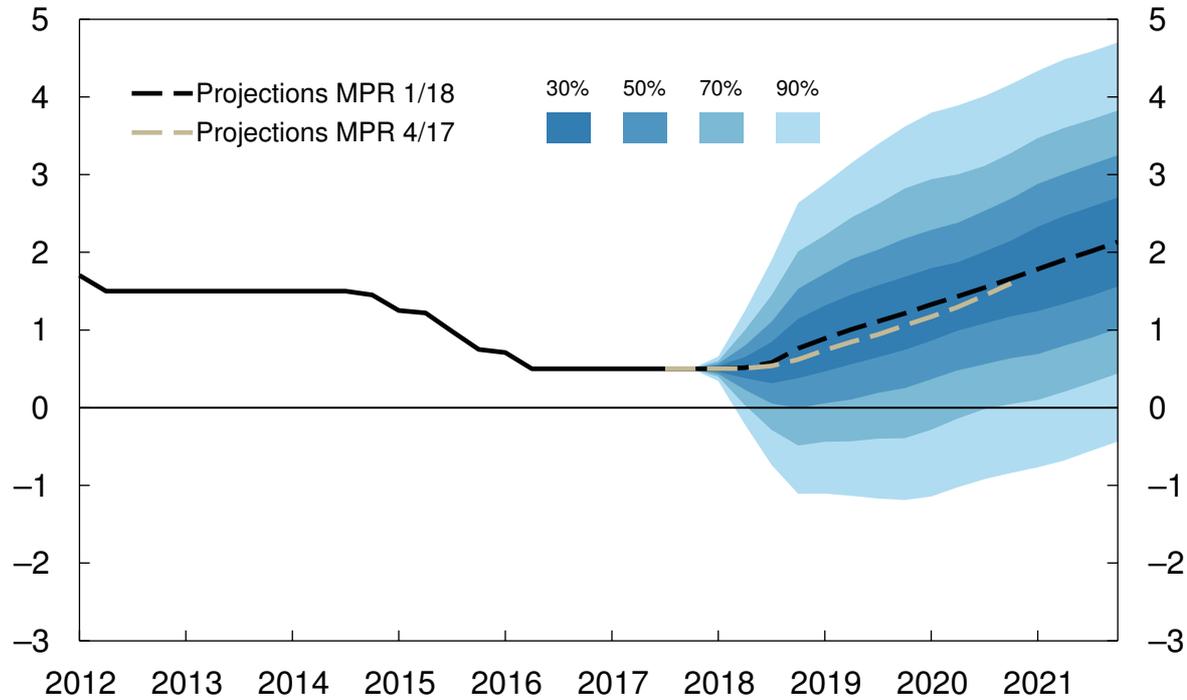


Chart 1.1a Key policy rate with fan chart¹⁾. Percent.
2012 Q1 – 2021 Q4²⁾

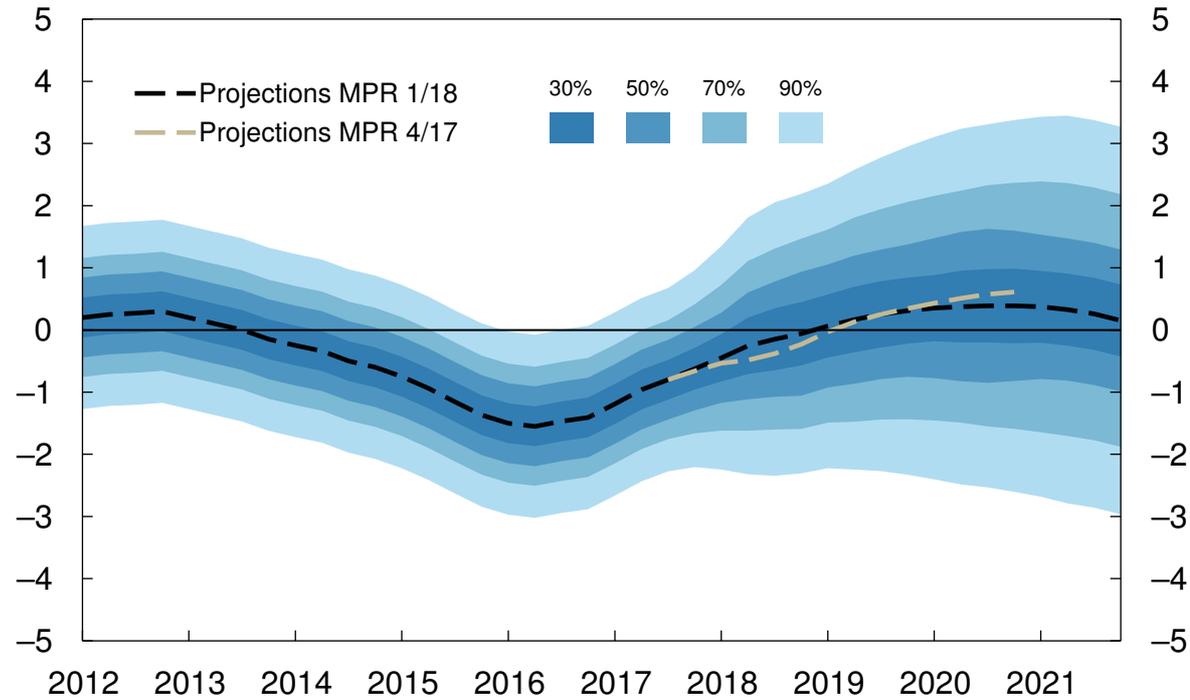


1) The fan chart is based on historical experience and stochastic simulations in Norges Bank's main macroeconomic model, NEMO. It does not take into account that a lower bound for the interest rate exists.

2) Projections for 2018 Q1 – 2021 Q4.

Source: Norges Bank

Chart 1.1b Projected output gap¹⁾ with fan chart²⁾. Percent.
2012 Q1 – 2021 Q4

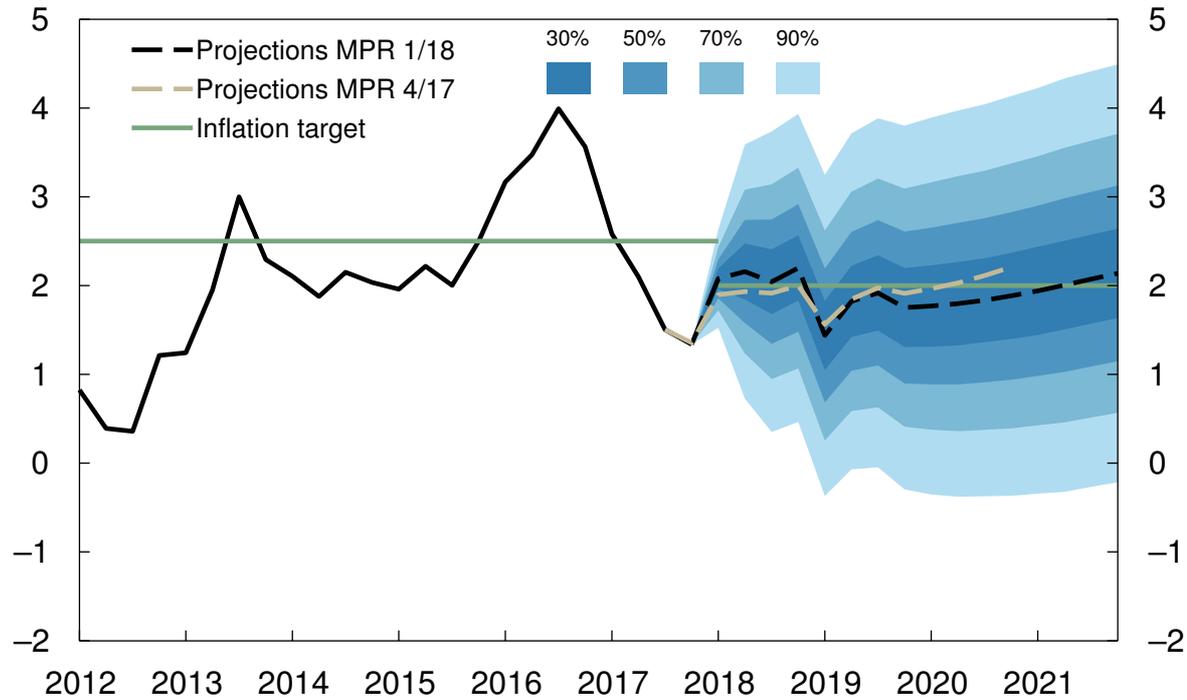


1) The output gap measures the percentage deviation between mainland GDP and projected potential mainland GDP.

2) The fan chart is based on historical experience and stochastic simulations in Norges Bank's main macroeconomic model, NEMO.

Source: Norges Bank

Chart 1.1c Consumer price index (CPI) with fan chart¹⁾.
 Four-quarter change. Percent. 2012 Q1 – 2021 Q4²⁾

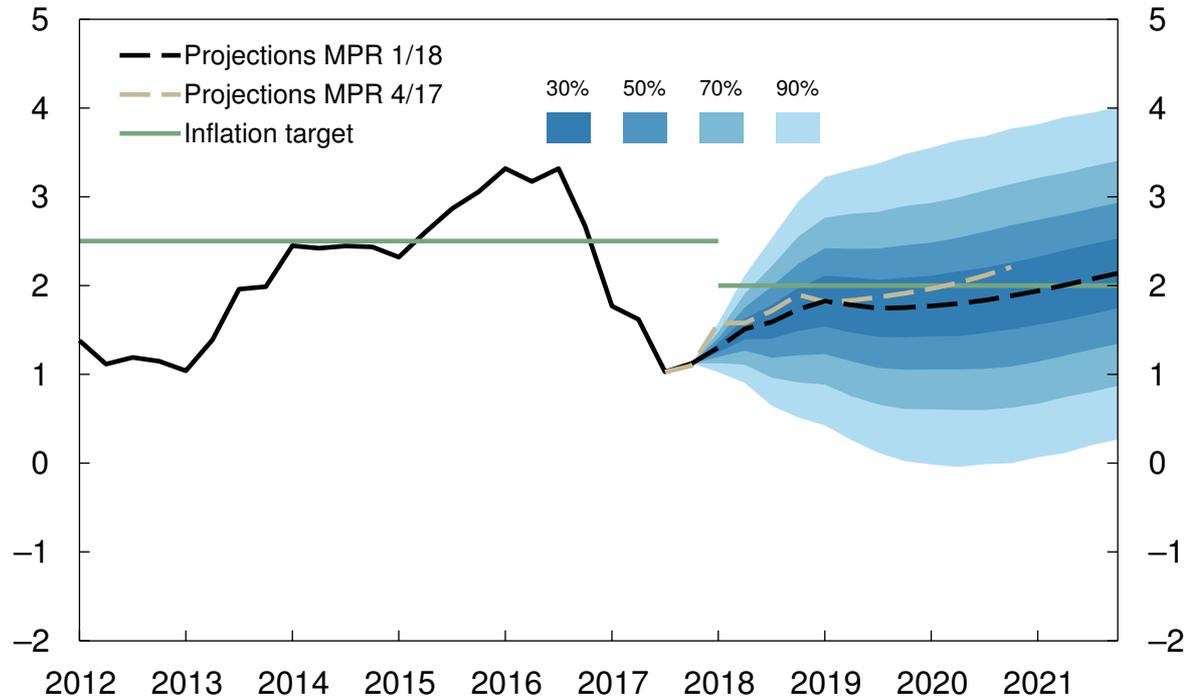


1) The fan chart is based on historical experience and stochastic simulations in Norges Bank's main macroeconomic model, NEMO.

2) Projections for 2018 Q1 – 2021 Q4.

Sources: Statistics Norway and Norges Bank

Chart 1.1d CPI-ATE¹⁾ with fan chart²⁾.
 Four-quarter change. Percent. 2012 Q1 – 2021 Q4³⁾



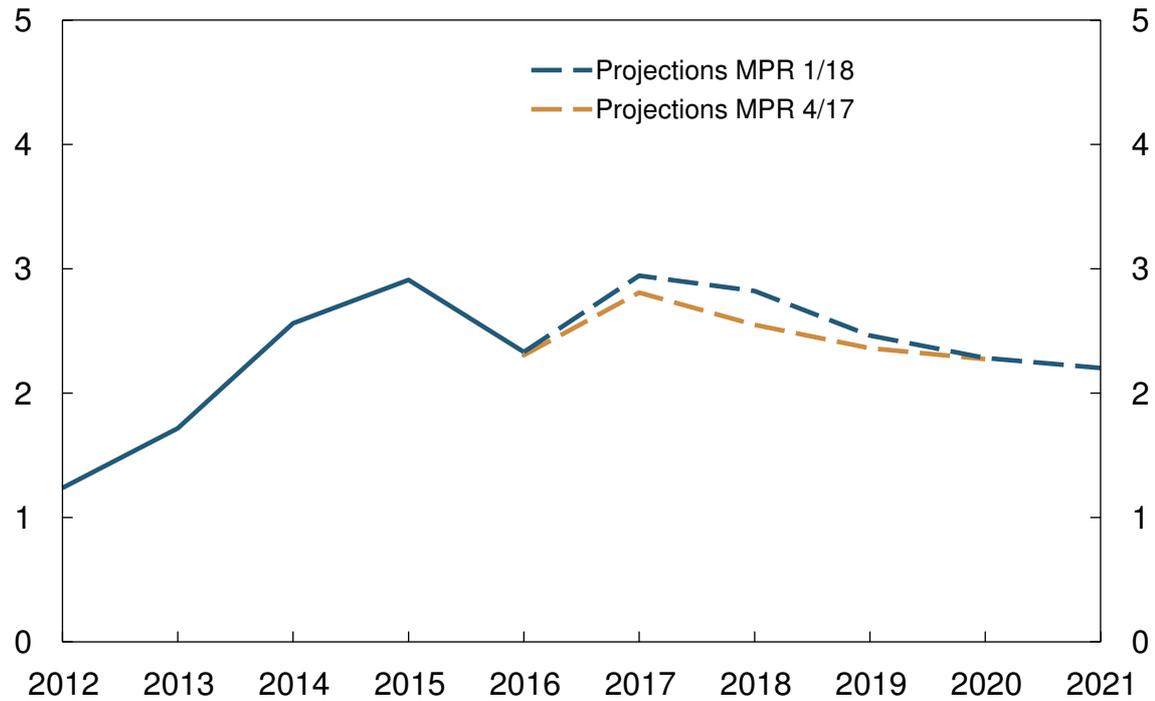
1) CPI adjusted for tax changes and excluding energy products.

2) The fan chart is based on historical experience and stochastic simulations in Norges Bank's main macroeconomic model, NEMO.

3) Projections for 2018 Q1 – 2021 Q4.

Sources: Statistics Norway and Norges Bank

Chart 1.2 GDP for Norway's trading partners.¹⁾ Annual change. Percent.
2012 – 2021 ²⁾

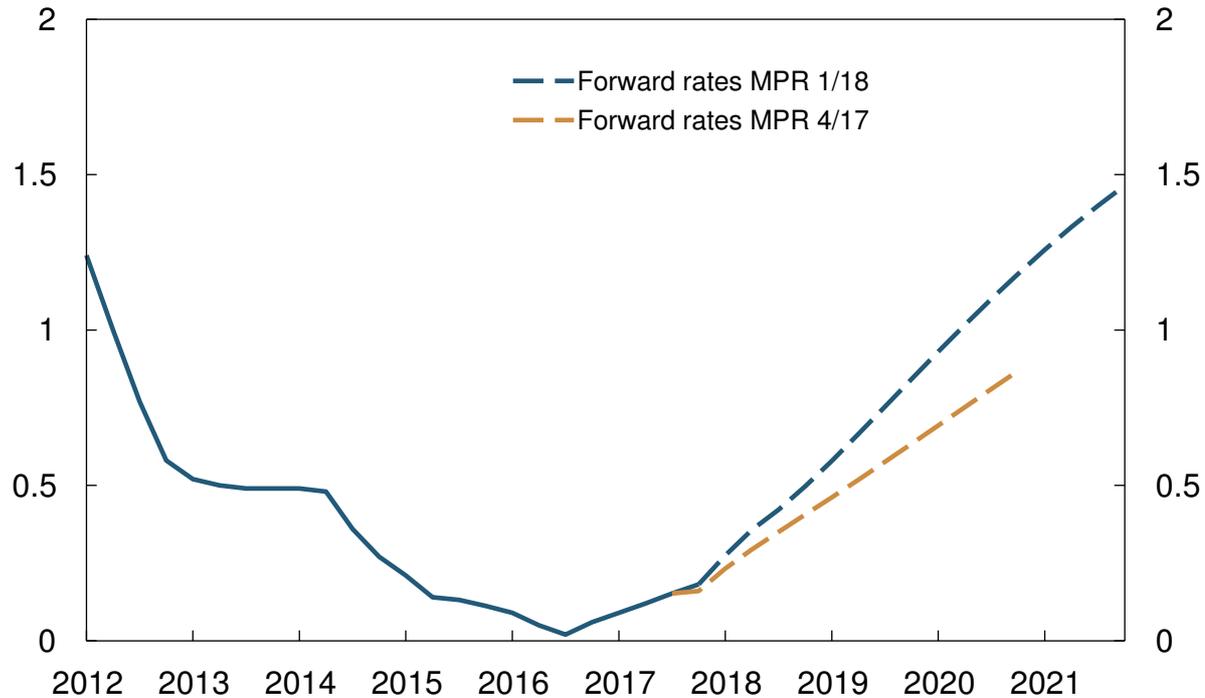


1) Export weights, 25 main trading partners.

2) Projections for 2017 – 2021.

Sources: Thomson Reuters and Norges Bank

Chart 1.3 Three-month money market rates for Norway's trading partners.¹⁾
Percent. 2012 Q1 – 2021 Q4²⁾

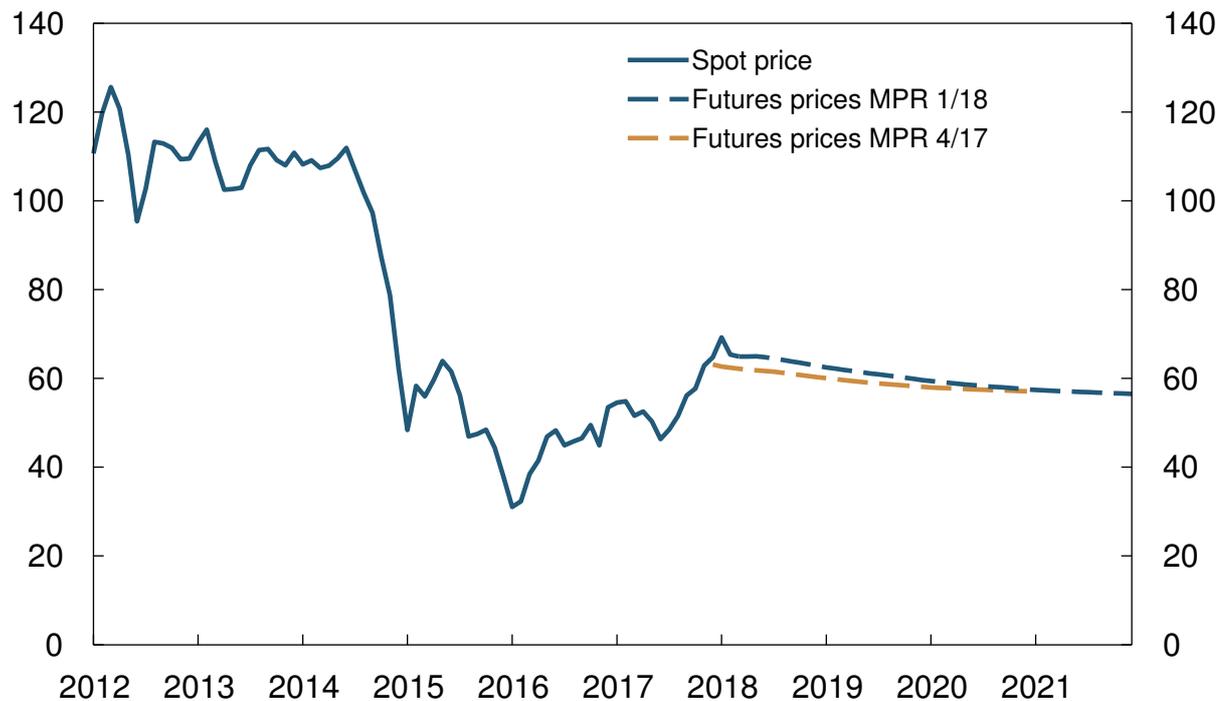


1) Based on money market rates and interest rate swaps. For information about the aggregate for trading partner interest rates, see *Norges Bank Papers 2/2015*.

