Monetary Policy Report
December 2015

SVERIGES RIKSBANK

HINC ROBUR ET SECURITAS

Chapter 1

Figure 1.1. Repo rate with uncertainty bands

**Per cent**
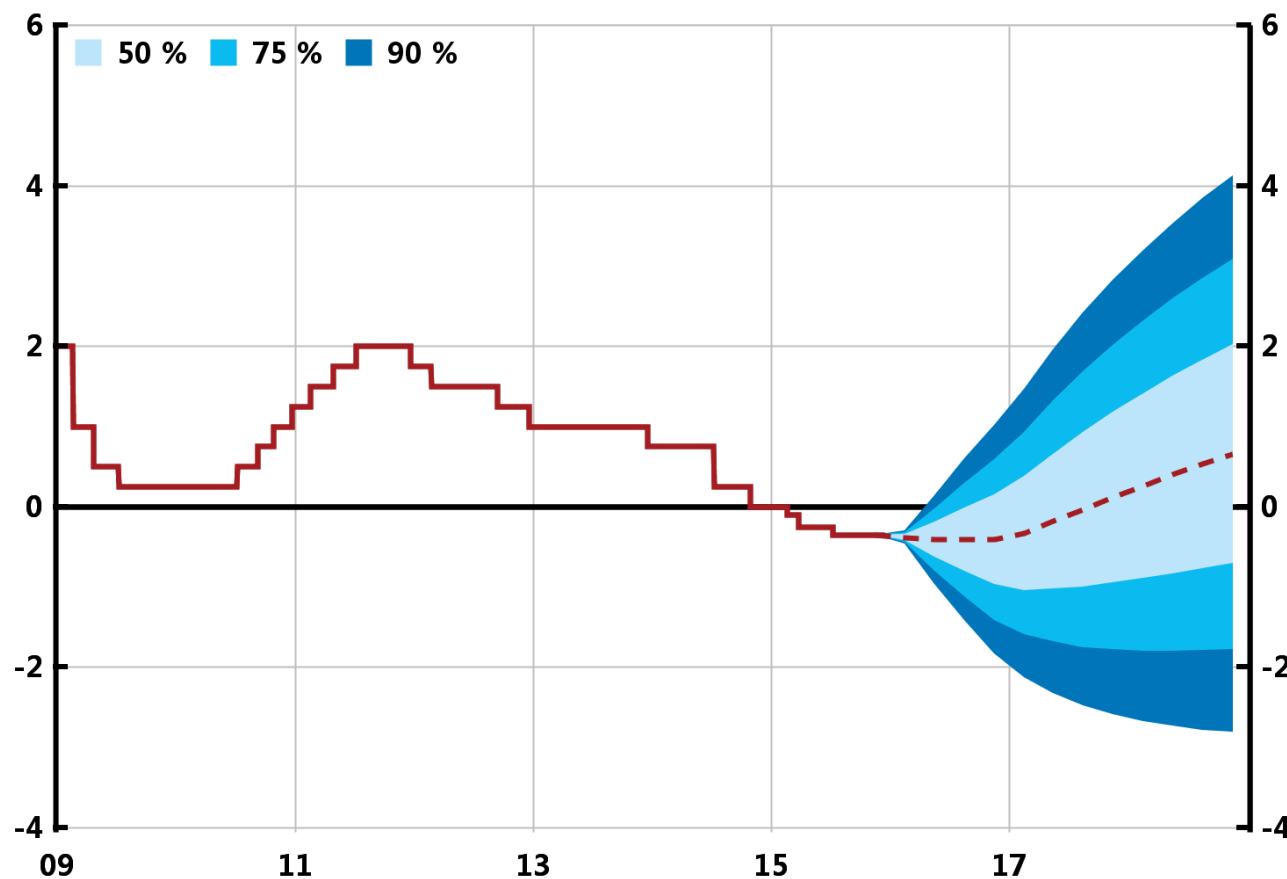
Legend: 50 %, 75 %, 90 %

Figure 1.2. GDP with uncertainty bands

Annual percentage change, seasonally-adjusted data

# Figure 1.3. CPIF with uncertainty bands
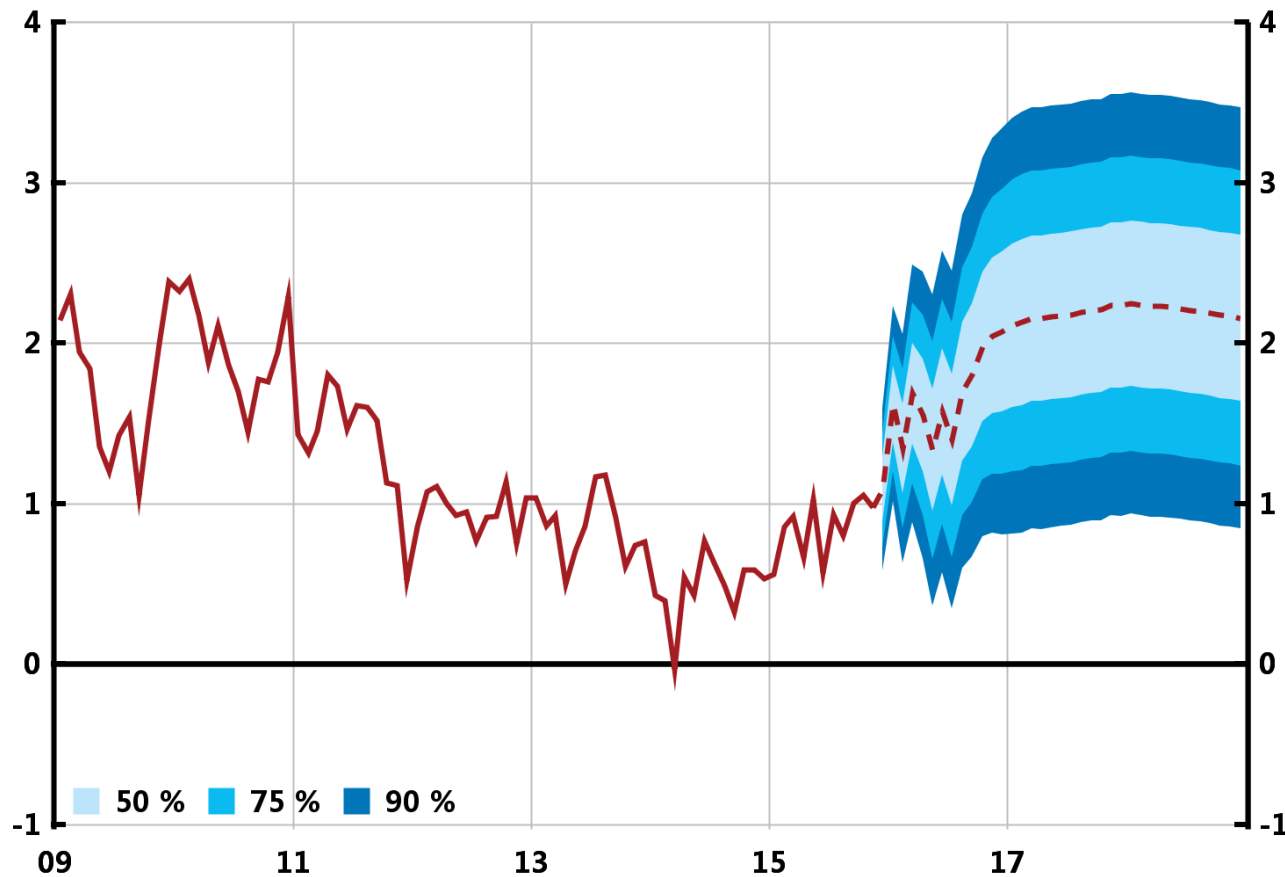
Annual percentage change

Legend: 50 % · 75 % · 90 %

X-axis: 09, 11, 13, 15, 17

Figure 1.4. CPI with uncertainty bands

Annual percentage change

Legend: 50 %, 75 %, 90 %

Figure 1.5. KIX-weighted nominal exchange rate

Index, 1992-11-18 = 100

Legend:
- December (red dashed)
- October (blue dashed)

Figure 1.6. CPIF excluding energy
Annual percentage change
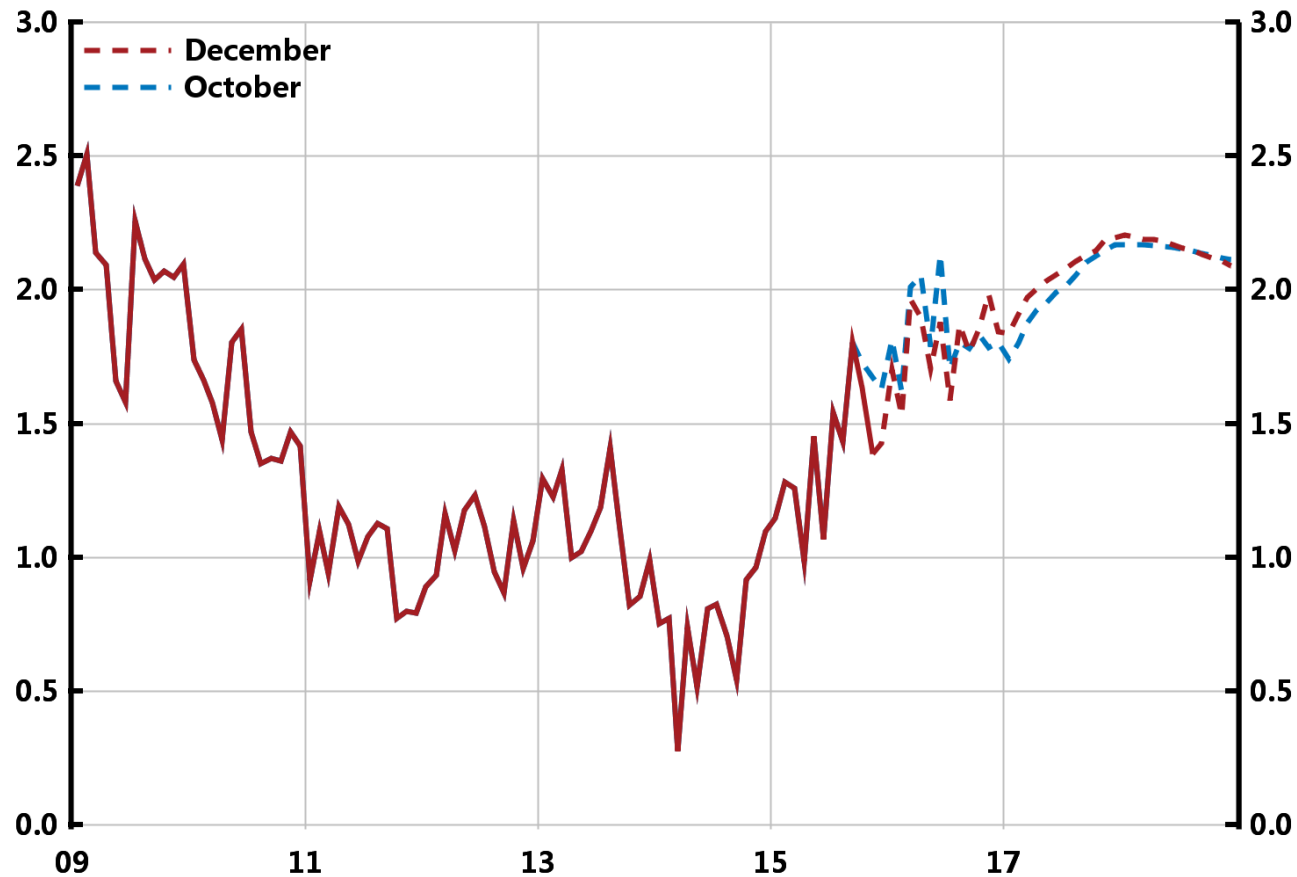
Note. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Figure 1.7. CPIF
Annual percentage change
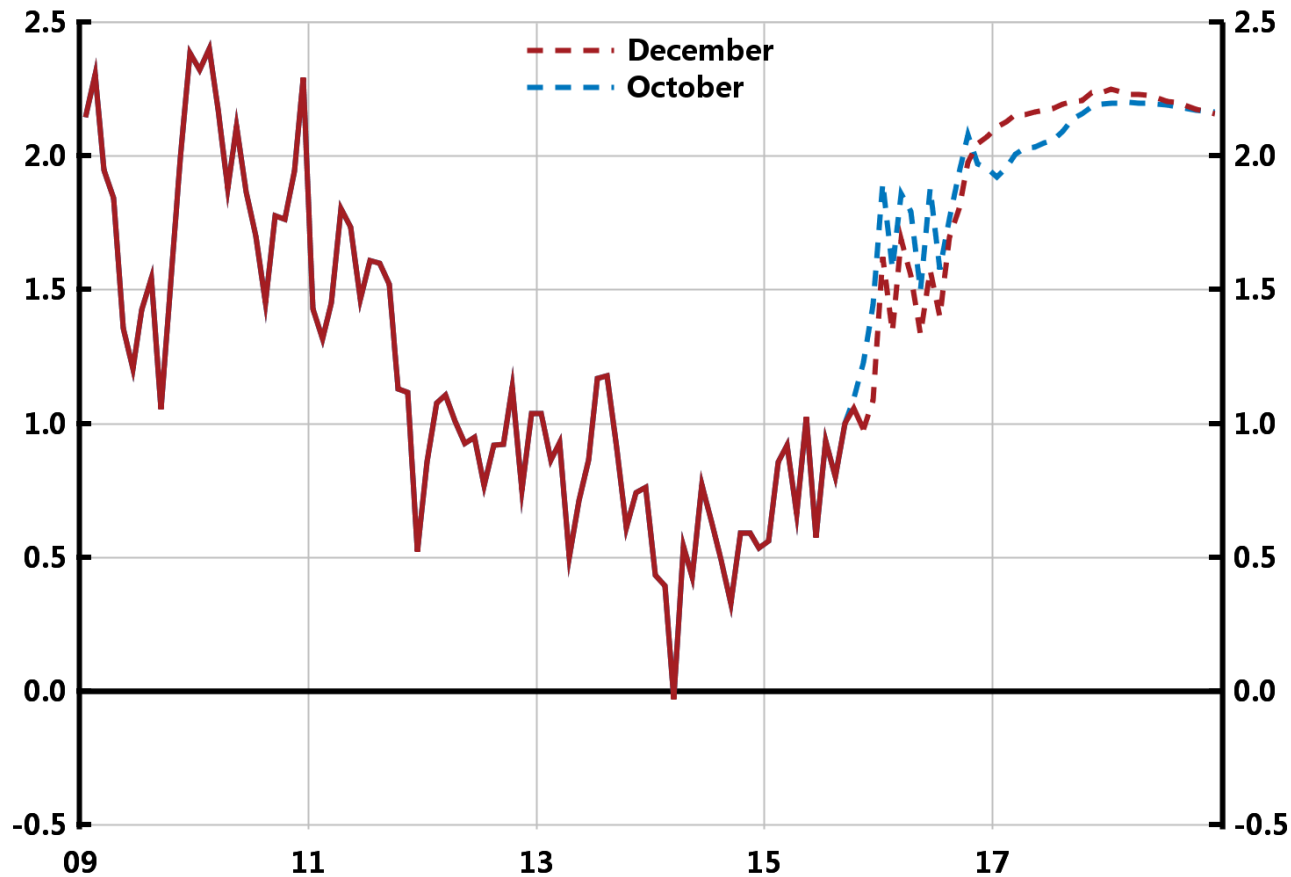
Note. The CPIF is the CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Figure 1.8. CPI
Annual percentage change

Sources: Statistics Sweden and the Riksbank
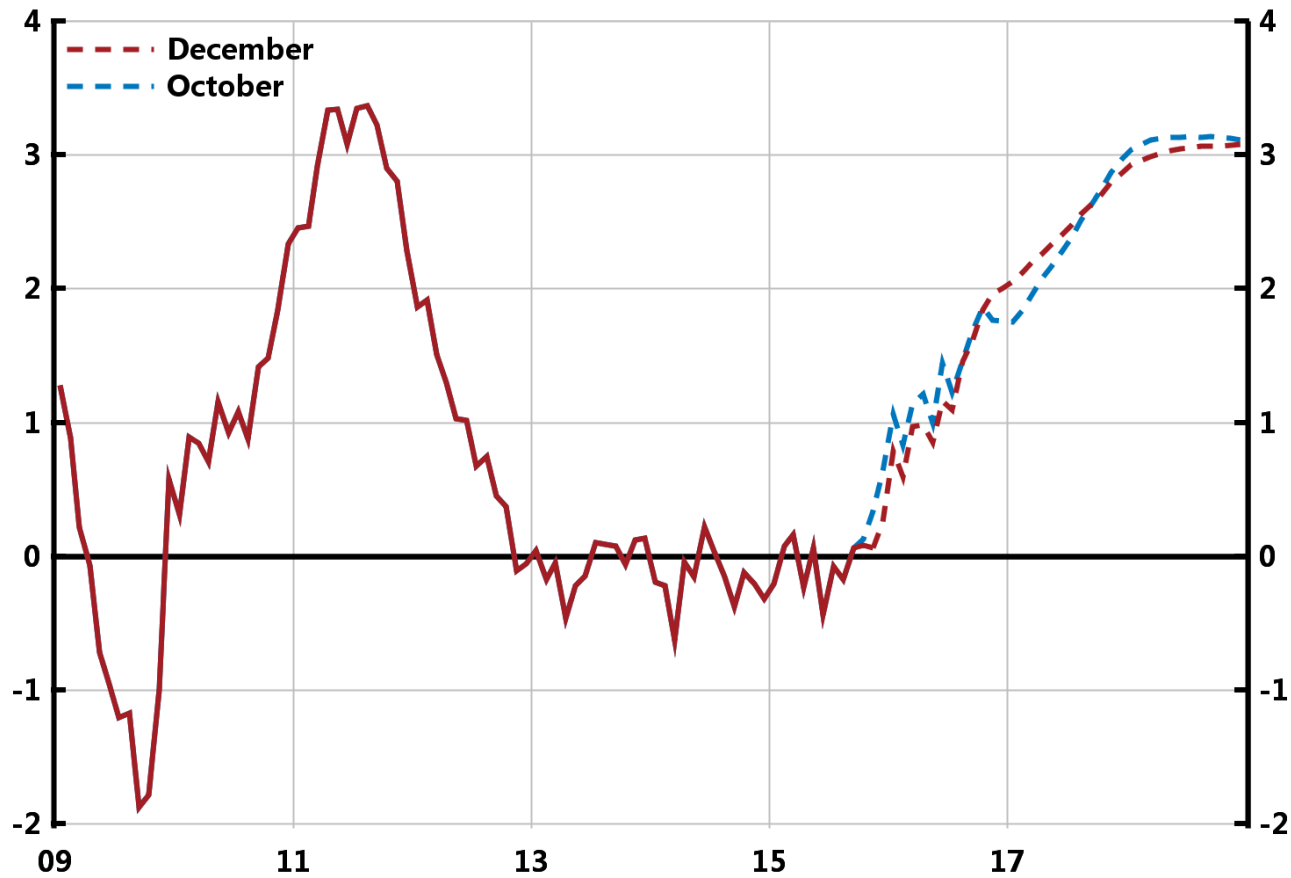
Figure 1.9. Purchases of government bonds decided by the Riksbank

