

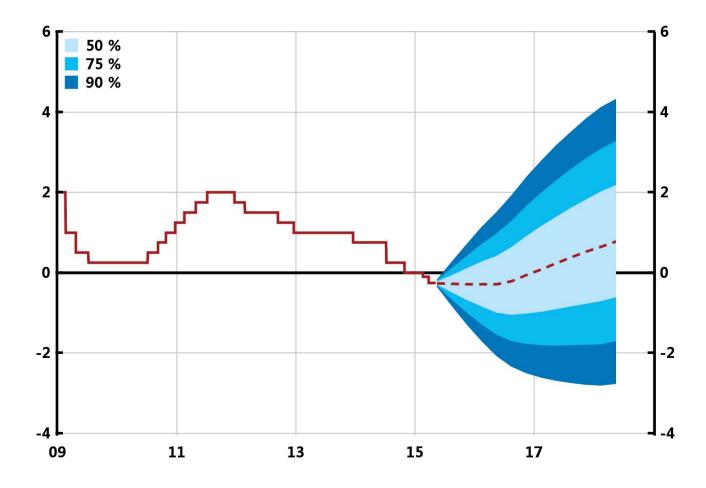
#### Monetary Policy Report

#### April 2015

### Figure 1.1. Repo rate with uncertainty bands



Per cent



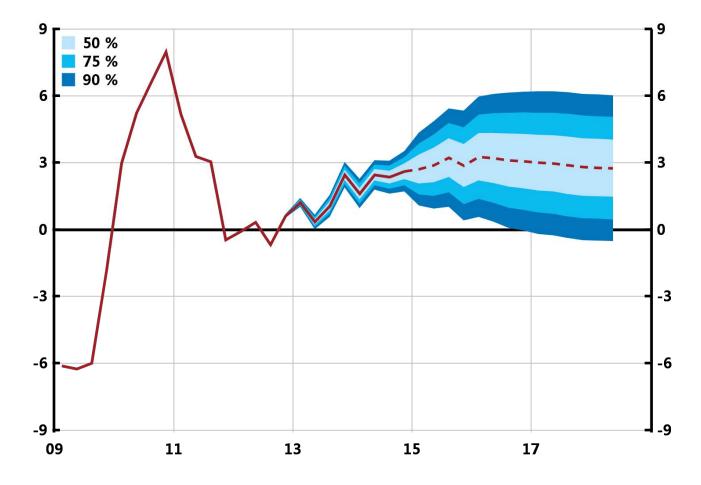
Note. The uncertainty bands for the repo rate are based on the Riksbank's historical forecasting errors and the ability of risk-premium adjusted forward rates to forecast the future repo rate for the period 1999 up to the point when the Riksbank started to publish forecasts for the repo rate during 2007.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



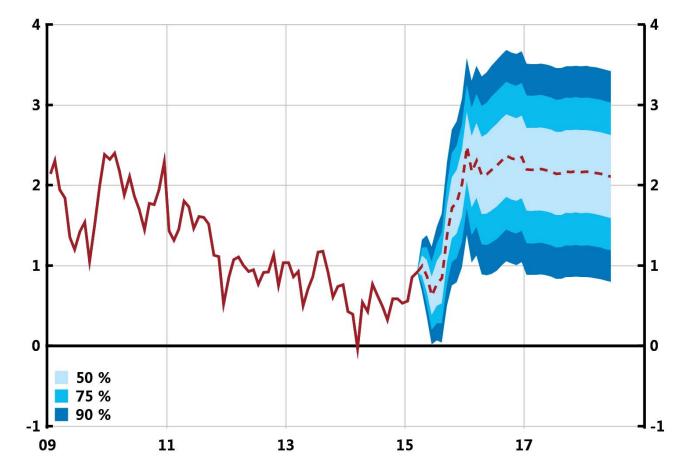
Note. The uncertainty bands are based on the Riksbank's historical forecasting errors. There is also uncertainty for the outcomes for GDP, as the figures in the National Accounts are revised several years after the preliminary publication.

Sources: Statistics Sweden and the Riksbank

#### Figure 1.3. CPIF with uncertainty bands

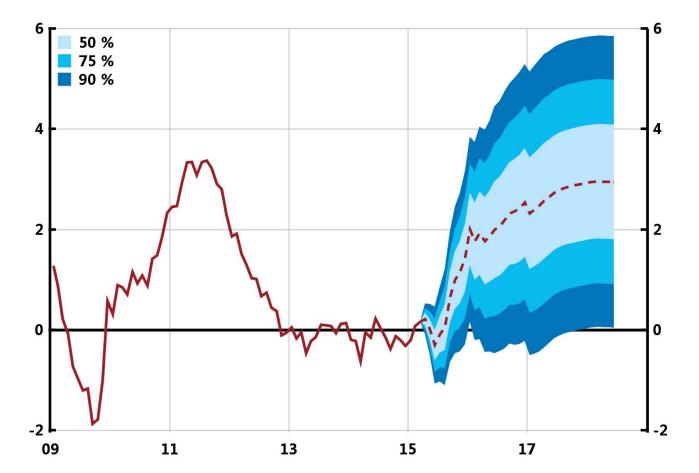
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Annual percentage change



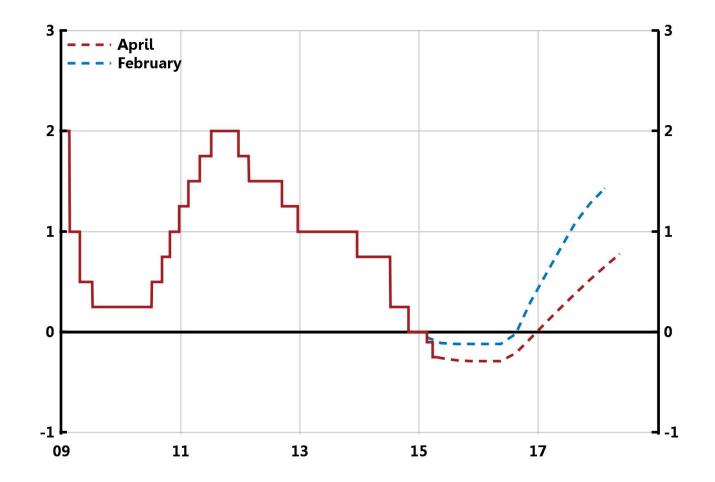
## Figure 1.4. CPI with uncertainty bands

Annual percentage change



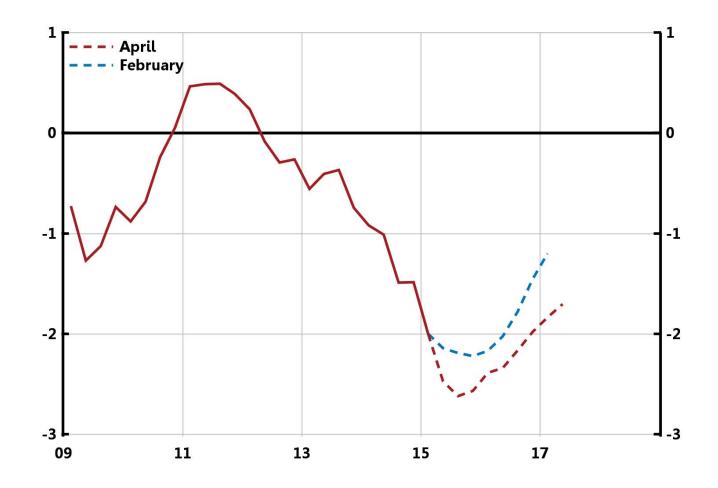


#### Figure 1.5. Reportate





#### Figure 1.6. Real repo rate Per cent, quarterly averages

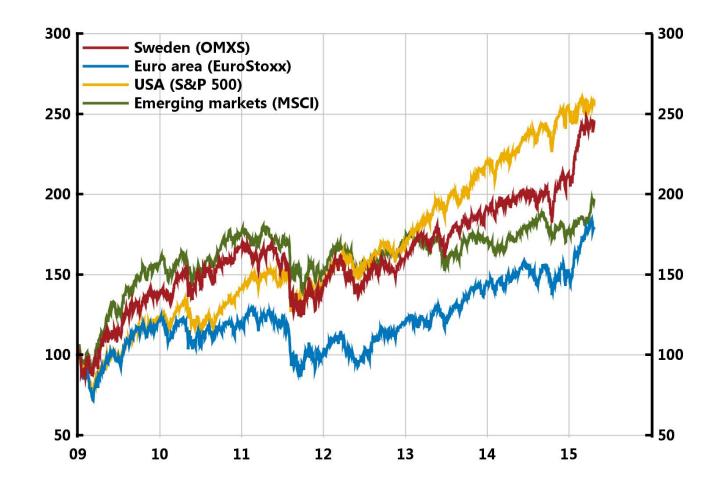


Note. The real repo rate is a mean value of the Riksbank's repo rate forecast for the year ahead minus the inflation forecast (CPIF) for the corresponding period.

