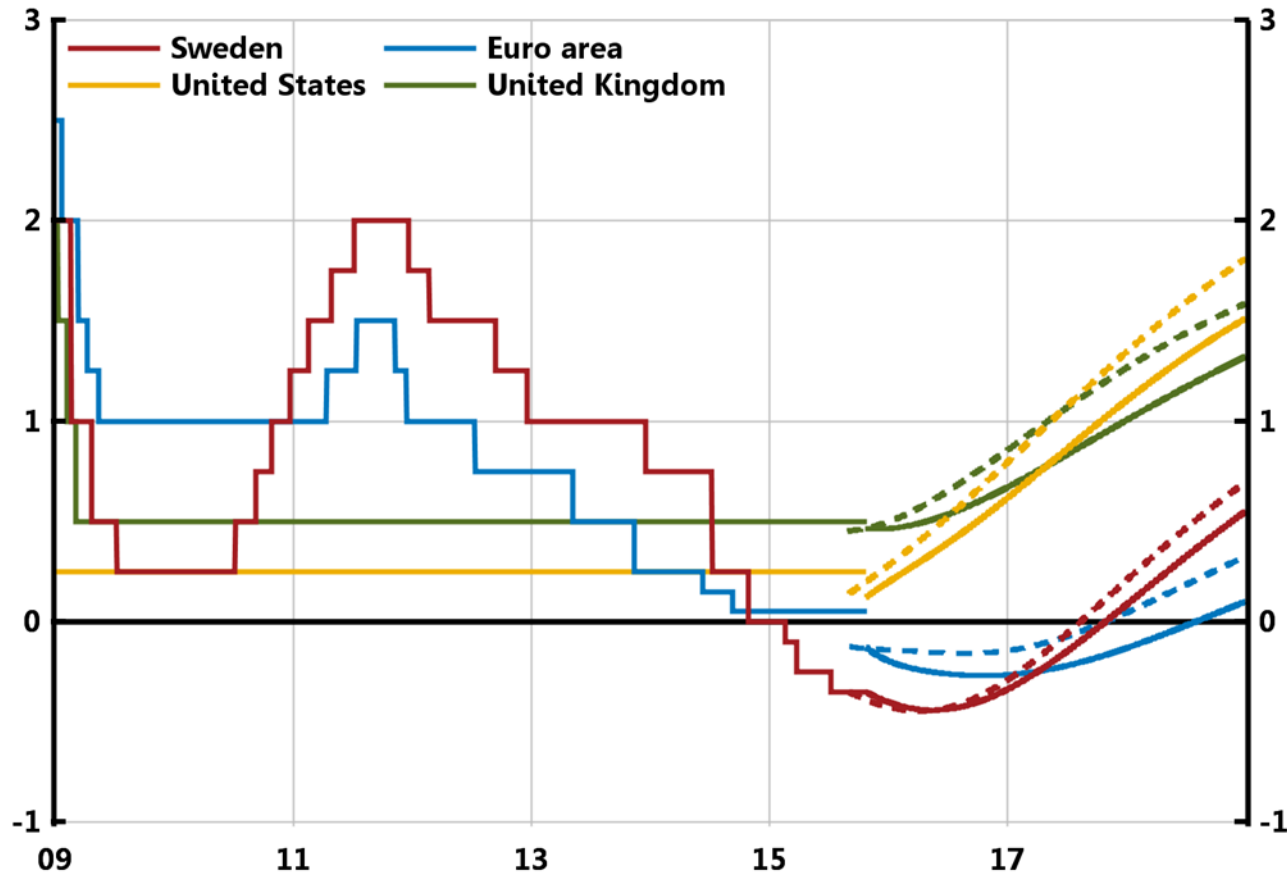
Sources: Statistics Sweden and the Riksbank



Chapter 2

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 official policy rate. Unbroken lines are estimated 23 October 2015, broken lines 2 September 2015.

Sources: Macrobond and the Riksbank

Figure 2.2. Government bond rates with 10 years left to maturity

Per cent

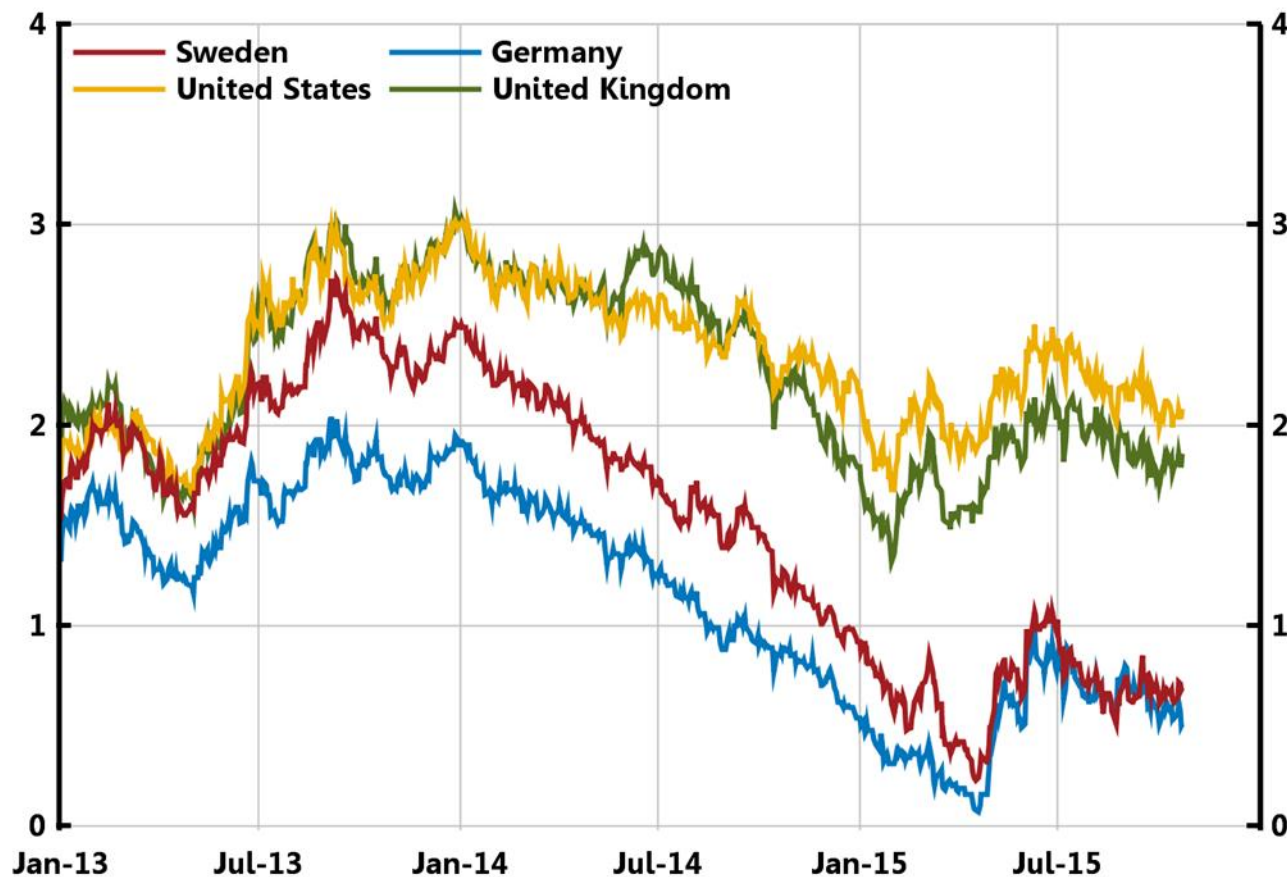
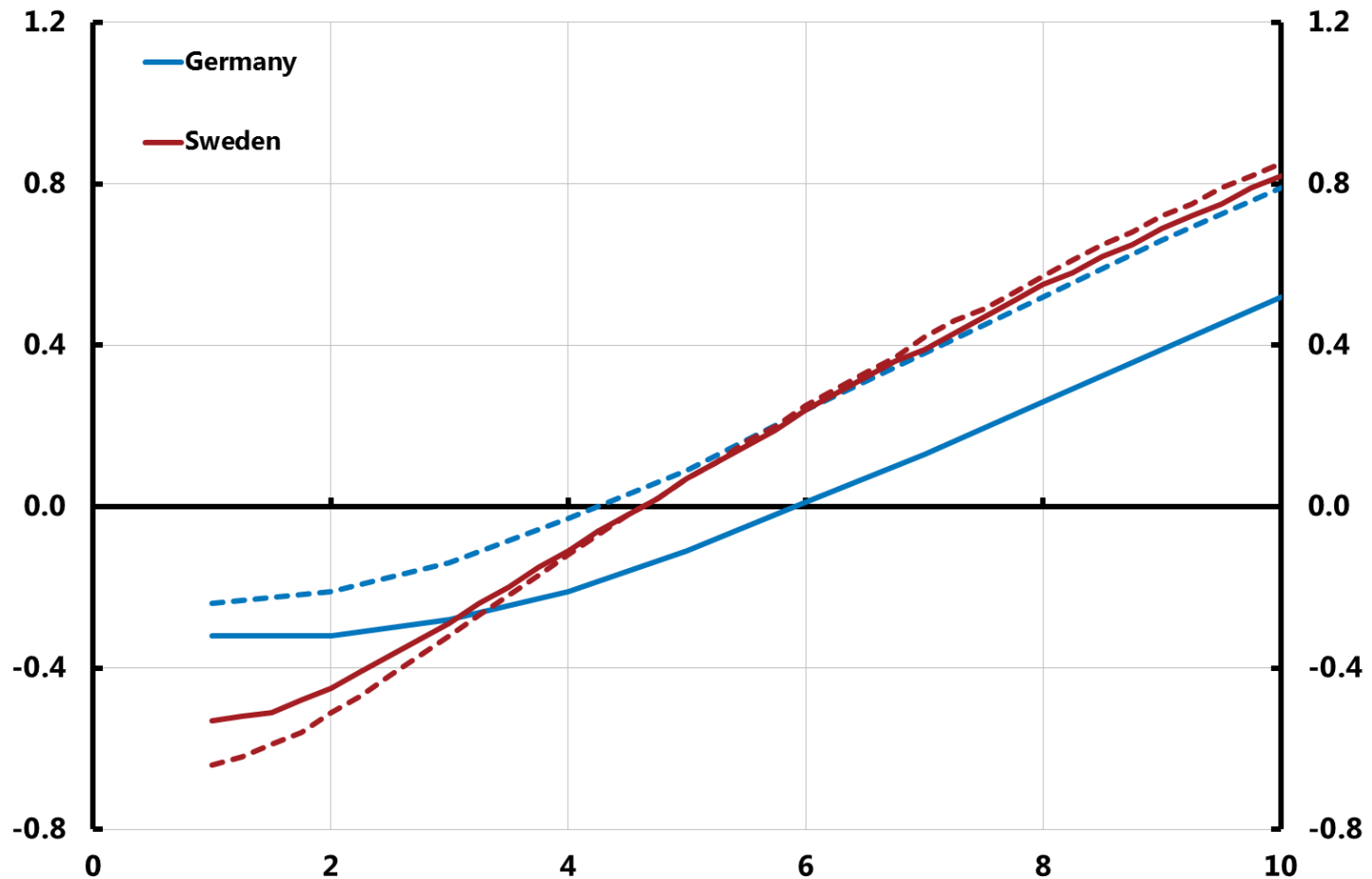


Figure 2.3. Yield curves in Sweden and Germany

Per cent

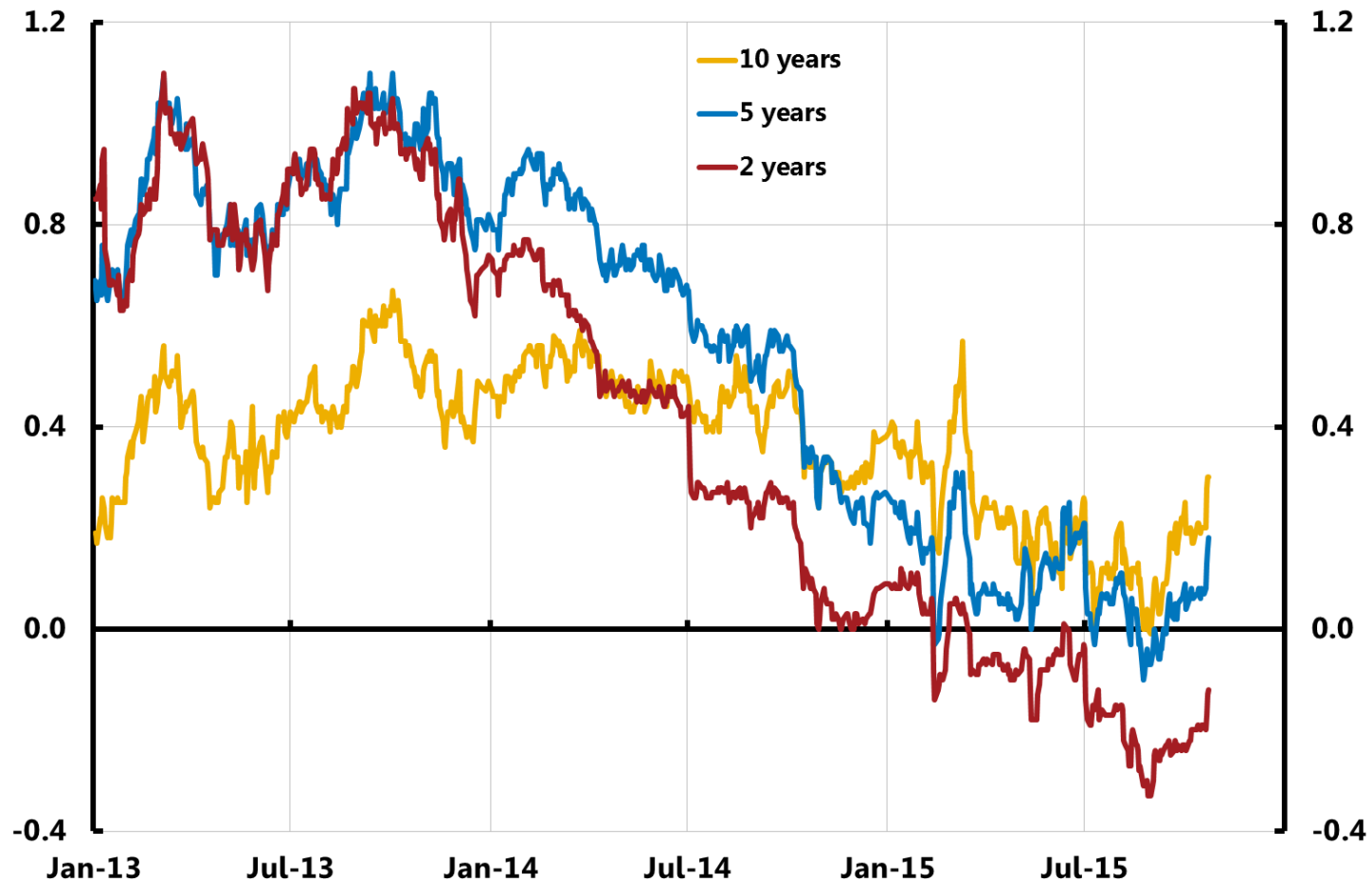


Note. Horizontal axis shows maturities in years. The yield curve is zero coupon yields interpolated from bond prices in accordance with the Nelson-Siegel method. Unbroken lines are estimated 23 October 2015, broken lines 2 September 2015.

Sources: Macrobond, Thomson Reuters and the Riksbank

Figure 2.4. Yield differential in relation to Germany

Per cent

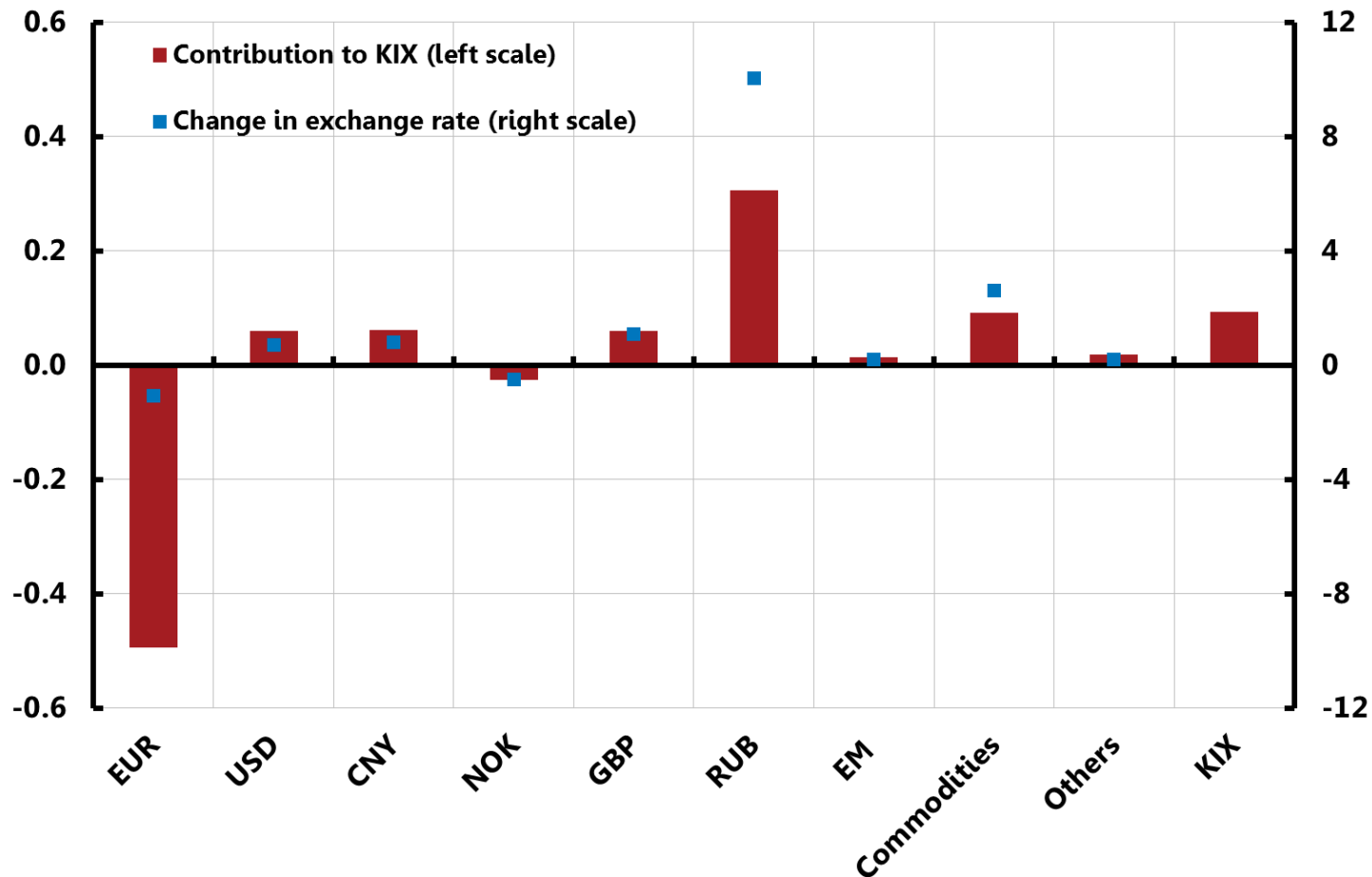


Note. The yield curve is zero coupon yields interpolated from bond prices in accordance with the Nelson-Siegel method.

