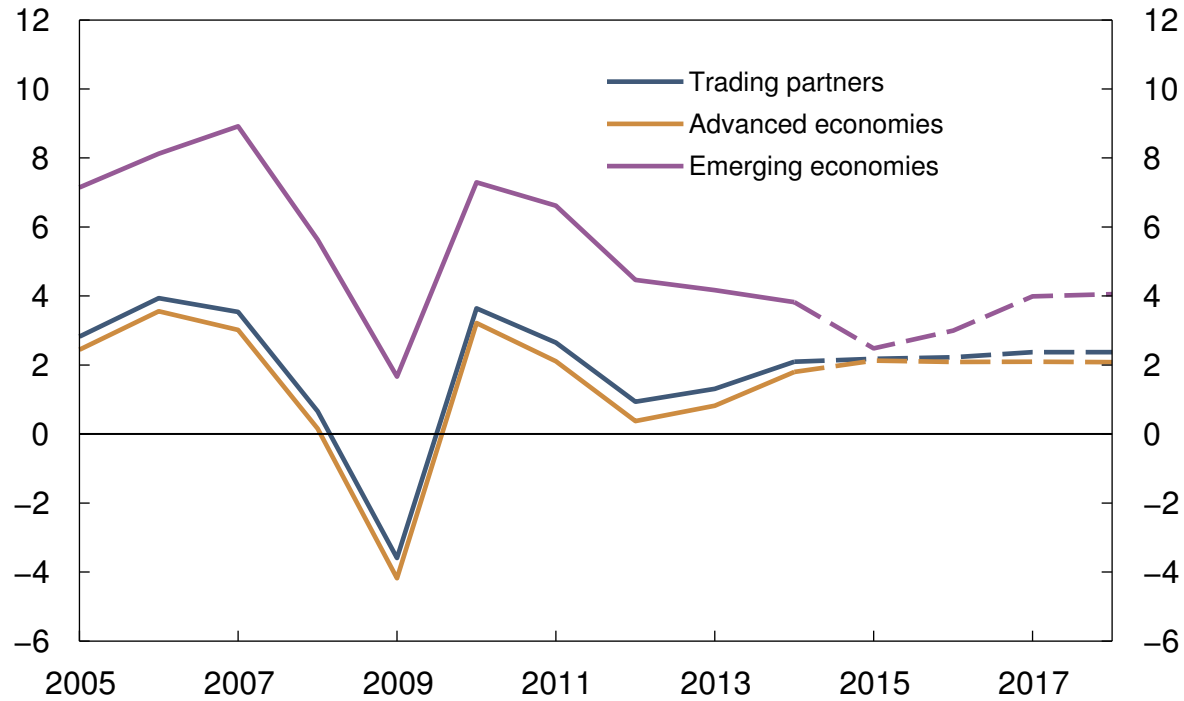
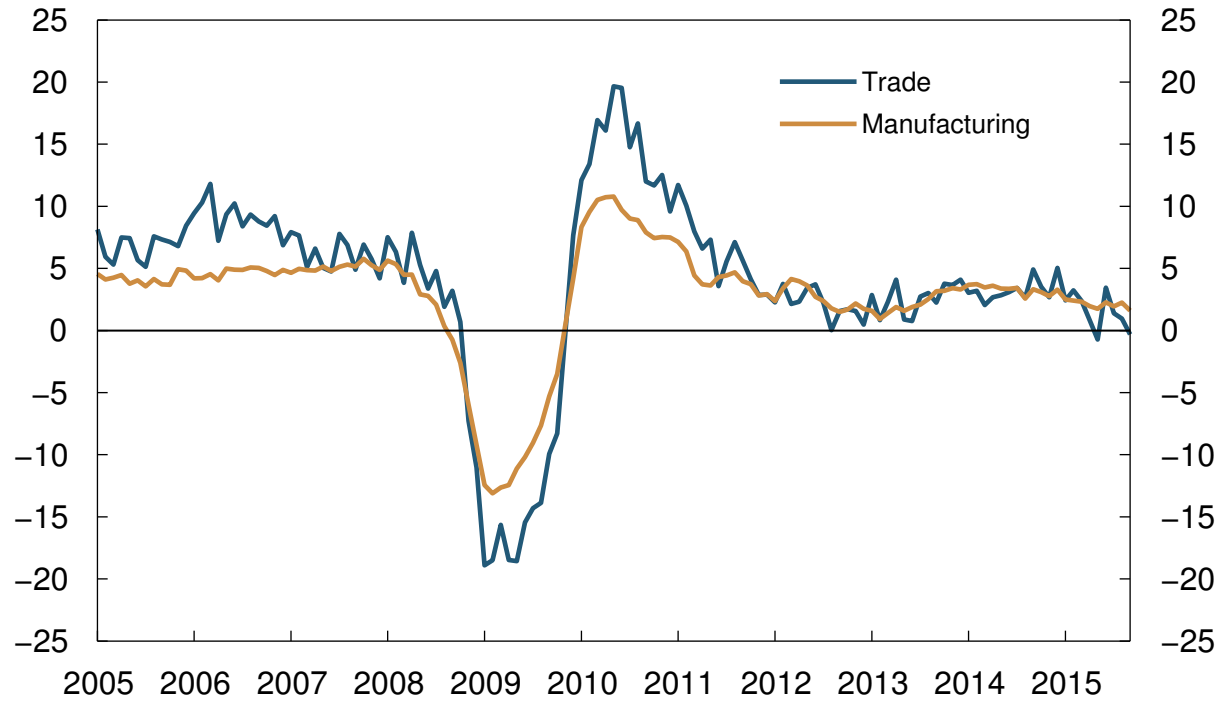


Chart 1.1 GDP growth for trading partners by aggregate.
Annual change. Percent. Export weights. 2005 – 2018¹⁾



1) Projections from 2015 (broken lines).
Sources: Thomson Reuters and Norges Bank

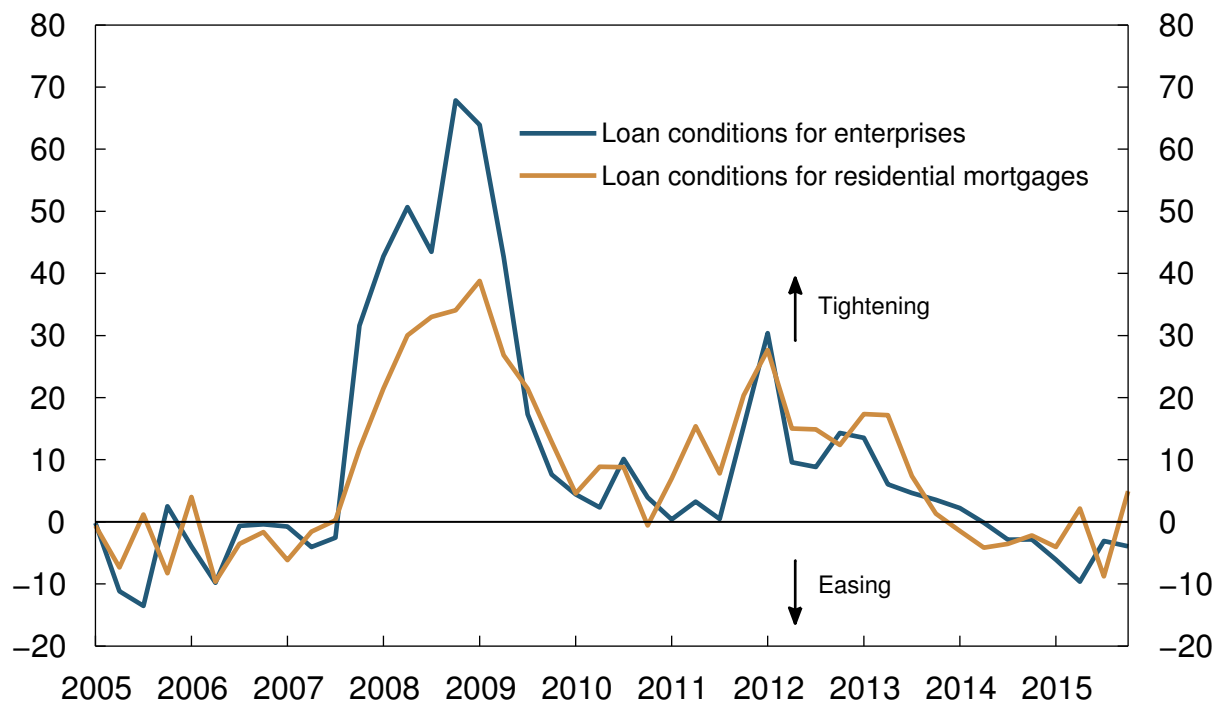
Chart 1.2 Global trade and manufacturing.
Twelve-month change. Percent. January 2005 – September 2015



Source: CPB Netherlands Bureau for Economic Policy Analysis

Chart 1.3 Conditions for loans in the euro area.

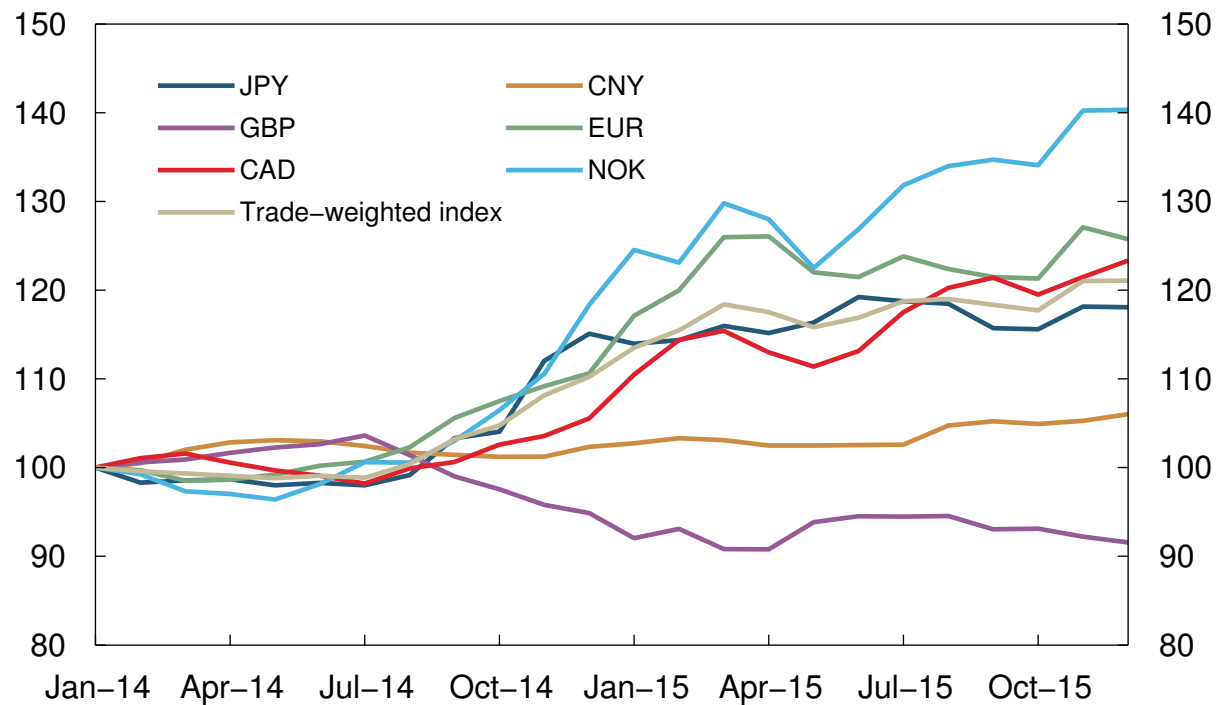
Index.¹⁾ 2005 Q1 – 2015 Q4



1) Difference between the share of banks reporting tightening and the share of banks reporting easing in loan conditions.

Source: Thomson Reuters

Chart 1.4 USD exchange rate against selected currencies.^{1) 2)}
 Index. January 2014 = 100. January 2014 – December 2015

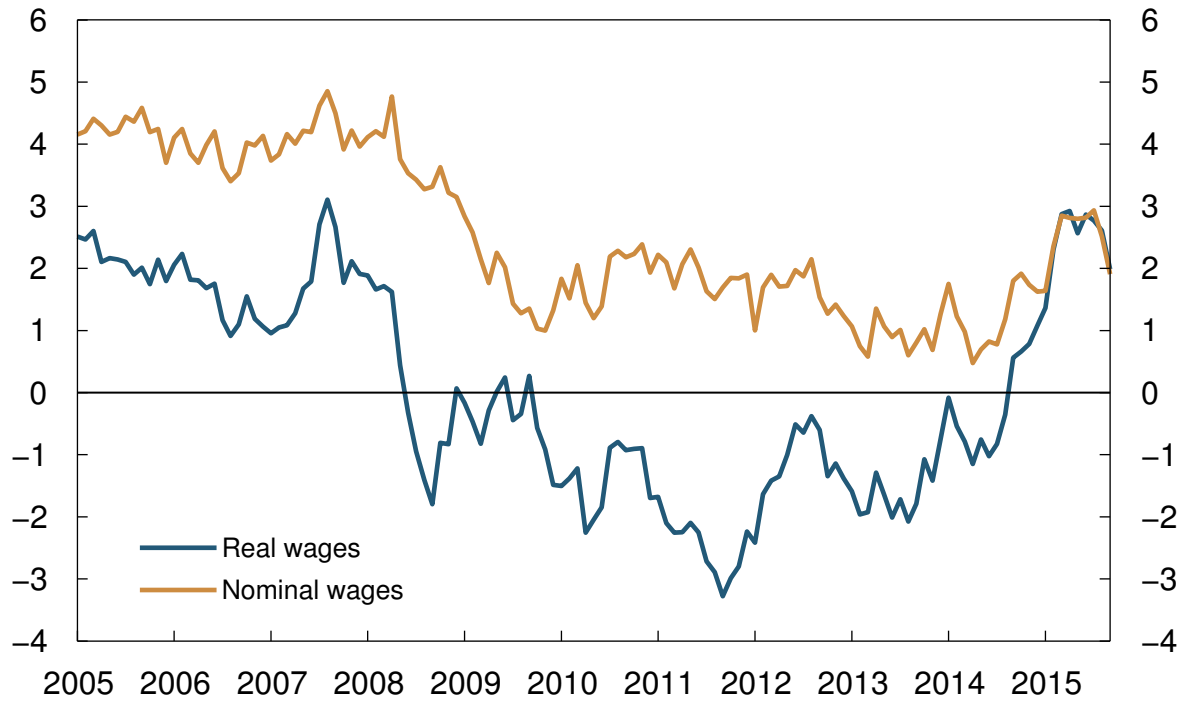


1) A positive slope denotes a stronger dollar exchange rate.

2) Data for December 2015 is the average for the period 1 – 11 December.

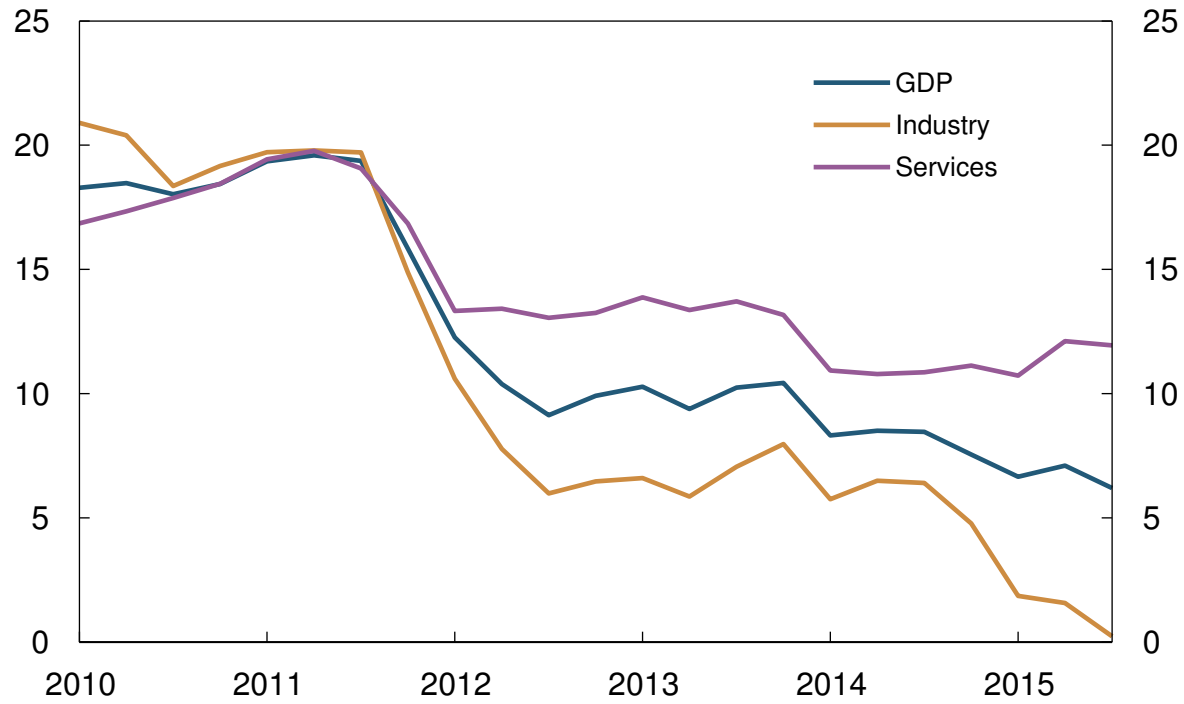
Sources: Thomson Reuters and Norges Bank

Chart 1.5 Wage growth in the UK.¹⁾
Twelve-month change. Percent. January 2005 – September 2015



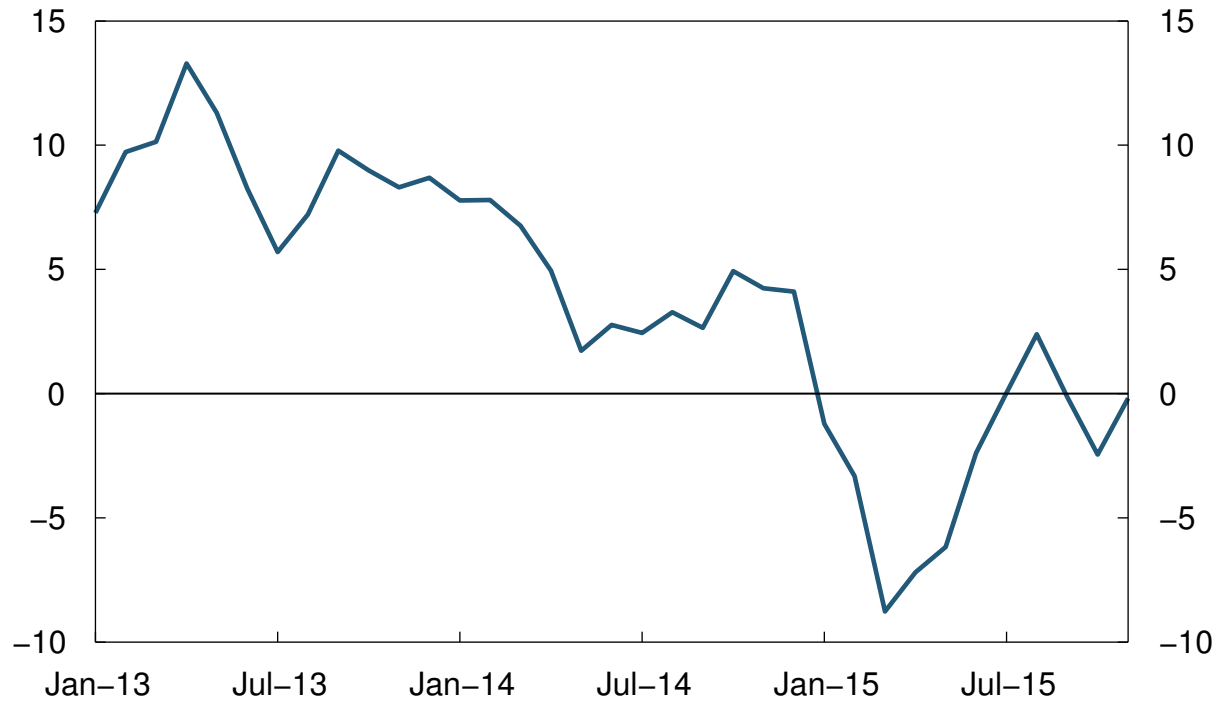
1) Excluding bonuses.
Source: Office for National Statistics

Chart 1.6 GDP in China by sector.
Four-quarter change. Percent. 2010 Q1 – 2015 Q3



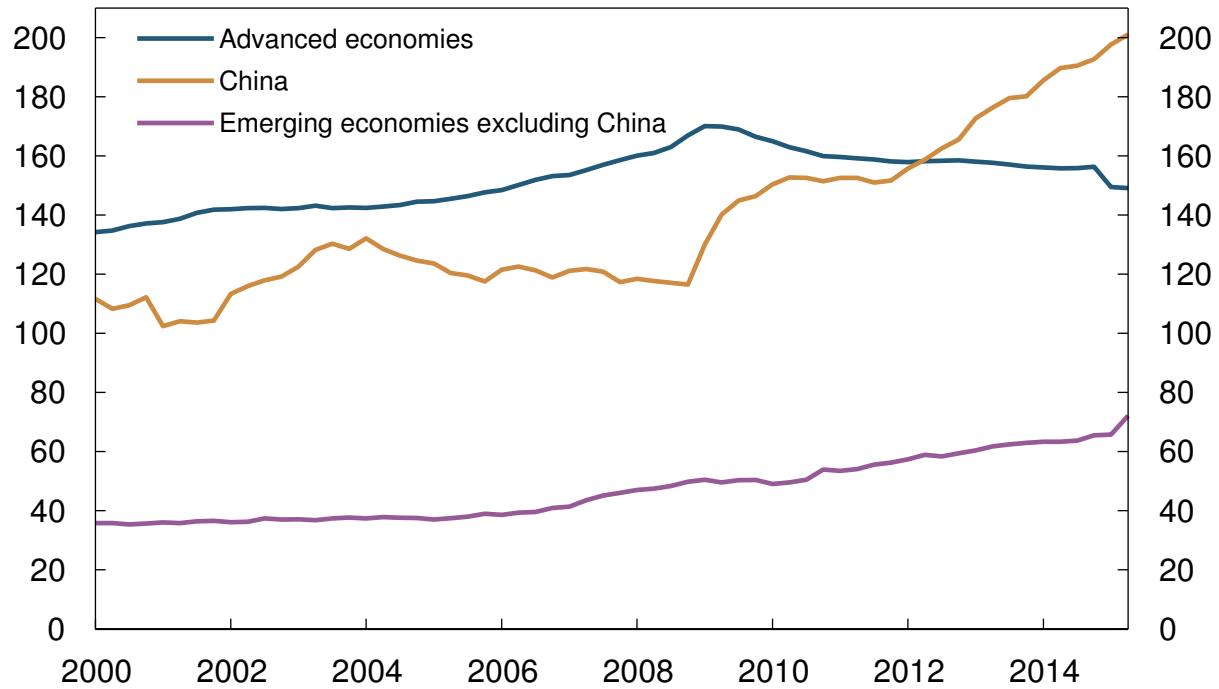
Sources: CEIC and Norges Bank

Chart 1.7 Chinese imports of goods. Volume. Twelve-month change.
Three-month moving average. Percent. January 2013 – November 2015



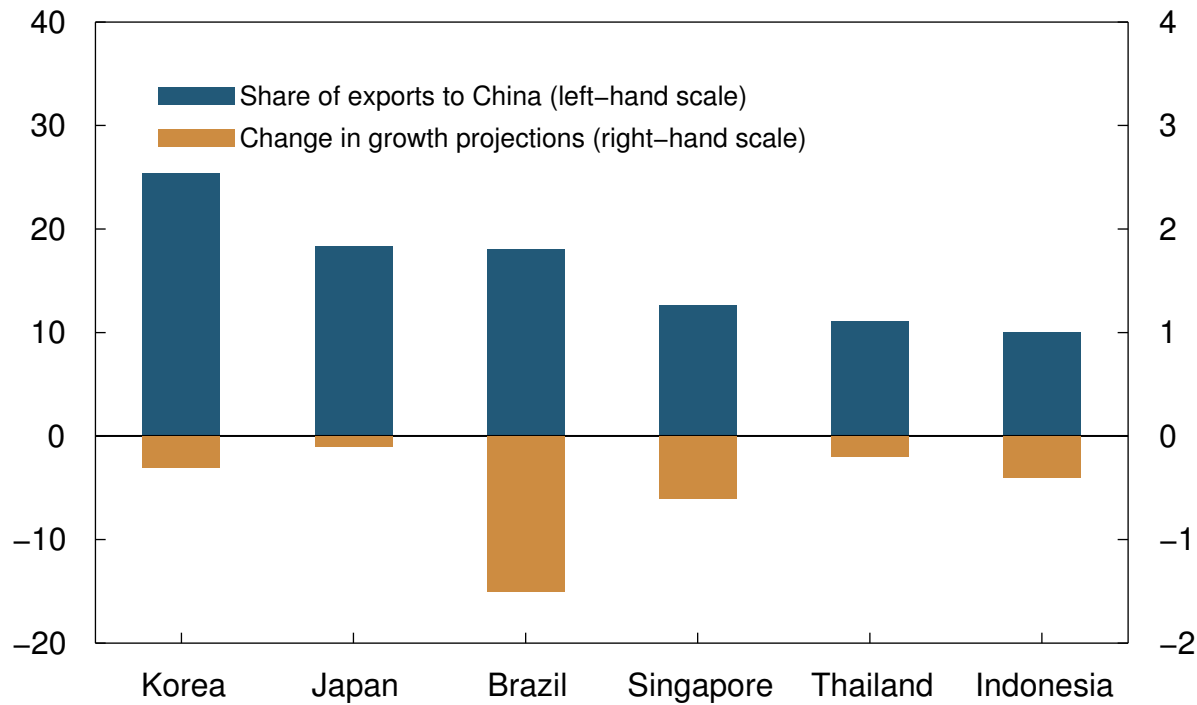
Sources: Thomson Reuters and Norges Bank

Chart 1.8 Private sector credit as a share of GDP.
Percent. 2000 Q1 – 2015 Q2



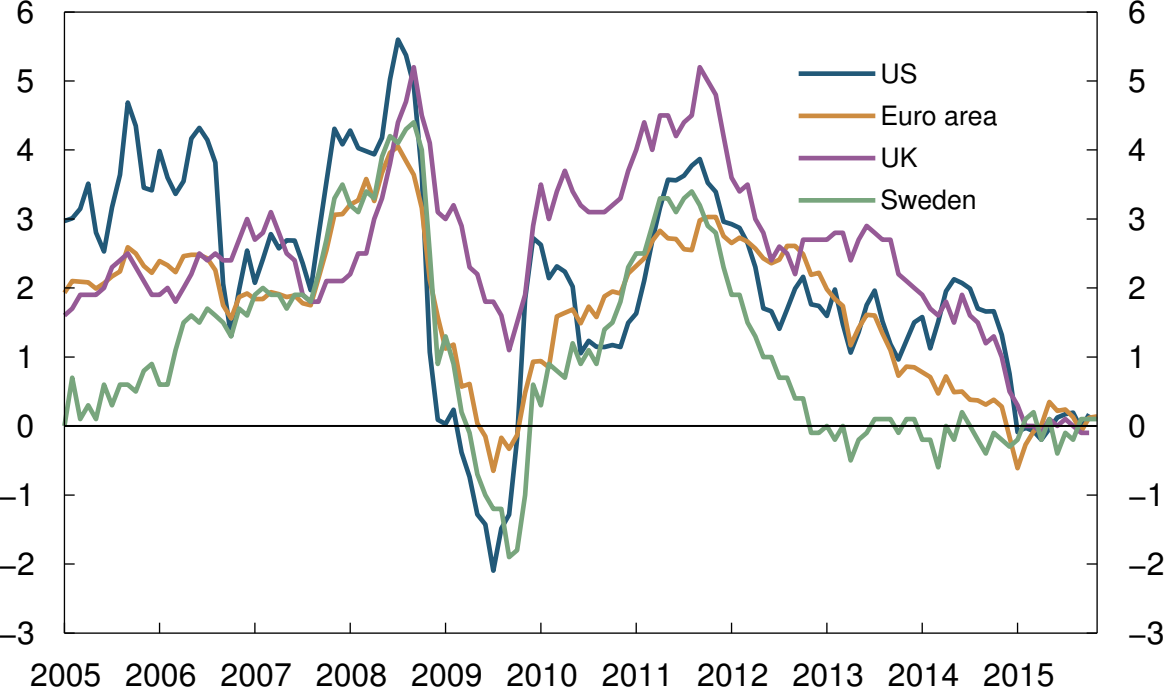
Sources: Bank for International Settlements, Thomson Reuters and Norges Bank

Chart 1.9 Exports to China as a share of total exports.¹⁾ Percent.
 Change in growth projections for 2016 since MPR 3/15. Percentage points



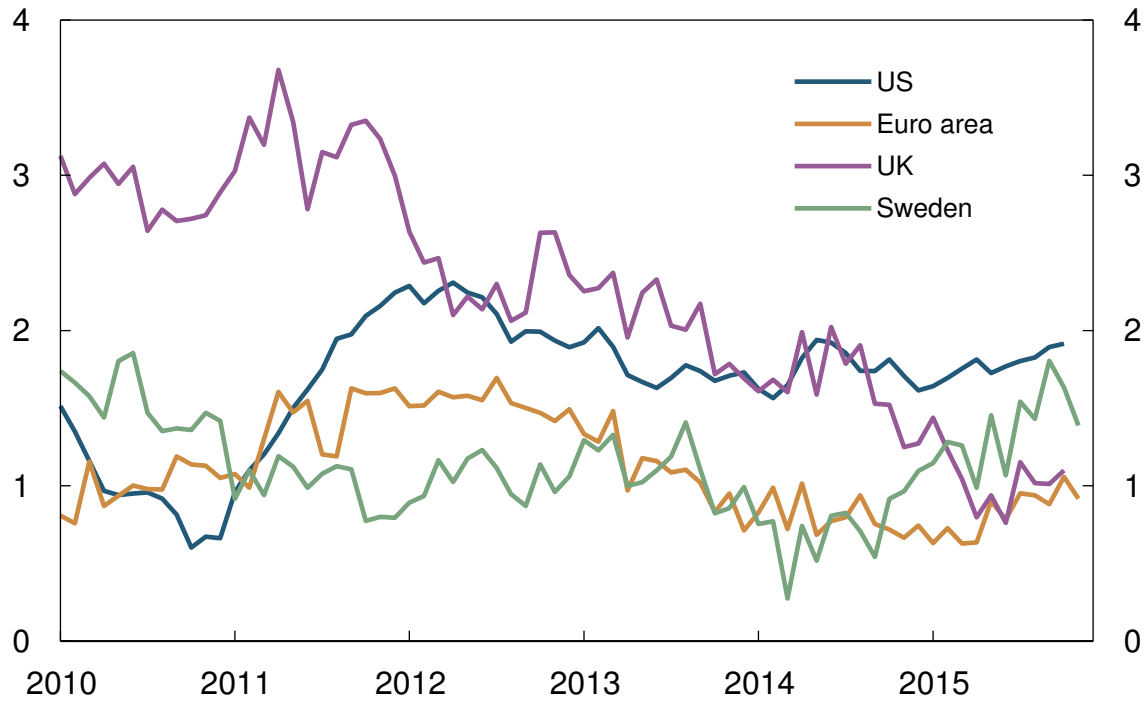
1) Data for 2014.
 Sources: UN Comtrade and Norges Bank

Chart 1.10 Consumer price inflation among trading partners.
Twelve-month change. Percent. January 2005 – November 2015¹⁾



1) Latest observation October 2015 for the US and the UK.
Source: Thomson Reuters

Chart 1.11 Consumer prices excluding food and energy.¹⁾
Twelve-month change. Percent. January 2010 – November 2015²⁾

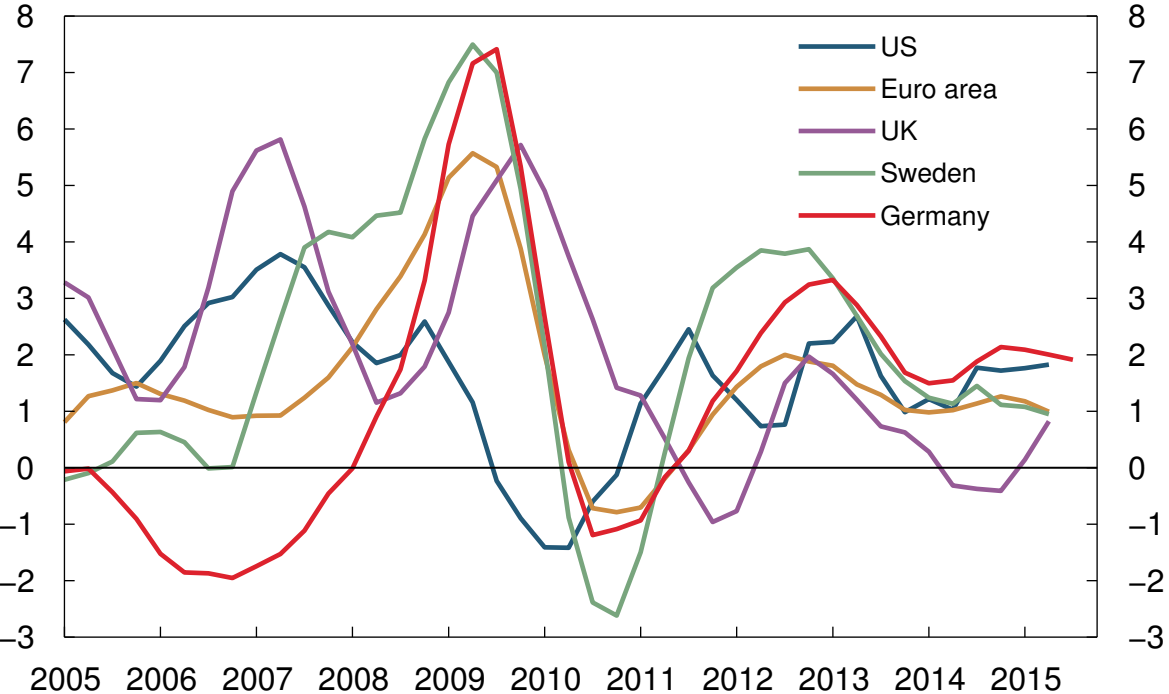


1) Time series for Sweden show consumer prices excluding energy, at a constant mortgage interest rate. Time series for the euro area and the UK show consumer prices excluding food, energy, alcohol and tobacco.

2) Latest observation October 2015 for the US and the UK.

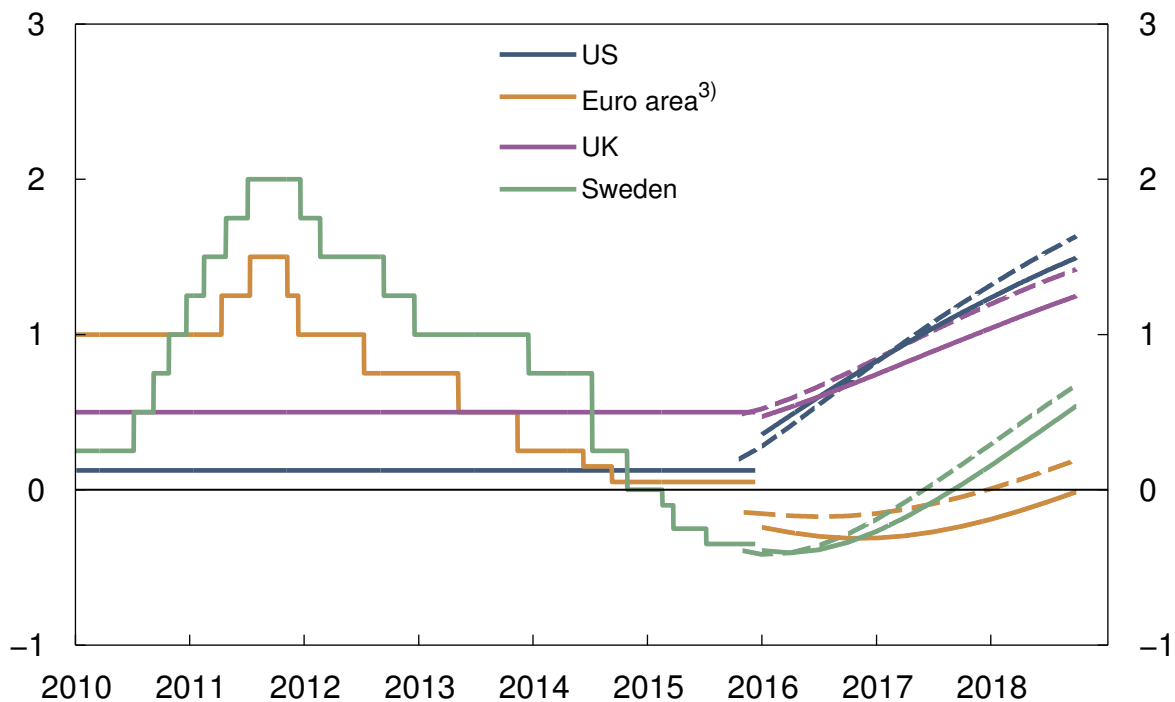
Source: Thomson Reuters.

Chart 1.12 Unit labour costs.
 Four-quarter change. Three-quarter moving average.
 Percent. 2005 Q1 – 2015 Q3¹⁾



1) Latest observation 2015 Q2 for the US, euro area, the UK and Sweden.
 Source: OECD

Chart 1.13 Policy rates and estimated forward rates at 18 September 2015 and 11 December 2015.¹⁾ Percent. 1 January 2010 – 31 December 2018²⁾



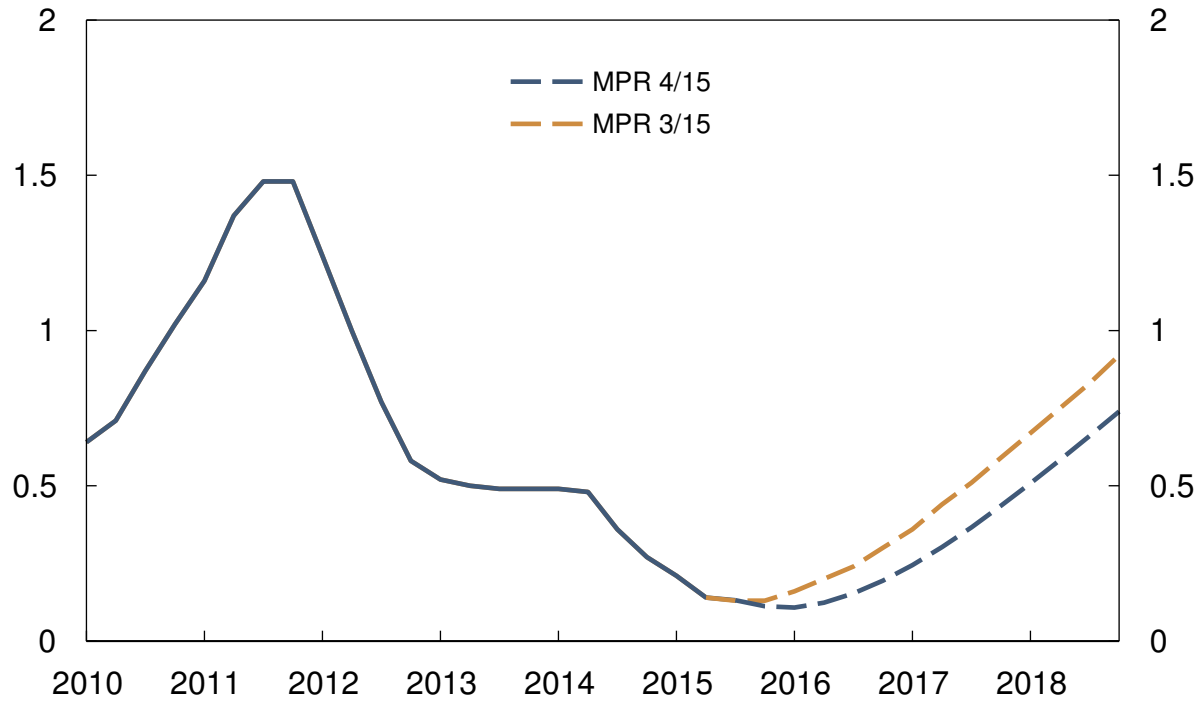
1) Broken lines show estimated forward rates at 18 September 2015. Solid lines show forward rates at 11 December 2015. Forward rates are based on Overnight Index Swap (OIS) rates.

2) Daily data from 1 January 2010 and quarterly data from 2015 Q4.

3) EONIA for the euro area from 2015 Q4.

Sources: Bloomberg, Thomson Reuters and Norges Bank

Chart 1.14 Money market rates for trading partners.¹⁾
Percent. 2010 Q1 – 2018 Q4²⁾

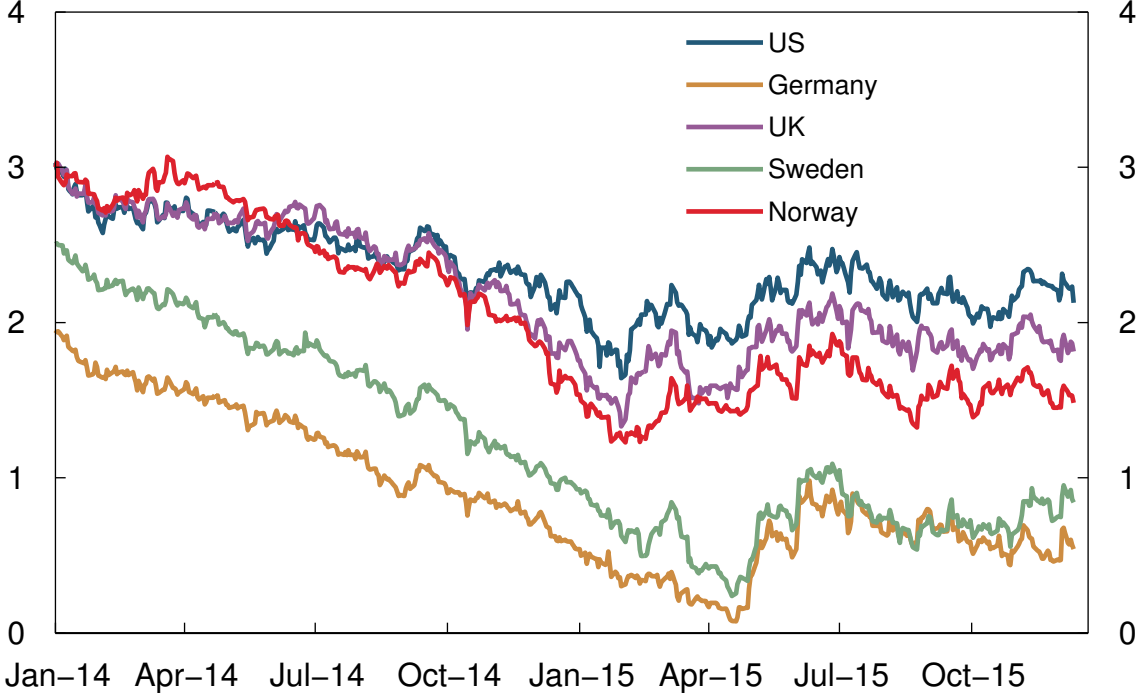


1) For information about the aggregate for trading partner interest rates, see *Norges Bank Papers 2/2015*.