Sources: Statistics Sweden and the Riksbank

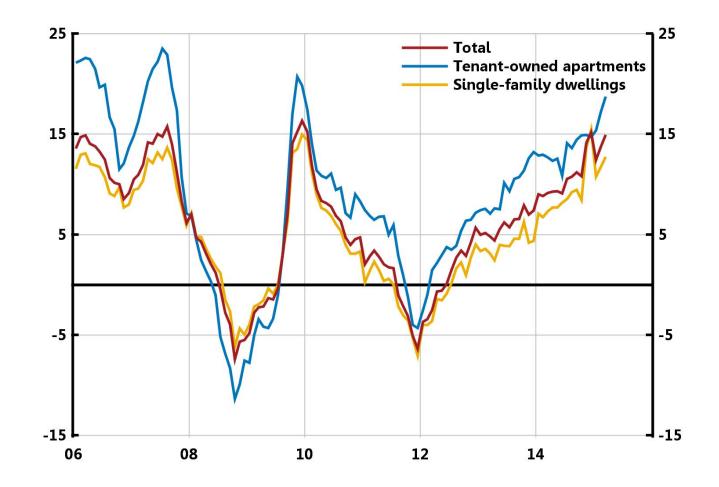


#### Figure 1.7. Stock market movements Index, 2 January 2009 = 100



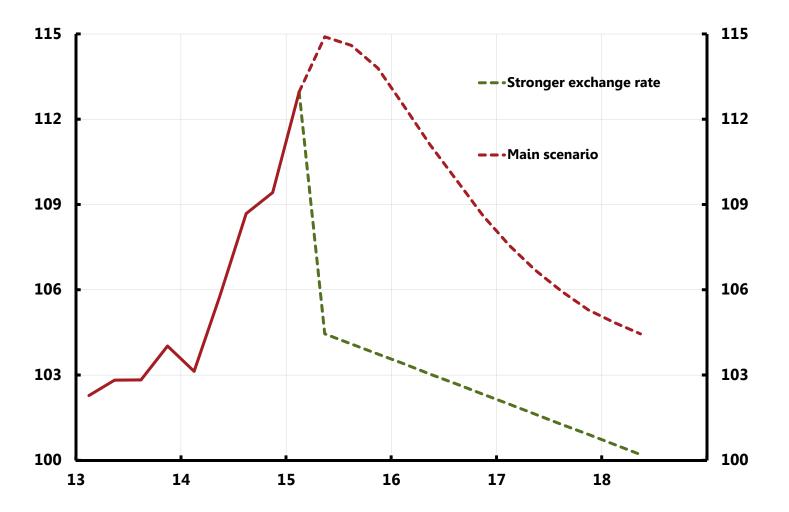


#### Figure 1.8. Housing prices Annual percentage change



## Figure 1.9. KIX-weighted nominal exchange rate

Index, 18 November 1992 = 100, quarterly averages



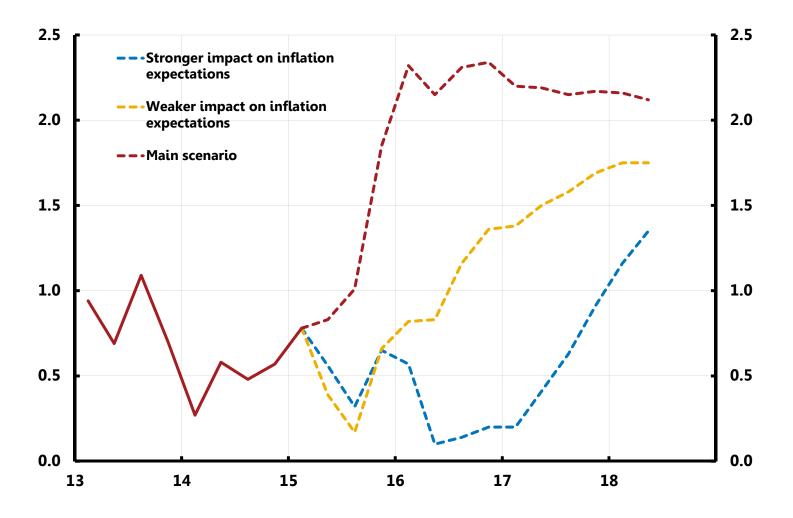
Note. KIX is an aggregate of the countries that are important to Sweden's international transactions.





#### Figure 1.10. CPIF

#### Annual percentage change, quarterly averages

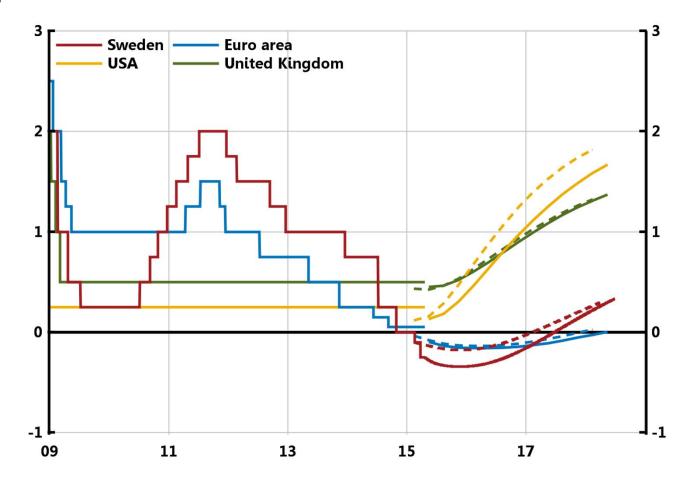


Sources: Statistics Sweden and the Riksbank

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



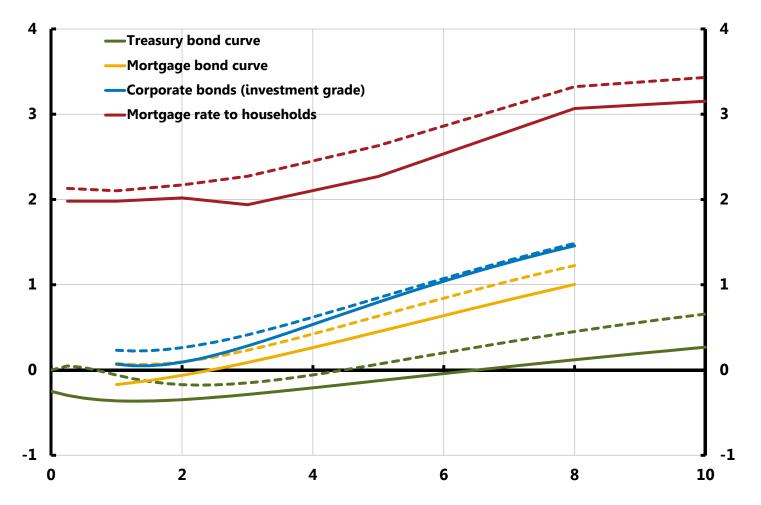
Per cent





#### Figure 2.2. Yield curves in Sweden

Per cent

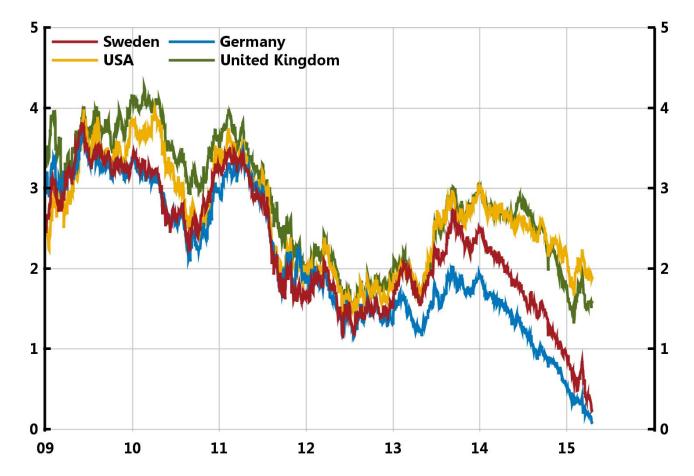


Note. Horizontal axis shows maturities. The government-, mortgage- and corporate-bond curves are zero coupon yields interpolated from bond prices using the Nelson-Siegel method. For mortgage and corporate bonds, only yields with a maturity up to 8 years are shown, which reflects the maturities for the bonds used for the interpolation. Mortgage rates for households are an average of mortgage rates listed by Swedish banks and mortgage institutions. Unbroken lines are estimated 17 April 2015, broken lines 11 February 2015.