Sources: Macrobond, Thomson Reuters and the Riksbank

Figure 2.5. Contributions and changes to KIX exchange rates

Percentage points and per cent, respectively



Note. The figure shows change in KIX and contributions from different currencies between 2 September 2015 and 23 October 2015. EM refers to Brazil, Hungary, India, Mexico, Poland and Turkey. Commodities refer to Australia, Canada and New Zealand. Others refers to Czech Republic, Denmark, Iceland, Japan, South Korea and Switzerland.

Sources: Thomson Reuters and the Riksbank

Figure 2.6. The development of the krona against the euro and the dollar

SEK per foreign currency

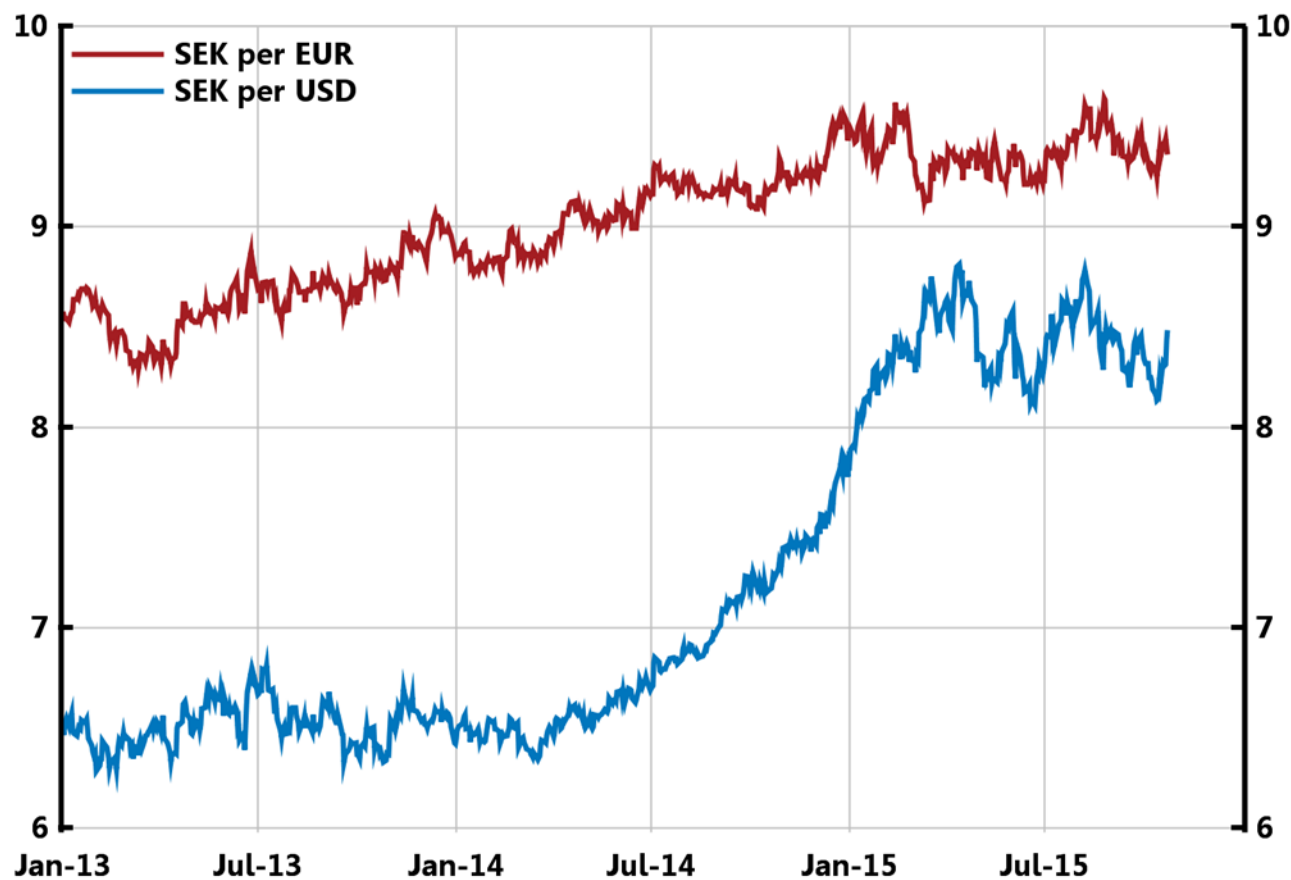


Figure 2.7. Stock market movements

Index, 3 January 2006 = 100

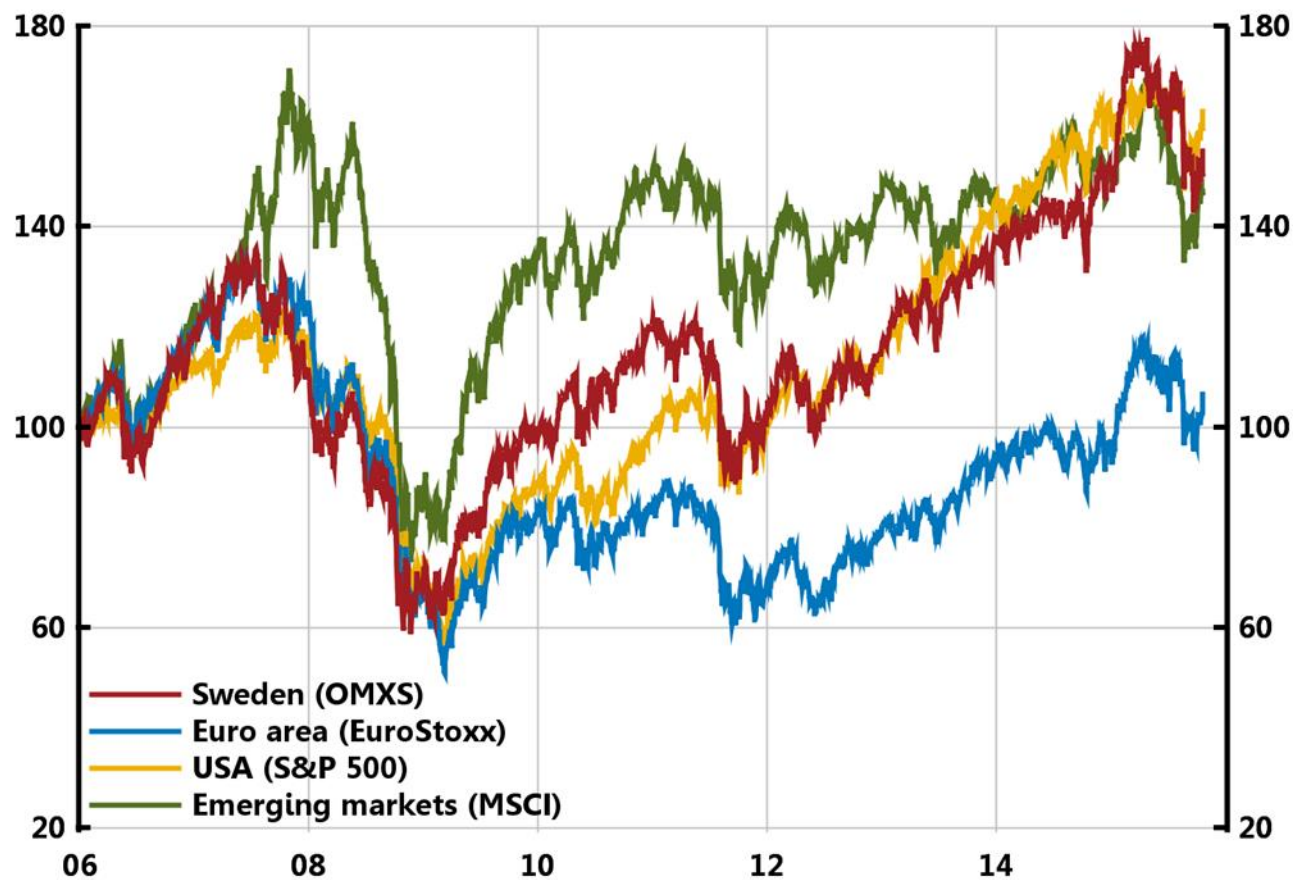
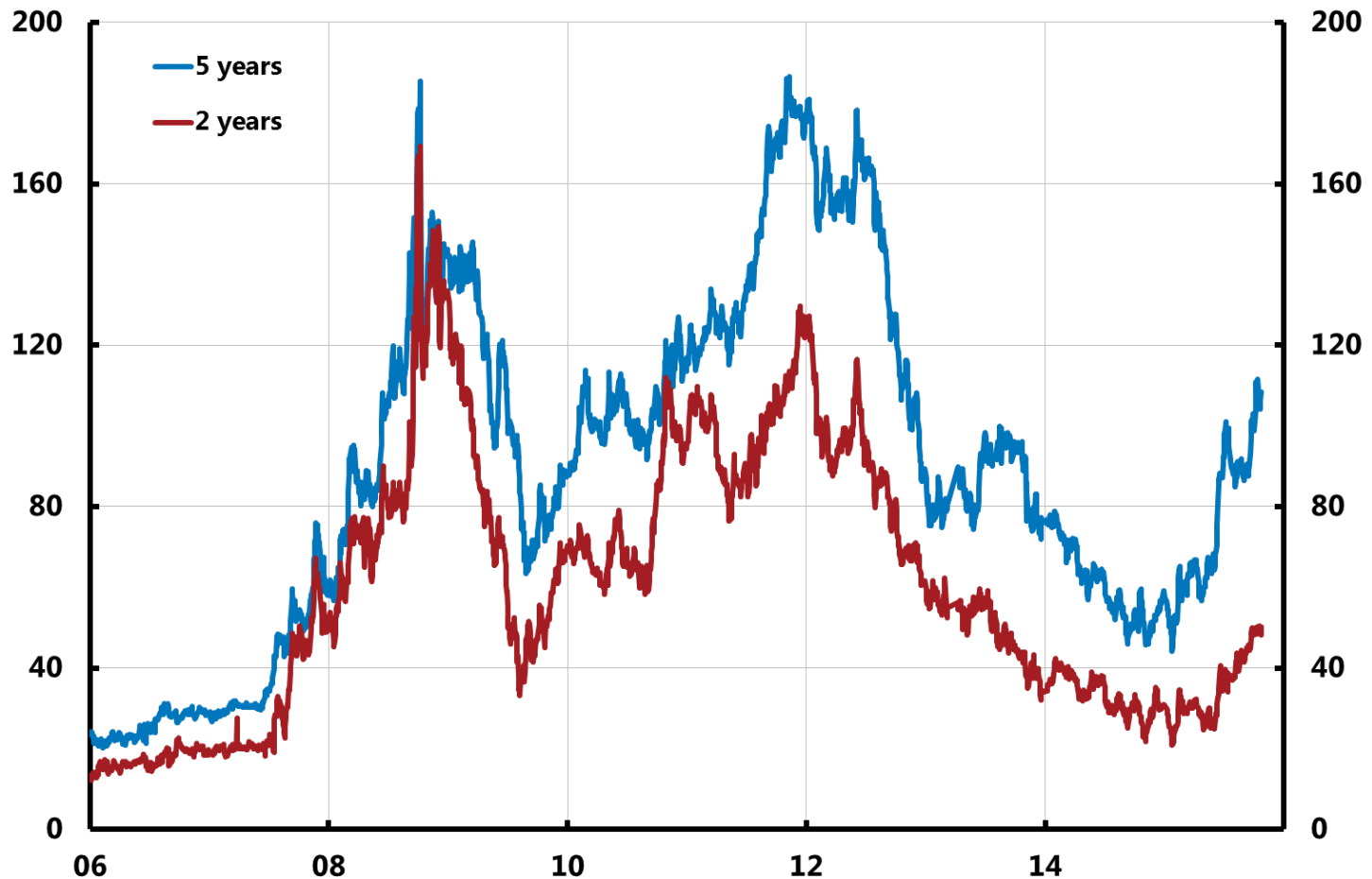


Figure 2.8. The yield differential between mortgage bond yields and government bond yields

Basis points



Note. Mortgage bond and government bond yields are zero coupon yields interpolated from bond prices using the Nelson-Siegel method.

Sources: Macrobond and the Riksbank

Figure 2.9. Bank lending to households and companies

Annual percentage change

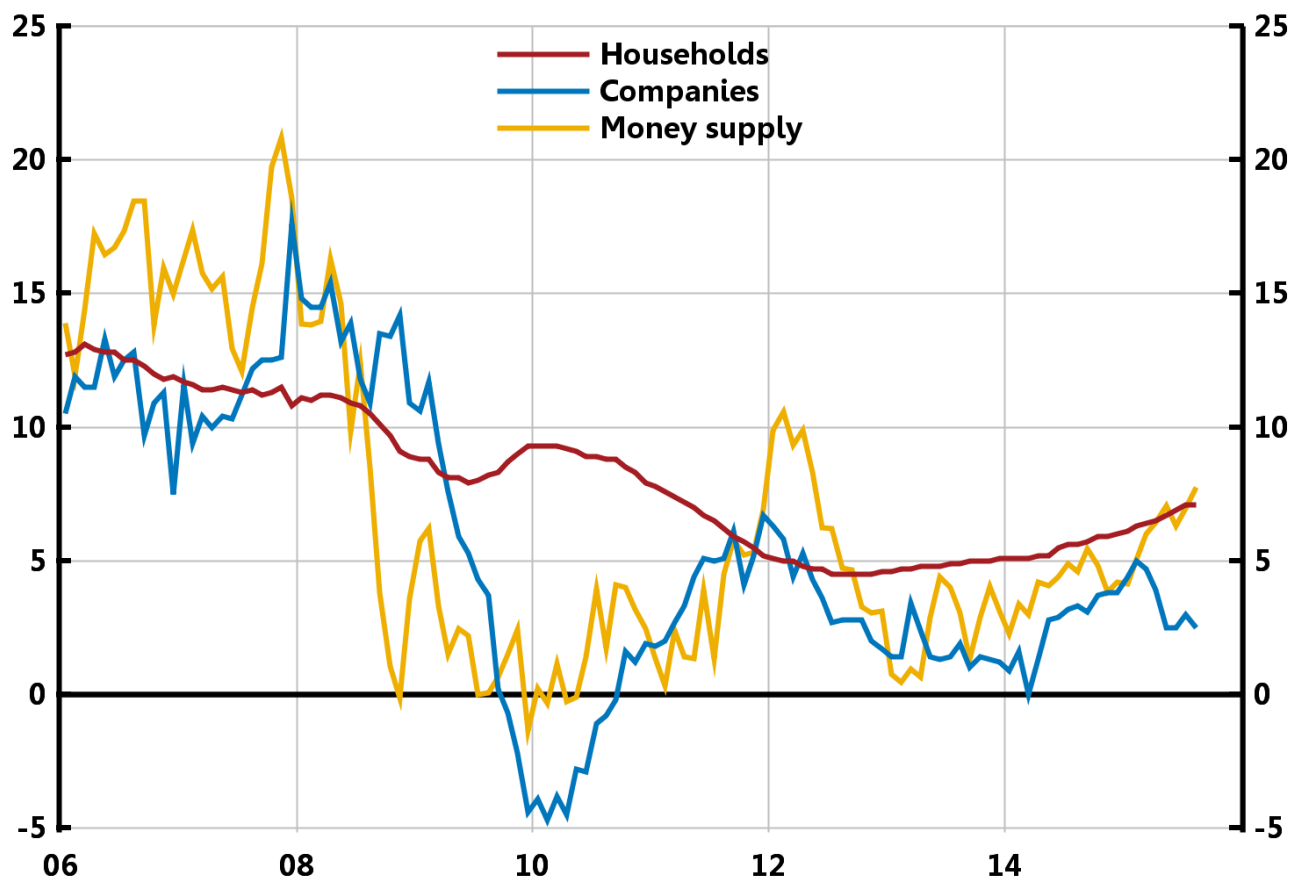
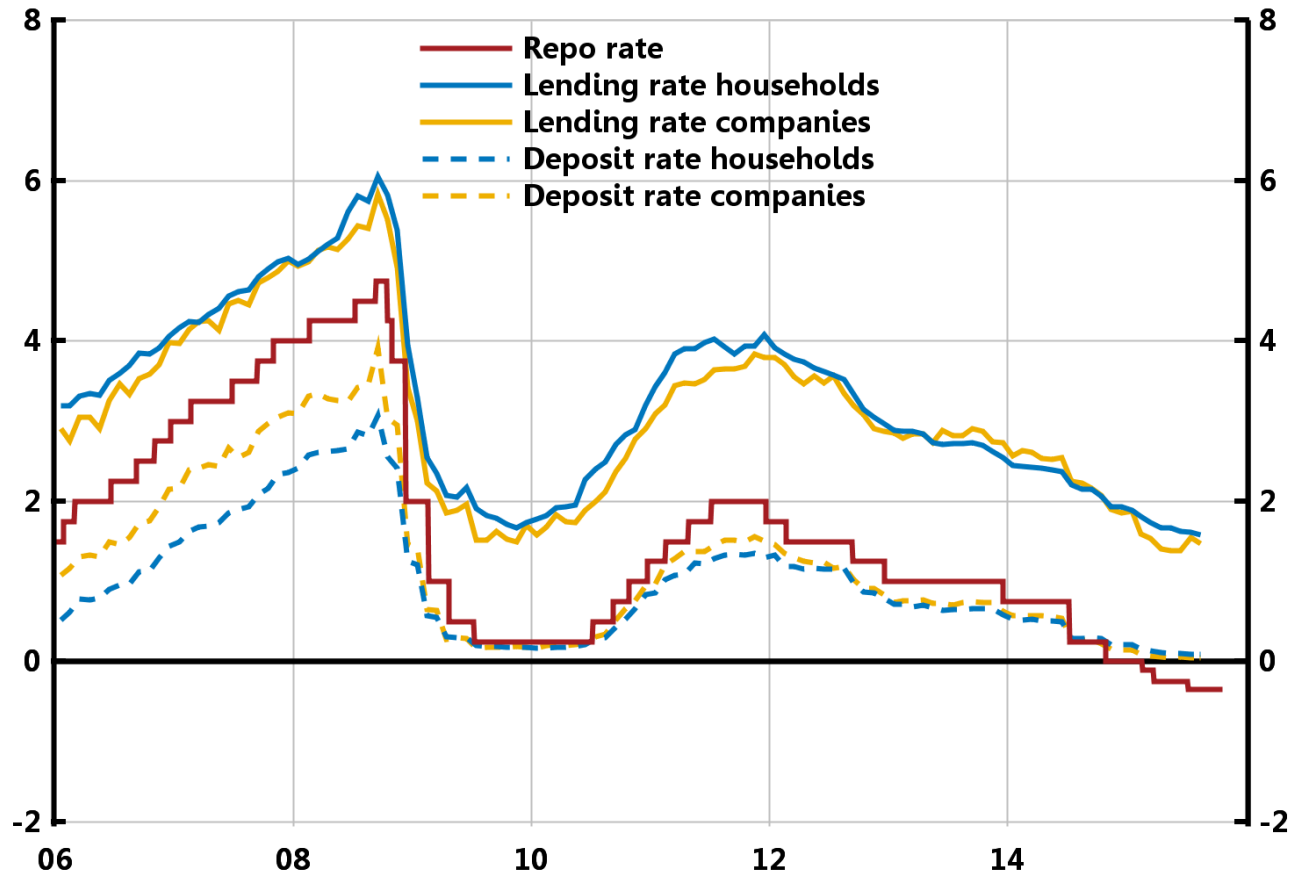