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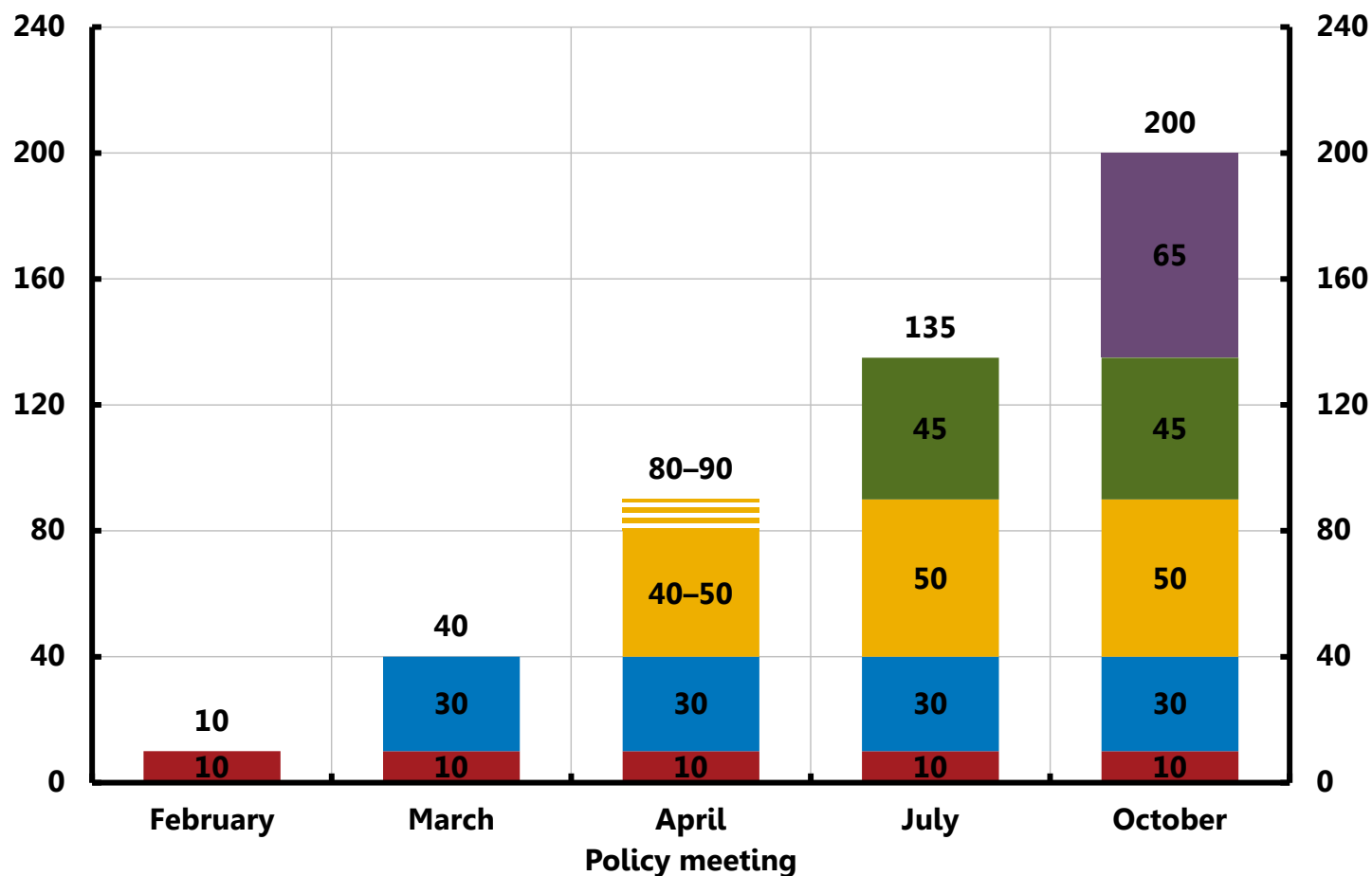
Note. Government bond purchases will continue until 30 June 2016.

Source: The Riksbank

Figure 1.10. Repo rate
Per cent
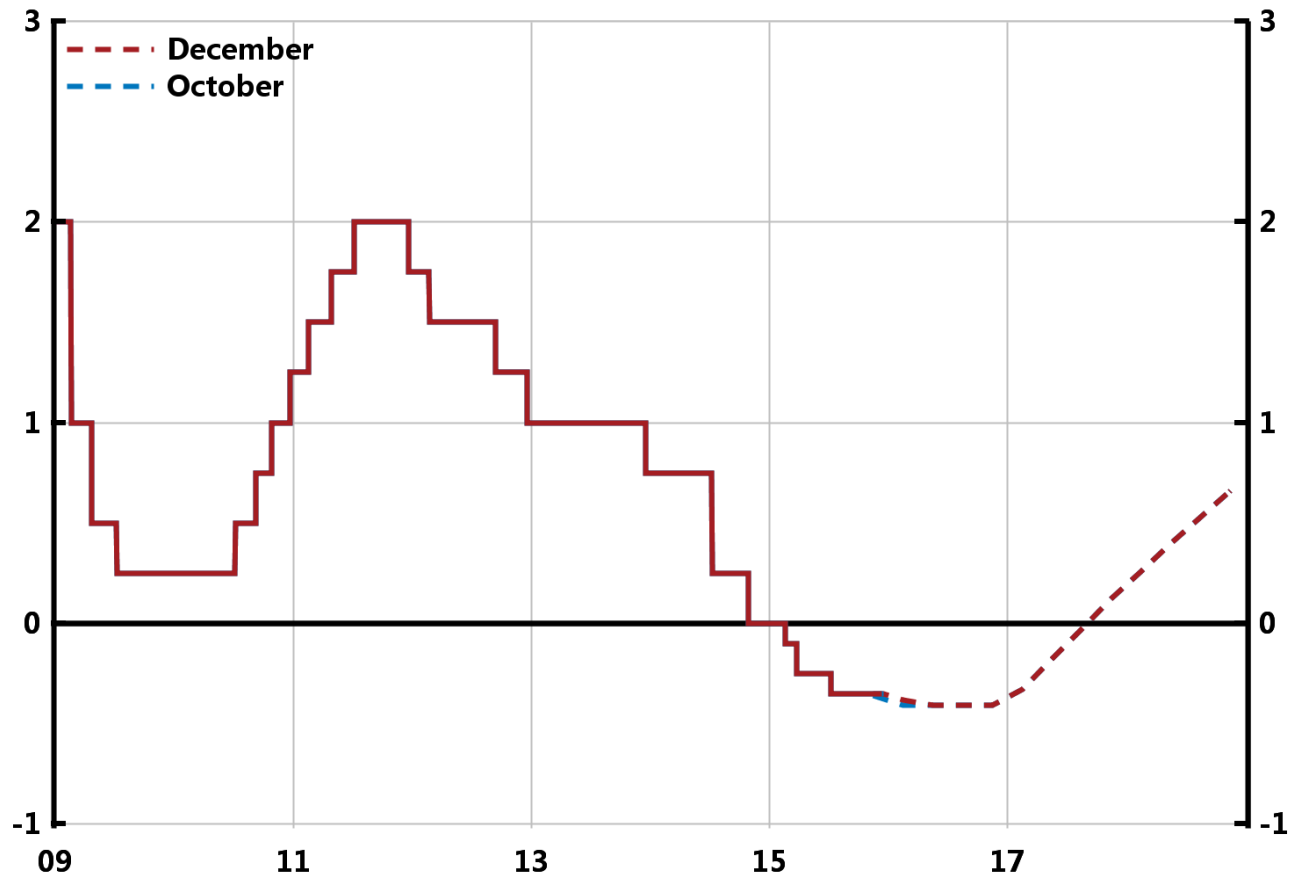
Note. Outcomes are daily data and the forecasts refer to quarterly averages.

Source: The Riksbank

Figure 1.11. Real repo rate

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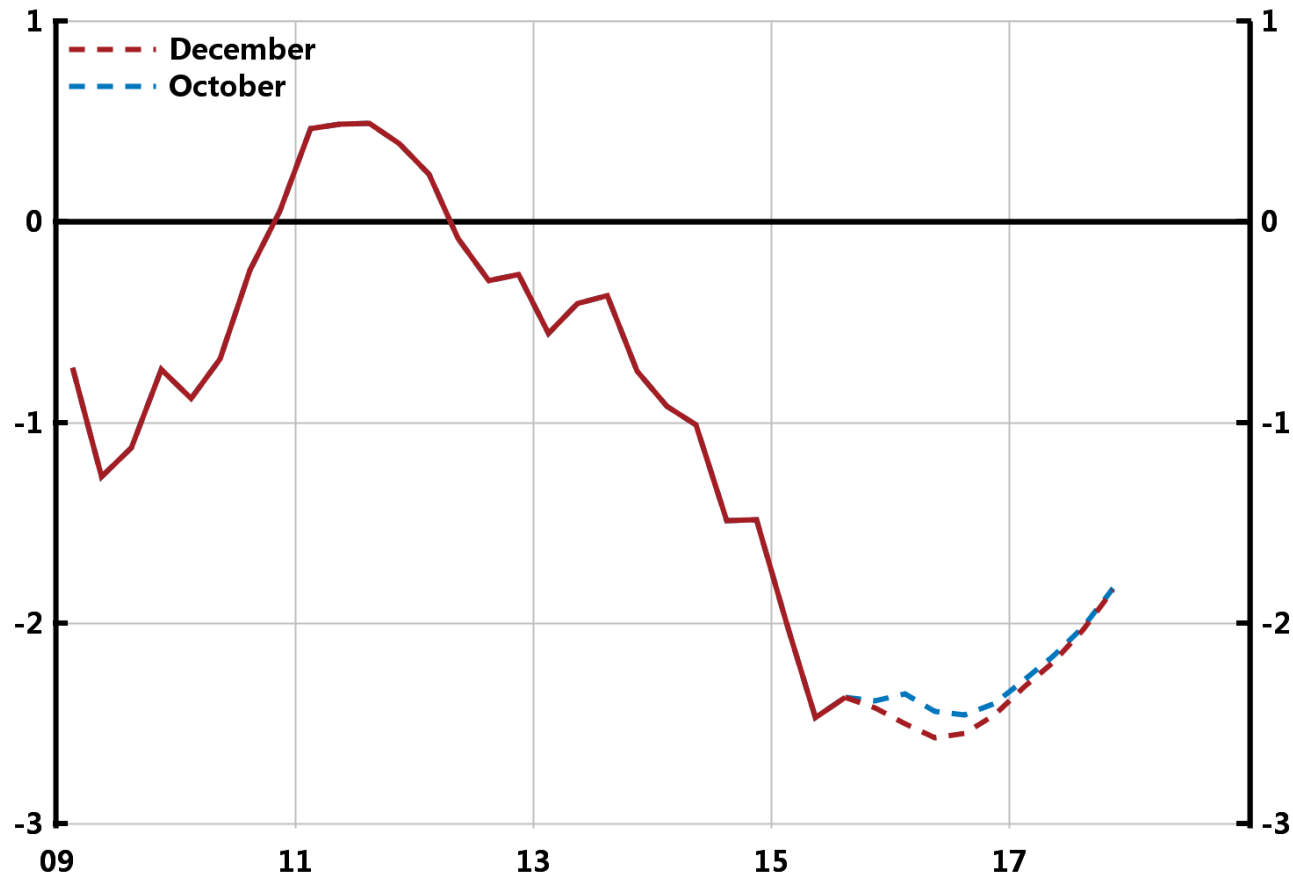
Note. The real repo rate is a mean value of the Riksbank's repo rate forecast for the year ahead minus the inflation forecast (CPIF) for the corresponding period.

Sources: Statistics Sweden and the Riksbank

Figure 1.12. Inflation expectations among all participants

Per cent

Source: TNS Sifo Prospera
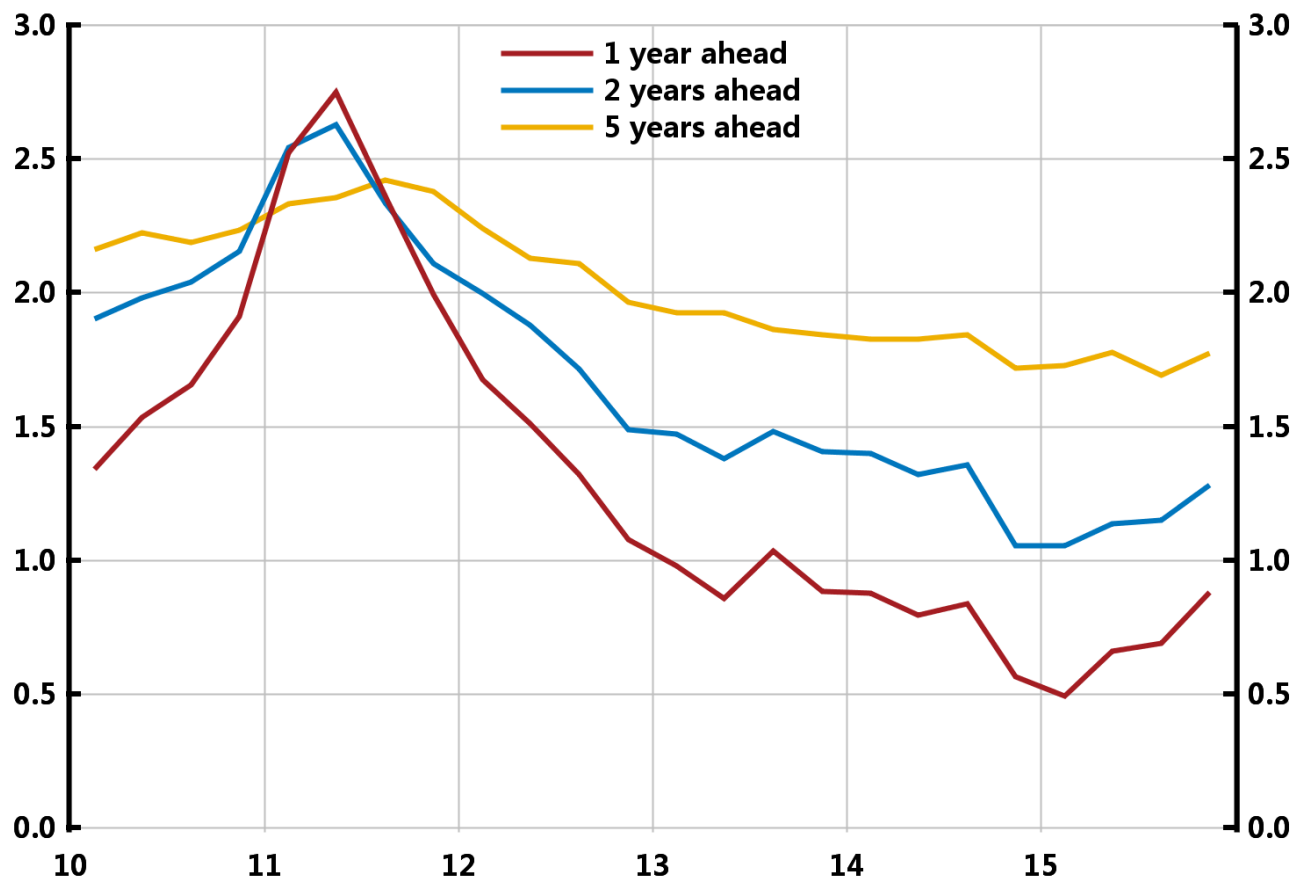
Figure 1.13. Housing prices