Soure: Macrobond, Thomson Reuters and the Riksbank

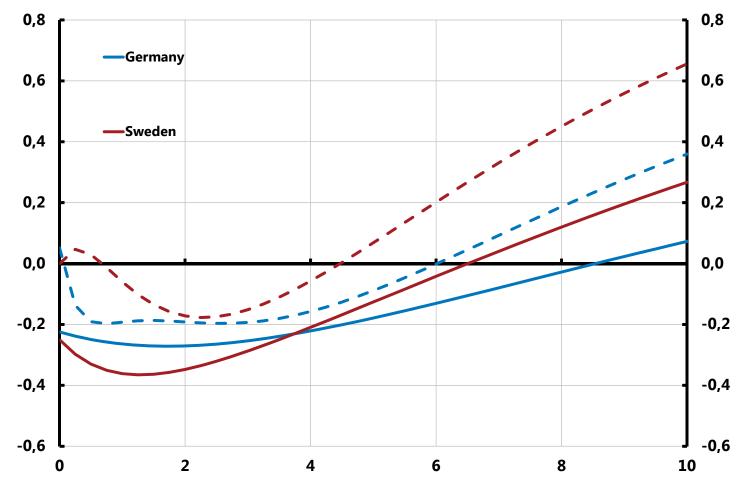
#### Figure 2.3. Government bond rates with 10 years left to maturity

Per cent



### Figure 2.4. Yield curves in Sweden and Germany

Per cent

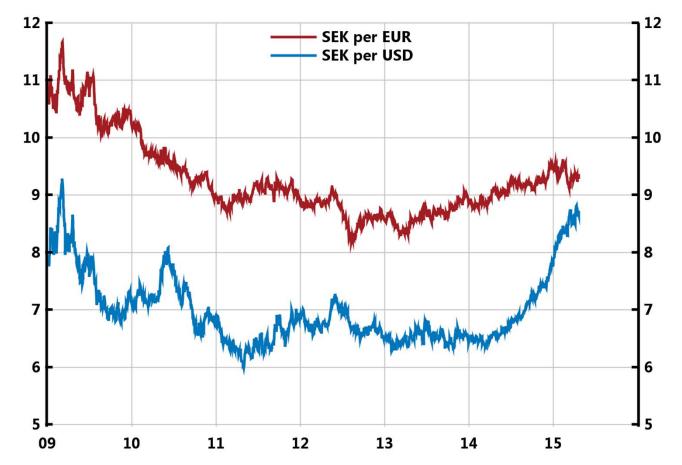


Source: Deutsche Bundesbank, Thomson Reuters and the Riksbank

#### Figure 2.5. Development of the krona against the euro and the dollar

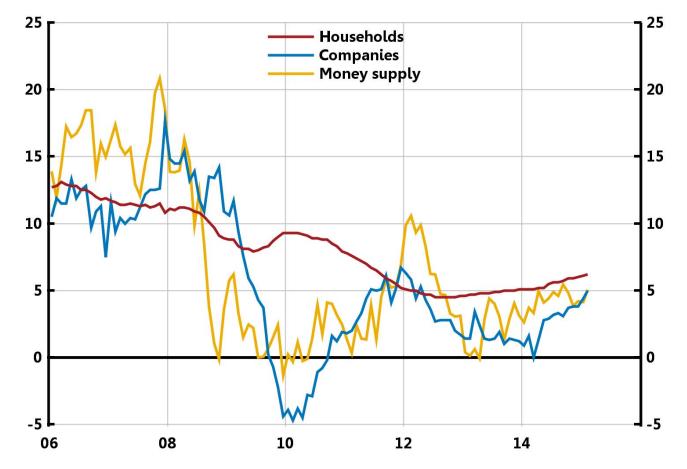


SEK per foreign currency



## Figure 2.6. Lending to households and companies

Annual percentage change

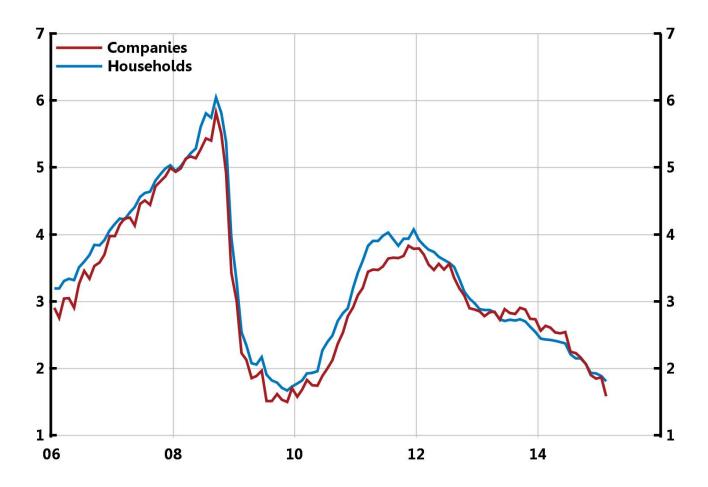


Note. MFIs' lending to households and non-financial companies according to financial market statistics adjusted for reclassifications and traded loans since 2006. Money supply is M3 outstanding amount.

Source: Statistics Sweden

#### Figure 2.7. Interest rates to households and businesses, new contracts

Per cent

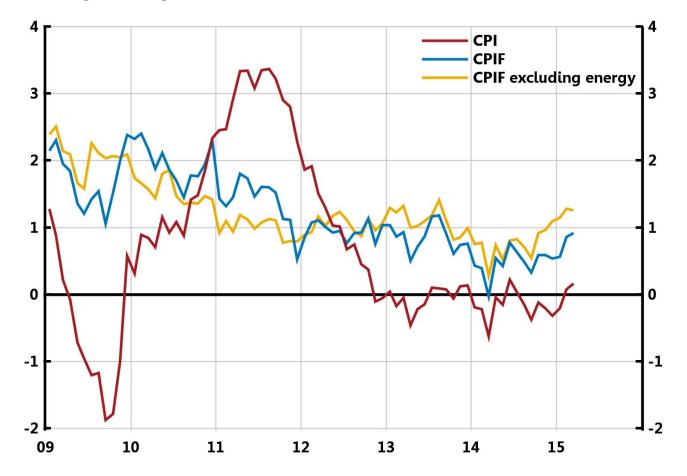


Note. Interest rates on loans from MFIs to households with housing as colletaral and to non-financial companies.

## Figure 3.1. CPI, CPIF and CPIF excluding energy



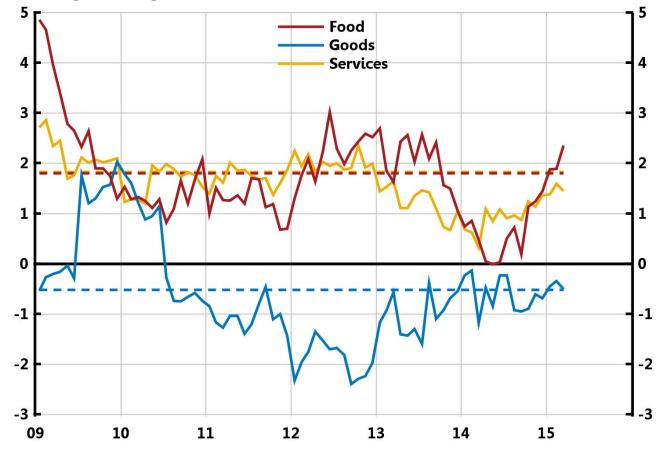
Annual percentage change





#### Figure 3.2. Food, goods and service prices

Annual percentage change

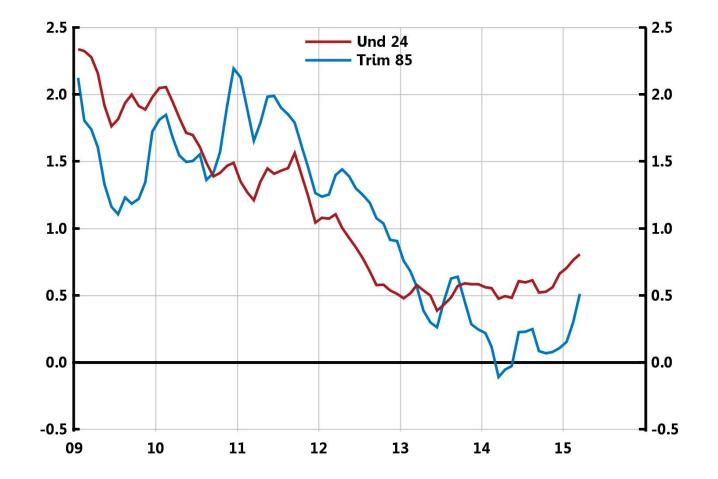


Note. The broken lines represent the average for the period 2000 to the latest outcome. The line showing the average for food overlaps the line showing the average for services.