Figure 2.10. Repo rate together with the deposit and lending rate to households and companies, new contracts

Per cent

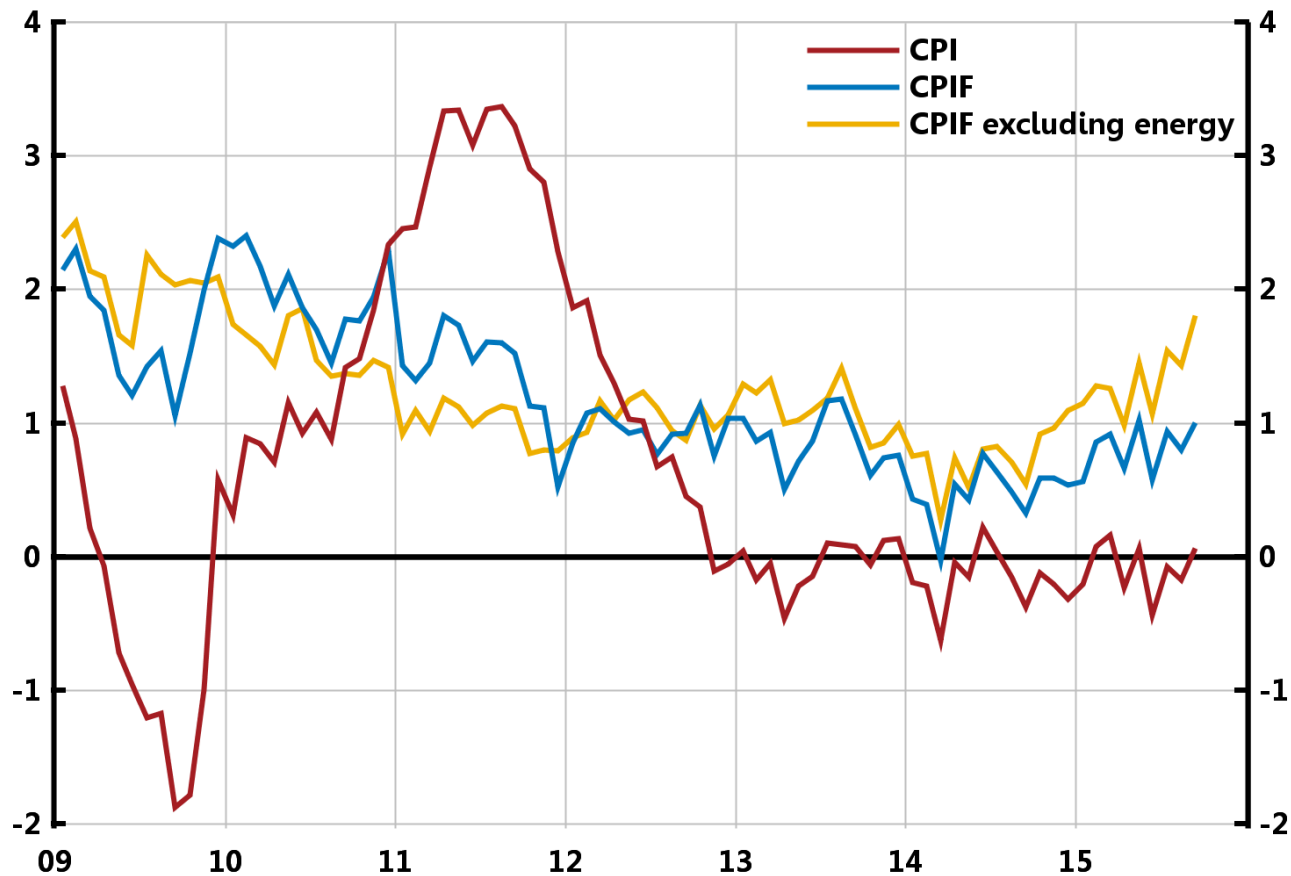




Chapter 3

Figure 3.1. CPI, CPIF and CPIF excluding energy

Annual percentage change

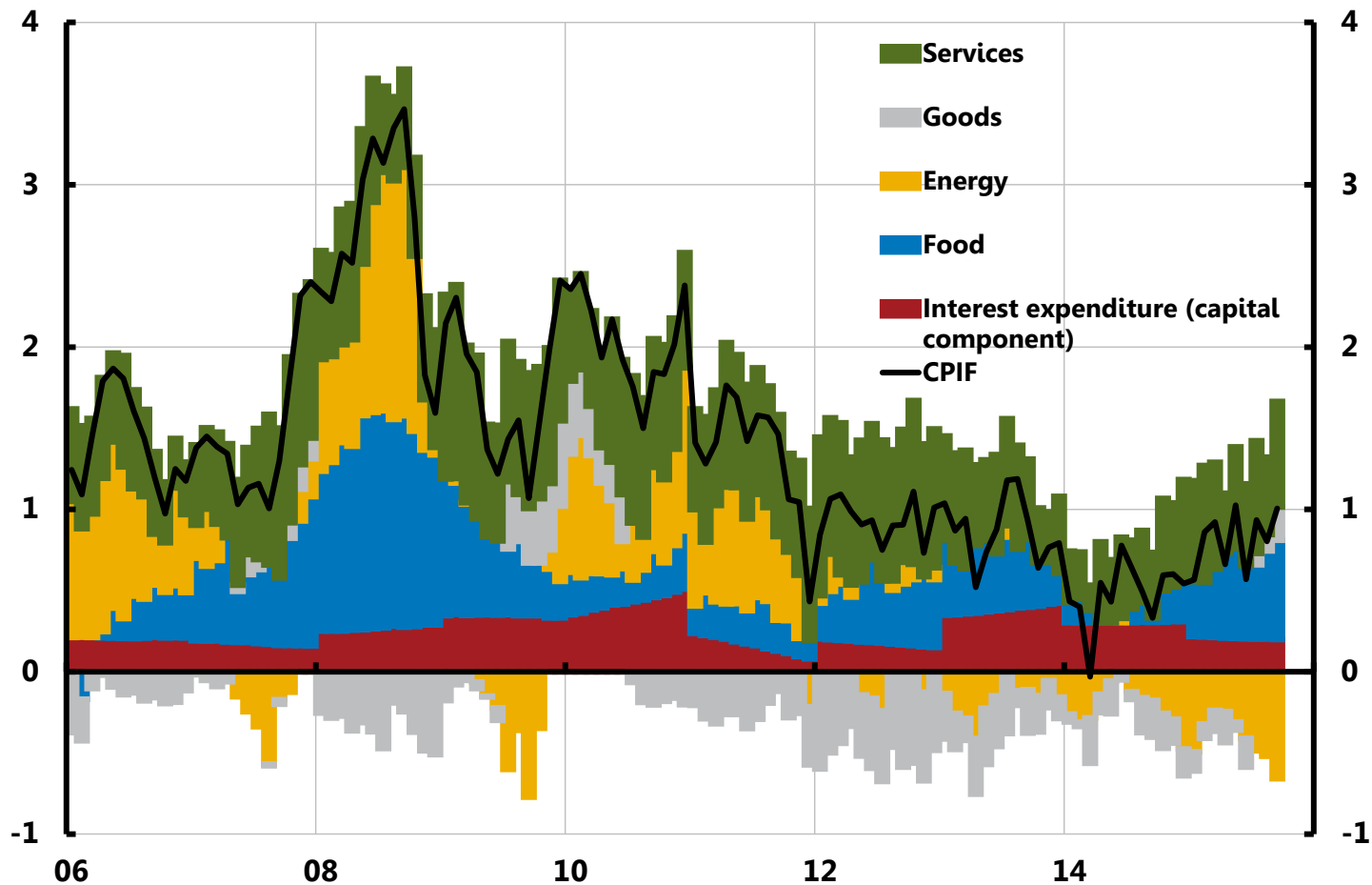


Note. The CPIF is the CPI with a fixed mortgage rate.

Source: Statistics Sweden

Figure 3.2. CPIF and contributions to CPI-inflation

Annual percentage change and percentage points, respectively

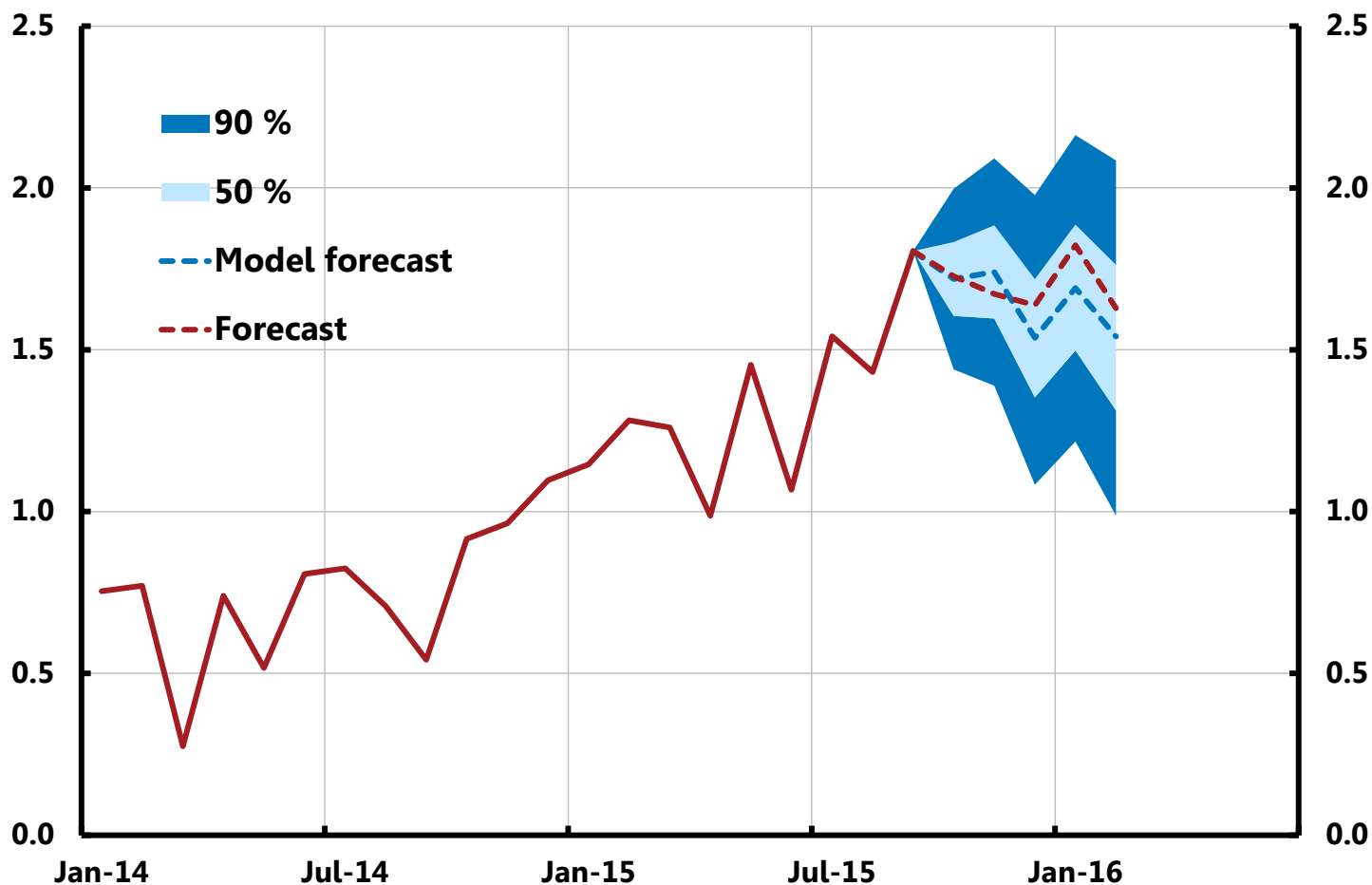


Note. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Figure 3.3. Model forecast CPIF excluding energy with uncertainty bands

Annual percentage change



Note. The uncertainty bands are based on the models historical forecasting errors. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Figure 3.4. World trade volume