2) Forward rates at 8 December 2017 (orange line) and 9 March 2018 (blue line).

Sources: Thomson Reuters and Norges Bank

Chart 1.4 Oil price.¹⁾ USD/barrel. January 2012 – December 2021²⁾

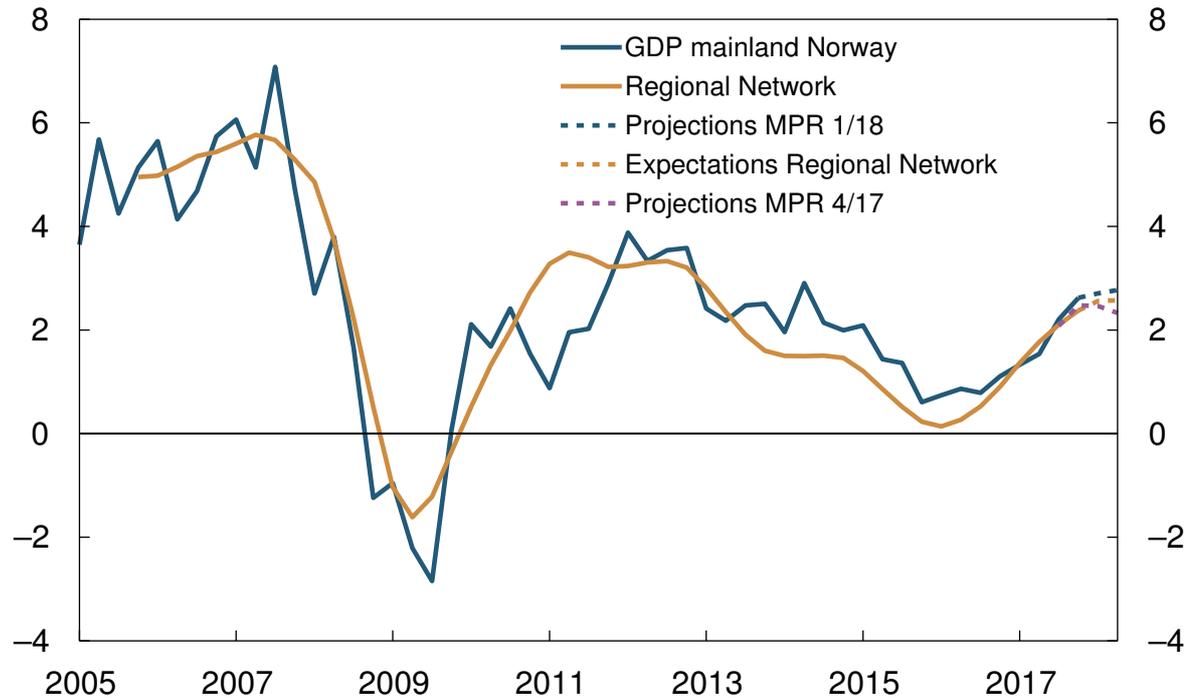


1) Brent Blend.

2) Futures prices are the averages of futures prices for the period 5 March – 9 March 2018 for MPR 1/18 and 4 December – 8 December 2017 for MPR 4/17.

Sources: Thomson Reuters and Norges Bank

Chart 1.5 GDP for mainland Norway¹⁾ and Regional Network indicator of output growth²⁾. Four-quarter change. Percent. 2005 Q1 – 2018 Q2³⁾



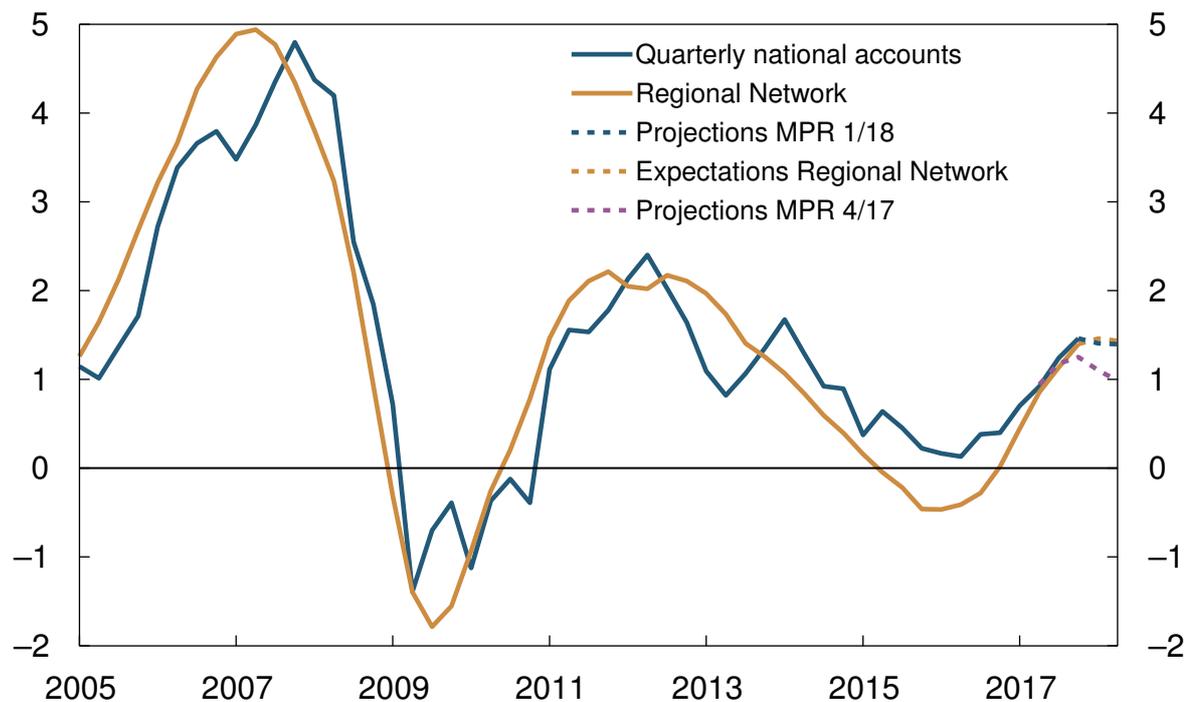
1) Seasonally adjusted.

2) Reported output growth for the past three months converted to quarterly figures. The quarterly figures are calculated by weighting together three-monthly figures based on when the survey was carried out. For 2018 Q1 expected output growth is estimated by weighting together reported growth over the past three months and expected growth in the next six months. 2018 Q2 is expected growth in the next six months, as measured in January.

3) Projections for 2018 Q1 – 2018 Q2.

Sources: Statistics Norway and Norges Bank

Chart 1.6 Growth in employment in the quarterly national accounts and Regional Network¹⁾. Four-quarter change. Percent. 2005 Q1 – 2018 Q2²⁾

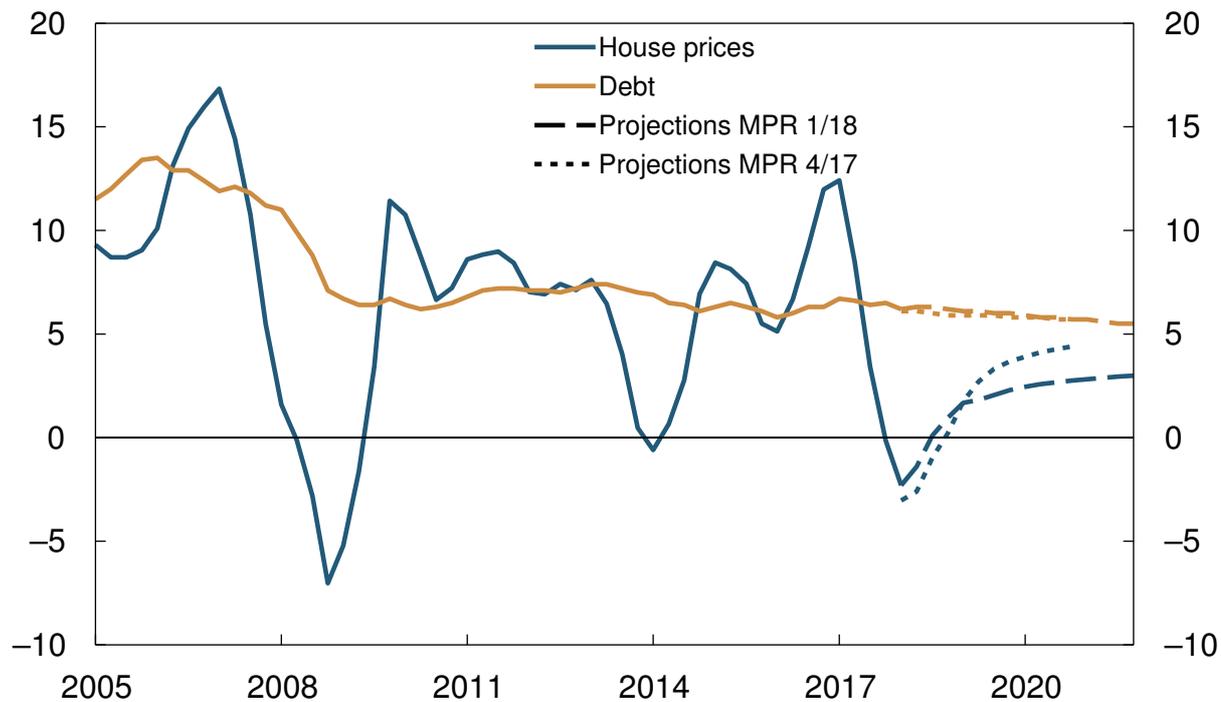


1) Reported employment growth for the past three months. Quarterly figures are calculated by weighting together three-monthly figures based on when the survey was carried out. For 2018 Q1, expected employment growth is estimated by weighting together reported growth over the past three months and expected growth in the next three months. 2018 Q2 is expected growth in the next three months as measured in January.

2) Projections for 2018 Q1 – 2018 Q2.

Sources: Statistics Norway and Norges Bank

Chart 1.7 House prices and household debt¹⁾.
 Four-quarter change. Percent. 2005 Q1 – 2021 Q4²⁾

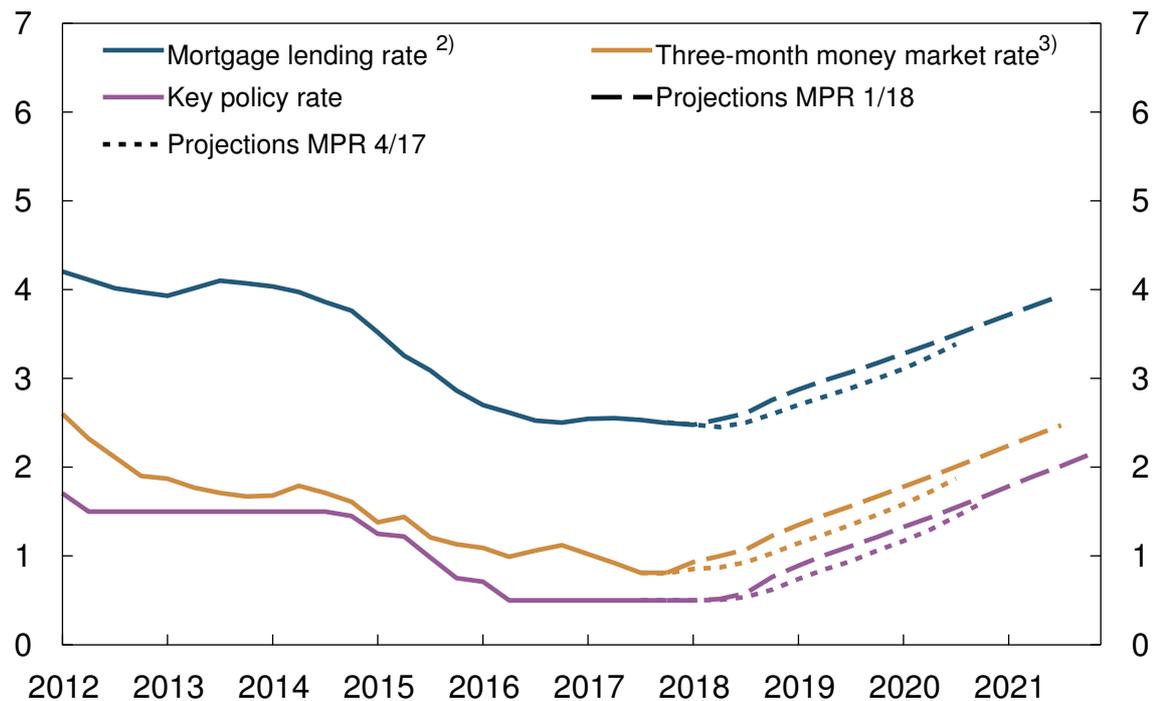


1) Domestic credit to households (C2).

2) Projections for 2018 Q1 – 2021 Q4.

Sources: Eiendomsverdi, Finn.no, Real Estate Norway, Statistics Norway and Norges Bank

Chart 1.8 Interest rates. Percent. 2012 Q1 – 2021 Q4 ¹⁾



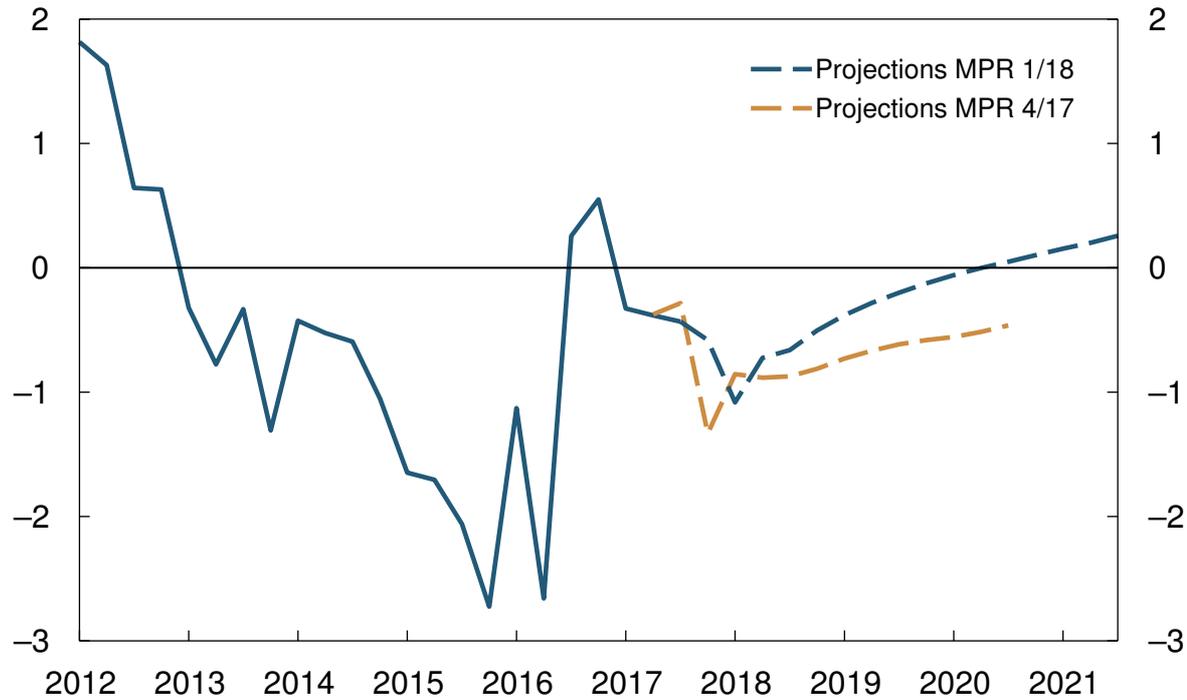
1) Projections for 2018 Q1 – 2021 Q4.

2) The mortgage lending rate is average interest rate on outstanding mortgage loans to households. From the sample of banks and mortgage companies included in Statistics Norway's monthly interest rate statistics.

3) Key policy rate plus Norwegian money market premium. Money market rate estimated on the basis of a two-quarter average of the key policy rate forecast and the projection for the money market premium.

Sources: Statistics Norway, Thomson Reuters and Norges Bank

Chart 1.9 Real interest rate¹⁾. Percent. 2012 Q1 – 2021 Q3²⁾

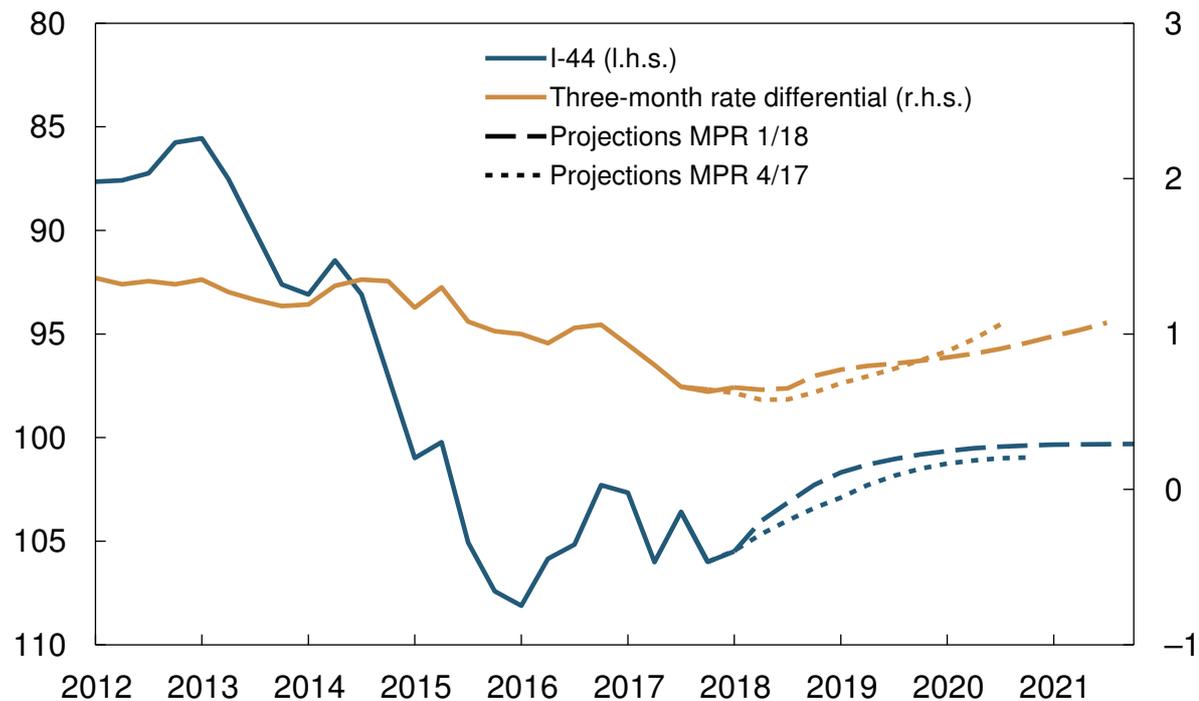


1) Three-month money market rate deflated by inflation in the next quarter, measured by annualised, seasonally adjusted quarterly growth in the CPI adjusted for tax changes and excluding energy prices (CPI-ATE).

2) Projections for 2017 Q4 – 2021 Q3.

Source: Statistics Norway and Norges Bank

Chart 1.10 Three-month money market rate differential between Norway¹⁾ and trading partners²⁾. Percentage points. Import-weighted exchange rate index (I-44)³⁾. 2012 Q1 – 2021 Q4⁴⁾



1) Key policy rate plus Norwegian money market premium. The calculations are based on the assumption that the key policy rate forecast is priced into the money market.