Sources: Statistics Sweden and the Riksbank

### Figure 3.3. Measures of underlying inflation

Annual percentage change, three months moving average



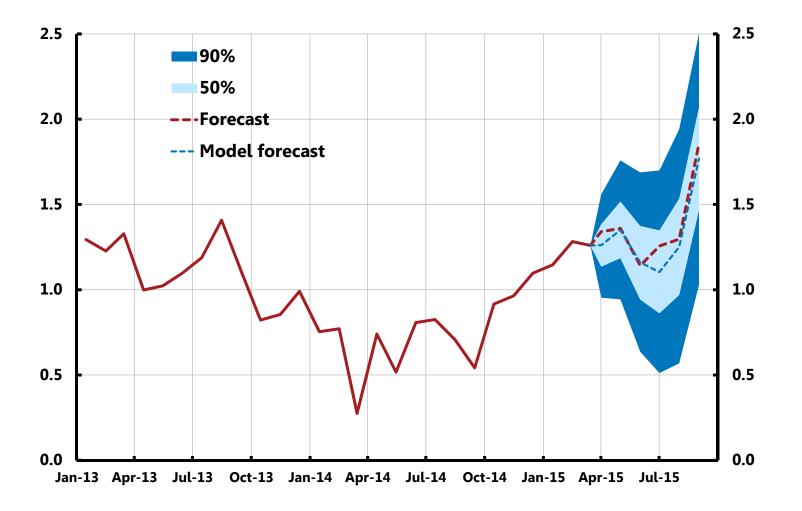
Note. Und 24 and Trim 85 are statistical measures calculated on the basis of the CPI divided into approximately 70 subgroups. Und 24 is weighted and adjusted for the historical standard deviation. In Trim 85 the 7.5 per cent highest and the 7.5 lowest yearly price changes have been excluded.

Sources: Statistics Sweden and the Riksbank



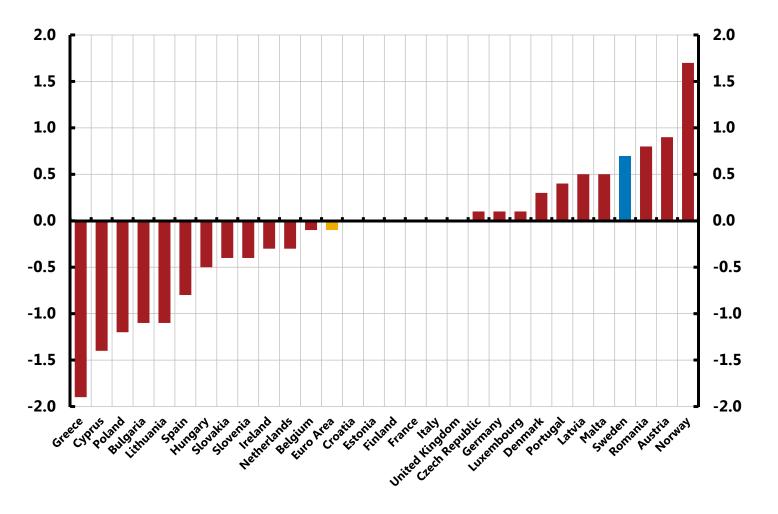
## Figure 3.4. CPIF excluding energy and model forecast

Annual percentage change



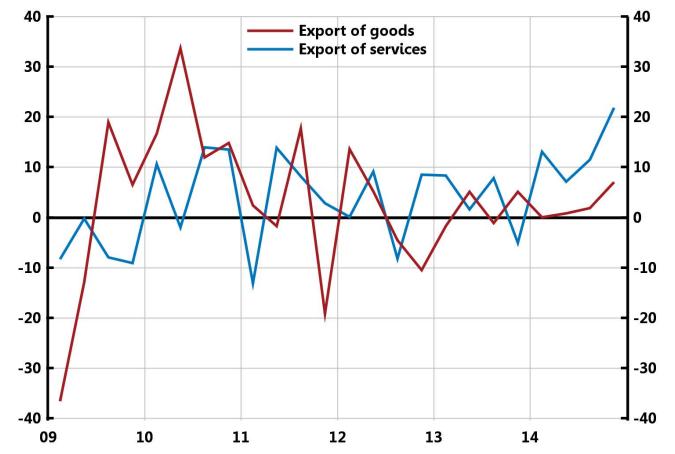
# Figure 3.5. HICP in the EU countries and Norway

Annual percentage change



## Figure 3.6. Export of goods and services

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

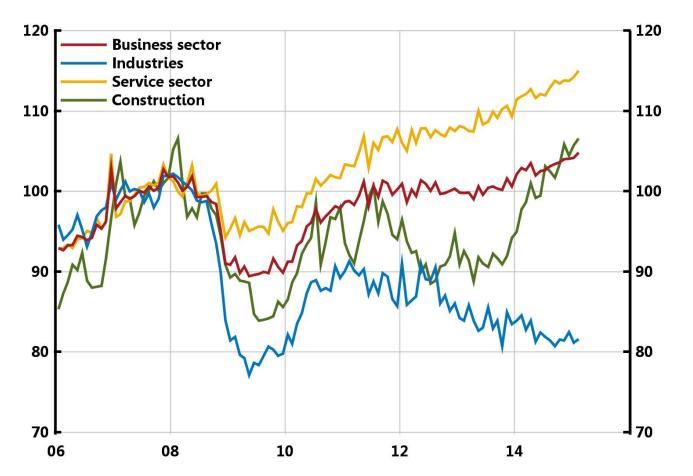




Sources: Statistics Sweden and the Riksbank

#### Figure 3.7. Production in the business sector

Index, 2007 = 100



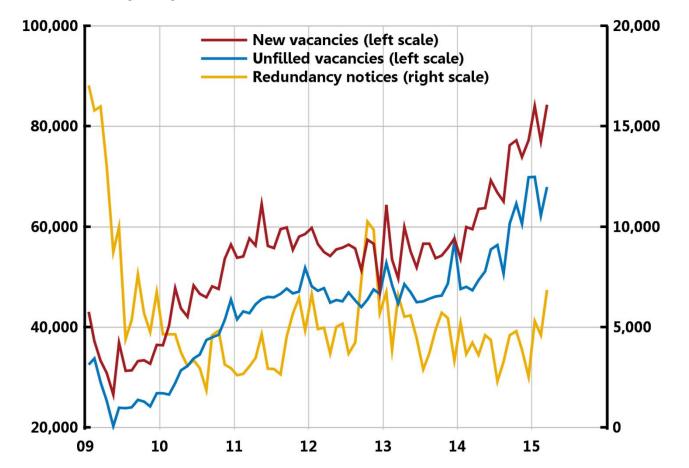


Sources: Statistics Sweden and the Riksbank

### Figure 3.8. New and unfilled vacancies and redundancy notices

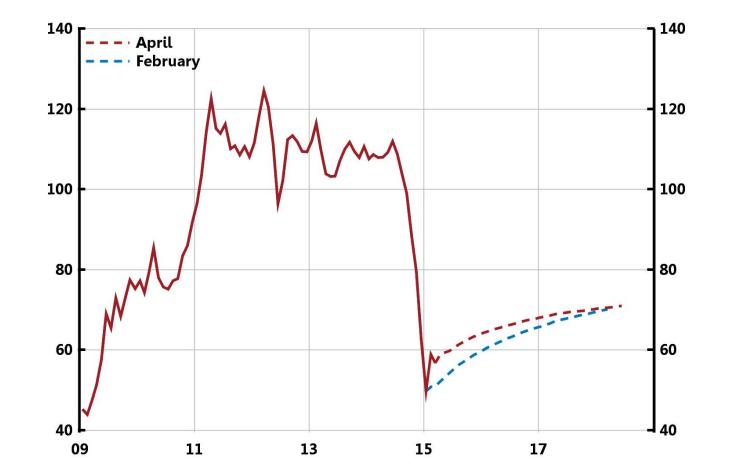


Number of, seasonally-adjusted data



#### Figure 4.1. Oil price and futures price USD per barrel

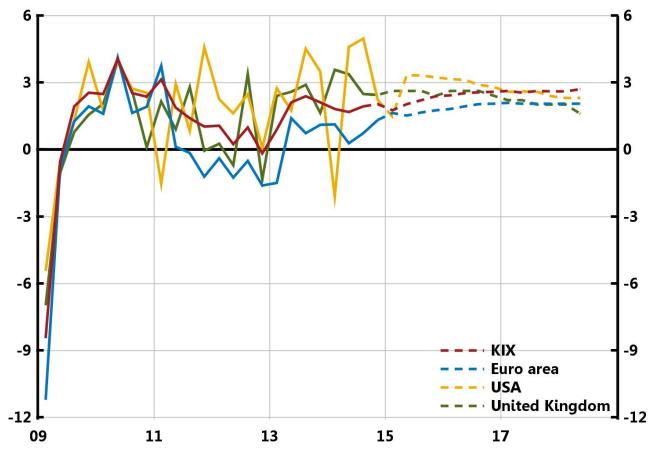




Note. Brent oil, futures are calculated as a 15-day average. Outcomes represent monthly averages of spot prices.