Index, 2011 = 100

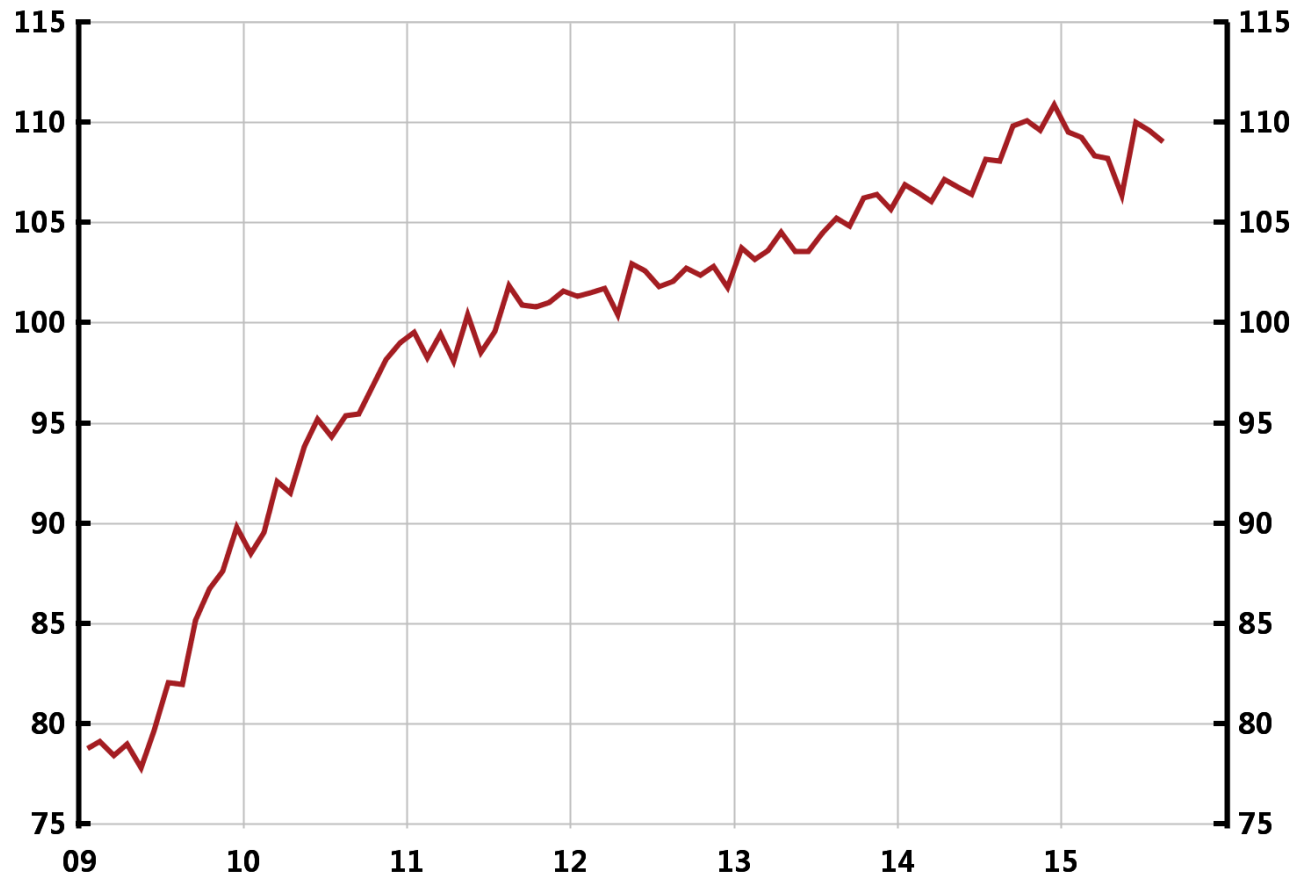
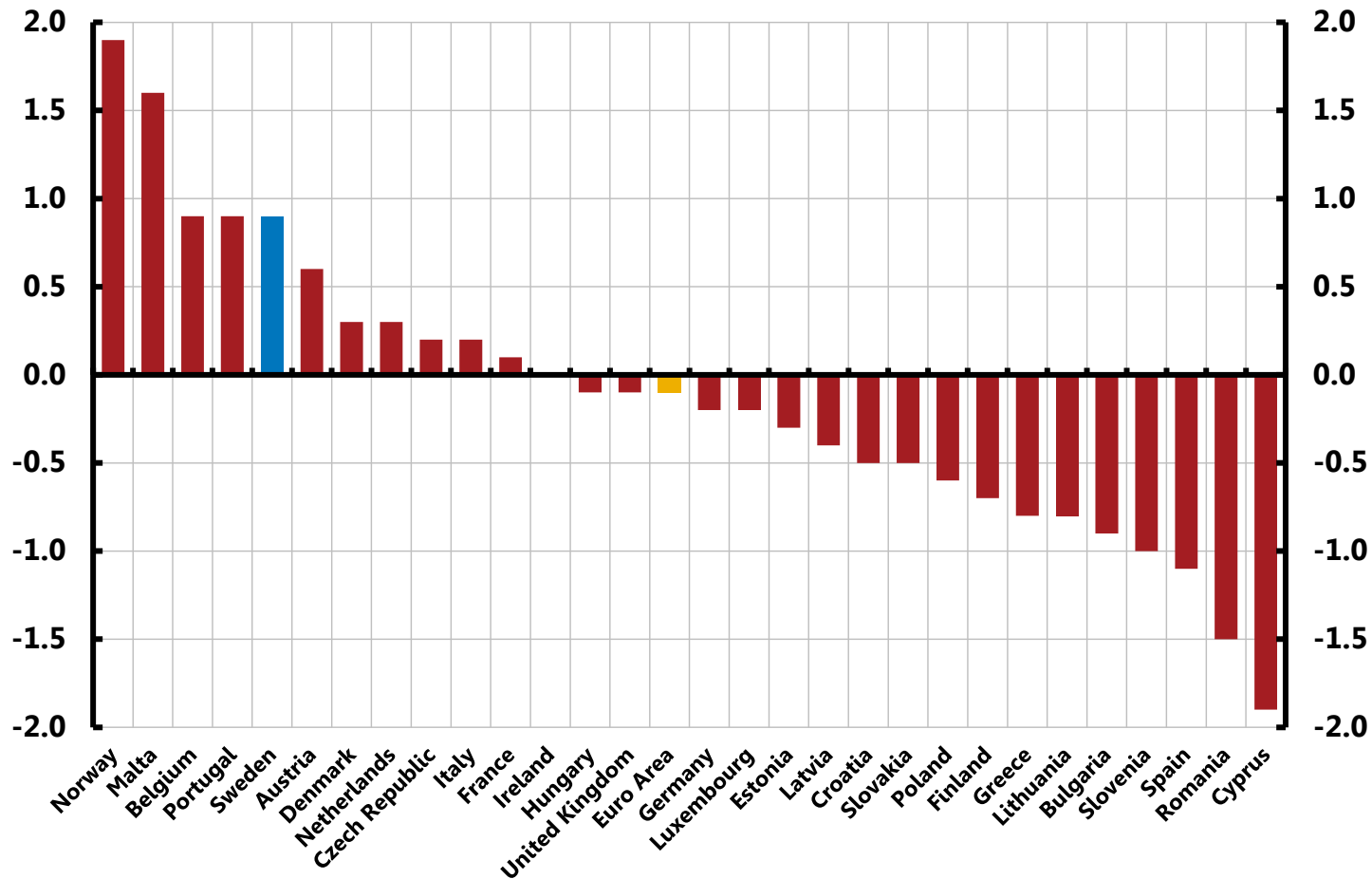


Figure 3.5. HICP in the EU countries and Norway

Annual percentage change



Note. The figure shows the percentage change in HICP between September 2014 and September 2015.

Source: Eurostat

Figure 3.6. Confidence indicators

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

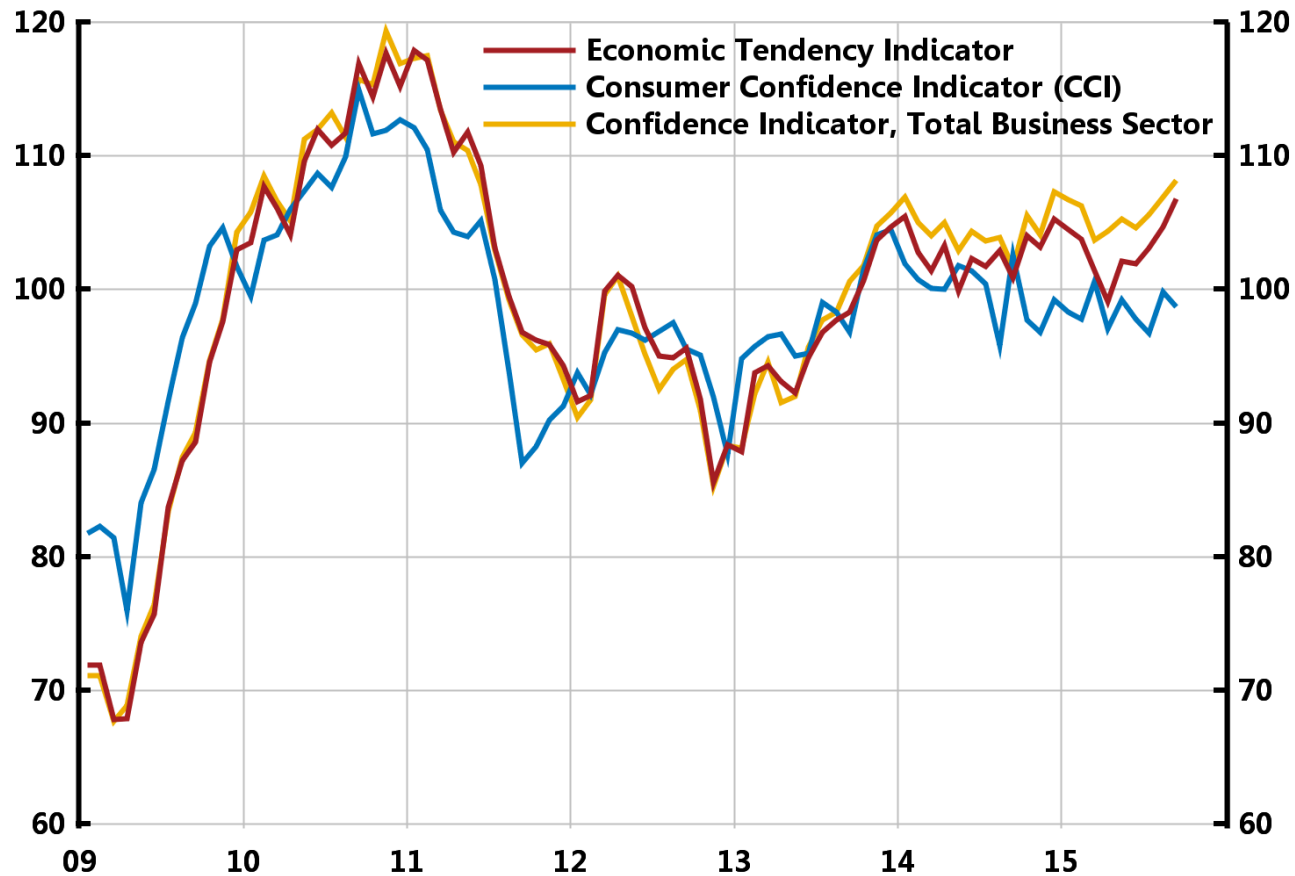
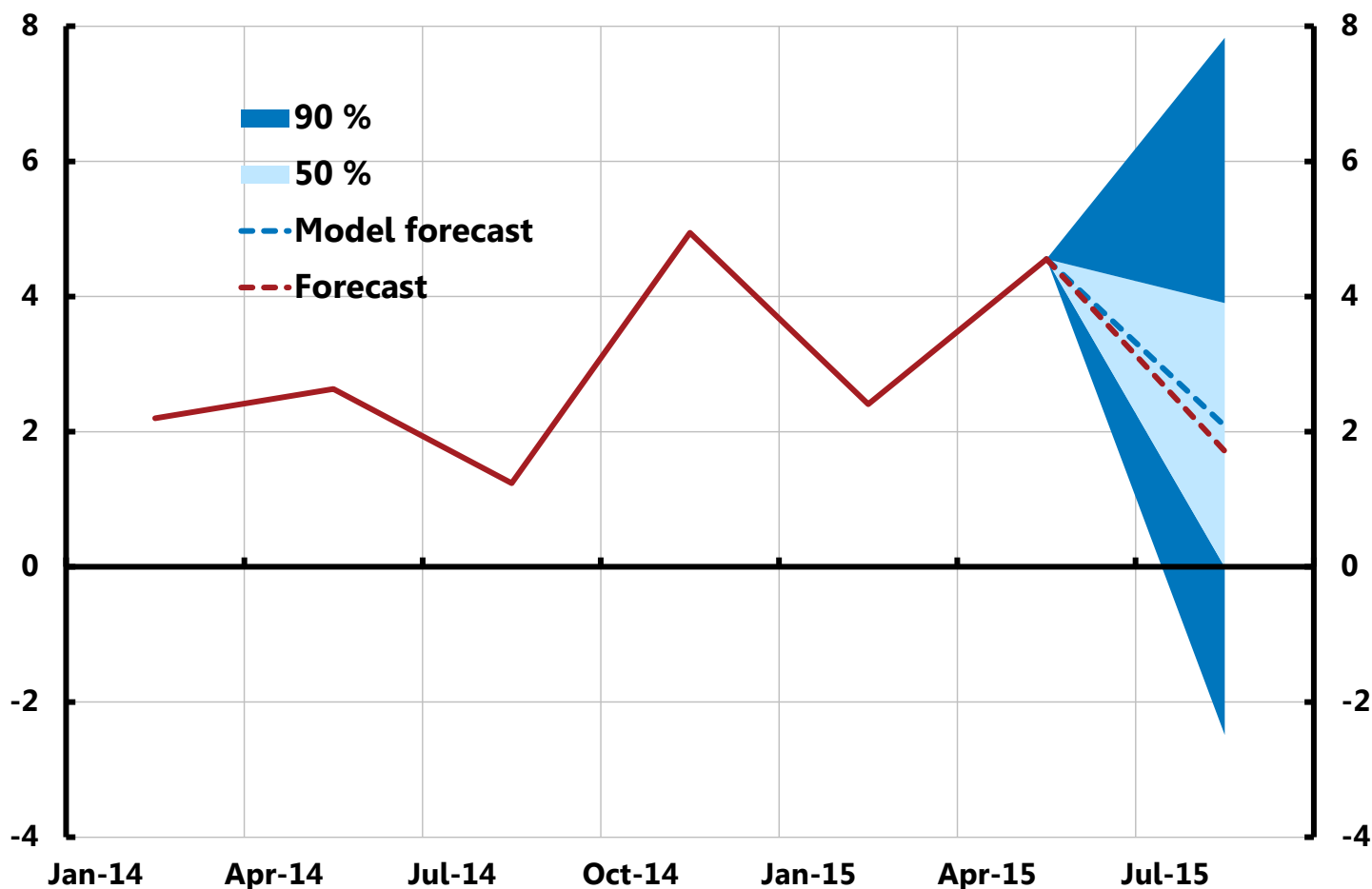


Figure 3.7. Model forecast GDP with uncertainty bands

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

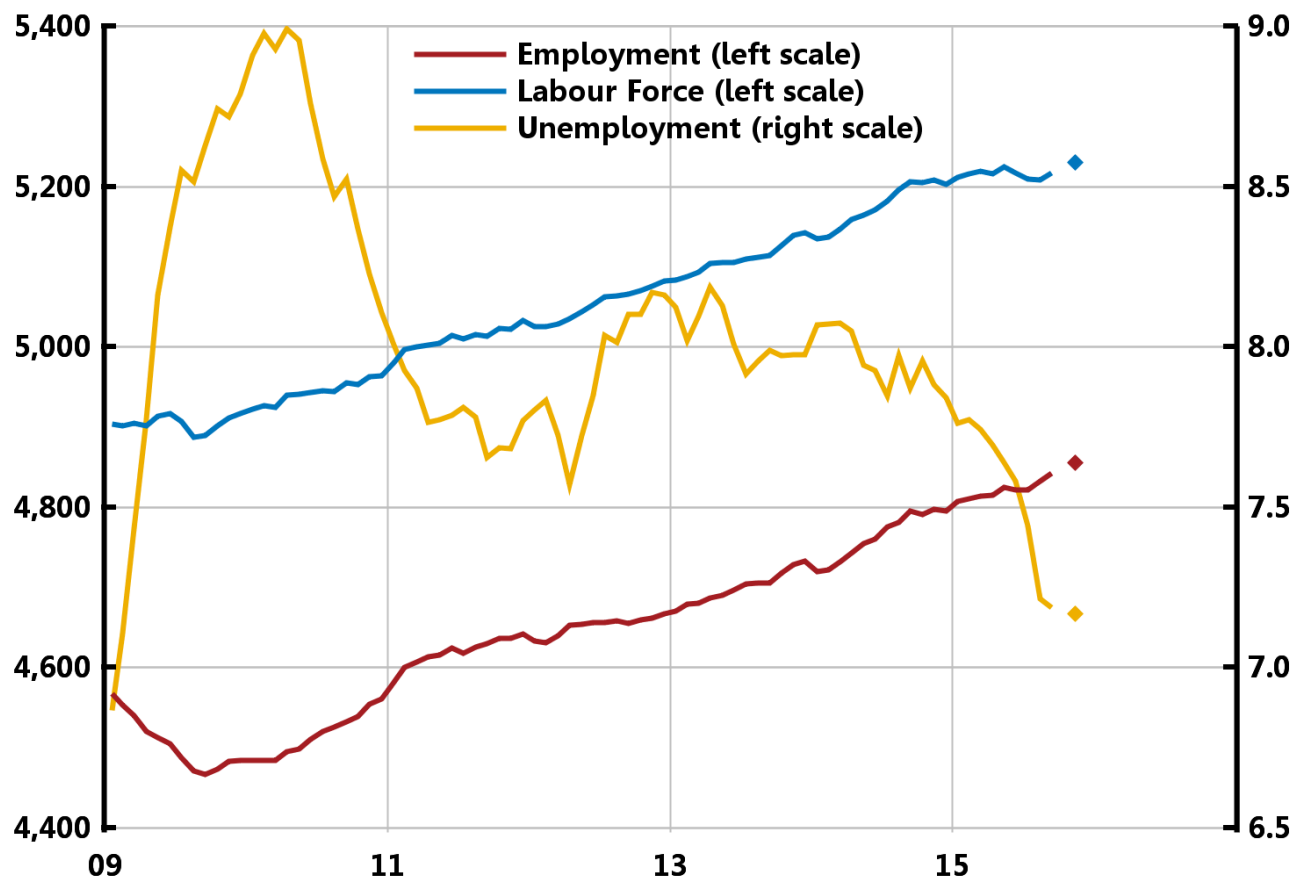


Note. The model forecast is an average of forecasts from different statistical models. The uncertainty bands are based on the models' historical forecasting errors.