2) Blue and orange broken lines show forward rates for 11 December 2015 and 18 September 2015, respectively.

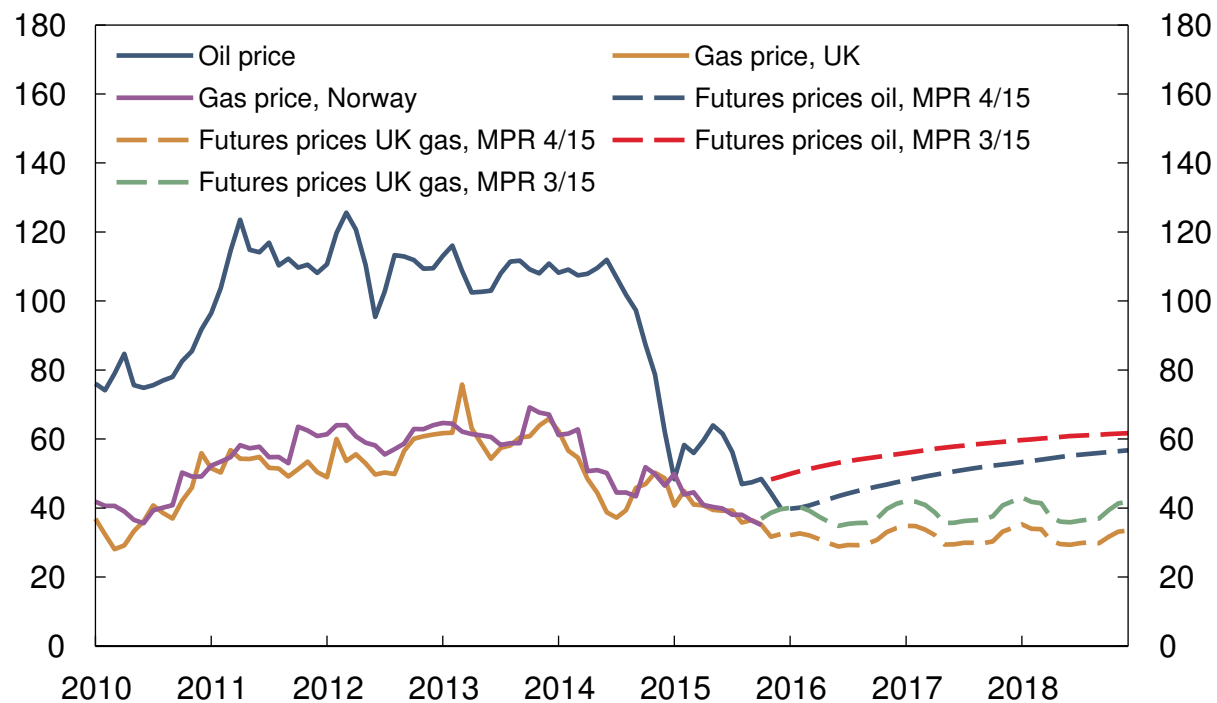
Sources: Thomson Reuters and Norges Bank

Chart 1.15 Yields on 10-year government bonds.
Percent. 1 January 2014 – 11 December 2015



Source: Bloomberg

Chart 1.16 Crude oil and natural gas prices.
 USD/barrel. January 2010 – December 2018^{1) 2)}



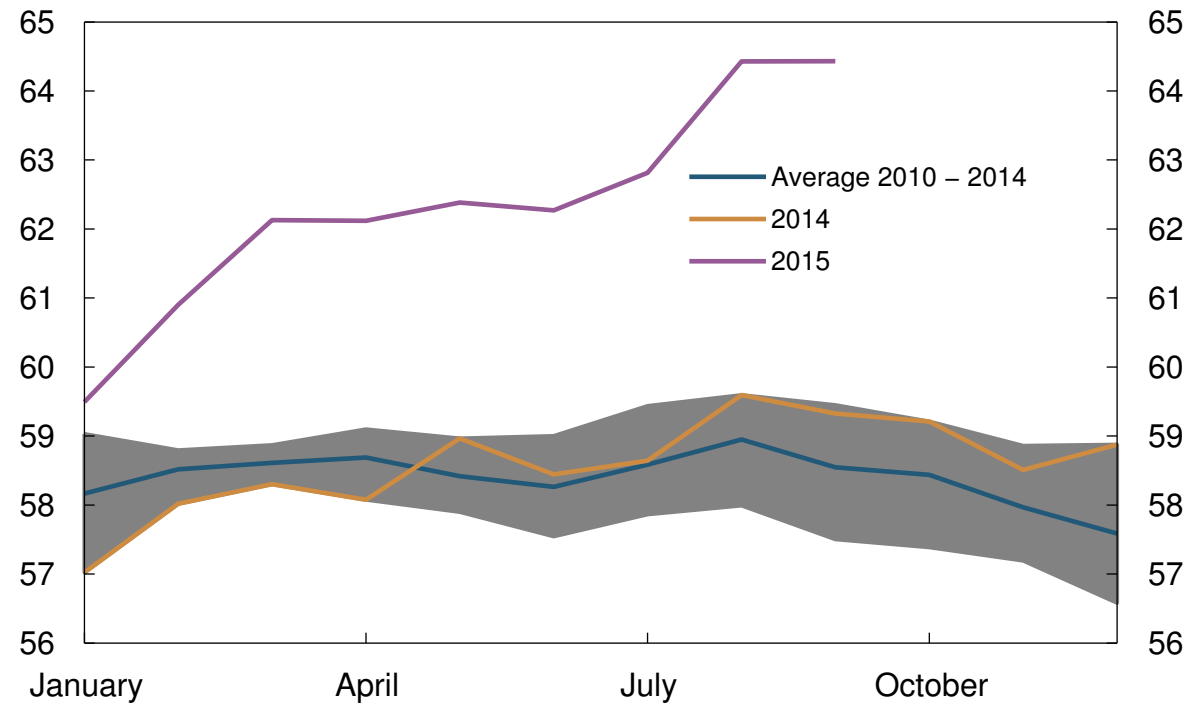
1) For December 2015, the average of daily data is used up to and including 11 December 2015 for the oil price and UK gas price.

2) Futures prices (broken lines) for oil and UK gas are the average of futures prices. in the period 14–18 September 2015 for MPR 3/15 and 7–11 December 2015 for MPR 4/15.

Sources: Thomson Reuters, Statistics Norway and Norges Bank

Chart 1.17 Oil inventories in OECD countries.

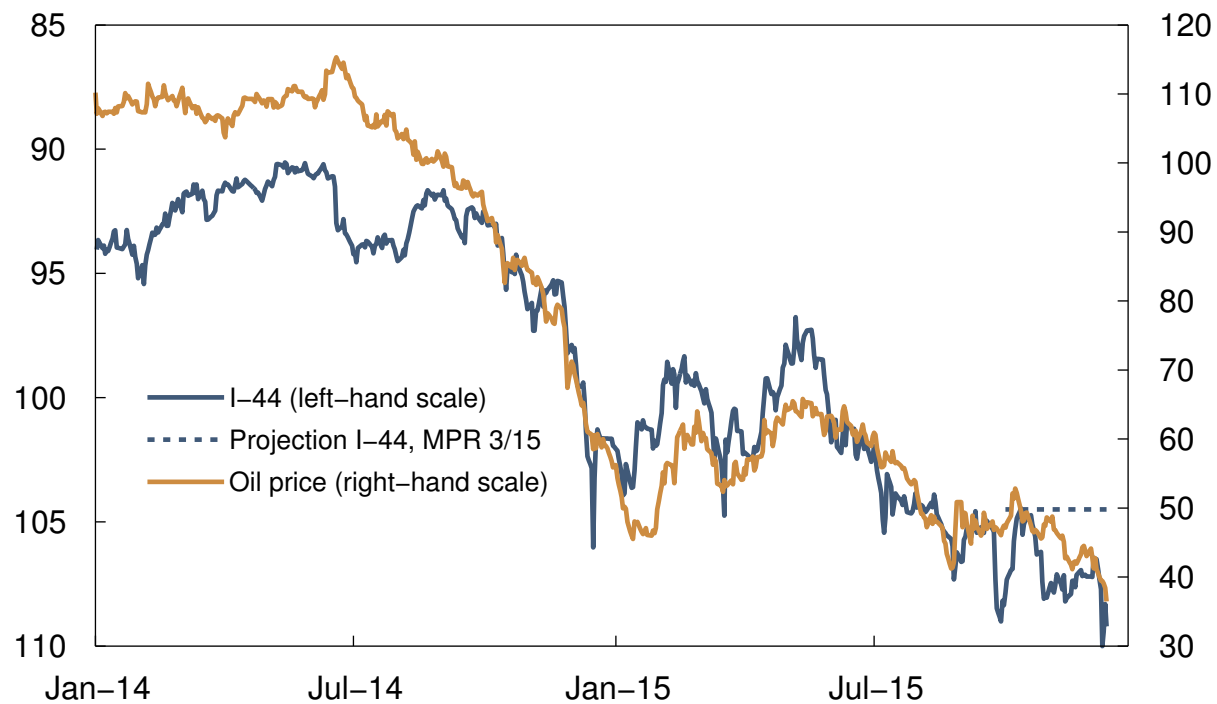
Total oil inventories in number of days of consumption.¹⁾ January 2014 – September 2015



1) Days of consumption is calculated using average demand over the next three months. The grey band shows the interval between the highest and lowest level in the period 2010 - 2014.

Sources: IEA and Norges Bank

Chart 1.18 Oil price¹⁾ and import-weighted exchange rate index (I-44).²⁾
1 January 2014 – 11 December 2015

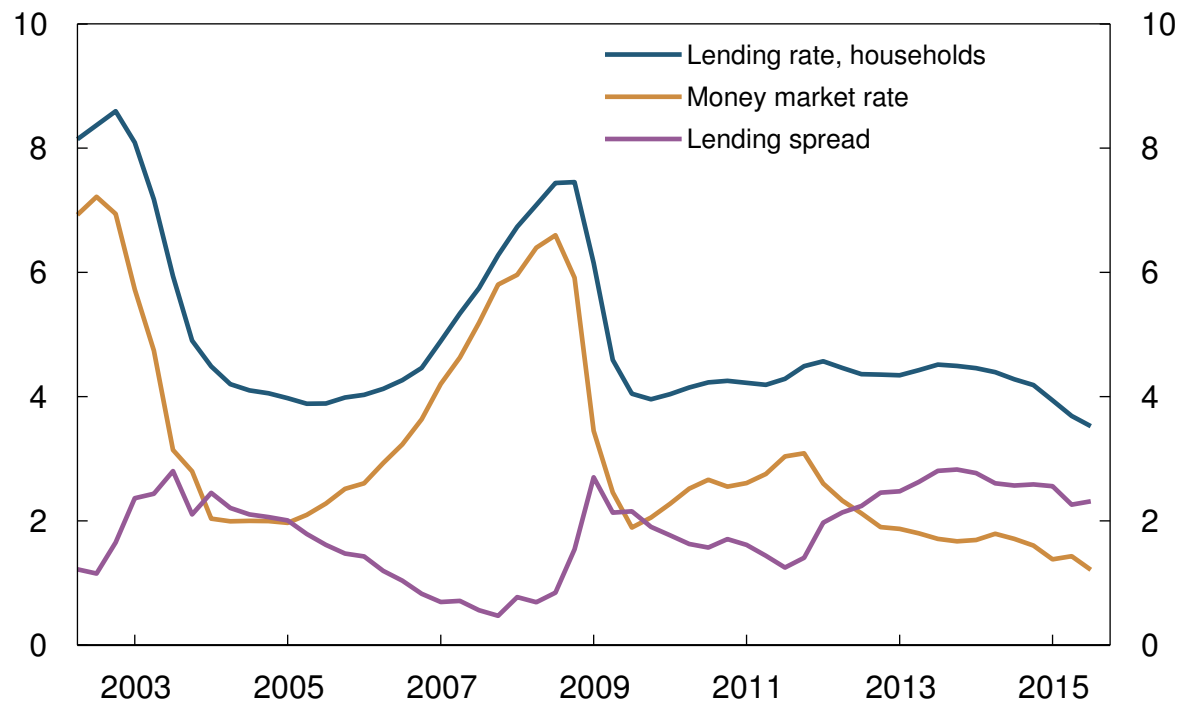


1) USD/barrel.

2) A positive slope denotes a stronger krone exchange rate.

Sources: Thomson Reuters and Norges Bank

Chart 1.19 Lending rate to households¹⁾, money market rate and lending spread.²⁾
 Percent. 2002 Q2 – 2015 Q3



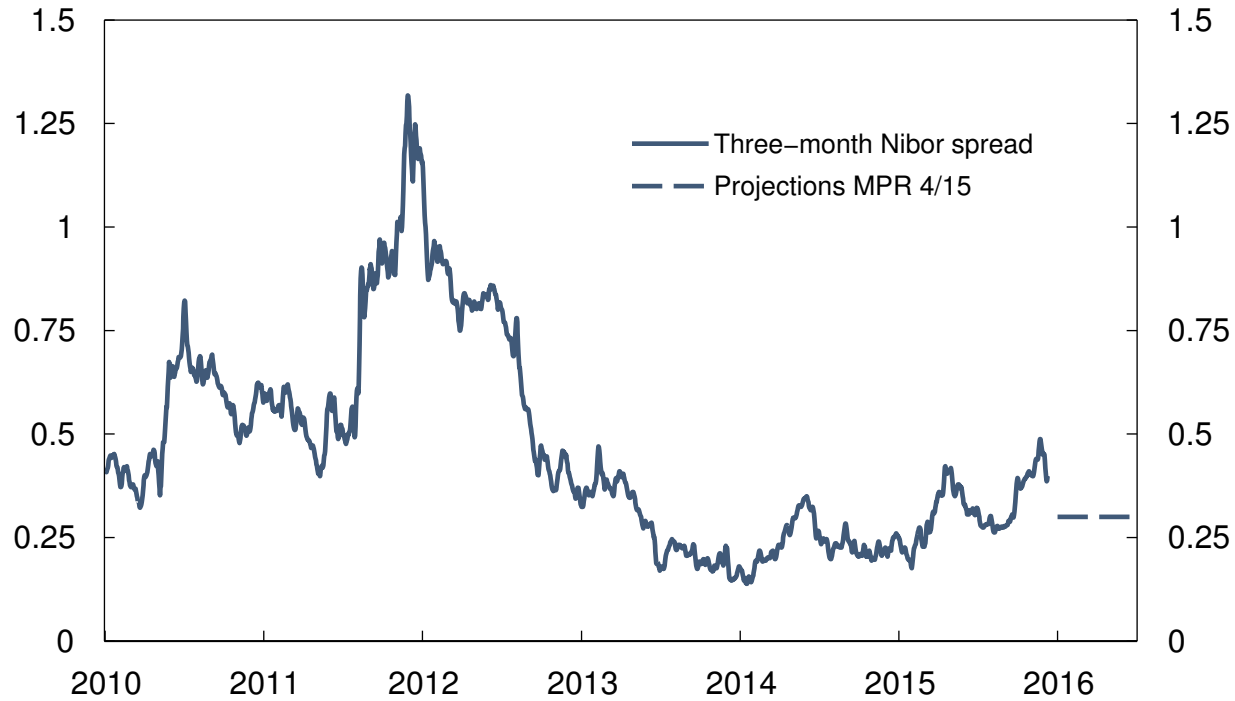
1) Average lending rate for banks and mortgage companies for all lending to households.

2) The rates are calculated by taking the average of the quarter.

Sources: Statistics Norway and Norges Bank

Chart 1.20 Three-month Nibor spread.¹⁾

Five-day moving average. Percentage points. January 2010 – June 2016²⁾

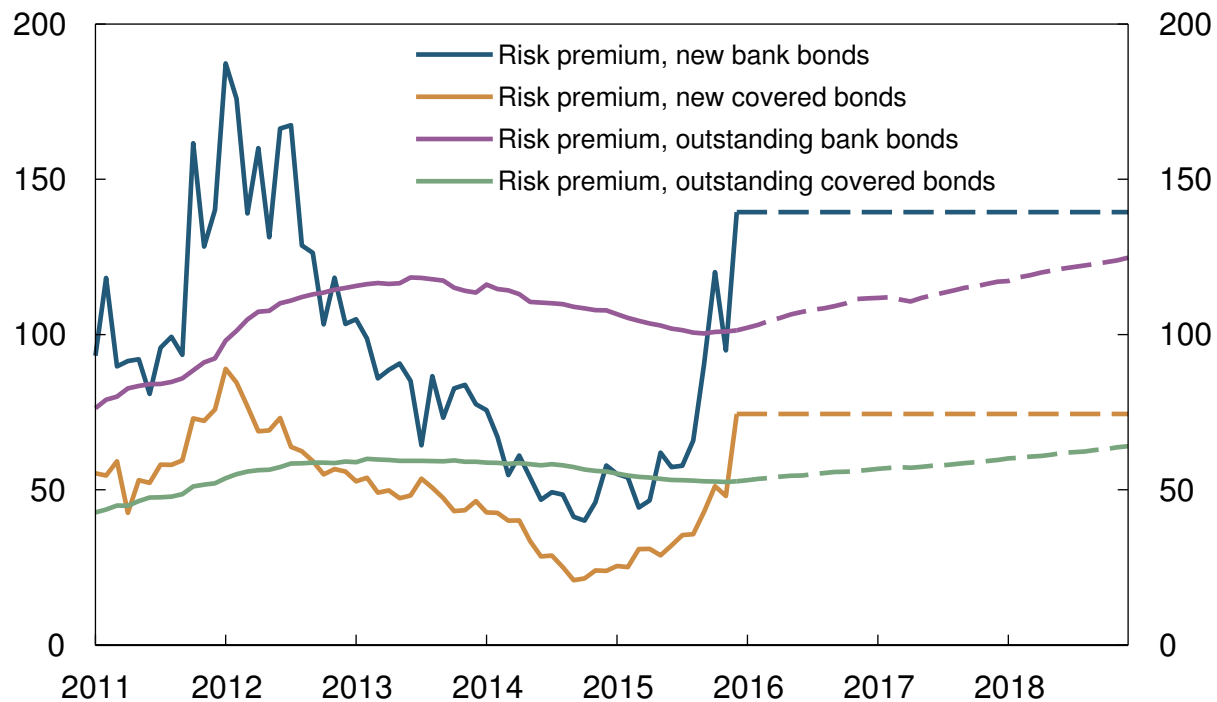


1) Norges Bank estimates on the difference between three-month Nibor and expected key policy rate.

2) Projections from 2016 Q1 (broken line).

Sources: Thomson Reuters and Norges Bank

Chart 1.21 Average risk premiums on new and outstanding bond debt for Norwegian banks. Premiums above three-month Nibor. Basis points. January 2011 – December 2018^{1) 2)}

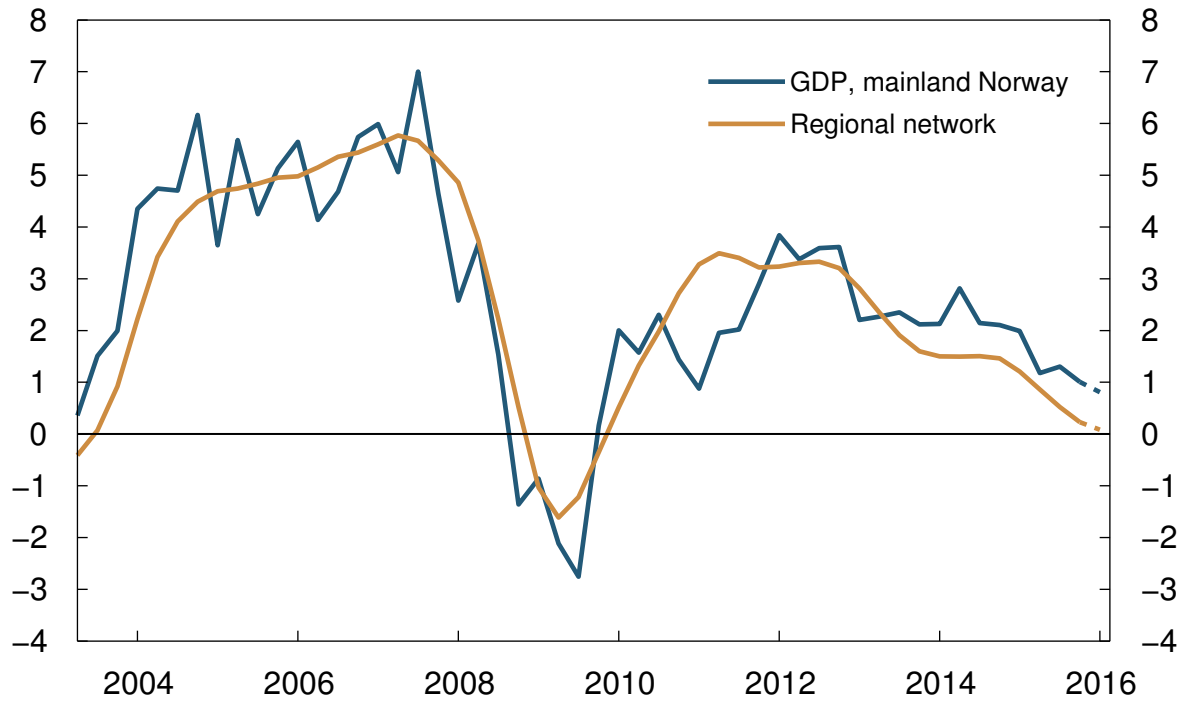


1) Indicative risk premiums up to and including 11 December 2015 are used for December 2015. This level is assumed for new bonds throughout the projection period.

2) Projections from January 2016 (broken lines).

Sources: Stamdata, Bloomberg, DNB Markets and Norges Bank

Chart 1.22 GDP for mainland Norway¹⁾ and Norges Bank's regional network's indicator of output growth²⁾.
Four-quarter change. Percent. 2003 Q2 – 2016 Q1

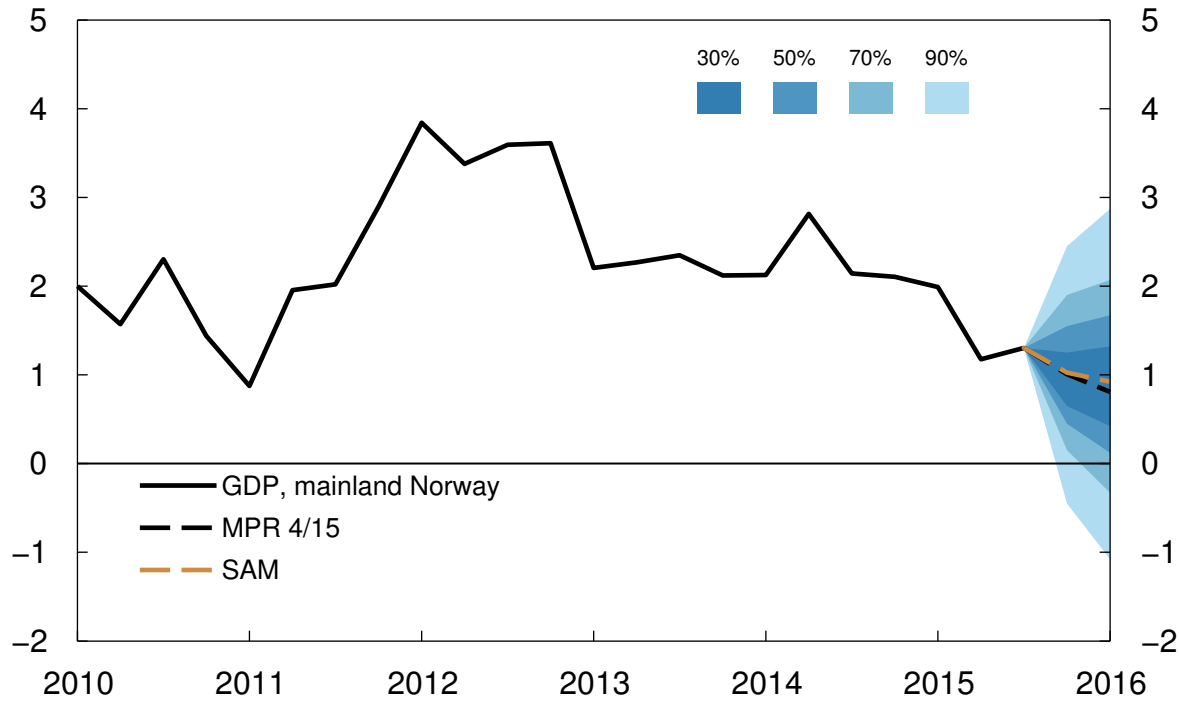


1) Projections for 2015 Q4 – 2016 Q1 (broken line).

2) Converted to quarterly series.

Sources: Statistics Norway and Norges Bank

Chart 1.23 GDP for mainland Norway. Actual figures, baseline scenario and projections from SAM¹⁾ with fan chart.
 Four-quarter change. Seasonally adjusted. Volume. Percent. 2010 Q1 – 2016 Q1²⁾

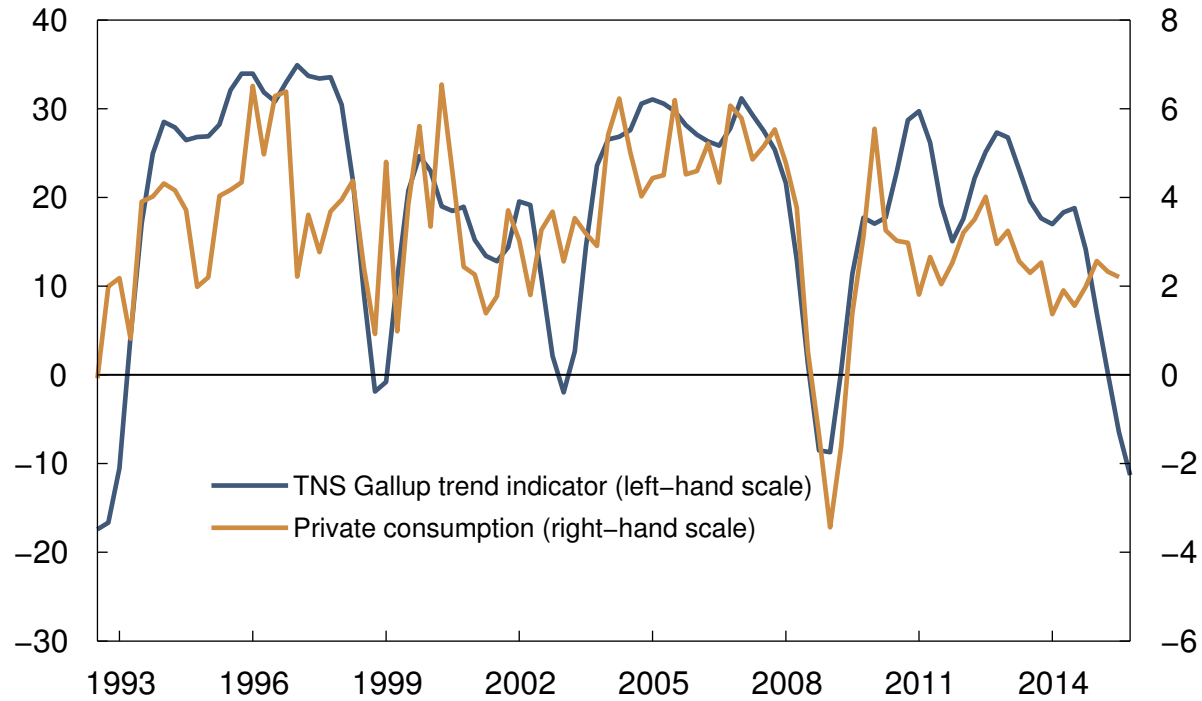


1) System for Averaging short-term Models.
 2) Projections for 2015 Q4 – 2016 Q1 (broken lines).
 Sources: Statistics Norway and Norges Bank

Chart 1.24 Consumer confidence and private consumption.

Net values for consumer confidence.¹⁾

Four-quarter change in private consumption. Percent. 1992 Q3 – 2015 Q4²⁾

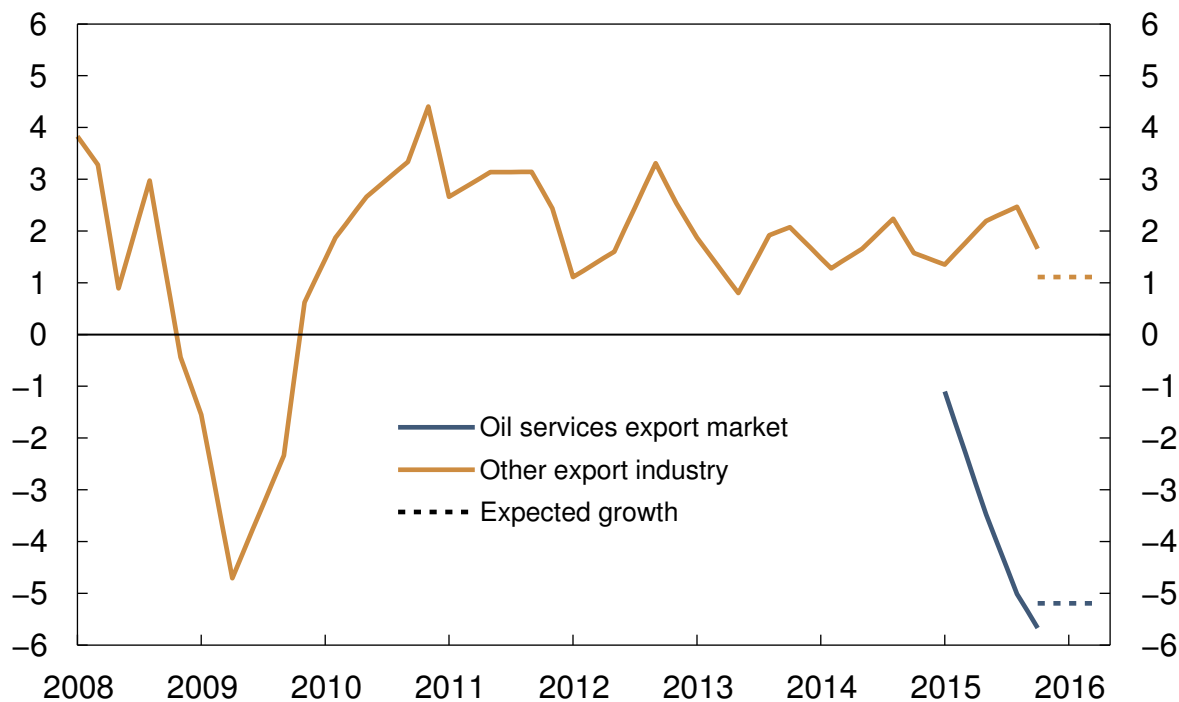


1) TNS Gallup Expectations barometer, adjusted trend indicator.

2) Last observation 2015 Q3 for private consumption.

Sources: TNS Gallup, Opinion and Norges Bank

Chart 1.25 Norges Bank's regional network indicator of output growth past three months and expected output growth next six months.¹⁾
 Percent.²⁾ Percent. January 2008 – April 2016³⁾



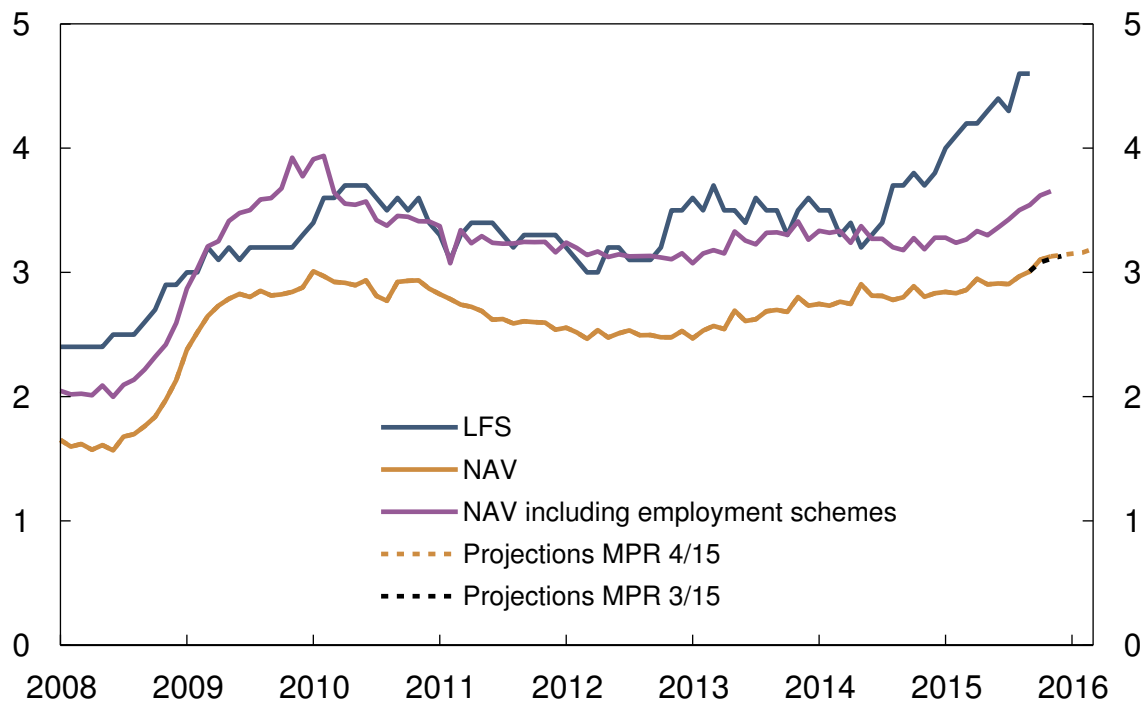
1) New sector classification results in a break in the series for export industry from 2015.

2) The network uses an index from -5 to +5, where -5 indicates that production is expected to decline by 10 percent or more annualised. Several oil service enterprises expect production to decline by more than 10 percent in the next six months. This is not reflected in the chart due to the limitations of the index.

3) Reported growth to October 2015. Expected growth for November 2015 – April 2016.

Source: Norges Bank

Chart 1.26 Unemployment rate. LFS¹⁾ and NAV²⁾.
 Seasonally adjusted. Percent. January 2008 – March 2016³⁾ 4)



1) Labour Force Survey.

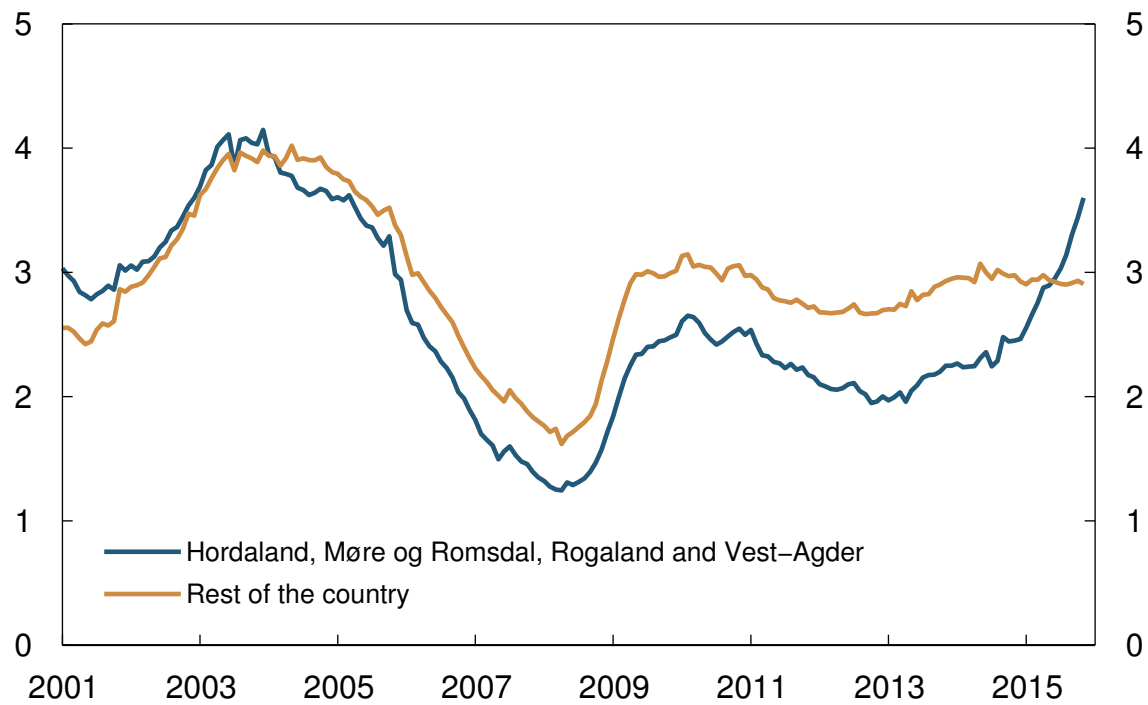
2) Norwegian Labour and Welfare Administration.

3) Projections for December 2015 – March 2016 (broken lines).

4) Latest observation September 2015 for LFS.