Annual percentage change

Legend:
- Total
- Tenant-owned apartments
- Single-family dwellings
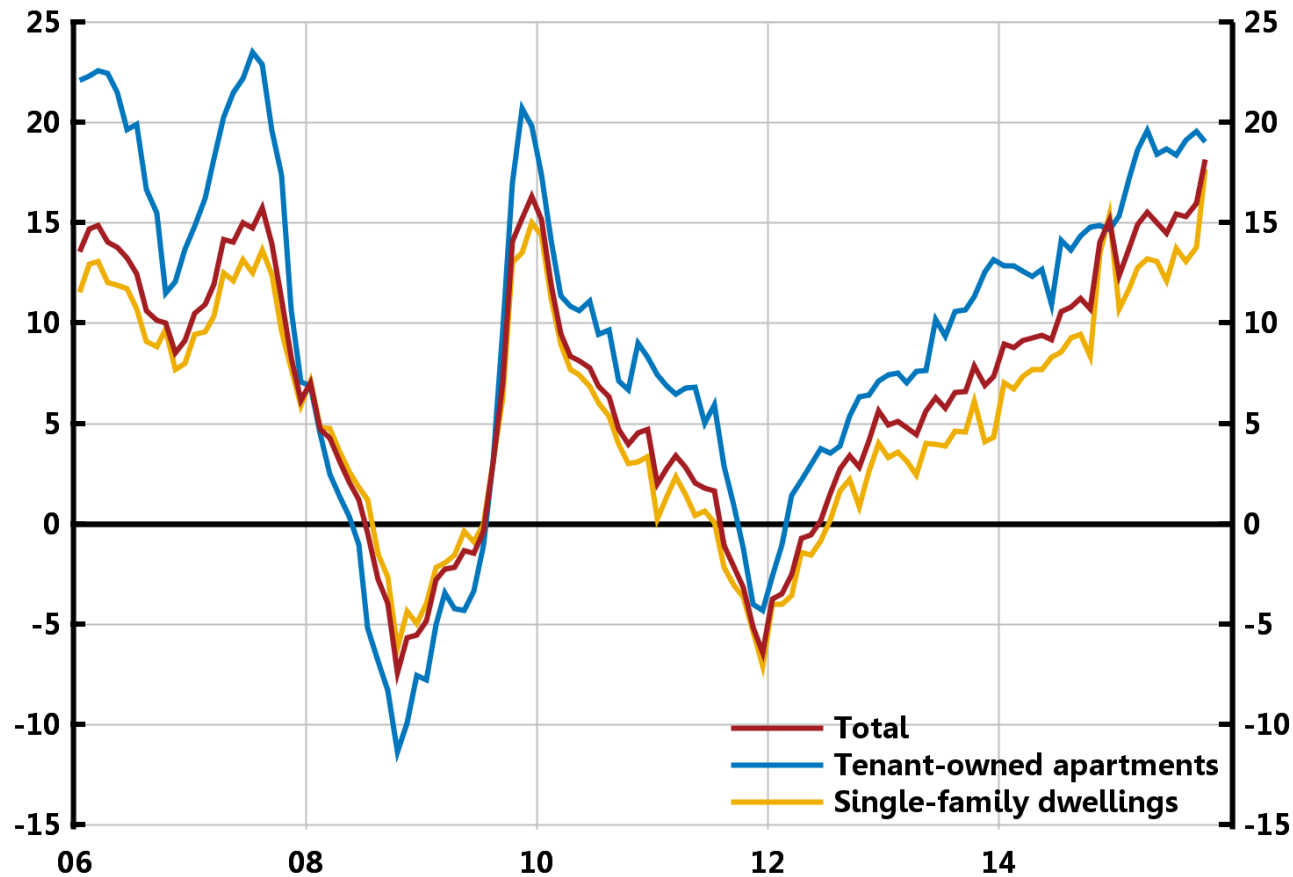
Figure 1.14. Household debt ratio
Per cent of disposable income
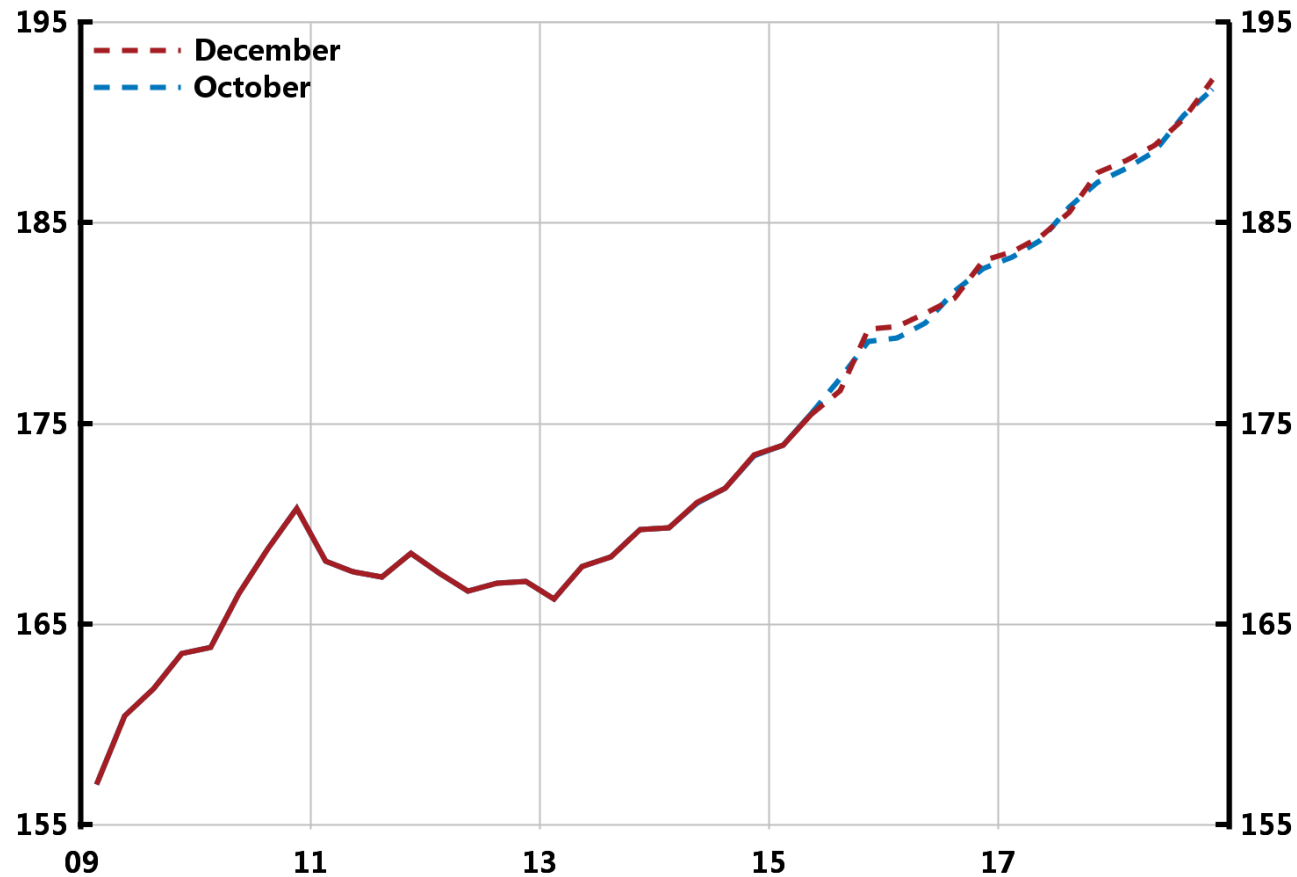
Note. Households' total debts as a share of their disposable incomes totalled over the past four quarters.

Sources: Statistics Sweden and the Riksbank

Figure 1.15. Unemployment

Percentage of labour force, 15–74 years

Legend:
- Greater fiscal policy effects
- Main scenario
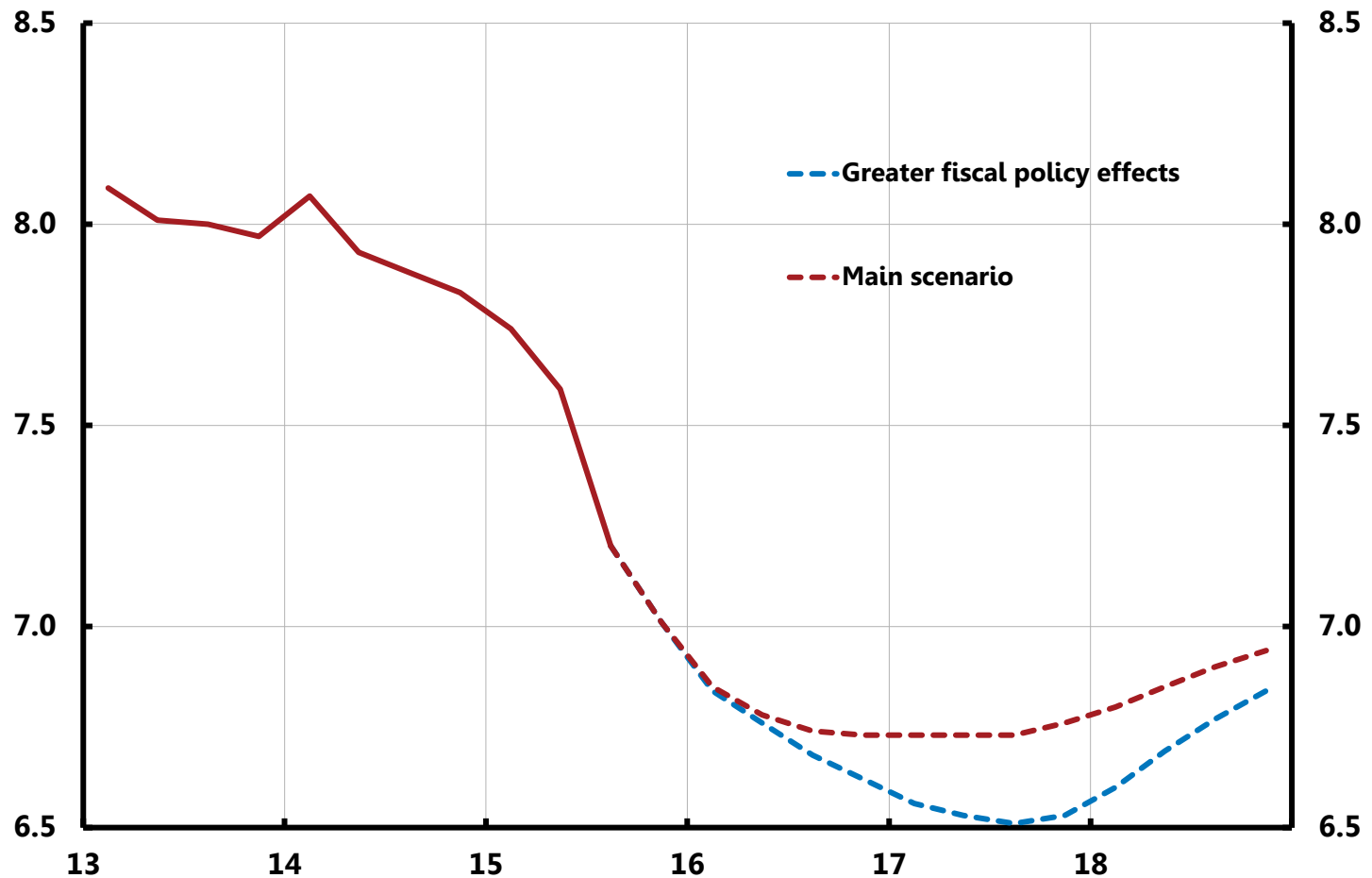
Figure 1.16. CPIF

Annual percentage change, quarterly averages
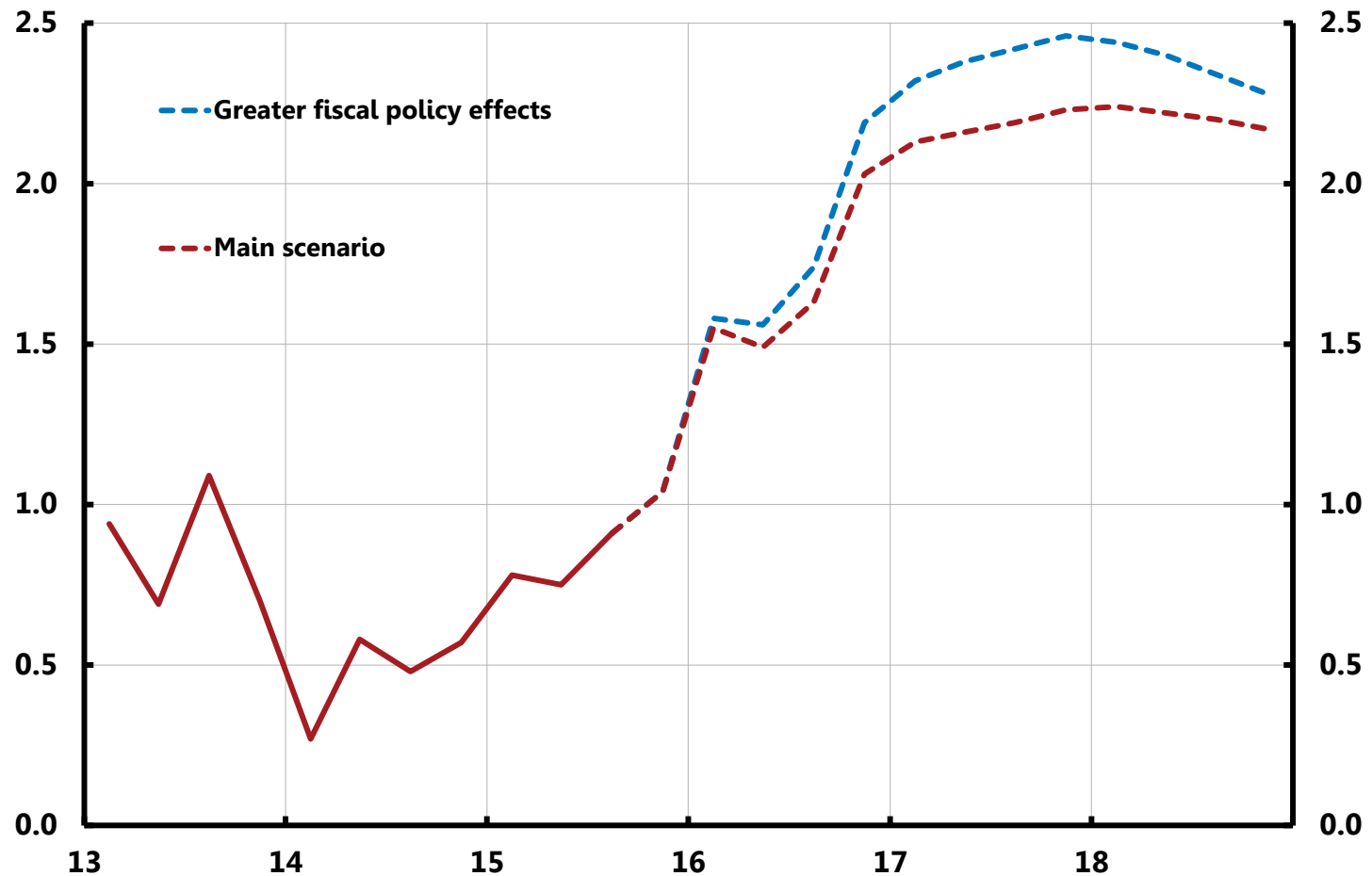
- - - - Greater fiscal policy effects
- - - - Main scenario

Chapter 2

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

Per cent
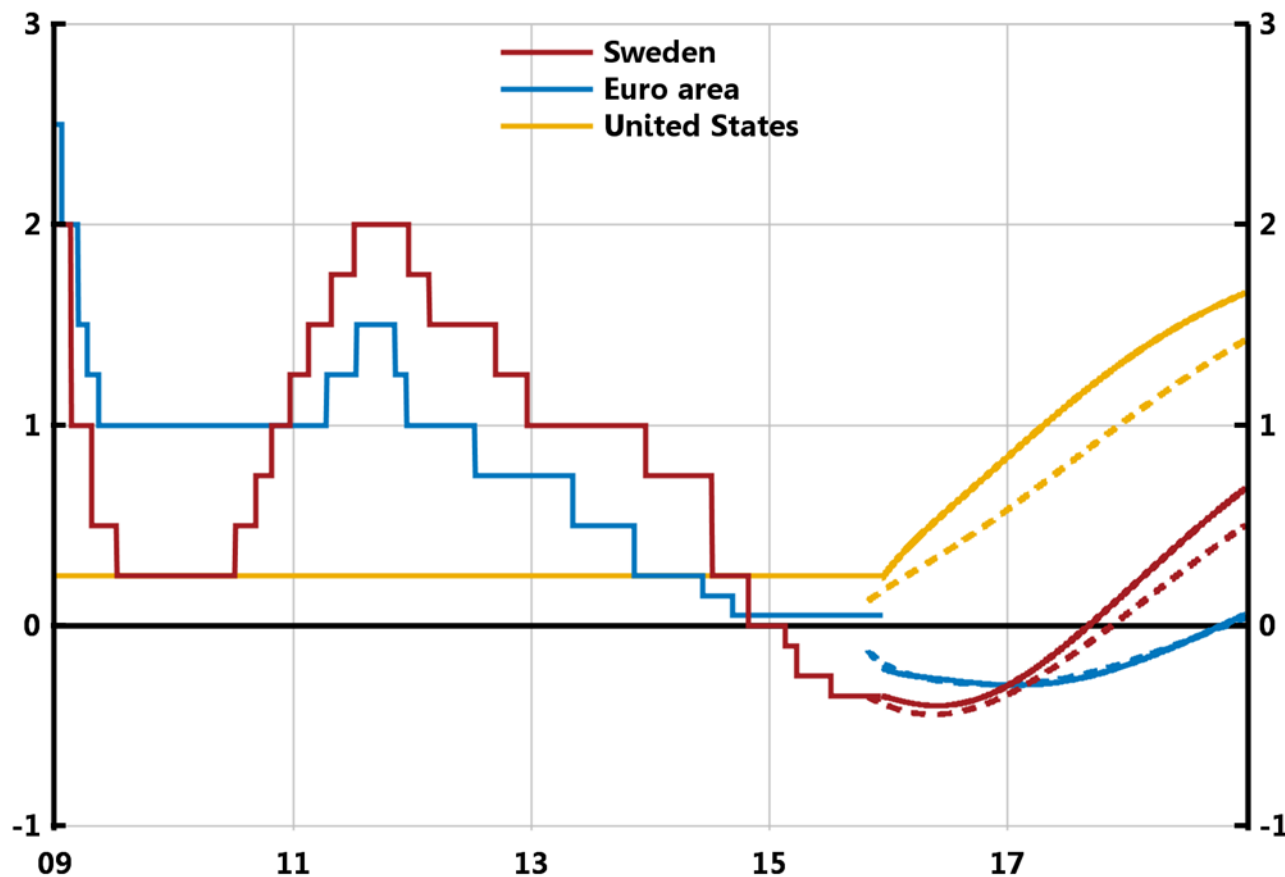
Note. Forward rates describe the expected overnight rate, which does not always correspond to the policy rate (refi rate for the euro area). Unbroken lines are estimated 10 December 2015, broken lines 27 October 2015.