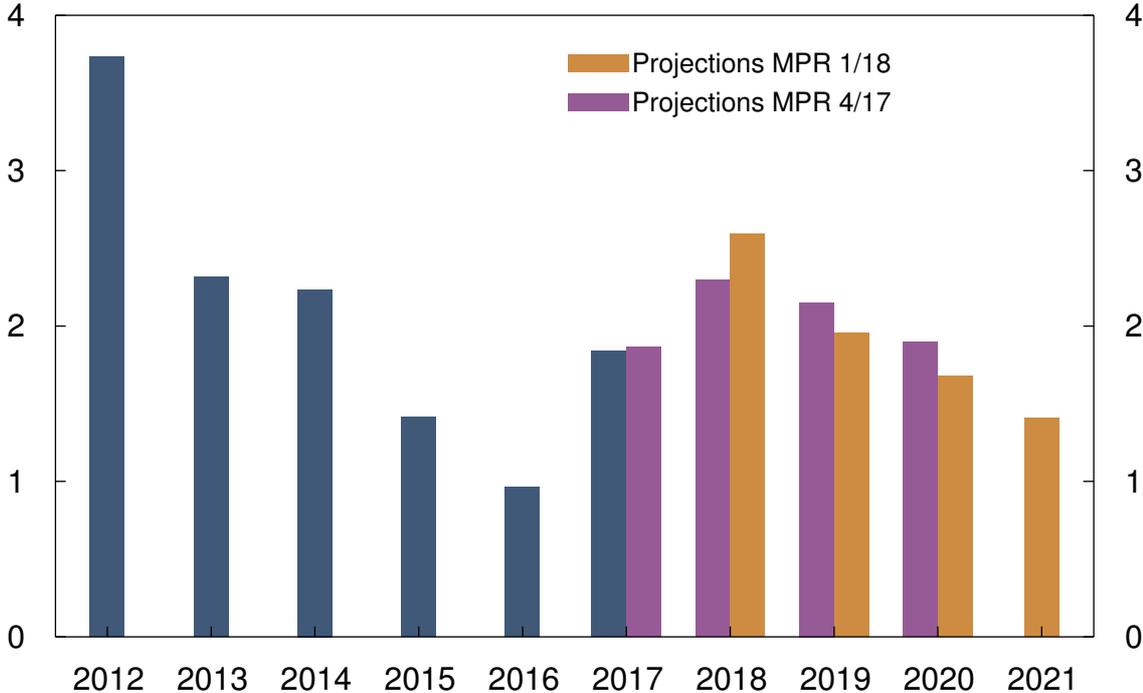
2) Forward rates for trading partners at 9 March 2018 and 8 December 2017. The aggregate for trading partner interest rates is described in *Norges Bank Papers 2/2015*.

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

4) Projections for 2018 Q1 – 2021 Q4.

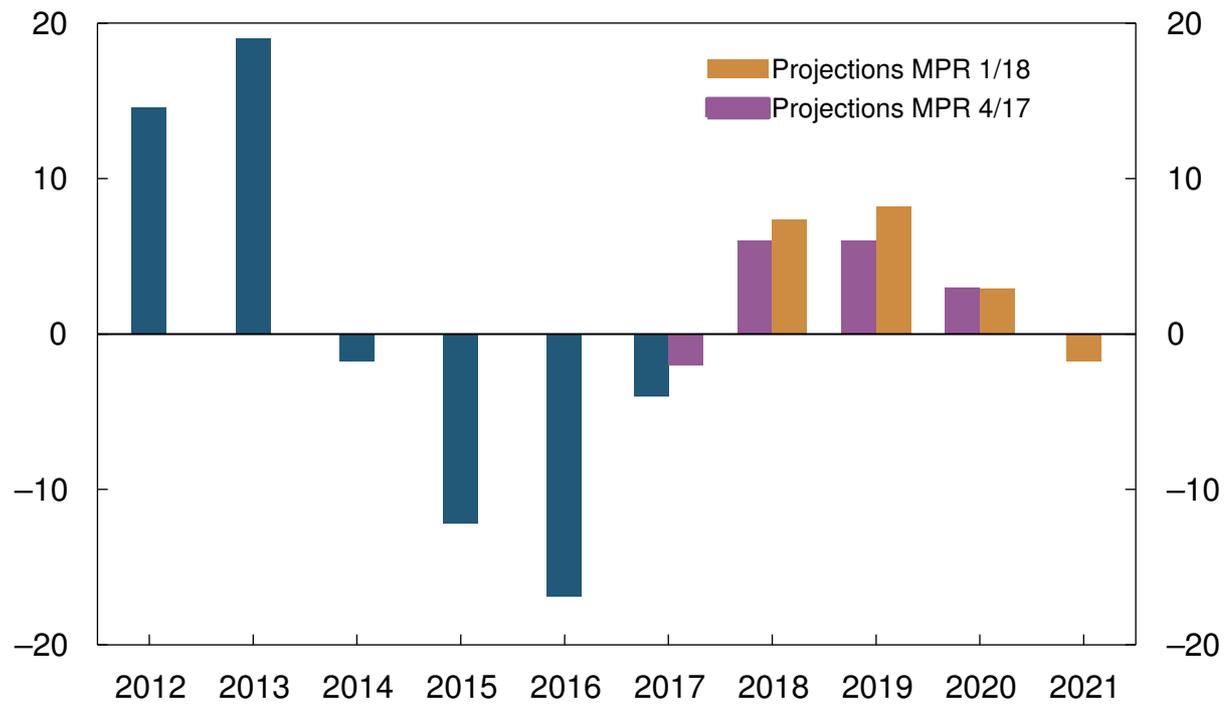
Sources: Thomson Reuters and Norges Bank

Chart 1.11 GDP for mainland Norway. Annual change. Percent. 2012 – 2021 ¹⁾



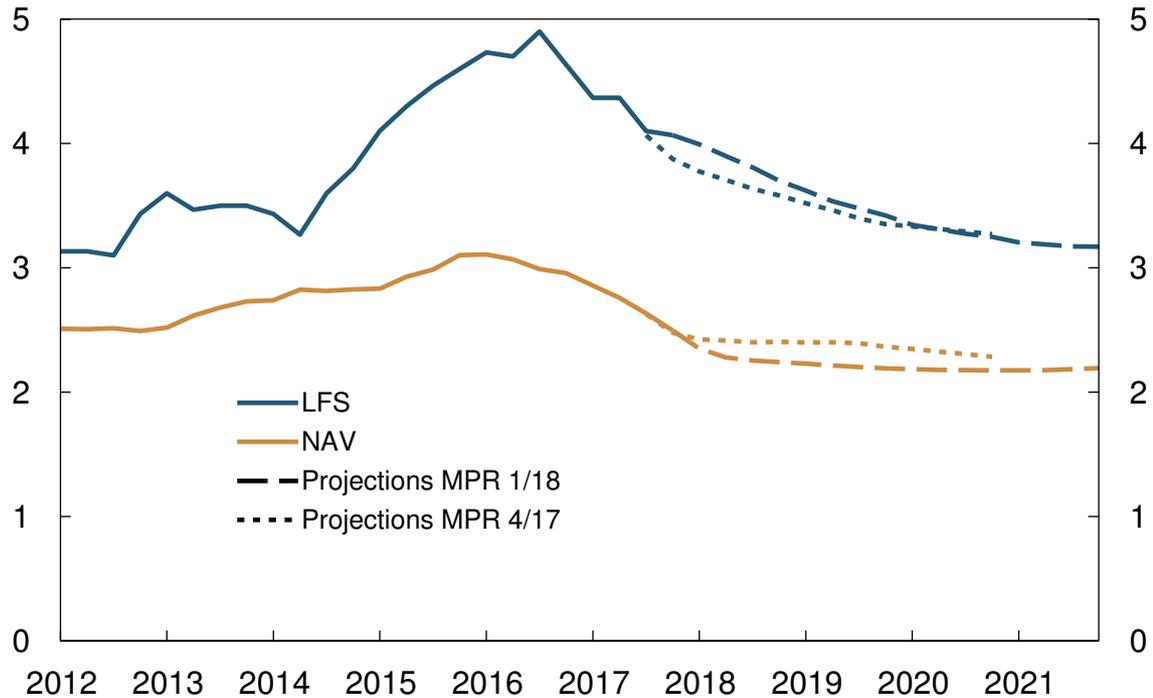
1) Projections for 2018 – 2021.
Sources: Statistics Norway and Norges Bank

Chart 1.12 Petroleum investment. Annual change. Percent. 2012 – 2021¹⁾



1) Projections for 2018 – 2021.
Sources: Statistics Norway and Norges Bank

Chart 1.13 Unemployment as a share of the labour force. LFS ¹⁾ and NAV ²⁾.
Seasonally adjusted. Percent. 2012 Q1 – 2021 Q4 ³⁾



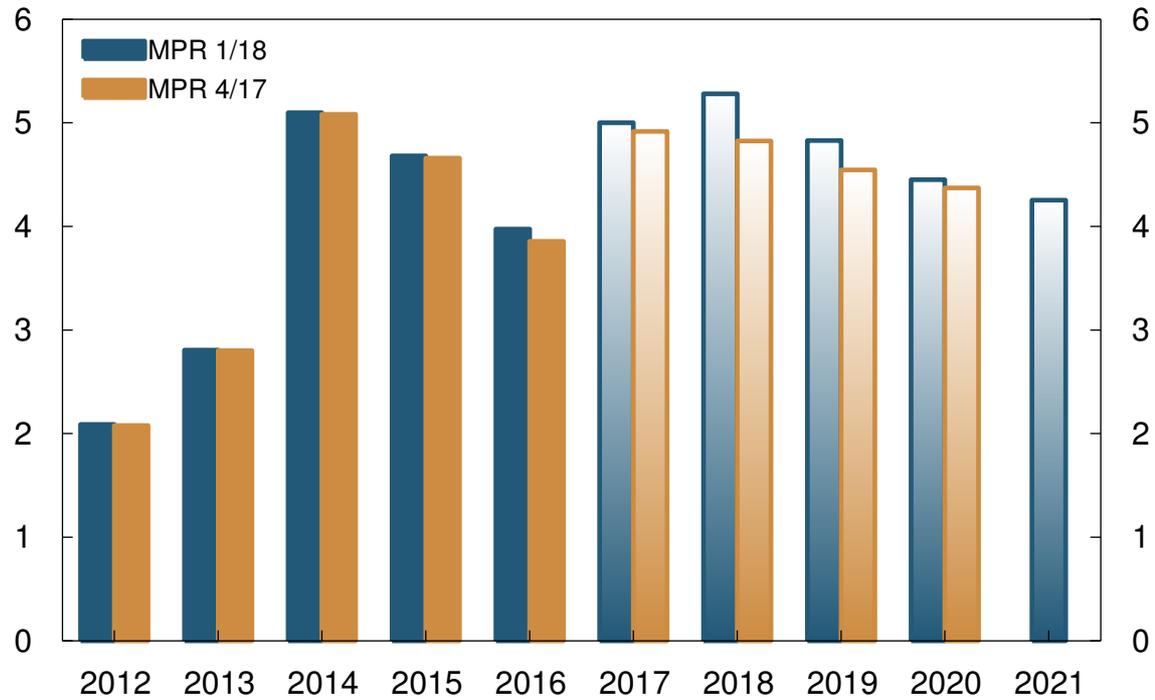
1) Labour Force Survey.

2) Registered unemployment.

3) Projections for 2018 Q1 – 2021 Q4.

Sources: Norwegian Labour and Welfare Administration (NAV), Statistics Norway and Norges Bank

Chart 2.1 Imports for Norway's trading partners.¹⁾ Annual change. Percent.
2012 – 2021²⁾

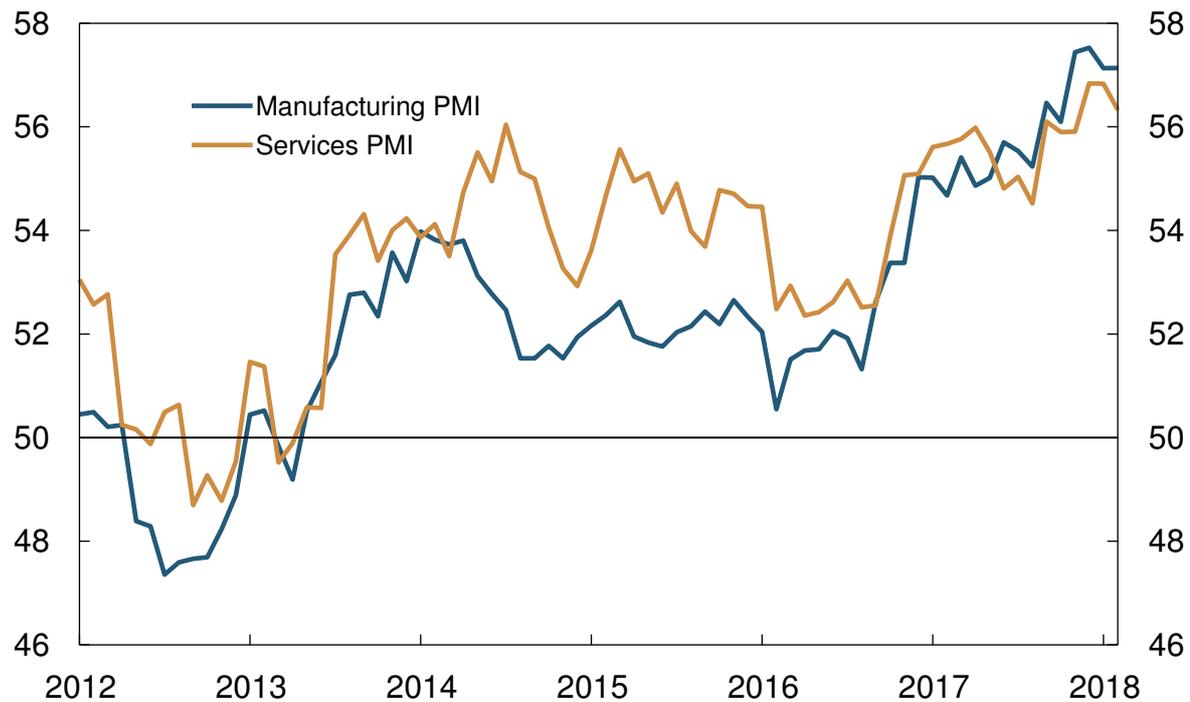


1) Export weights. 25 main trading partners.

2) Projections for 2017 – 2021 (shaded bars).

Sources: Thomson Reuters and Norges Bank

Chart 2.2 PMI for Norway's trading partners.¹⁾ Seasonally adjusted. Index.²⁾
January 2012 – February 2018

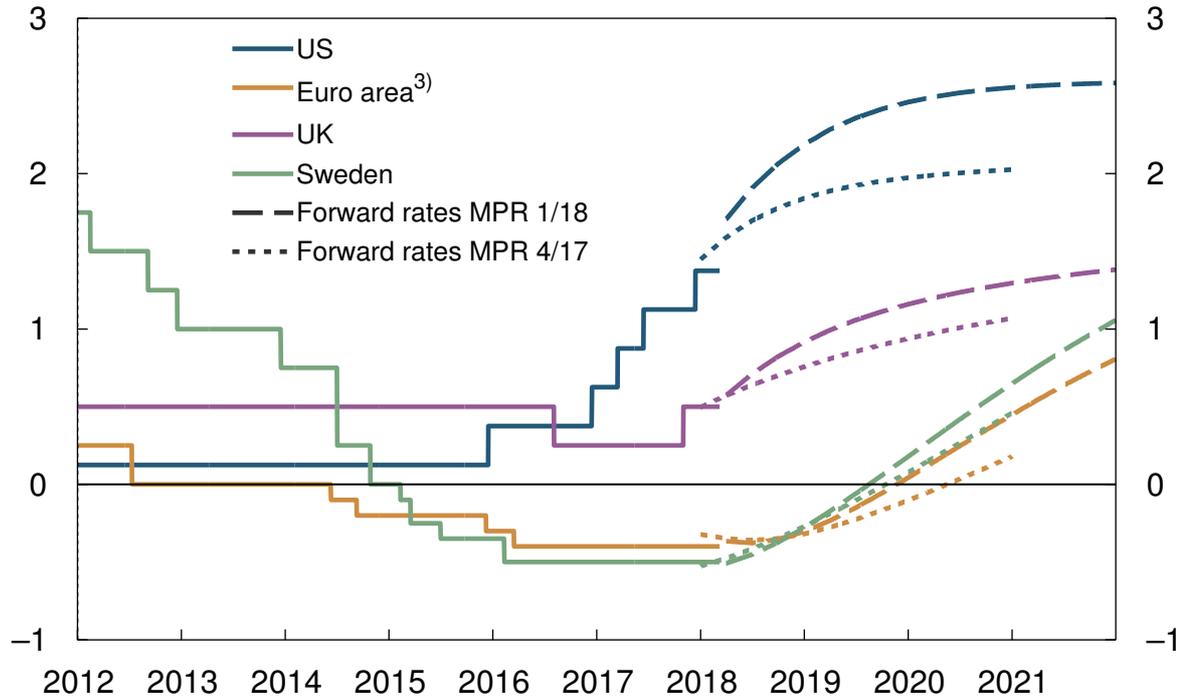


1) Export weights.

2) Survey of purchasing managers. Diffusion index centered around 50.

Sources: Thomson Reuters and Norges Bank

Chart 2.3 Policy rates and calculated forward rates¹⁾ in selected countries.
 Percent. 1 January 2012 – 31 December 2021²⁾



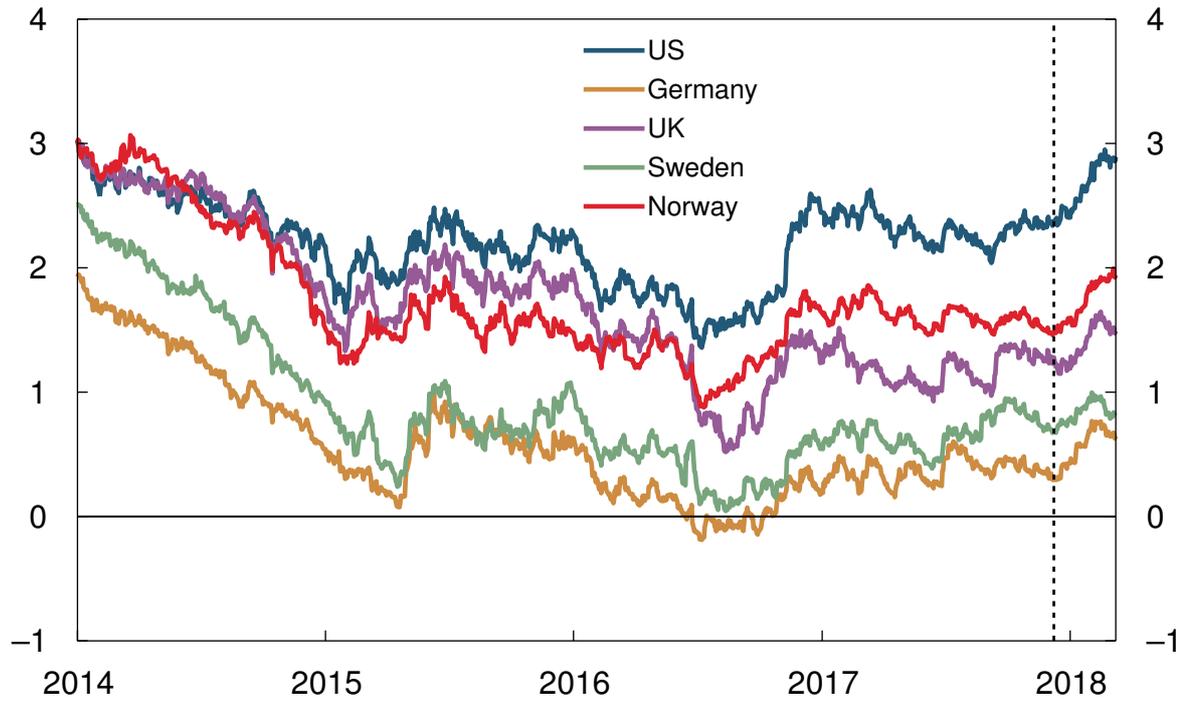
1) Forward rates at 8 December 2017 and 9 March 2018. Forward rates are calculated based on Overnight Index Swap (OIS) rates.

2) Daily data through 9 March 2018. Quarterly data from 2018 Q2.

3) ECB deposit facility rate. Eonia from 2018 Q2.