## Figure 4.2. Growth in various countries and regions

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

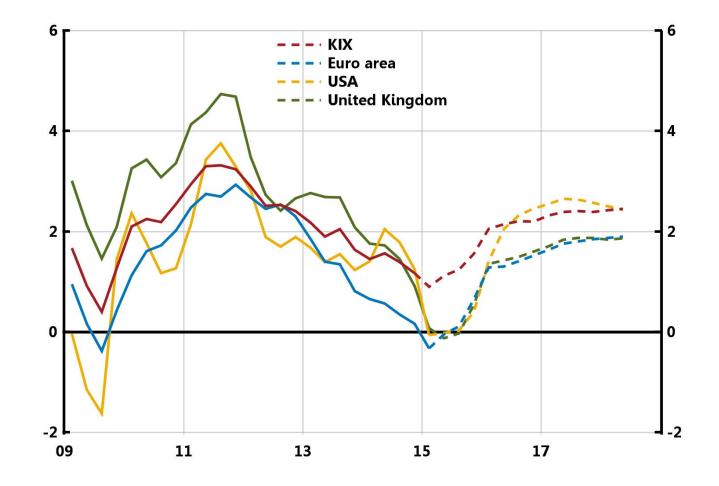


Note. KIX is an aggregate of the countries that are important to Sweden's international transactions.



#### **Figure 4.3. Inflation in various** countries and regions Annual percentage change



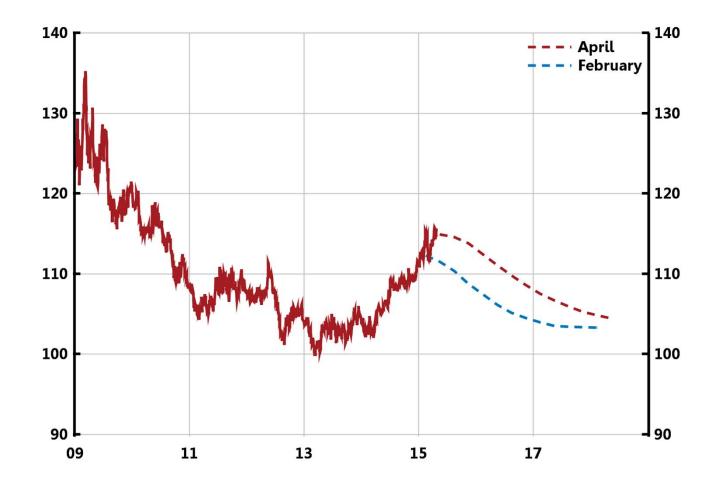


Note. KIX is an aggregate of the countries that are important to Sweden's international transactions. When calculating KIX-weighted inflation, the HICP is used for the euro area and the CPI for other countries. Inflation for the euro area is shown measured using the HICP and for the United States and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

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

## Figure 4.4. KIX-weighted nominal exchange rate

Index, 18 November 1992 = 100

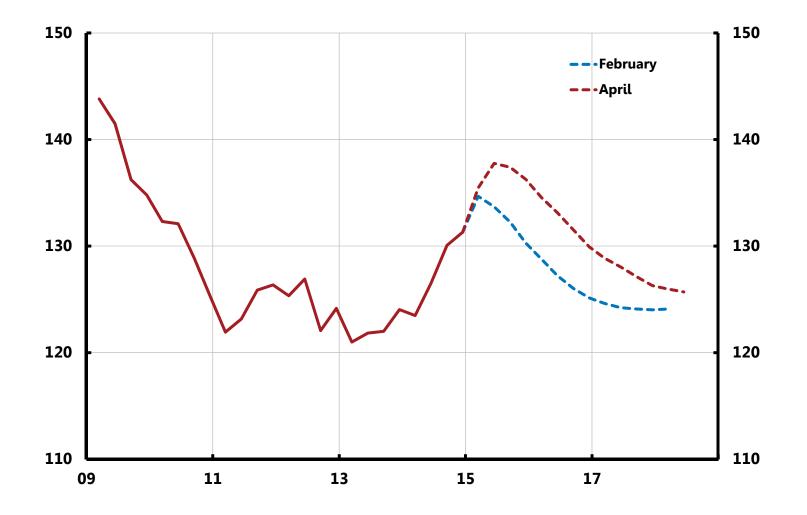




## Figure 4.5. KIX-weighted real exchange rate



Index, 18 November 1992 = 100, quarterly averages



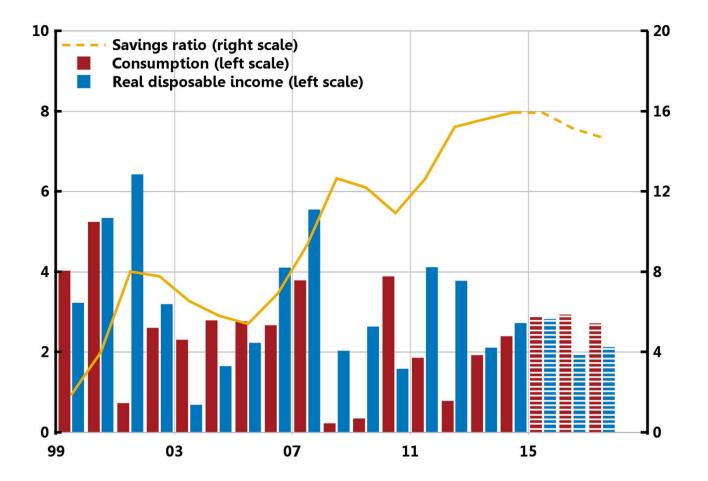
Note. The real exchange rate has been deflated with the CPIF for Sweden and the CPI for the rest of the world. The CPIF is the CPI with a fixed mortgage rate. KIX is an aggregate of the countries that are important to Sweden's international transactions.

Sources: National sources, Statistics Sweden and the Riksbank

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



Annual percentage change and per cent of disposable income



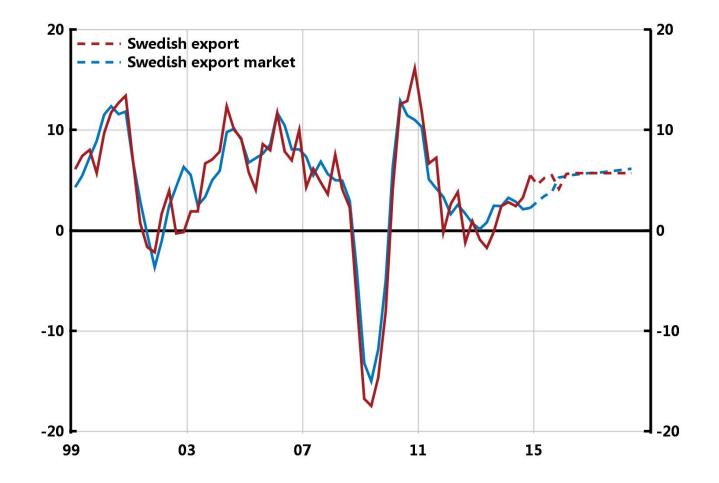
Note. The savings ratio includes collective insurance schemes. Disposable income has been deflated using the household consumption deflator.

Sources: Statistics Sweden and the Riksbank

### Figure 4.7. Exports and the Swedish export market



Annual percentage change, calendar-adjusted data

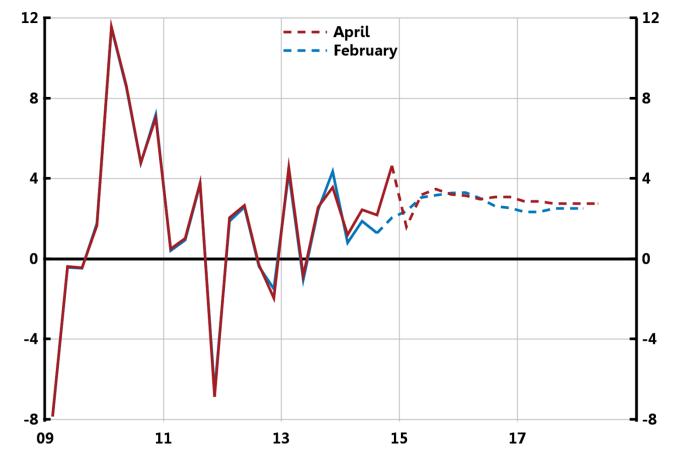


Note. The Swedish export market index aims to measure import demand in the countries to which Sweden exports. This is calculated by aggregating 32 countries and covers around 85 per cent of the total Swedish export market.