Sources: Macrobond and the Riksbank

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

Per cent

Source: Macrobond
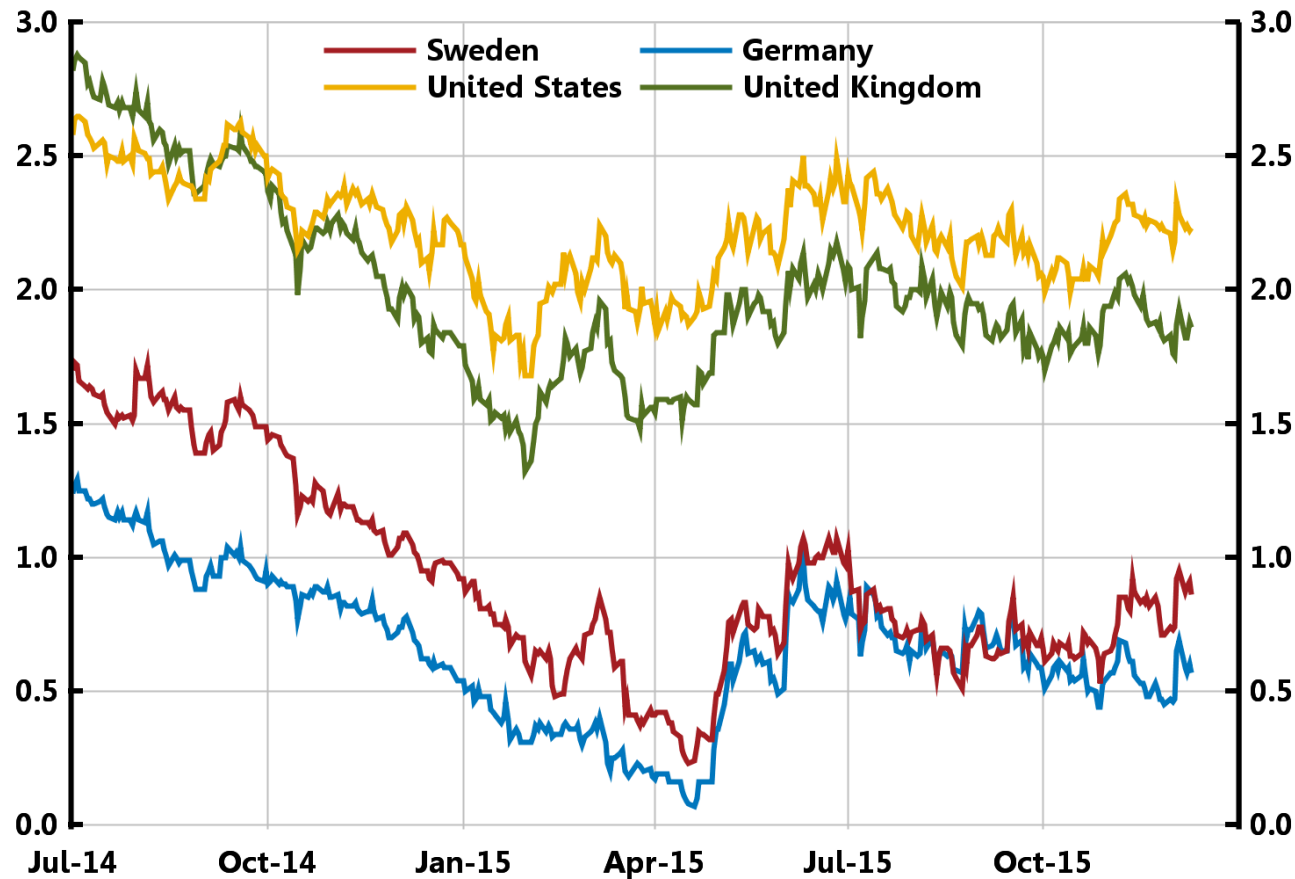
Figure 2.3. Yield curves in Sweden and Germany

Per cent

Figure 2.4. Repo rate together with the deposit and lending rate to households and companies, new contracts
Per cent
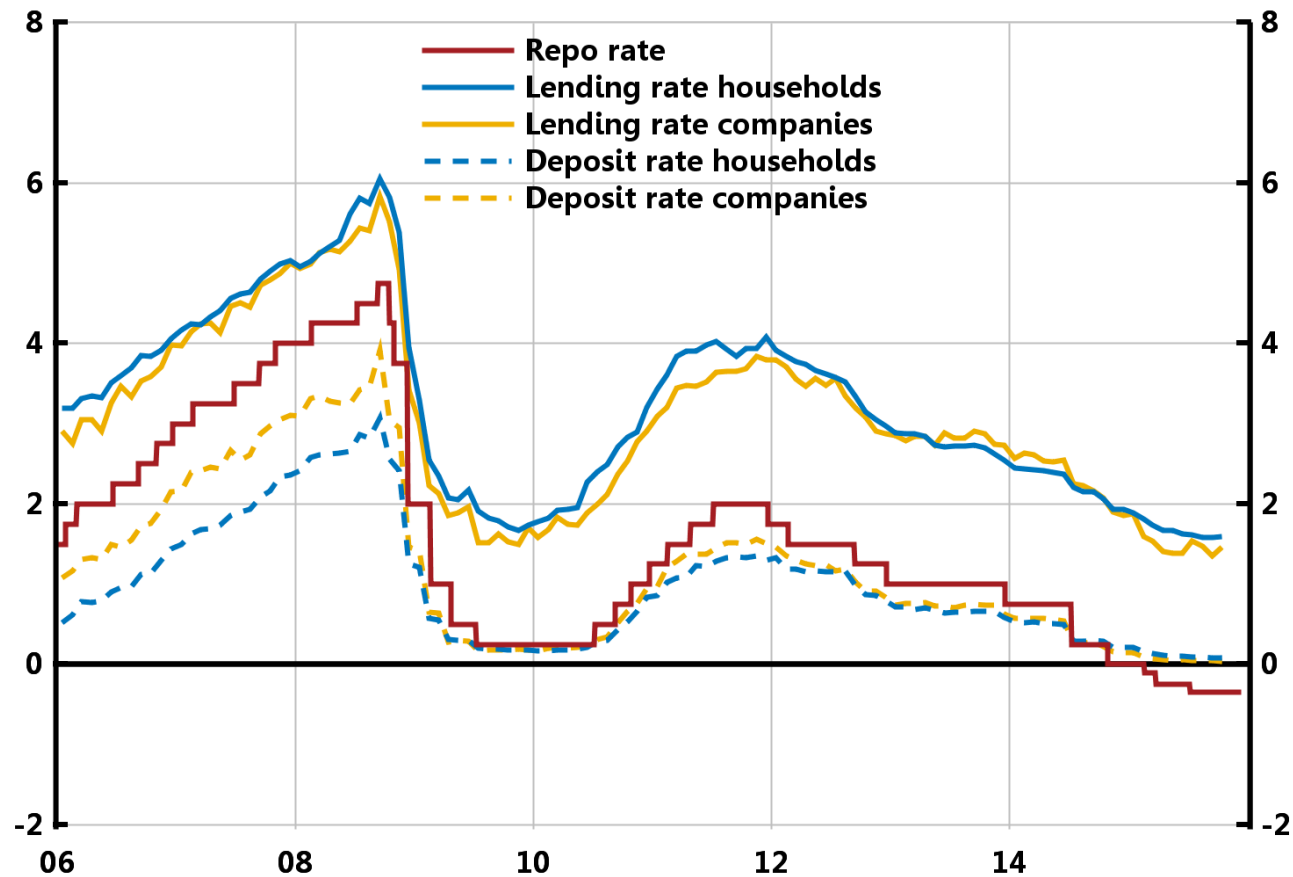
Note. MFIs' average deposit and lending rates for households and companies.

Sources: Statistics Sweden and the Riksbank

Figure 2.5. Lending to non-financial corporations

Annual percentage change
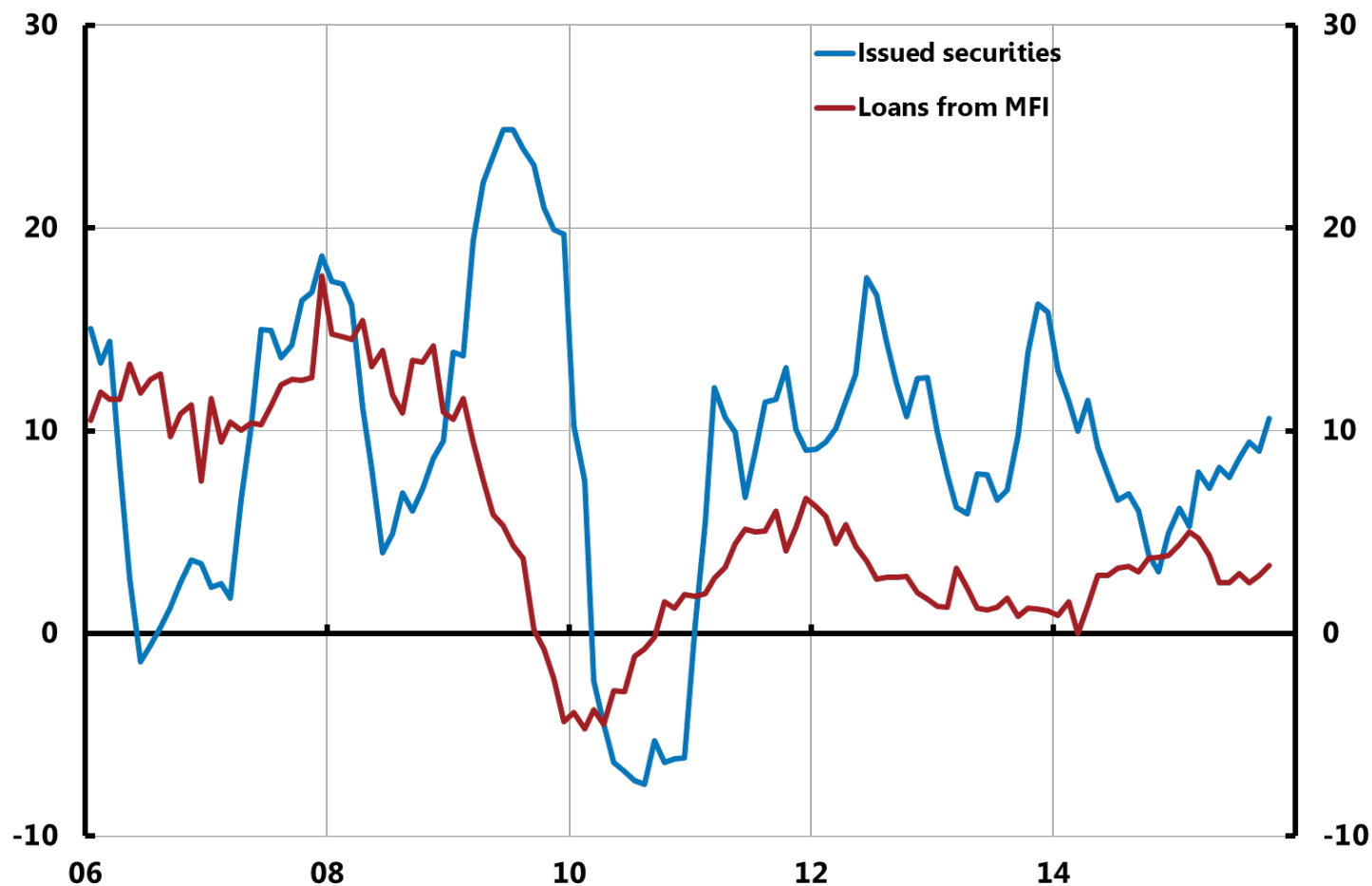
Note. The figure shows the annual growth rate for loans to non-financial corporations from financial market statistics as well as the annual growth rate for issues of securities.

Source: Statistics Sweden

Figure 2.6. Lending to households, different purposes

Annual percentage change
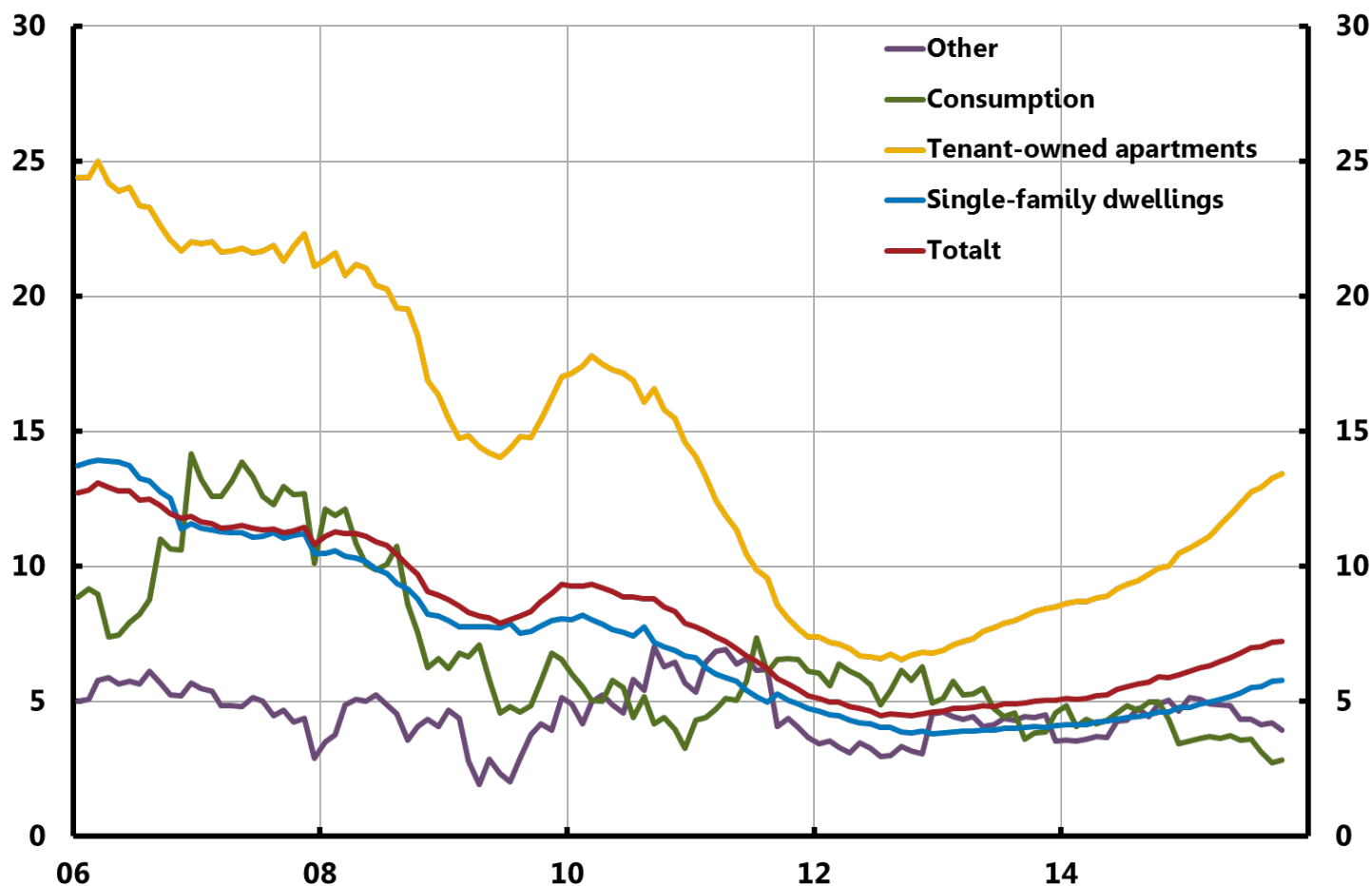
Note. The figure shows the annual growth rate for household loans as well as the growth rate for loans divided up into different types of collateral.

Source: Statistics Sweden

Figure 2.7. Development of the krona against the euro and the dollar

SEK per foreign currency

Source: Macrobond
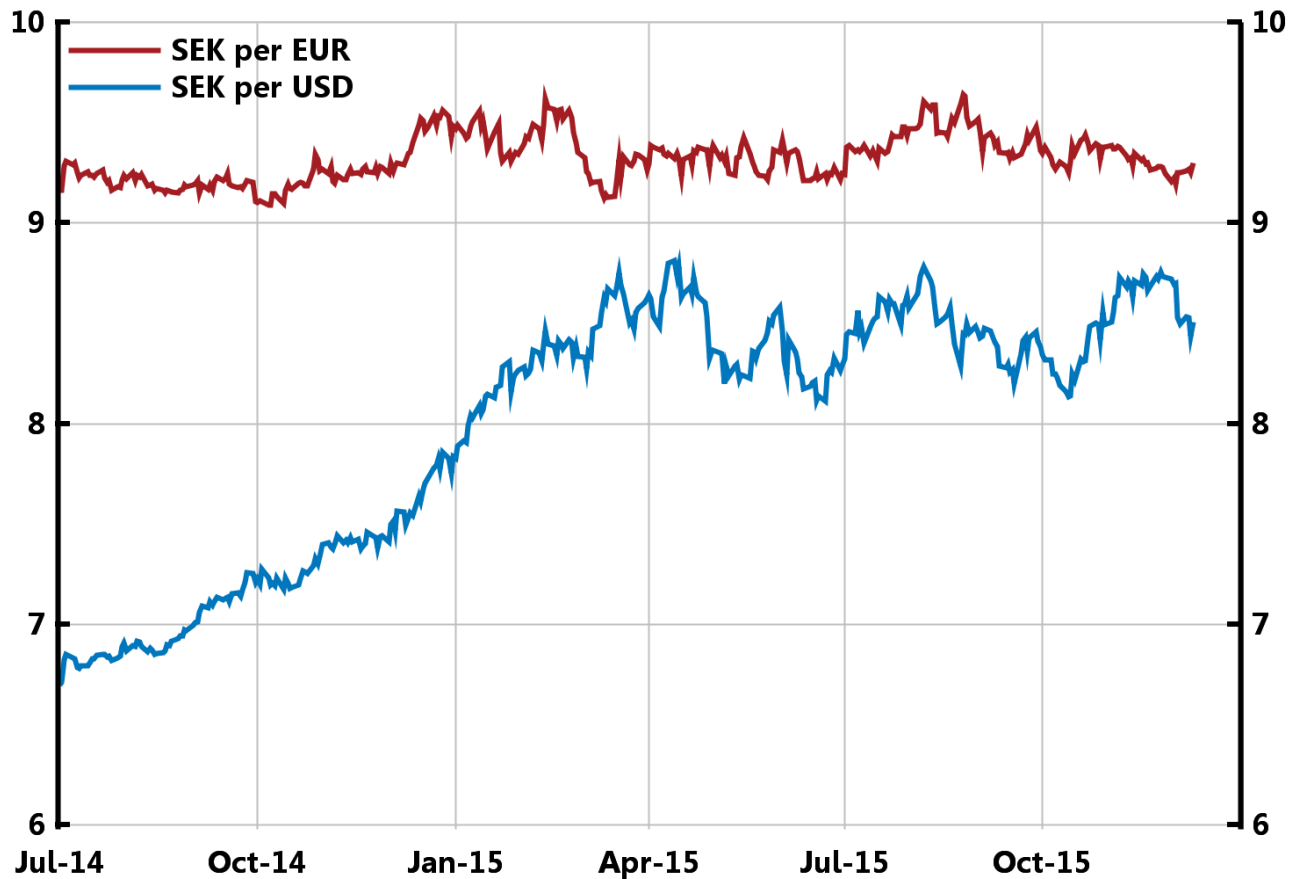
Figure 2.8. Stock market movements