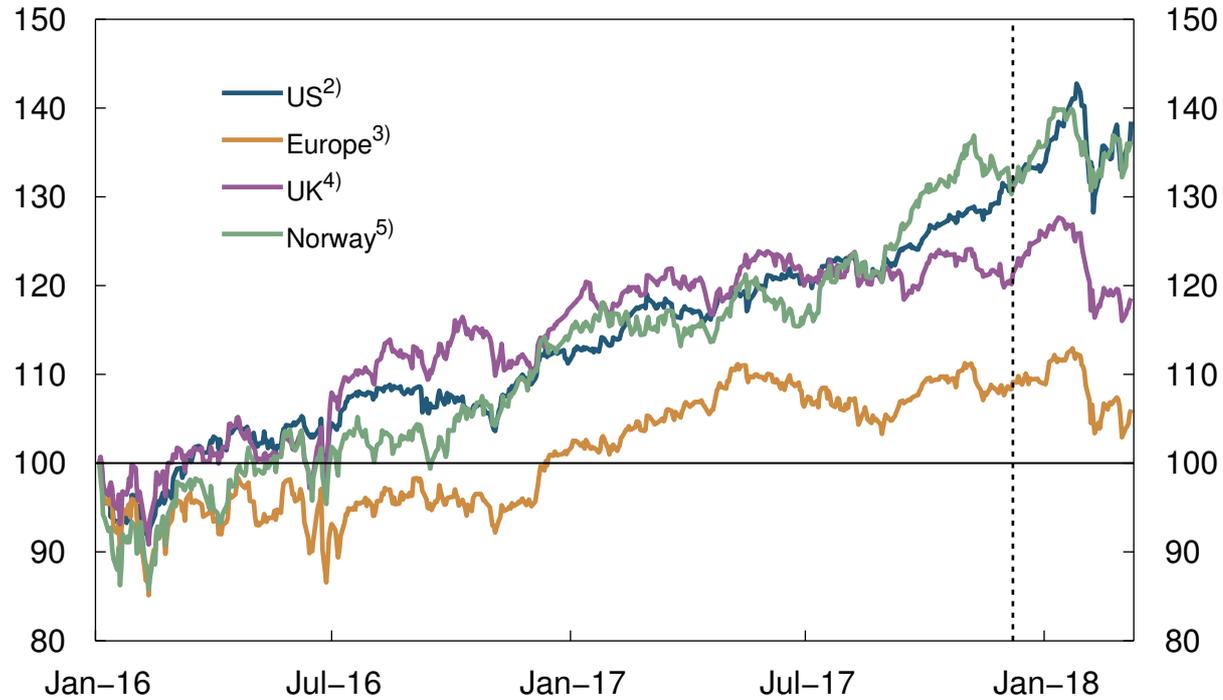
Sources: Bloomberg, Thomson Reuters and Norges Bank

Chart 2.4 Yields on ten-year government bonds in selected countries.
Percent. 1 January 2014 – 9 March 2018¹⁾



1) MPR 4/17 was based on information through 8 December 2017 indicated by the vertical line.
Source: Bloomberg

Chart 2.5 Equity price indexes in selected countries. 4 January 2016 = 100.
4 January 2016 – 9 March 2018 ¹⁾



1) MPR 4/17 was based on information through 8 December 2017 indicated by the vertical line.

2) Standard and Poor's 500 Index.

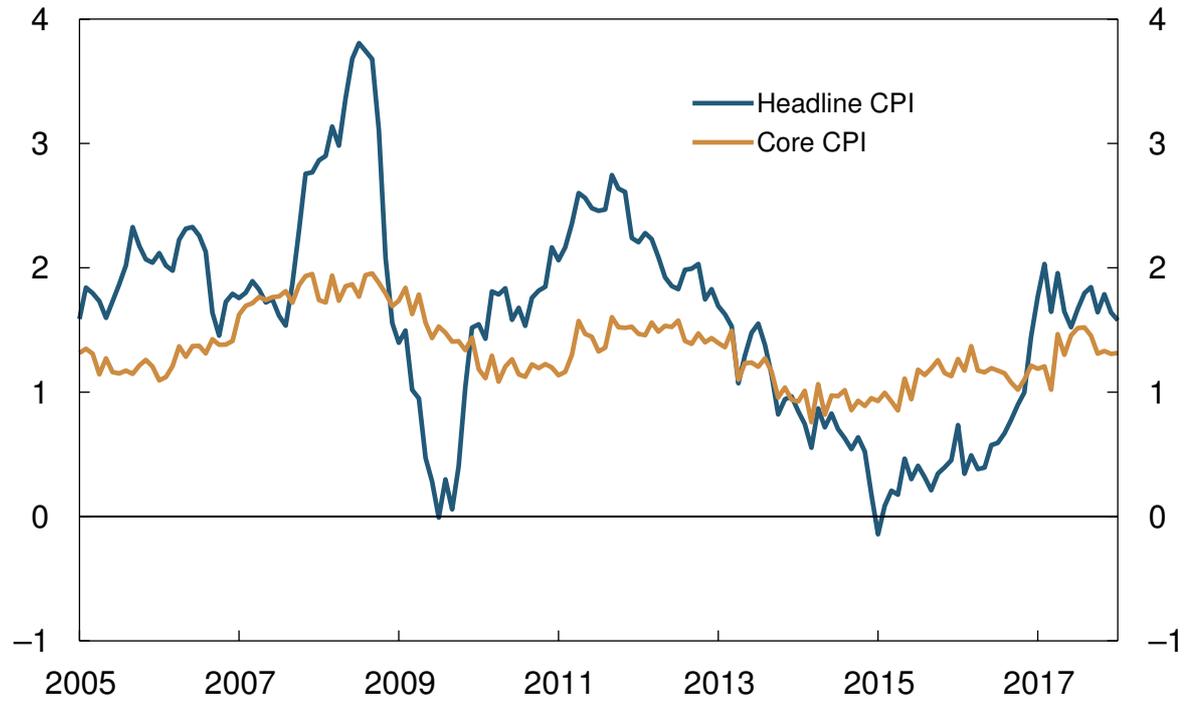
3) Stoxx Europe 600 Index.

4) Financial Times Stock Exchange 100 Index.

5) OSE Benchmark Index.

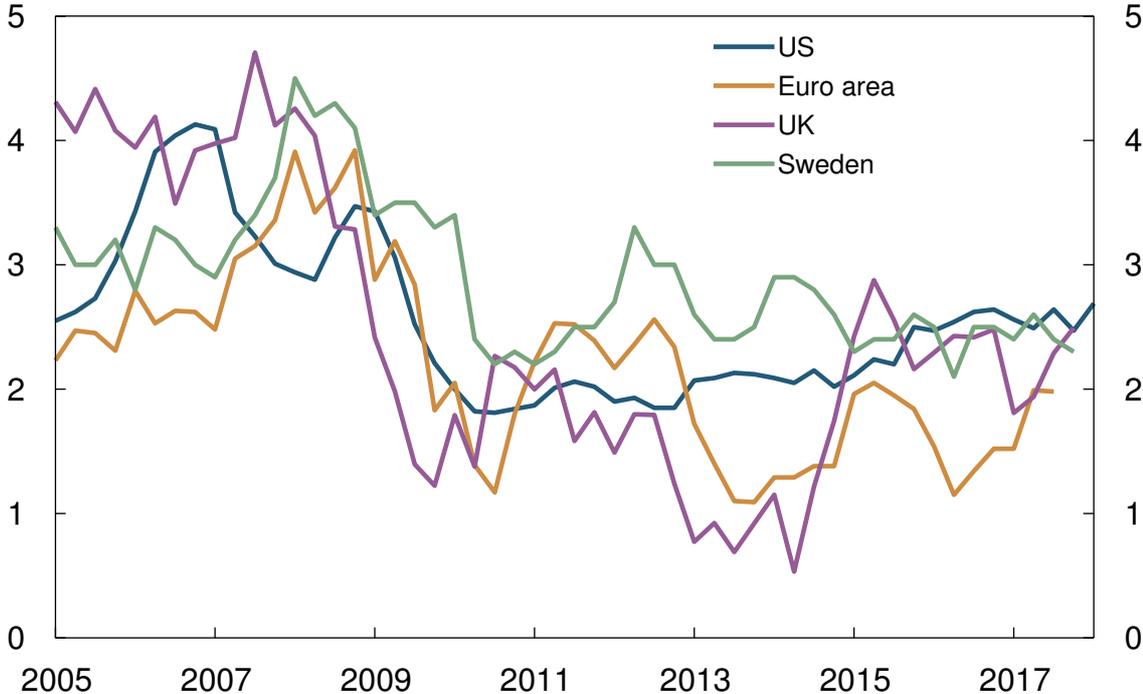
Source: Bloomberg

Chart 2.6 Headline and core CPI for Norway's main trading partners.¹⁾
Twelve-month change. Percent. January 2005 – January 2018



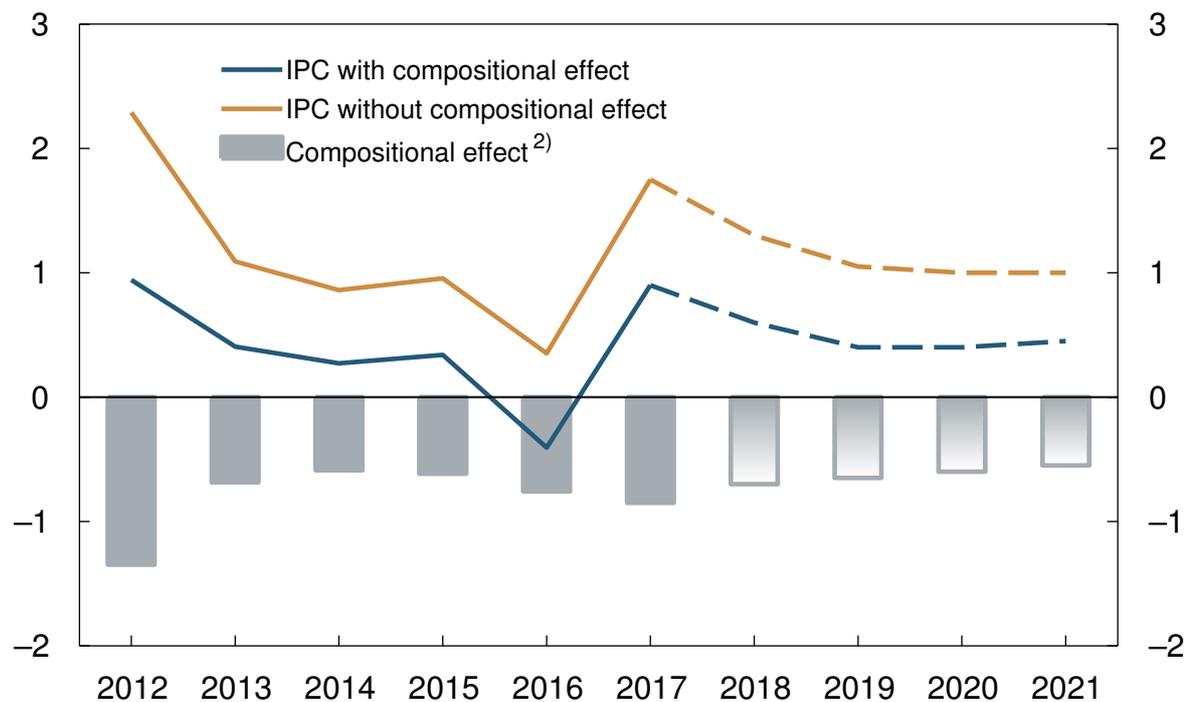
1) Import weights. US, euro area, UK and Sweden.
Sources: Thomson Reuters and Norges Bank

Chart 2.7 Wages in selected countries. Four-quarter change. Percent.
 2005 Q1 – 2018 Q1 ¹⁾



1) The latest observation is 2017 Q3 for the euro area and 2017 Q4 for the UK and Sweden. For the US, 2018 Q1 is calculated as the average of the twelve-month growth rates in January and February.
 Sources: Thomson Reuters and Norges Bank

Chart 2.8 Indicator of international inflationary impulses to imported consumer goods (IPC). Foreign currency. Annual change. Percent. 2012 – 2021¹⁾

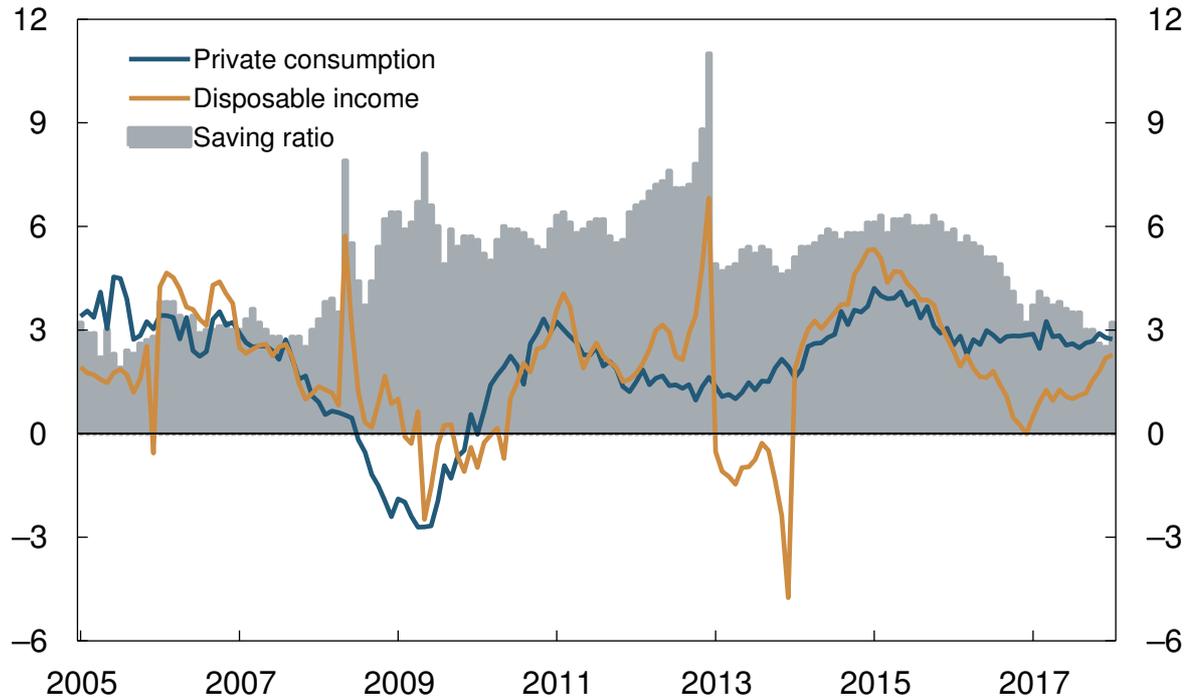


1) Projections for 2018 – 2021 (broken lines and shaded bars).

2) The compositional effect captures the negative contribution to inflationary impulses when Norway increases its share of imports from countries with lower price levels.

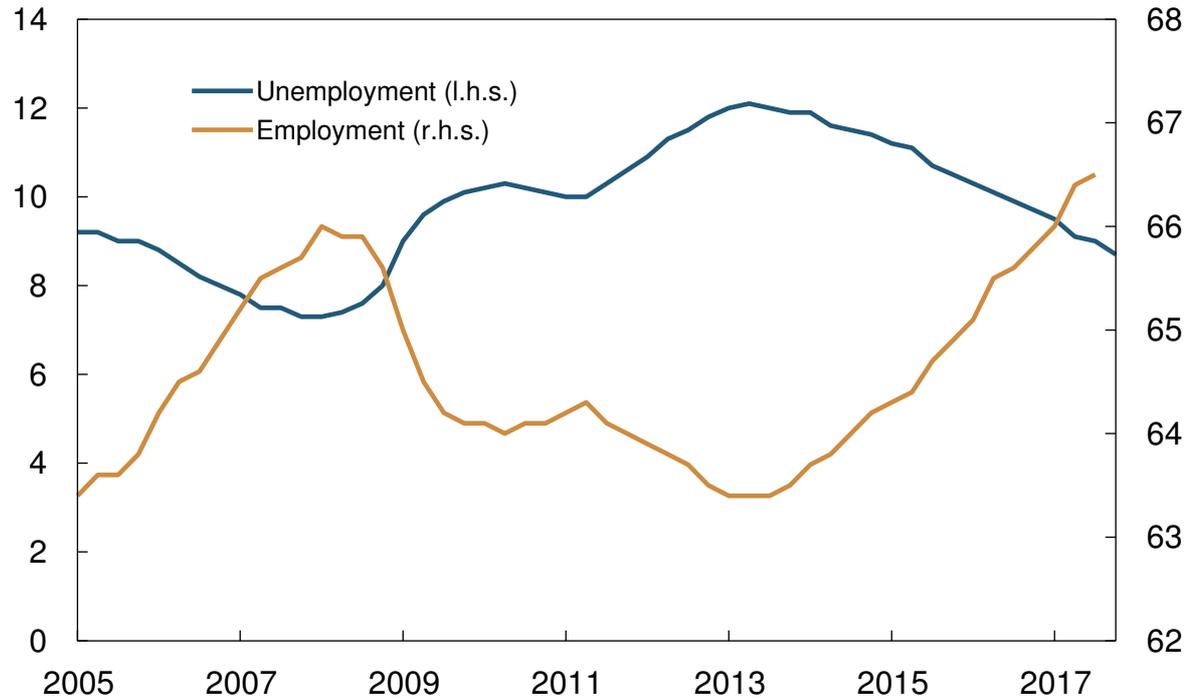
Sources: Statistics Norway, Thomson Reuters and Norges Bank

Chart 2.9 US. Saving ratio.¹⁾ Percent. Private consumption and disposable income. Twelve-month change. Seasonally adjusted. Percent. January 2005 – January 2018



1) Share of disposable income. Seasonally adjusted.
Source: Thomson Reuters

Chart 2.10 Unemployment¹⁾ and employment²⁾ in the euro area.
 Seasonally adjusted. Percent. 2005 Q1 – 2017 Q4³⁾



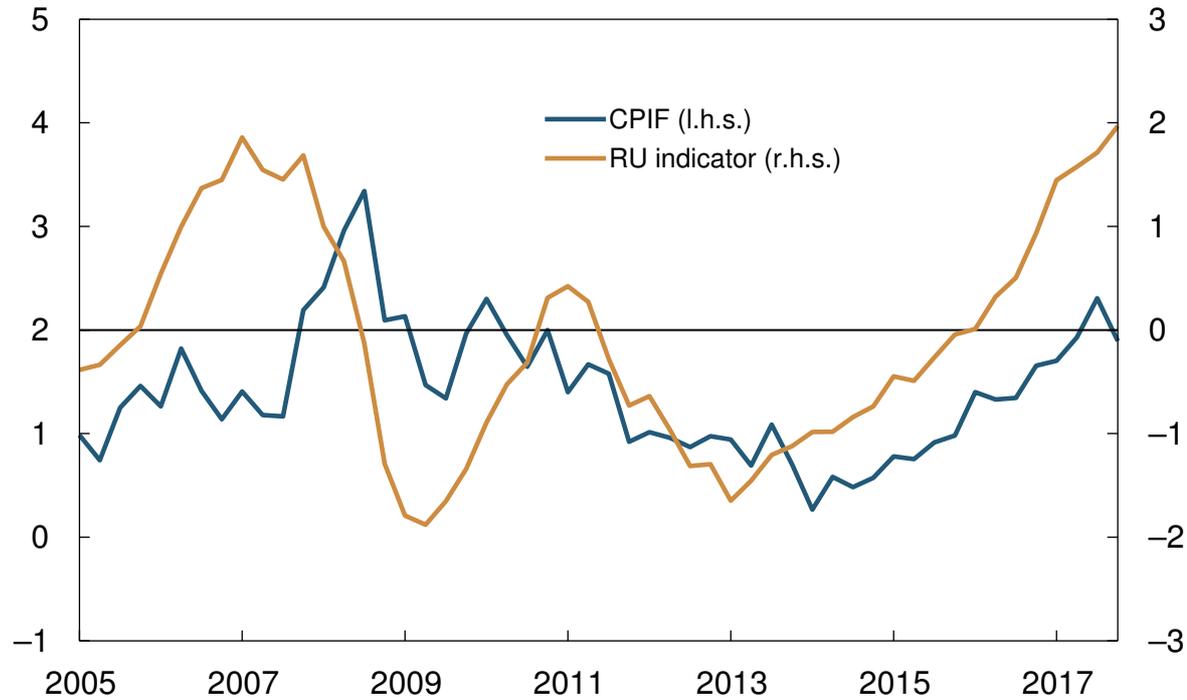
1) Unemployed as a share of the labour force.

2) Employed as a share of the population aged 15 – 64.

3) The latest observation for the employment rate is 2017 Q3.