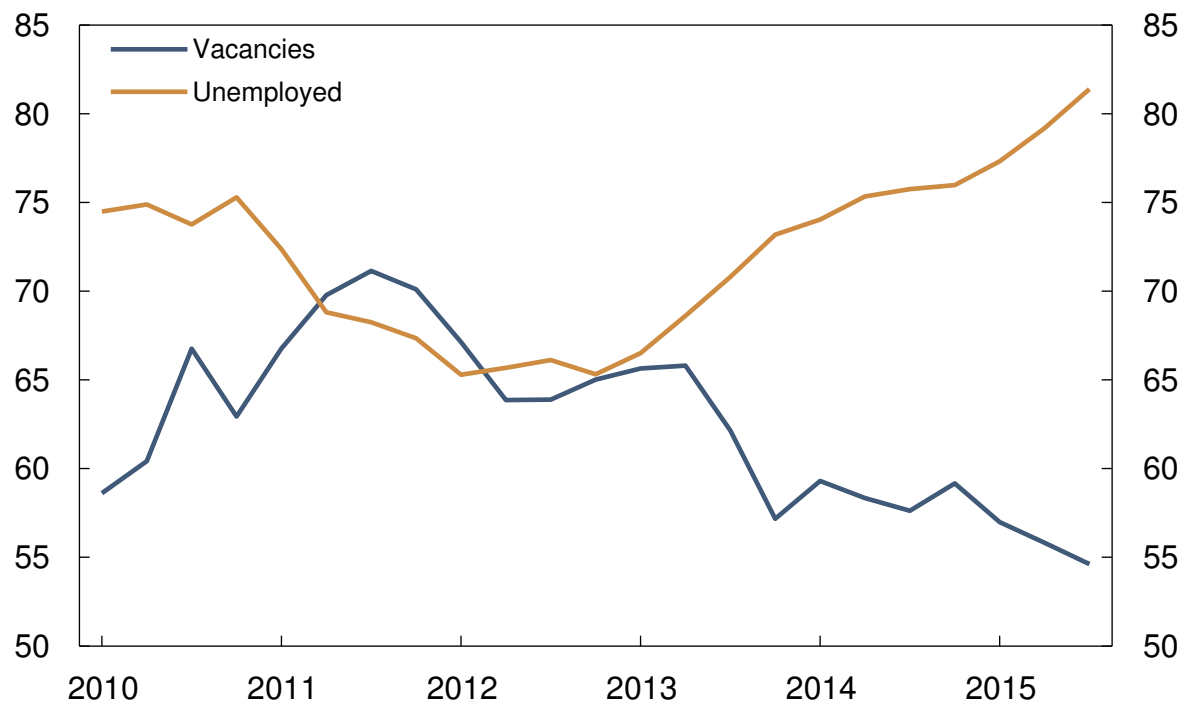
Sources: Statistics Norway, NAV and Norges Bank

Chart 1.27 Registered unemployment by county.
Share of labour force. Seasonally adjusted. Percent. January 2001 – November 2015



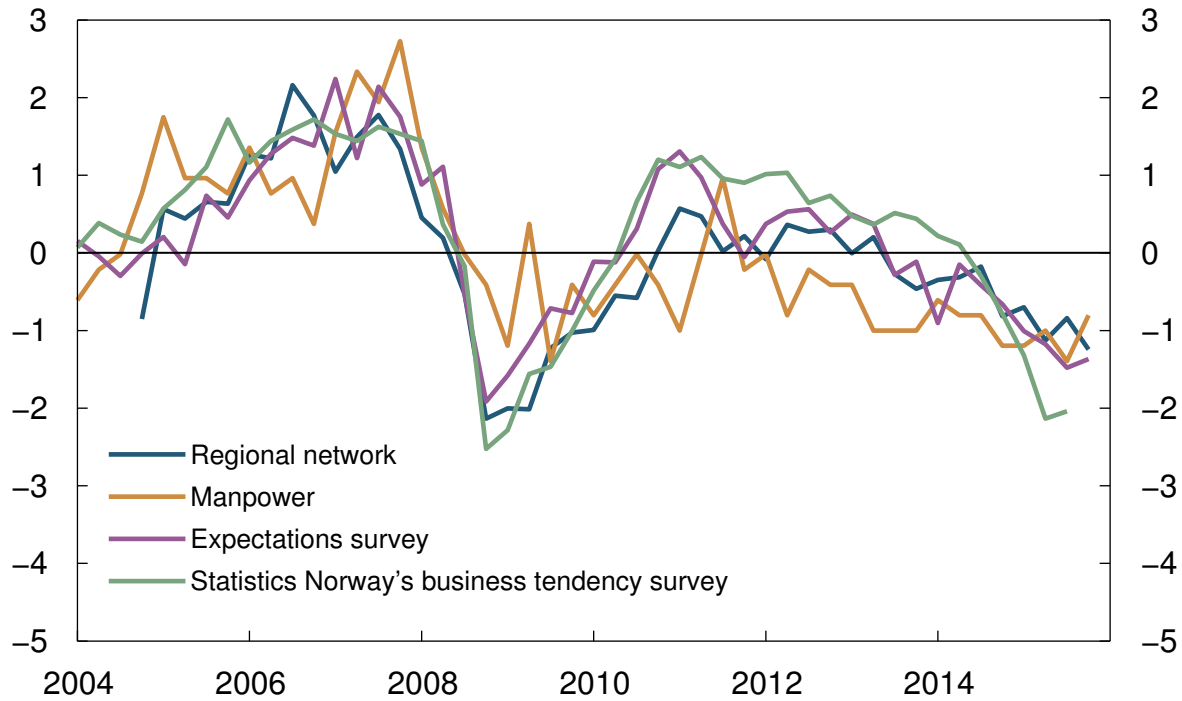
Sources: NAV and Norges Bank

Chart 1.28 Number of vacancies and number of unemployed¹⁾.
In 1000s of persons. Seasonally adjusted. 2010 Q1 – 2015 Q3



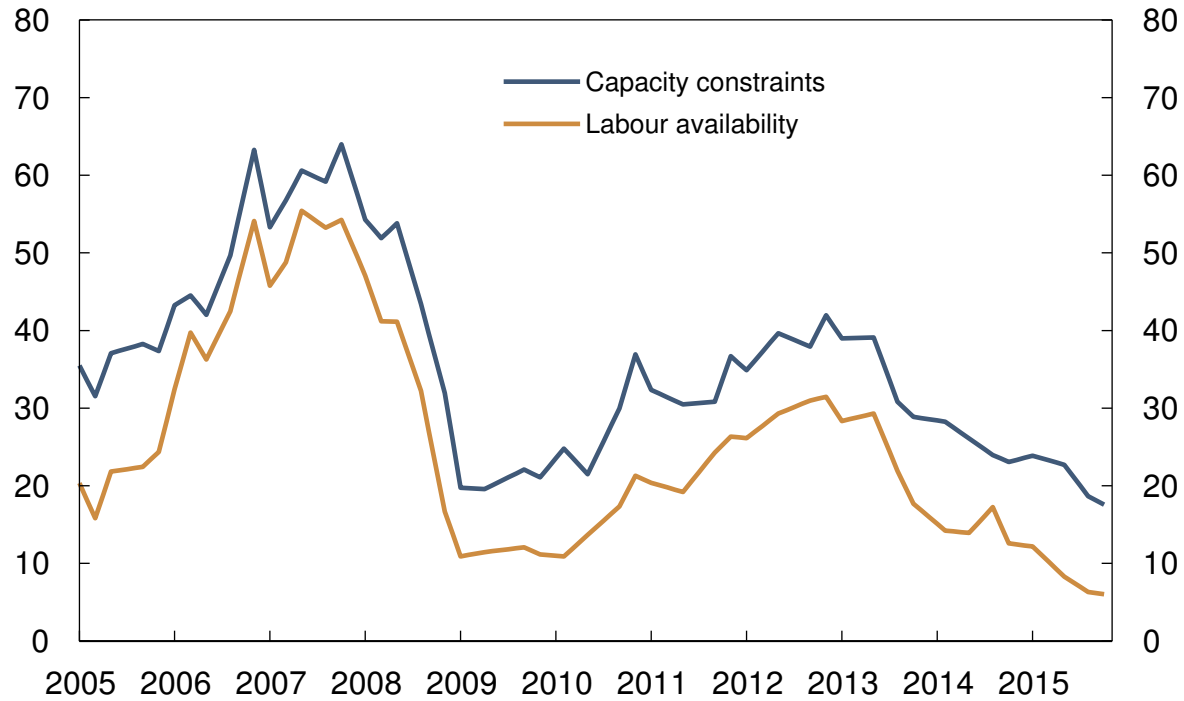
1) Registered unemployed.
Sources: Statistics Norway, NAV and Norges Bank

Chart 1.29 Four indicators of expected employment.¹⁾
 2004 Q1 – 2015 Q4²⁾



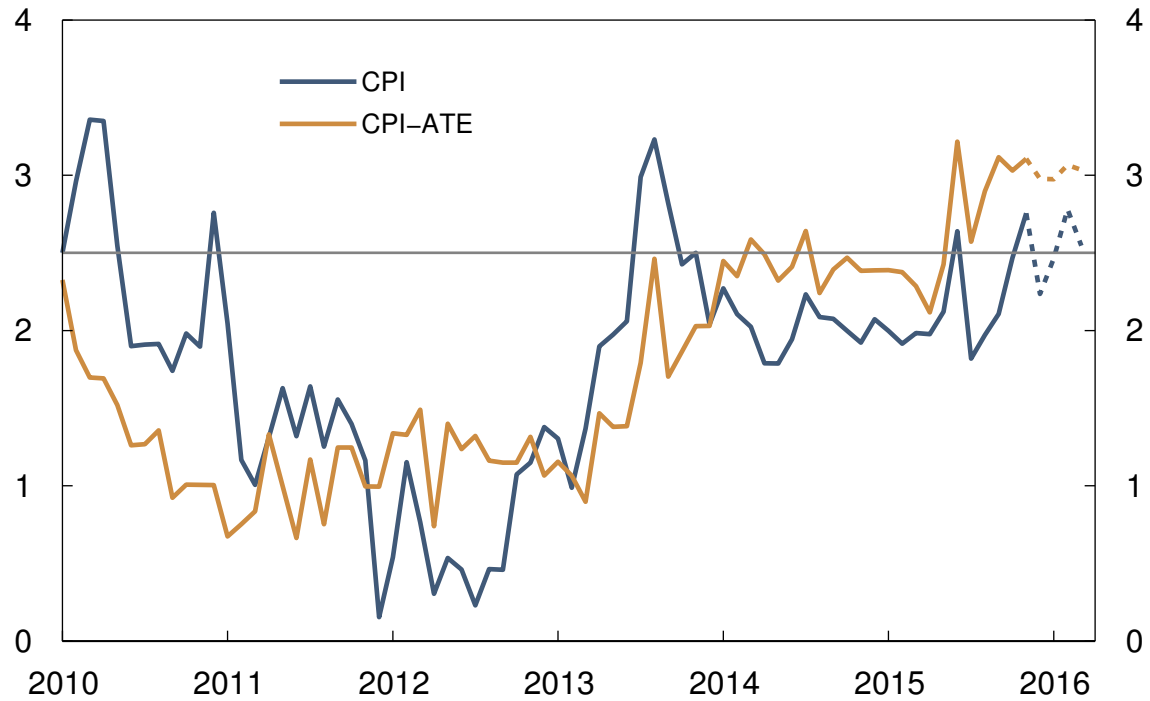
1) Number of standard deviations from the mean for each indicator.
 2) Last observation 2015 Q3 for Statistics Norway's business tendency survey.
 Sources: Statistics Norway, Manpower, Epinion and Norges Bank

Chart 1.30 Capacity constraints and labour availability as reported by Norges Bank's regional network.¹⁾ Percent. January 2005 – October 2015



1) Share of contacts that will have some or considerable problems accommodating an increase in demand and the share of contacts where production is constrained by labour supply.
Source: Norges Bank

Chart 1.31 CPI and CPI-ATE¹⁾.
Twelve-month change. Percent. January 2010 – March 2016²⁾

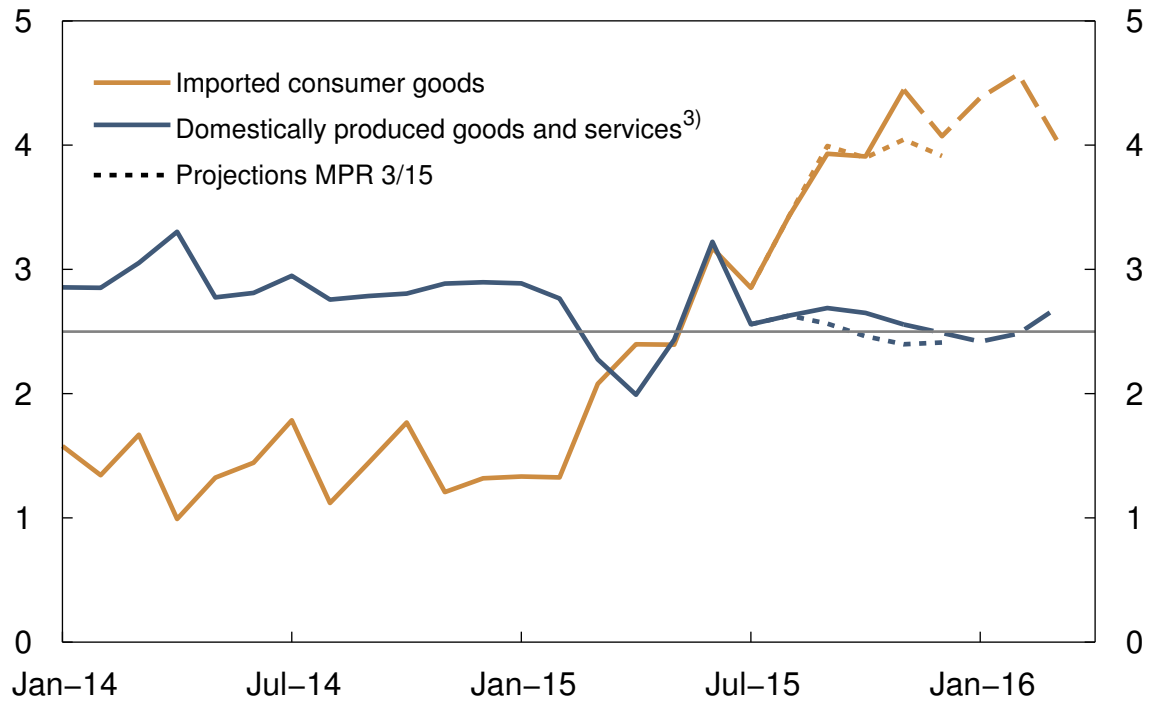


1) CPI adjusted for tax changes and excluding energy products.

2) Projections for December 2015 – March 2016 (broken lines).

Sources: Statistics Norway and Norges Bank

Chart 1.32 CPI-ATE¹⁾ by supplier sector.
 Twelve-month change. Percent. January 2014 – March 2016²⁾



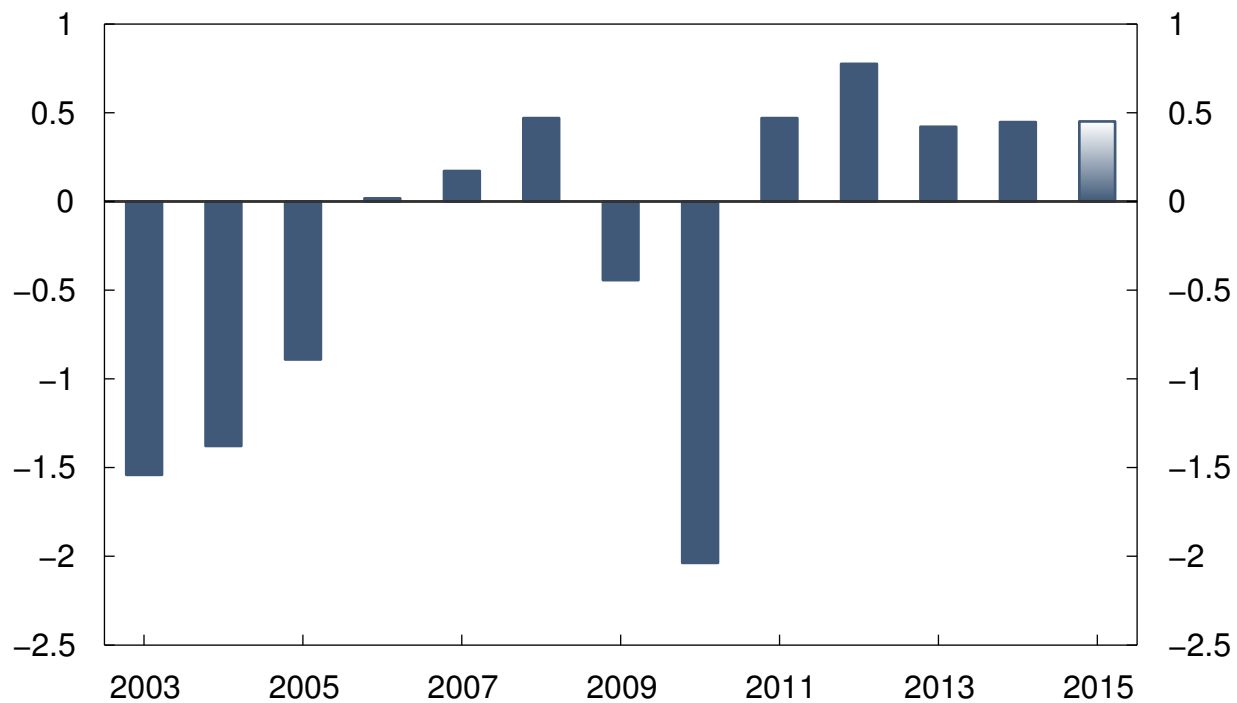
1) CPI adjusted for tax changes and excluding energy products.

2) Projections for December 2015 – March 2016 (broken lines).

3) Norges Bank's estimates.

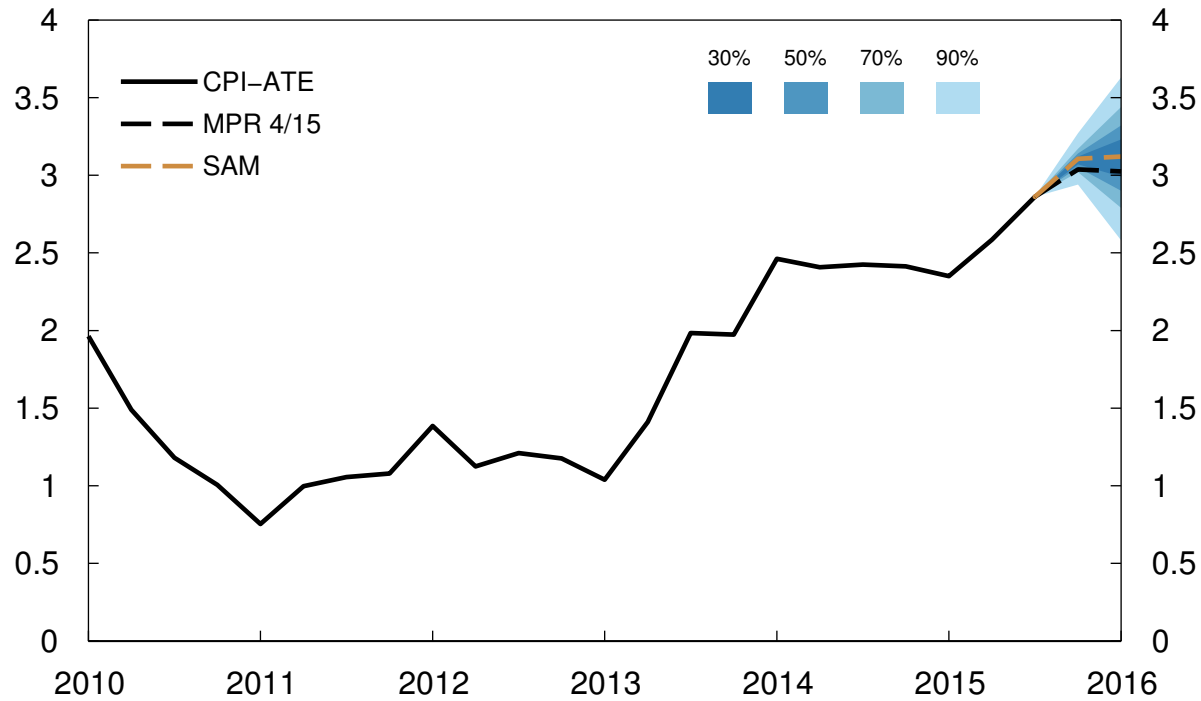
Sources: Statistics Norway and Norges Bank

Chart 1.33 Indicator of external price impulses to imported consumer goods measured in foreign currency. Annual change. Percent. 2003 – 2015¹⁾



1) Projections for 2015.
Source: Norges Bank

Chart 1.34 CPI-ATE.¹⁾ Actual figures, baseline scenario and projections from SAM²⁾ with fan chart. Four-quarter change. Percent. 2010 Q1 – 2016 Q1³⁾



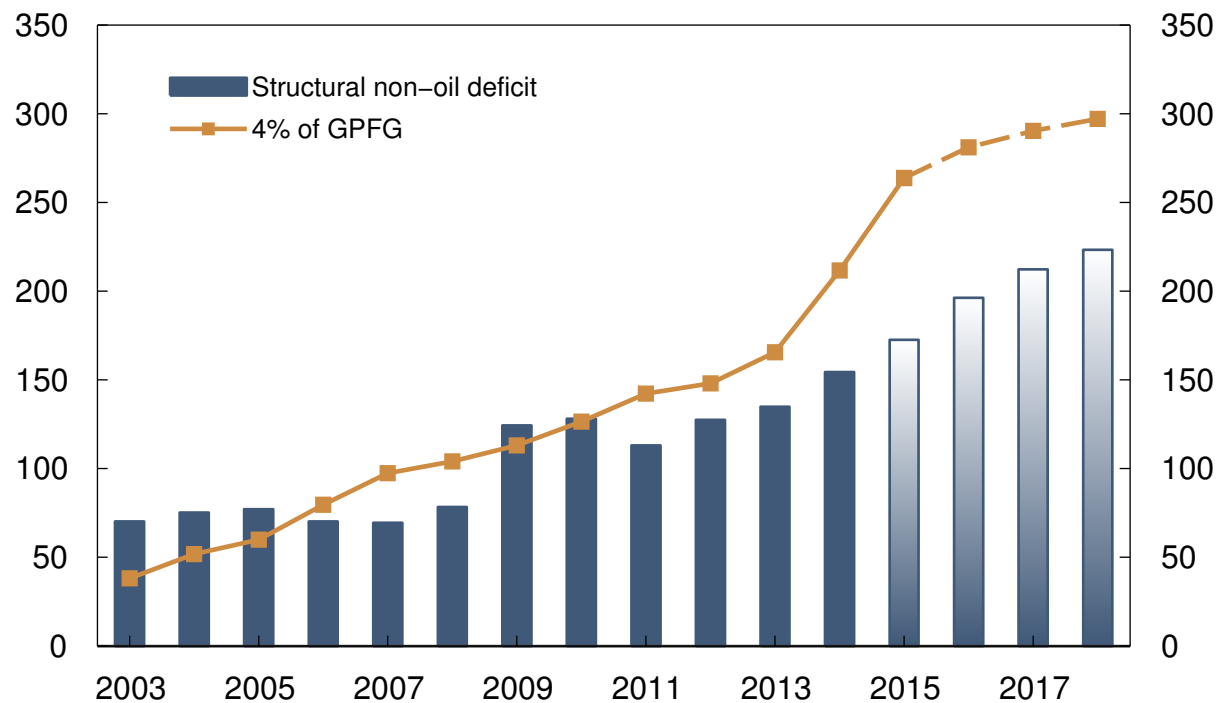
1) CPI adjusted for tax changes and excluding energy products.

2) System for Averaging short-term Models.

3) Projections for 2015 Q4 – 2016 Q1 (broken lines).

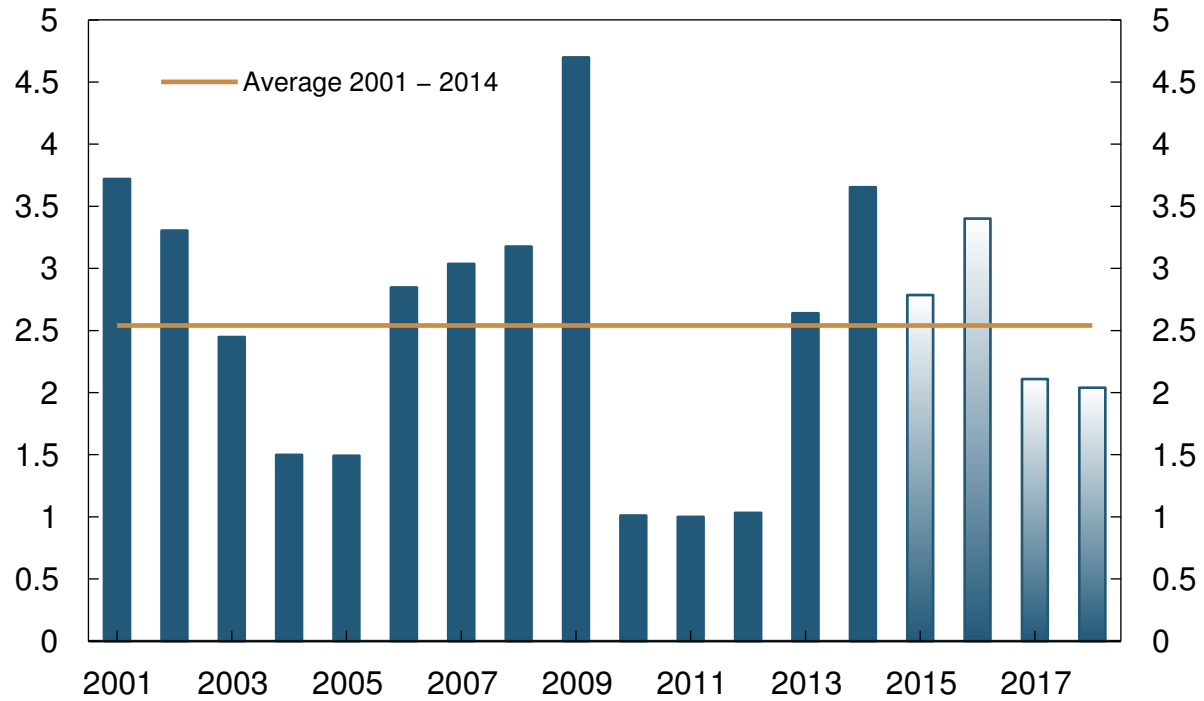
Sources: Statistics Norway and Norges Bank

Chart 1.35 Structural non-oil deficit and 4% of the Government Pension Fund Global (GPFG). Constant 2016 prices. In billions of NOK. 2003 – 2018¹⁾



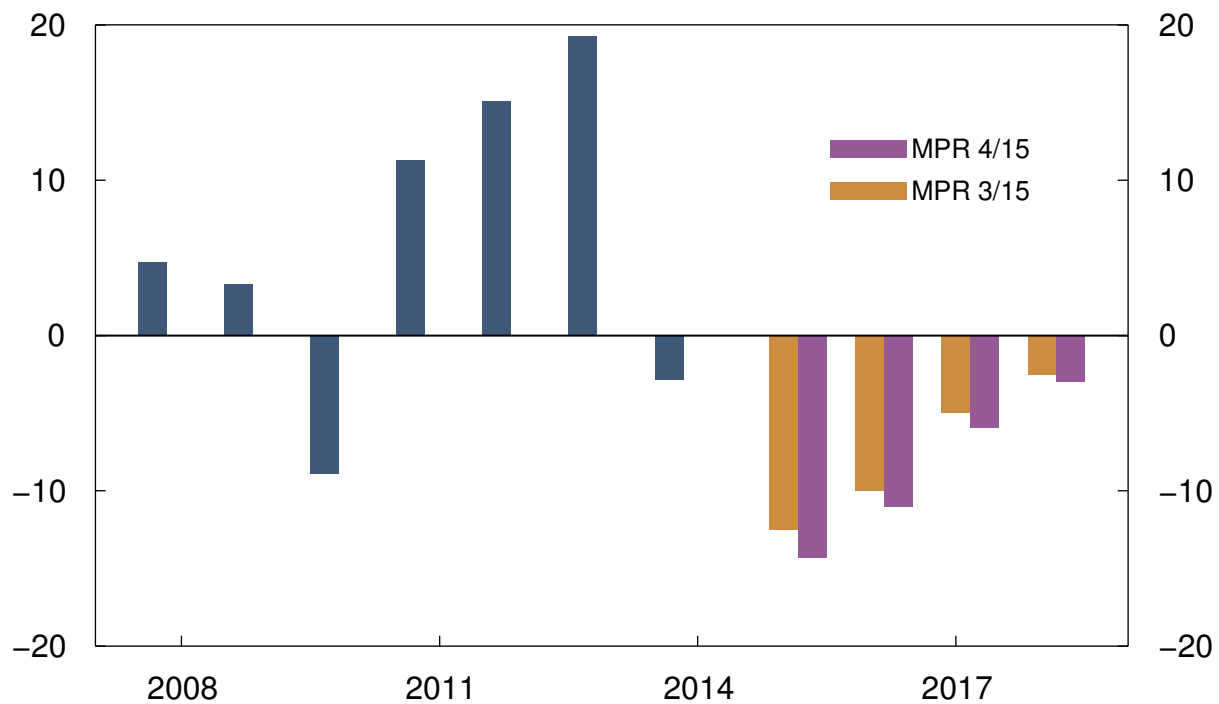
1) Projections for 2015 – 2018.
Sources: Ministry of Finance and Norges Bank

Chart 1.36 Public sector demand.
Volume. Annual change. Percent. 2001 – 2018



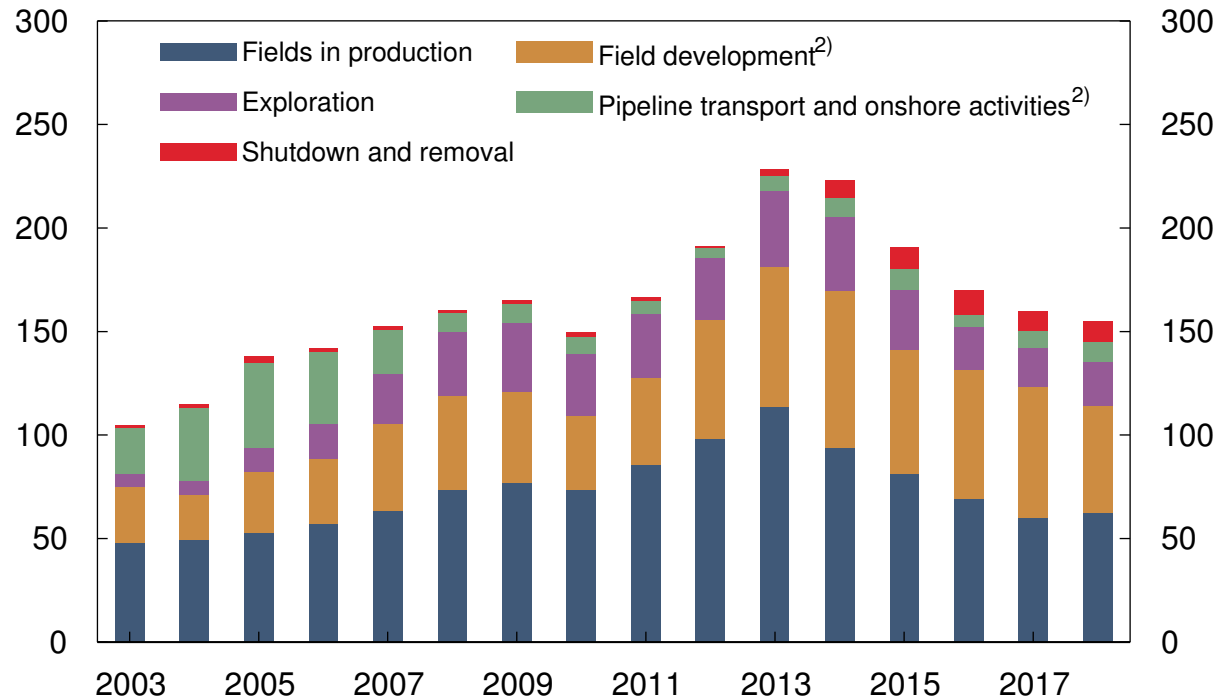
1) Projections for 2015 – 2018.
Sources: Statistics Norway and Norges Bank

Chart 1.37 Petroleum investment.
Volume. Annual change. Percent. 2008 – 2018¹⁾



1) Projections for 2015 – 2018.
Sources: Statistics Norway and Norges Bank

Chart 1.38 Petroleum investment.
 Constant 2015 prices. In billions of NOK. 2003 – 2018 ¹⁾

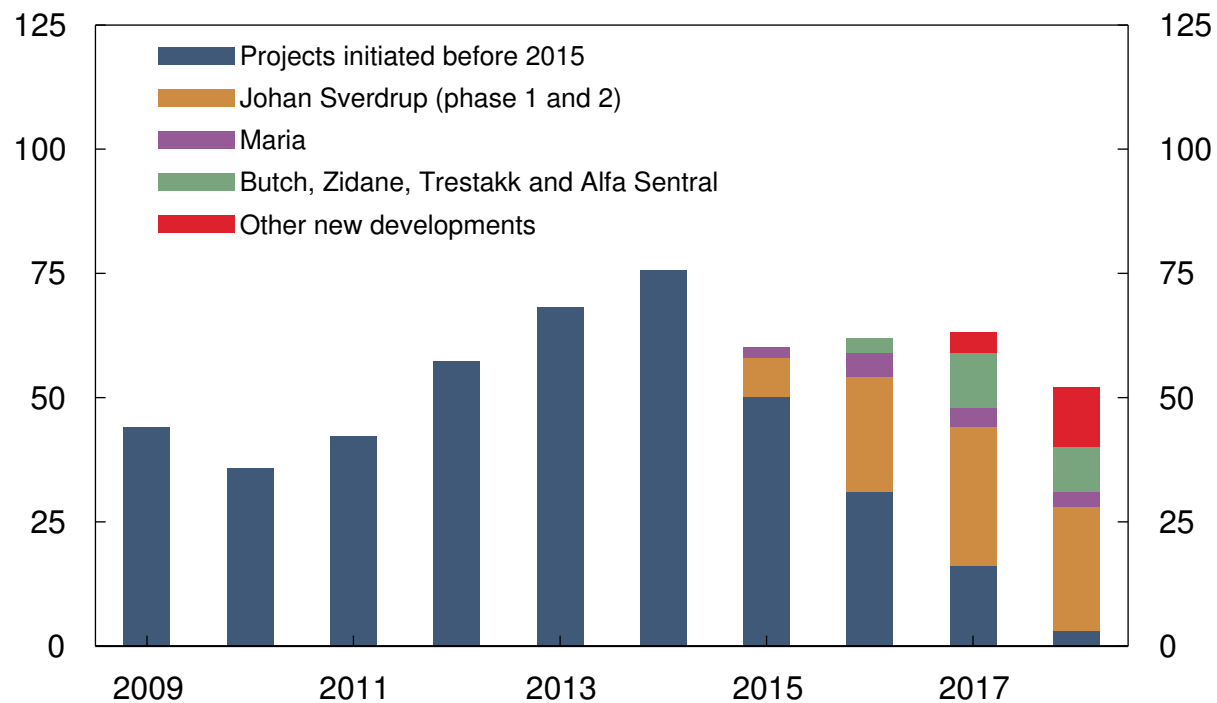


1) Projections for 2015 – 2018. Value figures for 2003 – 2014 from the investment intentions survey by Statistics Norway are deflated by the price index for petroleum investment in the national accounts. The index is projected to increase by 5% from 2014 to 2015 and 0% from 2015 to 2016.

2) Expenses for pipelines for the Johan Sverdrup development are included in the estimates for pipeline transport and onshore activities.

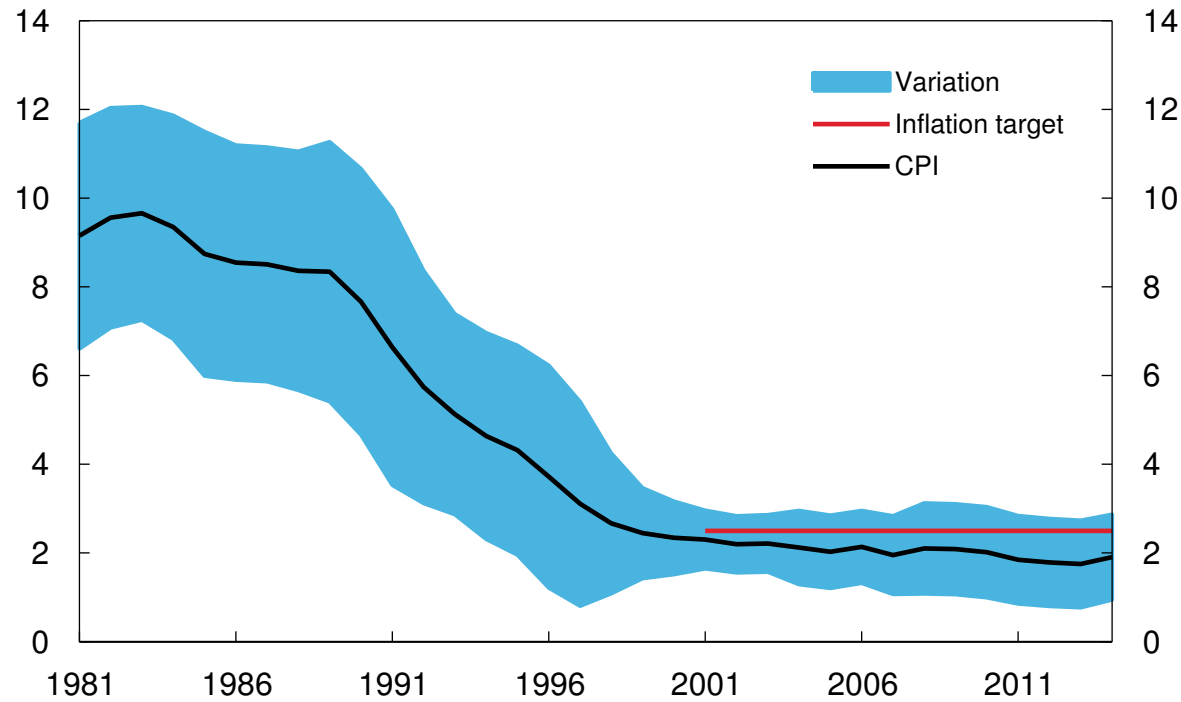
Sources: Statistics Norway and Norges Bank

Chart 1.39 Field development.
 Constant 2015 prices. In billions of NOK. 2009 – 2018 ¹⁾



1) Projections for 2015 – 2018. Value figures for 2009 – 2014 from the investment intentions survey by Statistics Norway are deflated by the price index for petroleum investment in the national accounts. The projections are based on the investment intentions survey for 2015 Q4, projections from the Norwegian Petroleum Directorate, reports to the Storting relating to projects commenced prior to 2015, impact assessments of new projects and current information on deferrals and assumed project commencements. Expenses for pipelines for the Johan Sverdrup development are included in the estimates for pipeline transport and onshore activities. Sources: Statistics Norway and Norges Bank

Chart 2.1 10-year moving average¹⁾ and variation²⁾ in the CPI.
Annual change. Percent. 1981 – 2014

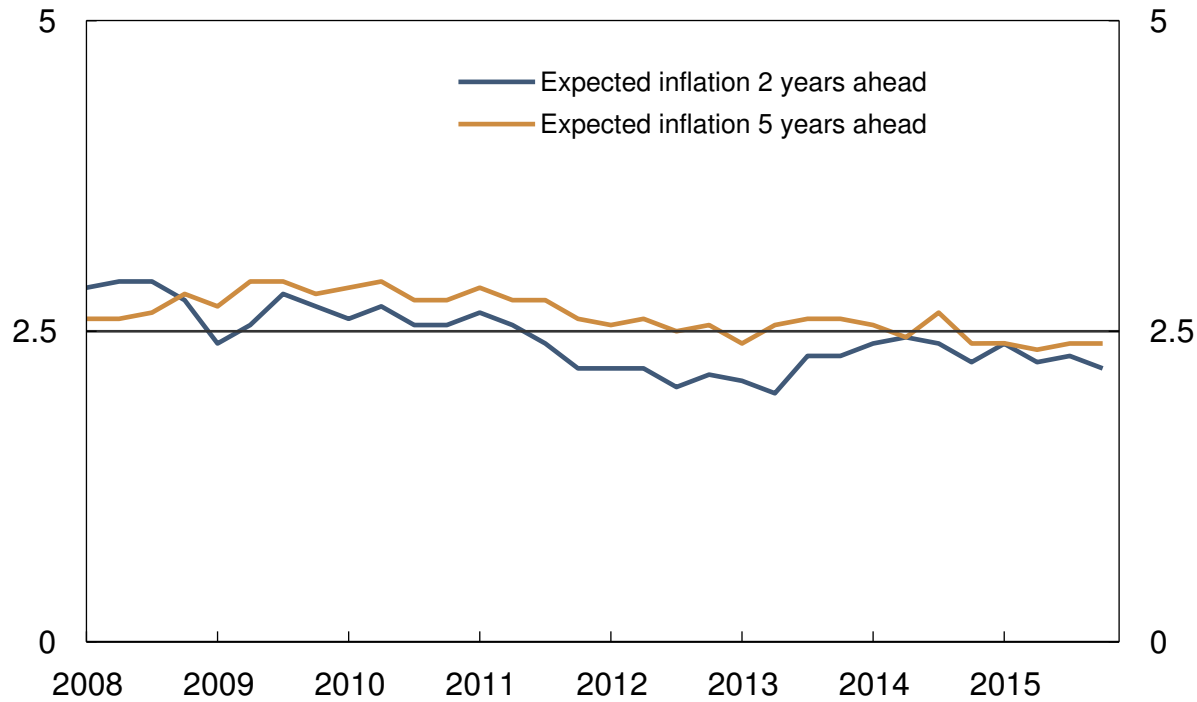


1) The moving average is calculated 10 years back.

2) The band around the CPI is the variation in the CPI in the average period, measured by +/- one standard deviation.

Sources: Statistics Norway and Norges Bank

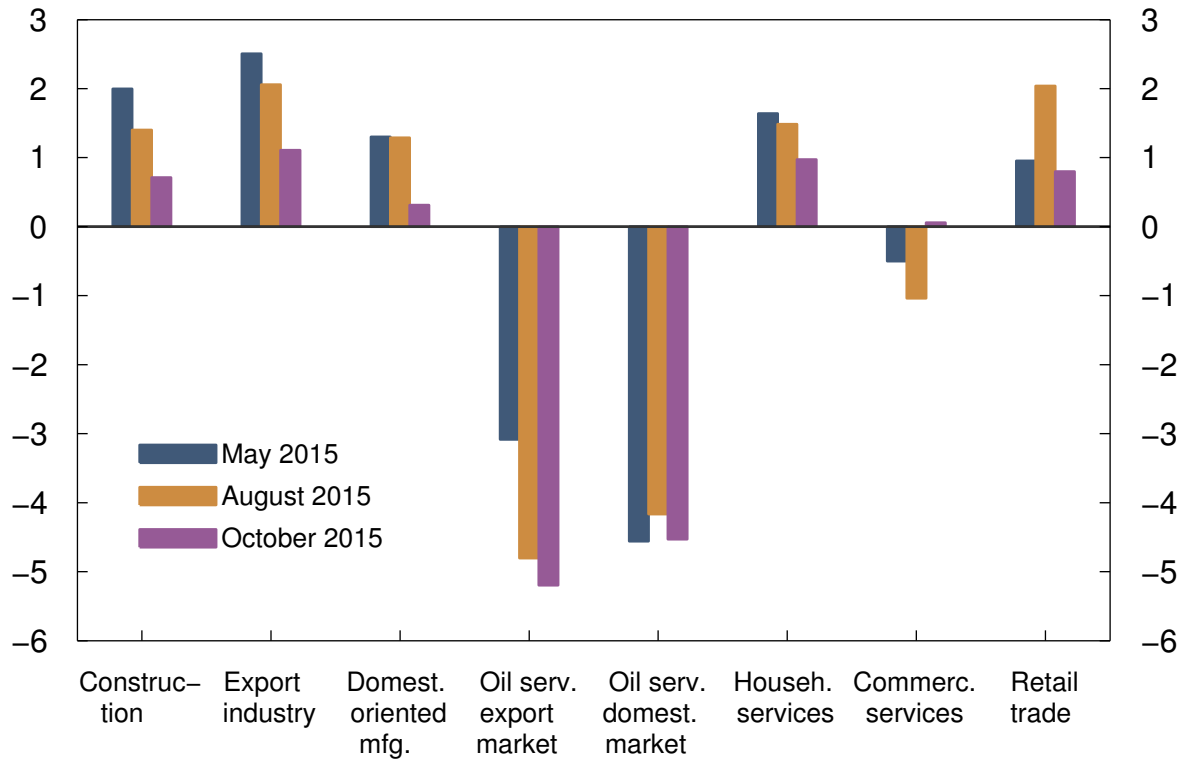
Chart 2.2 Expected consumer price inflation 2 and 5 years ahead.¹⁾
Percent. 2008 Q1 – 2015 Q4



1) Average of expectations of employer/employee organisations and economists in the financial industry and academia.

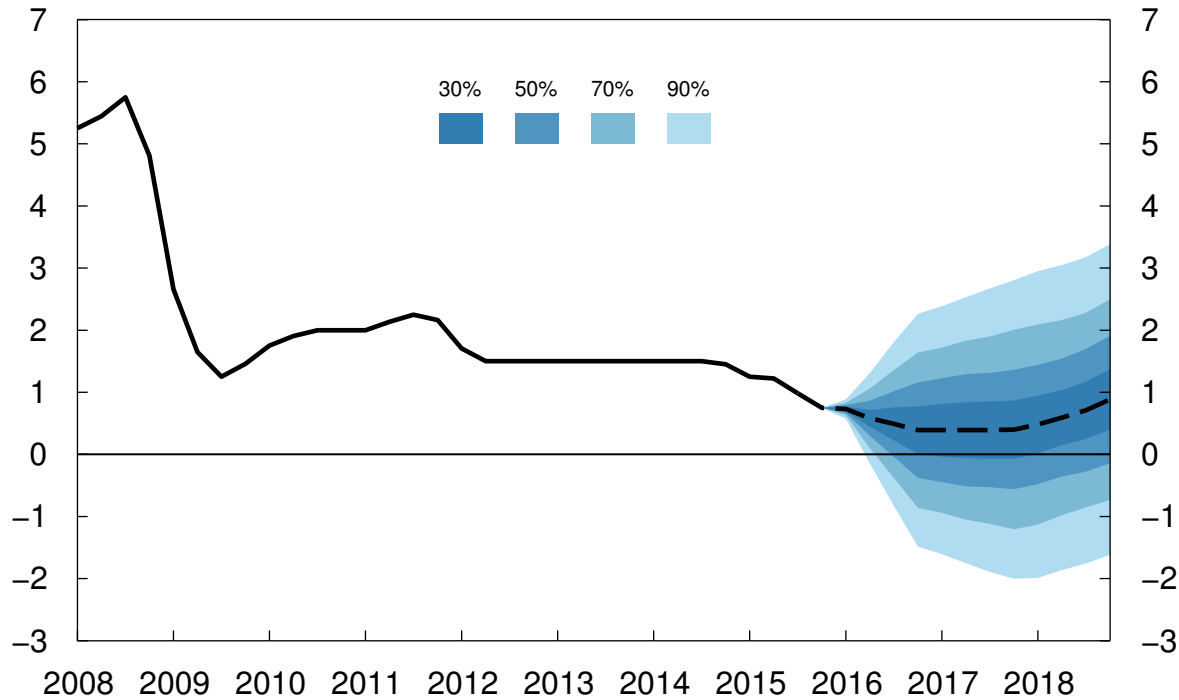
Sources: Epinion, Opinion, TNS Gallup and Norges Bank

Chart 2.3 Expected output growth next six months in Norges Bank's regional network.¹⁾ Annualised. Percent



1) The network uses an index from -5 to +5, where -5 indicates that production is expected to decline by 10% or more annualised. Several oil service enterprises expect production to decline by more than 10% in the next six months. This is not reflected in the chart due to the limitations of the index.
Source: Norges Bank

Chart 2.4a Projected key policy rate in the baseline scenario with fan chart.¹⁾
Percent. 2008 Q1 – 2018 Q4²⁾

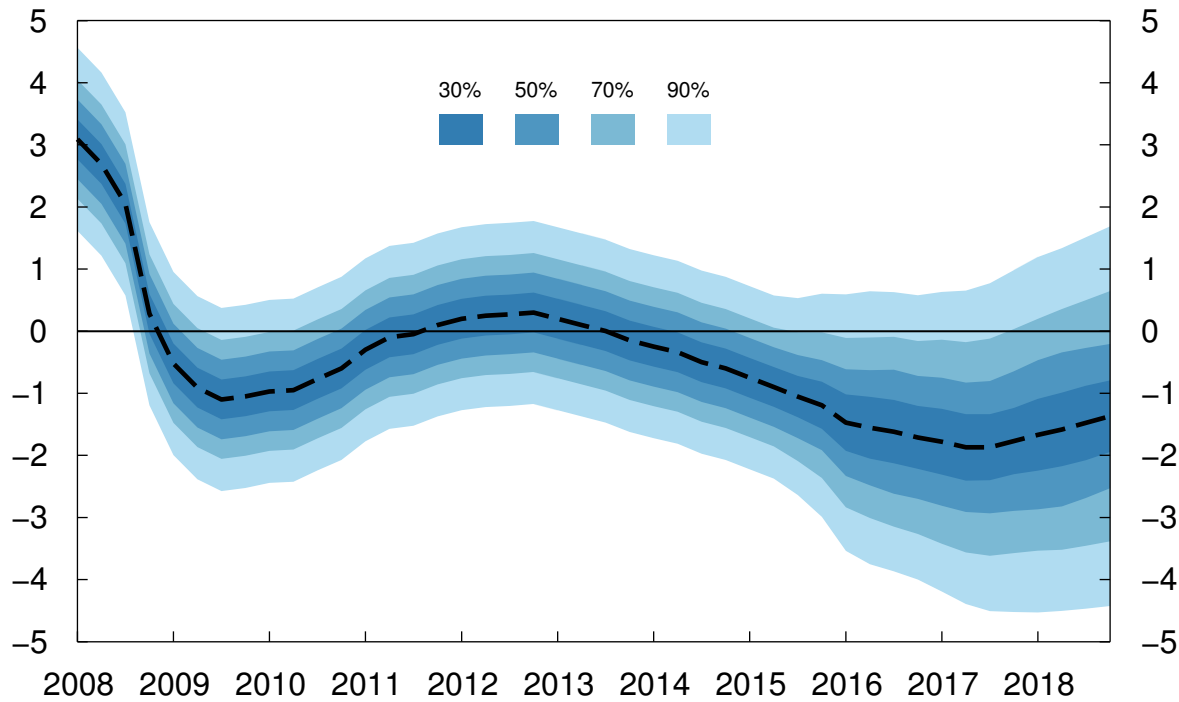


1) The fan charts are based on historical experience and stochastic simulations in our main macroeconomic model, NEMO. The fan chart for the key policy rate does not take into account that a lower bound for the interest rate may exist.