Sources: Statistics Sweden and the Riksbank

Figure 3.8. Employment, labour force and unemployment

Thousands of people and percentage of labour force, 15–74 years, seasonally-adjusted data

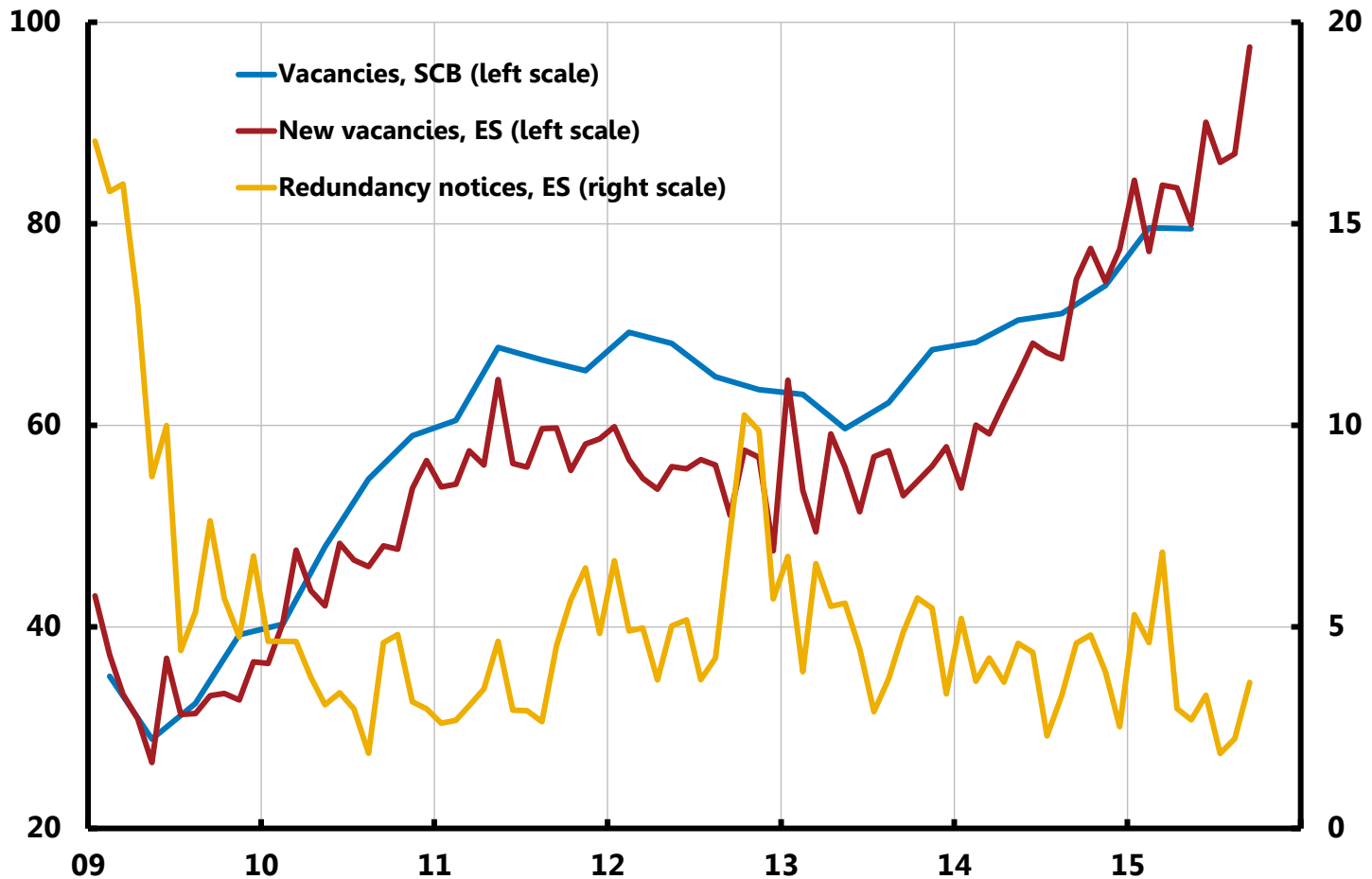


Note. Three-month moving average. The dots represent forecasts for the fourth quarter 2015.

Sources: Statistics Sweden and the Riksbank

Figure 3.9. Labour market indicators

Thousands, seasonally-adjusted data



Note. Vacancies are quarterly data, new vacancies and redundancy notices are monthly data.

Sources: Employment Service (ES) and Statistics Sweden (SCB)

Figure 3.10. RU indicator

Standard deviation



Note. The RU indicator is a measure of resource utilisation. It is normalised so that the mean value is 0 and the standard deviation is 1.

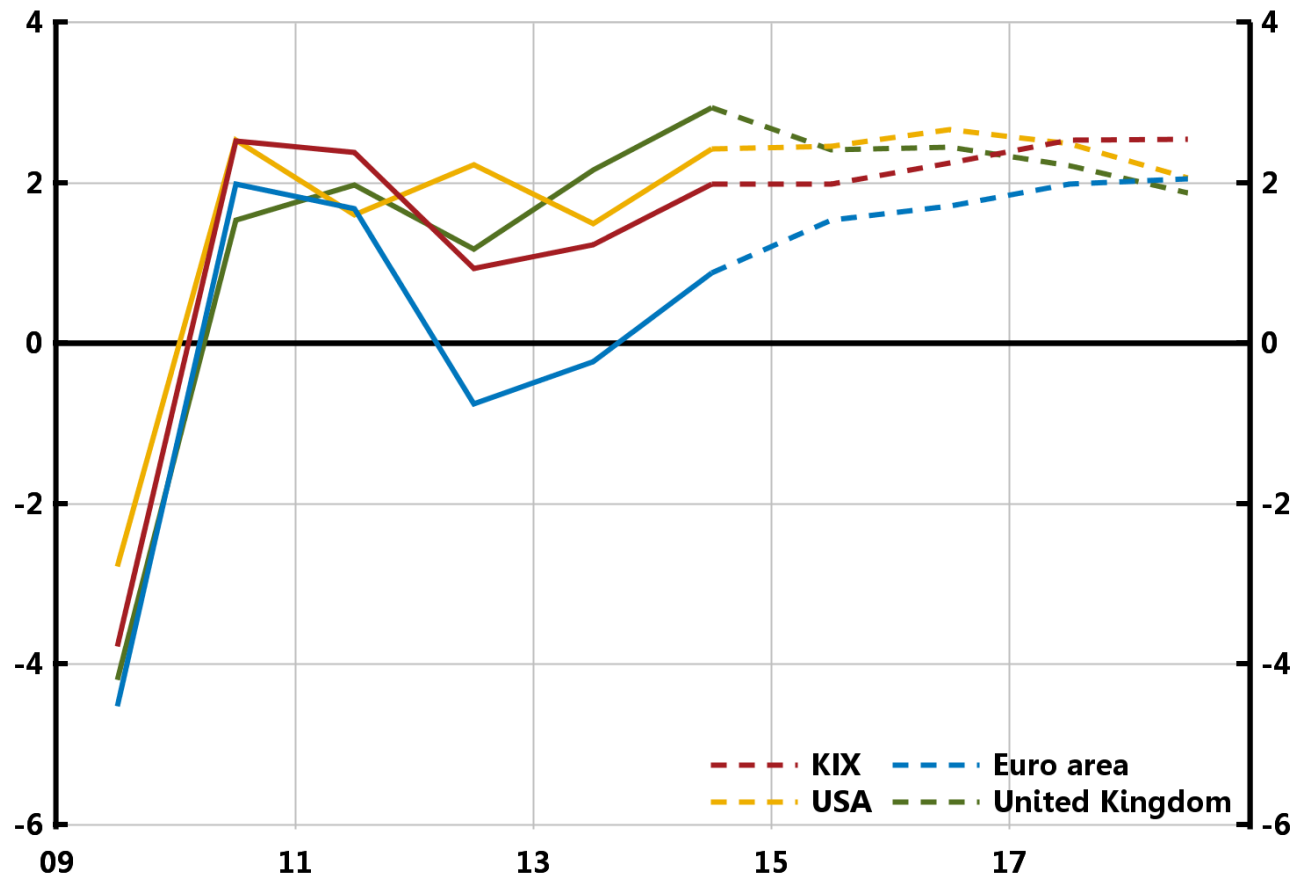
Source: The Riksbank



Chapter 4

Figure 4.1. Growth 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, Office for National Statistics and the Riksbank

Figure 4.2. Exports of goods to China, 2014

Per cent of GDP

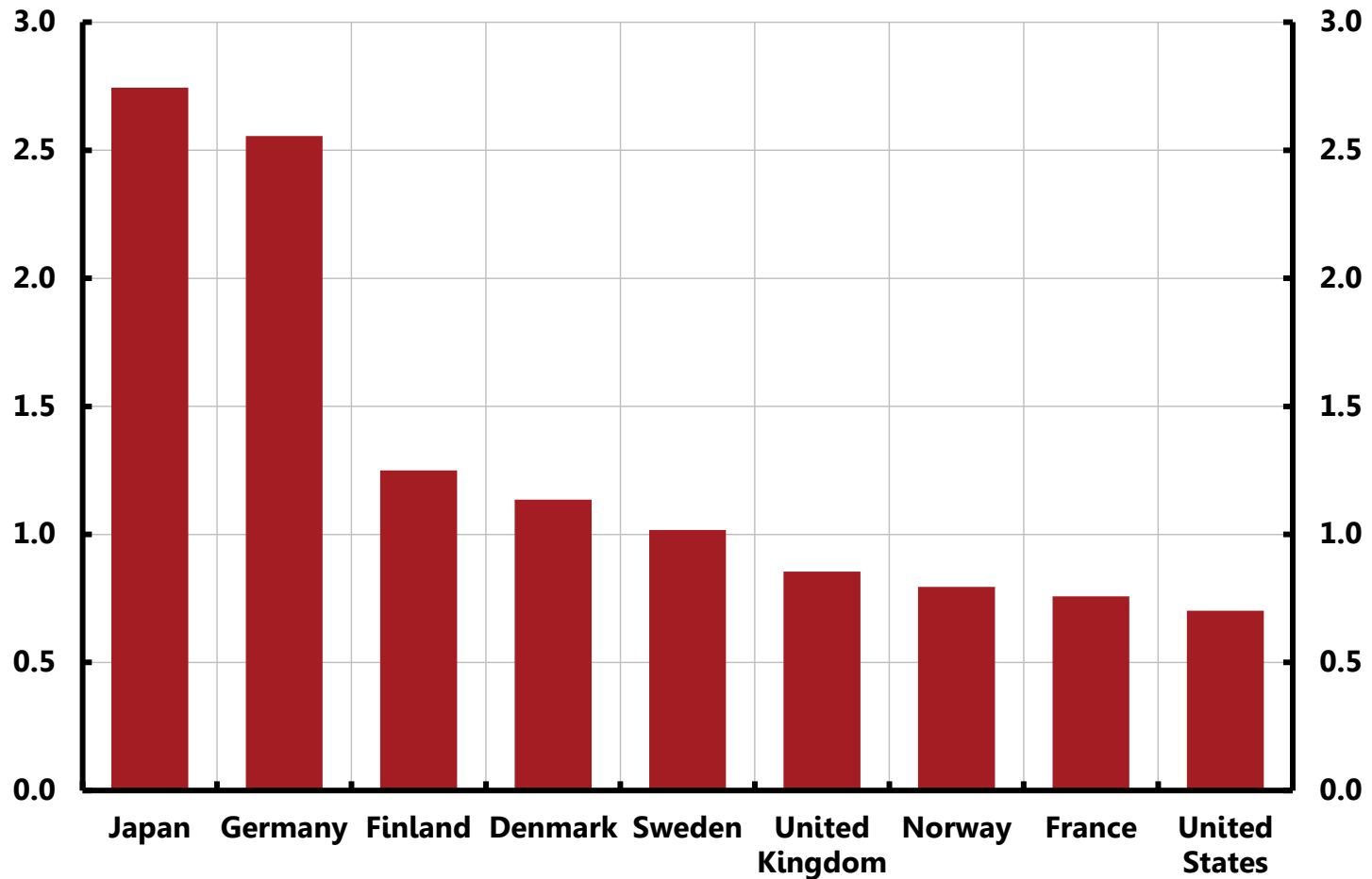


Figure 4.3. Wages abroad

Annual percentage change

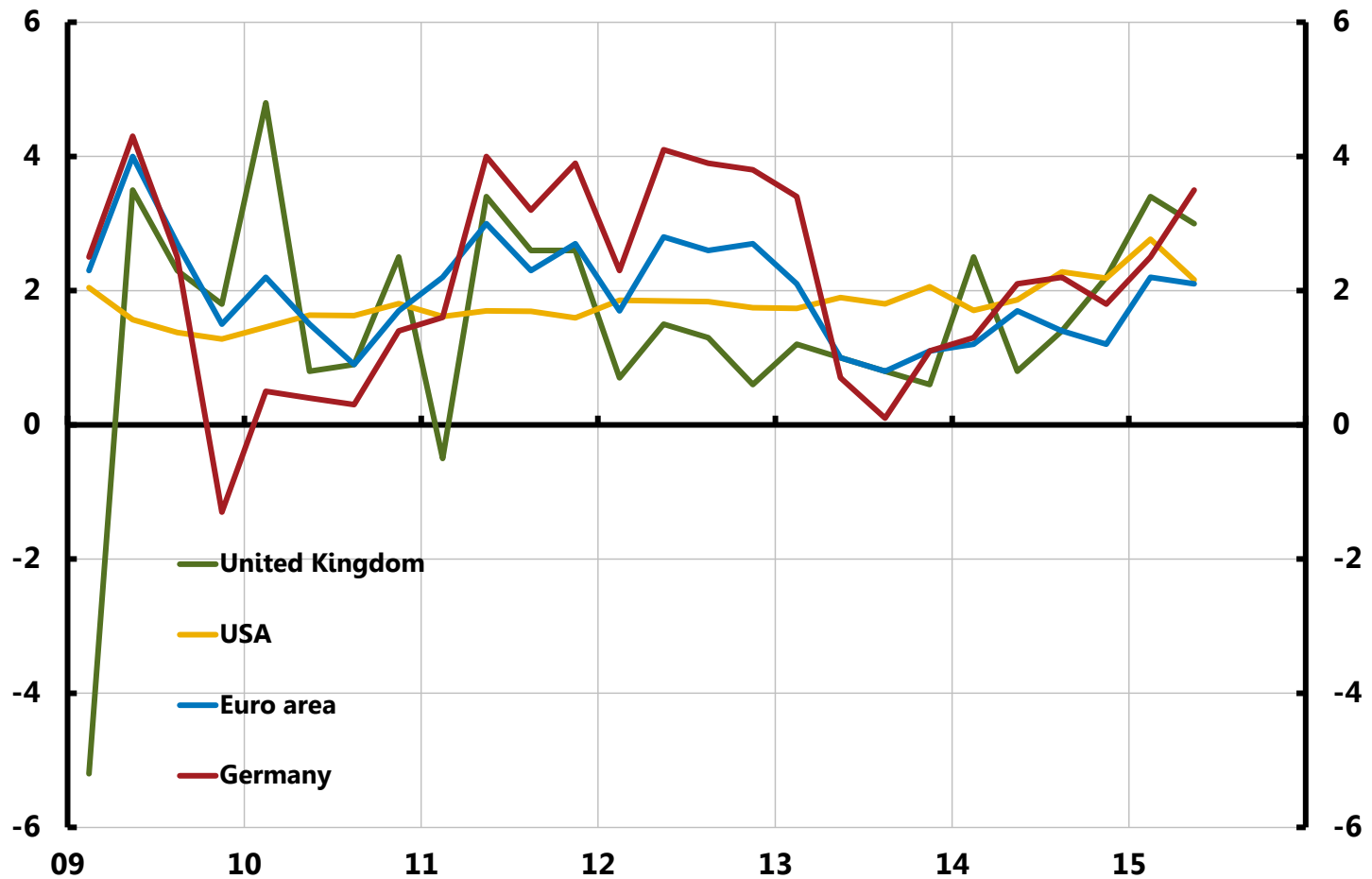
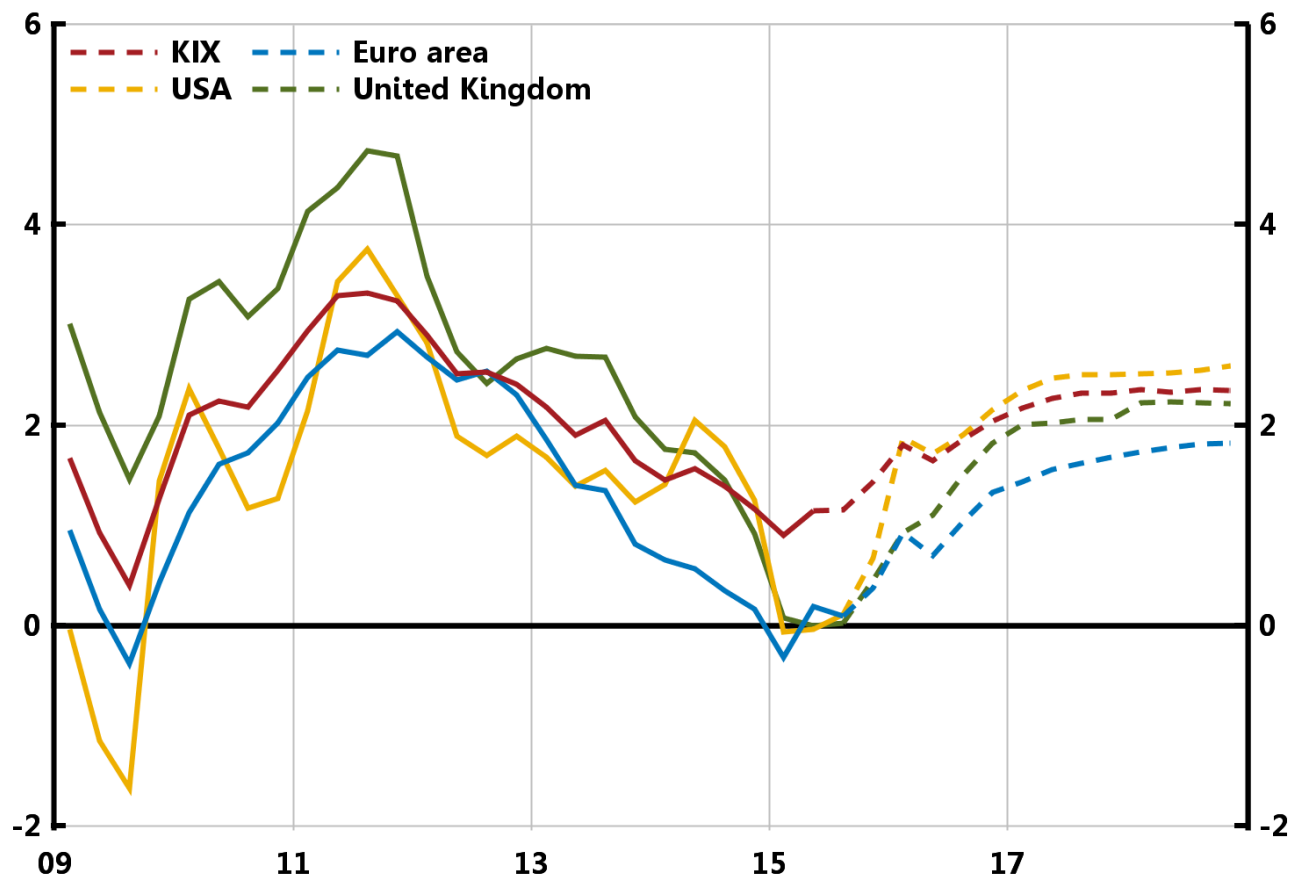