Source: Thomson Reuters

Chart 2.11 Consumer prices and spare capacity in Sweden.
 CPIF.¹⁾ Four-quarter change. Percent. RU indicator. Index.²⁾ 2005 Q1 – 2017 Q4

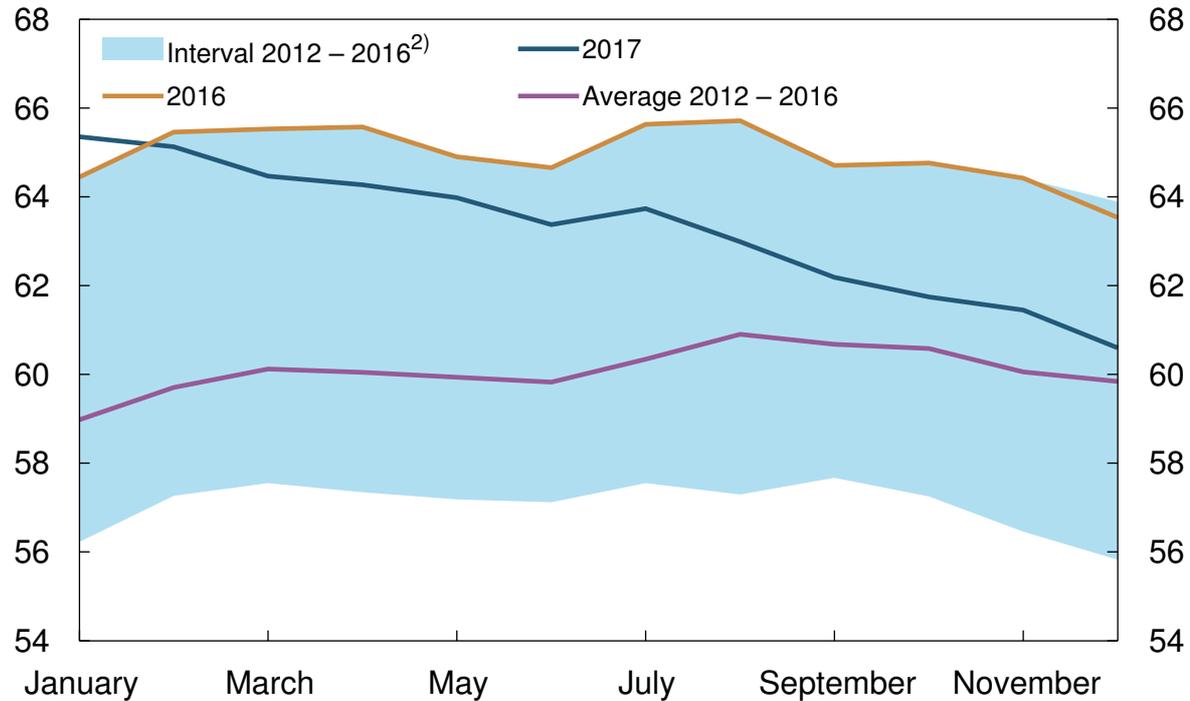


1) Consumer price index with a fixed interest rate. Sweden's inflation target is 2 percent measured by CPIF and indicated by the horizontal line.

2) The RU indicator is a measure of total resource utilisation. The series has been normalised so that its mean is 0 and its standard deviation 1.

Sources: The Riksbank and Thomson Reuters

Chart 2.12 Total OECD oil inventories.
 In days of forward demand.¹⁾ January 2016 – December 2017

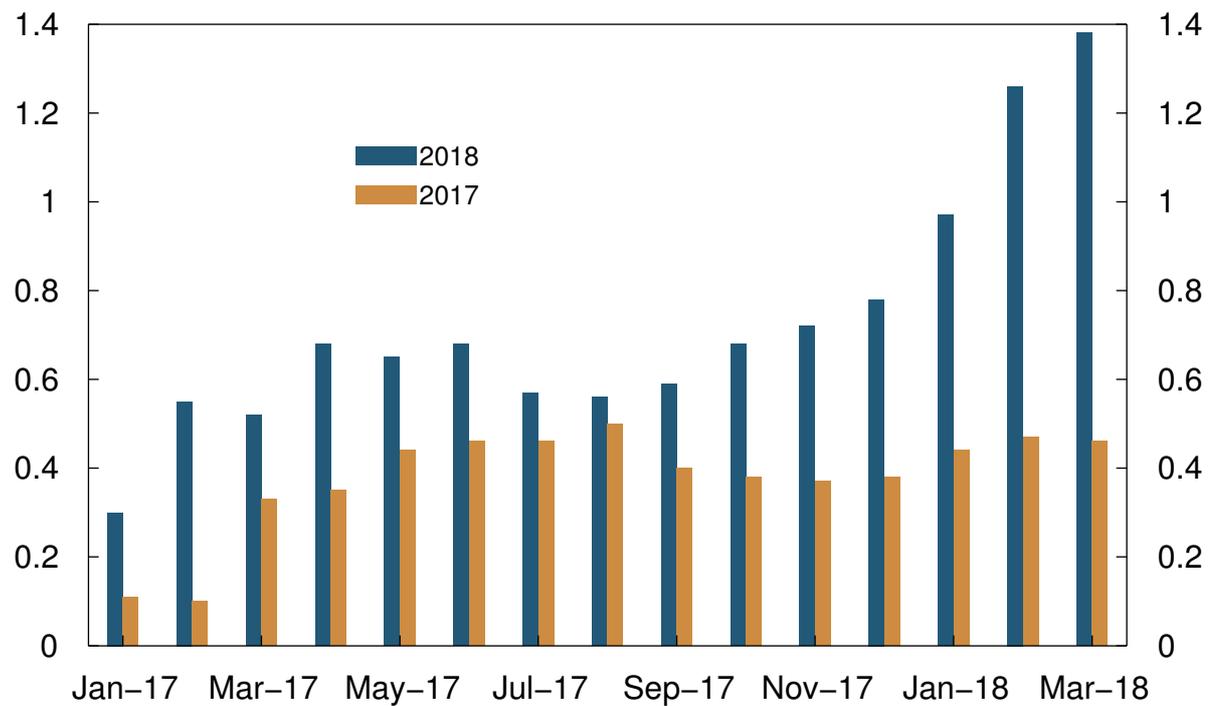


1) Days of forward demand are calculated using average expected demand over the next three months.

2) Interval between the highest and lowest level for a given month in the period 2012 – 2016.

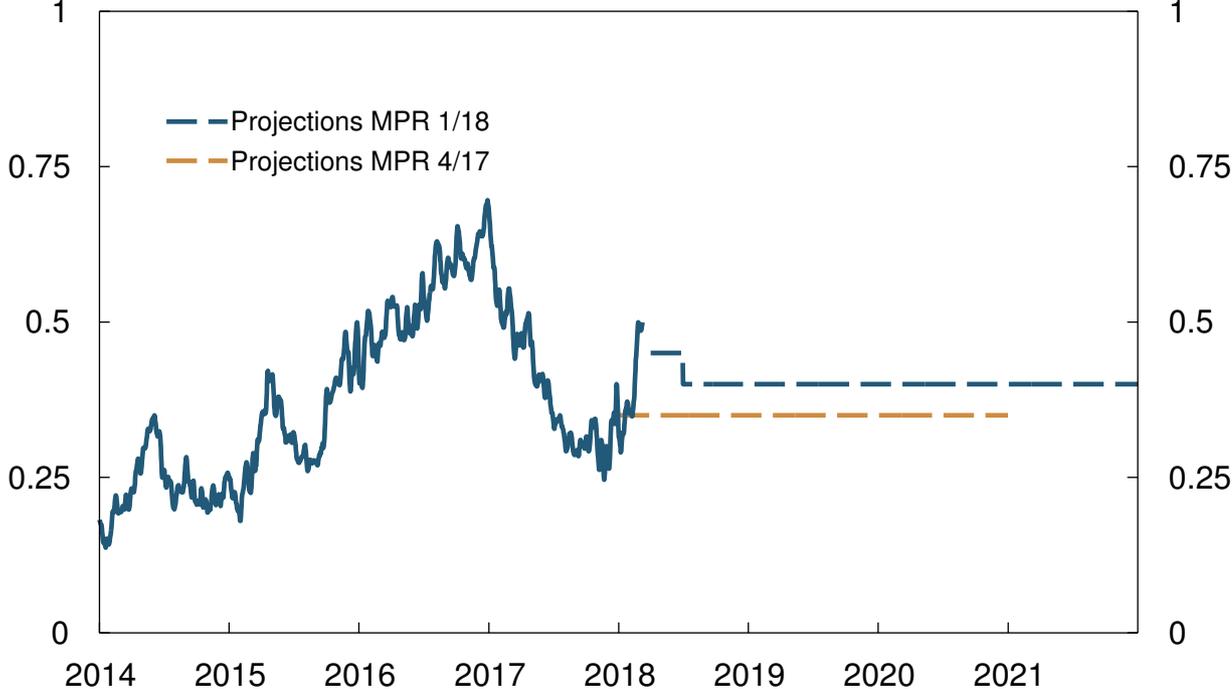
Sources: IEA and Norges Bank

Chart 2.13 Projections of annual change in US crude oil production from EIA's monthly reports¹⁾. In millions of barrels per day. January 2017 – March 2018



1) Short-Term Energy Outlook.
Sources: EIA and Norges Bank

Chart 3.1 Norwegian three-month money market premium.¹⁾ Five-day moving average. Percentage points. 1 January 2014 – 31 December 2021²⁾

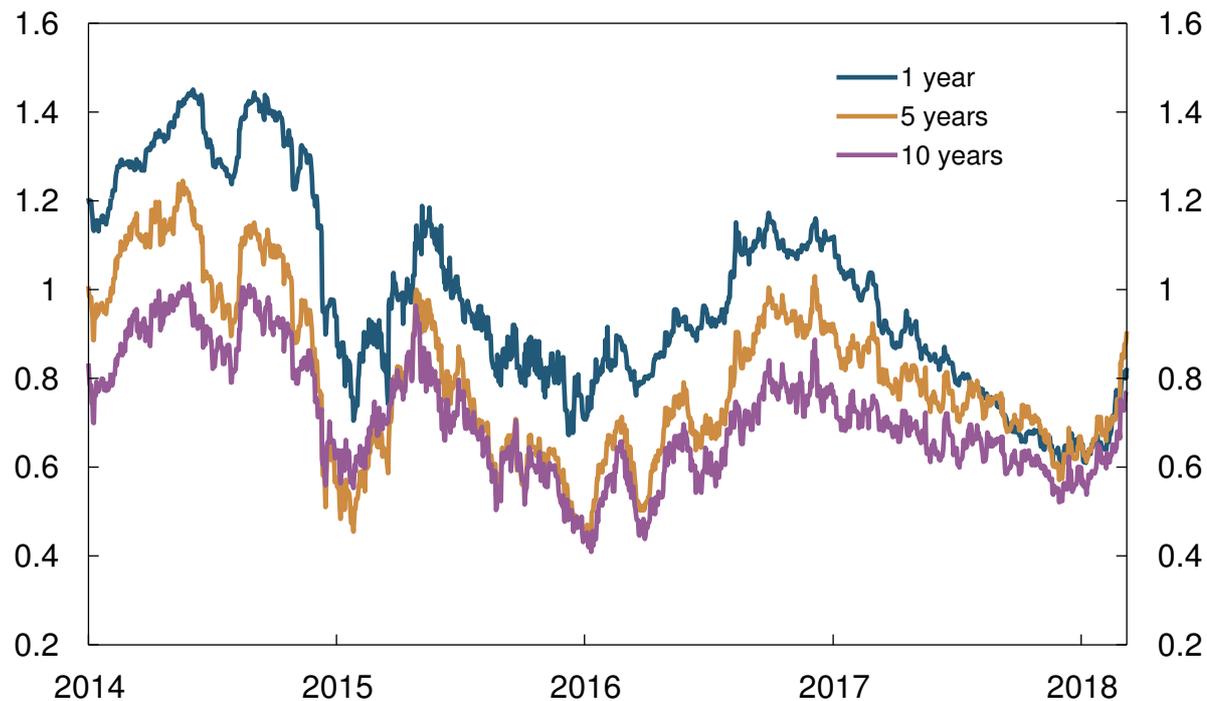


1) Norges Bank estimates of the difference between the three-month money market rate and the expected key policy rate.

2) Projections for 2018 Q2 – 2021 Q4.

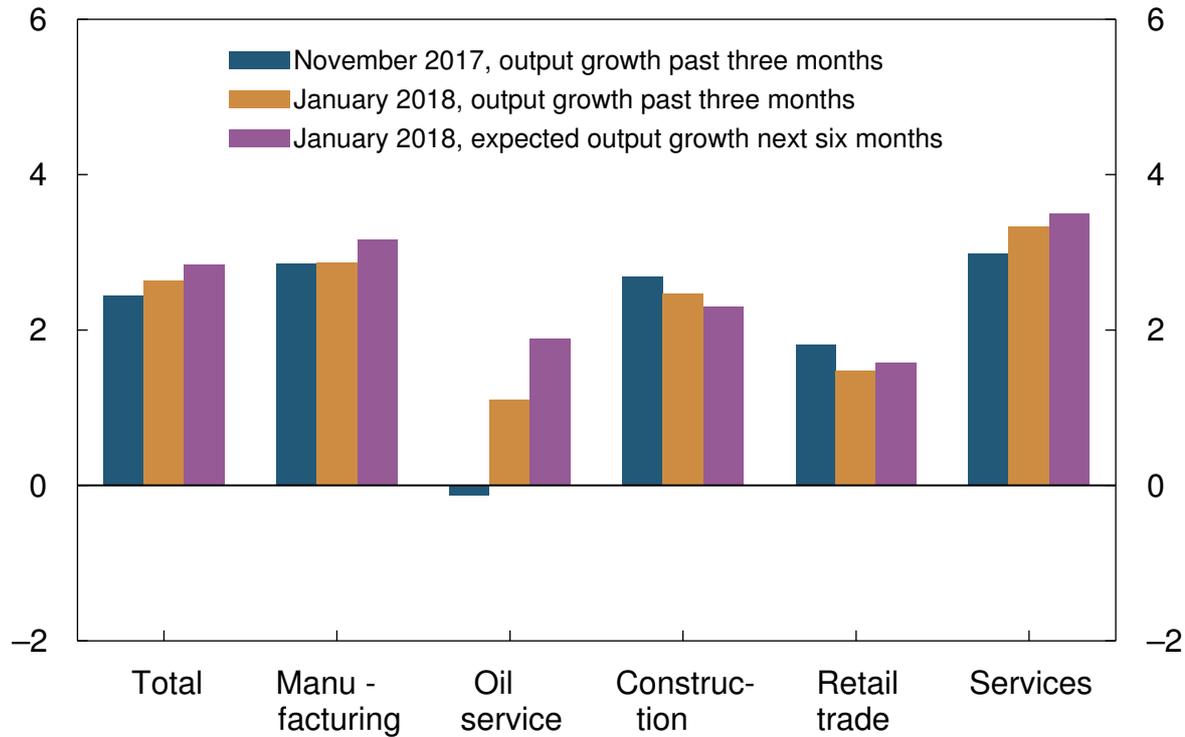
Sources: Bloomberg, Thomson Reuters and Norges Bank

Chart 3.2 Differences in interest rates¹⁾ between Norway and trading partners²⁾.
Percentage points. 1 January 2014 – 9 March 2018



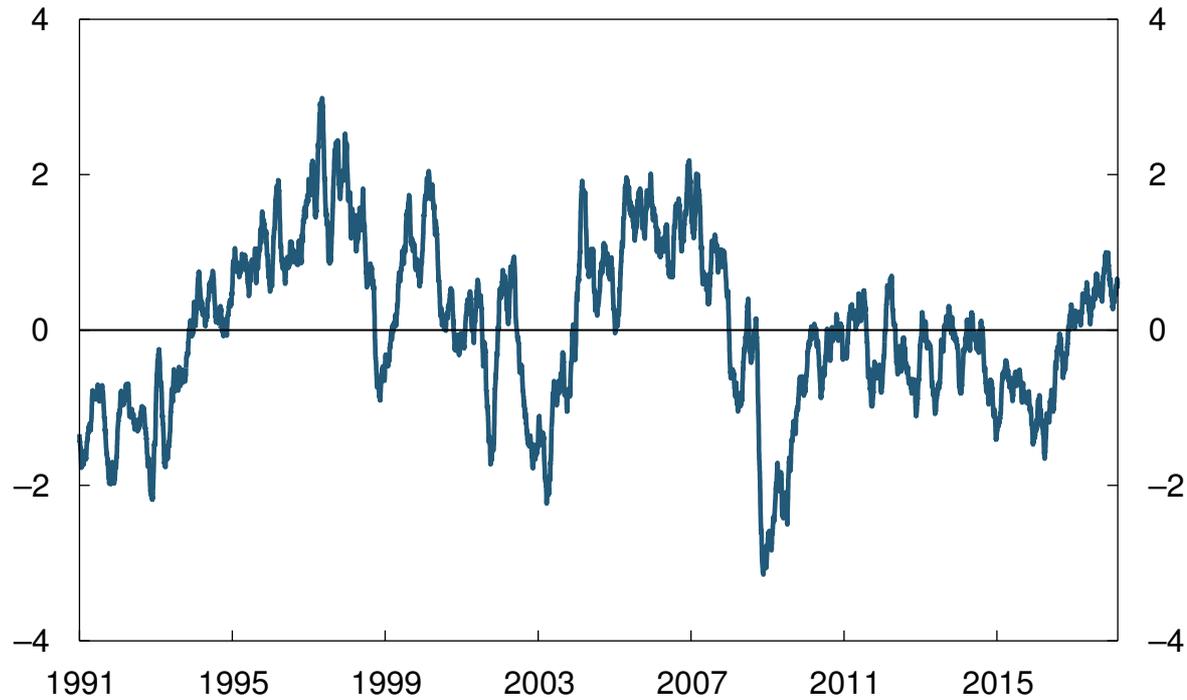
1) The interest rates are based on swap rates with maturity of 1 year, 5 years and 10 years.
2) The aggregate for trading partner interest rates is described in *Norges Bank Papers 2/2015*.
Sources: Bloomberg and Norges Bank

Chart 3.3 Output growth as reported by the Regional Network. Annualised. Percent



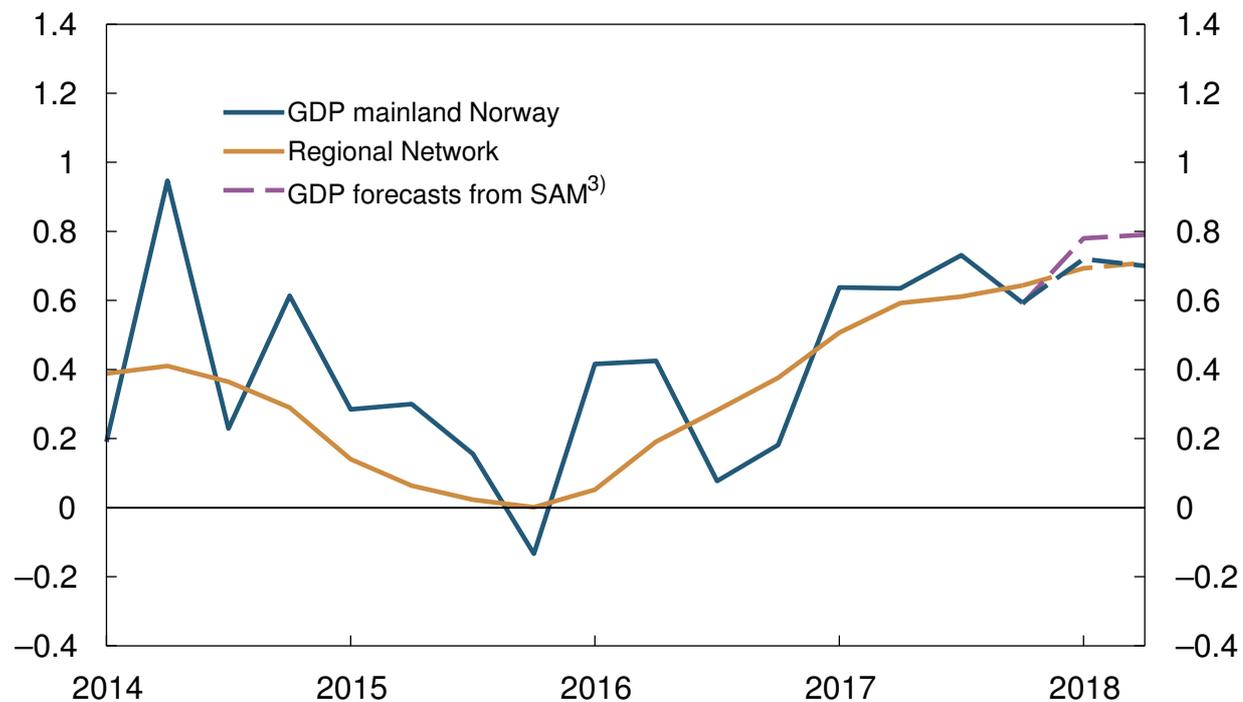
Source: Norges Bank

Chart 3.4 Financial News index (FNI).¹⁾ Index.
1 January 1991 – 28 February 2018



1) The FNI measures activity in the Norwegian economy based on media coverage of various news topics. The index average is zero. Positive values indicate better-than-average business cycle conditions.
Source: FNI – Retriever/CAMP(BI)