2) Projections for 2015 Q4 – 2018 Q4 (broken line).

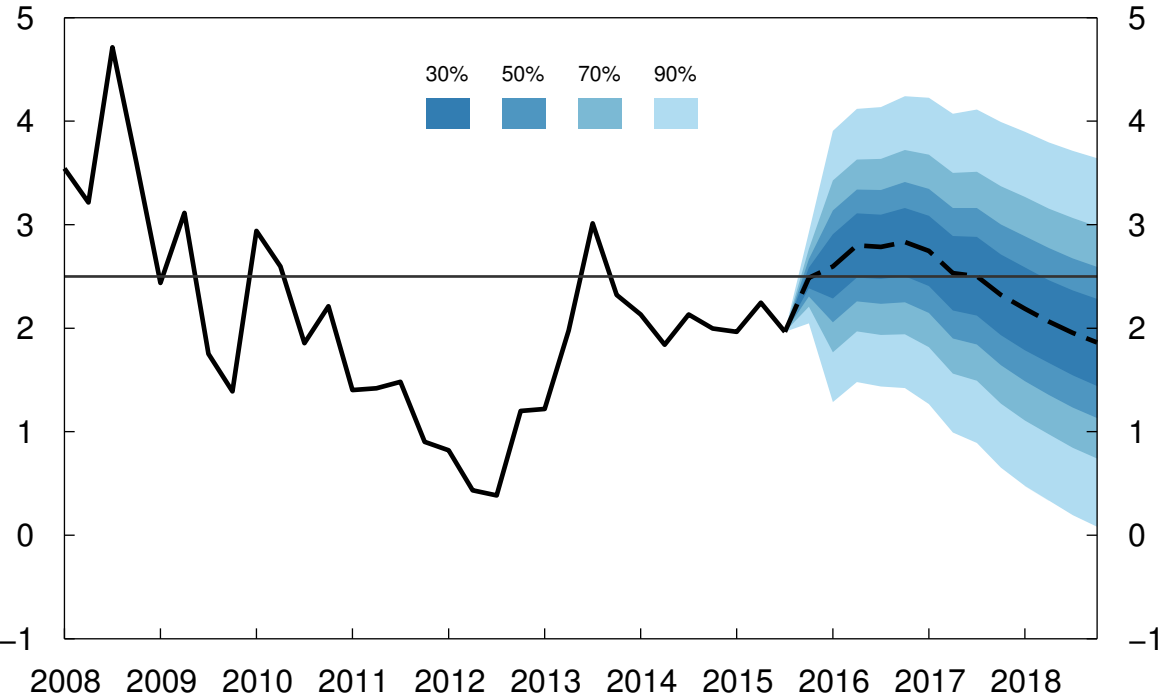
Source: Norges Bank

Chart 2.4b Projected output gap¹⁾ in the baseline scenario with fan chart.
Percent. 2008 Q1 – 2018 Q4



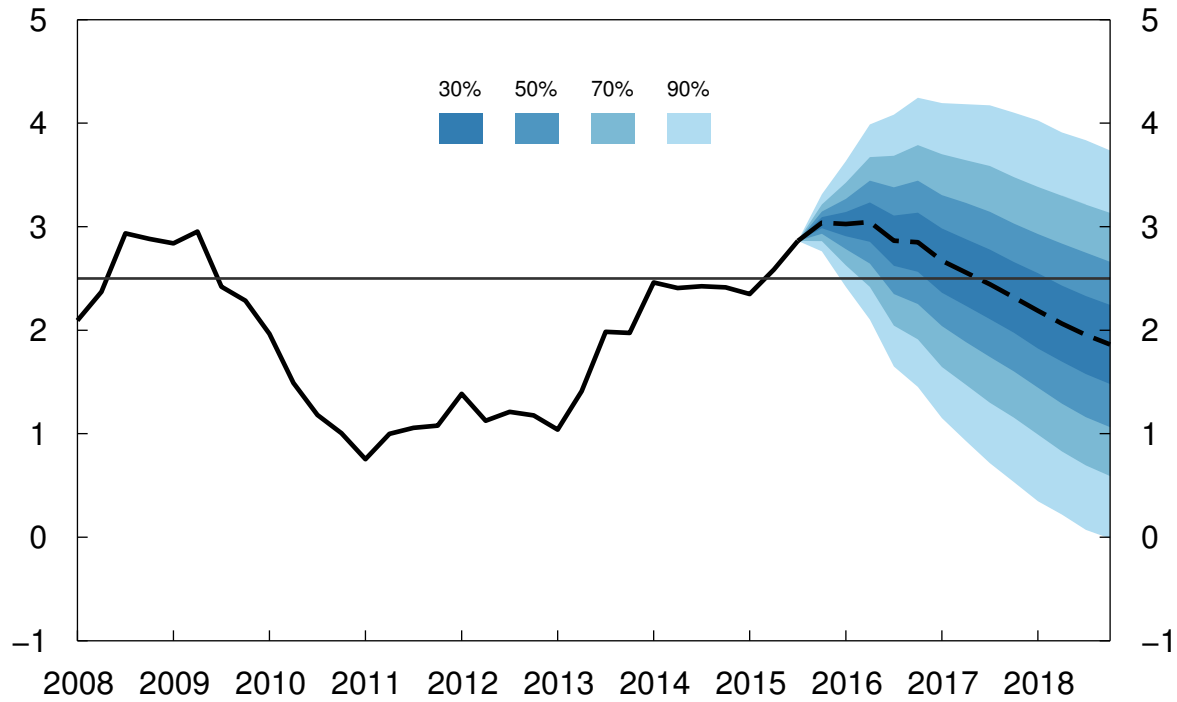
1) The output gap measures the percentage deviation between mainland GDP and projected potential mainland GDP.
Source: Norges Bank

Chart 2.4c Projected CPI in the baseline scenario with fan chart.
Four-quarter change. Percent. 2008 Q1 – 2018 Q4¹⁾



1) Projections for 2015 Q4 – 2018 Q4 (broken line).
Sources: Statistics Norway and Norges Bank

Chart 2.4d Projected CPI-ATE¹⁾ in the baseline scenario with fan chart.
Four-quarter change. Percent. 2008 Q1 – 2018 Q4²⁾

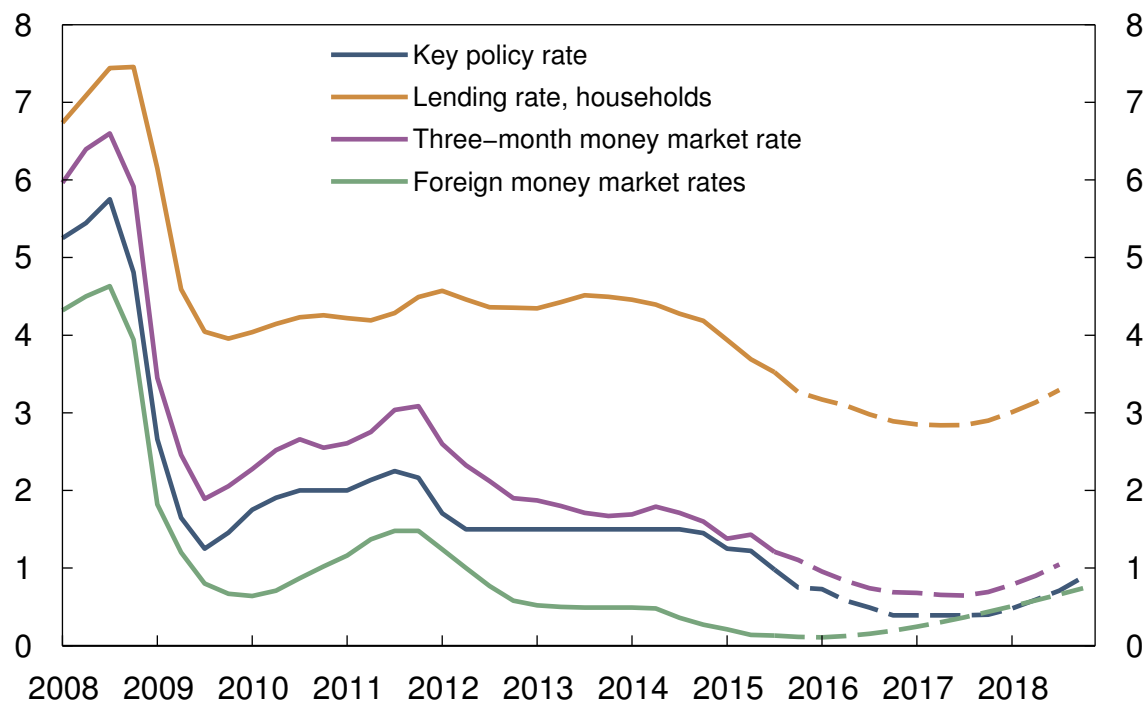


1) CPI adjusted for tax changes and excluding energy products.

2) Projections for 2015 Q4 – 2018 Q4 (broken line).

Sources: Statistics Norway and Norges Bank

Chart 2.5 Key policy rate, three-month money market rate¹⁾, interest rate on loans to households²⁾ and foreign money market rates in the baseline scenario. Percent. 2008 Q1 – 2018 Q4³⁾



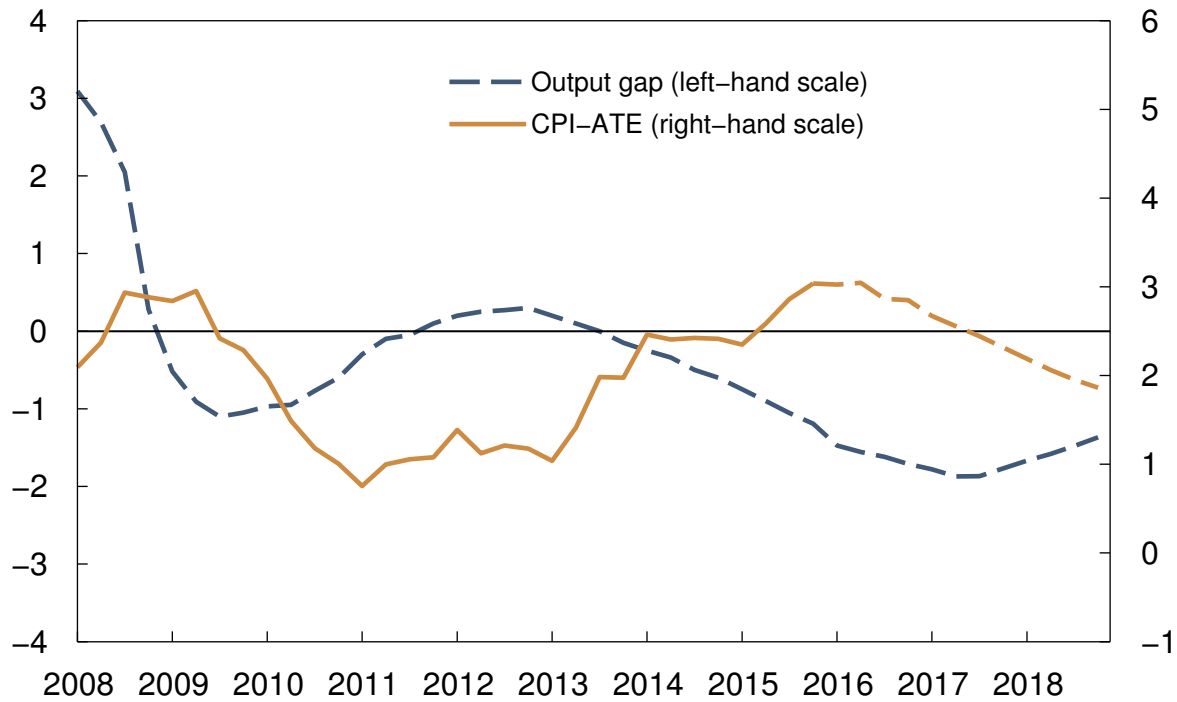
1) Key policy rate in the baseline scenario plus premiums in the Norwegian money market. The calculations are based on the assumption that announced interest rate changes are priced into the money market.

2) Average interest rate on all loans to households from banks and covered bond companies.

3) Projections for 2015 Q4 – 2018 Q4 (broken lines).

Sources: Thomson Reuters, Statistics Norway and Norges Bank

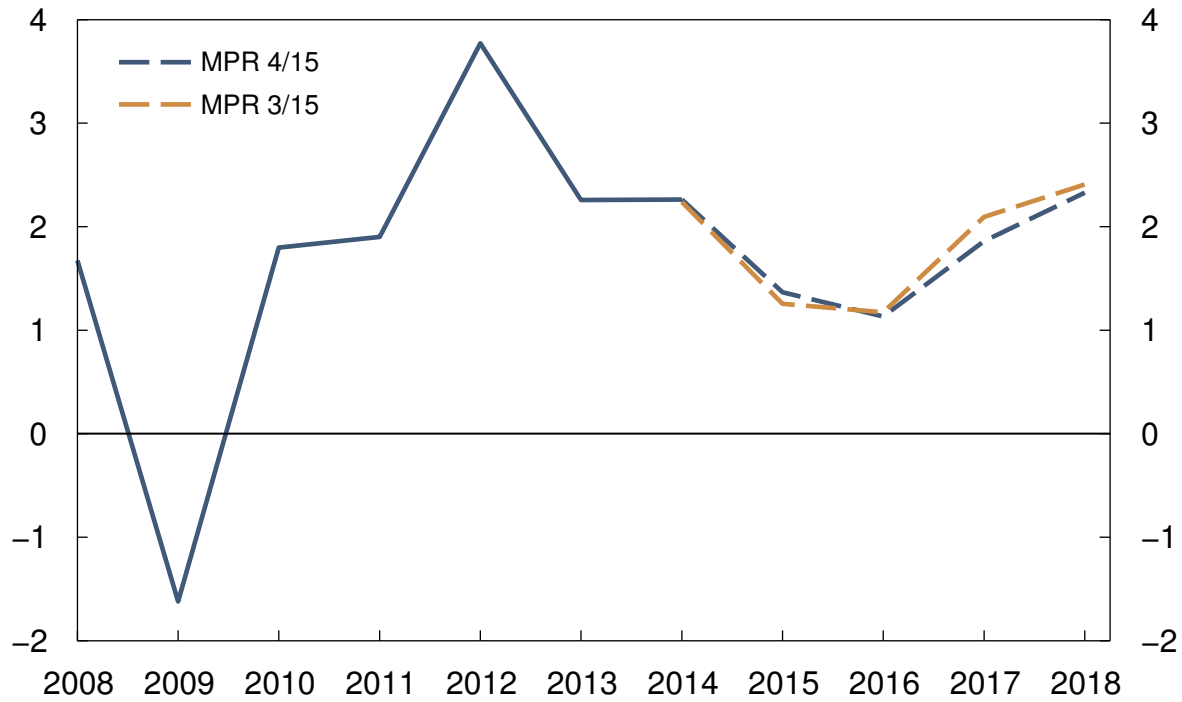
Chart 2.6 Inflation¹⁾ and output gap in the baseline scenario.
 Percent. 2008 Q1 – 2018 Q4



1) CPI adjusted for tax changes and excluding energy products. Projections for 2015 Q4 – 2018 Q4 (broken line).

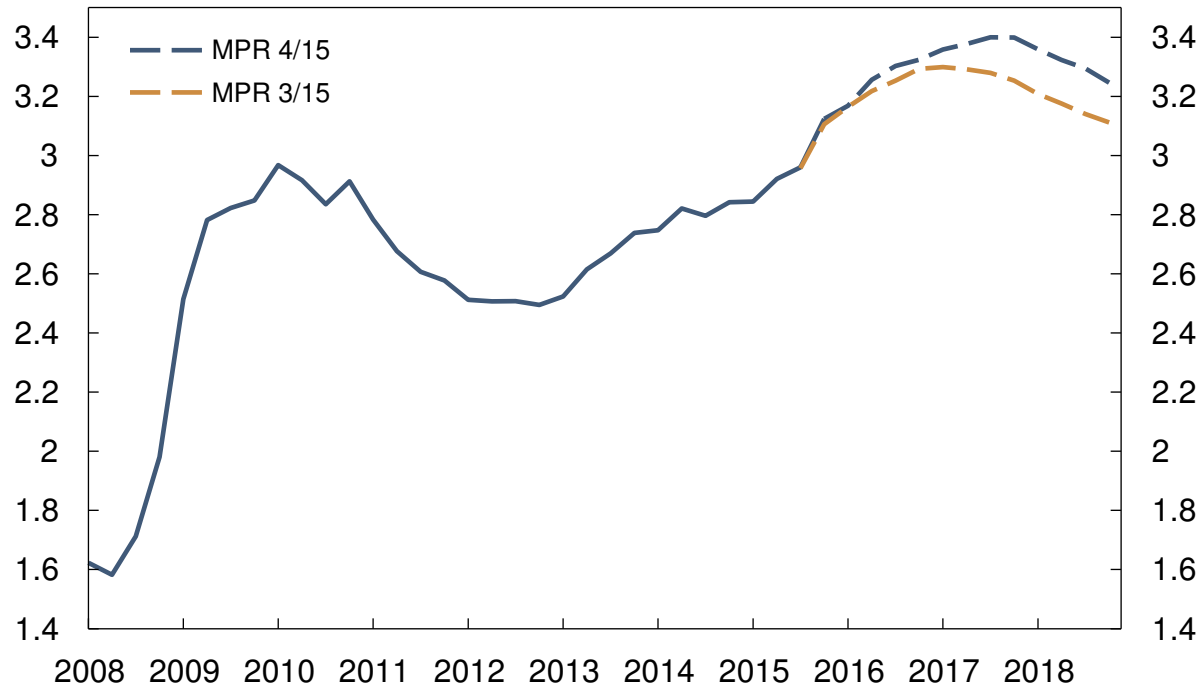
Sources: Statistics Norway and Norges Bank

Chart 2.7 GDP for mainland Norway.
Annual change. Percent. 2008 – 2018¹⁾



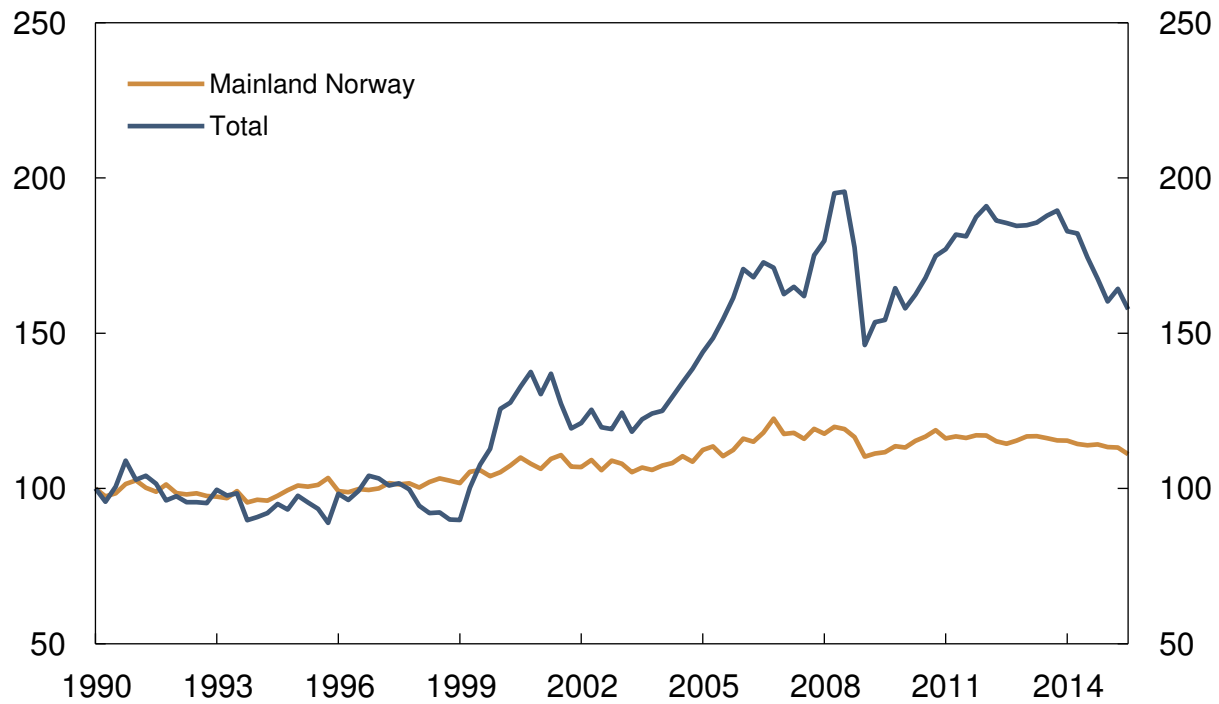
1) Projections for 2015 – 2018 (broken lines).
Sources: Statistics Norway and Norges Bank

Chart 2.8 Unemployment in percent of labour force. NAV.¹⁾
Seasonally adjusted. Percent. 2008 Q1 – 2018 Q4²⁾



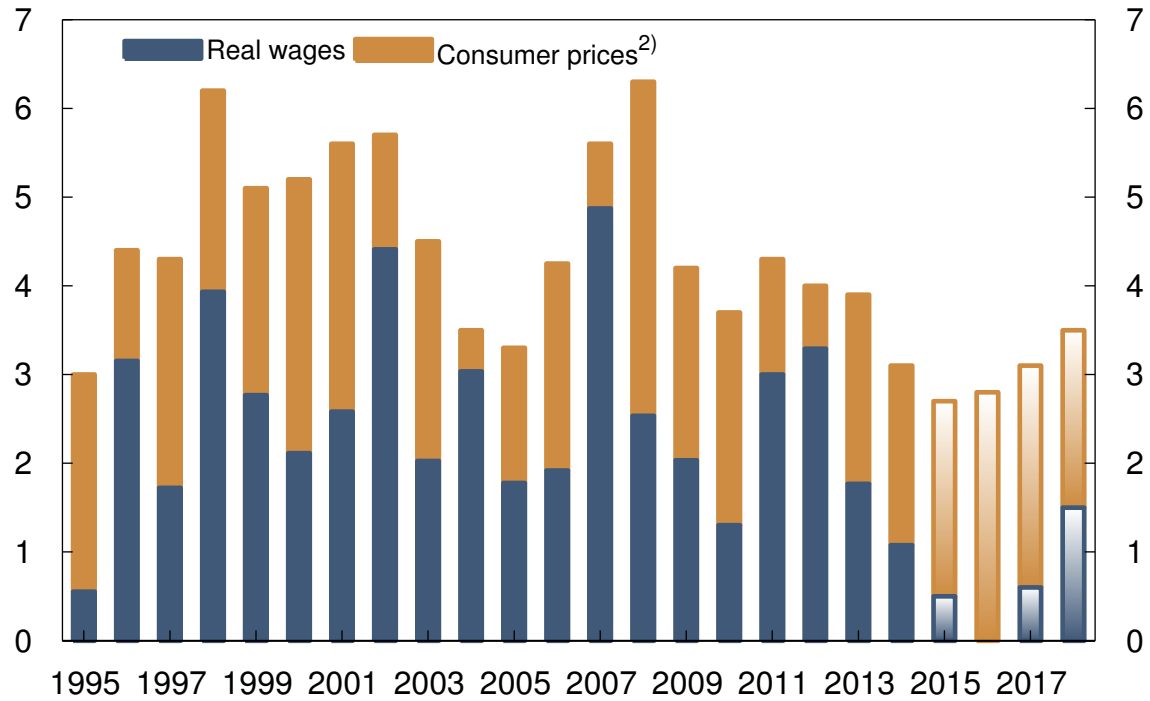
1) Norwegian Labour and Welfare Administration.
2) Projections for 2015 Q4 – 2018 Q4 (broken lines).
Sources: NAV, Statistics Norway and Norges Bank

Chart 2.9 Terms of trade.
Index. 1990 Q1 = 100. 1990 Q1 – 2015 Q3



Sources: Statistics Norway and Norges Bank

Chart 2.10 Annual wages.
Annual change. Percent. 1995 – 2018¹⁾

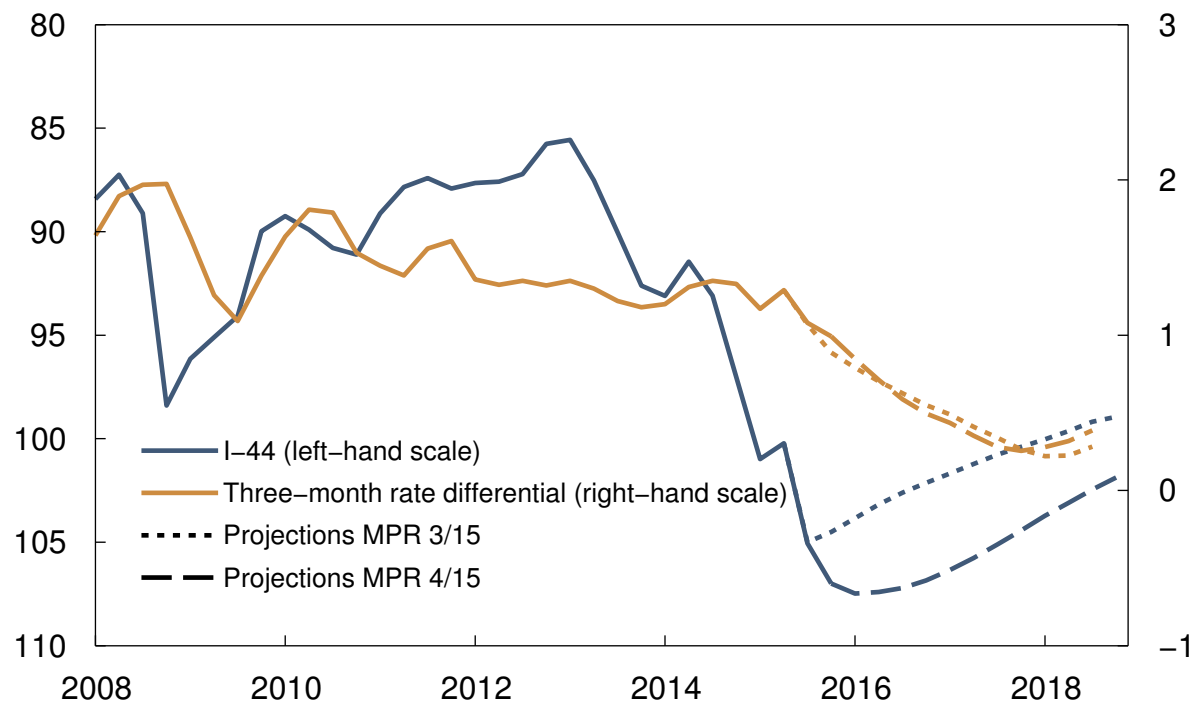


1) Projections for 2015 – 2018.

2) CPI.

Sources: TBU, Statistics Norway and Norges Bank

Chart 2.11 Three-month money market rate differential between Norway¹⁾ and trading partners²⁾ and import-weighted exchange rate index (I-44)³⁾. 2008 Q1 – 2018 Q4⁴⁾



1) Key policy rate in the baseline scenario plus premiums in the Norwegian money market. The calculations are based on the assumption that announced interest rate changes are priced into the money market.

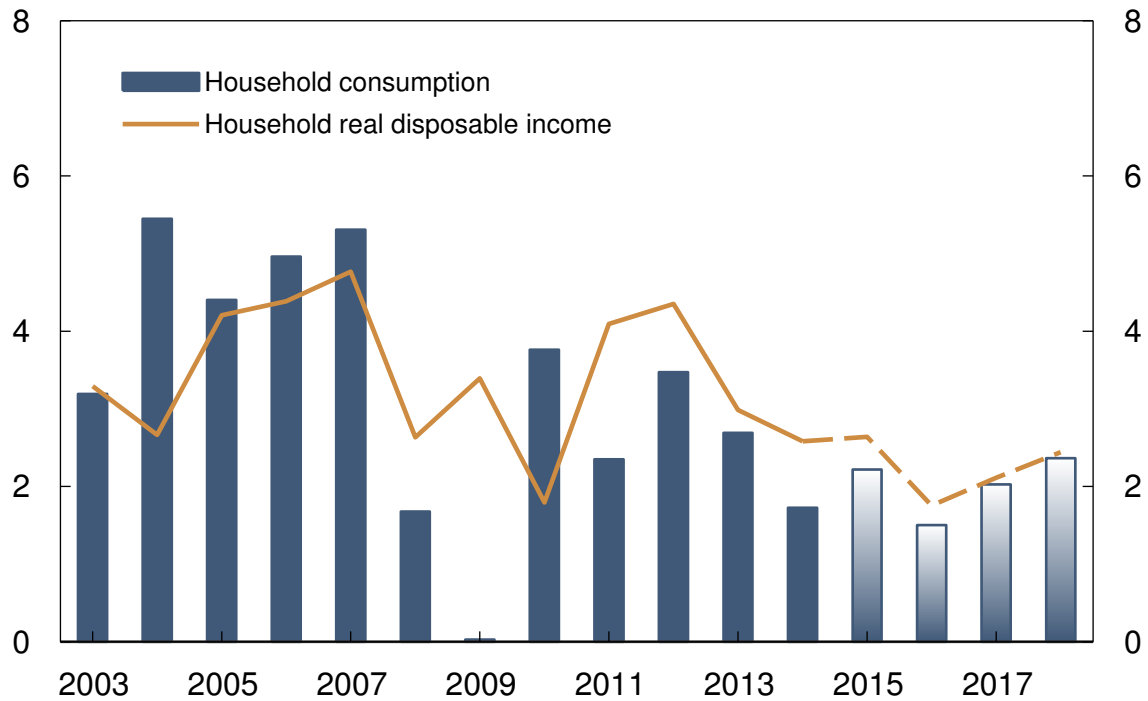
2) Forward rates for trading partners at 11 December 2015.

3) A positive slope denotes a stronger krone exchange rate.

4) Projections in MPR 4/15 for 2015 Q4 – 2018 Q4 (broken lines).

Sources: Thomson Reuters and Norges Bank

Chart 2.12 Household consumption¹⁾ and real disposable income²⁾.
Annual change. Percent. 2003 – 2018³⁾



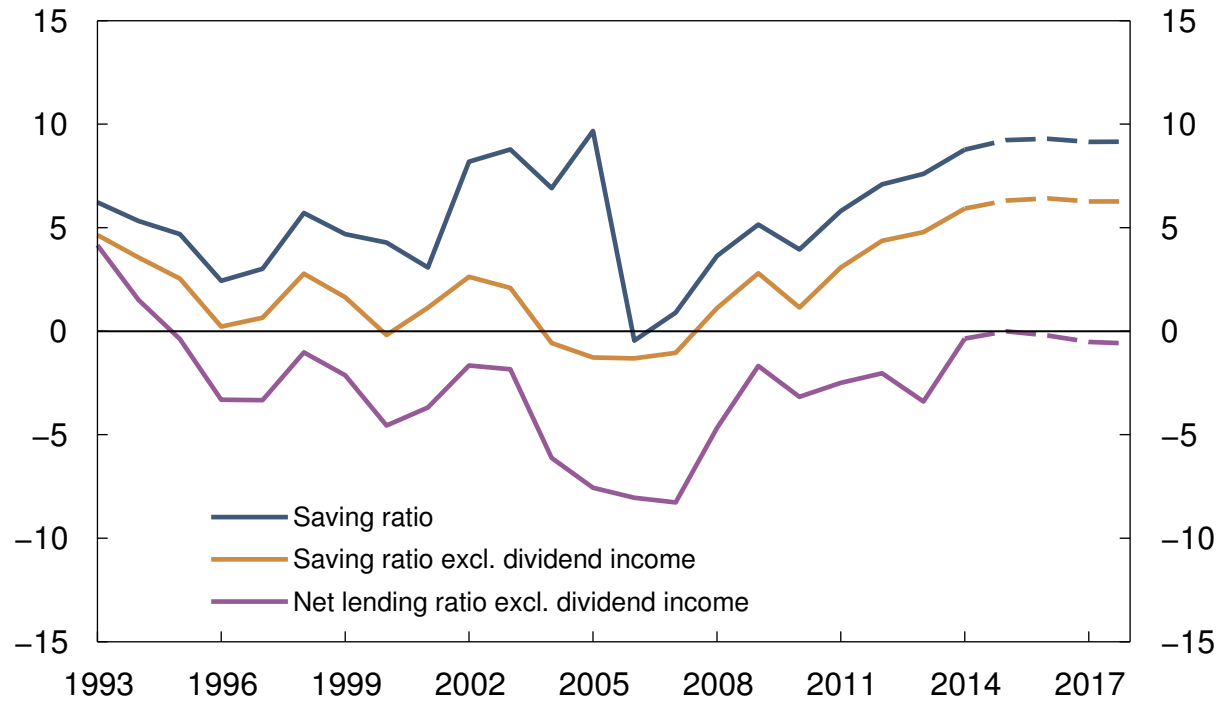
1) Includes consumption for non-profit organisations. Volume.

2) Excluding dividend income. Including income for non-profit organisations. Deflated by CPI.

3) Projections for 2015 – 2018.

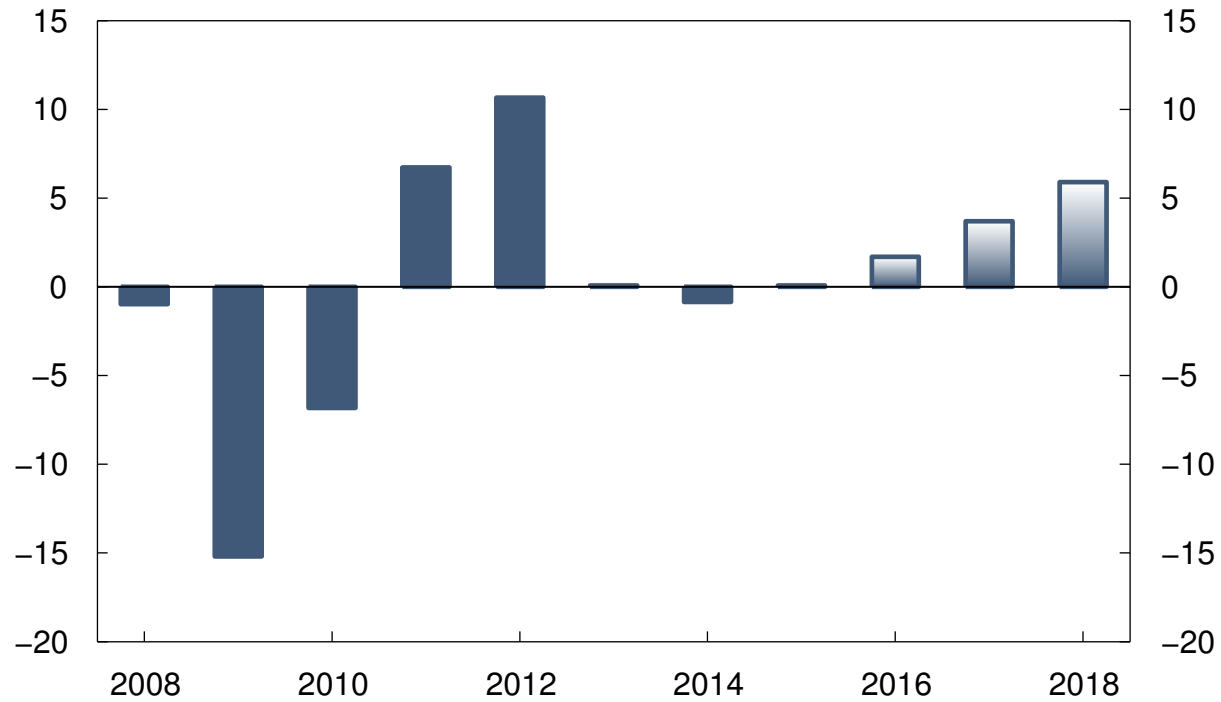
Sources: Statistics Norway and Norges Bank

Chart 2.13 Household saving and net lending as a share of disposable income.
Percent. 1993 – 2018 ¹⁾



1) Projections for 2015 – 2018 (broken lines).
Sources: Statistics Norway and Norges Bank

Chart 2.14 Private investment.¹⁾
Annual change. Percent. 2008 – 2018²⁾

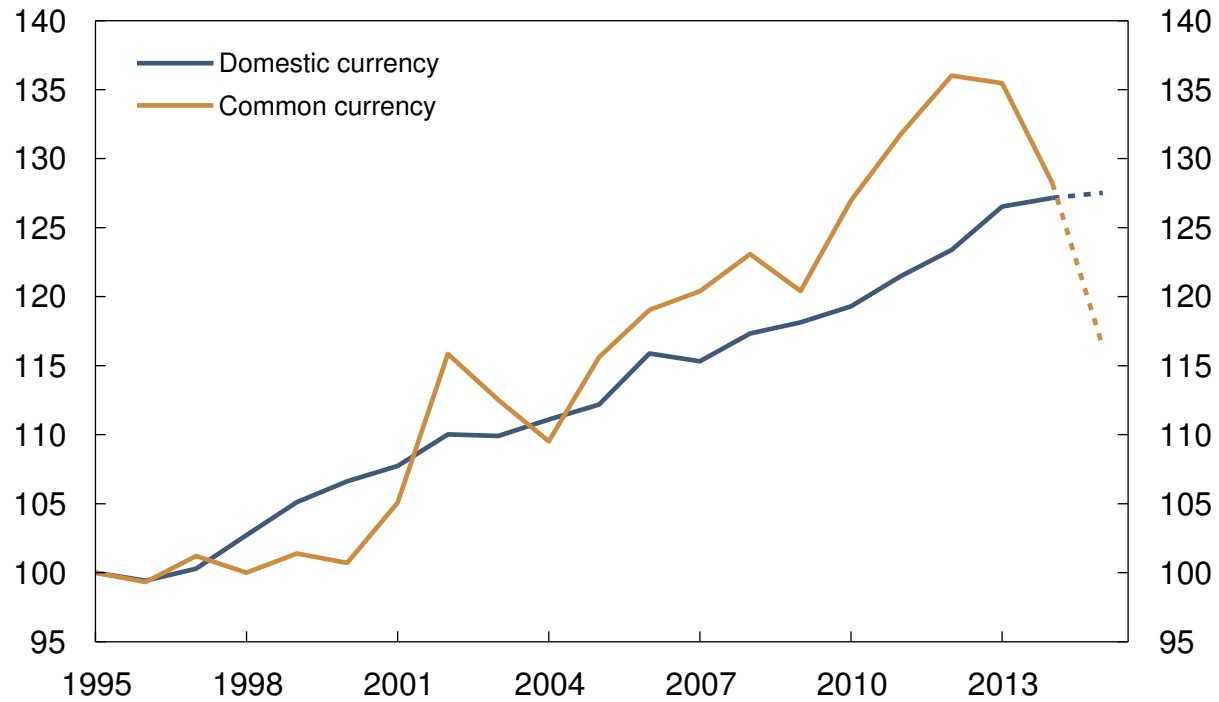


1) Housing and business investment.

2) Projections for 2015 – 2018.