Figure 4.4. Inflation in various countries and regions

Annual percentage change

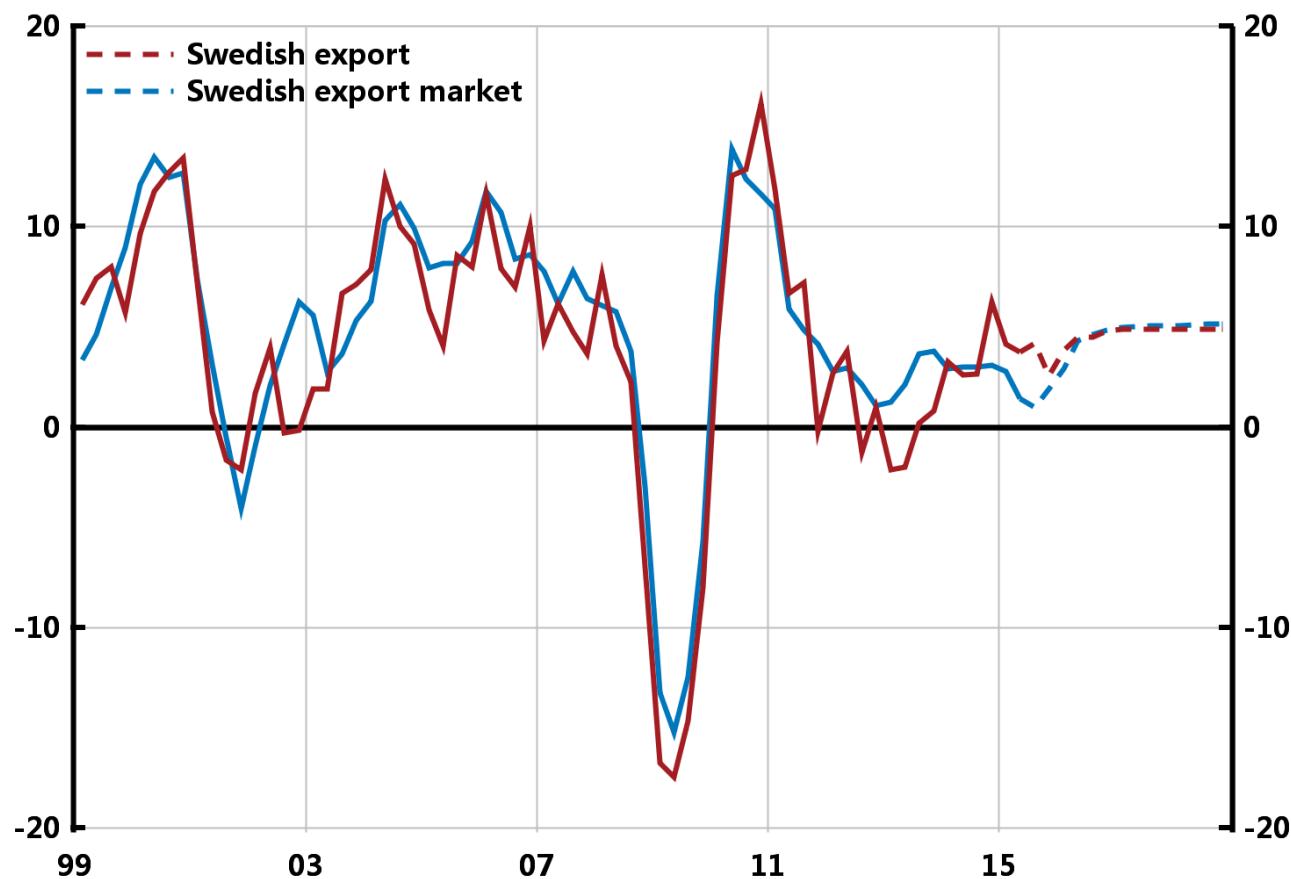


Note. KIX is an aggregate of the countries that are important to Sweden's international transactions. When calculating KIX-weighted inflation, the HICP is used for the euro area and the CPI for other countries. Inflation for the euro area is shown measured using the HICP and for the United States and the United Kingdom measured using the CPI.

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

Figure 4.5. Exports and the Swedish export market

Annual percentage change, calendar-adjusted data

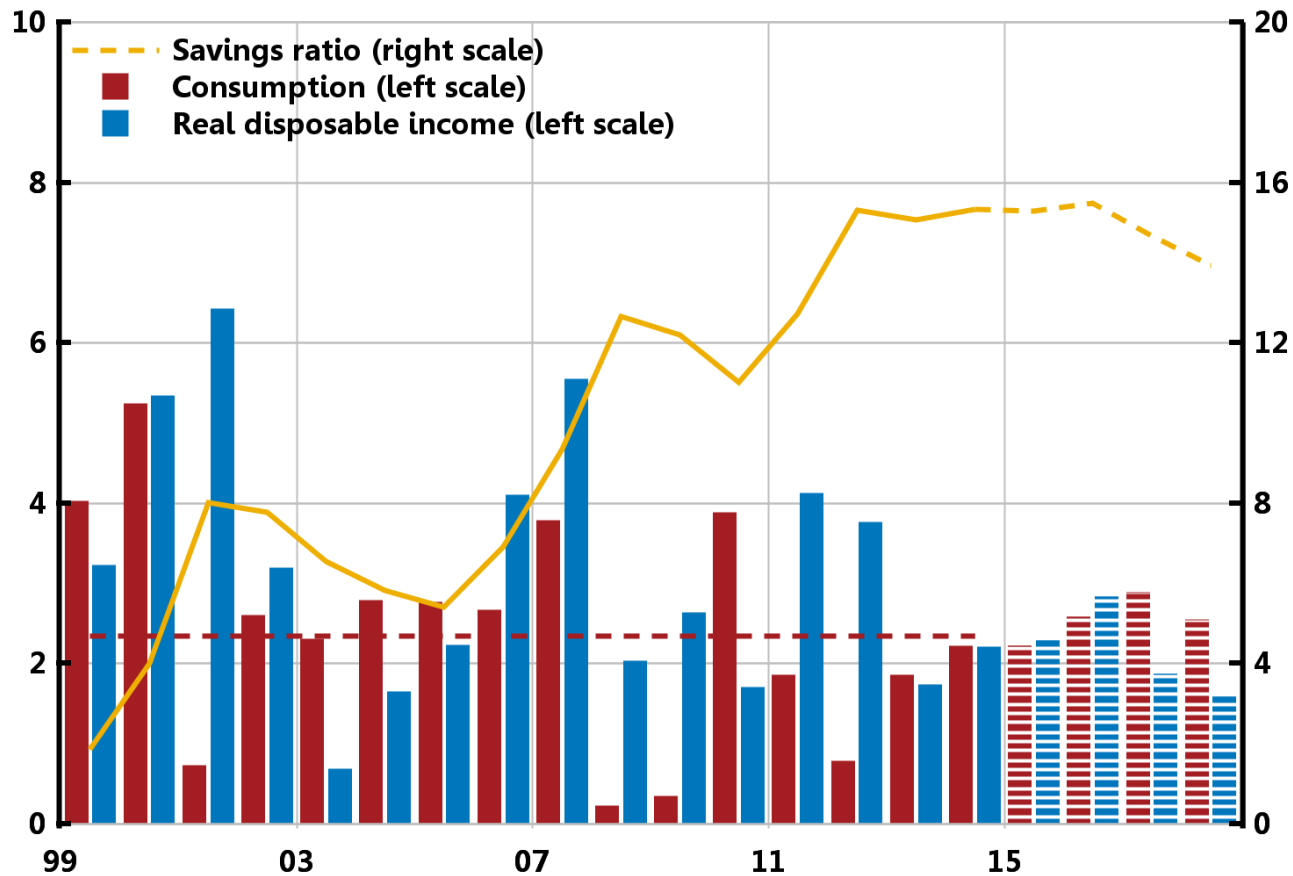


Note. The Swedish export market index aims to measure import demand in the countries to which Sweden exports. This is calculated by aggregating 32 countries and covers around 85 per cent of the total Swedish export market.

Sources: Statistics Sweden and the Riksbank

Figure 4.6. Households' real disposable incomes, consumption and savings ratio

Annual percentage change and per cent of disposable income



Note. The savings ratio includes collective insurance schemes. Disposable income has been deflated using the household consumption deflator. Broken line is the average of consumption between 1994 and 2014.

Sources: Statistics Sweden and the Riksbank

Figure 4.7. GDP

Quarterly change in per cent, seasonally-adjusted data

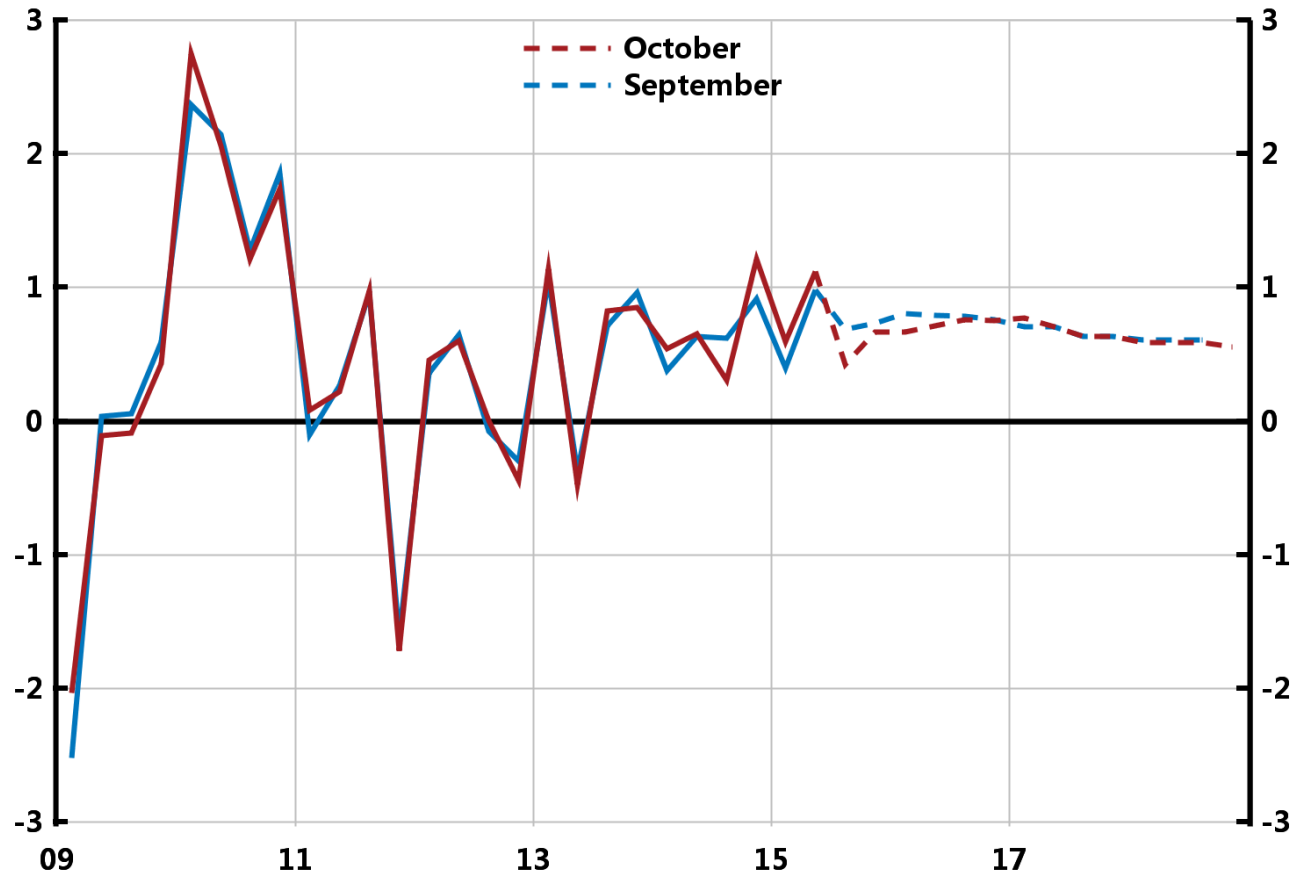
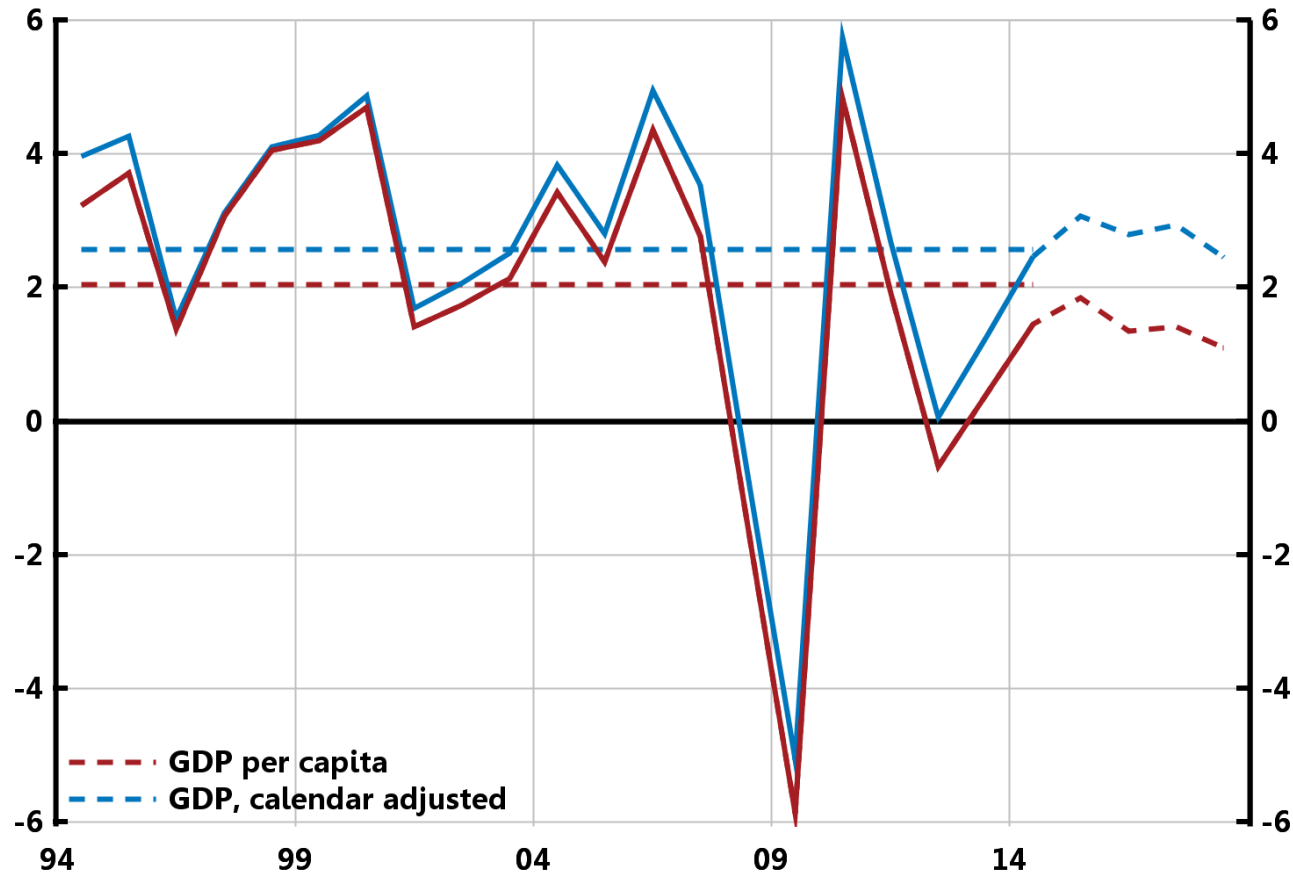


Figure 4.8. GDP and GDP per capita

Annual percentage change



Note. Broken lines refer to averages between 1994 and 2014.