Chart 3.5 GDP for mainland Norway and Regional Network's indicator of output growth¹⁾. Quarterly change. Percent. 2014 Q1 – 2018 Q2²⁾



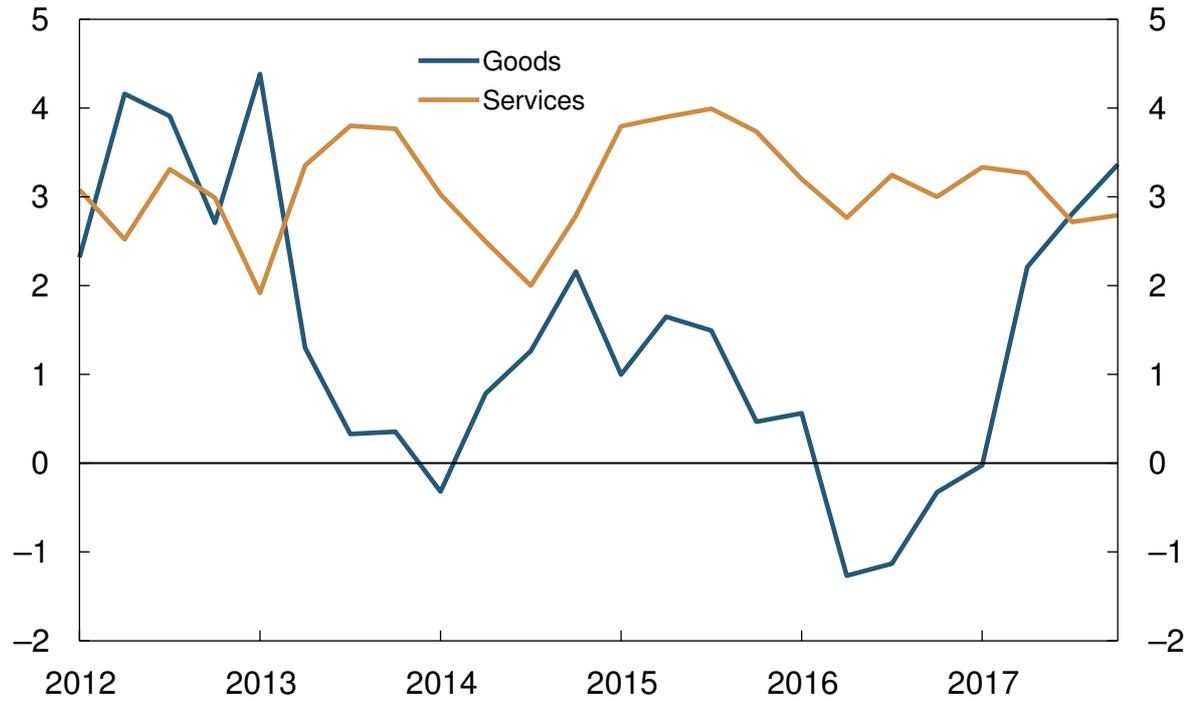
1) Reported output growth past three months converted to quarterly figures (solid line). The quarterly figures are calculated by weighting together three-monthly figures based on when the survey was carried out. For 2018 Q1 expected output growth is estimated by weighting together reported growth over the past three months and expected growth in the next six months and expected growth in the next six months as reported in January (broken orange line).

2) Projections for 2018 Q1 – 2018 Q2 (broken lines).

3) System for Averaging short-term Models.

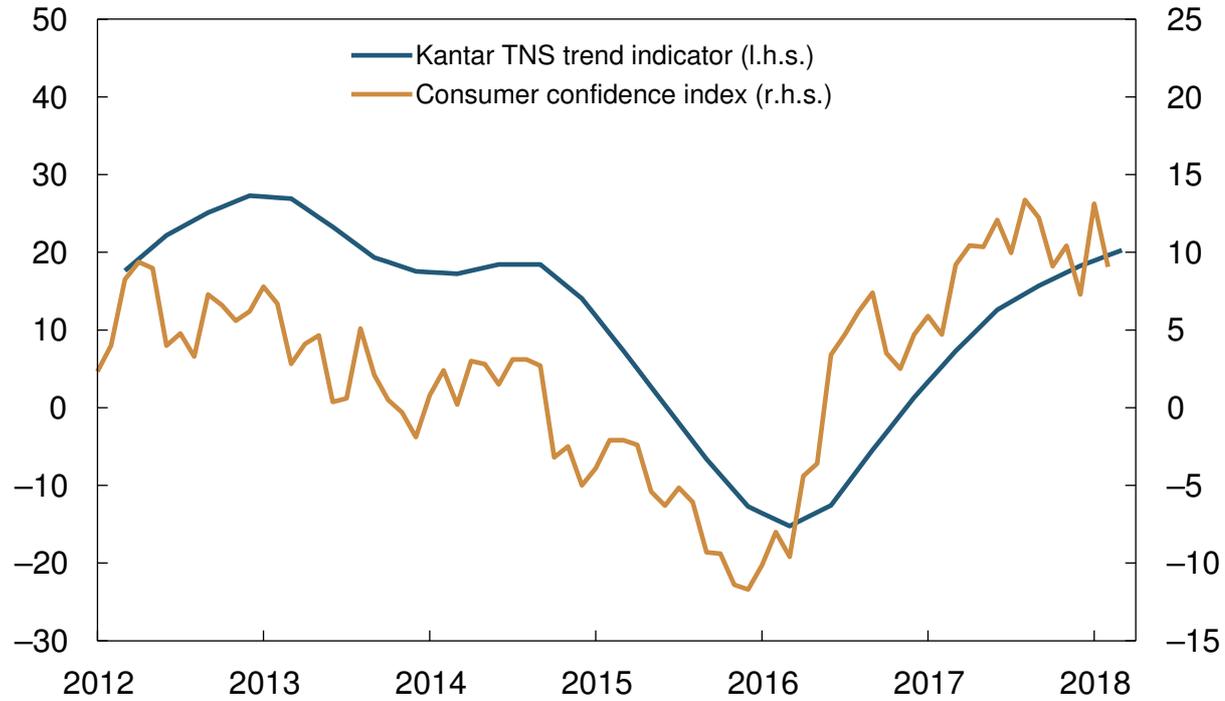
Sources: Statistics Norway and Norges Bank

Chart 3.6 Household consumption of goods and services. Volume.
Four-quarter change. Seasonally adjusted. Percent. 2012 Q1 – 2017 Q4



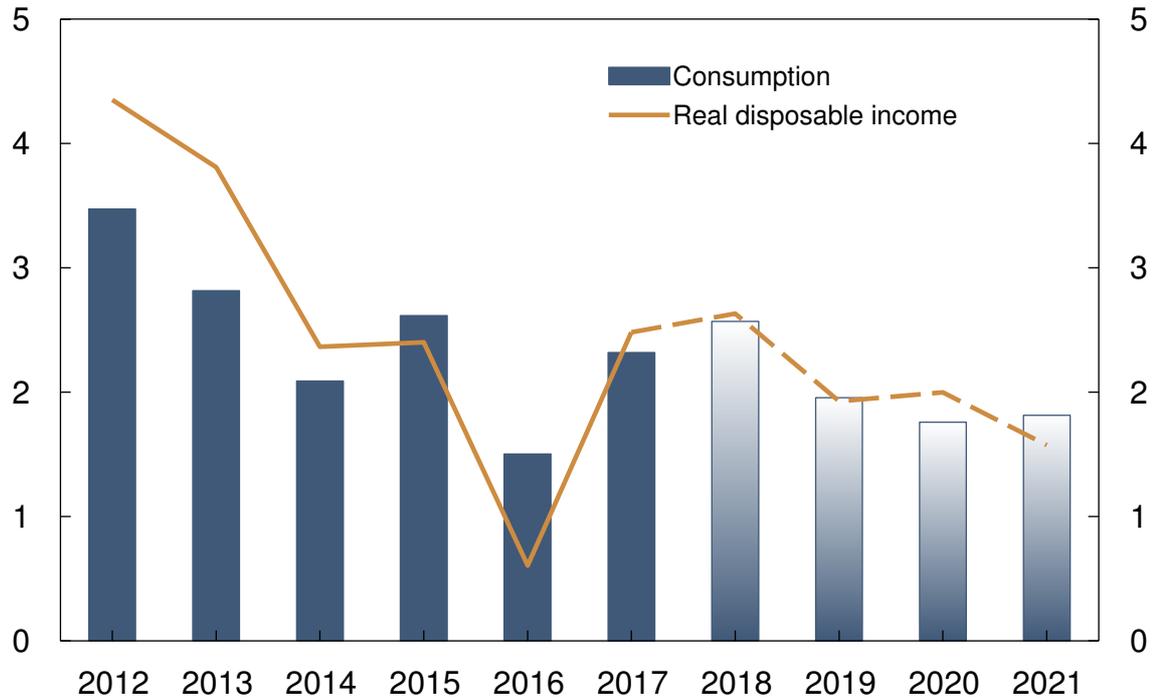
Source: Statistics Norway

Chart 3.7 Consumer confidence. Net values. Kantar TNS trend indicator for households. 2010 Q1 – 2018 Q1. Opinion consumer confidence index (CCI). January 2012 – February 2018



Sources: Kantar TNS and Opinion

Chart 3.8 Household consumption¹⁾ and real disposable income²⁾.
Annual change. Percent. 2012 – 2021³⁾



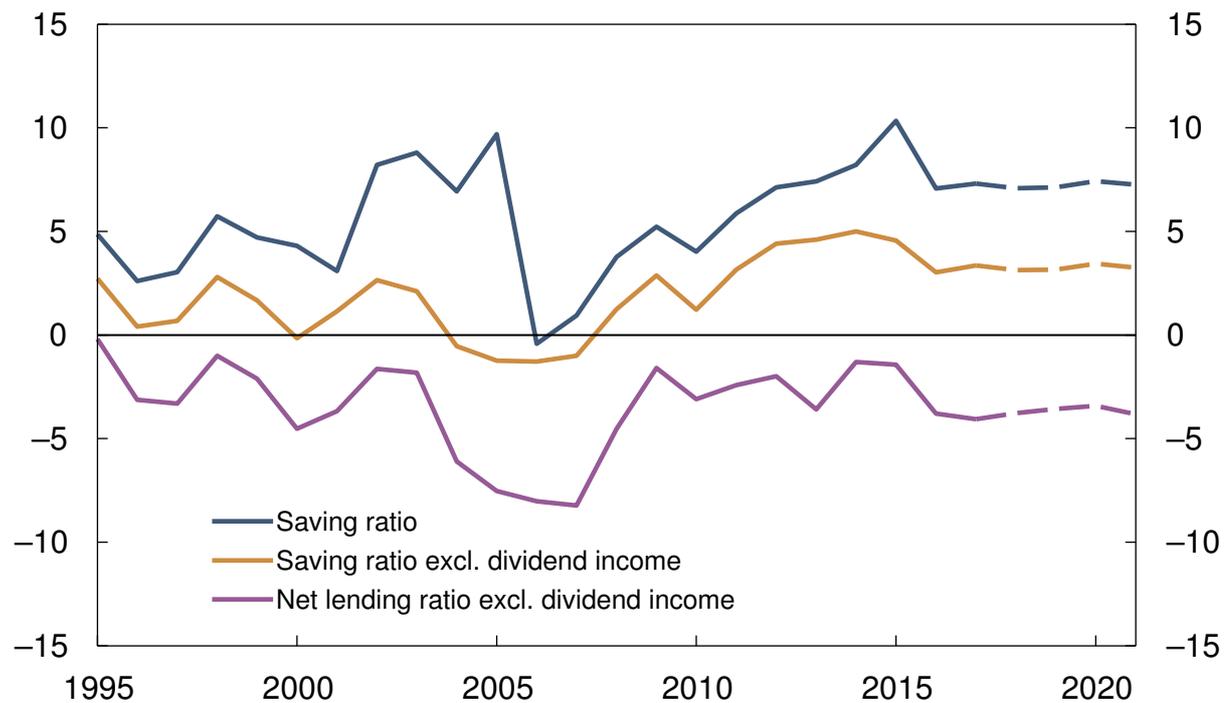
1) Includes consumption from non-profit organisations.

2) Excluding dividend income. Including income from non-profit organisations.

3) Projections for 2018 – 2021 (broken line and shaded bars).

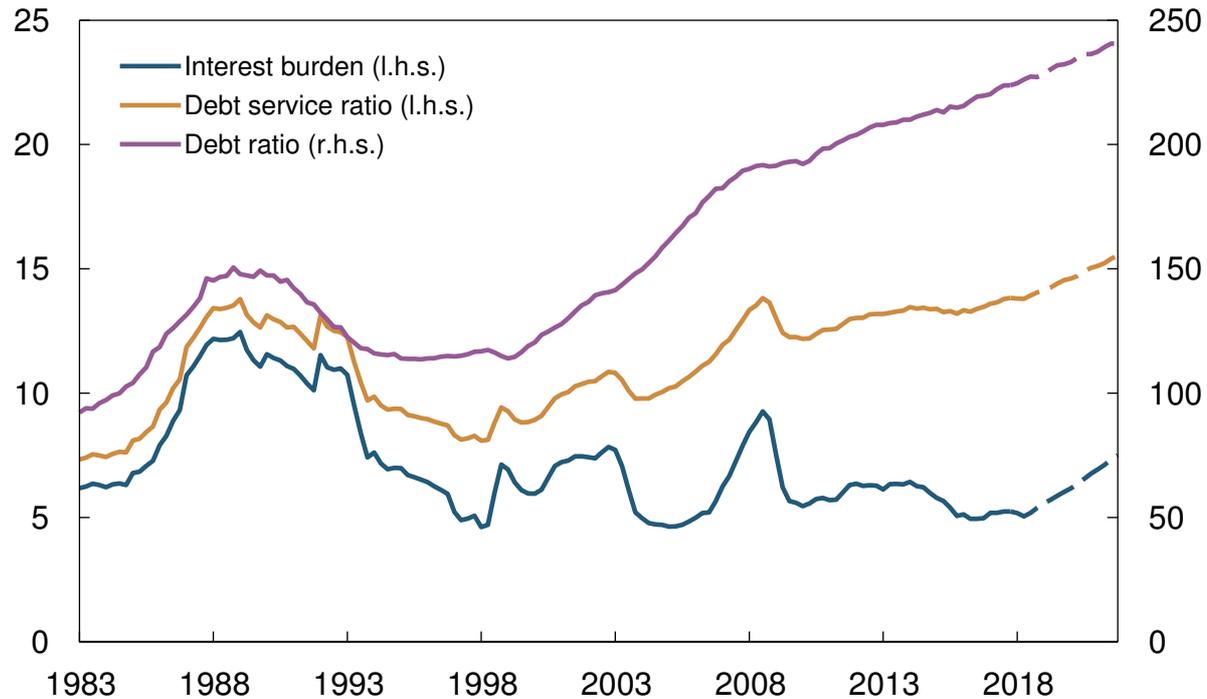
Sources: Statistics Norway and Norges Bank

Chart 3.9 Household saving and net lending. Share of disposable income.
Percent. 1995 – 2021¹⁾



1) Projections for 2018 – 2021 (broken lines).
Sources: Statistics Norway and Norges Bank

Chart 3.10 Household debt ratio, debt service ratio and interest burden.¹⁾
 Percent. 1983 Q1 – 2021 Q4²⁾

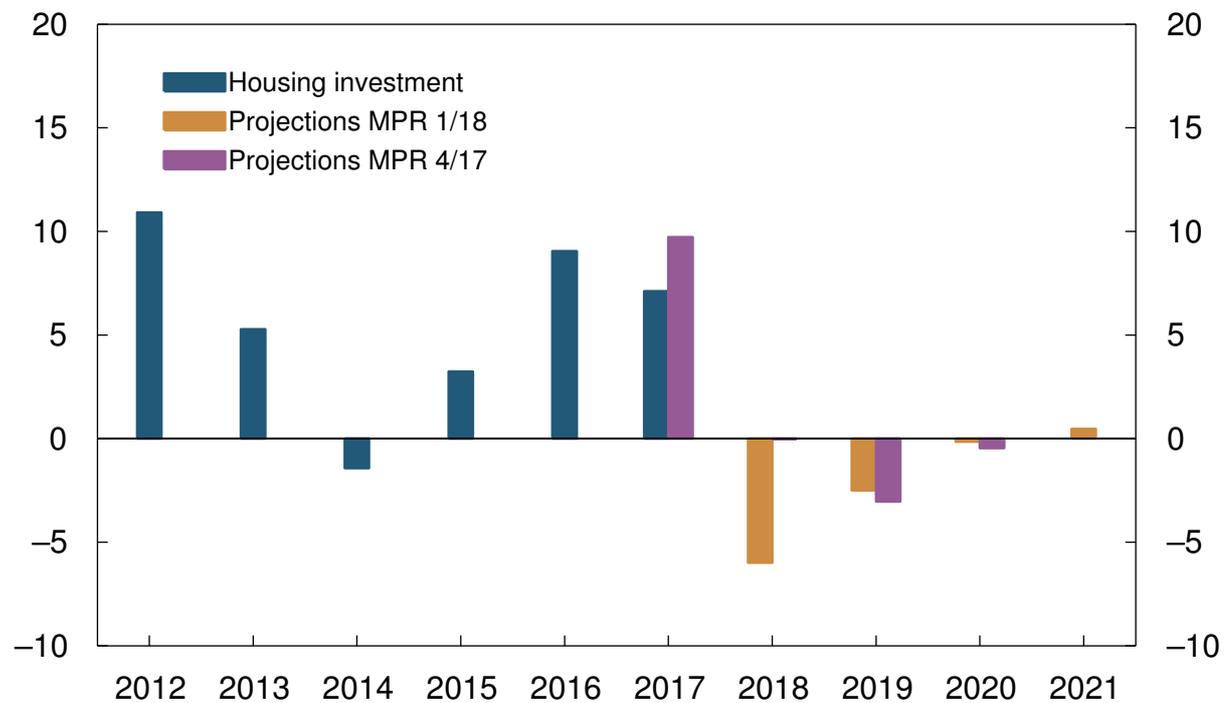


1) The debt ratio is loan debt as a percentage of disposable income. The interest burden is calculated as interest expenses as a share of disposable income including interest expenses. The debt service ratio also includes estimated principal payments on an 18-year mortgage. Disposable income is adjusted for estimated reinvested dividend income for 2000 Q1 – 2005 Q4 and reduction of equity capital for 2006 Q1 – 2012 Q3. For 2015 Q1 – 2017 Q3 growth in disposable income excluding dividends is used.

2) Projections for 2017 Q4 – 2021 Q4 (broken lines).