Sources: Statistics Norway and Norges Bank

Chart 2.15 Labour costs¹⁾ relative to trading partners.
Index. 1995 = 100. 1995 – 2015²⁾

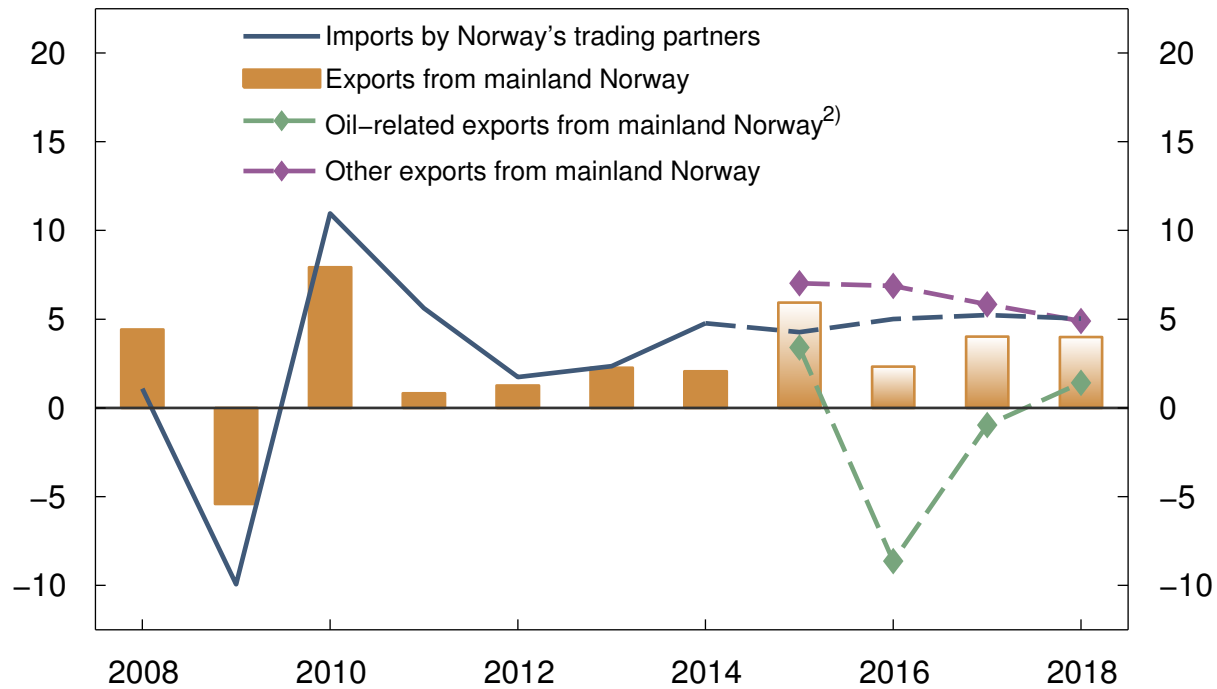


1) Hourly labour costs in manufacturing.

2) Projections for 2015 (broken lines).

Sources: TBU, Statistics Norway and Norges Bank

Chart 2.16 Exports from mainland Norway and imports by Norway's trading partners. Annual change. Percent. 2008 – 2018¹⁾

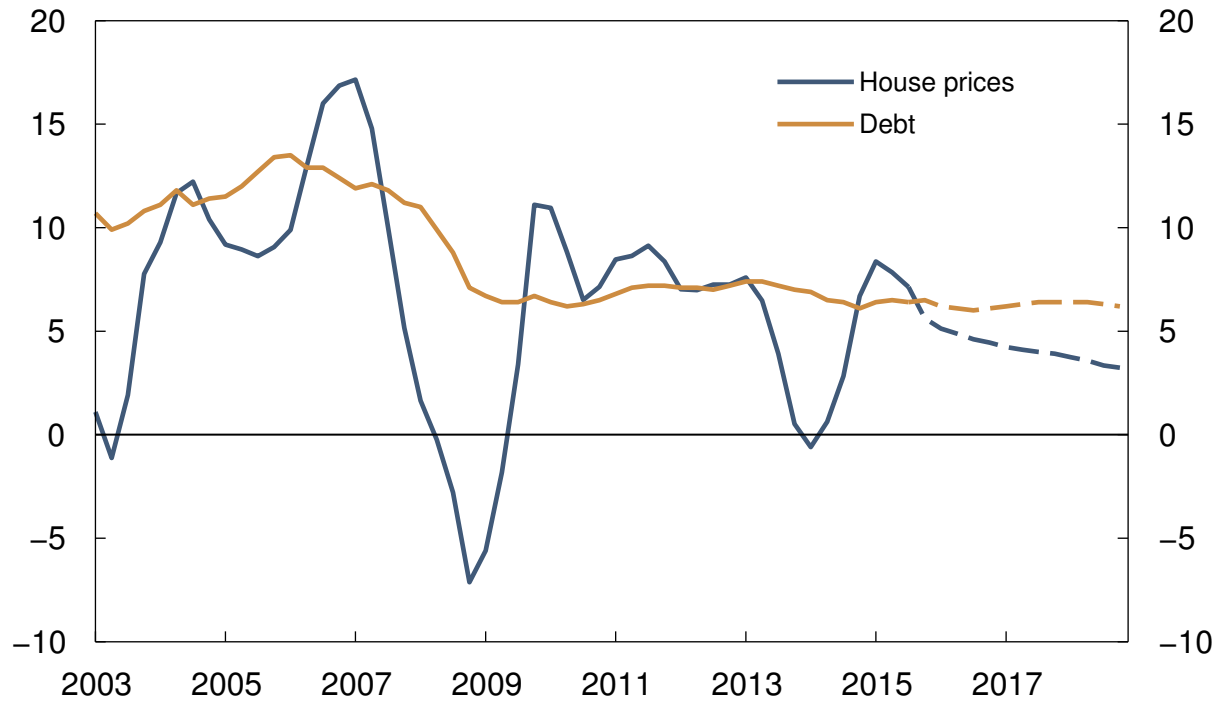


1) Projections for 2015 – 2018.

2) Goods and service groups in the national accounts where the oil service sector accounts for a considerable share of exports.

Sources: Thomson Reuters, Statistics Norway and Norges Bank

Chart 2.17 Household debt¹⁾ and house prices.
Four-quarter change. Percent. 2003 Q1 – 2018 Q4²⁾

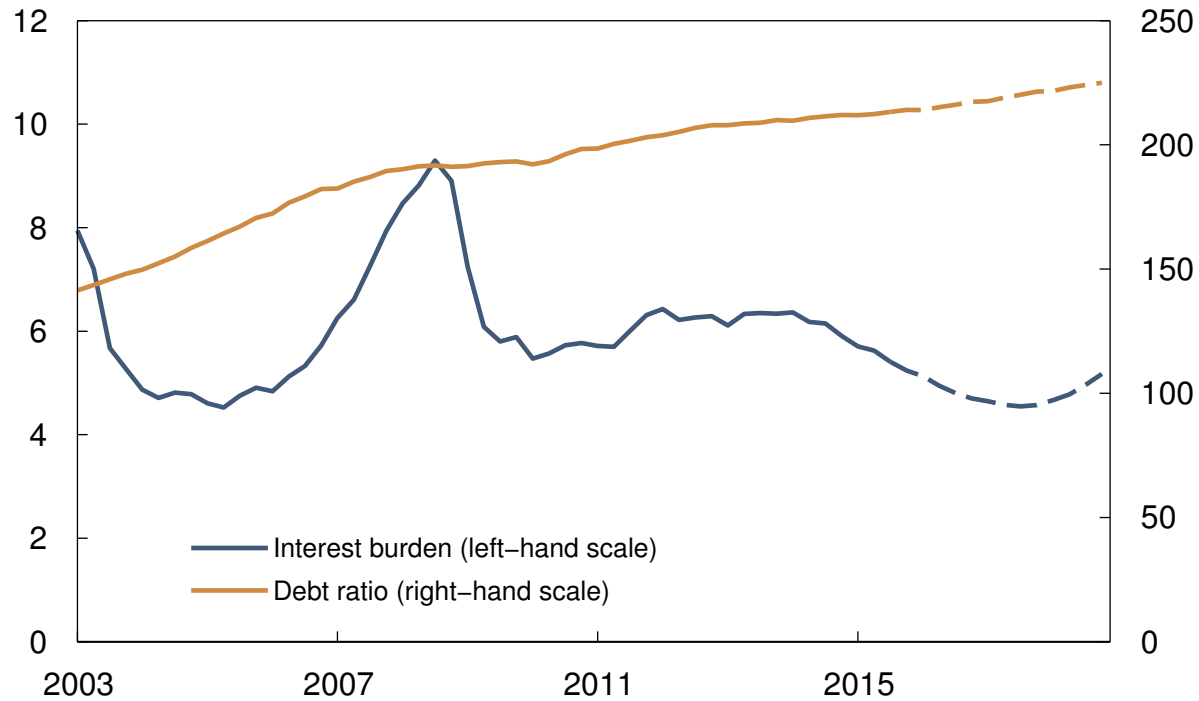


1) Domestic credit to households (C2).

2) Projections for 2015 Q4 – 2018 Q4 (broken lines).

Sources: Statistics Norway, Eiendom Norge, Eiendomsverdi, Finn.no and Norges Bank

Chart 2.18 Household debt ratio¹⁾ and interest burden²⁾.
Percent. 2003 Q1 – 2018 Q4³⁾



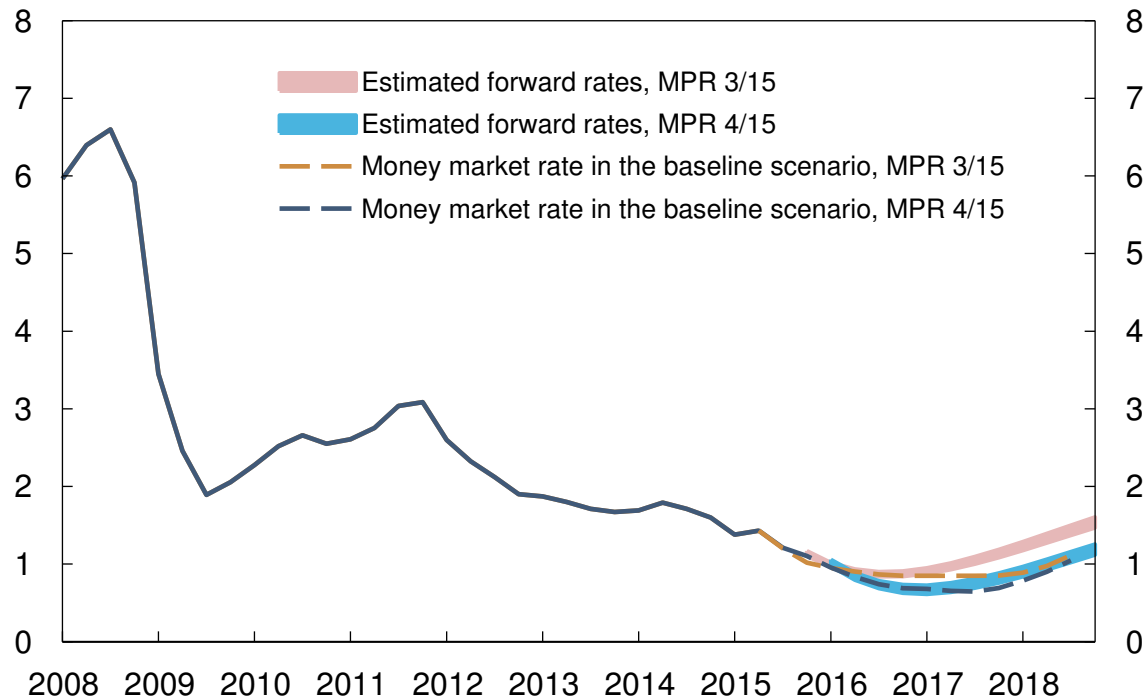
1) Loan debt as a percentage of disposable income adjusted for estimated reinvested dividend income for 2003 – 2005 and redemption/reduction of equity capital for 2006 Q1 – 2012 Q3.

2) Interest expenses as a percentage of disposable income adjusted for estimated reinvested dividend income for 2003 – 2005 and redemption/reduction of equity capital for 2006 Q1 – 2012 Q3 plus interest expenses.

3) Projections for 2015 Q3 – 2018 Q4 (broken lines).

Sources: Statistics Norway and Norges Bank

Chart 2.19 Three-month money market rate in the baseline scenario¹⁾ and estimated forward rates²⁾. Percent. 2008 Q1 – 2018 Q4

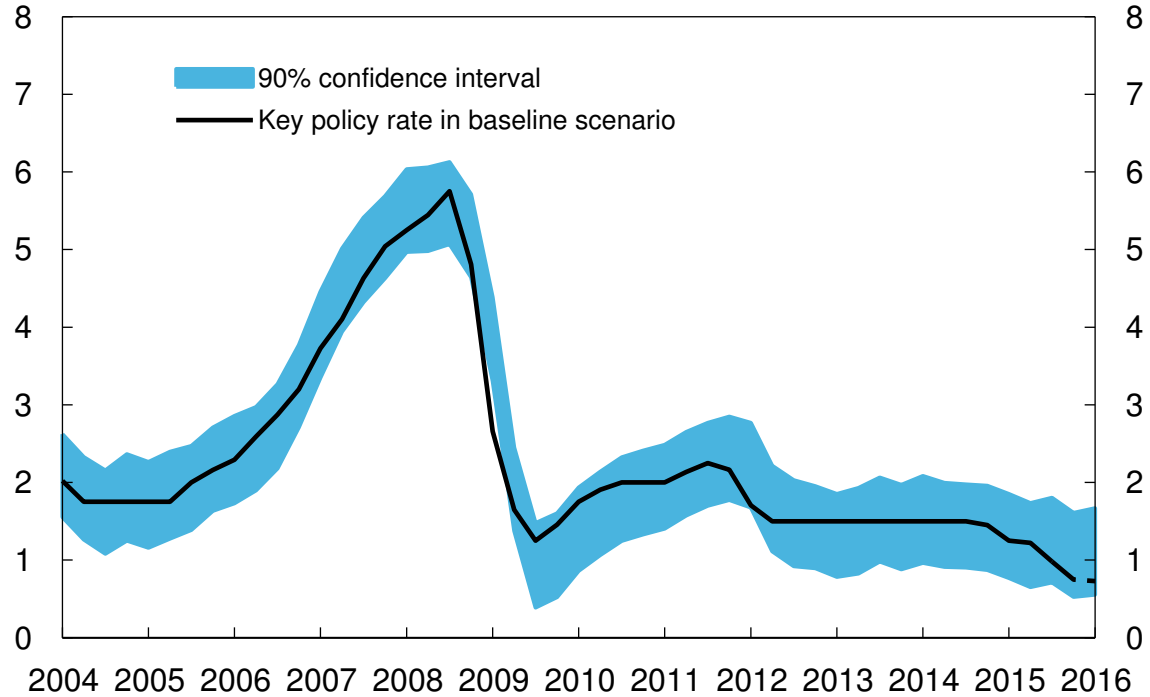


1) Key policy rate in the baseline scenario plus Norwegian money market premiums. The calculations are based on the assumption that announced interest rate changes are priced into the money market.

2) Forward rates are based on money market rates and interest rate swaps. The red and blue bands show the highest and lowest rates in the period 7 September – 18 September 2015 and 30 November – 11 December 2015.

Sources: Thomson Reuters and Norges Bank

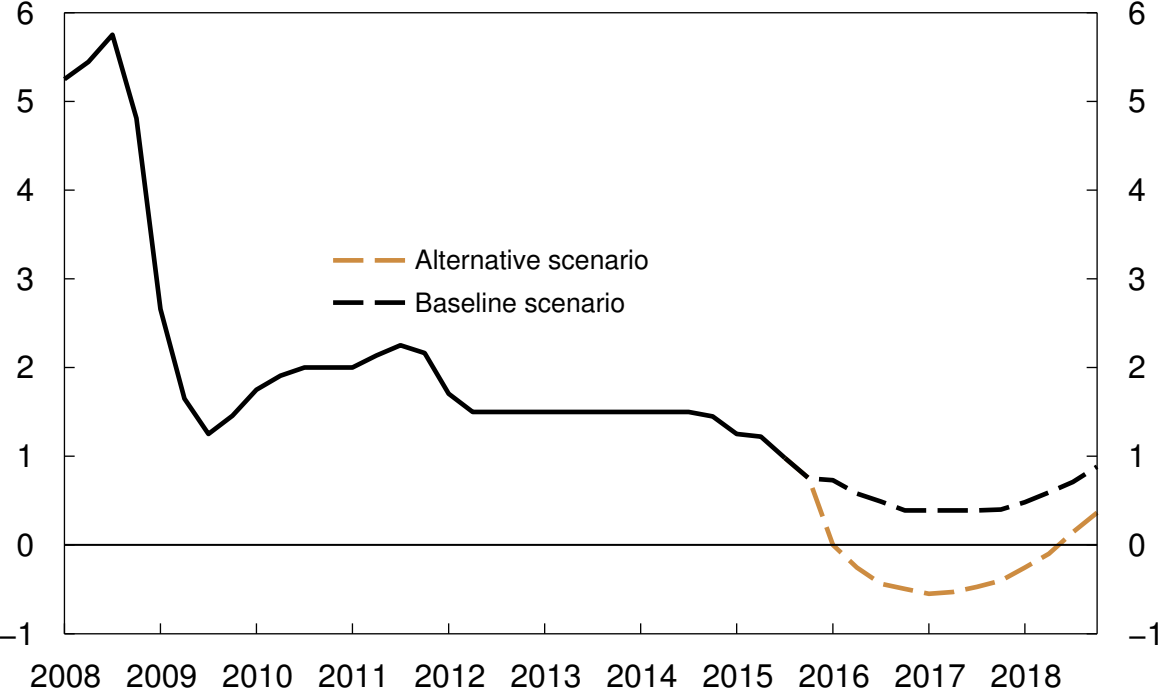
Chart 2.20 Key policy rate and interest rate developments that follow from Norges Bank's average pattern of interest rate setting.¹⁾
Percent. 2004 Q1 – 2016 Q1



1) Interest rate movements are explained by developments in inflation, mainland GDP growth, wage growth and three-month money market rates among trading partners, as well as the interest rate in the preceding period. The equation is estimated over the period 1999 Q1 – 2015 Q3. See Norges Bank *Staff Memo* 3/2008 for further discussion.

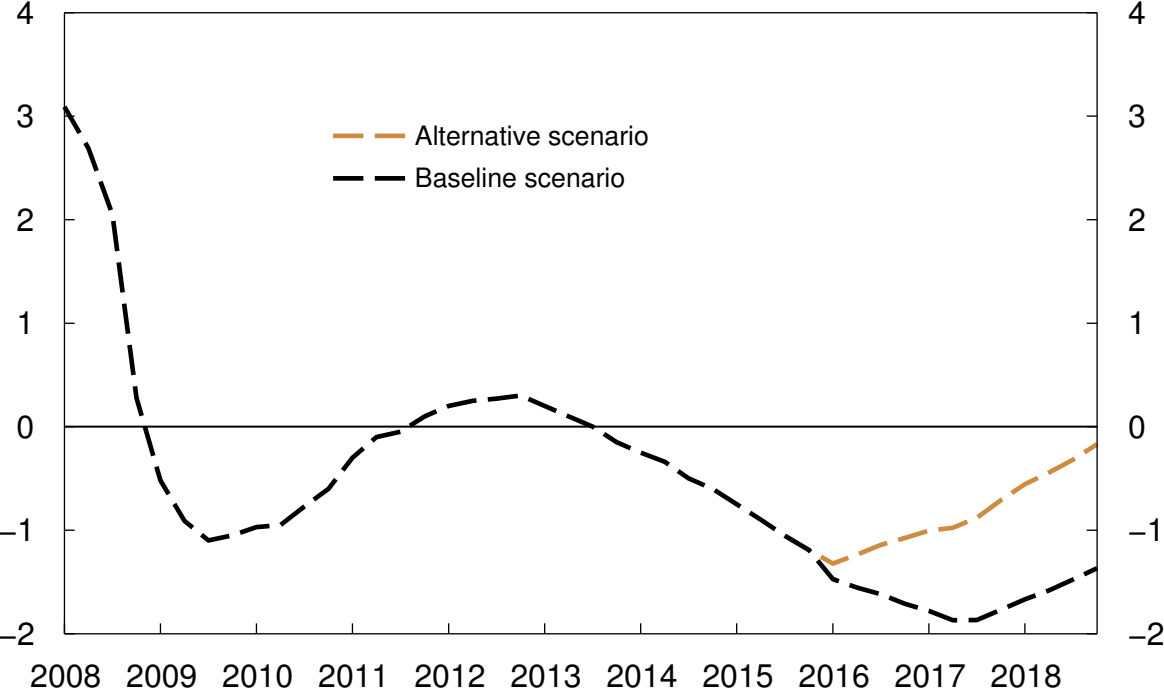
Source: Norges Bank

Chart 2.21a Key policy rate. Percent. 2008 Q1 – 2018 Q4



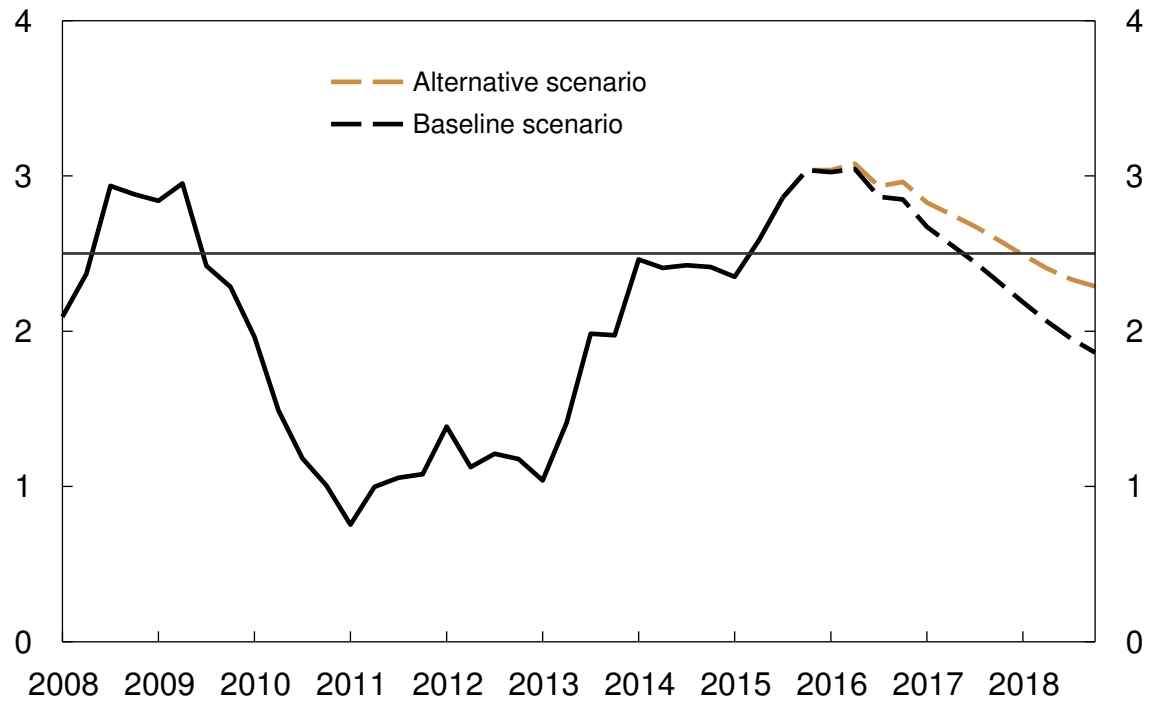
Source: Norges Bank

Chart 2.21b Output gap. Percent. 2008 Q1 – 2018 Q4



Source: Norges Bank

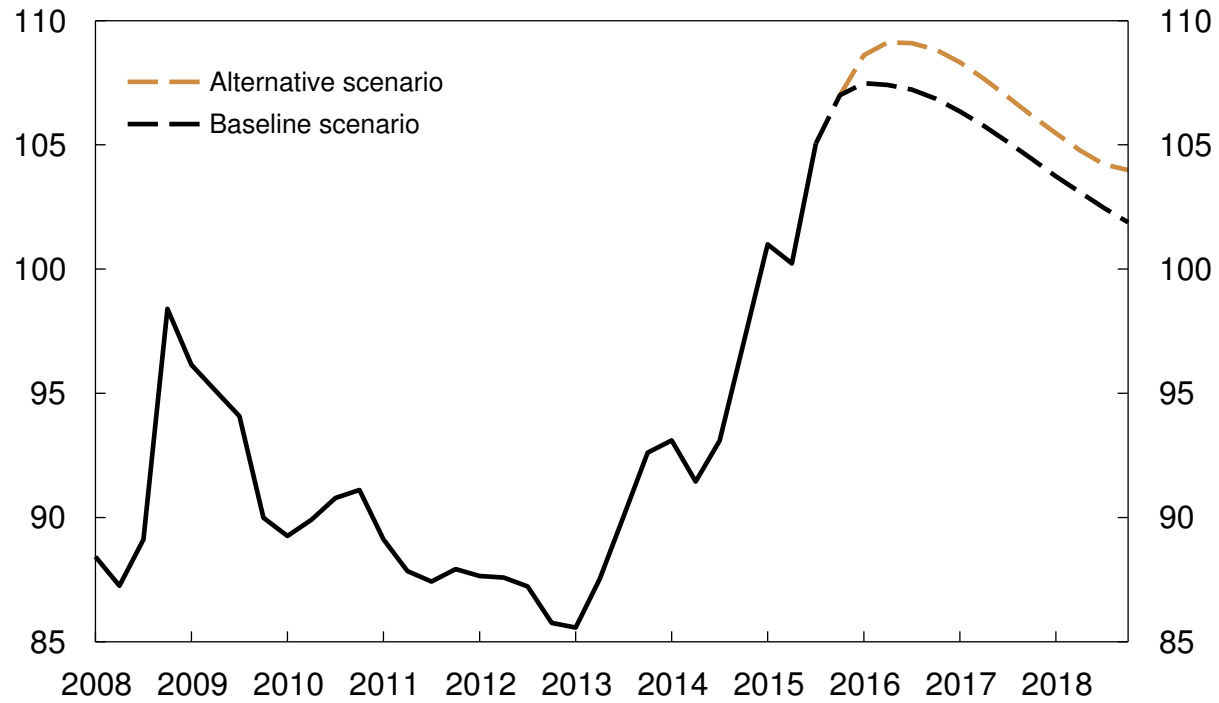
Chart 2.21c CPI-ATE.¹⁾ Four-quarter change. Percent. 2008 Q1 – 2018 Q4



1) CPI adjusted for tax changes and excluding energy products.

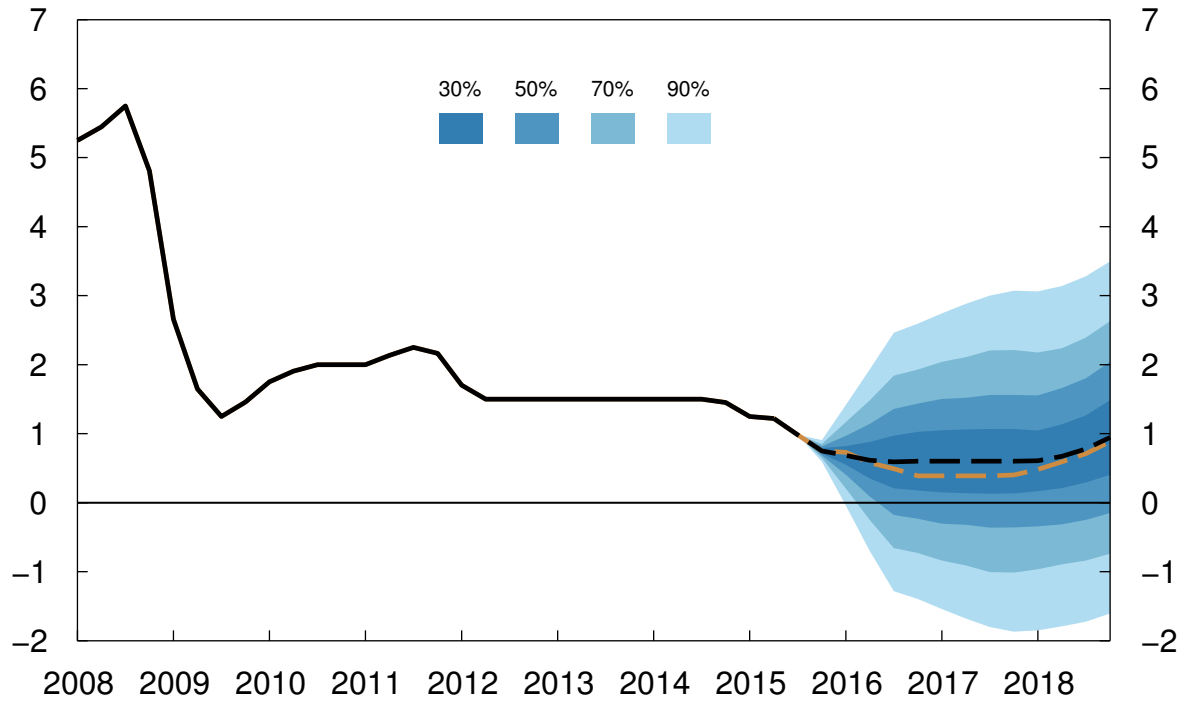
Sources: Statistics Norway and Norges Bank

Chart 2.21d Import-weighted exchange rate index (I-44). 2008 Q1 – 2018 Q4



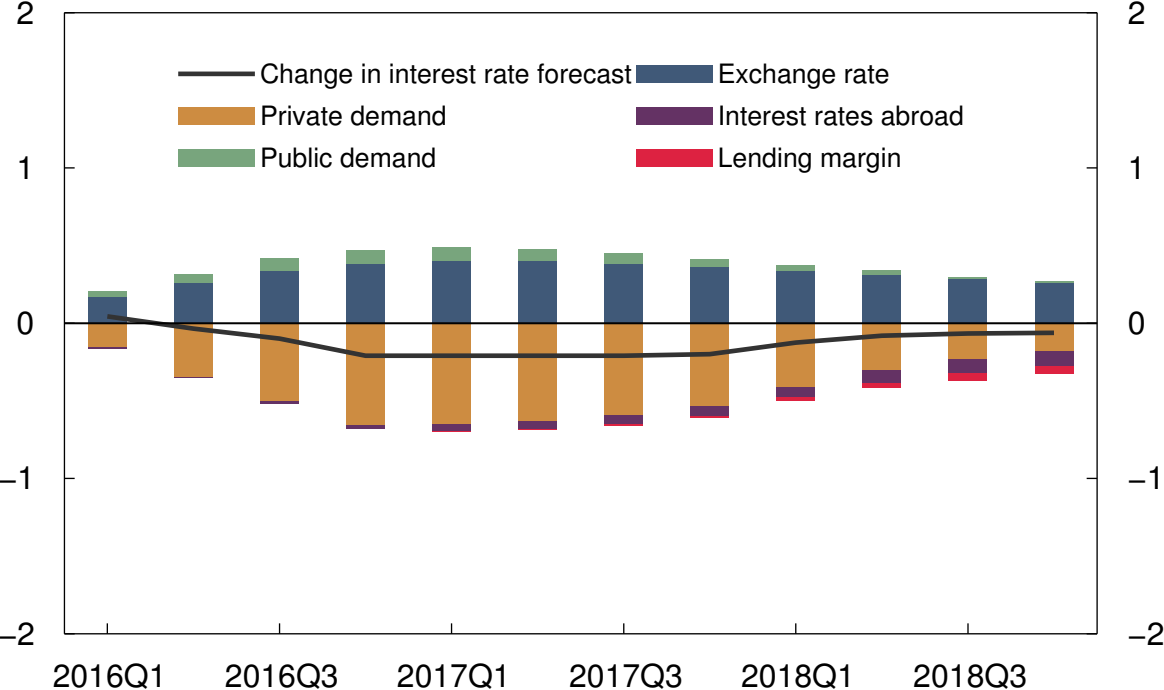
Source: Norges Bank

Chart 2.22 Key policy rate in the baseline scenario with fan chart in MPR 3/15 and key policy rate in the baseline scenario in MPR 4/15 (orange line). Percent. 2008 Q1 – 2018 Q4



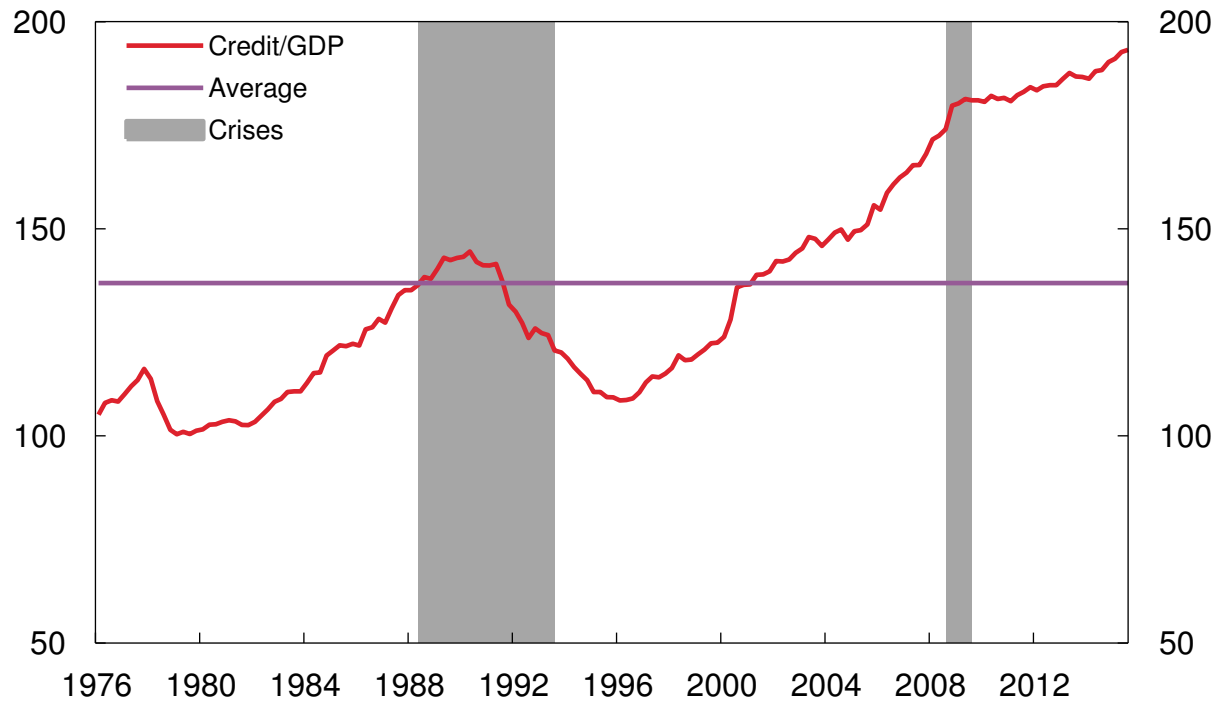
Source: Norges Bank

Chart 2.23 Factors behind changes in the interest rate forecast since MPR 3/15. Cumulative contribution. Percentage points. 2016 Q1 – 2018 Q4



Source: Norges Bank

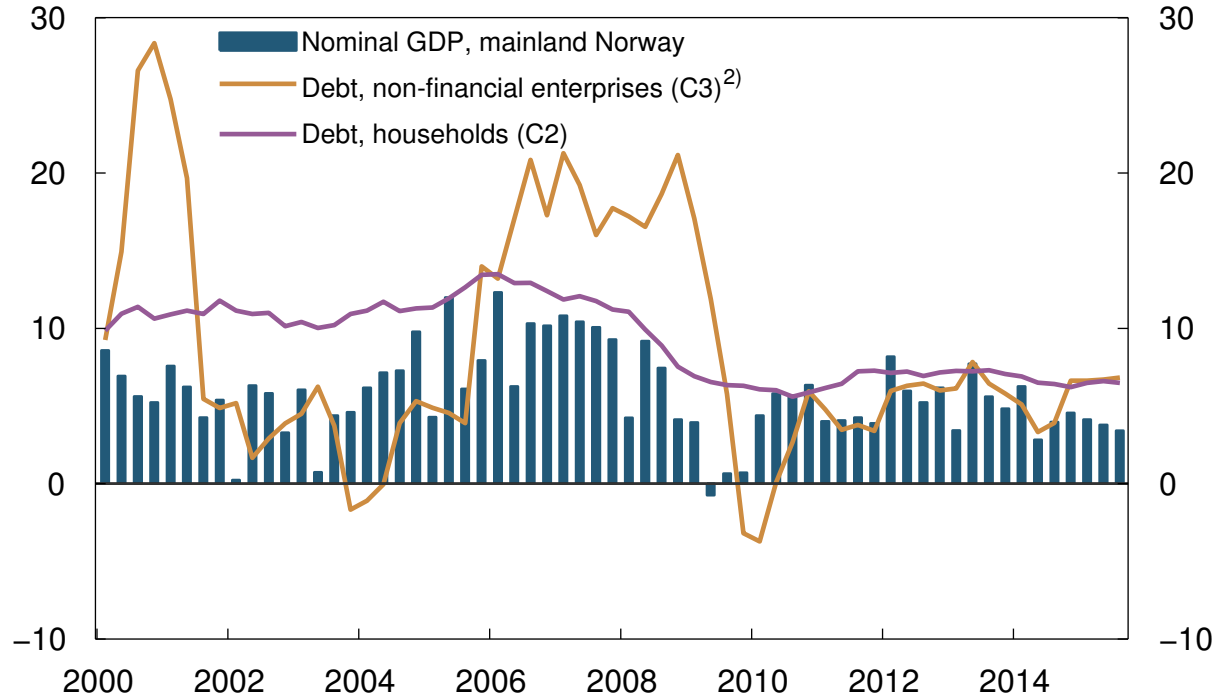
Chart 3.1 Total credit¹⁾ mainland Norway as a share of mainland GDP.
Percent. 1976 Q1 – 2015 Q3



1) The sum of C2 households and C3 non-financial enterprises for mainland Norway (all non-financial enterprises pre-1995). C3 non-financial enterprises comprises C2 non-financial enterprises and foreign debt for mainland Norway.

Sources: Statistics Norway, IMF and Norges Bank

Chart 3.2 Debt held by households and non-financial enterprises and mainland GDP. Four-quarter change.¹⁾ Percent. 2000 Q1 – 2015 Q3

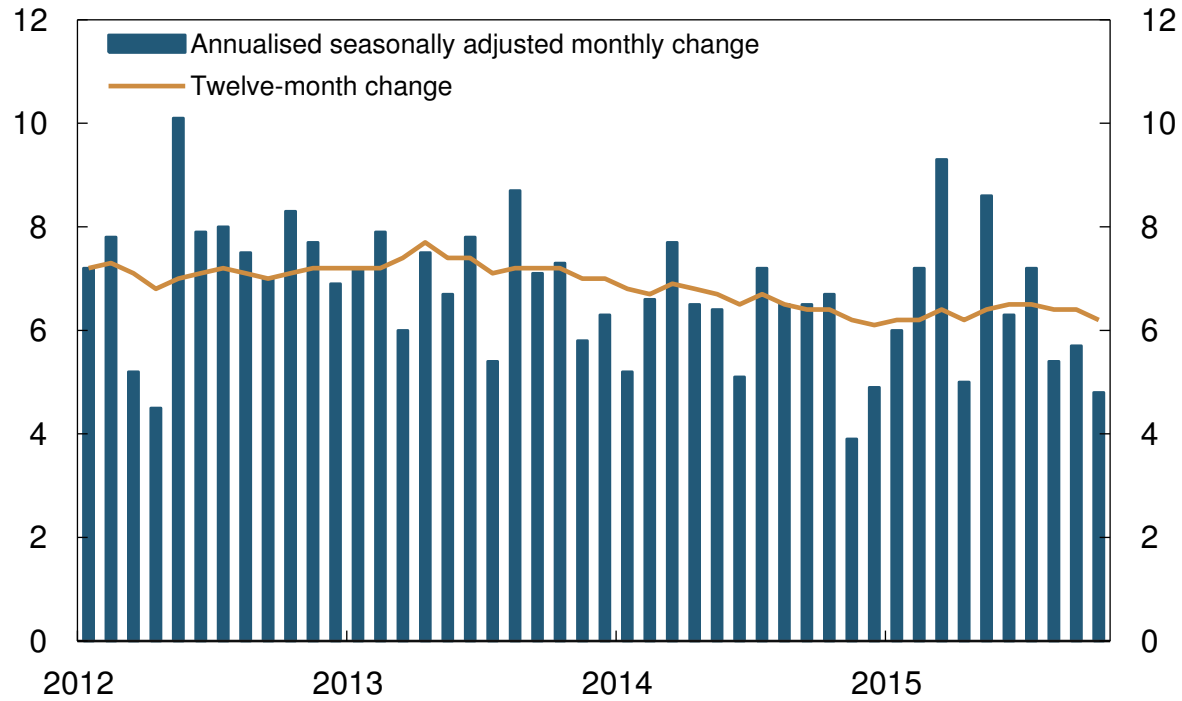


1) Estimated based on stock of debt at the end of the quarter.

2) Sum of C2 non-financial enterprises and foreign debt for mainland Norway.