Sources: Statistics Sweden and the Riksbank

Figure 4.9. Employment rate and labour force participation

Employment and labour force as percentage of the population, aged 15–74, seasonally-adjusted data

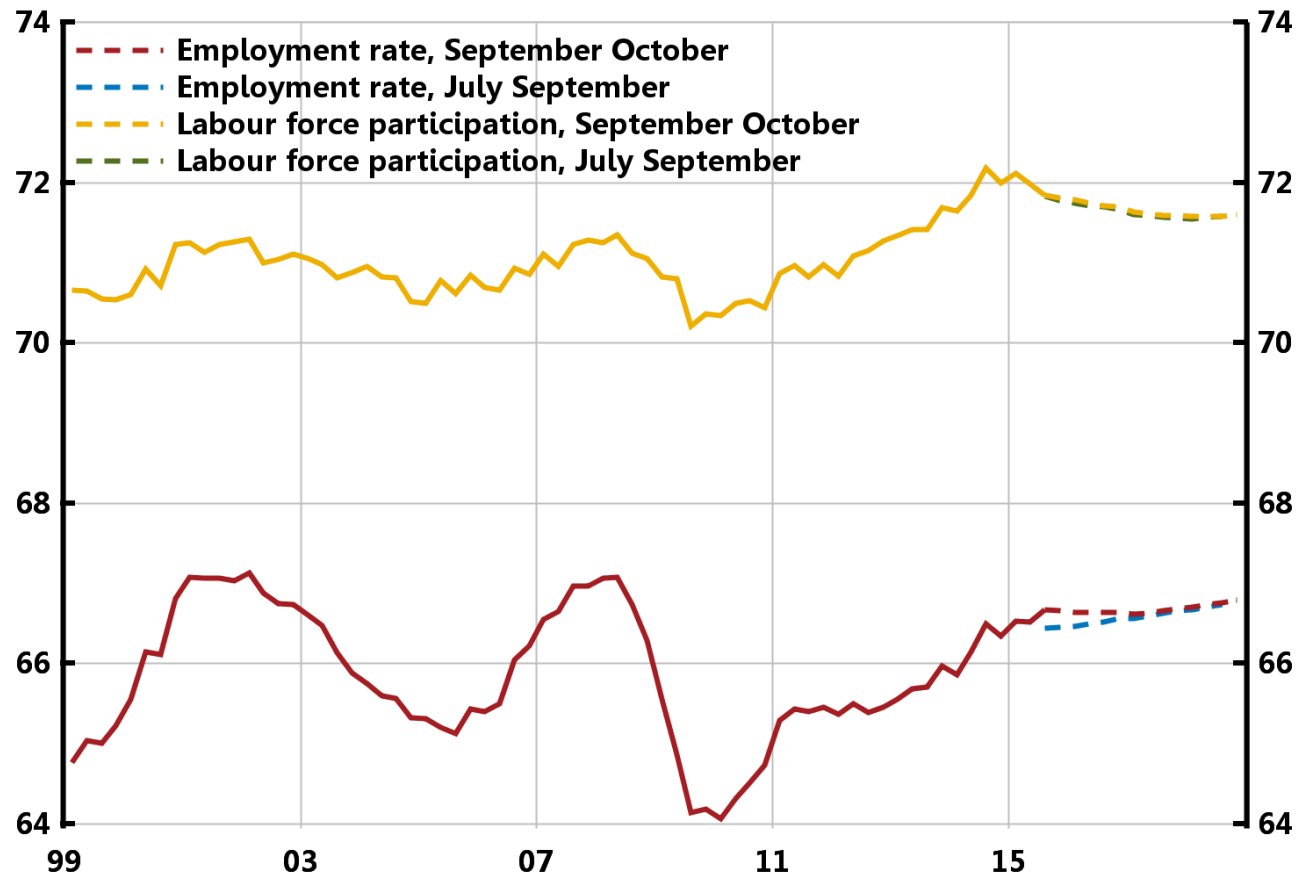
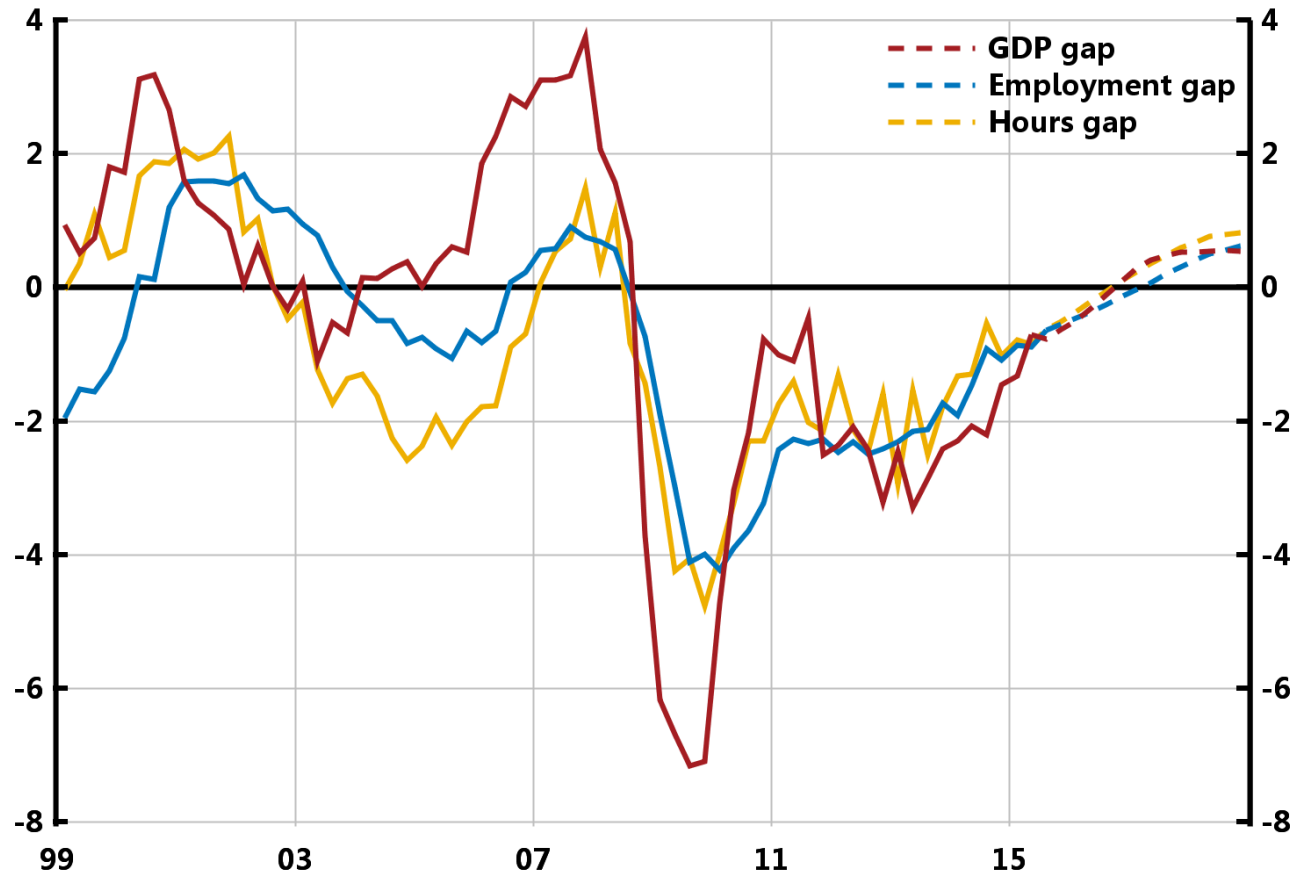


Figure 4.10. GDP gap, employment gap and hours gap

Per cent



Note. The GDP gap refers to the GDP deviation from trend, calculated using a production function. The hours gap and the employment gap refer to the deviation of the number of hours worked and the number of those employed from the Riksbank's assessed trends.

Sources: Statistics Sweden and the Riksbank

Figure 4.11. Unemployment

Per cent of the labour force, 15–74 years, seasonally-adjusted data

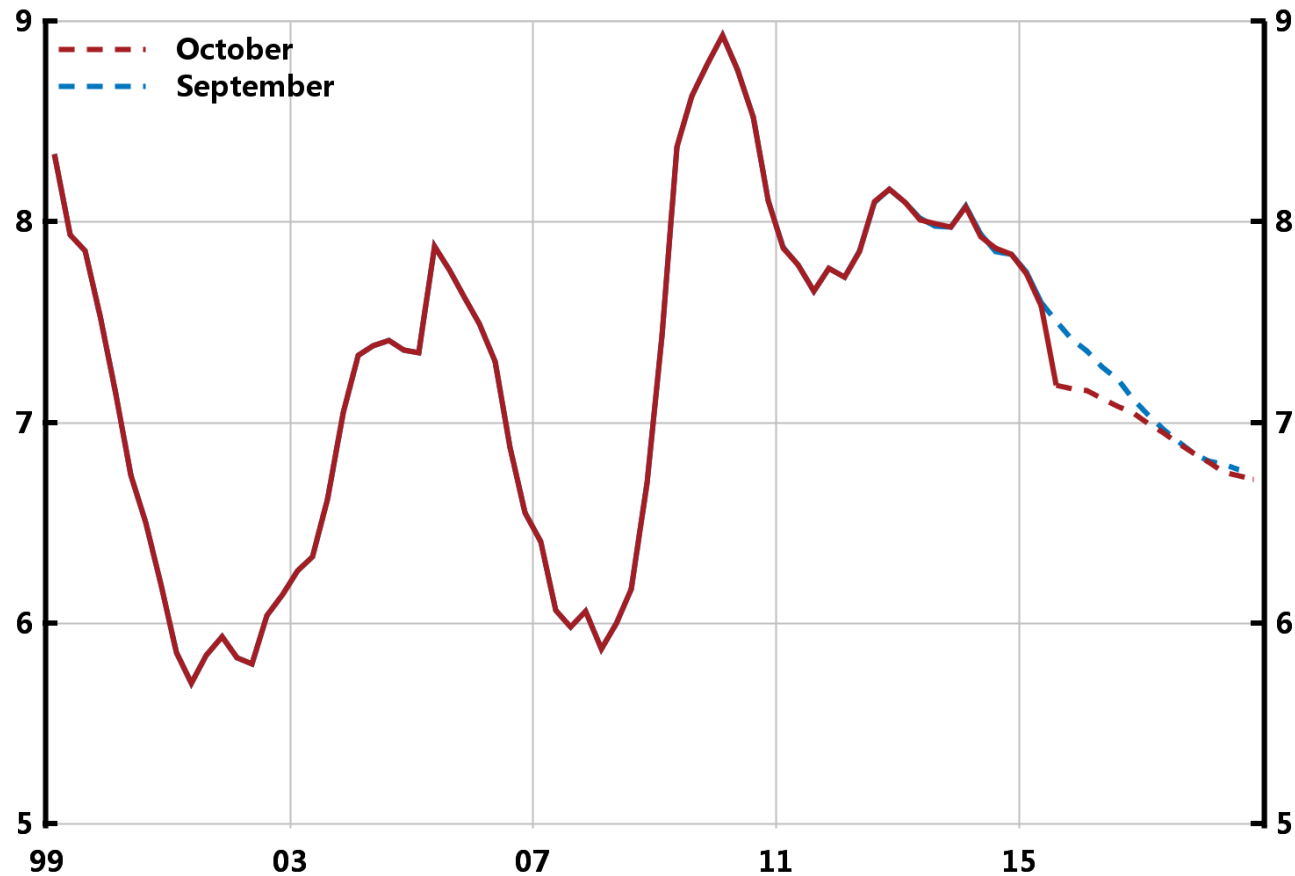


Figure 4.12. Cost pressures in the economy as a whole

Annual percentage change

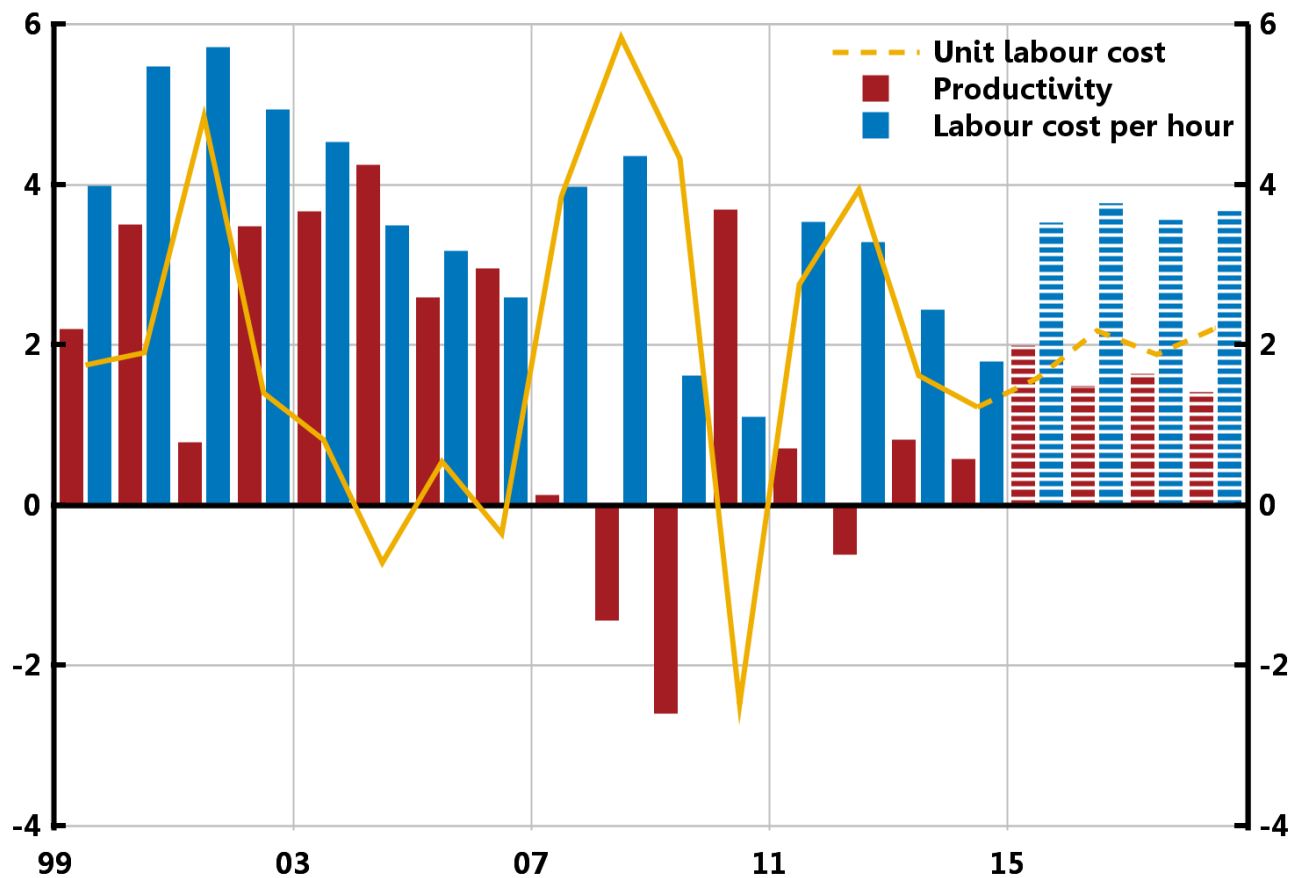
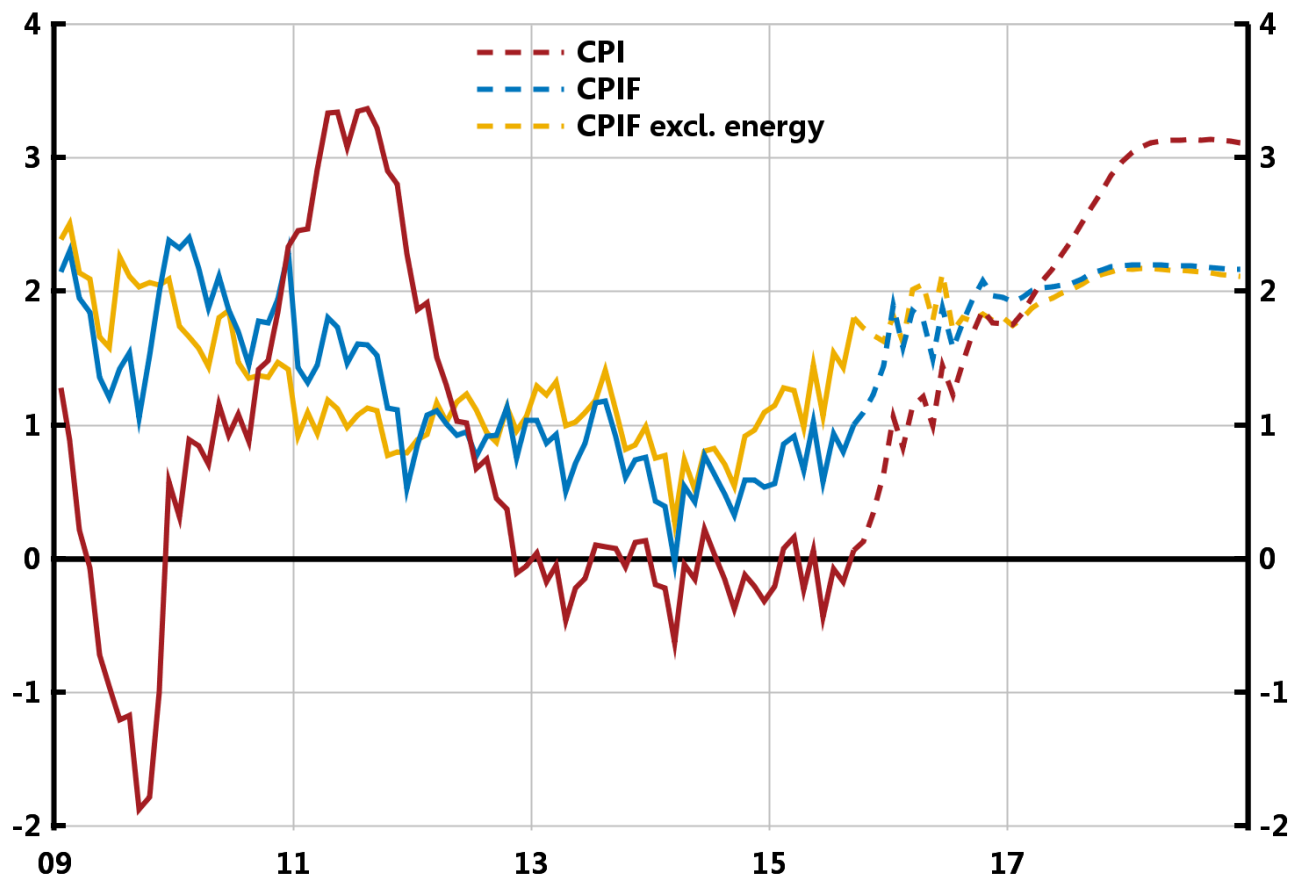