Sources: Statistics Sweden and the Riksbank



**Figure 4.8. GDP** Quarterly change in per cent, calculated as an annual percentage change, seasonally-adjusted data

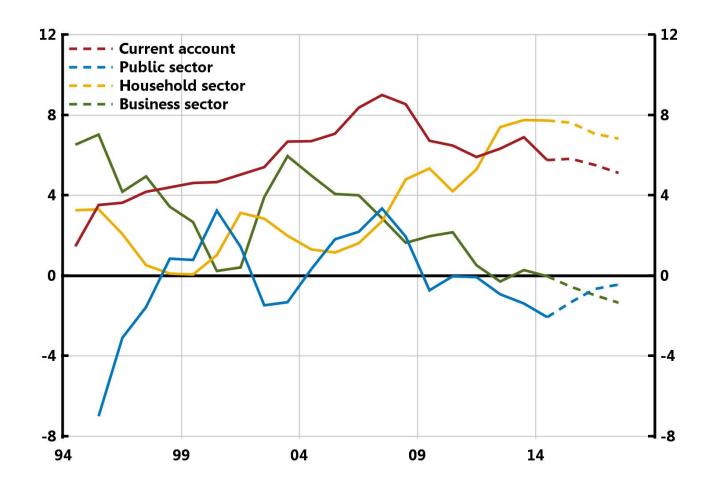


Sources: Statistics Sweden and the Riksbank

## Figure 4.9. Current account and net lending in different sectors

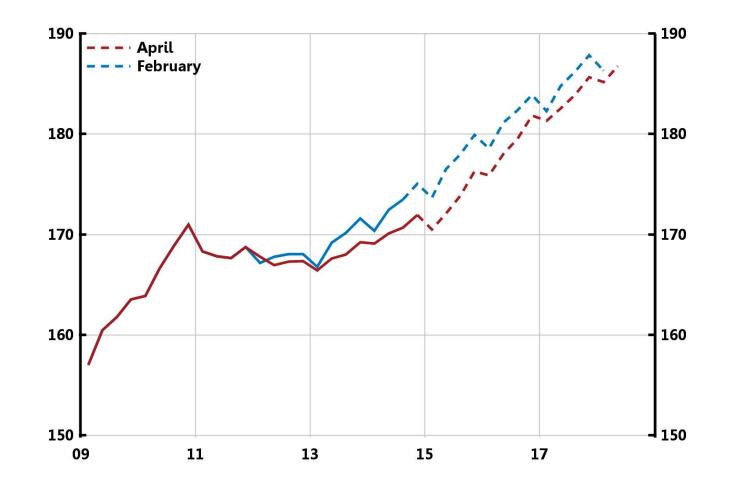
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Per cent of GDP



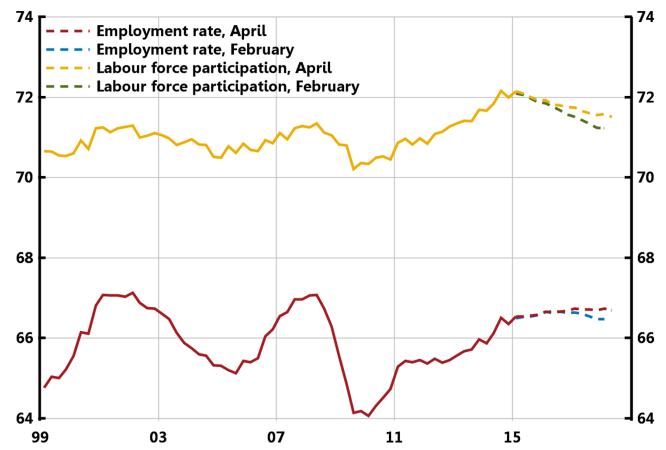


#### Figure 4.10. Household debt ratio Per cent of disposable income



## Figure 4.11. Employment rate and labour force participation

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

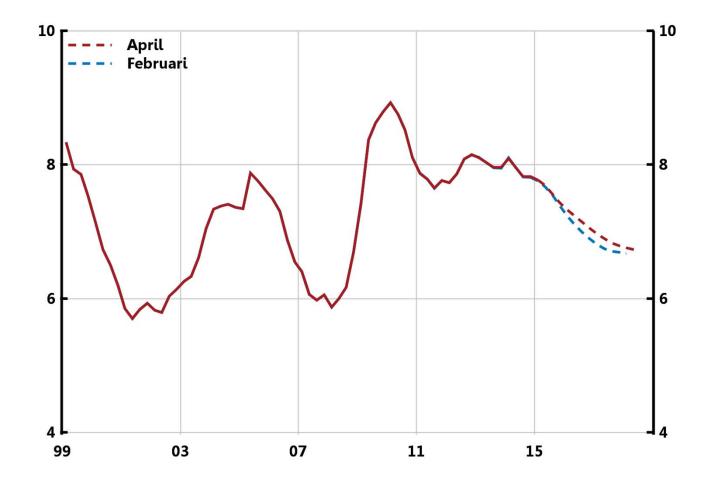


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Sources: Statistics Sweden and the Riksbank



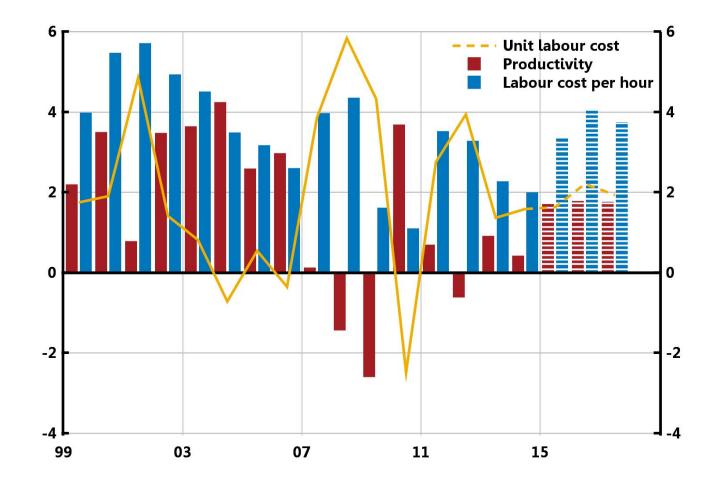
### Figure 4.12. Unemployment Per cent of the labour force, 15–74 years, seasonally-adjusted data



### Figure 4.13. Cost pressures in the economy as a whole



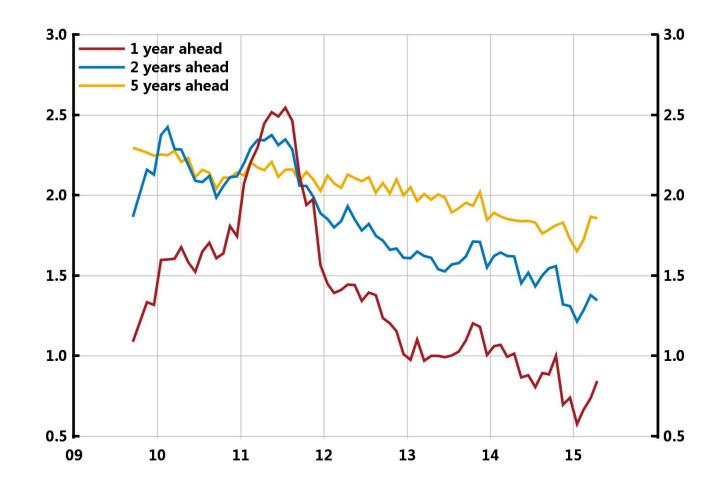
Annual percentage change



Sources: Statistics Sweden and the Riksbank

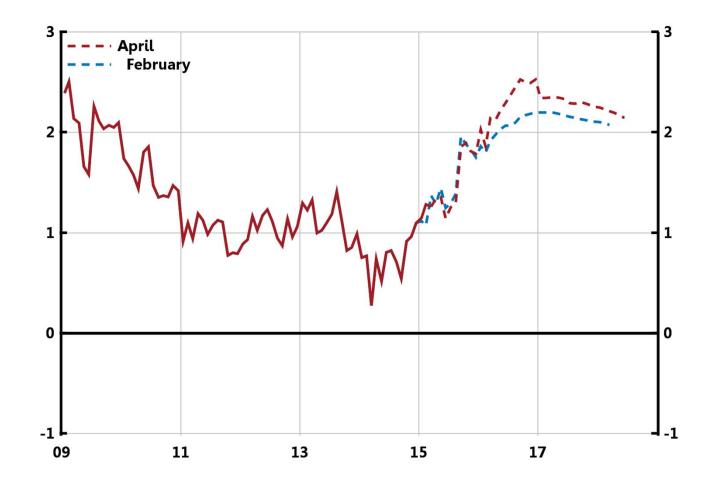
## Figure 4.14. Money market players' expectations of inflation