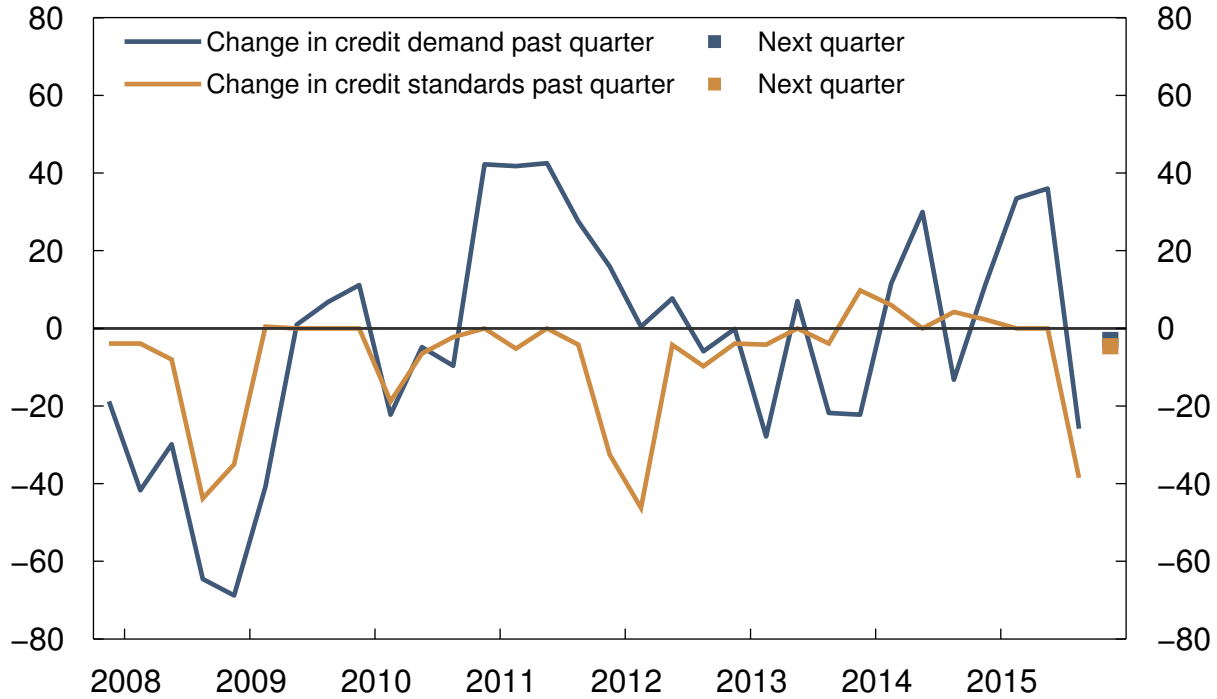
Sources: Statistics Norway and Norges Bank

Chart 3.3 Credit to households (C2). Twelve-month change and annualised seasonally adjusted monthly change. Percent. January 2012 – October 2015



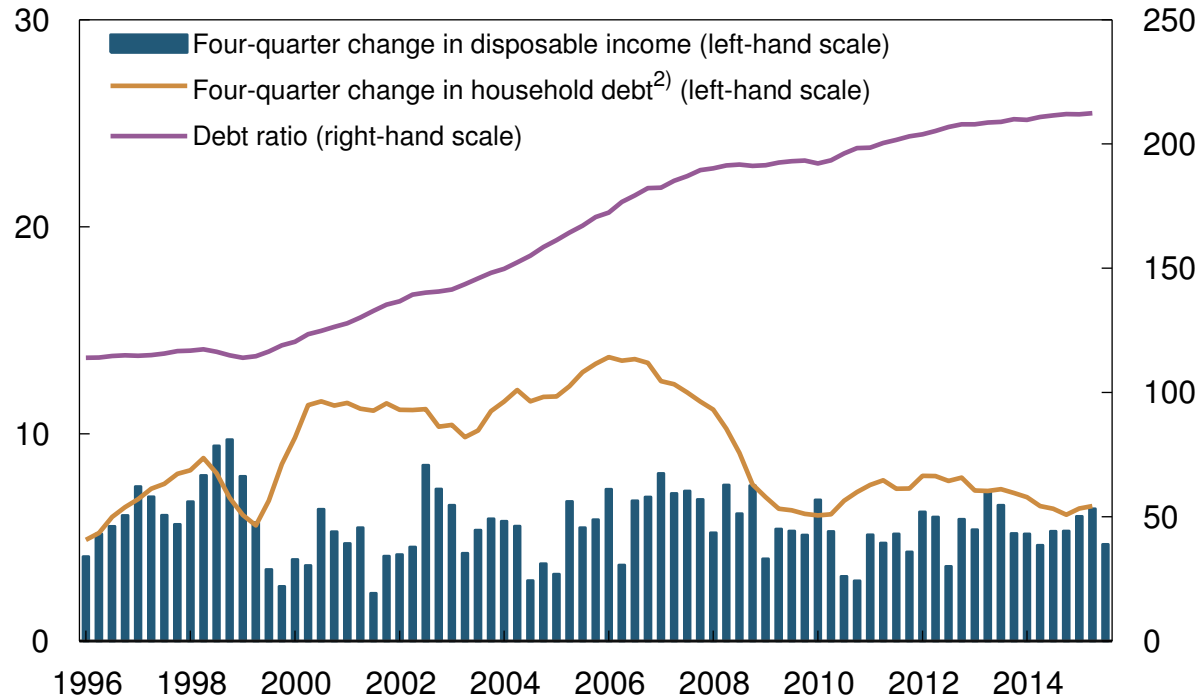
Source: Statistics Norway

Chart 3.4 Change in credit demand and banks' credit standards past quarter and expected change next quarter.¹⁾ Households. 2007 Q4 – 2015 Q3



1) Negative values denote stricter credit standards.
Source: Norges Bank

Chart 3.5 Ratio of household debt to disposable income.¹⁾
 Percent. 1996 Q1 – 2015 Q3

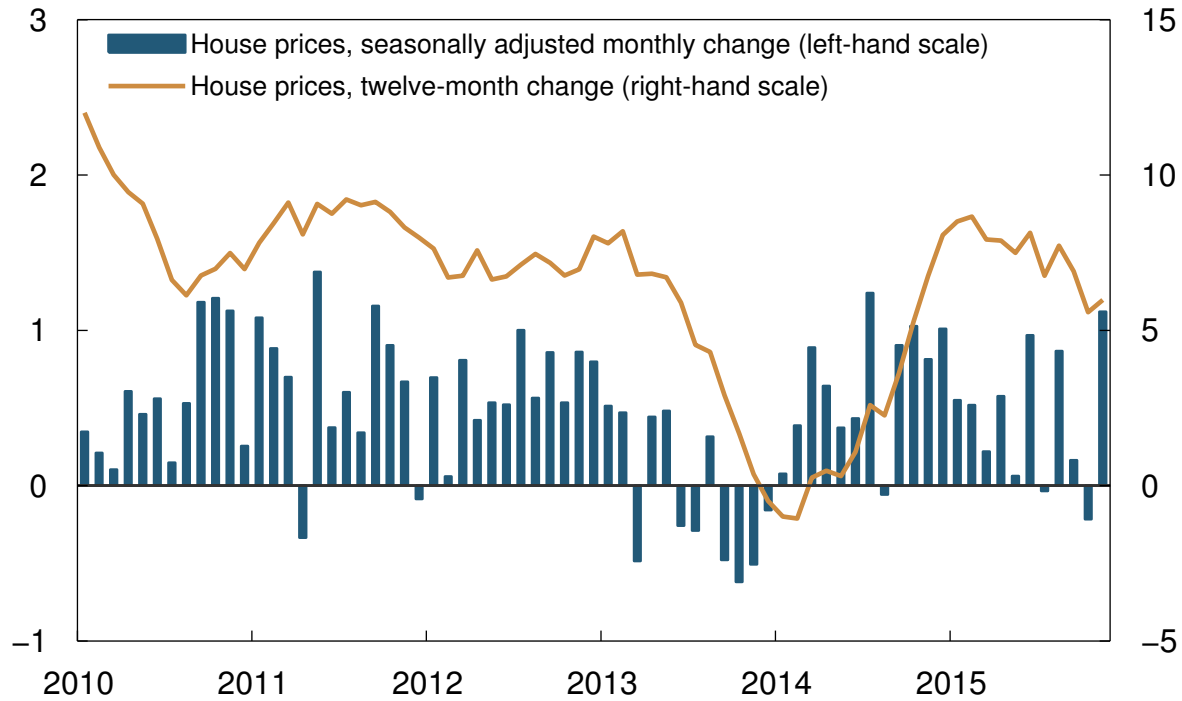


1) Loan debt for households and non-profit organisations as a percentage of disposable income, adjusted for estimated reinvested dividend income for 2000 – 2005 and redemption/reduction of equity capital for 2006 Q1 – 2012 Q3.

2) Estimated based on stock of debt at the end of the quarter. Last observation 2015 Q2.

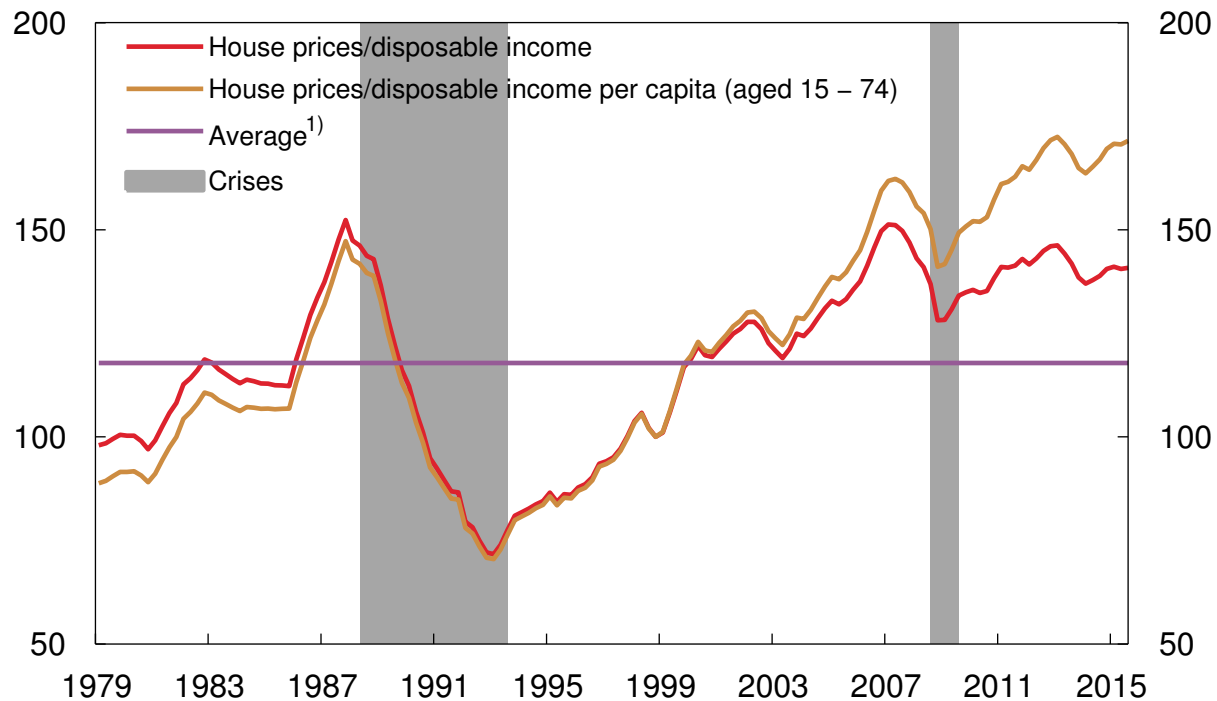
Sources: Statistics Norway and Norges Bank

Chart 3.6 House prices. Twelve-month change and seasonally adjusted monthly change. Percent. January 2010 – November 2015



Sources: Eiendom Norge, Eiendomsverdi and Finn.no

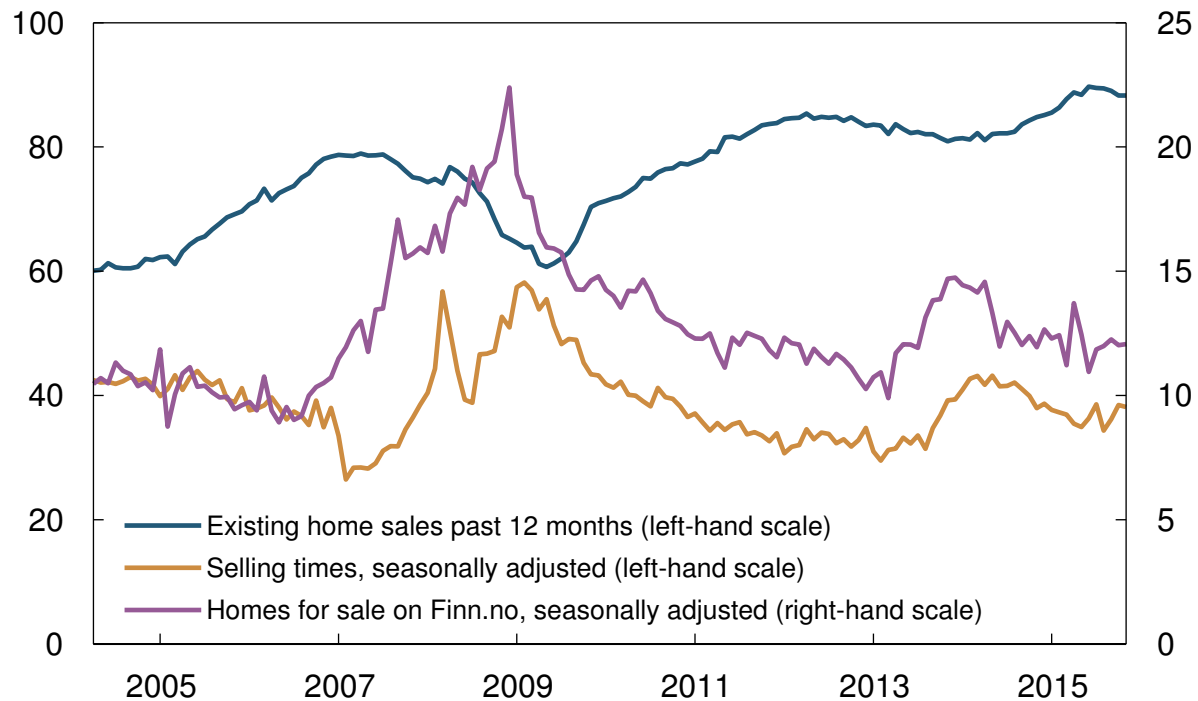
Chart 3.7 House prices relative to disposable income.
Indexed. 1998 Q4 = 100. 1979 Q1 – 2015 Q3



1) Average house prices/disposable income.

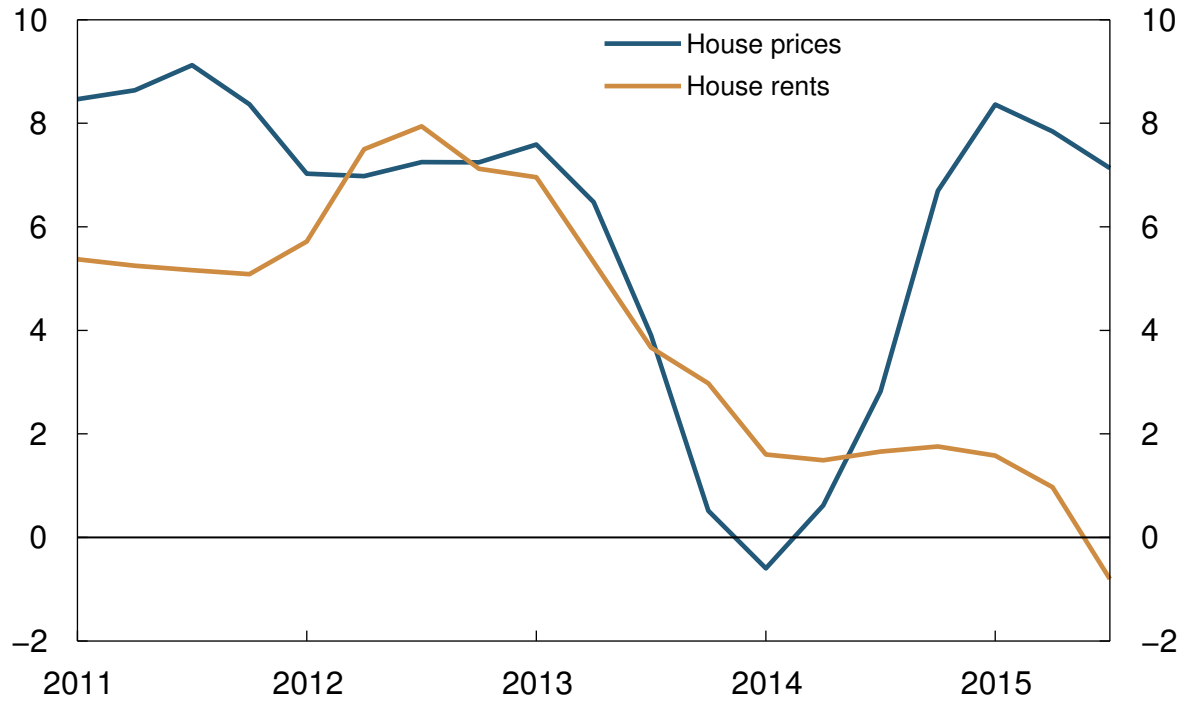
Sources: Statistics Norway, Eiendom Norge, Eiendomsverdi , Finn.no, Norwegian Association of Real Estate Agents (NEF) and Norges Bank

Chart 3.8 Sales of existing homes and homes for sale in thousands of dwellings. Selling times in days. April 2004 – November 2015



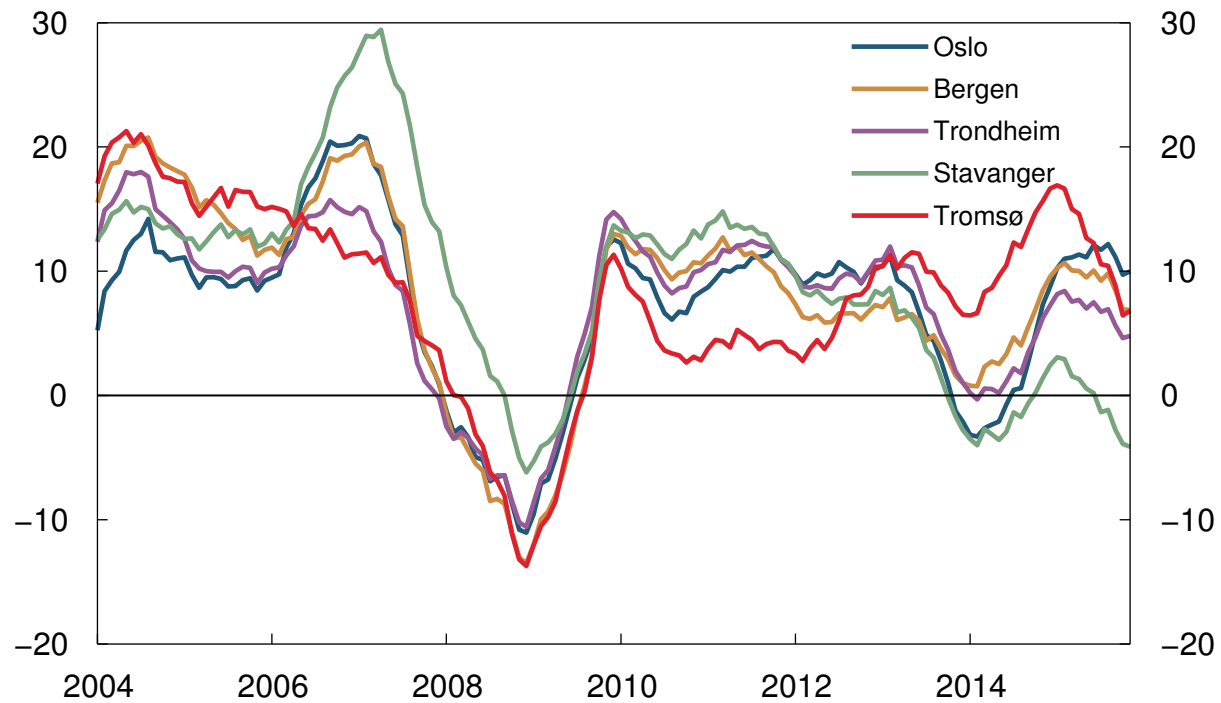
Sources: Eiendom Norge, Eiendomsverdi and Finn.no

Chart 3.9 Development in house prices and house rents.
Four-quarter change. Percent. 2011 Q1 – 2015 Q3



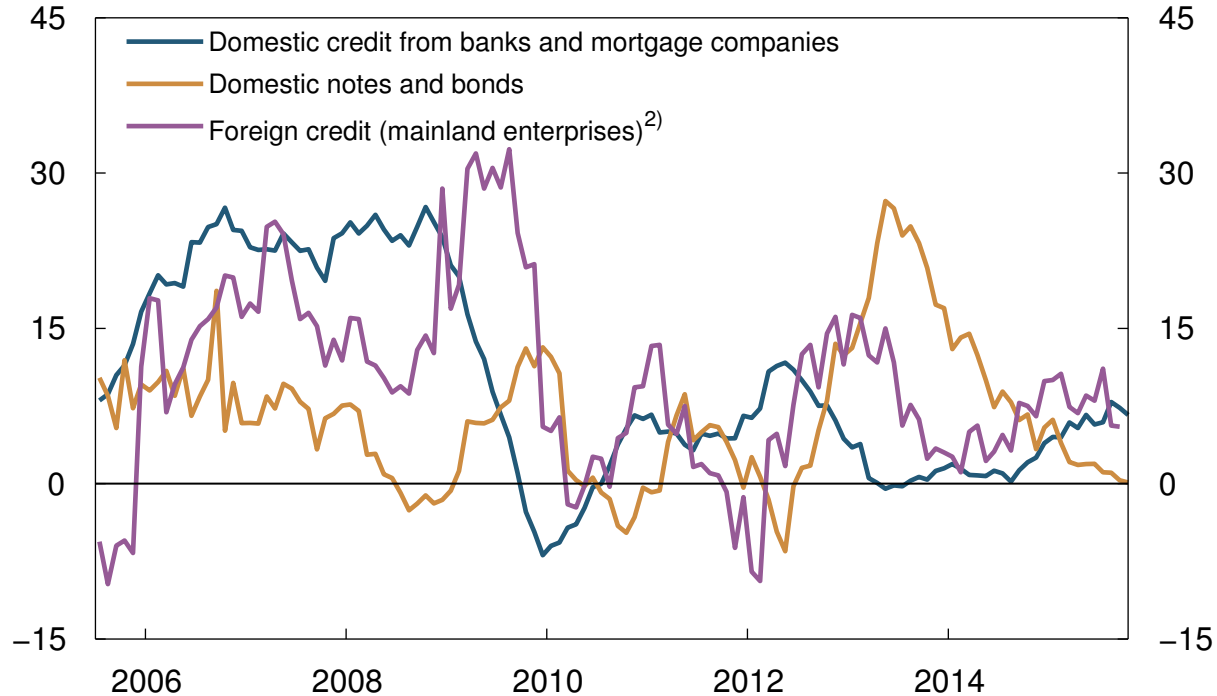
Sources: Eiendom Norge, Eiendomsverdi and Finn.no

Chart 3.10 House prices in selected cities.
Twelve-month change. Percent. January 2004 – November 2015



Sources: Eiendom Norge, Eiendomsverdi and Finn.no

Chart 3.11 Credit from selected funding sources to Norwegian non-financial enterprises. Twelve-month change.¹⁾ Percent. July 2005 – October 2015

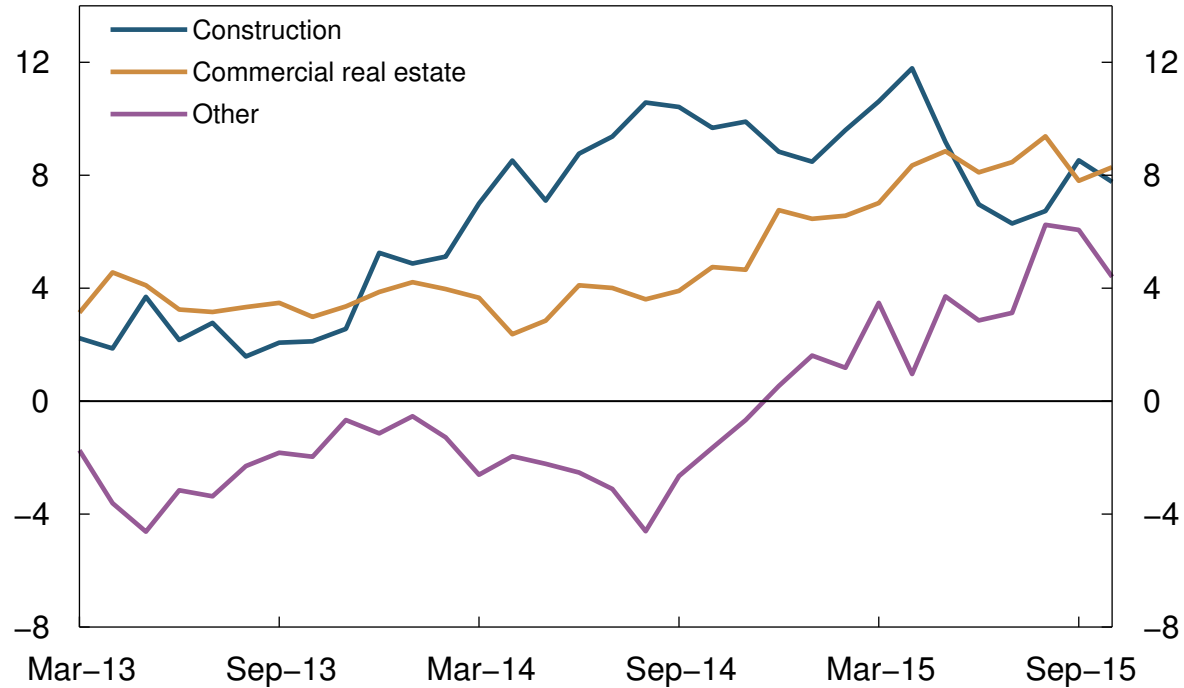


1) Estimated based on stock of debt.

2) Change based on transactions. To end-September 2015.

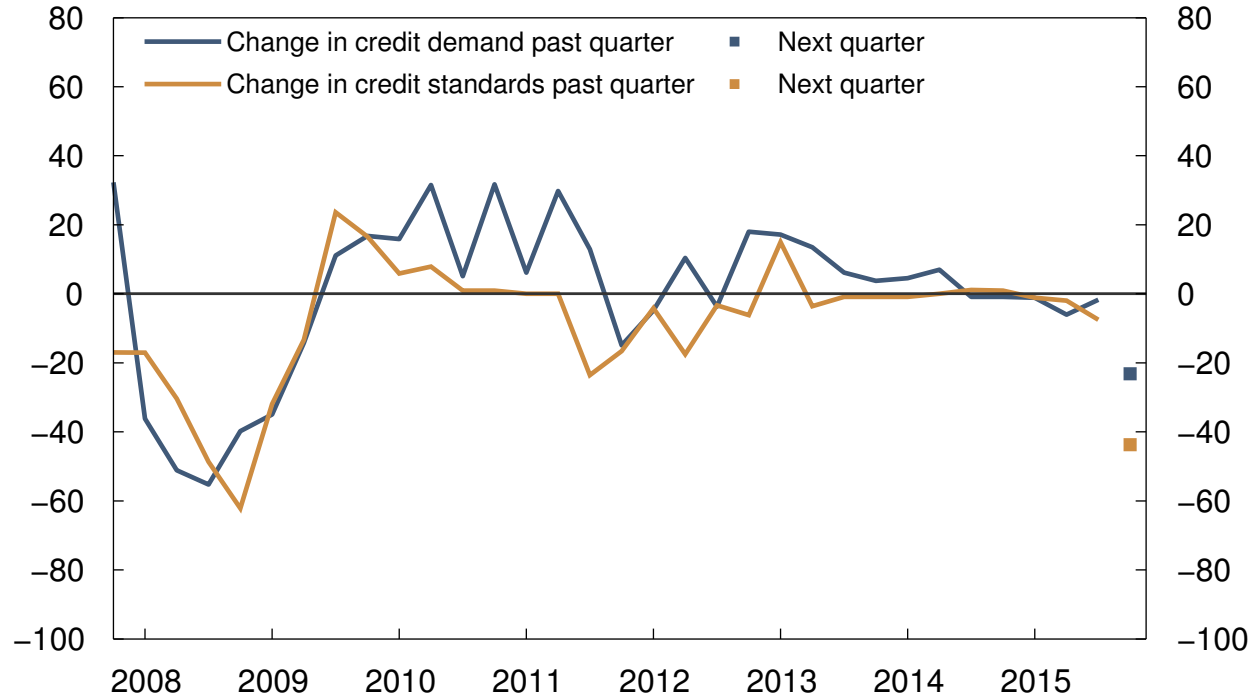
Sources: Statistics Norway and Norges Bank

Chart 3.12 Domestic credit to Norwegian non-financial enterprises in selected industries from banks and mortgage companies. Twelve-month change.¹⁾ Percent. March 2013 – October 2015



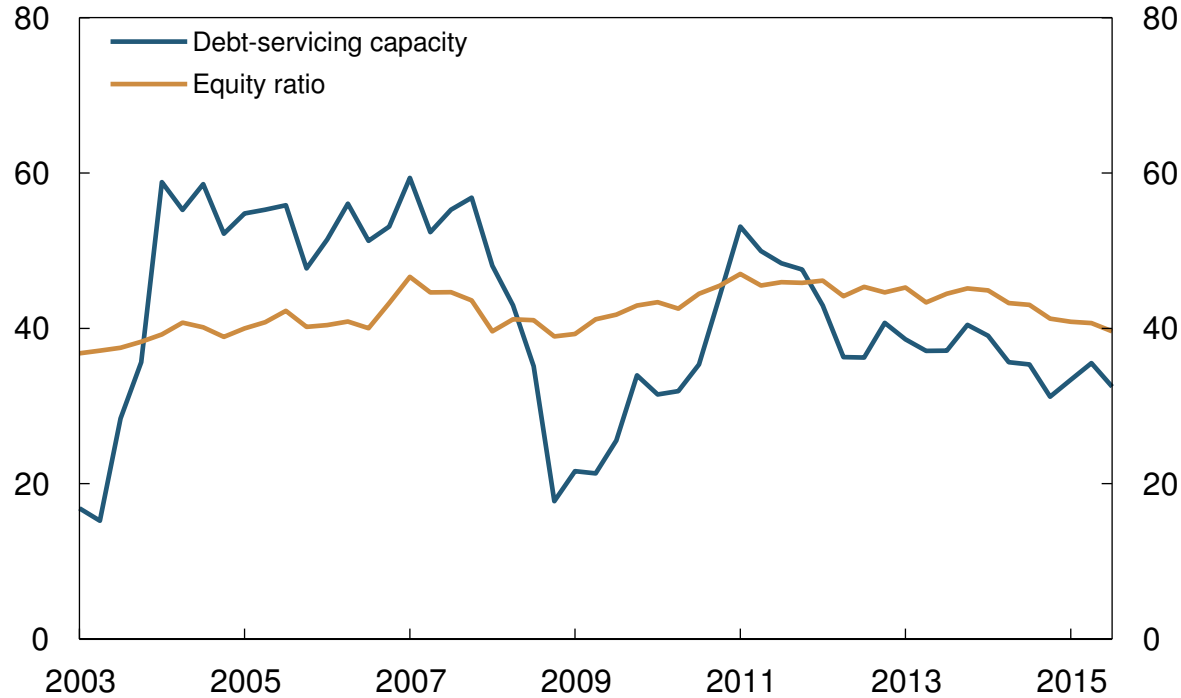
1) Estimated based on stock of debt.
Sources: Statistics Norway and Norges Bank

Chart 3.13 Changes in credit demand and banks' credit standards past quarter, and expected change next quarter.¹⁾ Enterprises. 2007 Q4 – 2015 Q3



1) Negative values denote lower demand or tighter credit standards.
Source: Norges Bank

Chart 3.14 Debt-servicing capacity¹⁾ and equity ratio²⁾ for listed companies.³⁾
 Percent. 2003 Q1 – 2015 Q3



1) Pre-tax profit plus depreciation and amortisation for the previous four quarters as a percentage of interest-bearing debt less cash and cash-equivalents (net interest-bearing debt).

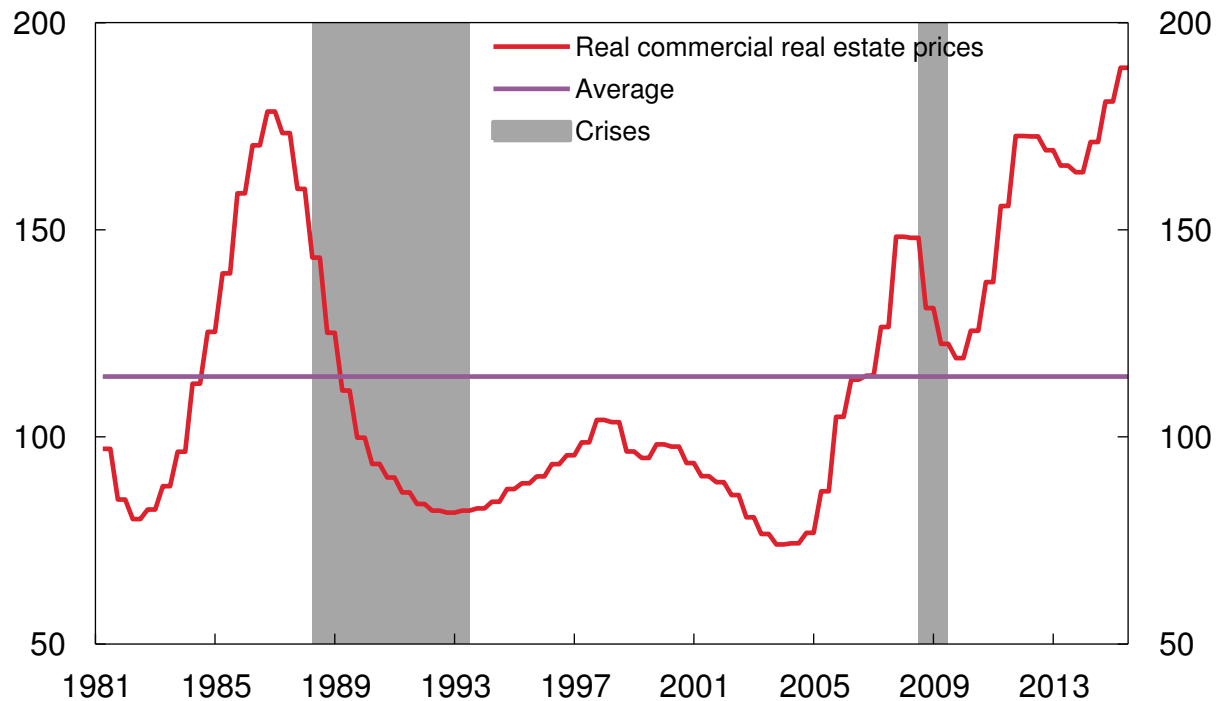
2) Book equity as a percentage of total assets.

3) Norwegian non-financial companies listed on Oslo Børs. Norsk Hydro is excluded until 2007 Q3.

Statoil is excluded for the entire period.

Sources: Bloomberg, Statistics Norway and Norges Bank

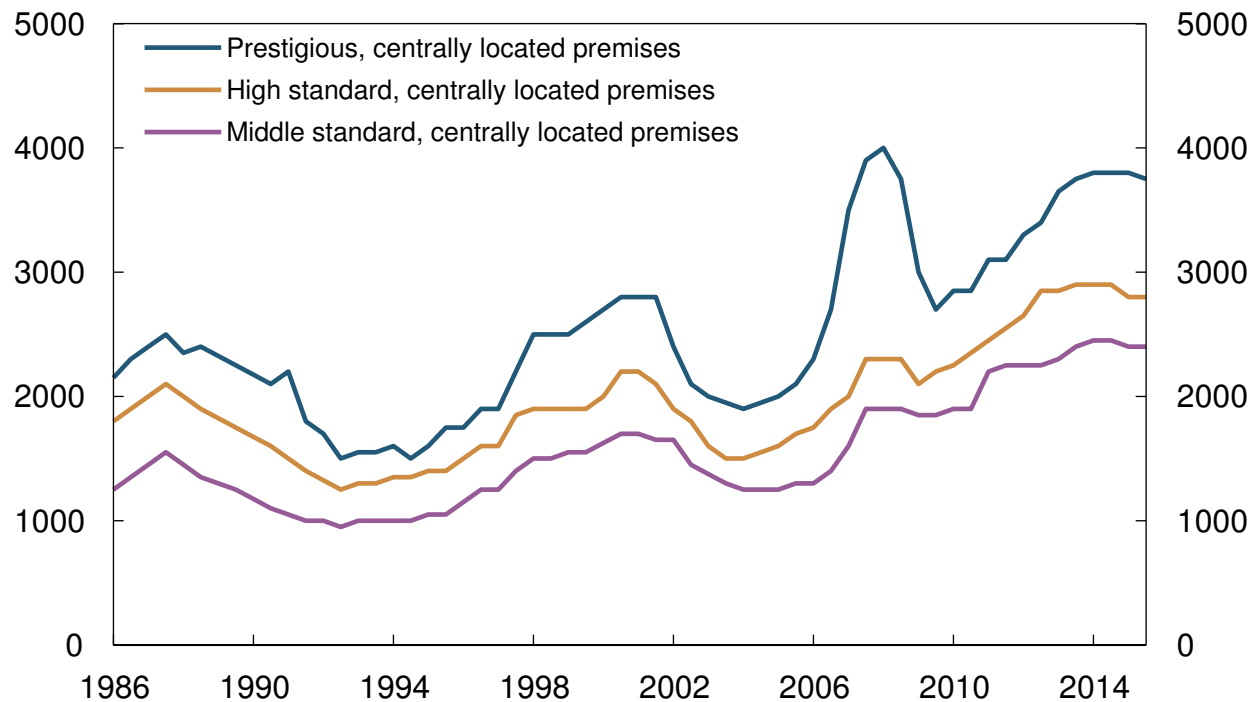
Chart 3.15 Real commercial real estate prices.¹⁾
Indexed. 1998 = 100. 1981 Q2 – 2015 Q3



1) Estimated sales prices for centrally located high-standard office premises in Oslo deflated by the GDP deflator for mainland Norway.

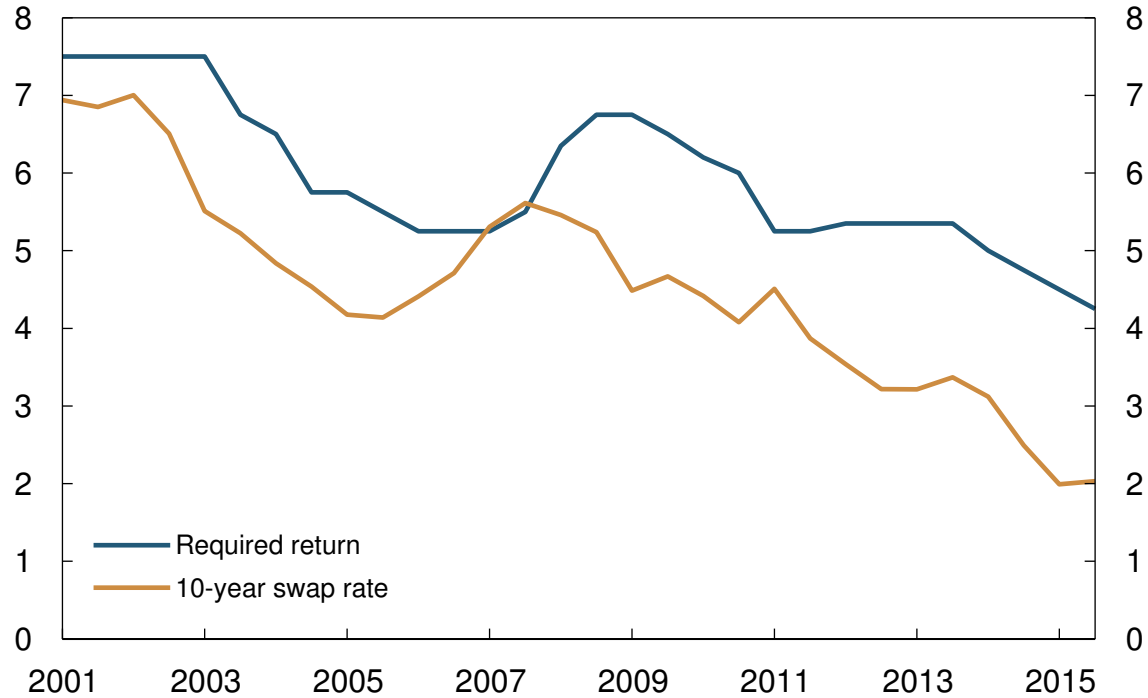
Sources: Dagens Næringsliv, OPAK, Statistics Norway and Norges Bank

Chart 3.16 Annual rental prices for office premises in Oslo.
NOK per square meter. 1986 H1 – 2015 H2



Sources: OPAK and Dagens Næringsliv

Chart 3.17 Required return¹⁾ for prime office space in Oslo and 10-year swap rate.²⁾
Percent. 2001 H1 – 2015 H2

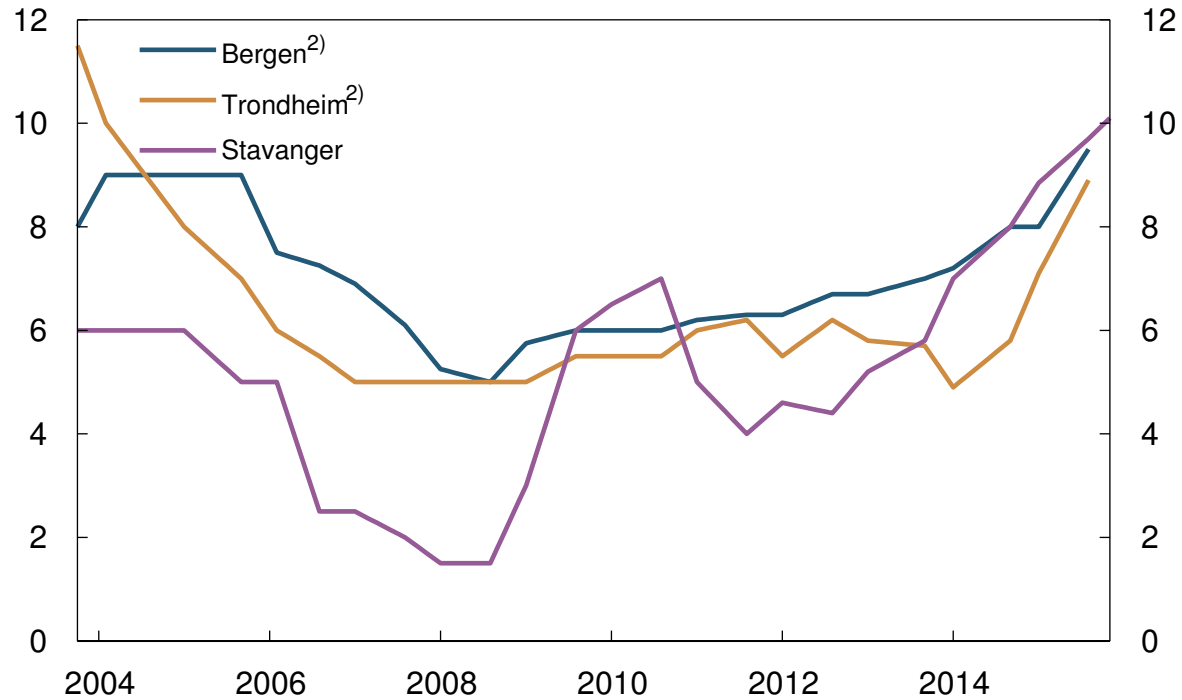


1) The required return is based on assessments by Dagens Næringsliv's expert panel for commercial real estate.

2) Semi-annual swap rate is calculated as an average of daily rates. The swap rate for 2015 H2 is the average of the daily rates in the period 1 July – 11 December.

Sources: Dagens Næringsliv and Thomson Reuters

Chart 3.18 Office vacancy rates in selected cities.¹⁾
 Percent. October 2003 – November 2015

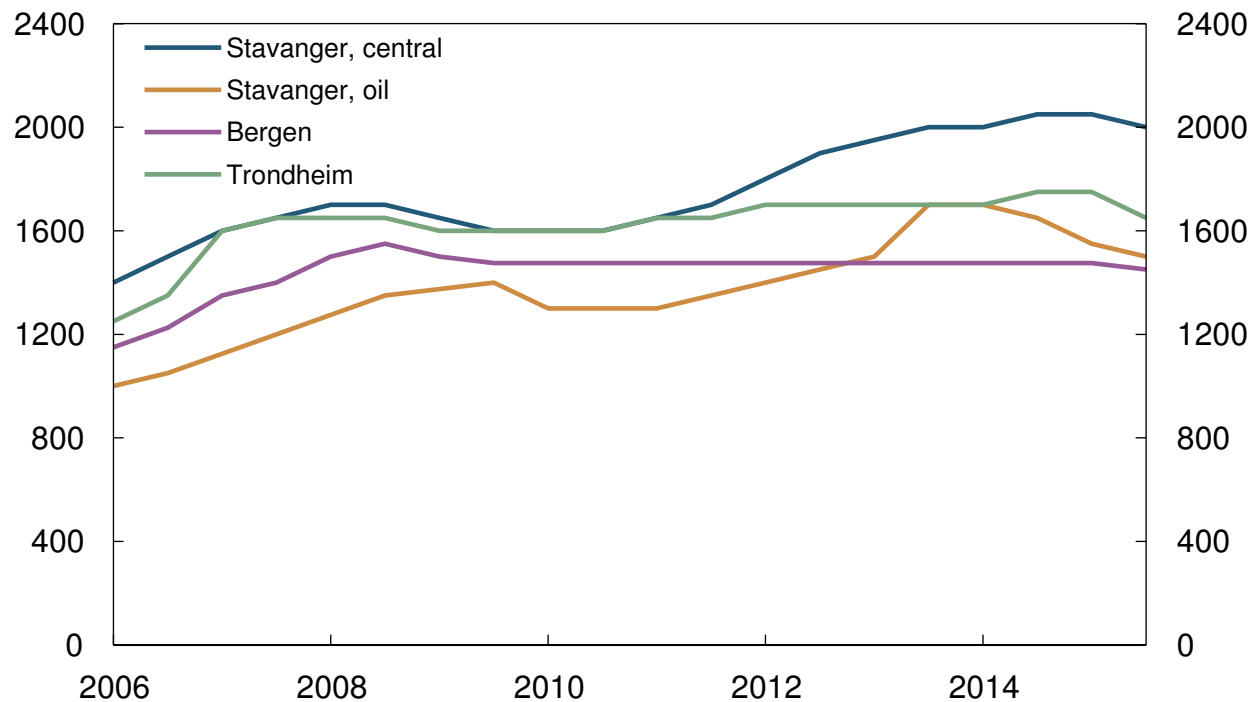


1) The figures are normally published semi-annually. Monthly data are calculated by linear interpolation.