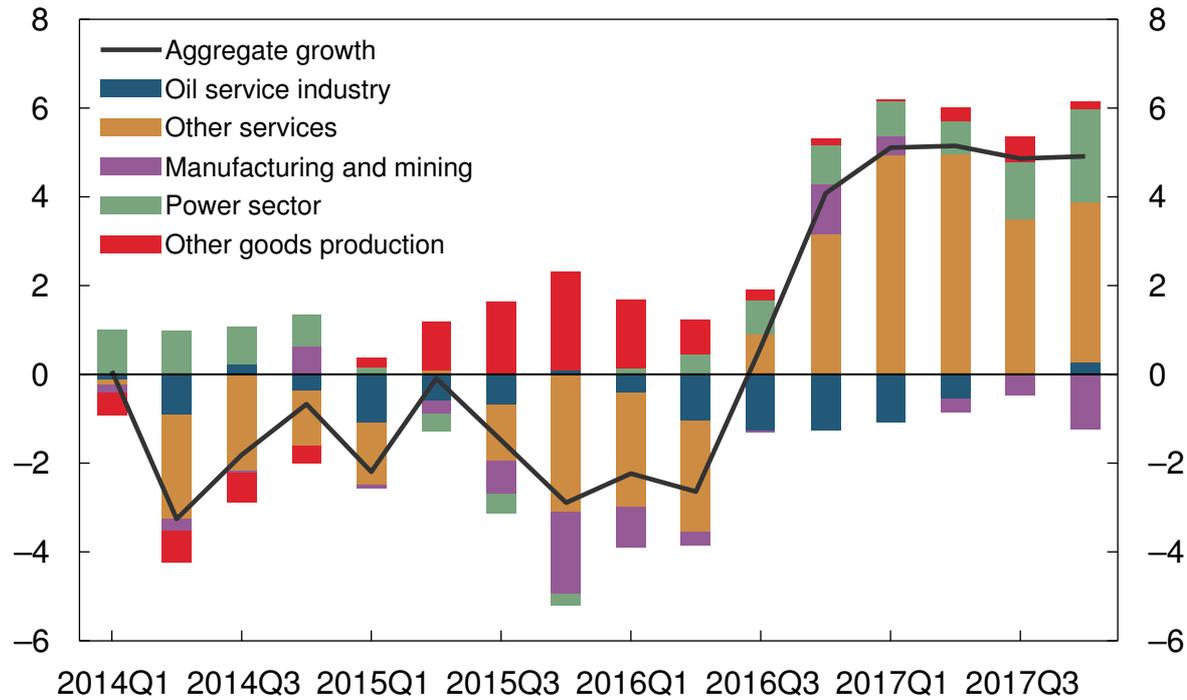
Sources: Statistics Norway and Norges Bank

Chart 3.11 Housing investment. Annual change. Percent. 2012 – 2021¹⁾



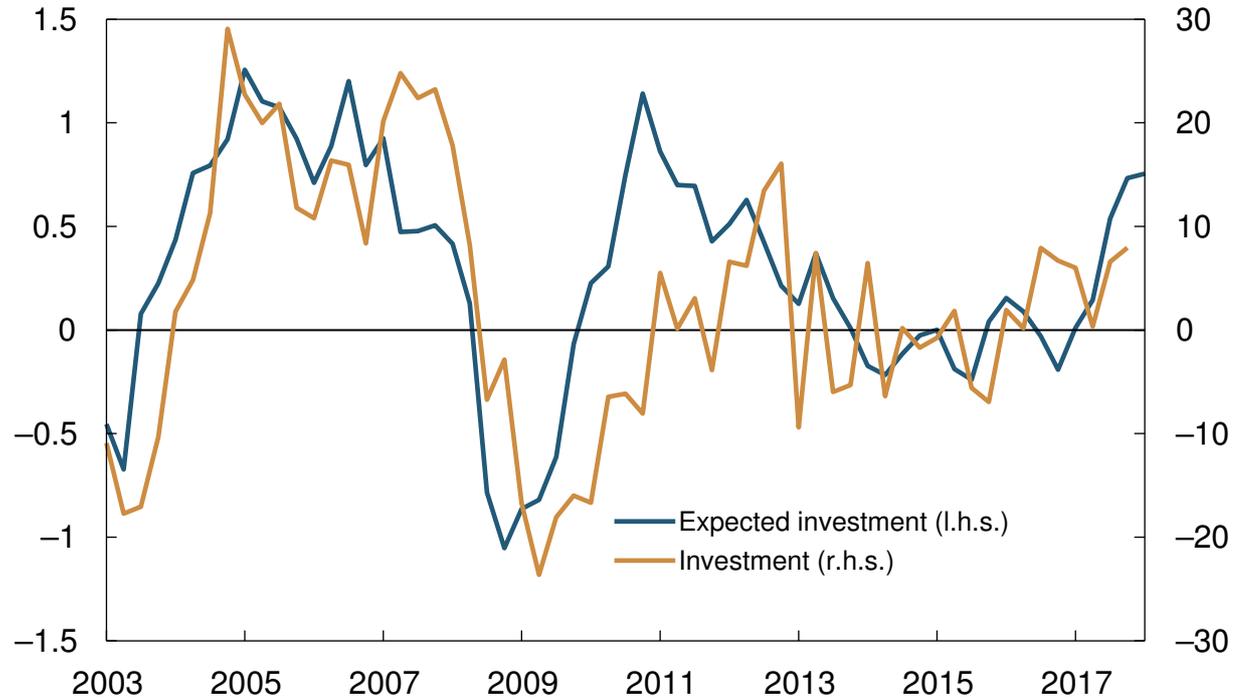
1) Projections for 2018 – 2021.
Sources: Statistics Norway and Norges Bank

Chart 3.12 Mainland business investment by sector. Contribution to four-quarter change. Four-quarter moving average. Percentage points. 2014 Q1 – 2017 Q4



Sources: Statistics Norway og Norges Bank

Chart 3.13 Expected change in business investment over next 12 months.¹⁾
 Change in business investment. Four-quarter change. Seasonally adjusted.
 Percent. 2003 Q1 – 2018 Q1²⁾

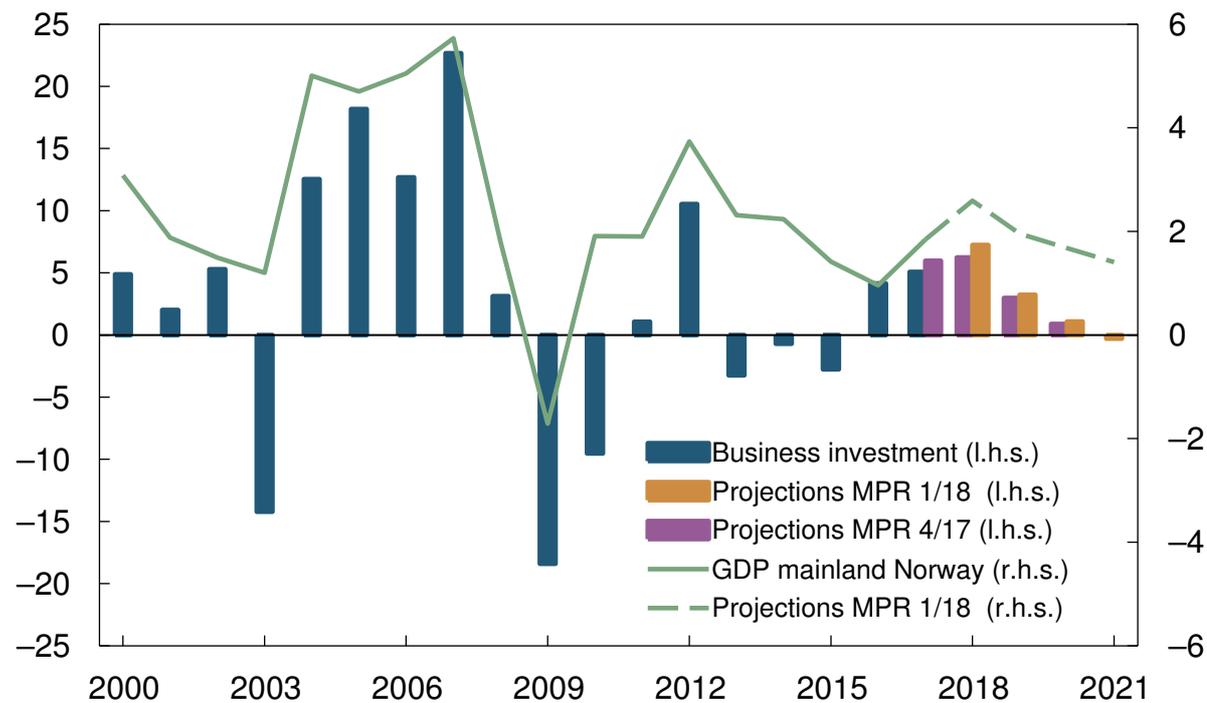


1) Regional Network. Weighted average of manufacturing, oil service, retail trade and services.

2) Last observation for investment 2017 Q4.

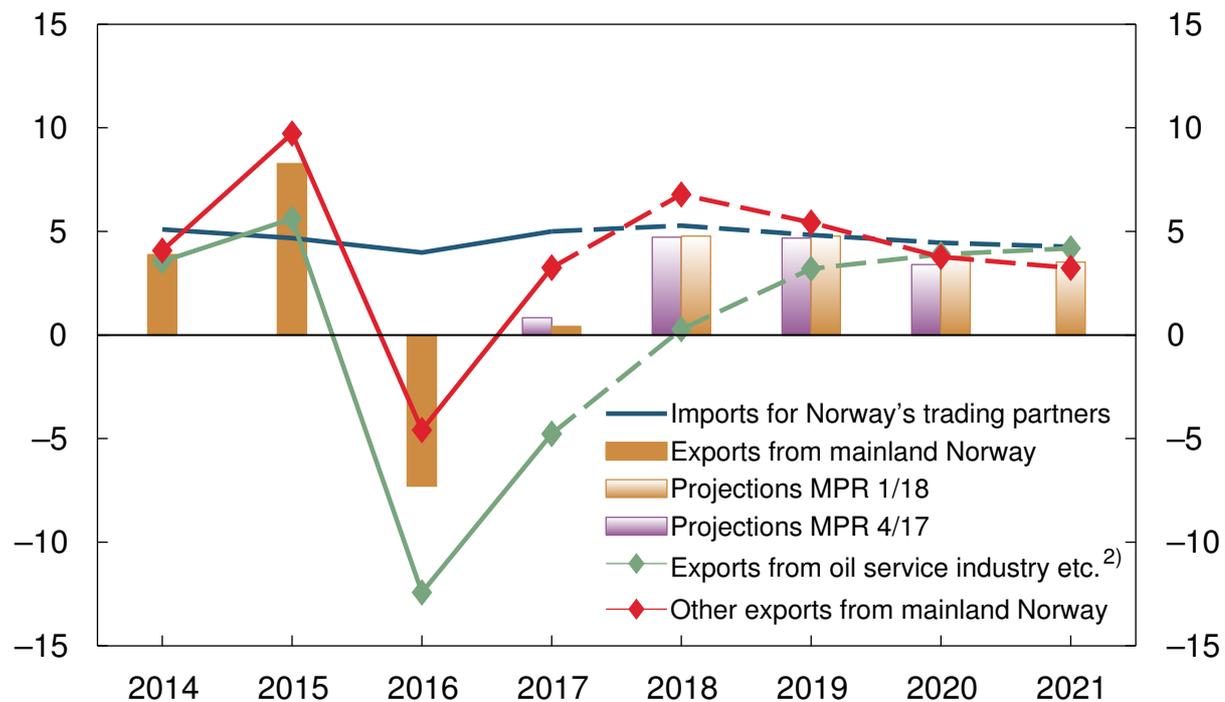
Sources: Statistics Norway and Norges Bank

Chart 3.14 Business investment and GDP. Annual change. Percent.
2000 – 2021¹⁾



1) Projections for 2018 – 2021.
Sources: Statistics Norway and Norges Bank

Chart 3.15 Exports from mainland Norway and imports for Norway's trading partners. Annual change. Percent. 2014 – 2021 ¹⁾

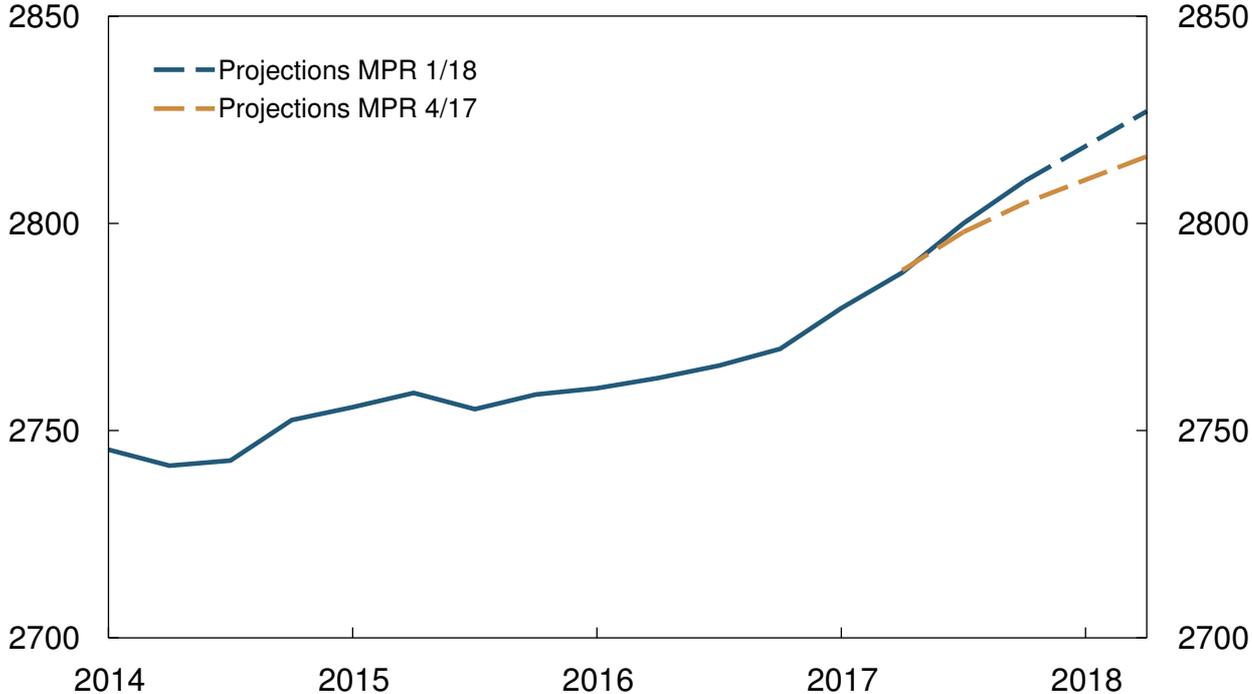


1) Projections for 2018 – 2021 (broken lines).

2) Groups of goods and services in the national accounts where the oil service industry accounts for a considerable share of exports.

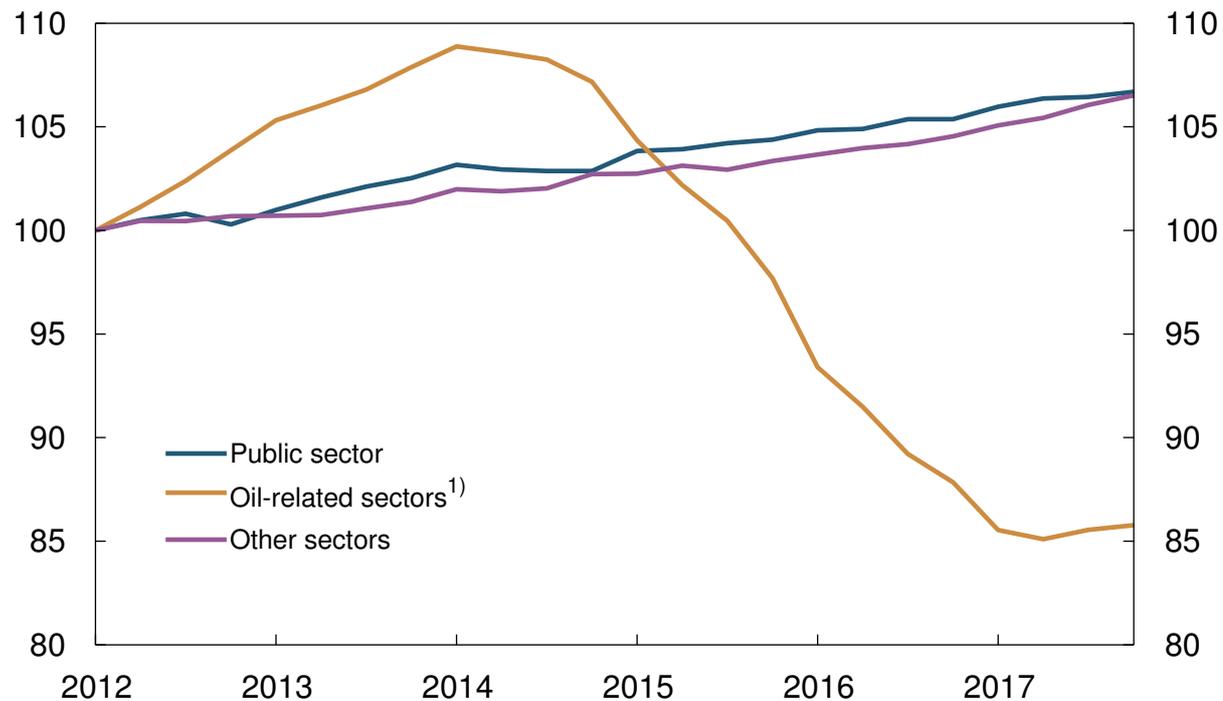
Sources: Statistics Norway, Thomson Reuters and Norges Bank

Chart 3.16 Employment according to the quarterly national accounts (QNA).
In thousands. Seasonally adjusted. 2014 Q1 – 2018 Q2¹⁾



1) Projections for 2018 Q1 – 2018 Q2.
Sources: Statistics Norway and Norges Bank

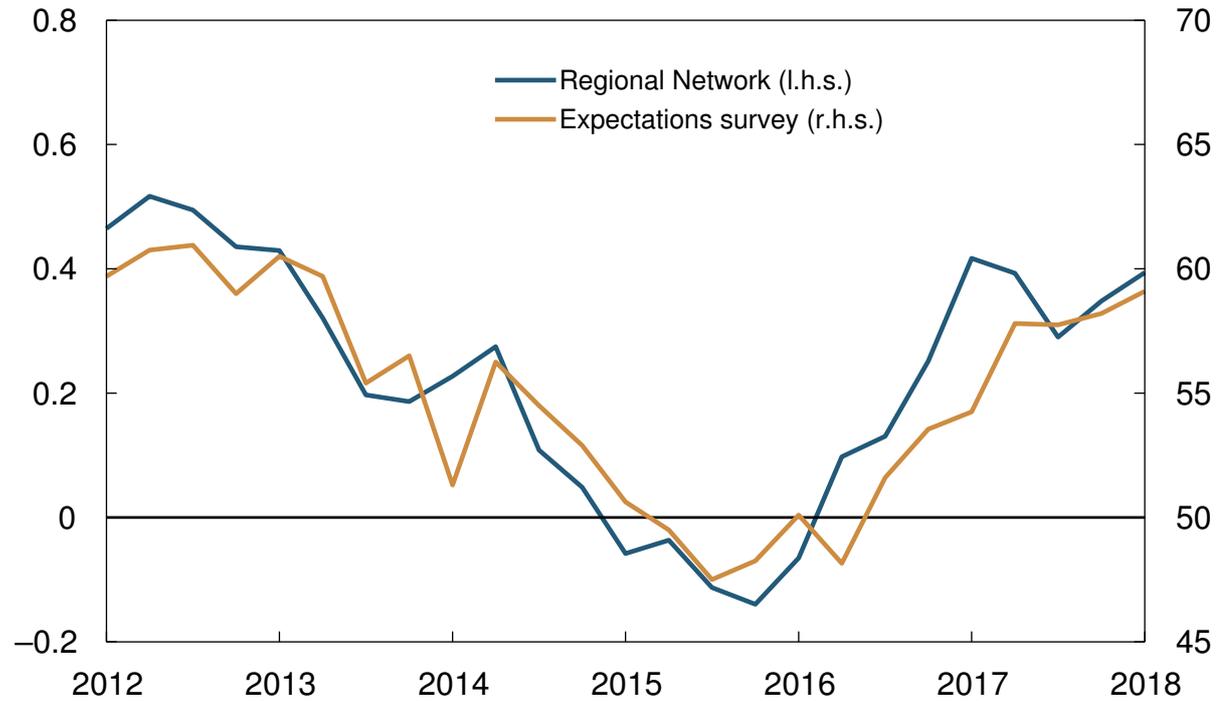
Chart 3.17 Employment by sector. Index. 2012 Q1 = 100.
2012 Q1 – 2017 Q4



1) Extraction of crude oil and natural gas, including services, production of metals, electrical equipment and machines, shipbuilding and construction of other means of transport and repairs and installation of machines and equipment. These sectors accounted for 7% of the total employment in Norway in 2012 Q1.