Index, 3 January 2006 = 100

Legend:
- Sweden (OMXS)
- Euro area (EuroStoxx)
- USA (S&P 500)
- Emerging markets (MSCI)
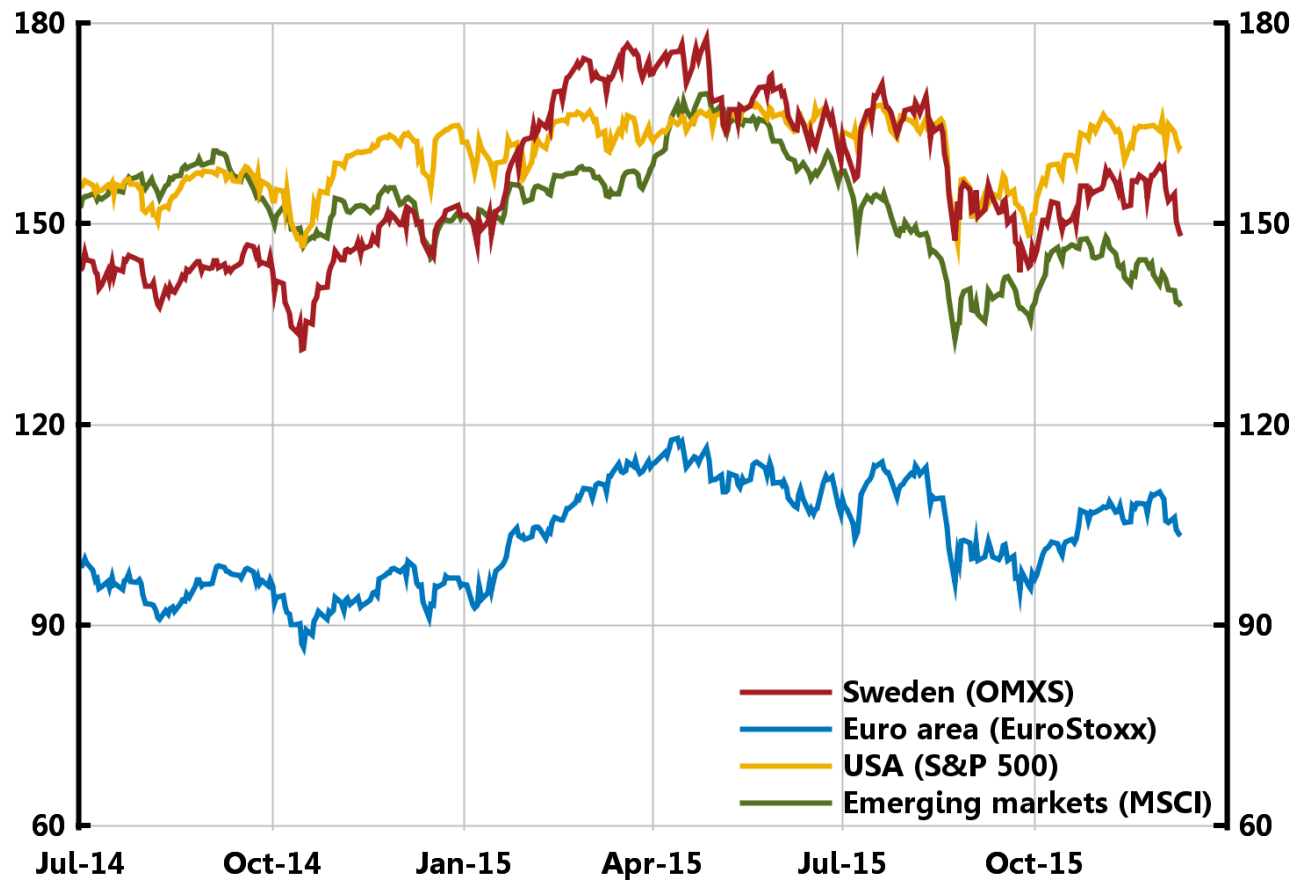
Chapter 3

Figure 3.1. Measures of underlying inflation

Annual percentage change, three months moving average
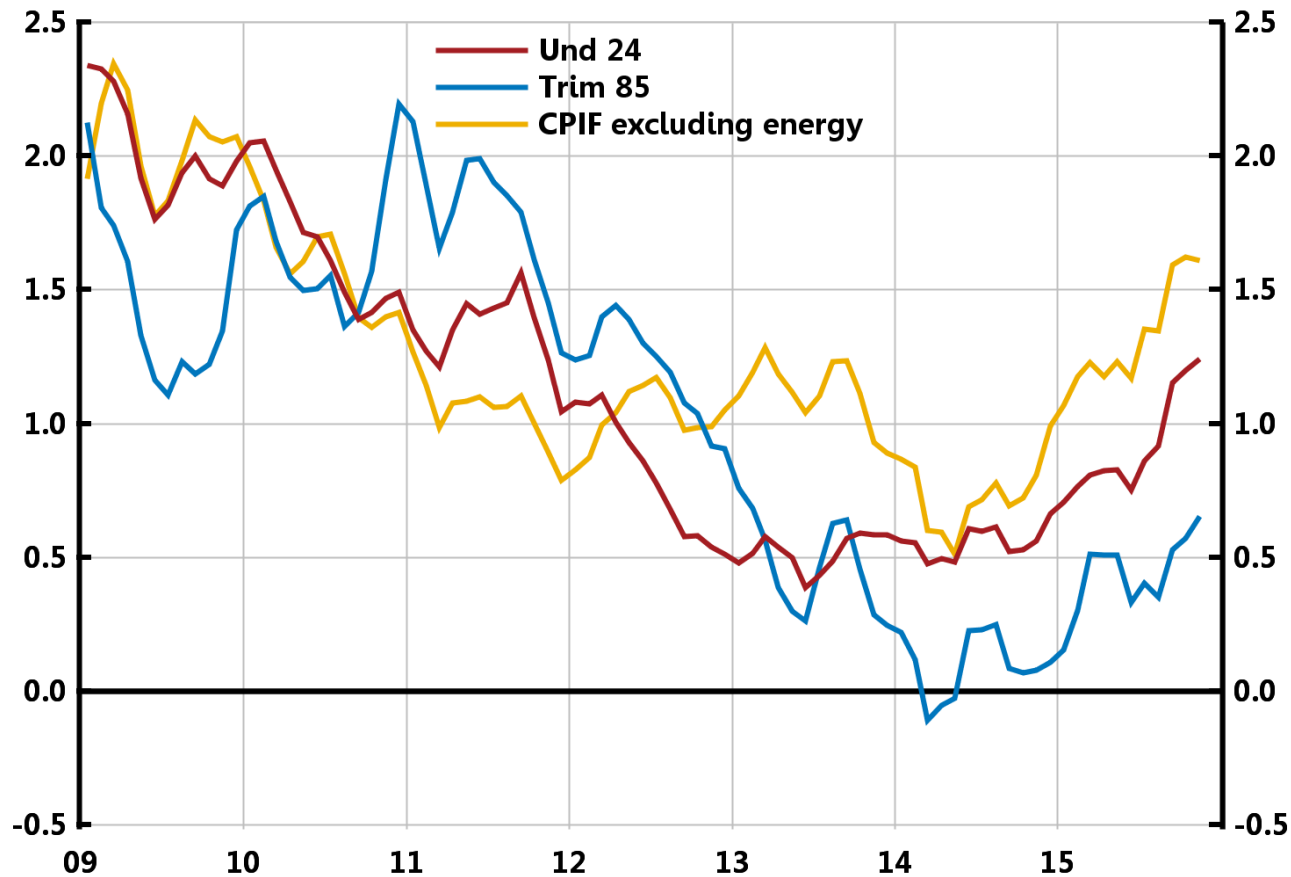
Legend:
- Und 24
- Trim 85
- CPIF excluding energy

Figure 3.2. CPI, CPIF and CPIF excluding energy

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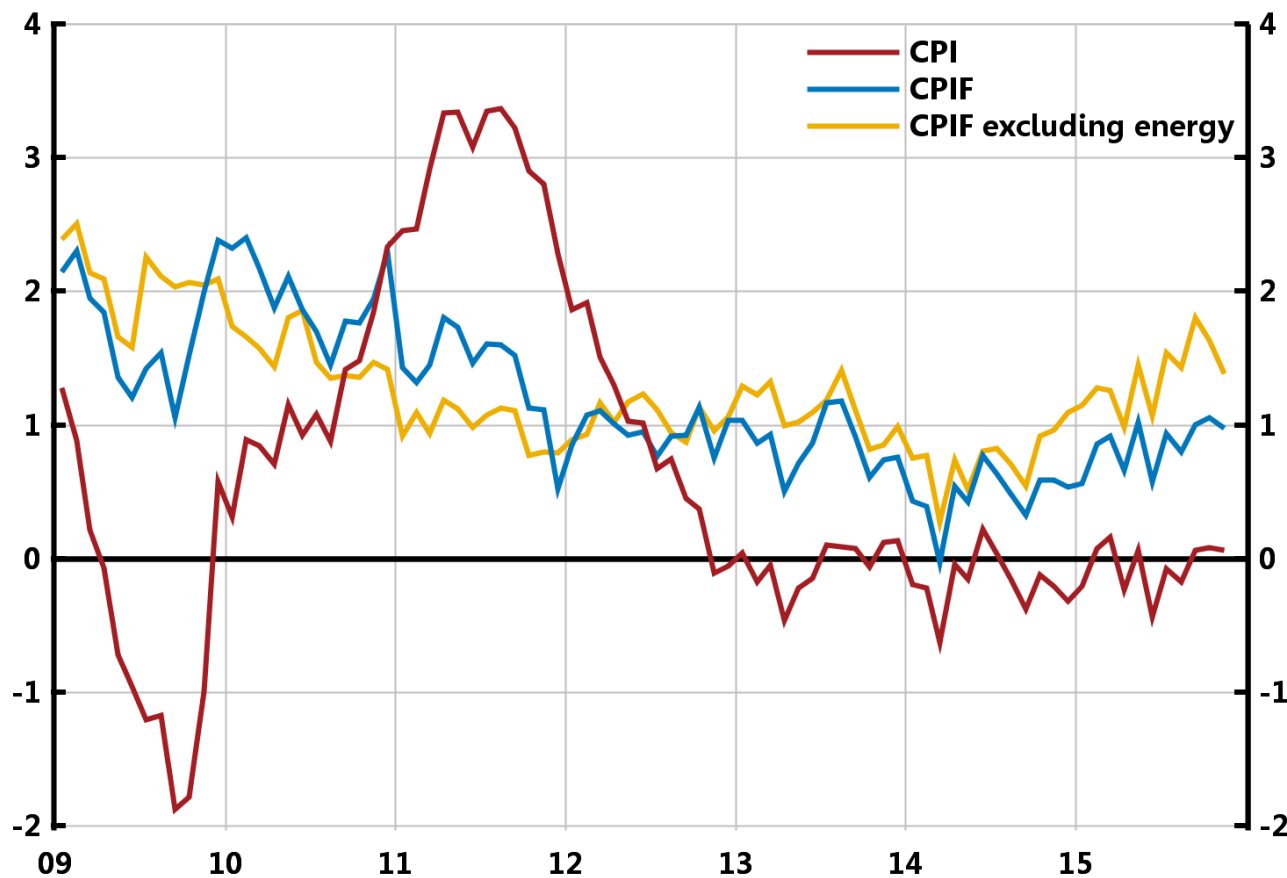
Note. The CPIF is the CPI with a fixed mortgage rate.

Source: Statistics Sweden

Figure 3.3. CPI and the contributions to CPI-inflation

Annual percentage change and percentage points, respectively

Sources: Statistics Sweden and the Riksbank
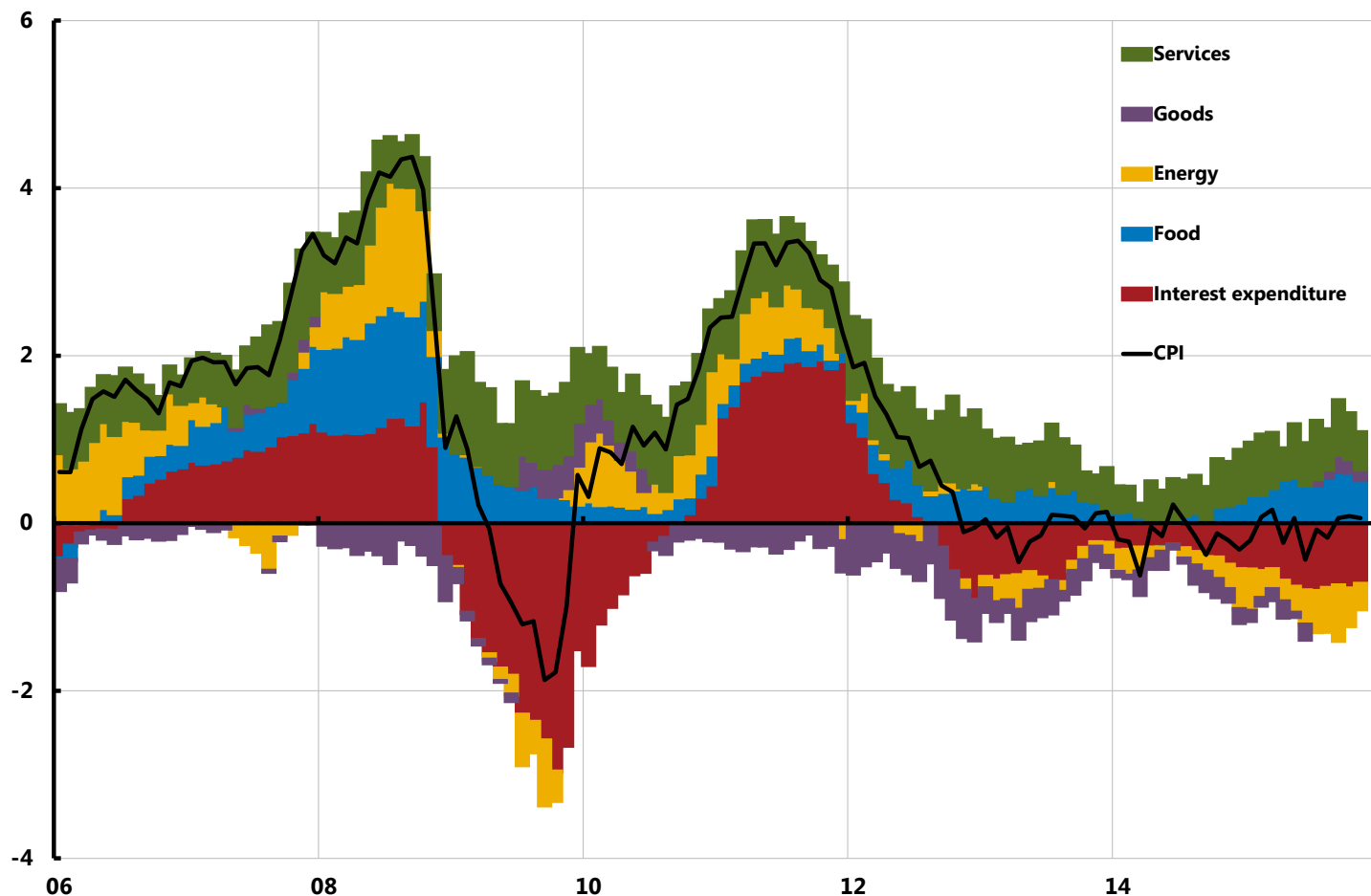
Figure 3.4. Model forecast CPIF excluding energy with uncertainty bands

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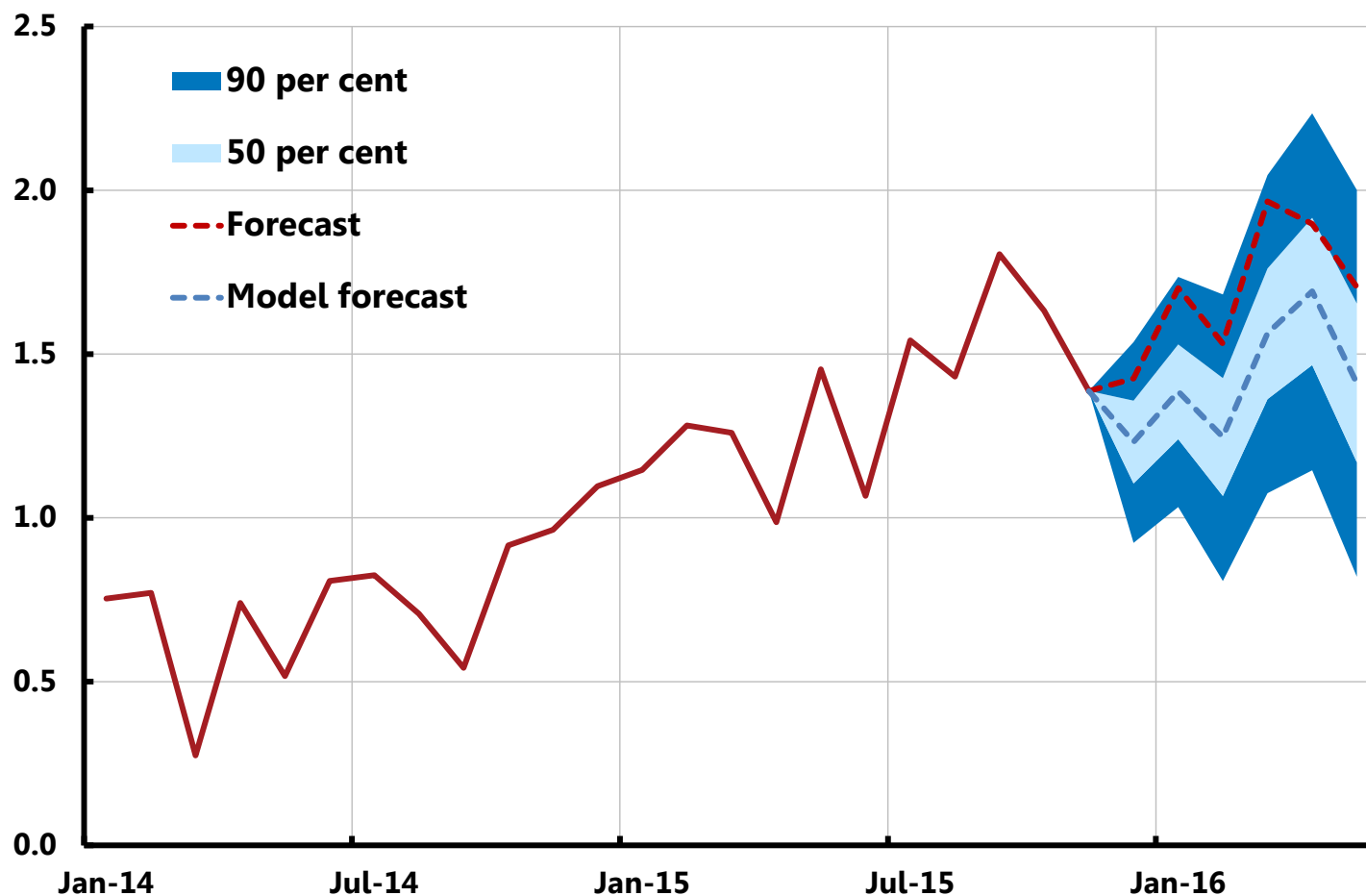
Note. The uncertainty bands are based on the models' historical forecasting errors. The CPIF is CPI with a fixed mortgage rate.