2) Figures up to and including August 2015.

Sources: Eiendomsmegler 1 Midt-Norge, Eiendomsmegler 1 Rogaland, Kyte Næringsmegling and Akershus Eiendom

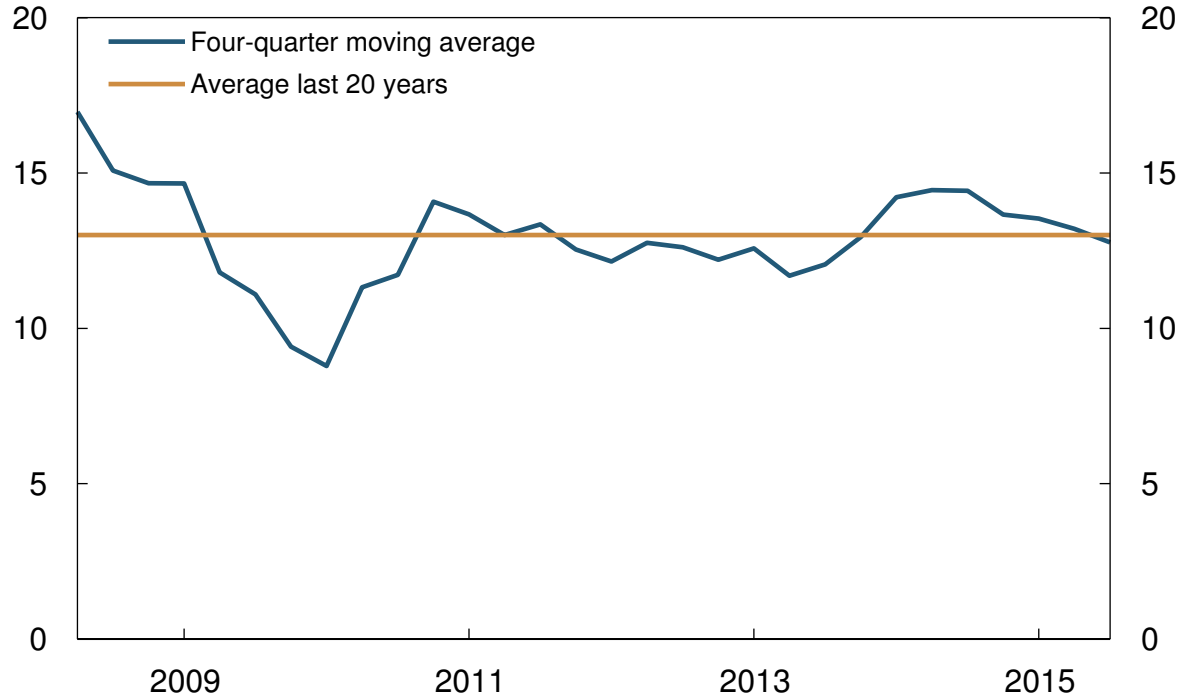
Chart 3.19 Rental prices for office premises in selected cities.
 NOK per square metre, per year. 2006 H1 – 2015 H2¹⁾



1) The statistics previously comprised one rental price segment per area. In the latter half of 2013, prices were divided into the segments “middle standard” and “high standard” per area. For the series “Stavanger, central” and “Stavanger, oil” the segment “high standard” was continued, while “middle standard” was continued for “Bergen” and “Trondheim”.

Sources: OPAK and Dagens Næringsliv

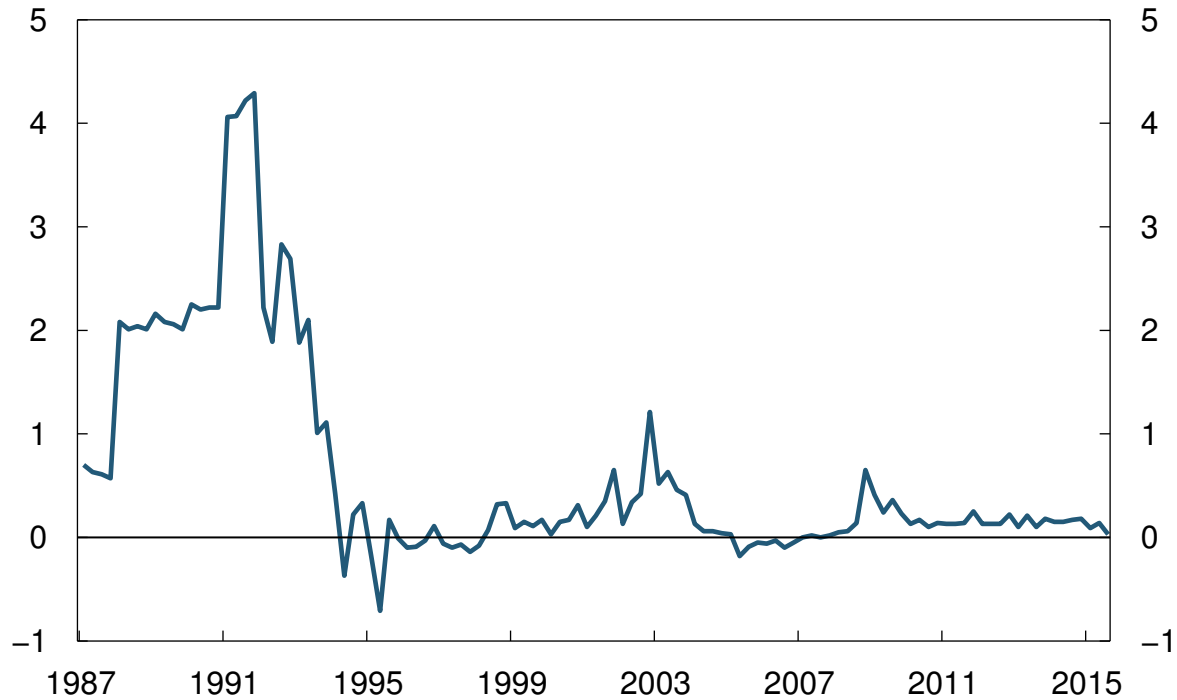
Chart 3.20 Return on equity for Norwegian banks¹⁾. Percent. 2008 Q2 – 2015 Q3



1) Calculated as weighted average of seven large Norwegian banks: DNB Bank, Nordea Bank Norge, SpareBank 1 SR-Bank, Sparebanken Vest, SpareBank 1 SMN, Sparebanken Sør og SpareBank 1 Nord-Norge (excluding Sparebanken Sør to end-December 2013).

Sources: Banking groups' quarterly and annual reports and Norges Bank

Chart 3.21 Banks' ¹⁾ loan losses as a share of gross lending. ²⁾
Percent. Annualised. 1987 Q1 – 2015 Q3

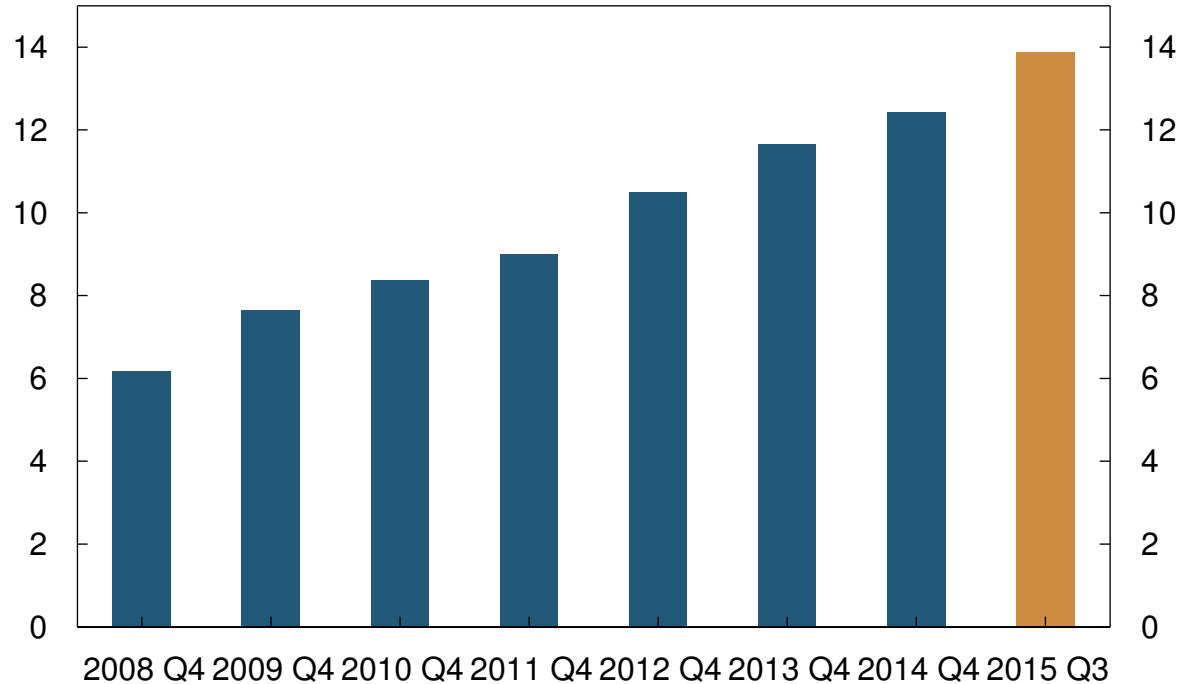


1) All banks and credit institutions in Norway.

2) Loan losses in 2015 Q3 are affected by the reversal of DNB's loan losses owing to the sale of previously written-loans. Excluding this effect, loan loss ratios of Norwegian banks would be at approximately the same level as in 2015 Q2.

Source: Norges Bank

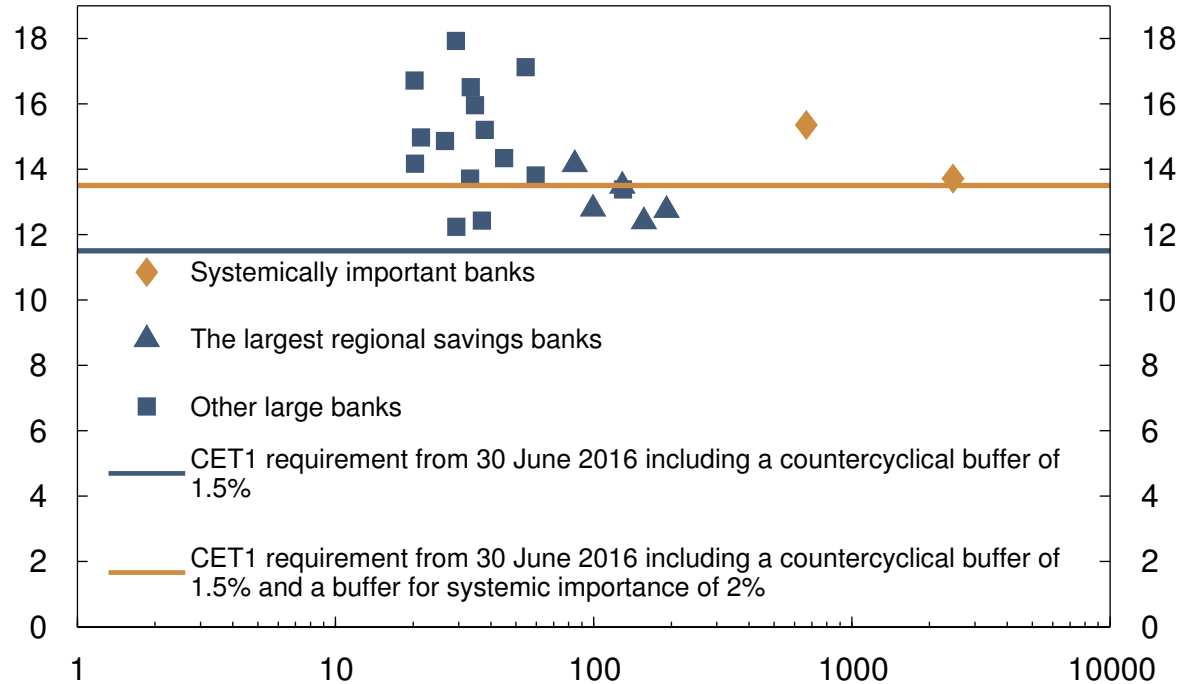
Chart 3.22 Common Equity Tier 1 (CET1) capital ratios in banks.¹⁾
Percent. 2008 Q4 – 2015 Q3



1) Calculated as weighted average of seven large Norwegian banks: DNB Bank, Nordea Bank Norge, SpareBank 1 SR-Bank, Sparebanken Vest, SpareBank 1 SMN, Sparebanken Sør og SpareBank 1 Nord-Norge (excluding Sparebanken Sør to end-December 2013).

Sources: Banking groups' quarterly and annual reports and Norges Bank

Chart 3.23 Banking groups¹⁾ Common Equity Tier 1 (CET1) capital ratios. Percent. Total assets.²⁾ In billions of NOK. At 30 September 2015³⁾



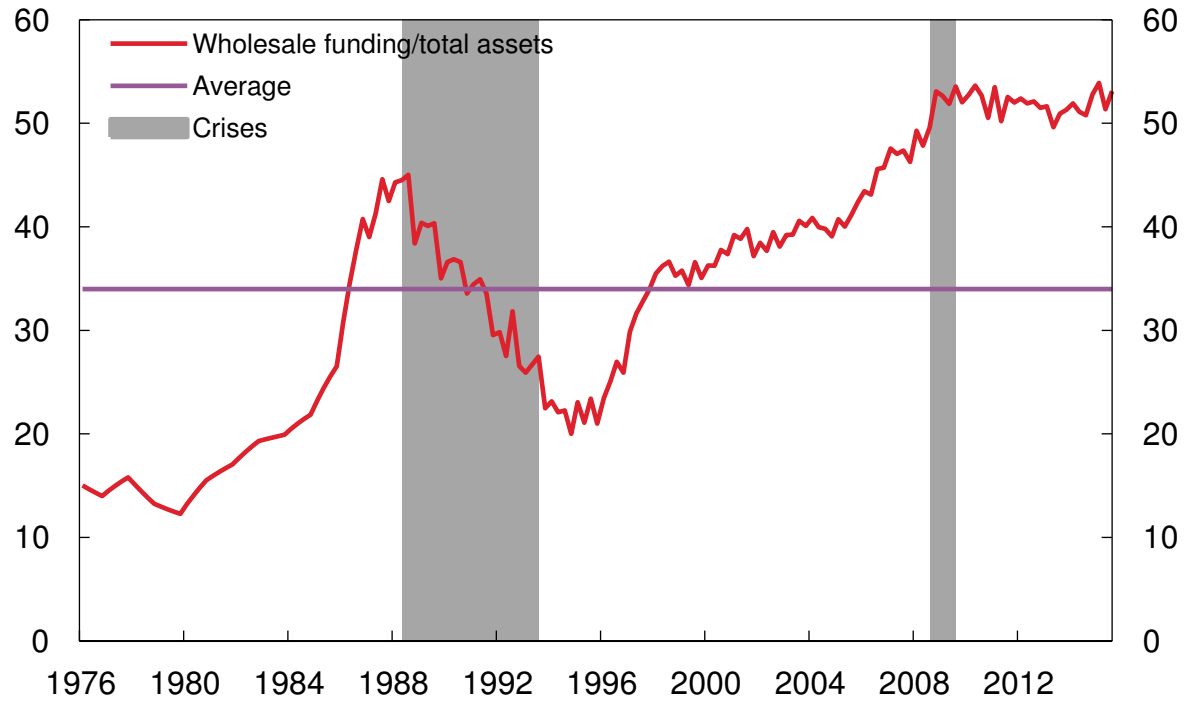
1) Banking groups with total assets in excess of NOK 20bn, excluding branches of foreign banks in Norway.

2) Logarithmic scale.

3) Assuming that profits for the first three quarters of 2015 are added in full to CET1 capital.

Sources: Banking groups' quarterly reports and Norges Bank

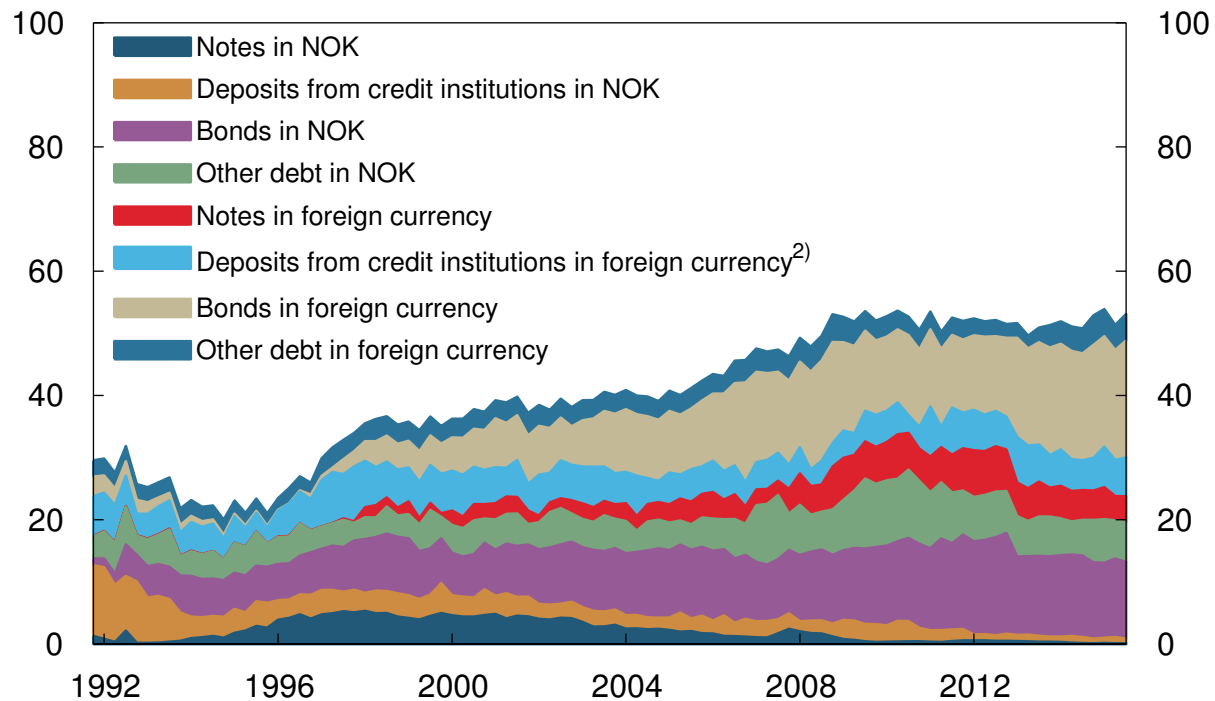
Chart 3.24 Banks' ¹⁾ wholesale funding as a share of total assets.
Percent. 1976 Q1 – 2015 Q3



1) All banks and covered bond mortgage companies in Norway, excluding branches and subsidiaries of foreign banks.

Source: Norges Bank

Chart 3.25 Decomposition of banks' ¹⁾ wholesale funding.
As a percentage of total assets. 1991 Q4 – 2015 Q3

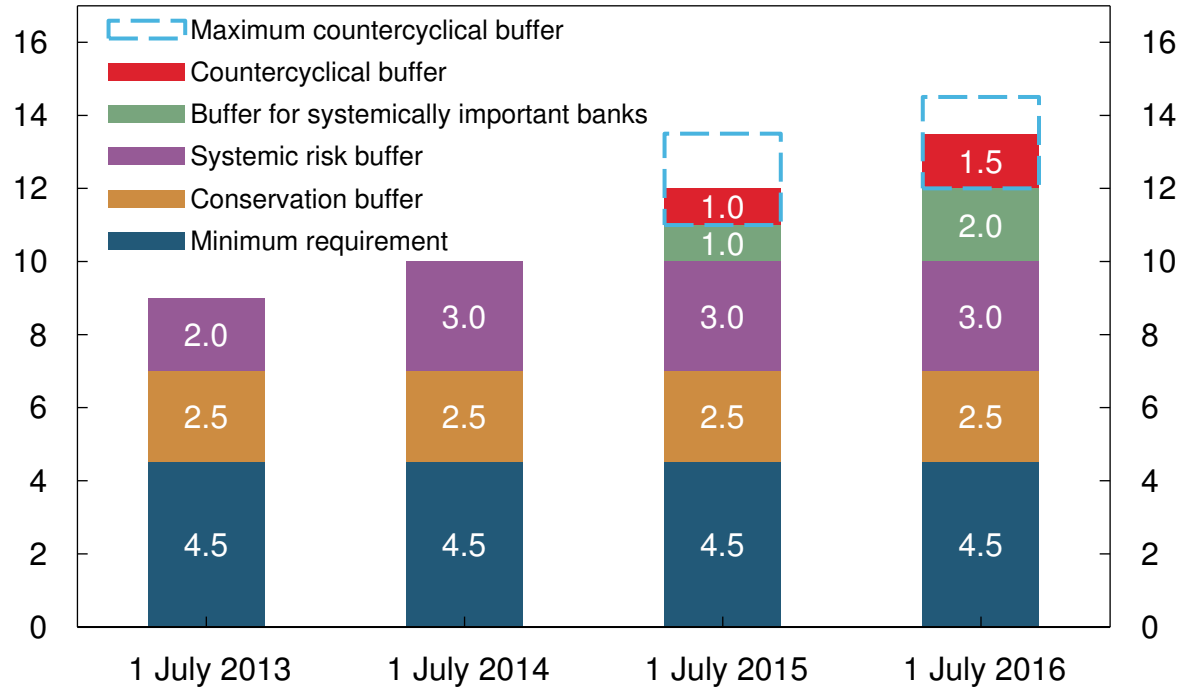


1) All banks and covered bond mortgage companies in Norway excluding branches and subsidiaries of foreign banks.

2) Deposits from credit institutions include deposits from central banks.

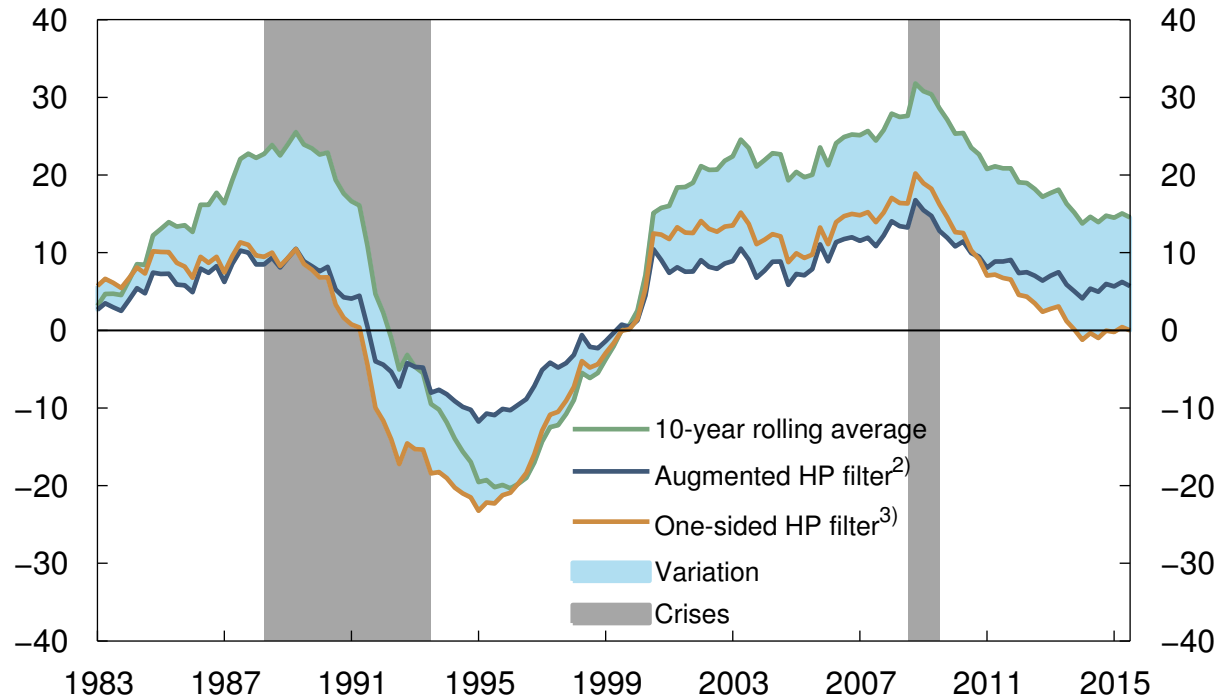
Source: Norges Bank

Chart 3.26 Phasing-in of Pillar 1 Common Equity Tier 1 capital requirements in the Norwegian capital adequacy framework. Percent. 1 July 2013 – 1 July 2016



Sources: Ministry of Finance and Norges Bank

Chart 3.27a Credit gap. Total credit¹⁾ mainland Norway as a share of mainland GDP. Deviation from estimated trends. Percentage points. 1983 Q1 – 2015 Q3



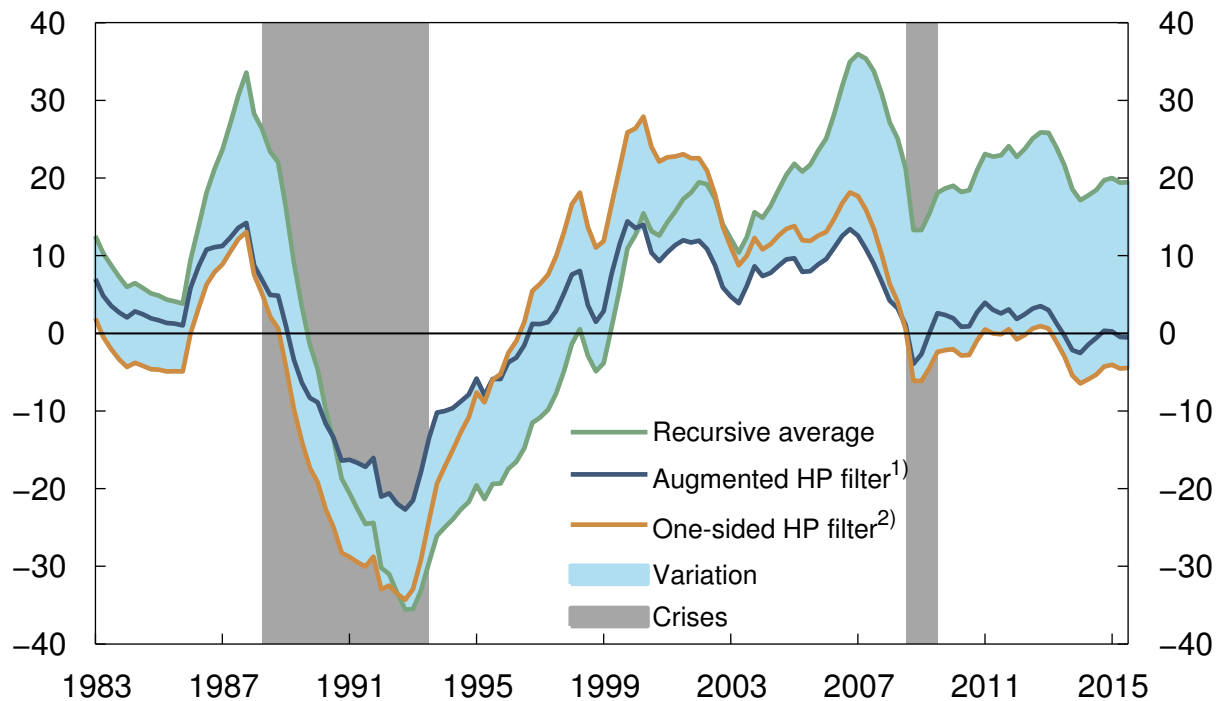
1) The sum of C2 households and C3 non-financial enterprises for mainland Norway (all non-financial enterprises pre-1995). C3 non-financial enterprises comprises C2 non-financial enterprises and foreign debt for mainland Norway.

2) One-sided Hodrick-Prescott filter estimated on data augmented with a simple projection. Lambda = 400 000.

3) One-sided Hodrick-Prescott filter. Lambda = 400 000.

Sources: Statistics Norway, IMF and Norges Bank

Chart 3.27b House price gap. House prices relative to disposable income.
Deviation from estimated trends. Percent. 1983 Q1 – 2015 Q3

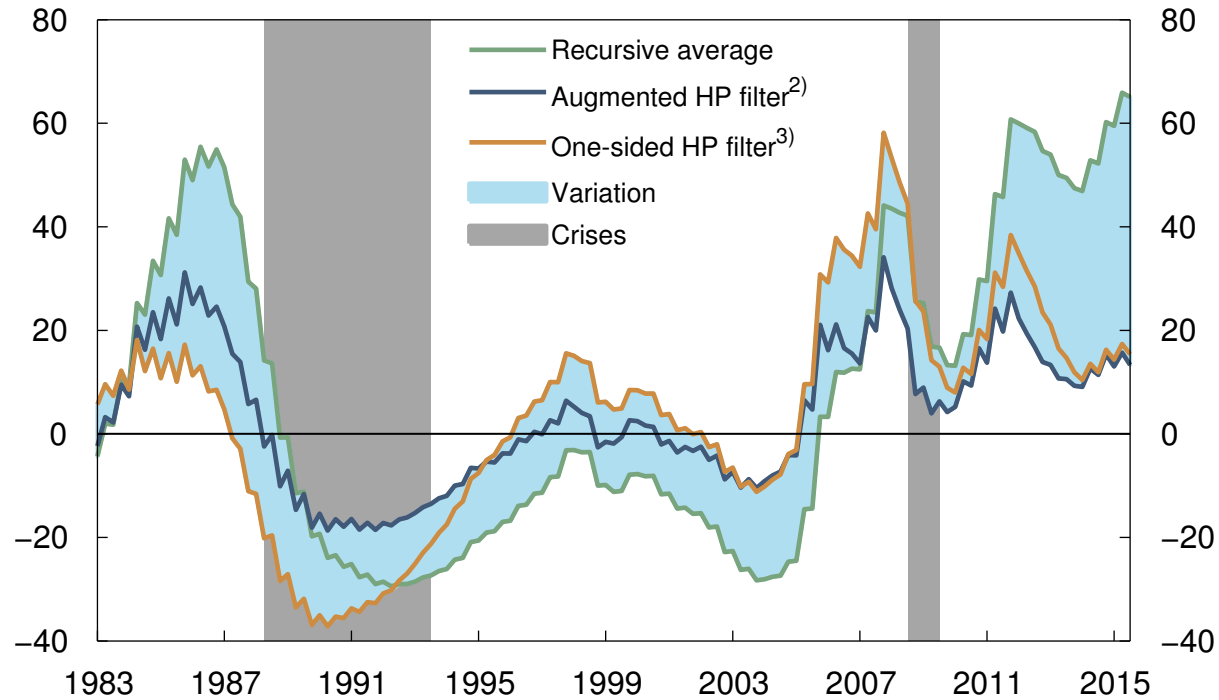


1) One-sided Hodrick-Prescott filter estimated on data augmented with a simple projection. Lambda = 400 000.

2) One-sided Hodrick-Prescott filter. Lambda = 400 000.

Sources: Statistics Norway, Eiendom Norge, Norwegian Association of Real Estate Agents (NEF), Finn.no, Eiendomsverdi and Norges Bank

Chart 3.27c Commercial real estate price gap. Real commercial real estate prices¹⁾ as deviation from estimated trends. Percent. 1983 Q1 – 2015 Q3



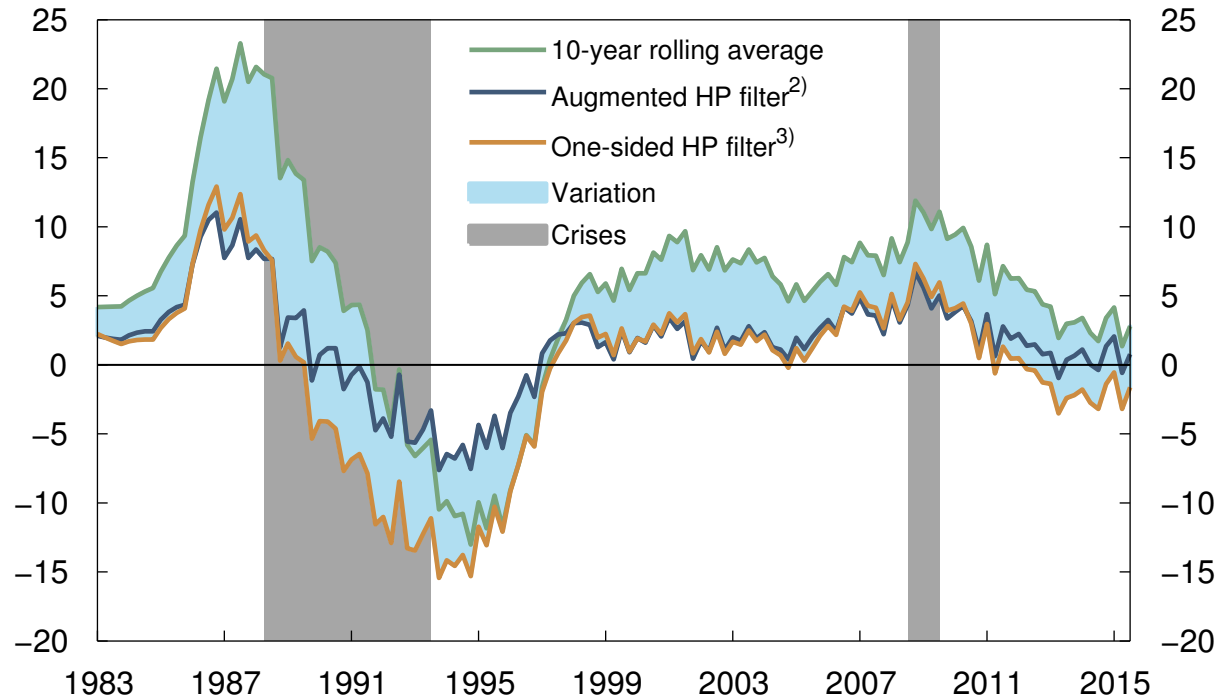
1) Estimated sales prices for office premises in Oslo deflated by the GDP deflator for mainland Norway.

2) One-sided Hodrick-Prescott filter estimated on data augmented with a simple projection. Lambda = 400 000.

3) One-sided Hodrick-Prescott filter. Lambda = 400 000.

Sources: Dagens Næringsliv, OPAK, Statistics Norway and Norges Bank

Chart 3.27d Wholesale funding gap. Banks¹⁾ wholesale funding as a share of total assets. Deviation from estimated trends. Percentage points. 1983 Q1 – 2015 Q3



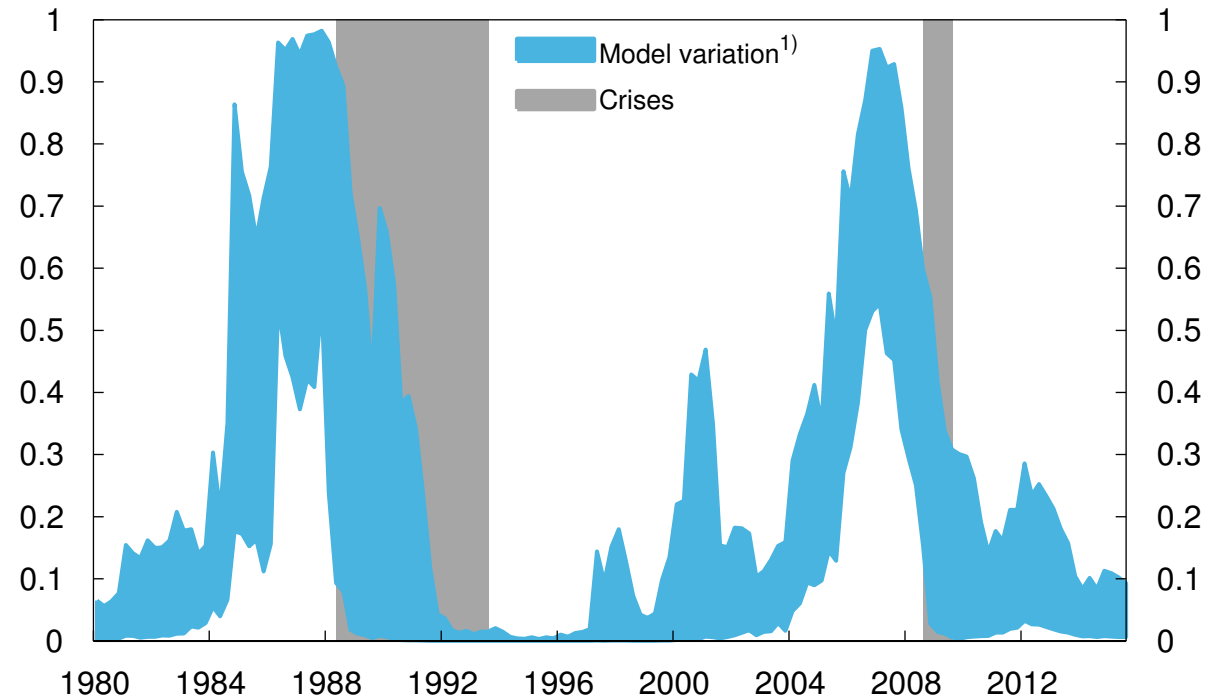
1) All banks and covered bond mortgage companies in Norway excluding branches and subsidiaries of foreign banks.

2) One-sided Hodrick-Prescott filter estimated on data augmented with a simple projection. Lambda = 400 000.

3) One-sided Hodrick-Prescott filter. Lambda = 400 000.

Source: Norges Bank

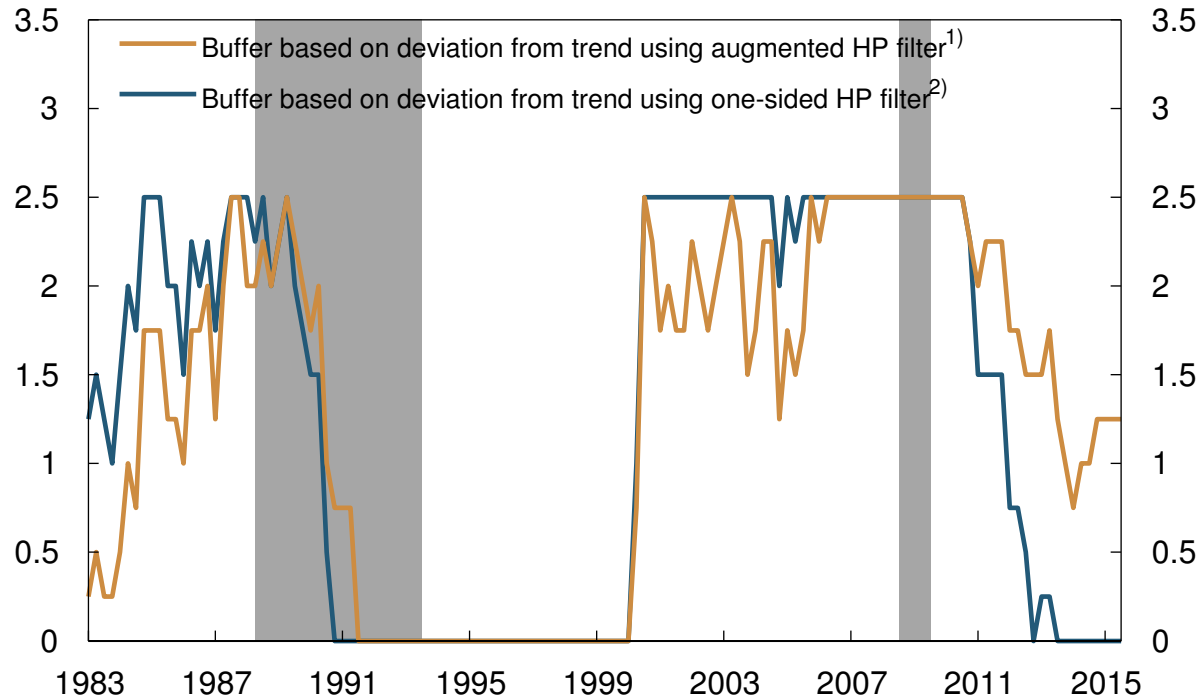
Chart 3.28 Estimated crisis probabilities from various model specifications.
1980 Q1 – 2015 Q3



1) Model variation is represented by the highest and lowest crisis probability based on different model specifications and trend calculations.

Source: Norges Bank

Chart 3.29 Benchmark rates for the countercyclical capital buffer under alternative trend estimates. Percent. 1983 Q1 – 2015 Q3

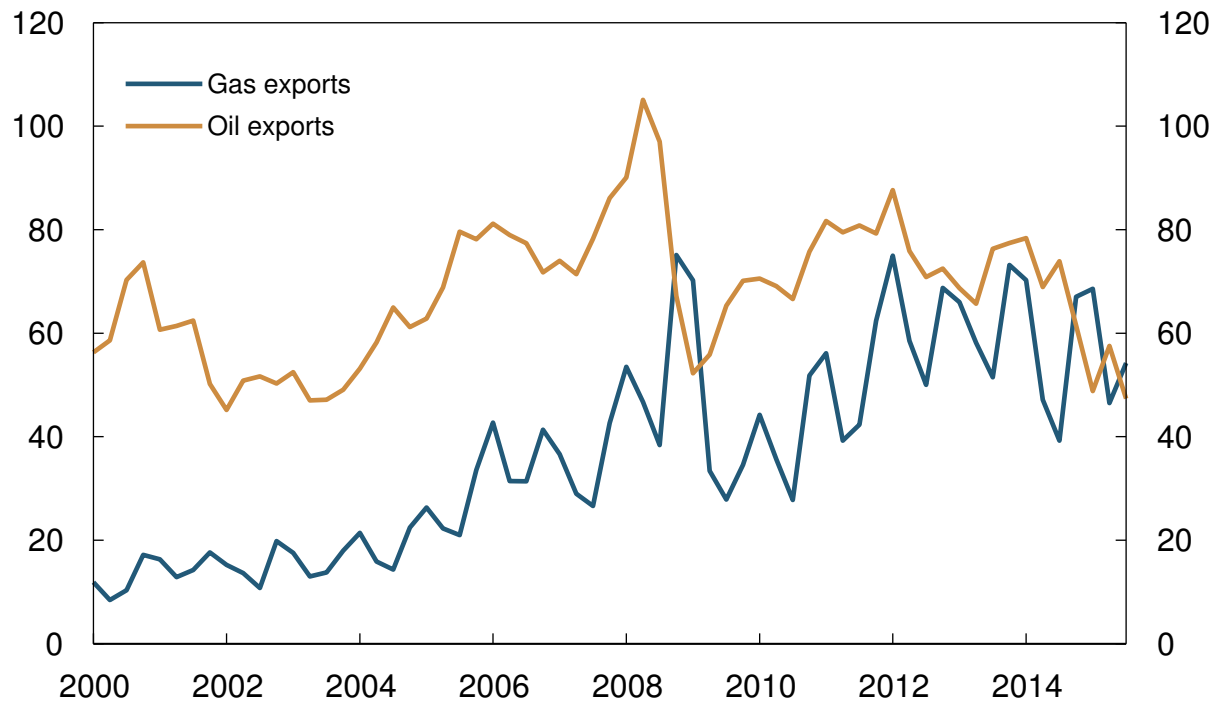


1) One-sided Hodrick-Prescott filter estimated on data augmented with a simple projection. Lambda = 400 000.