Figure 4.13. CPI, CPIF and CPIF excluding energy

Annual percentage change



Note. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank



Article: Migration
– opportunity and
challenge

Figure 4.14. Working-age population

Million people, aged 15–74

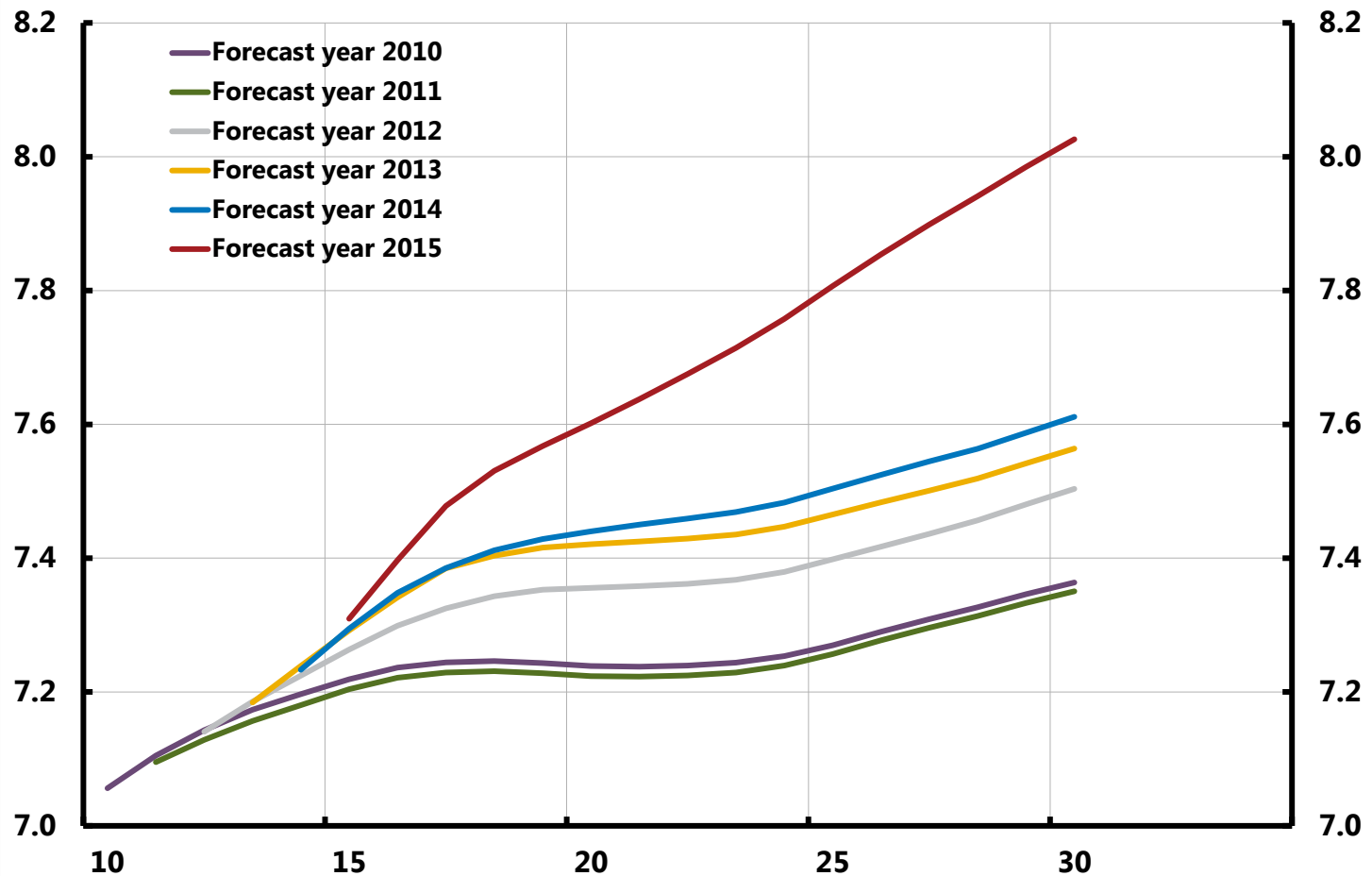


Figure 4.15. Accumulated population increase

Thousands of people, aged 15–74

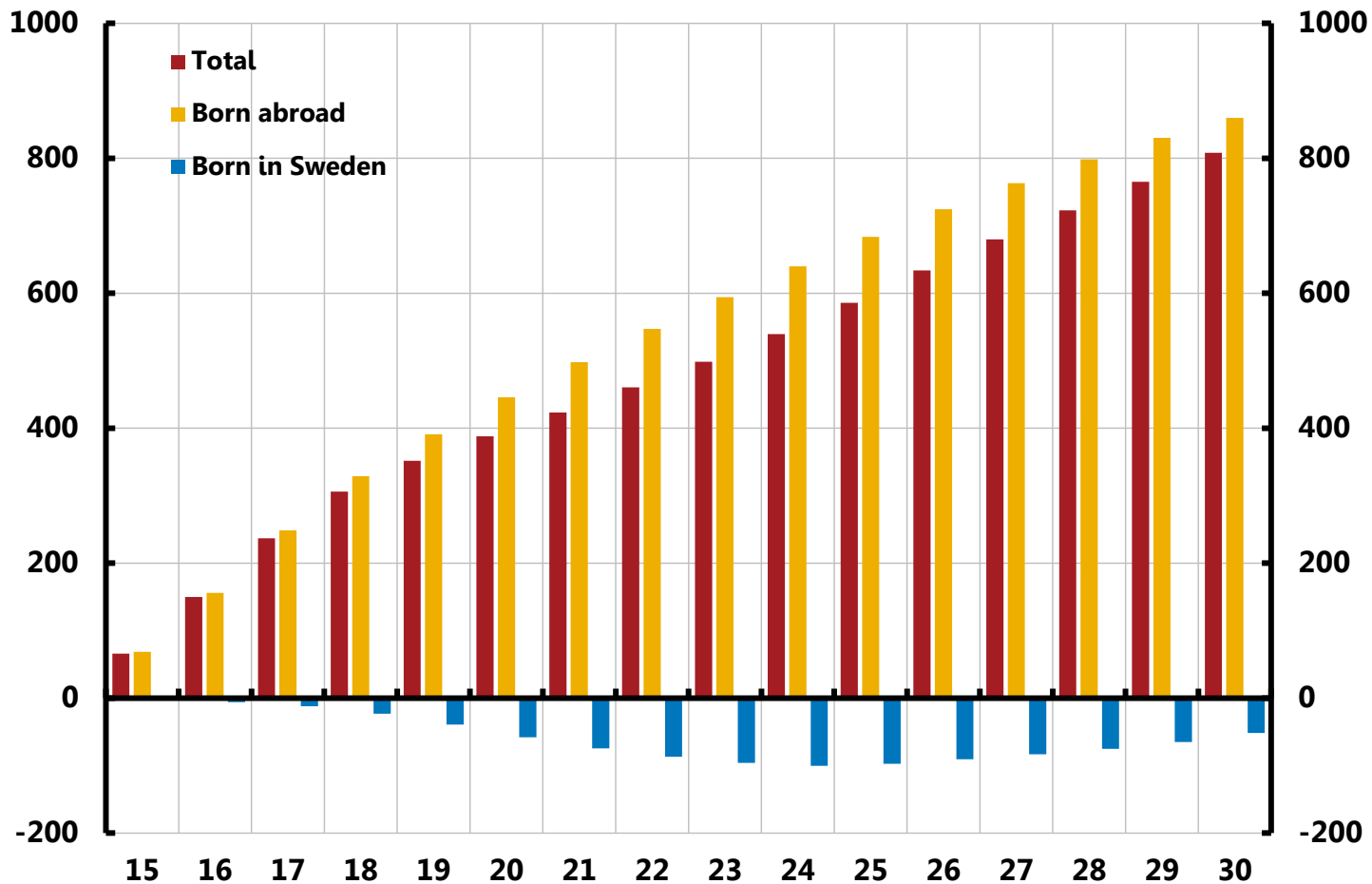
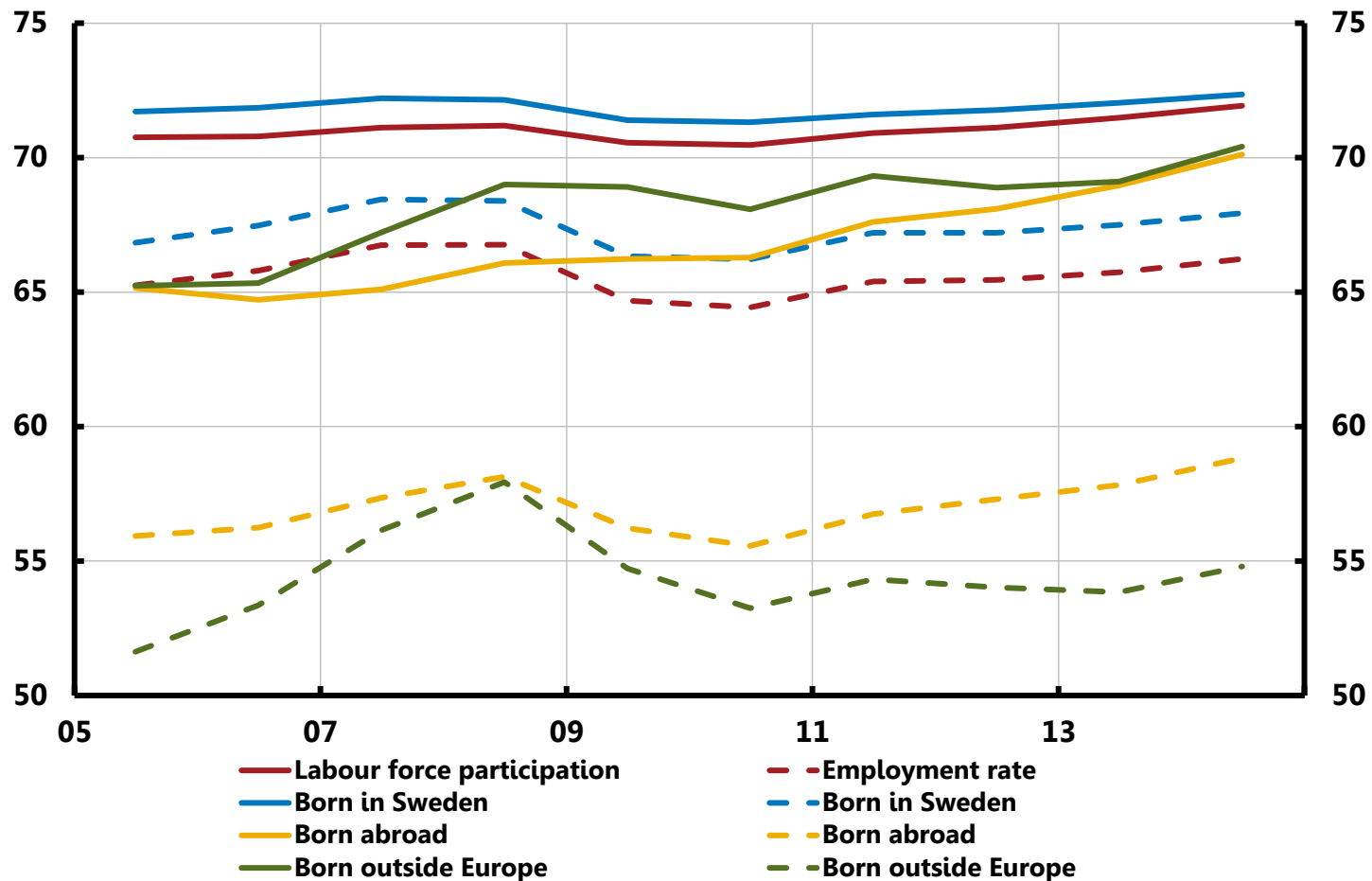


Diagram 4.16. Employment rate and labour force participation rate

Employment and labour force as percentage of the population, aged 15–74





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

	2015 Q3	2015 Q4	2016 Q1	2016 Q4	2017 Q4	2018 Q4
Repo rate	-0.3	-0.4 (-0.4)	-0.4 (-0.4)	-0.4 (-0.2)	0.1 (0.4)	0.7

Source: The Riksbank

Table 2. Inflation

Annual percentage change, annual average

	2014	2015	2016	2017	2018
CPI	-0.2	0.0 (0.0)	1.4 (1.8)	2.4 (2.8)	3.1
CPIF	0.5	0.9 (0.9)	1.8 (2.0)	2.1 (2.2)	2.2
CPIF excl. energy	0.7	1.4 (1.4)	1.8 (2.0)	2.0 (2.1)	2.1
HICP	0.2	0.8 (0.8)	1.7 (1.8)	2.1 (2.1)	2.2

Note. The CPIF is the CPI with a fixed mortgage rate. 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

	2014	2015	2016	2017	2018
Repo rate	0.5	-0.3 (-0.3)	-0.4 (-0.3)	-0.1 (0.2)	0.5
10-year rate	1.8	0.8 (0.8)	1.3 (1.5)	2.3 (2.5)	3.0
Exchange rate, KIX, 18 November 1992 = 100	106.7	112.7 (113.0)	110.4 (110.1)	107.3 (106.3)	105.6
General government net lending*	-1.7	-1.1 (-1.4)	-0.6 (-0.8)	-0.3 (-0.4)	-0.1

* Per cent of GDP

Sources: Statistics Sweden and the Riksbank

Table 4. International conditions

Annual percentage change, unless otherwise stated

GDP	PPP-weights	KIX-weights	2014	2015	2016	2017	2018
Euro area	0.14	0.46	0.9	1.5 (1.3)	1.7 (1.7)	2.0 (2.0)	2.1
USA	0.16	0.09	2.4	2.5 (2.5)	2.7 (3.0)	2.5 (2.8)	2.1
Japan	0.05	0.03	-0.1	0.7 (0.6)	0.7 (0.7)	0.4 (0.4)	0.5
China	0.15	0.08	7.5	6.8 (6.6)	6.4 (6.3)	6.1 (6.1)	6.0
KIX-weighted	0.75	1.00	2.0	2.0 (1.9)	2.2 (2.3)	2.5 (2.6)	2.5
World (PPP-weighted)	1.00	—	3.4	3.1 (3.2)	3.6 (3.7)	3.8 (3.8)	3.8

Note. Calendar-adjusted growth rates. The PPP-weights refer to the global purchasing-power adjusted GDP-weights, according to the IMF. The National Institute of Economic Research updates the weights for the KIX krona index at the start of every year with a time lag of three years. The figures in the table are based on the new KIX weights for 2012 that are used for 2015, and on an assumption that the weights will develop according to the trend of the past five years in the coming forecast years.

CPI	2014	2015	2016	2017	2018
Euro area (HICP)	0.4	0.1 (0.1)	1.0 (1.0)	1.6 (1.7)	1.8
USA	1.6	0.2 (-0.2)	1.9 (1.7)	2.5 (2.8)	2.5
Japan	2.7	0.9 (0.9)	1.4 (1.4)	2.1 (2.1)	2.1
KIX-weighted	1.4	1.2 (1.1)	1.8 (1.8)	2.3 (2.4)	2.3

	2014	2015	2016	2017	2018
Policy rates in the rest of the world, per cent	0.2	0.1 (0.1)	0.1 (0.1)	0.3 (0.4)	0.6
Crude oil price, USD/barrel Brent	99.6	54.7 (54.4)	53.9 (53.4)	58.5 (58.6)	61.0
Swedish export market	3.0	1.8 (2.5)	4.2 (4.8)	5.0 (5.3)	5.1

Note. Policy rates in the rest of the world refer to a weighted average of USA, the euro area, Norway and the United Kingdom. A review of the input series has led to revisions of the Swedish export market for 2014 and 2015.

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

Table 5. GDP by expenditure

Annual percentage change, unless otherwise stated

	2014	2015	2016	2017	2018
Private consumption	2.2	2.2 (2.2)	2.6 (3.0)	2.9 (2.8)	2.6
Public consumption	1.6	1.9 (2.3)	2.7 (2.8)	1.9 (1.9)	1.8
Gross fixed capital formation	7.6	5.6 (4.3)	5.6 (5.9)	4.6 (4.5)	4.4
Inventory investment*	0.1	-0.1 (0.0)	0.2 (0.0)	0.0 (0.0)	0.0
Exports	3.5	4.0 (3.8)	4.8 (5.4)	4.4 (4.9)	4.7
Imports	6.3	2.9 (2.9)	6.2 (6.2)	5.4 (5.8)	5.9
GDP	2.3	3.3 (3.1)	3.0 (3.4)	2.7 (2.6)	2.3
GDP, calendar-adjusted	2.5	3.1 (2.8)	2.8 (3.2)	2.9 (2.9)	2.5
Final figure for domestic demand*	3.1	2.8 (2.6)	3.2 (3.5)	2.9 (2.9)	2.7
Net exports*	-0.9	0.6 (0.5)	-0.4 (-0.1)	-0.3 (-0.2)	-0.4
Current account (NA), per cent of GDP	5.4	6.3 (6.7)	5.7 (6.2)	5.2 (5.6)	4.6

*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

	2014	2015	2016	2017	2018
Population, aged 15–74	0.7	0.7 (0.8)	1.1 (1.1)	1.2 (1.2)	0.9
Potential hours worked	0.7	0.7 (0.7)	0.7 (0.8)	0.7 (0.8)	0.7
GDP, calendar-adjusted	2.5	3.1 (2.8)	2.8 (3.2)	2.9 (2.9)	2.5
Number of hours worked, calendar-adjusted	1.8	1.1 (1.0)	1.3 (1.3)	1.3 (1.3)	1.0
Employed, aged 15–74	1.4	1.3 (1.2)	1.1 (1.2)	1.2 (1.3)	1.1
Labour force, aged 15–74	1.3	0.8 (0.8)	0.8 (0.8)	1.0 (1.0)	0.9
Unemployment, aged 15–74 *	7.9	7.4 (7.6)	7.1 (7.2)	6.9 (6.9)	6.8

* Per cent of the labour force

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 7. Wages and labour costs for the economy as a whole

Annual percentage change, calendar-adjusted data unless otherwise stated

	2014	2015	2016	2017	2018
Hourly wage, NMO	2.8	2.6 (2.6)	3.1 (3.2)	3.4 (3.4)	3.5
Hourly wage, NA	1.8	3.2 (3.0)	3.2 (3.3)	3.6 (3.6)	3.7
Employers' contribution*	0.0	0.3 (0.3)	0.5 (0.5)	0.0 (0.0)	0.0
Hourly labour cost, NA	1.8	3.5 (3.2)	3.8 (3.8)	3.6 (3.6)	3.7
Productivity	0.6	2.0 (1.8)	1.5 (1.8)	1.6 (1.5)	1.4
Unit labour cost	1.2	1.5 (1.4)	2.2 (2.0)	1.9 (2.0)	2.2

* Contribution to the increase in labour costs, 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 divided by the seasonally adjusted total number of hours worked. Unit labour cost is defined as labour cost divided by seasonally-adjusted value added at constant prices.

Sources: National Mediation Office, Statistics Sweden and the Riksbank