Sources: Statistics Sweden and the Riksbank

Figure 3.5. Confidence indicators
Index, average = 100, standard deviation = 10, seasonally-adjusted data
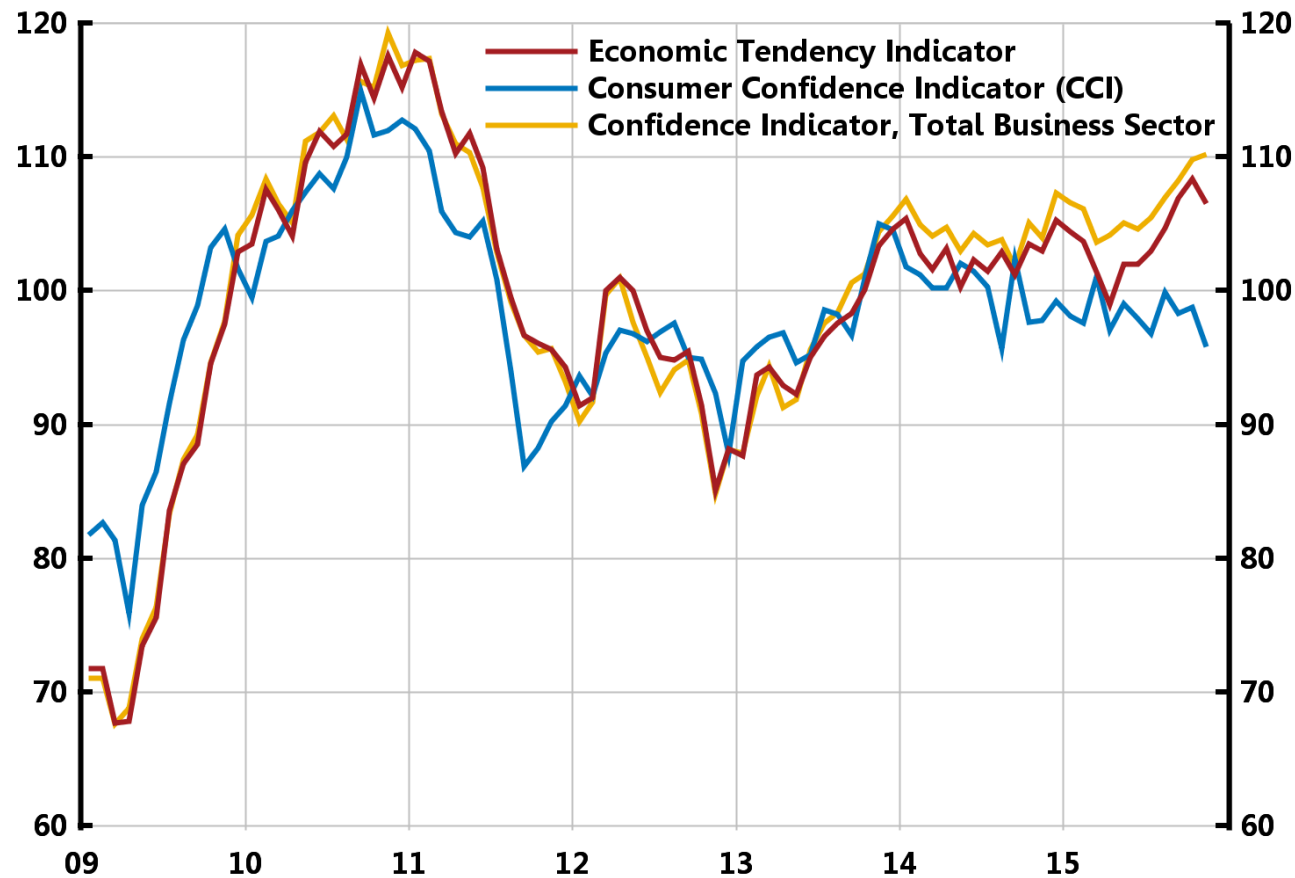
Figure 3.6. World trade volume
Index, 2011 = 100
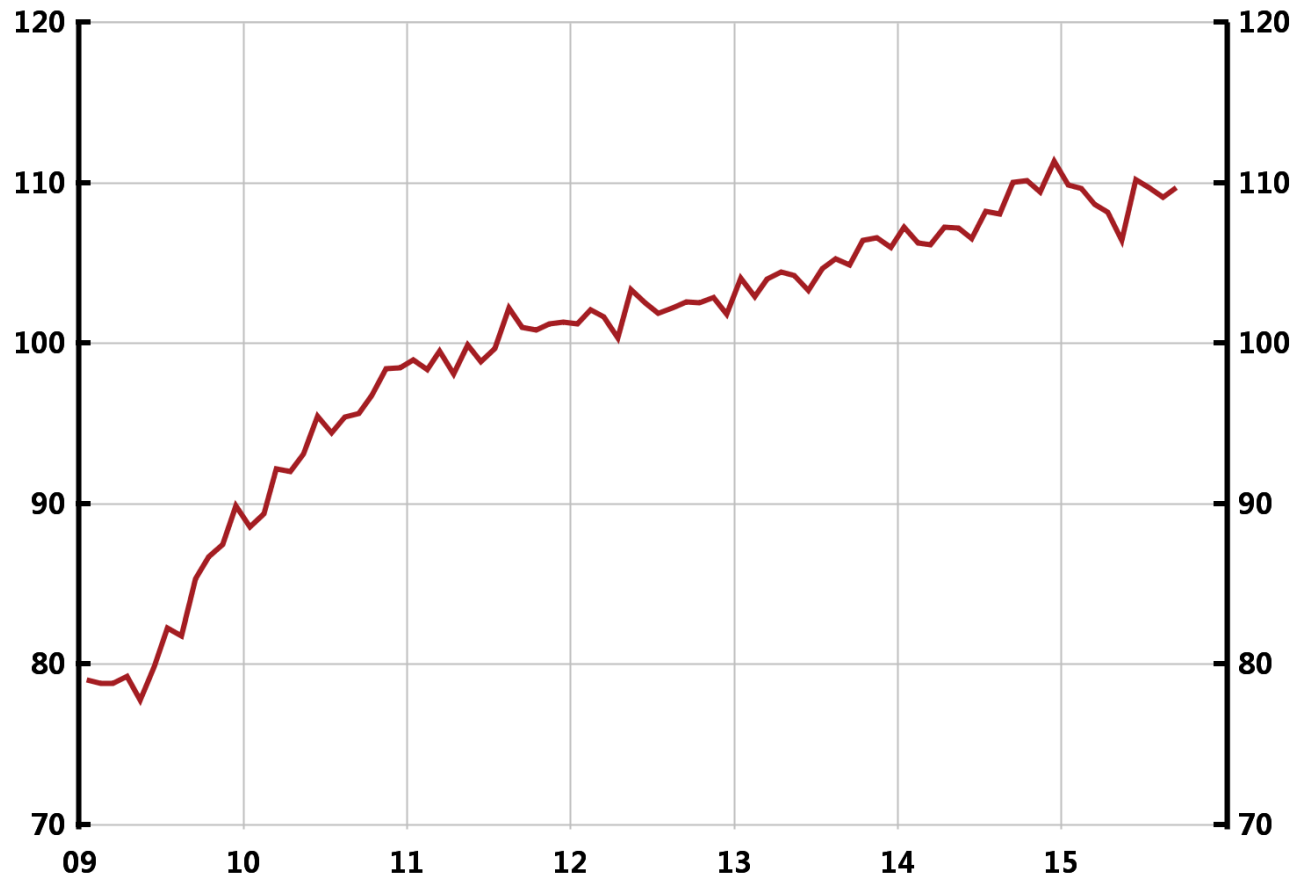
Source: CPB Netherlands Bureau for
Economic Policy Analysis

Figure 3.7. Model forecast GDP with uncertainty bands

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

Legend:
- 90 per cent
- 50 per cent
- Model forecast
- Forecast
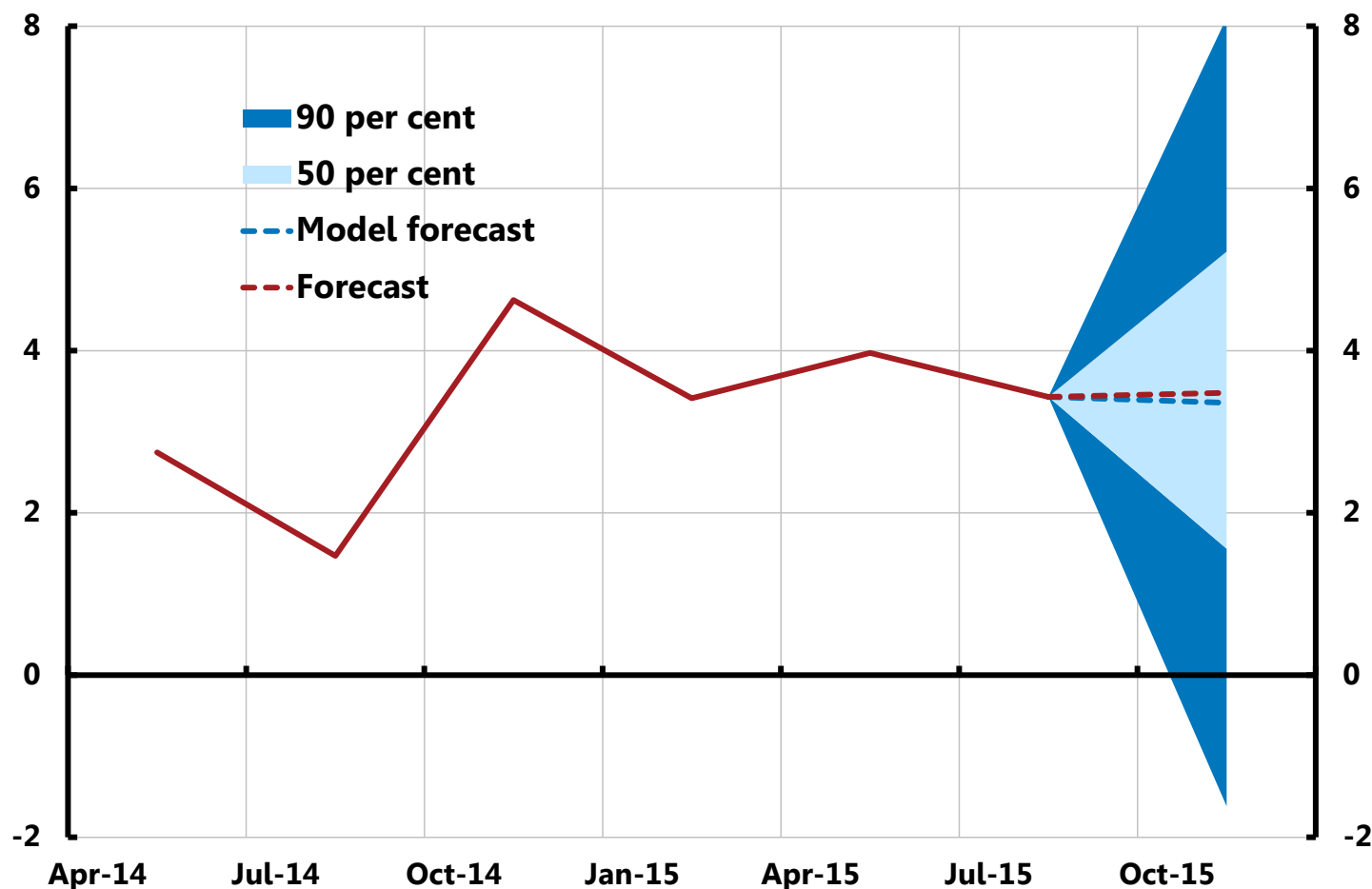
Note. The model forecast is an average of forecasts from different statistical models. The uncertainty bands are based on the models' historical forecasting errors.

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
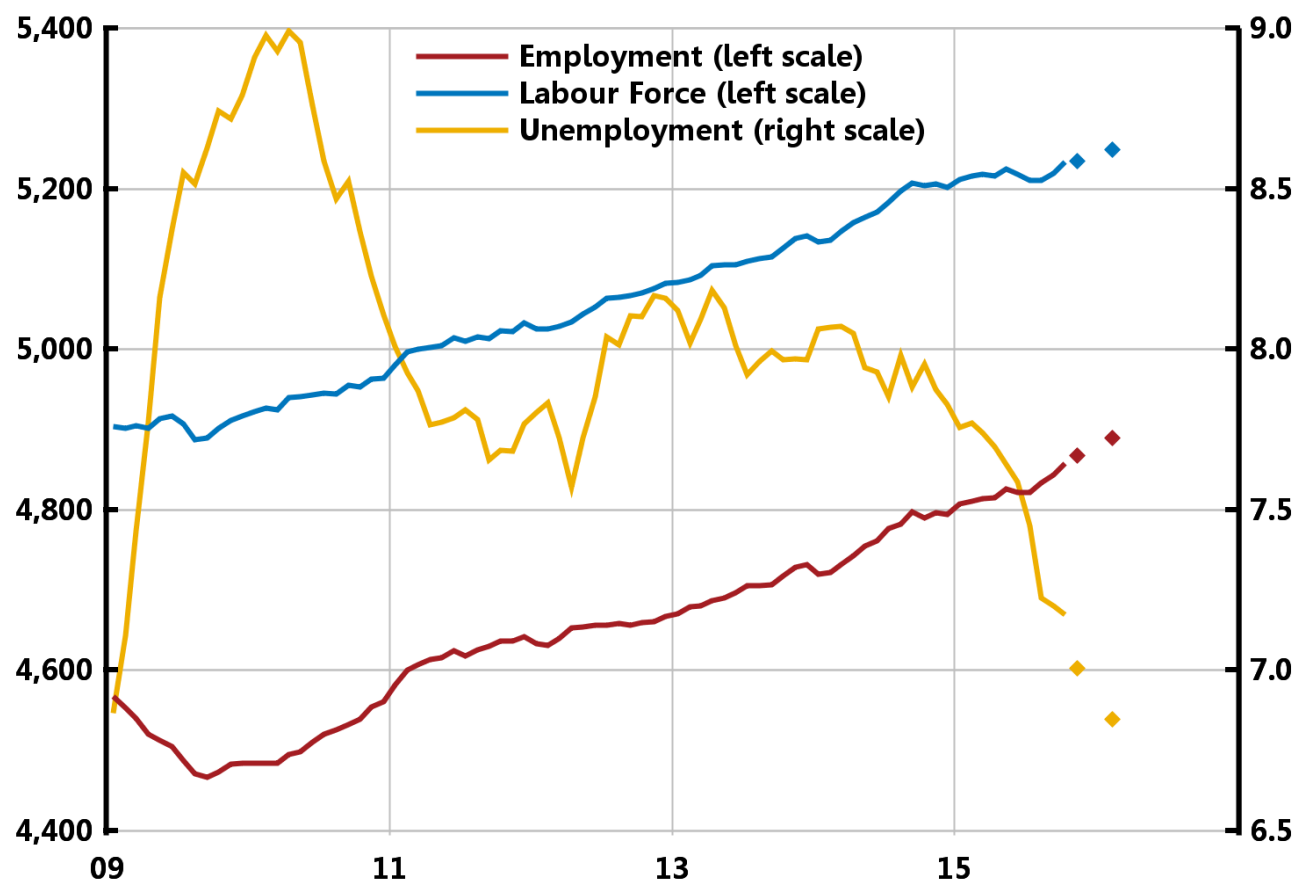
Note. Three-month moving average. The dots represent forecasts for the fourth quarter 2015 and the first quarter 2016.

Sources: Statistics Sweden and the Riksbank

Figure 3.9. Labour market indicators

Thousands, seasonally-adjusted data

Legend:
- Vacancies, SCB (left scale)
- Redundancy notices, ES (right scale)
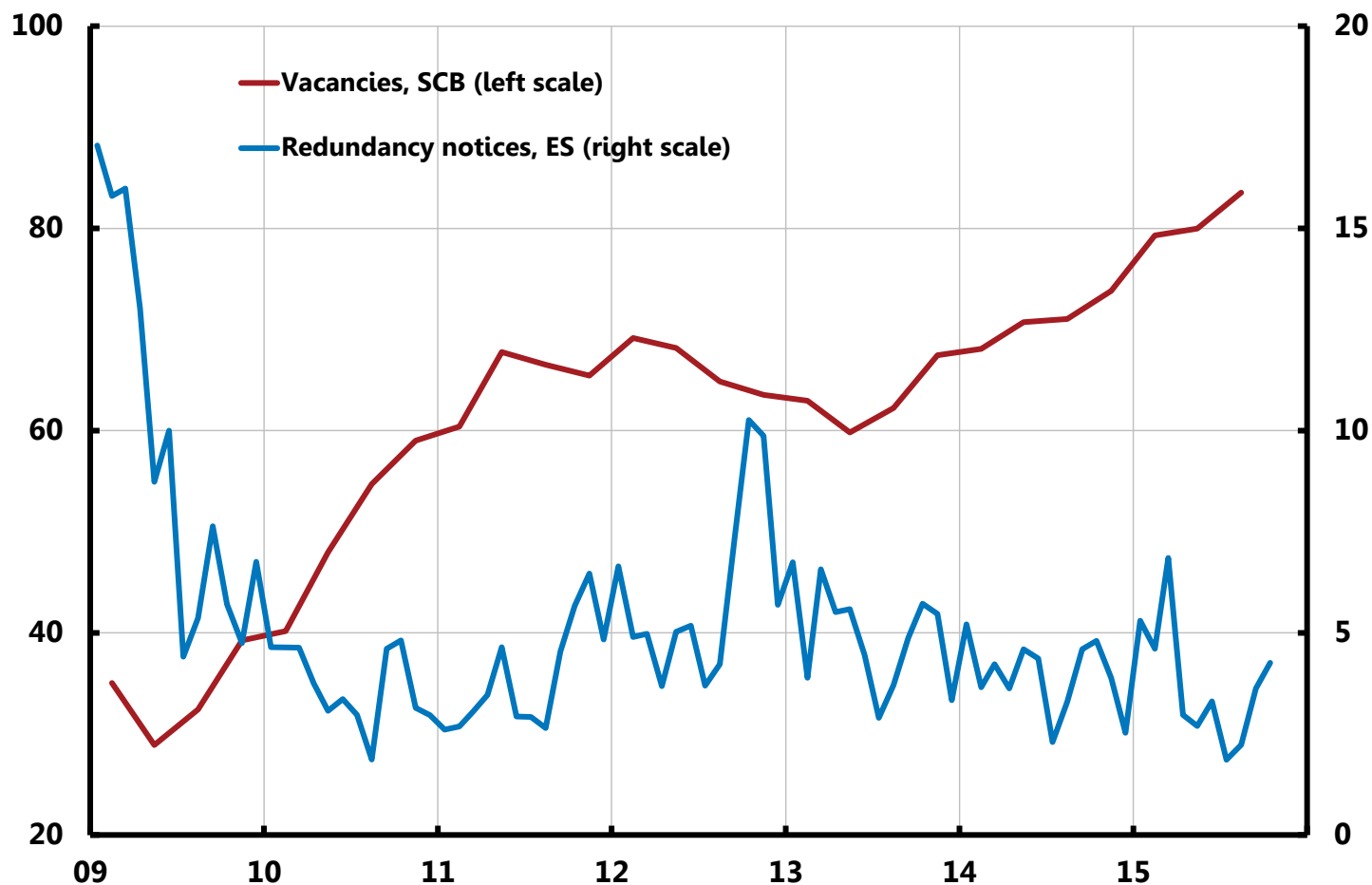
Note. Vacancies are quarterly data and redundancy notices are monthly data.