Per cent





### Figure 4.15. CPIF excluding energy Annual percentage change

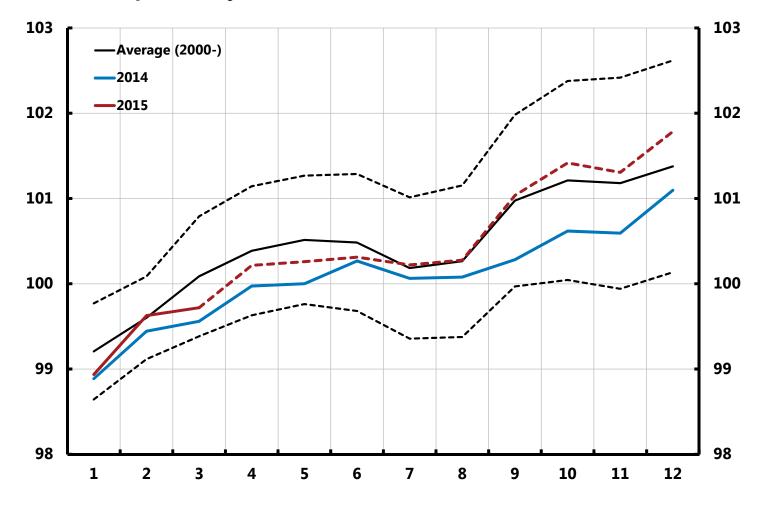


Sources: Statistics Sweden and the Riksbank

## Figure 4.16. Monthly development in CPIF excluding energy



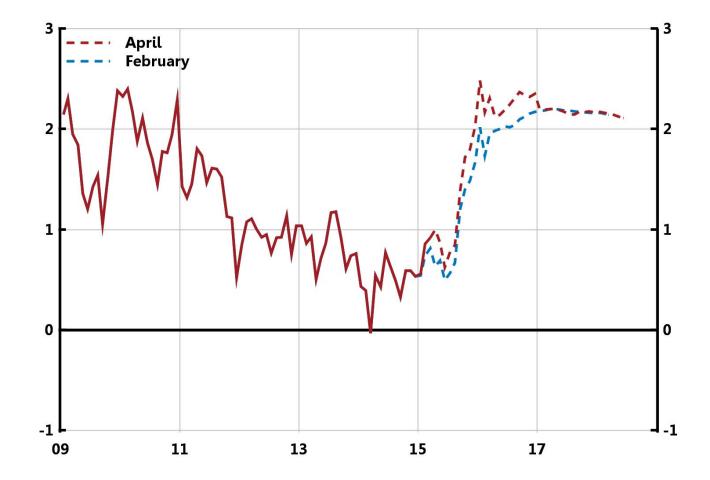
Index, December previous year= 100



Sources: Statistics Sweden and the Riksbank



### Figure 4.17. CPIF Annual percentage change

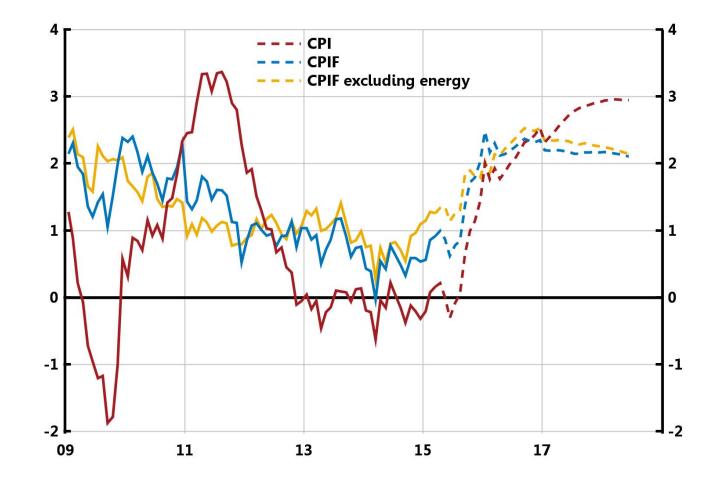


Sources: Statistics Sweden and the Riksbank

## Figure 4.18. CPI, CPIF and CPIF excluding energy

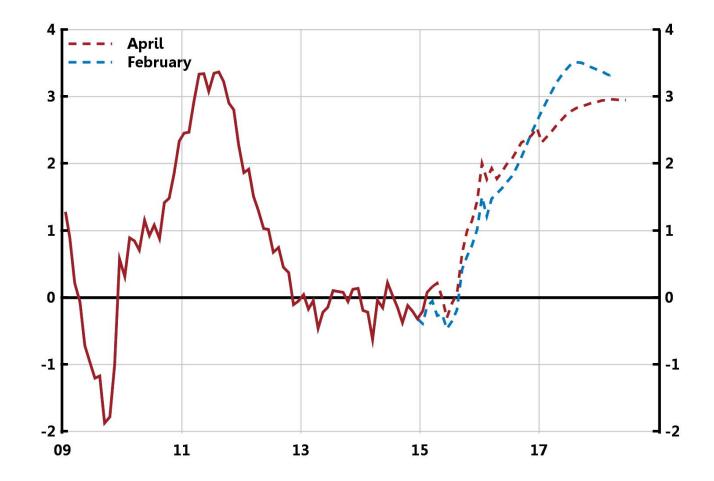


Annual percentage change





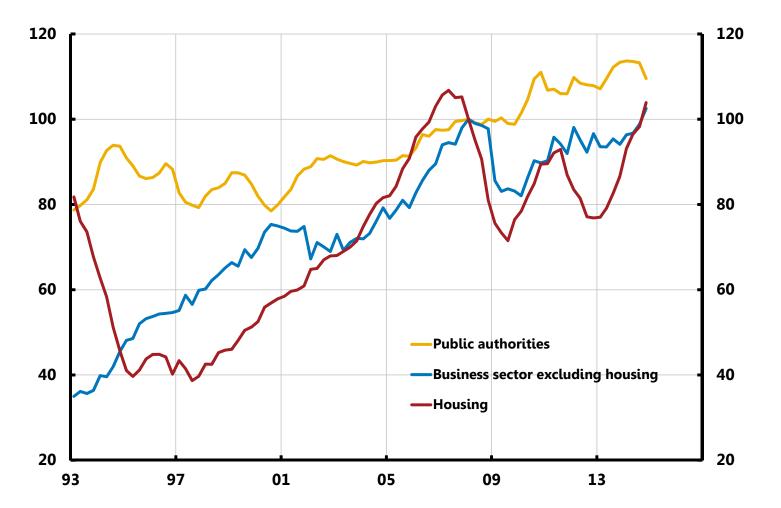
### Figure 4.19. CPI Annual percentage change