2) One-sided Hodrick-Prescott filter. Lambda = 400 000.

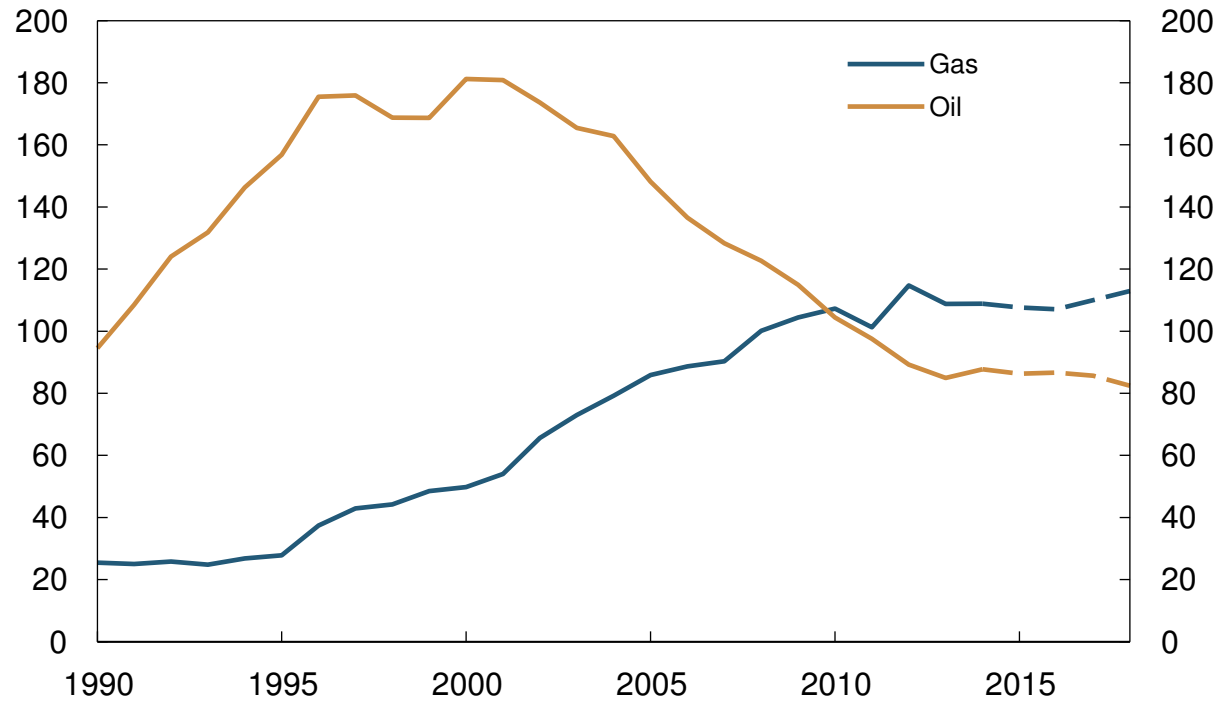
Sources: Statistics Norway, IMF and Norges Bank

Chart 1 Exports of crude oil and natural gas.
In billions of NOK. 2000 Q1 – 2015 Q3



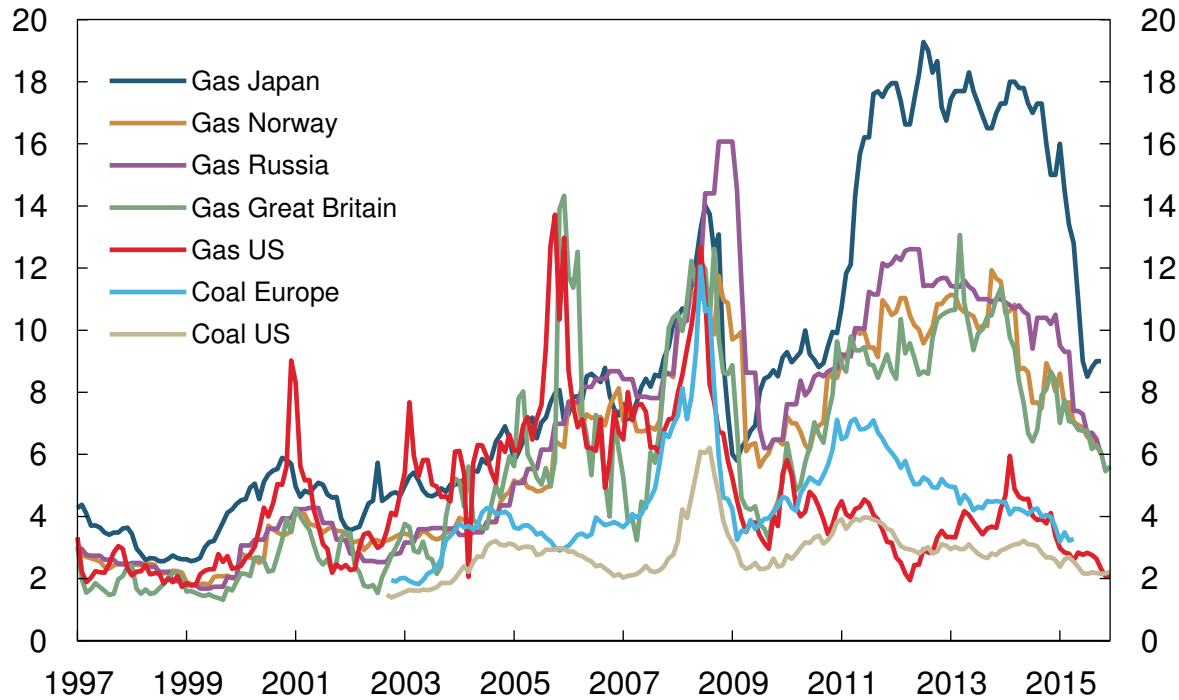
Source: Statistics Norway

Chart 2 Production of oil and gas.
In billions of tonnes of oil equivalents. 1990 – 2018¹⁾



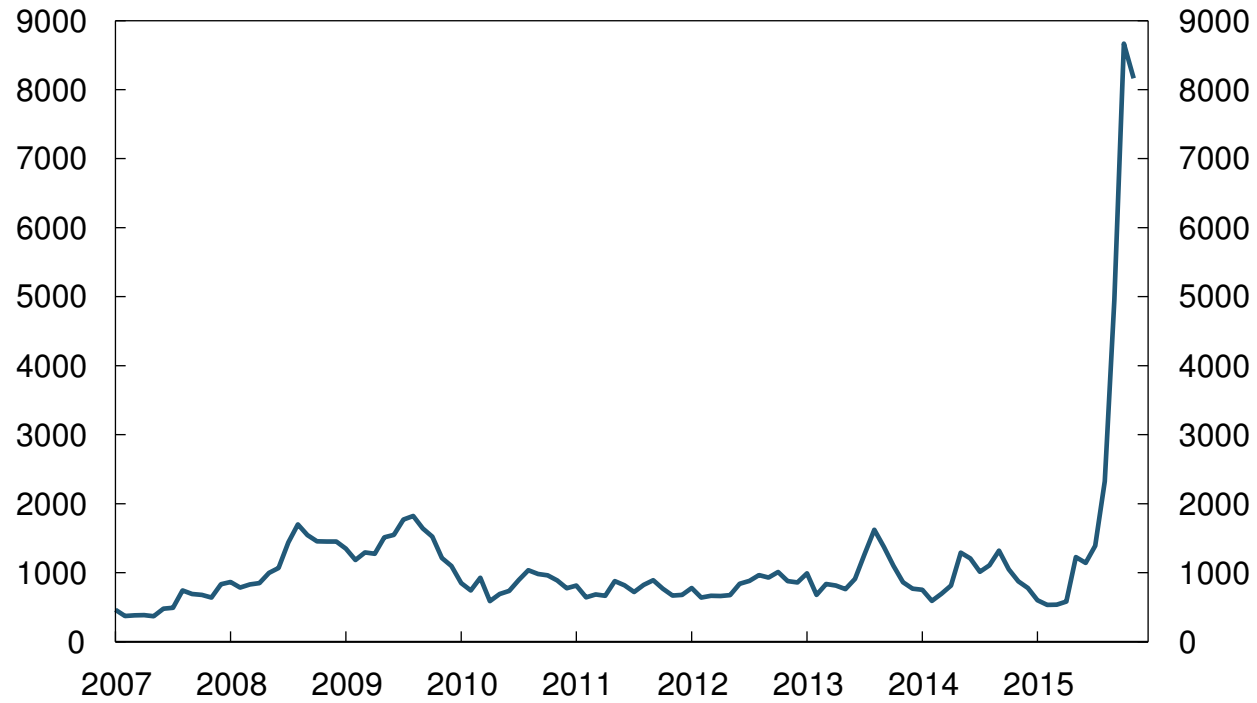
1) Projections from 2015 (broken lines).
Source: Norwegian Petroleum Directorate

Chart 3 Gas and coal prices.
USD/MMBtu. January 1997 – December 2015¹⁾



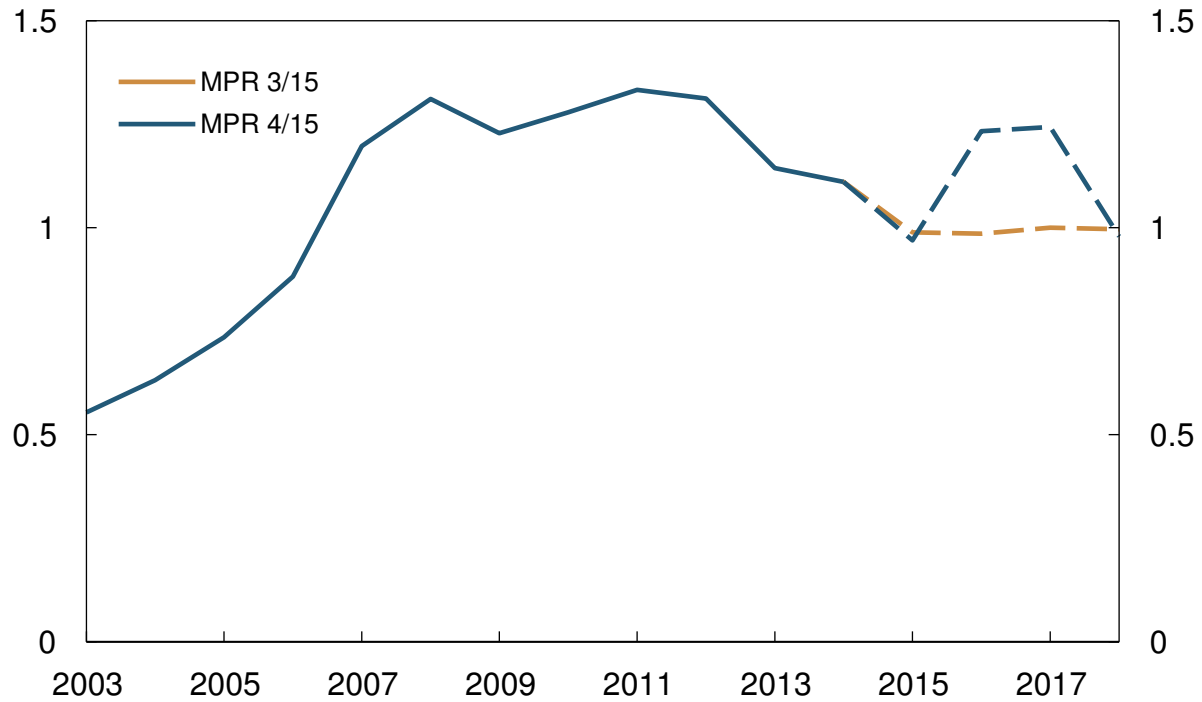
1) For December 2015, an average of daily data is used up to and including 11 December 2015.
Sources: Thomson Reuters, SSB, IMF and CME Group

Chart 1 Number of asylum applications received per month.
January 2008 – November 2015



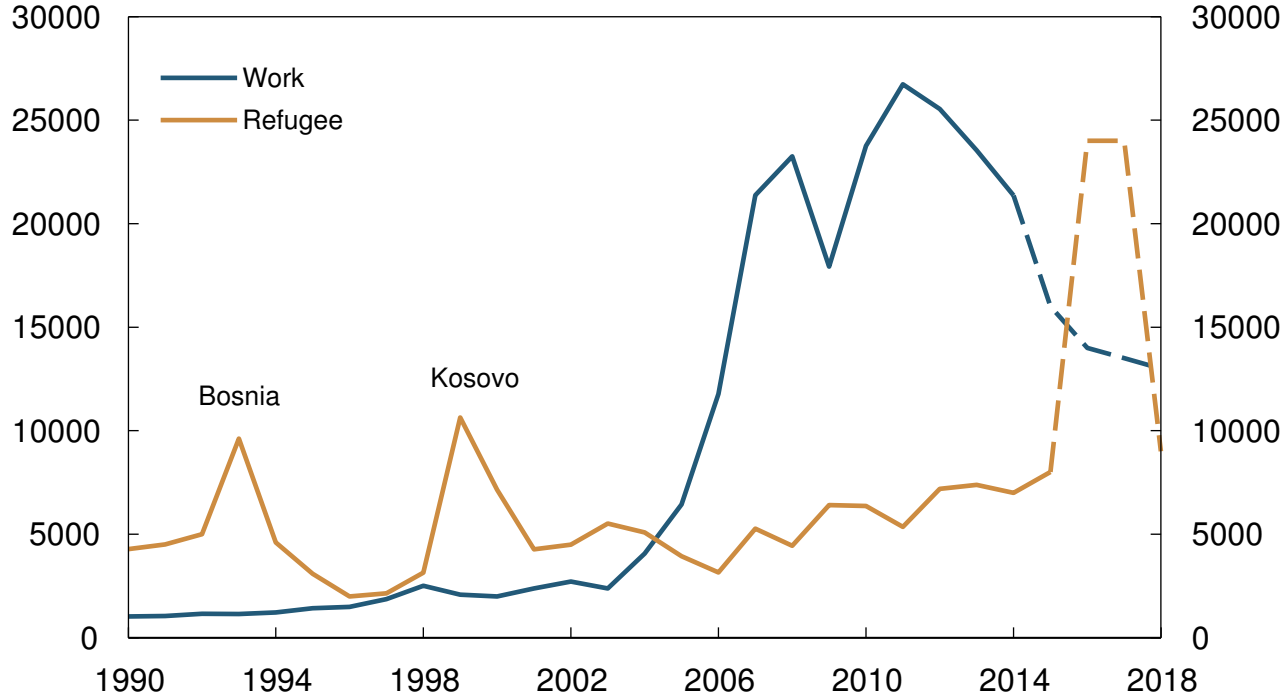
Source: Norwegian Directorate of Immigration

Chart 2 Population growth.
Percent. 2003 – 2018¹⁾



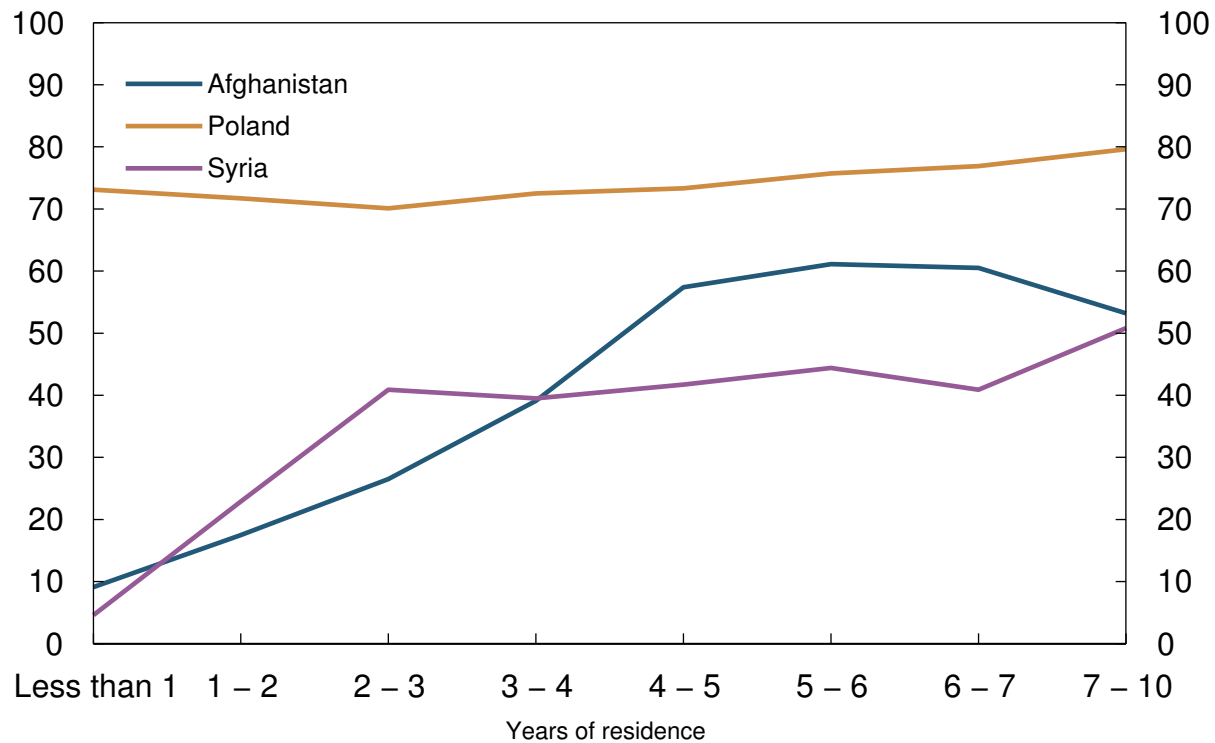
1) Projections for 2015 – 2018.
Sources: Statistics Norway and Norges Bank

Chart 3 Non-Nordic immigrants by reason for entry.
Number of persons. 1990 – 2018¹⁾



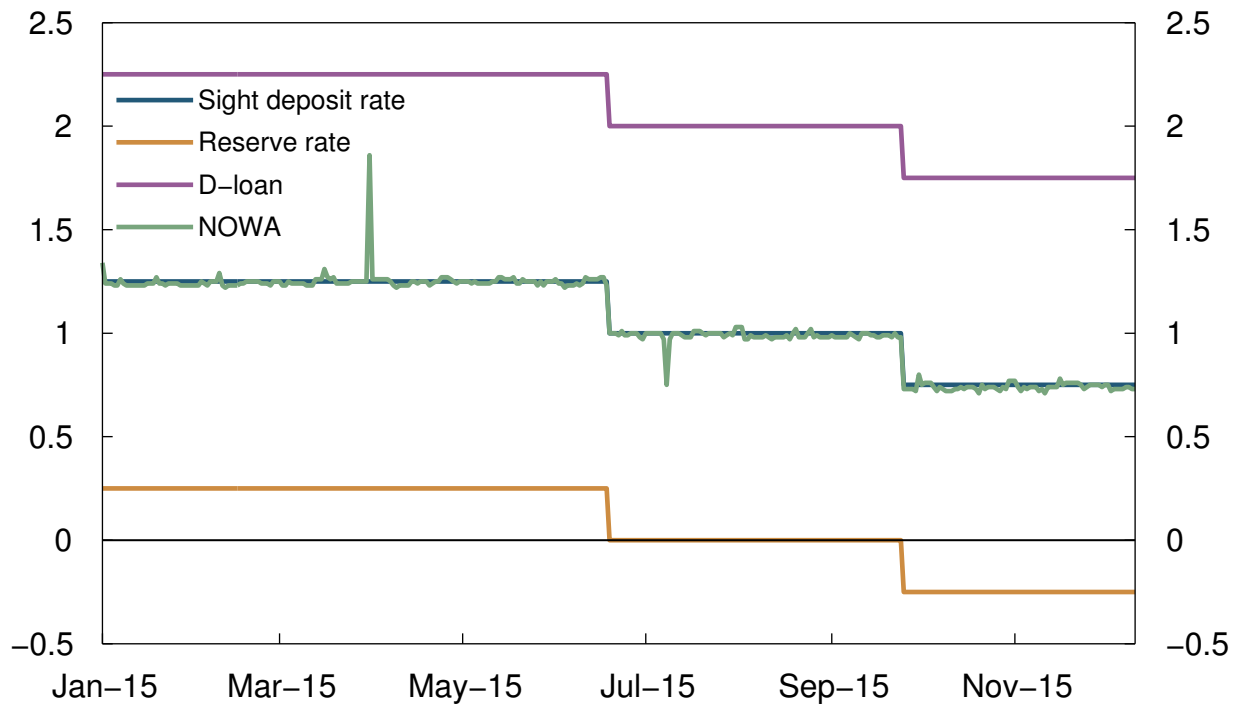
1) Projections for 2015 – 2018.
Sources: Statistics Norway and Norges Bank

Chart 4 Employed as a percentage of the population ages 15 – 74 in 2014.
By country of origin and length of residence in Norway



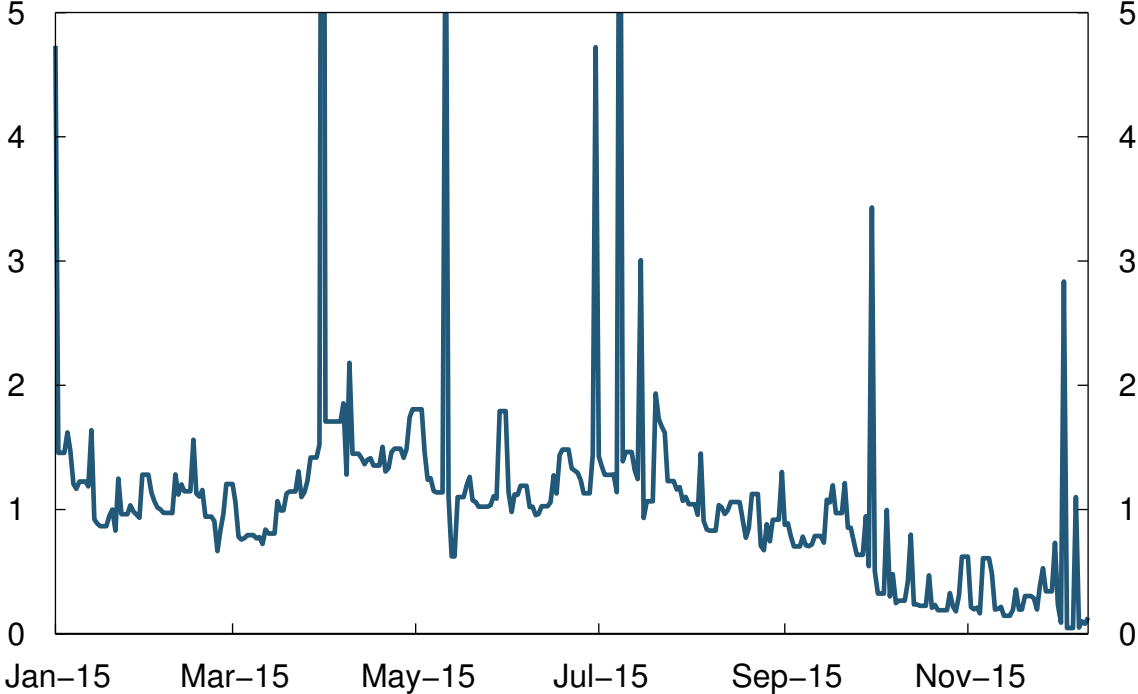
Source: Statistics Norway

Chart 1 Norges Bank's interest rates and the NOWA-rate.
Percent. 1 January 2015 – 11 December 2015



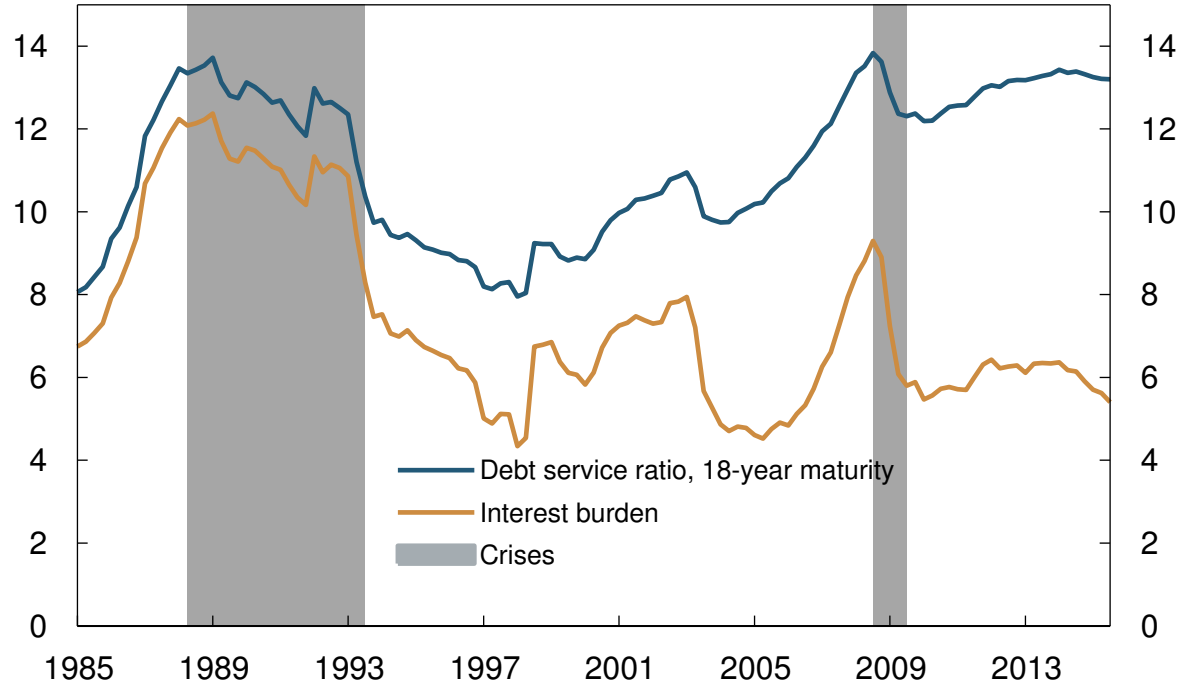
Source: Norges Bank

Chart 2 Reserve deposits in Norges Bank.
In billions of NOK. 1 January 2015 – 11 December 2015



Source: Norges Bank

Chart 1 Household debt service ratio¹⁾ and interest burden²⁾.
Percent.1985 Q1 – 2015 Q3

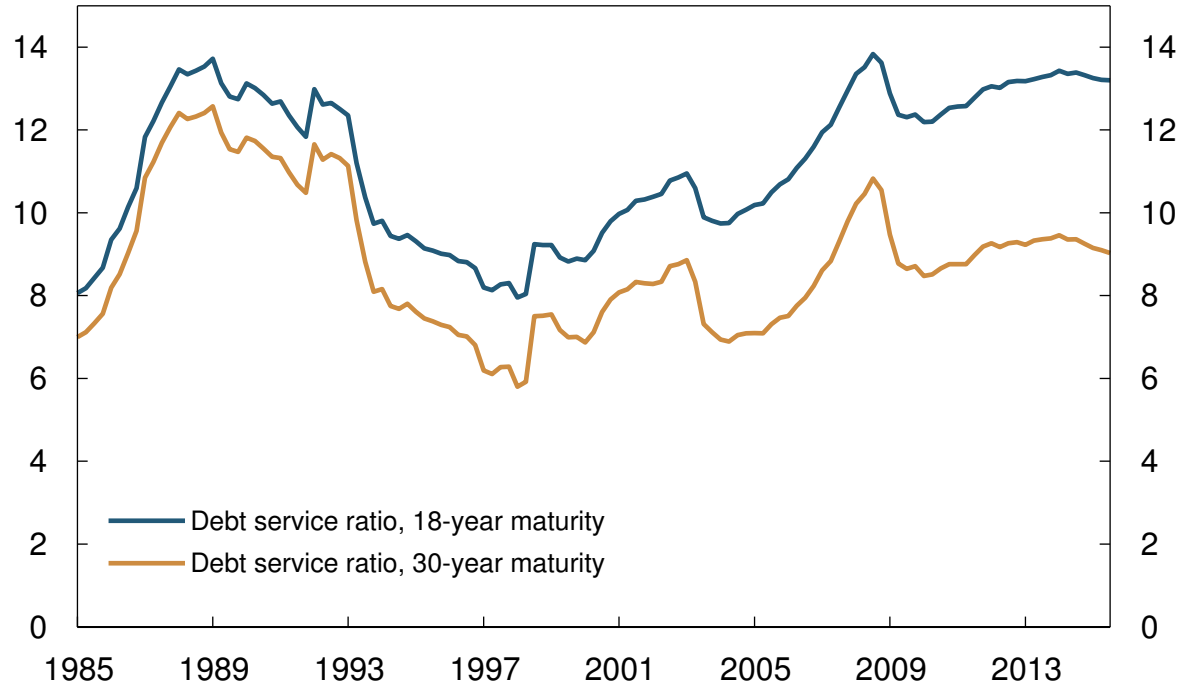


1) Interest expenses and estimated principle repayments as a percentage of disposable income adjusted for estimated reinvested dividend income for 2003 – 2005 and redemption/reduction of equity capital for 2006 Q1 – 2012 Q3 plus interest expenses.

2) Interest expenses as a percentage of disposable income adjusted for estimated reinvested dividend income for 2003 – 2005 and redemption/reduction of equity capital for 2006 Q1 – 2012 Q3 plus interest expenses.

Sources: Statistics Norway and Norges Bank

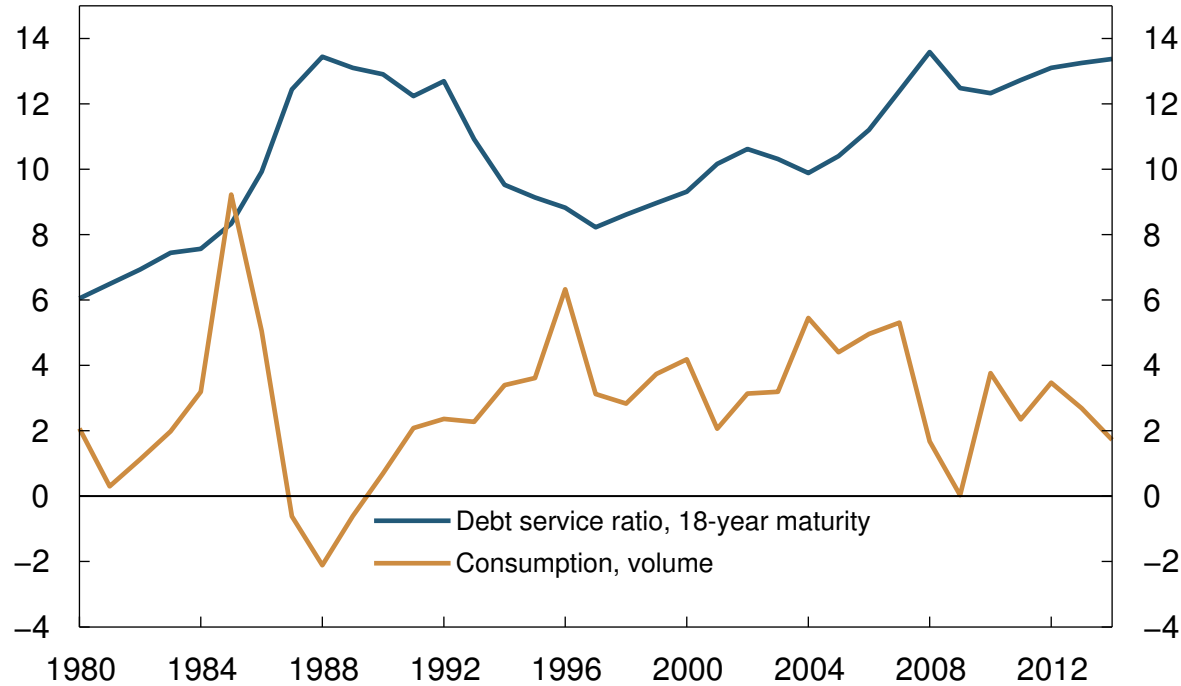
Chart 2 Household debt service ratio¹⁾. Percent. 1985 Q1 – 2015 Q3



1) Interest expenses and estimated principle repayments as a percentage of disposable income adjusted for estimated reinvested dividend income for 2003 – 2005 and redemption/reduction of equity capital for 2006 Q1 – 2012 Q3 plus interest expenses.

Sources: Statistics Norway and Norges Bank

Chart 3 Household debt service ratio¹⁾ and consumption²⁾. Percent. 1980 – 2014

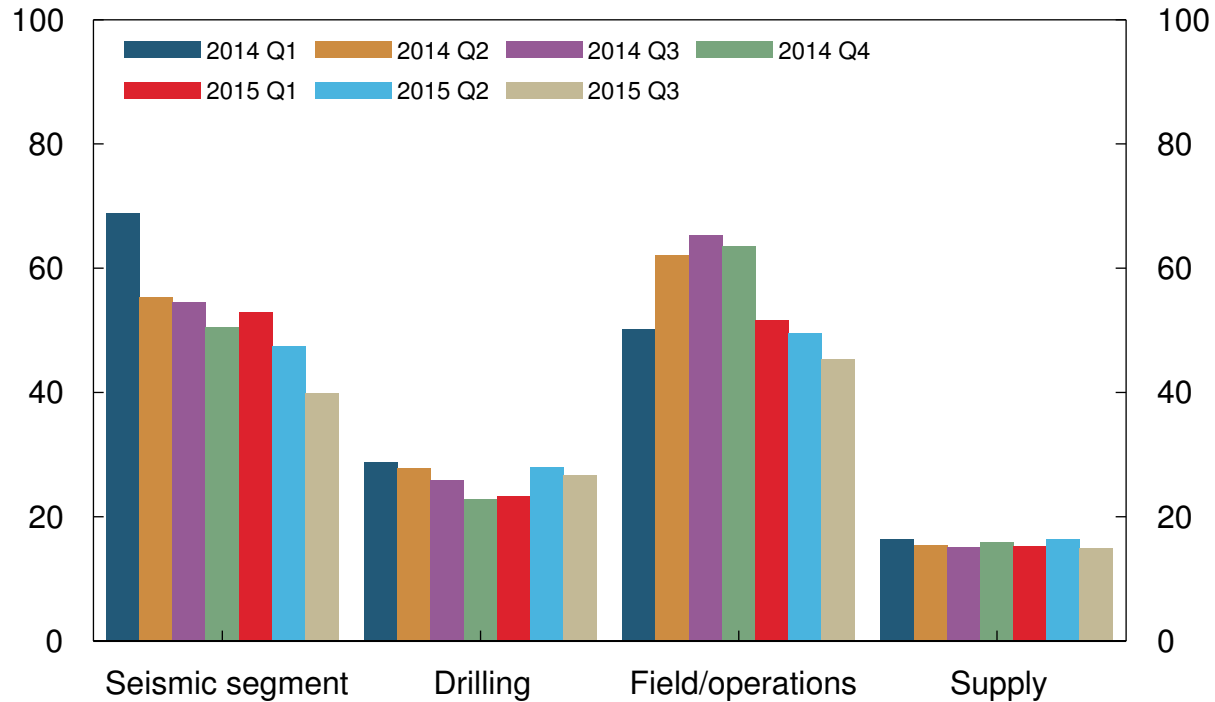


1) Interest expenses and estimated principle repayments as a percentage of disposable income adjusted for estimated reinvested dividend income for 2003 – 2005 and redemption/reduction of equity capital for 2006 Q1 – 2012 Q3 plus interest expenses.

2) Annual change in percent. Volume.

Sources: Statistics Norway and Norges Bank

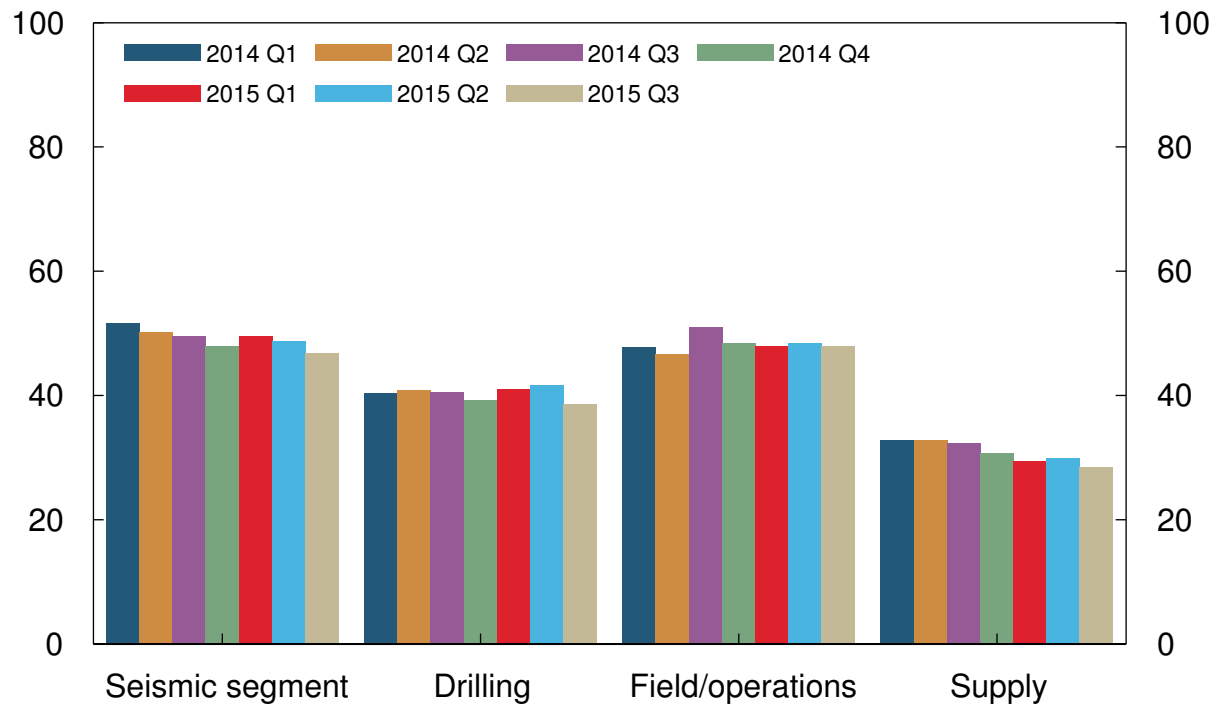
Chart 2 Debt-servicing capacity¹⁾ of oil service companies.
Percent. 2014 Q1 – 2015 Q3



1) Earnings before interest, taxes, depreciation and amortisation (EBITDA) for the previous four quarters as a percentage of net interest-bearing debt. The EBITDA measure has been standardised by Bloomberg. Adjusted for goodwill impairment for two companies where this was not included in the Bloomberg EBITDA measure.

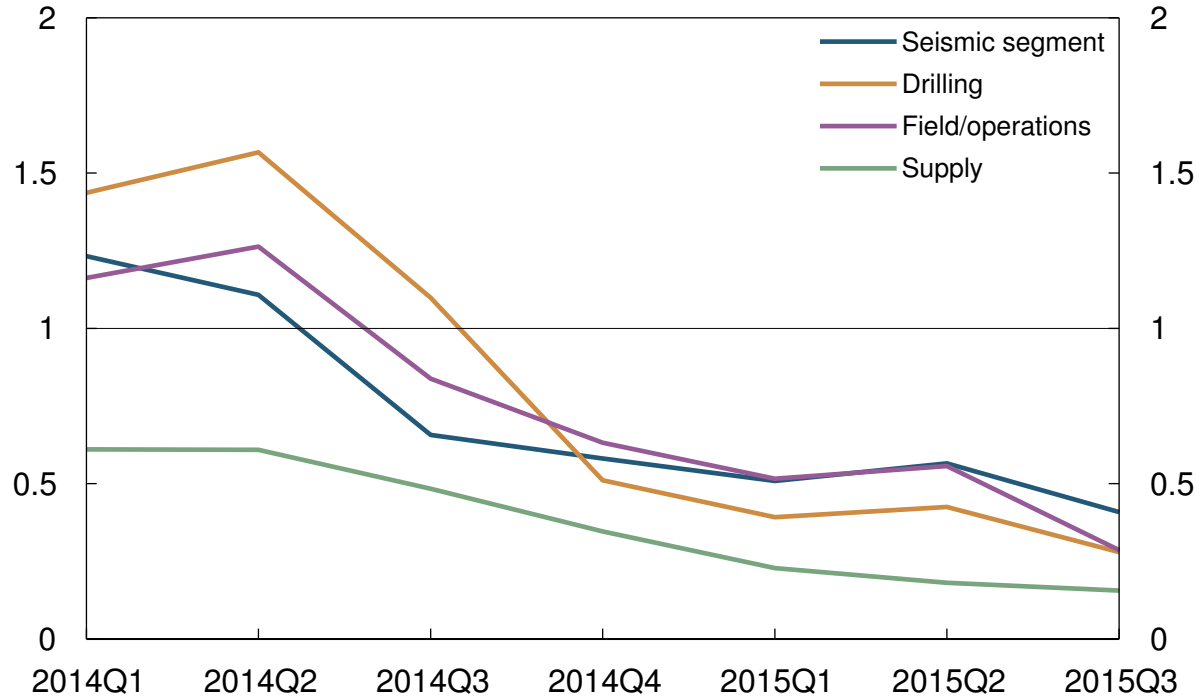
Sources: Bloomberg and Norges Bank.

Chart 3 Equity ratio¹⁾ of oil service companies.
 Percent. 2014 Q1 – 2015 Q3



1) Book equity as a percentage of total assets.
 Sources: Bloomberg and Norges Bank

Chart 4 Price-to-book ratio¹⁾ of oil service companies. 2014 Q1 – 2015 Q3



1) Share price as a percentage of book value per share.
Sources: Bloomberg and Norges Bank