Sources: Employment Service, Statistics Sweden and the Riksbank

Figure 3.10. RU indicator
Standard deviation
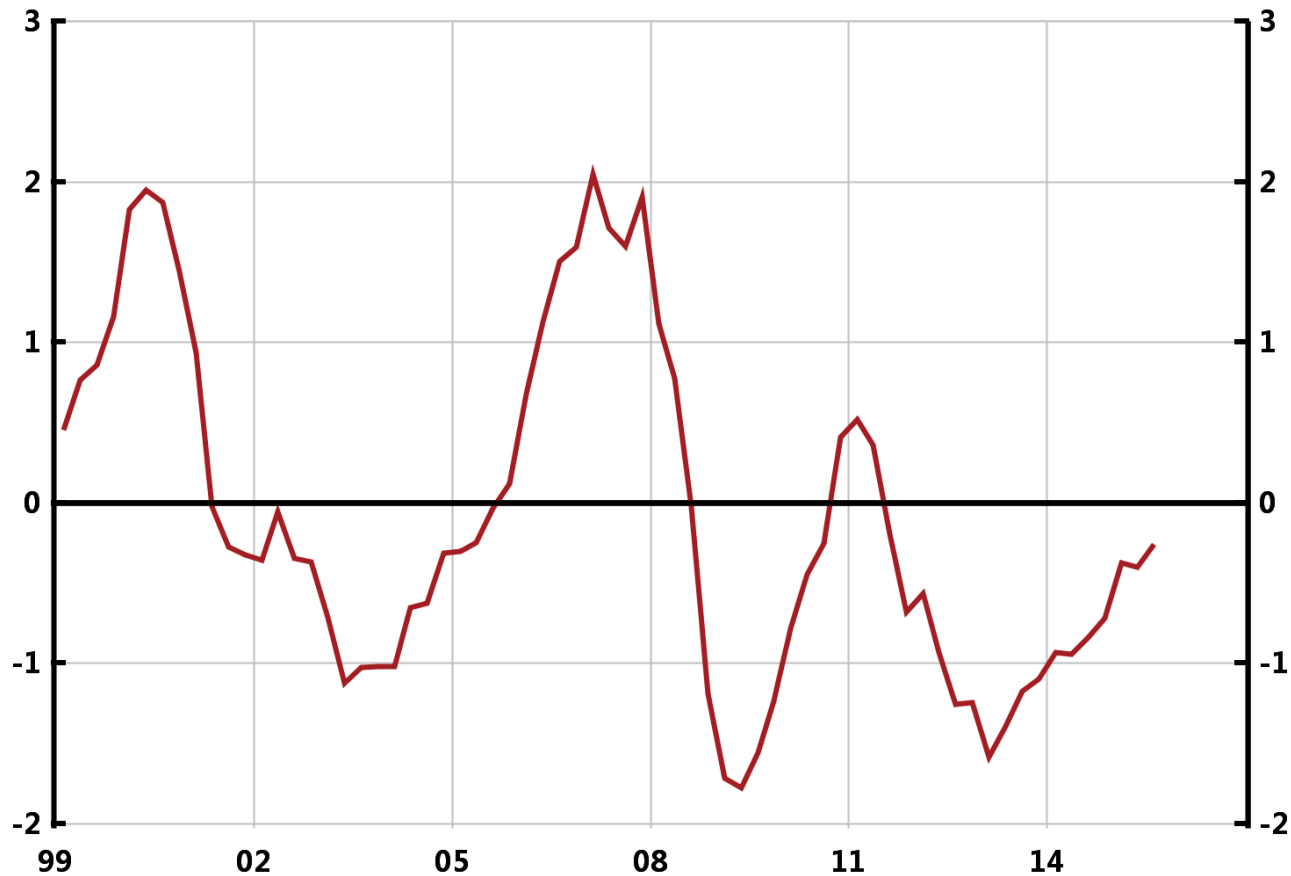
Note. The RU indicator is a measure of resource utilisation. It is normalised so that the mean value is 0 and the standard deviation is 1.

Source: The Riksbank

Chapter 4

Figure 4.1. Growth in various countries and regions

Quarterly change in per cent, calculated as an annual percentage change, seasonally-adjusted data
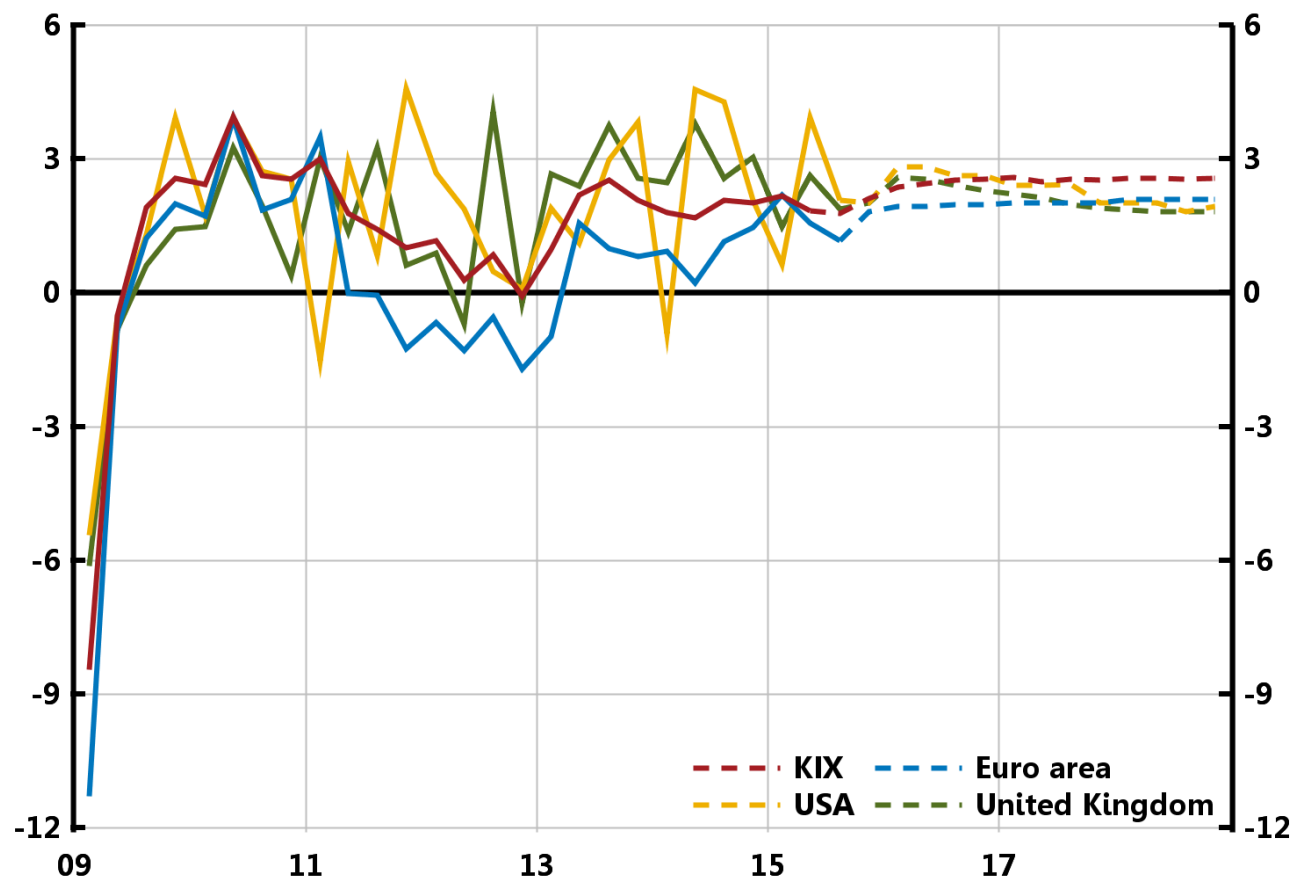
Note. KIX is an aggregate of the countries that are important to Sweden's international transactions.

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

Figure 4.2. Oil price and futures price

USD per barrel

Figure 4.3. Inflation in various countries and regions

Annual percentage change

Legend: KIX, USA, Euro area, United Kingdom

Figure 4.4. GDP in Sweden

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

Sources: Statistics Sweden and the Riksbank
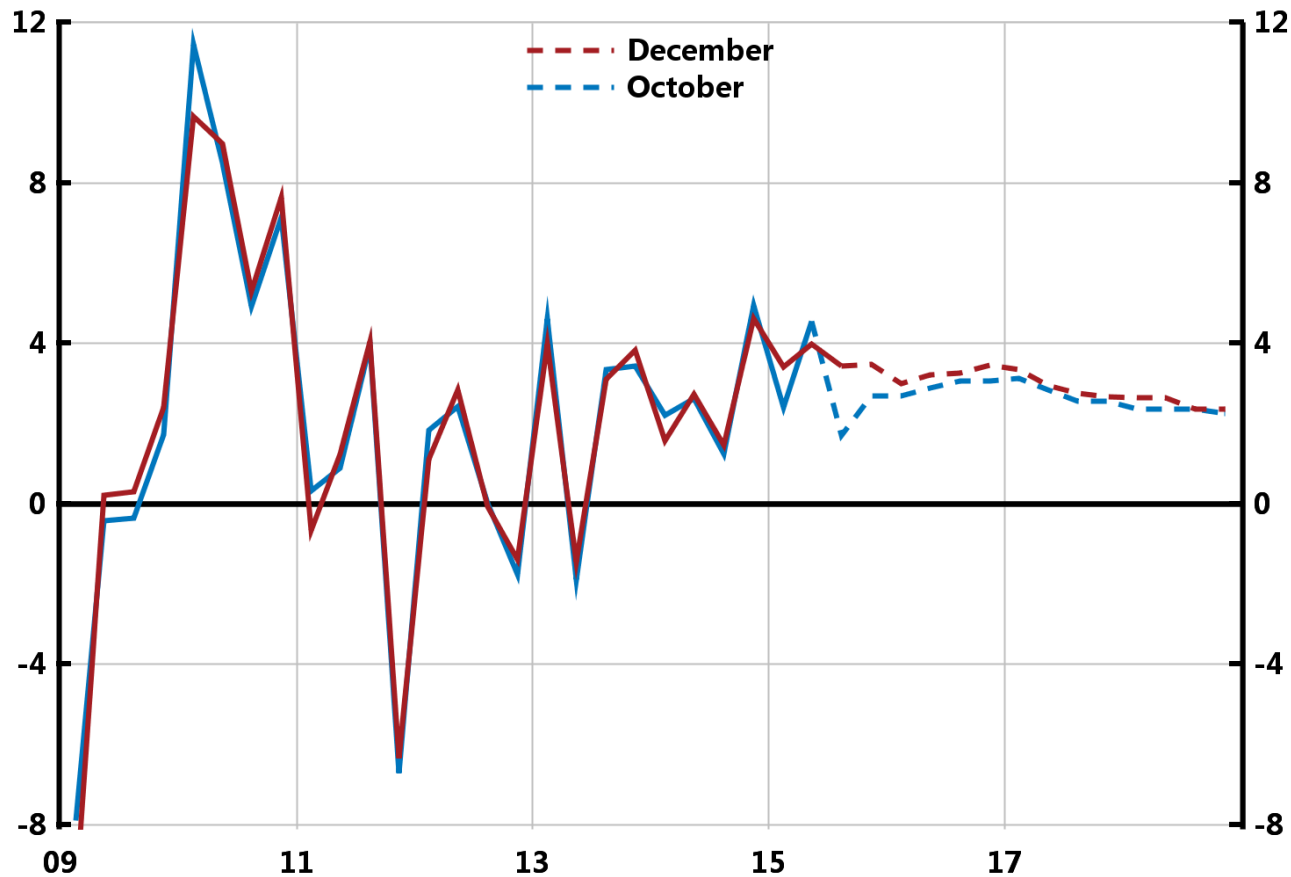
Figure 4.5 GDP and GDP per capita

Annual percentage change
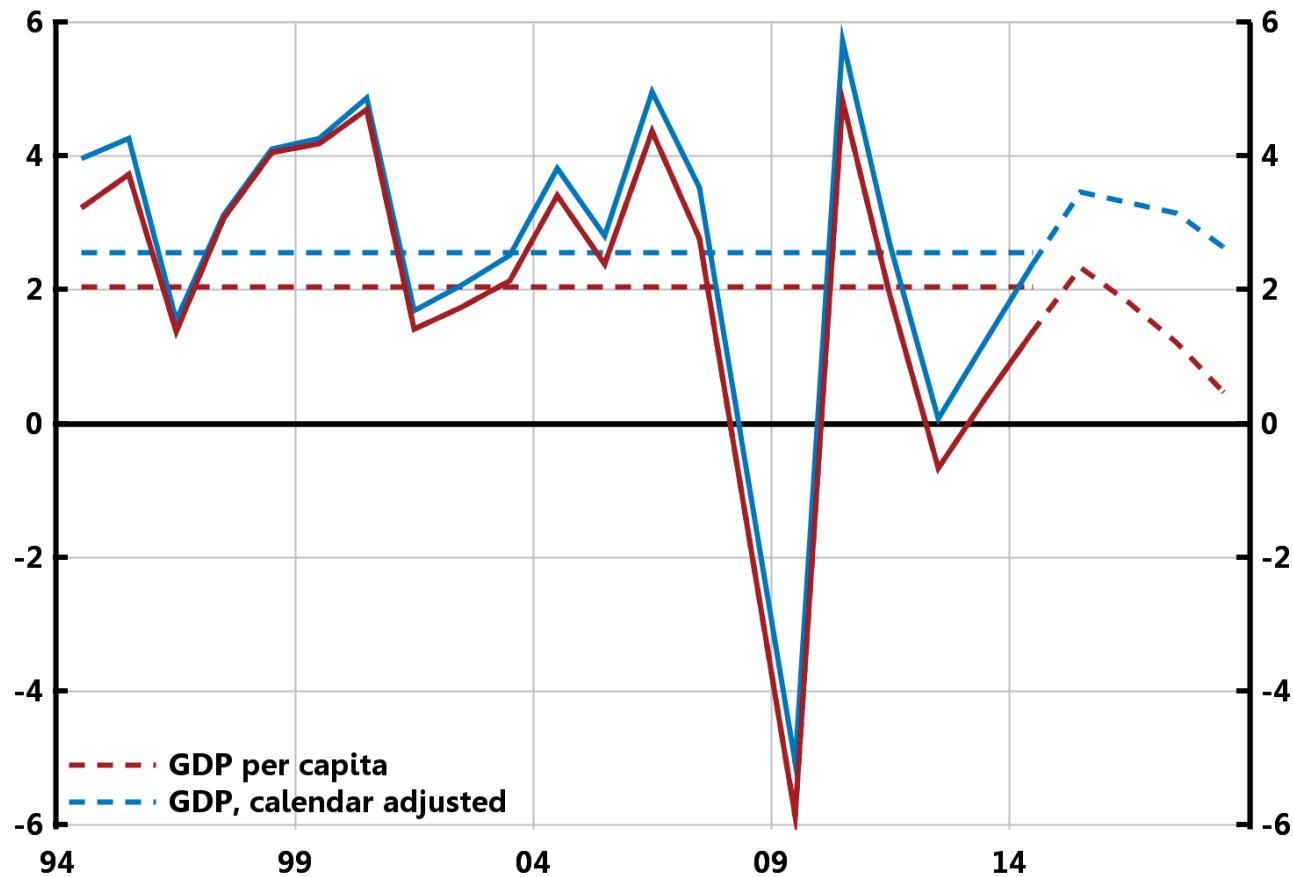
Legend:
- — — GDP per capita
- — — GDP, calendar adjusted

X-axis: 94, 99, 04, 09, 14
Y-axis: -6, -4, -2, 0, 2, 4, 6

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Figure 4.6. Unemployment

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

Sources: Statistics Sweden and the Riksbank
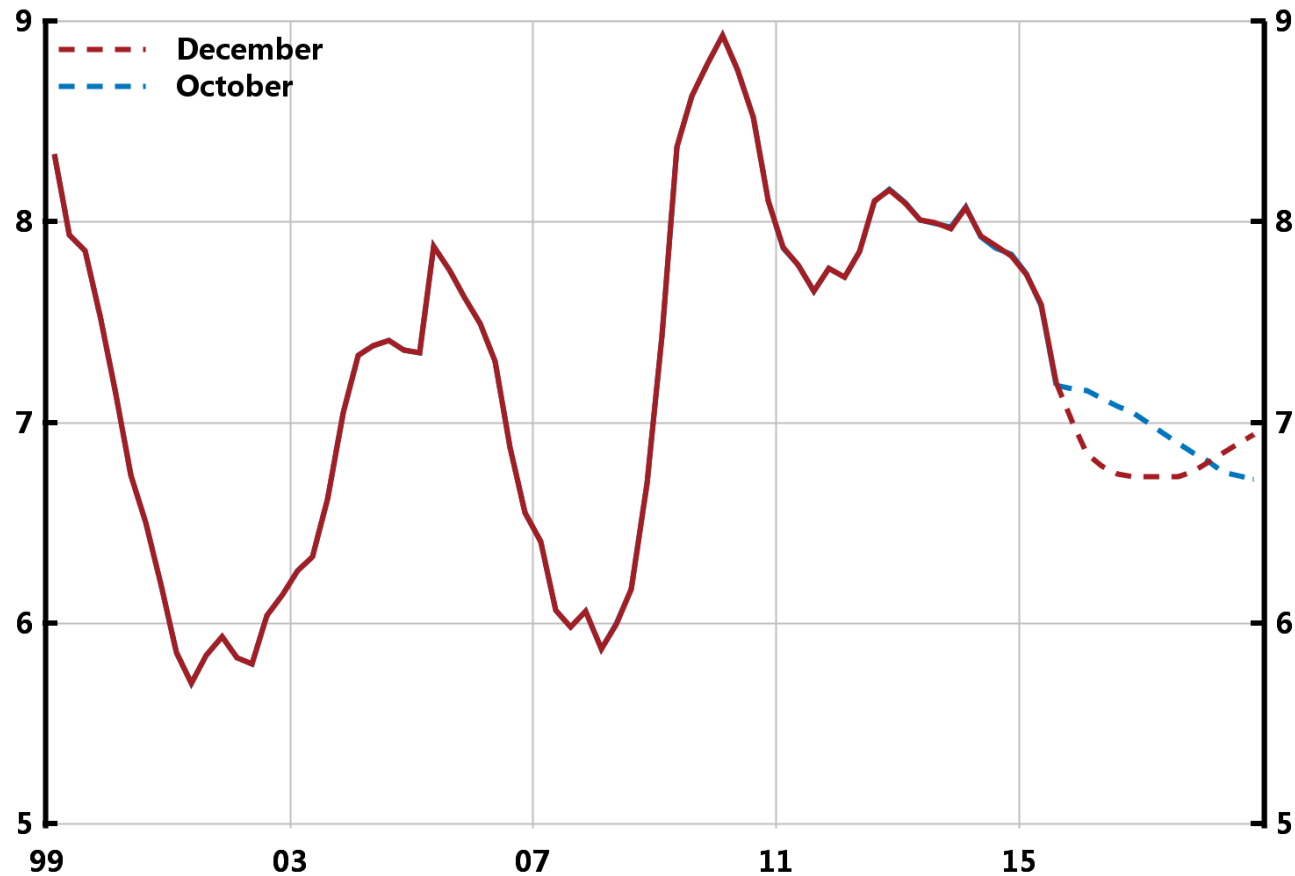
Figure 4.7. Employment rate and labour force participation