Sources: Statistics Sweden and the Riksbank

## Figure 4.20. Investments in Sweden 1993-2014

Index, 2008 q1 = 100, seasonally-adjusted data

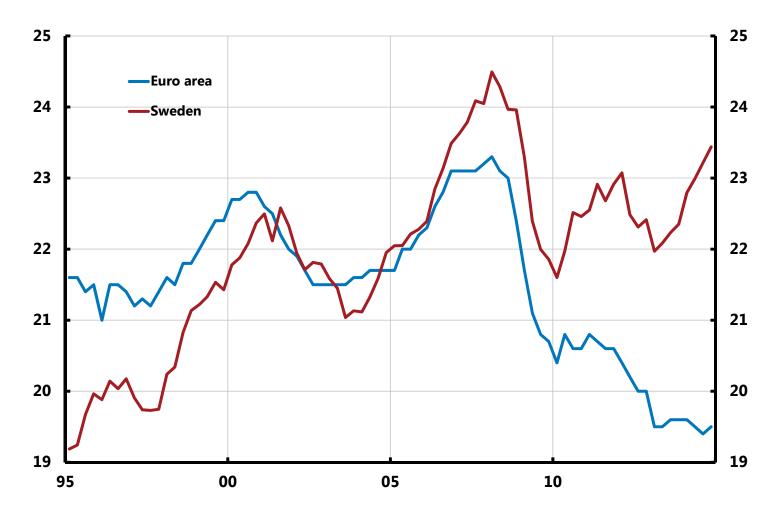


Sources: National Institute for Economic Research

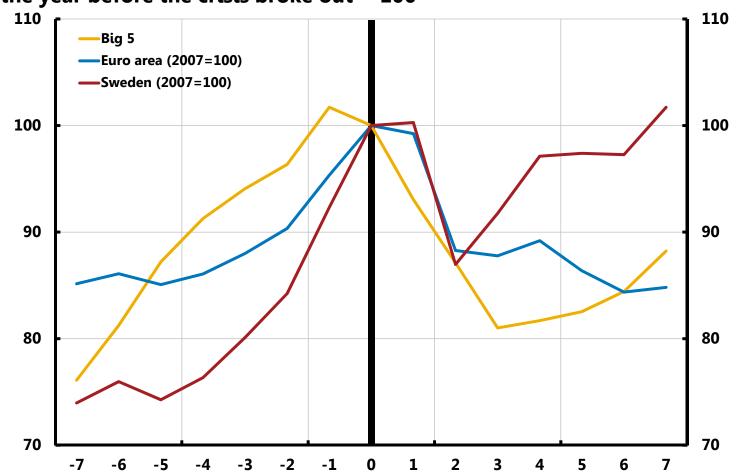


### Figure 4.21. Investment ratio

Percentage of GDP in current prices, seasonally-adjusted data



# Figure 4.22. Investment in Sweden and the euro area compared with five of the most serious financial crises



Index, the year before the crisis broke out = 100

Note. "Big 5" are financial crises in Spain 1977, Norway 1987, Sweden 1991, Finland 1991 and Japan 1992. T=0 the year the crisis broke out.



#### Table 1. Repo rate forecast

Per cent, quarterly averages

	Q4 2014	Q1 2015	Q2 2015	Q2 2016	Q2 2017	Q2 2018
Repo rate	0.1	-0.1 (-0.1)	-0.3 (-0.1)	-0.3 (-0.1)	0.2 (0.8)	0.8
Source: The Riksbank						
Table 2. Inflation Annual percentage change, annual a	verage					
		2013	2014	2015	2016	2017
CPI		0.0	-0.2	0.3 (0.1)	2.1 (1.9)	2.7 (3.3)
CPIF		0.9	0.5	1.1 (0.9)	2.3 (2.0)	2.2 (2.2)
CPIF excl. energy		1.1	0.7	1.5 (1.5)	2.3 (2.0)	2.3 (2.2)
HICP		0.4	0.2	0.9 (0.9)	2.1 (2.0)	2.2 (2.1)

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

	2013	2014	2015	2016	2017
Repo rate	1.0	0.5	-0.2 (-0.1)	-0.2 (0.0)	0.3 (0.9)
10-year rate	2.1	1.8	0.5 (0.8)	1.4 (1.8)	2.4 (2.8)
Exchange rate, KIX, 18 November 1992 = 100	103.0	106.7	114.1 (110.7)	110.5 (105.8)	106.4 (103.6)
General government net lending*	-1.4	-2.1 (-2.2)	-1.3 (-1.4)	-0.7 (-0.8)	-0.5 (-0.7)

\* Per cent of GDP. The outcome for general government net lending in 2014 was revised in connection with Statistics Sweden's publication of the EDP statistics (figures on public saving and gross debt according to the EU's convergence criteria which are reported to the European Commission twice a year). In order for the statistics to be consistent with other forecast variables, the outcome relates to what was published in connection with the National Accounts.

Sources: Statistics Sweden and the Riksbank



#### **Table 4. International conditions**

Annual percentage change, unless otherwise stated

GDP	PPP- weights	KIX- weights	2013	2014	2015	2016	2017
Euro area	0.14	0.46	-0.4	0.9 (0.9)	1.4 (1.2)	1.8 (1.7)	2.1 (2.0)
USA	0.16	0.09	2.2	2.4	2.9 (3.6)	3.1 (3.3)	2.7 (2.5)
Japan	0.05	0.03	1.6	-0.1 (0.1)	0.4 (0.6)	0.8 (0.8)	0.4 (0.4)
China	0.15	0.08	7.8	7.5	6.5 (6.8)	6.5 (6.5)	6.3 (6.3)
KIX-weighted	0.75	1.00	1.2	2.0 (1.9)	2.0 (2.0)	2.4 (2.4)	2.6 (2.6)
World (PPP-weighted)	1.00	_	3.4	3.4 (3.3)	3.3 (3.6)	3.8 (3.9)	3.9 (3.9)

Note. Calendar-adjusted growth rates. The PPP-weights refer to the global purchasing-power adjusted GDP-weights for 2012, according to the IMF's forecasts. 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	2013	2014	2015	2016	2017
Euro area (HICP)	1.4	0.4	0.1 (-0.1)	1.4 (1.2)	1.8 (1.7)
USA	1.5	1.6	0.1 (-0.3)	2.1 (2.2)	2.6 (2.7)
Japan	0.4	2.7	0.9 (0.9)	1.5 (1.5)	2.1 (2.1)
KIX-weighted	1.9	1.4	1.2 (1.0)	2.2 (2.0)	2.4 (2.3)
	2013	2014	2015	2016	2017
Policy rates in the rest of the world, per cent	0.2	0.2	0.1 (0.1)	0.1 (0.2)	0.4 (0.5)
Crude oil price, USD/barrel Brent	108.8	99.6	59.8 (54.7)	66.2 (63.0)	69.3 (67.8)
Swedish export market	1.5	2.6 (3.0)	3.9 (4.8)	5.6 (5.3)	5.9 (5.7)

Note. Policy rates in the rest of the world refer to a weighted average of USA, the euro area, Norway and the United Kingdom. Sources: Eurostat, IMF, Intercontinental Exchange, national sources, OECD and the Riksbank



#### Table 5. GDP by expenditure

Annual percentage change, unless otherwise stated

	2013	2014	2015	2016	2017
Private consumption	1.9	2.4 (2.5)	2.9 (2.7)	2.9 (2.8)	2.7 (2.3)
Public consumption	0.7	1.9 (1.5)	2.2 (1.9)	2.7 (1.9)	1.9 (1.3)
Gross fixed capital formation	-0.4	6.5 (4.7)	4.0 (4.7)	5.6 (5.5)	4.4 (3.7)
Inventory investment*	0.1	0.2 (0.2)	0.0 (0.1)	0.0 (0.0)	0.0 (0.0)
Exports	-0.2	3.3 (2.2)	5.3 (4.8)	6.1 (6.5)	5.3 (5.0)
Imports	-0.7	6.5 (5.1)	4.9 (5.8)	6.7 (6.5)	6.1 (5.6)
GDP	1.3	2.1 (1.8)	3.2 (2.7)	3.4 (3.3)	2.7 (2.2)
GDP, calendar-adjusted	1.3	2.3 (1.9)	2.9 (2.4)	3.2 (3.1)	2.9 (2.5)
Final figure for domestic demand*	1.0	3.0 (2.6)	2.8 (2.8)	3.4 (3.1)	2.8 (2.3)
Net exports*	0.2	-1.1 (-1.0)	0.3 (-0.2)	0.0 (0.2)	-0.1 (0.0)
Current account (NA), per cent of GDP	6.9	5.8 (5.4)	5.8 (4.8)	5.5 (4.7)	5.1 (4.4)

\*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

	2013	2014	2015	2016	2017
Population, aged 15–74	0.6	0.7	0.9 (0.8)	1.1 (1.0)	1.1 (1.1)
GDP, calendar-adjusted	1.3	2.3 (1.9)	2.9 (2.4)	3.2 (3.1)	2.9 (2.5)
Number of hours worked, calendar-adjusted	0.3	1.8 (2.0)	1.2 (1.1)	1.4 (1.0)	1.1 (0.8)
Employed, aged 15–74	1.0	1.4	1.4 (1.3)	1.3 (1.2)	1.2 (0.9)
Labour force, aged 15–74	1.1	1.3	1.0 (0.9)	0.8 (0.6)	0.8 (0.6)
Unemployment, aged 15–74 *	8.0	7.9	7.6 (7.6)	7.2 (7.1)	6.9 (6.7)

\* 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

	2013	2014	2015	2016	2017
Hourly wage, NMO	2.5	2.9 (3.0)	2.9 (2.9)	3.4 (3.4)	3.5 (3.5)
Hourly wage, NA	2.1	1.8 (1.7)	3.0 (3.2)	3.5 (3.7)	3.7 (3.7)
Employers' contribution*	0.2	0.2 (0.0)	0.3 (0.0)	0.5 (0.0)	0.0 (0.0)
Hourly labour cost, NA	2.3	2.0 (1.7)	3.3 (3.2)	4.0 (3.7)	3.7 (3.7)
Productivity	0.9	0.4 (-0.1)	1.7 (1.3)	1.8 (2.0)	1.8 (1.7)
Unit labour cost	1.4	1.6 (1.8)	1.6 (1.9)	2.2 (1.6)	1.9 (2.0)

\* 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