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

Legend:
- Employment rate, December
- Employment rate, October
- Labour force participation, December
- Labour force participation, October

Sources: Statistics Sweden and the Riksbank
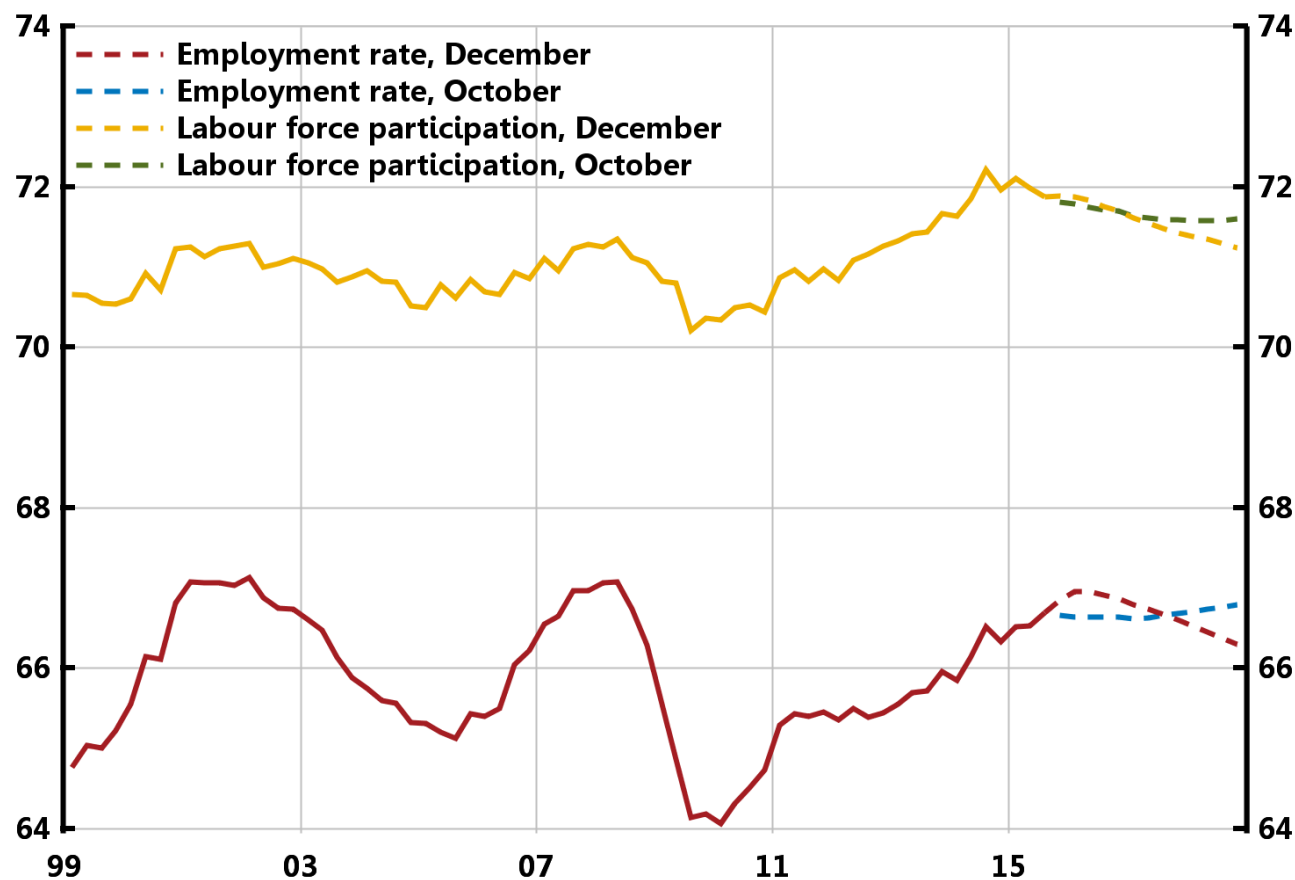
Figure 4.8. Cost pressures in the economy as a whole

Annual percentage change

Sources: Statistics Sweden and the Riksbank
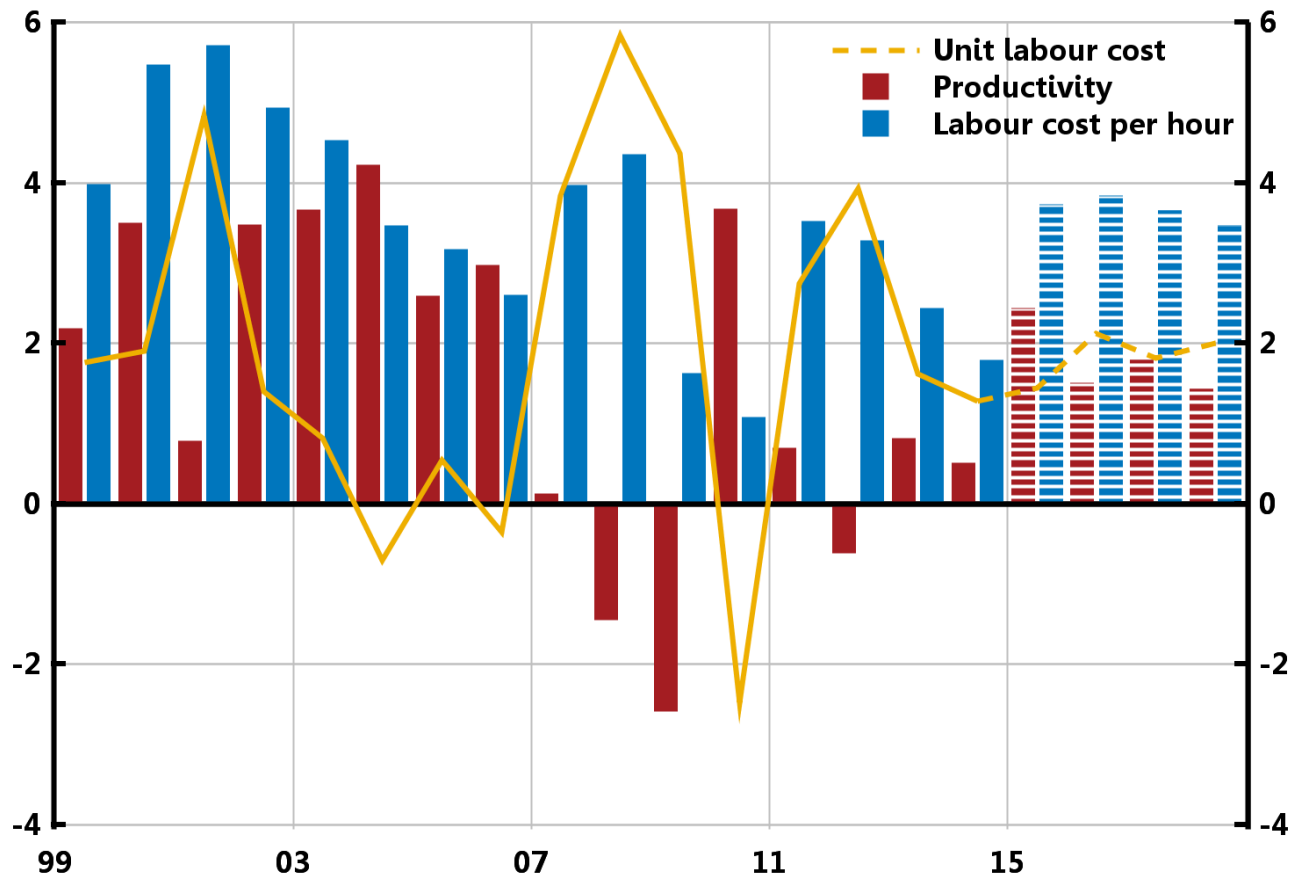
Figure 4.9. CPI, CPIF and CPIF excluding energy
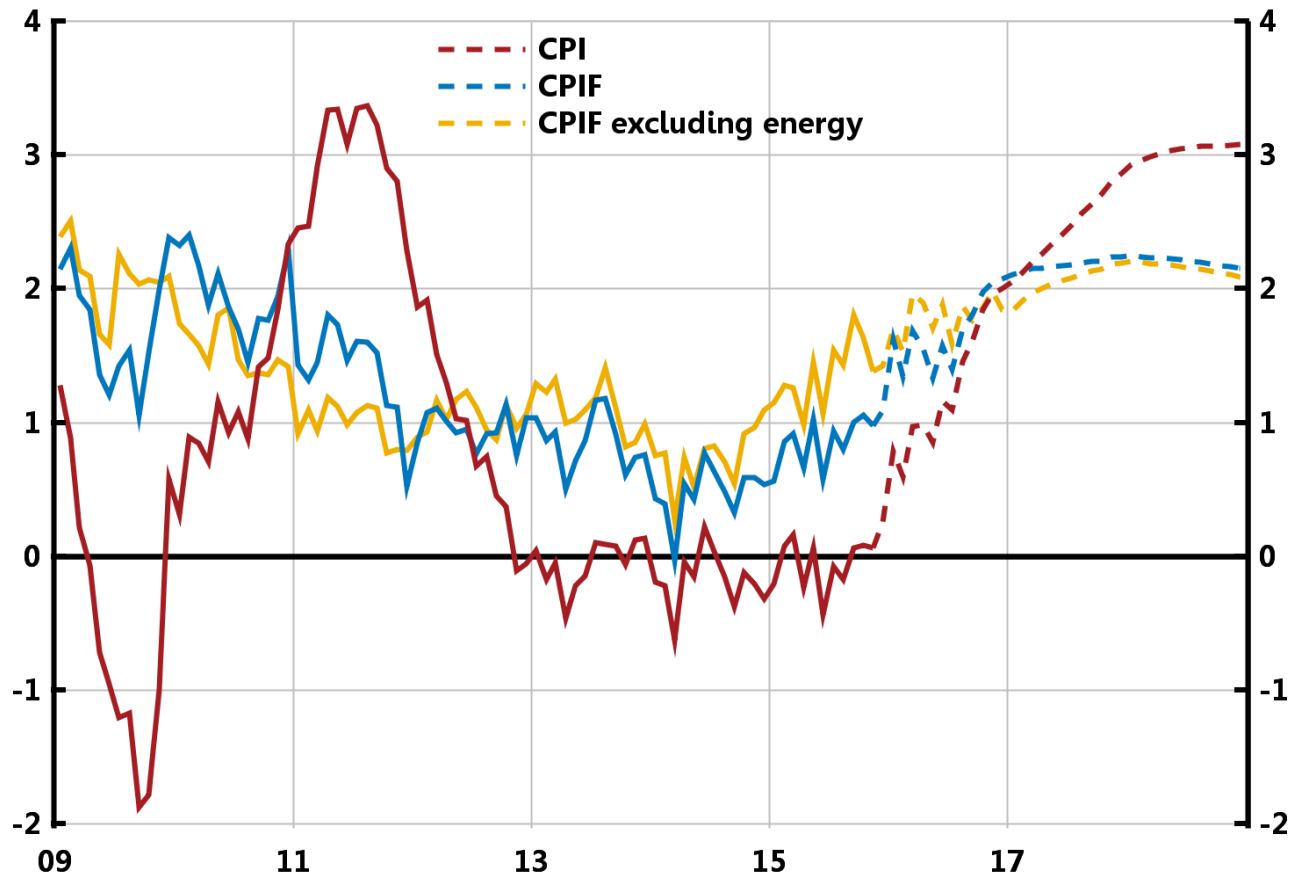
Annual percentage change

Legend:
- CPI
- CPIF
- CPIF excluding energy

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

Sources: Statistics Sweden and the 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

	Q3 2015	Q4 2015	Q1 2016	Q4 2016	Q4 2017	Q4 2018
Repo rate	−0.3	−0.4 (−0.4)	−0.4 (−0.4)	−0.4 (−0.4)	0.1 (0.1)	0.7 (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)	1.3 (1.4)	2.5 (2.4)	3.0 (3.1)
CPIF	0.5	0.9 (0.9)	1.7 (1.8)	2.2 (2.1)	2.2 (2.2)
CPIF excl. energy	0.7	1.4 (1.4)	1.8 (1.8)	2.1 (2.0)	2.2 (2.1)
HICP	0.2	0.7 (0.8)	1.6 (1.7)	2.1 (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 (−0.4)	−0.1 (−0.1)	0.5 (0.5)
10-year rate	1.8	0.8 (0.8)	1.4 (1.3)	2.3 (2.3)	3.1 (3.0)
Exchange rate, KIX, 18 November 1992 = 100	106.7	112.6 (112.7)	109.4 (110.4)	107.3 (107.3)	105.7 (105.6)
General government net lending*	−1.7	−1.0 (−1.1)	−0.9 (−0.6)	−0.7 (−0.3)	−0.6 (−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 (1.5)	1.8 (1.7)	2.0 (2.0)	2.1 (2.1)
USA	0.16	0.09	2.4	2.5 (2.5)	2.6 (2.7)	2.5 (2.5)	2.1 (2.1)
Japan	0.05	0.03	−0.1	0.8 (0.7)	1.1 (0.7)	0.4 (0.4)	0.7 (0.5)
China	0.15	0.08	7.5	6.8 (6.8)	6.4 (6.4)	6.1 (6.1)	6.0 (6.0)
KIX-weighted	0.75	1.00	2.0	2.0 (2.0)	2.3 (2.2)	2.5 (2.5)	2.6 (2.5)
World (PPP-weighted)	1.00	—	3.4	3.1 (3.1)	3.6 (3.6)	3.8 (3.8)	3.9 (3.8)

Note. Calendar-adjusted growth rates. The PPP-weights refer to the global purchasing-power adjusted GDP-weights, according to the IMF. The weights for the KIX krona index are updated 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)	0.8 (1.0)	1.5 (1.6)	1.8 (1.8)
USA	1.6	0.2 (0.2)	1.8 (1.9)	2.5 (2.5)	2.6 (2.5)
Japan	2.7	0.8 (0.9)	1.4 (1.4)	2.1 (2.1)	2.1 (2.1)
KIX-weighted	1.4	1.1 (1.2)	1.8 (1.8)	2.3 (2.3)	2.3 (2.3)

	2014	2015	2016	2017	2018
Policy rates in the rest of the world, per cent	0.2	0.1 (0.1)	0.0 (0.1)	0.2 (0.3)	0.5 (0.6)
Crude oil price, USD/barrel Brent	99.6	54.0 (54.7)	47.5 (53.9)	53.5 (58.5)	57.1 (61.0)
Swedish export market	3.1	1.9 (1.8)	4.0 (4.2)	5.1 (5.0)	5.1 (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.

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	2.4 (2.2)	2.8 (2.6)	3.0 (2.9)	2.7 (2.6)
Public consumption	1.3	2.2 (1.9)	4.0 (2.7)	2.5 (1.9)	1.8 (1.8)
Gross fixed capital formation	7.5	7.3 (5.6)	5.1 (5.6)	4.7 (4.6)	4.8 (4.4)
Inventory investment*	0.1	−0.1 (−0.1)	0.1 (0.2)	0.0 (0.0)	0.0 (0.0)
Exports	3.5	4.8 (4.0)	5.5 (4.8)	4.4 (4.4)	4.7 (4.7)
Imports	6.3	4.4 (2.9)	6.3 (6.2)	5.4 (5.4)	5.9 (5.9)
GDP	2.3	3.7 (3.3)	3.6 (3.0)	2.9 (2.7)	2.5 (2.3)
GDP, calendar-adjusted	2.4	3.5 (3.1)	3.3 (2.8)	3.2 (2.9)	2.6 (2.5)
Final figure for domestic demand*	3.1	3.4 (2.8)	3.5 (3.2)	3.2 (2.9)	2.9 (2.7)
Net exports*	−0.9	0.4 (0.6)	−0.1 (−0.4)	−0.3 (−0.3)	−0.4 (−0.4)
Current account (NA), per cent of GDP	4.9	5.5 (6.3)	5.2 (5.7)	4.6 (5.2)	4.0 (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 (0.7)	1.1 (1.1)	1.6 (1.2)	1.8 (0.9)
Potential hours worked	0.7	0.7 (0.7)	0.7 (0.7)	0.9 (0.7)	1.1 (0.7)
GDP, calendar-adjusted	2.4	3.5 (3.1)	3.3 (2.8)	3.2 (2.9)	2.6 (2.5)
Number of hours worked, calendar-adjusted	1.8	1.0 (1.1)	1.8 (1.3)	1.3 (1.3)	1.2 (1.0)
Employed, aged 15–74	1.4	1.4 (1.3)	1.6 (1.1)	1.3 (1.2)	1.4 (1.1)
Labour force, aged 15–74	1.3	0.8 (0.8)	0.9 (0.8)	1.2 (1.0)	1.5 (0.9)
Unemployment, aged 15–74 *	7.9	7.4 (7.4)	6.8 (7.1)	6.7 (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)	3.2 (3.1)	3.5 (3.4)	3.4 (3.5)
Hourly wage, NA	1.8	3.3 (3.2)	3.3 (3.2)	3.7 (3.6)	3.6 (3.7)
Employers' contribution*	0.0	0.5 (0.3)	0.5 (0.5)	0.0 (0.0)	−0.1 (0.0)
Hourly labour cost, NA	1.8	3.7 (3.5)	3.8 (3.8)	3.7 (3.6)	3.5 (3.7)
Productivity	0.5	2.4 (2.0)	1.5 (1.5)	1.8 (1.6)	1.4 (1.4)
Unit labour cost	1.3	1.3 (1.5)	2.3 (2.2)	1.8 (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