Sources: Statistics Norway and Norges Bank

Chart 3.18 Expected employment. Regional Network.¹⁾ Quarterly change. Percent. Norges Bank's expectations survey. Diffusion index.²⁾ 2012 Q1 – 2018 Q1

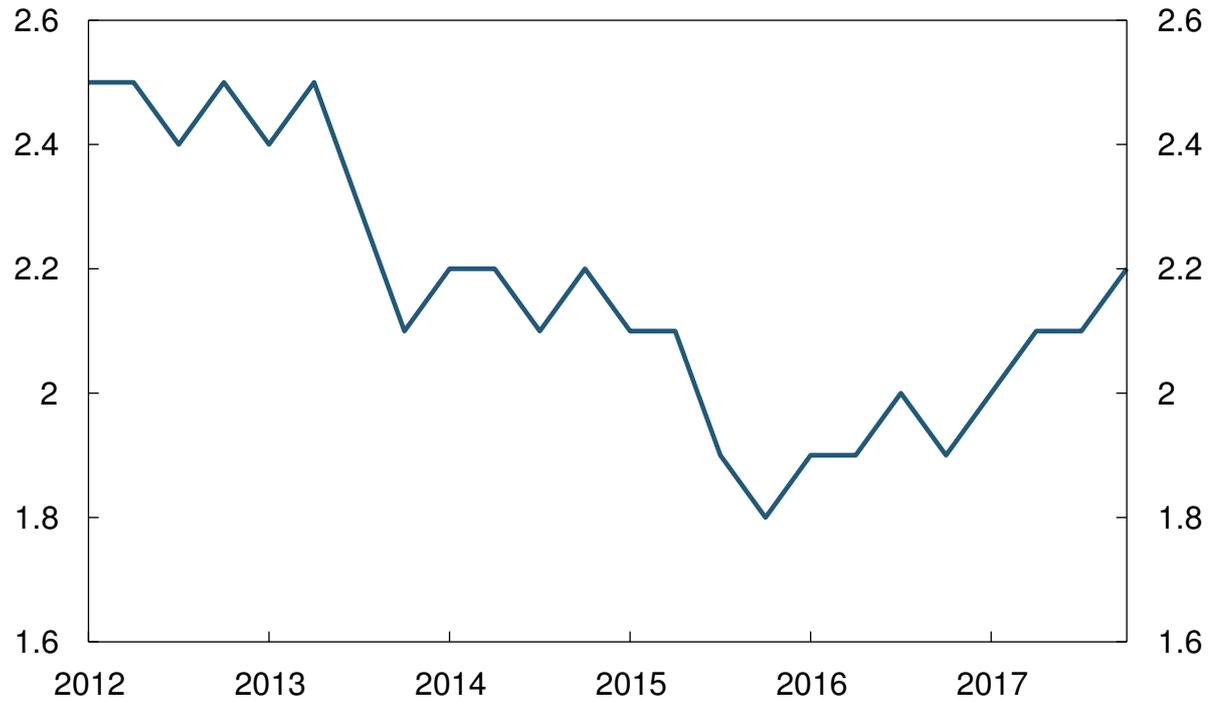


1) Expected change in employment next three months.

2) Share of business leaders expecting "more employees" in their own firm in the following 12 months + (1/2 * share expecting "unchanged number of employees").

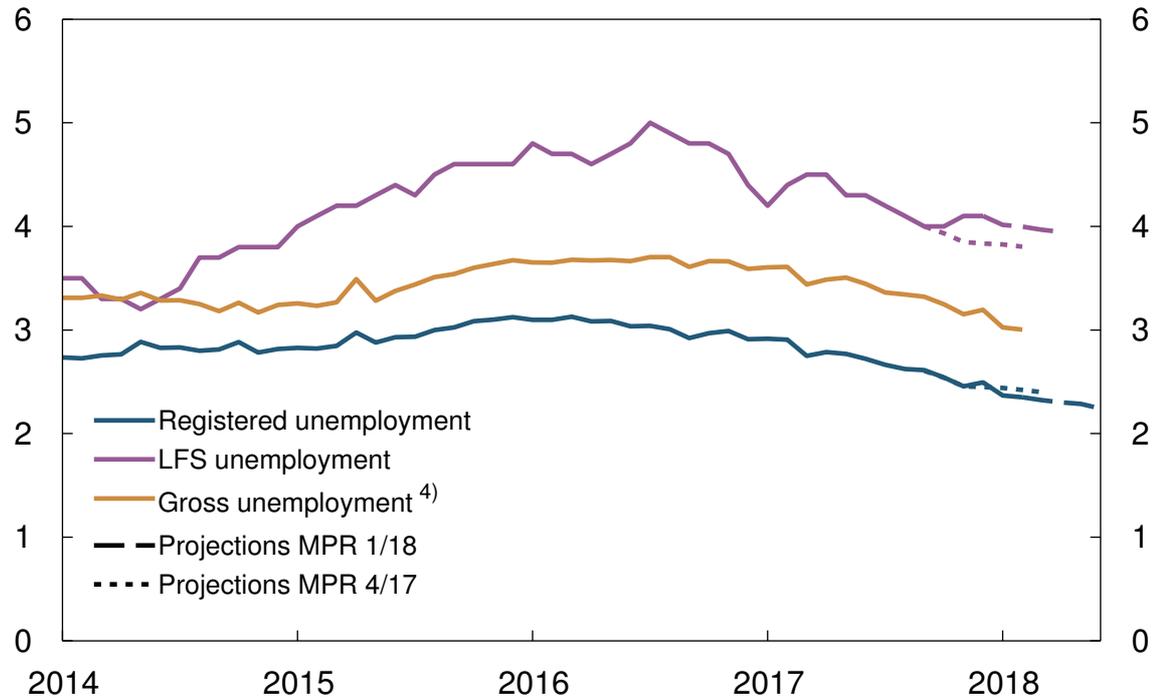
Sources: Epinion and Norges Bank

Chart 3.19 Job vacancies. All sectors. As a share of the total number of positions. Seasonally adjusted. Percent. 2012 Q1 – 2017 Q4



Source: Statistics Norway

Chart 3.20 Unemployment. Share of the labour force. LFS¹⁾ and NAV²⁾.
Seasonally adjusted. Percent. January 2014 – June 2018³⁾



1) Labour Force Survey.

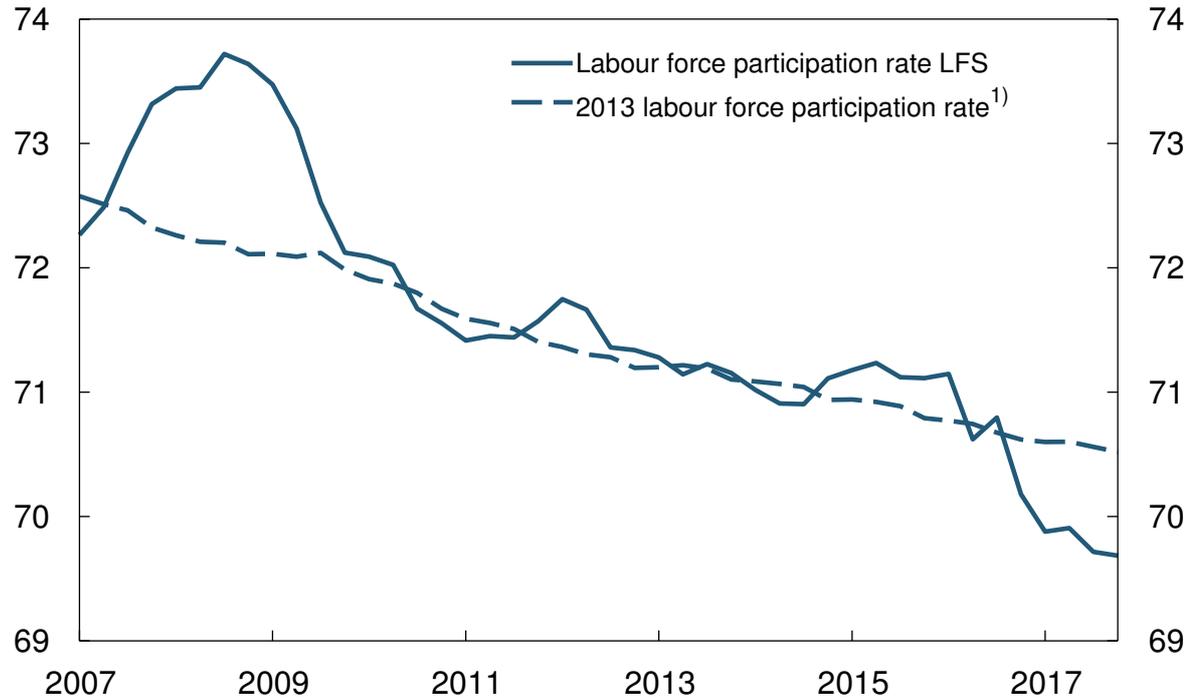
2) Registered unemployment.

3) Projections for March 2018 – June 2018 (registered unemployment) and January 2018 – April 2018 (LFS).

4) Registered unemployed and ordinary labour market programme participants.

Sources: Norwegian Labour and Welfare Administration (NAV), Statistics Norway and Norges Bank

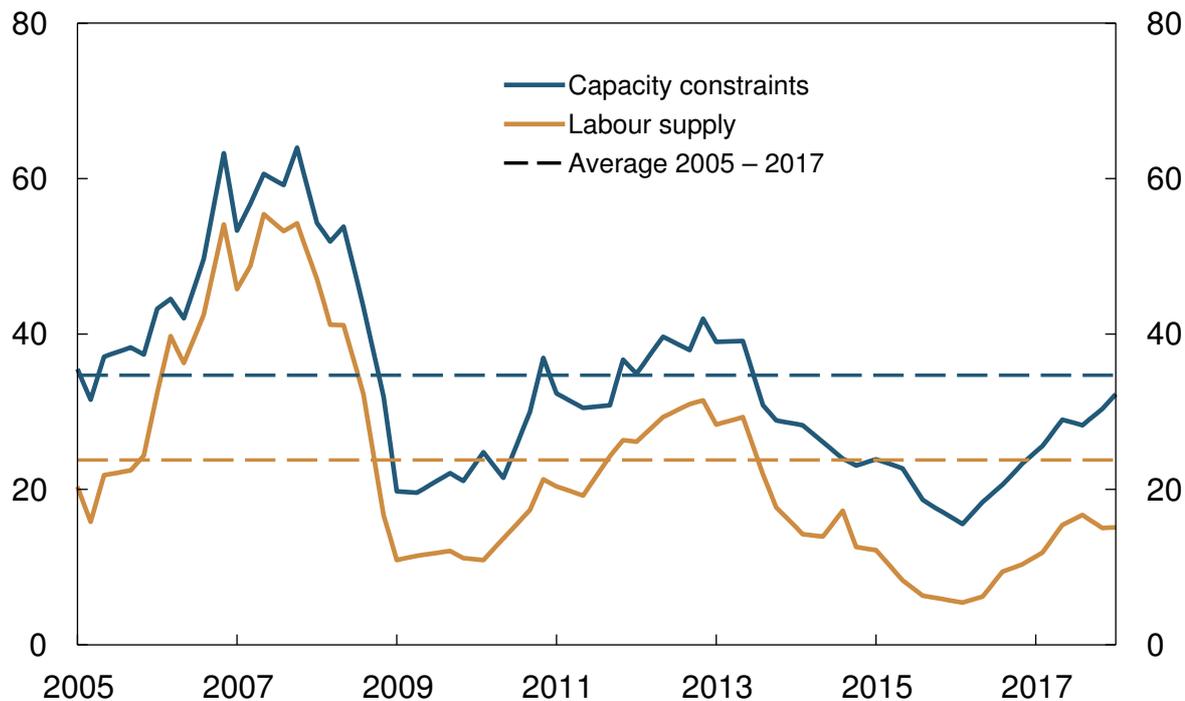
Chart 3.21 Labour force. Share of the population (15 - 74 years). Percent.
2007 Q1 – 2017 Q4



1) Change in the rate if the rate for each five-year age cohort had been unchanged at 2013-levels. The curve falls because the population is ageing. 2013 was selected because the output gap in that year is considered to have been close to zero. The calculations also take into account non-Western immigrants' somewhat lower labour force participation rate than the population as a whole.

Sources: Statistics Norway and Norges Bank

Chart 3.22 Capacity constraints¹⁾ and labour supply²⁾ as reported by the Regional Network. Percent. January 2005 – January 2018

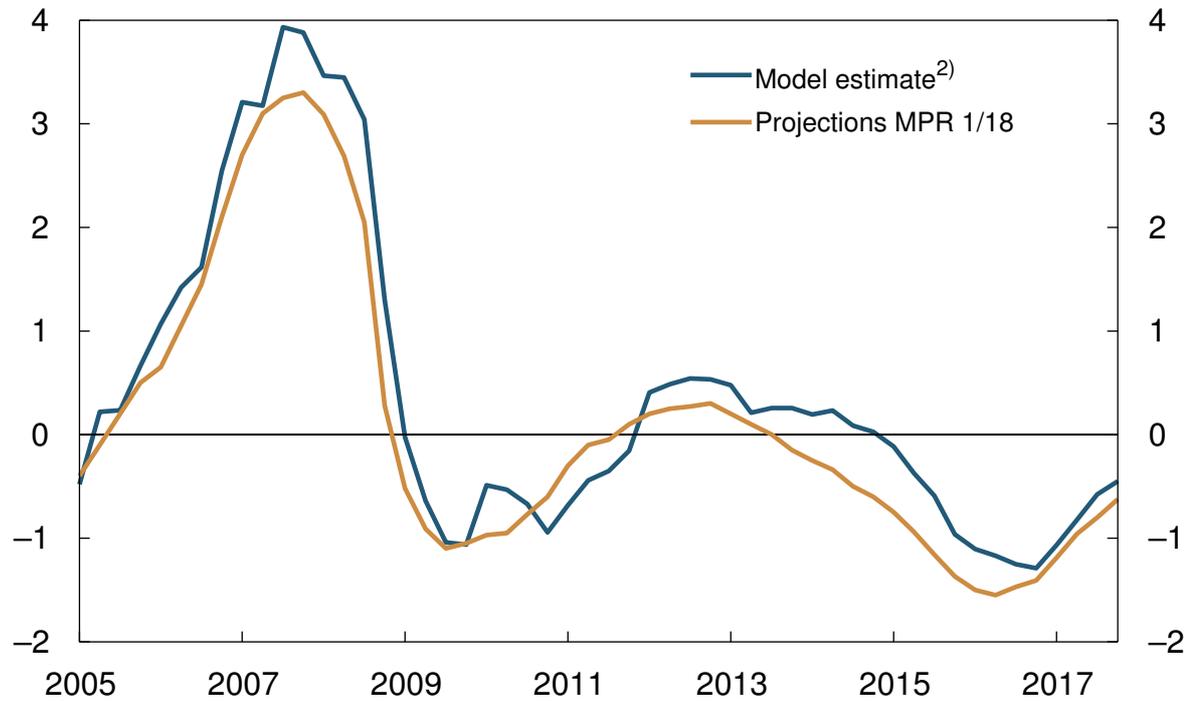


1) Share of contacts that will have some or considerable problems accommodating an increase in demand.

2) The share of contacts reporting that output is being constrained by labour supply.

Source: Norges Bank

Chart 3.23 Projected output gap.¹⁾ Percent. 2005 Q1 – 2017 Q4

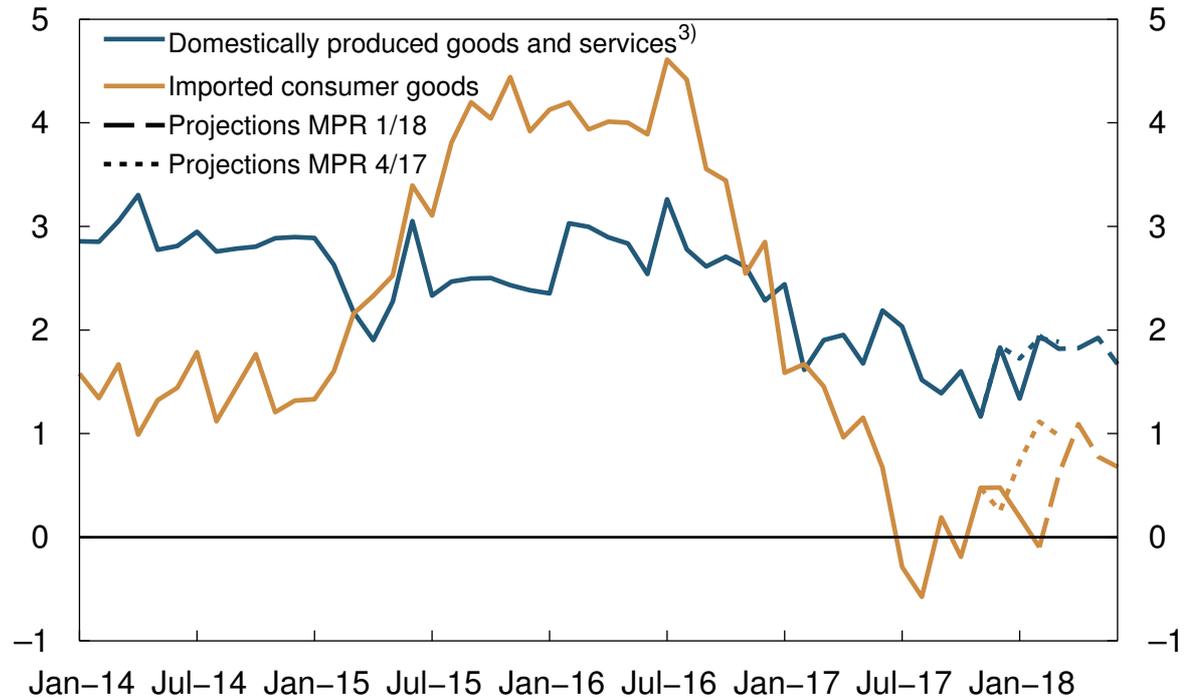


1) The output gap measures the percentage deviation between mainland GDP and projected potential mainland GDP.

2) For a review, see box on page 34 in *Monetary Policy Report 4/17*.

Source: Norges Bank

Chart 3.24 CPI-ATE¹⁾ by supplier sector. Twelve-month change. Percent.
 January 2014 – June 2018 ²⁾



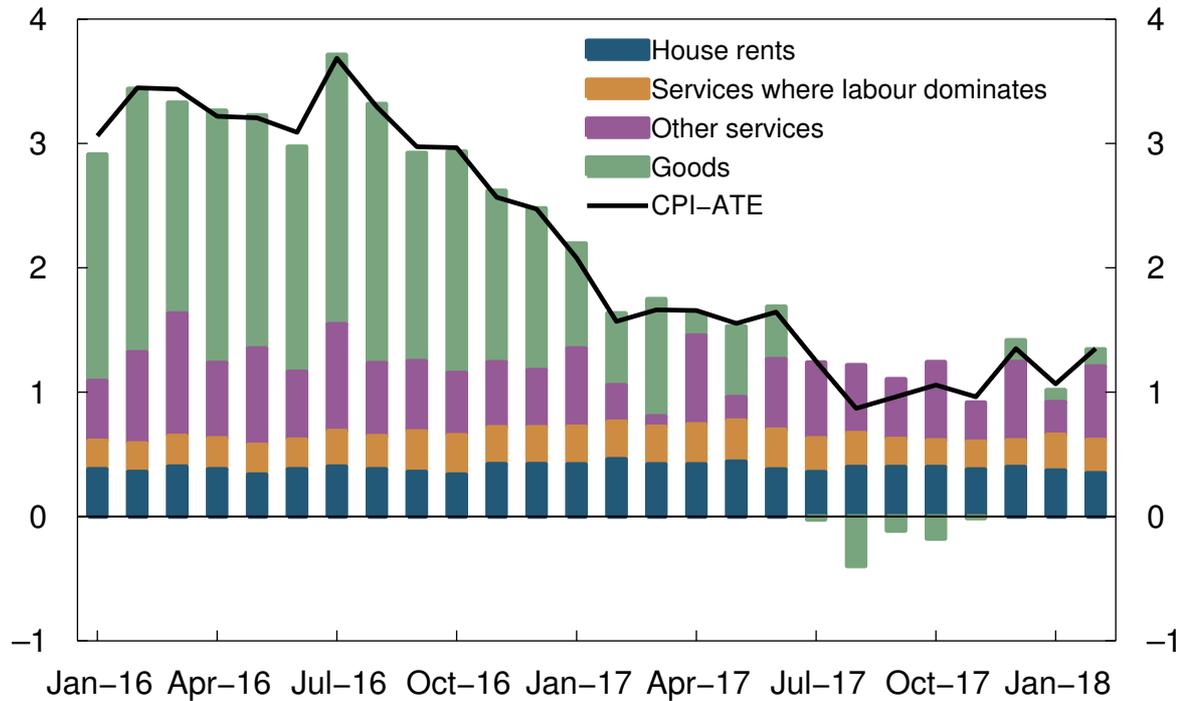
1) CPI adjusted for tax changes and excluding energy products.

2) Projections for March 2018 – June 2018.

3) Norges Bank's estimates.

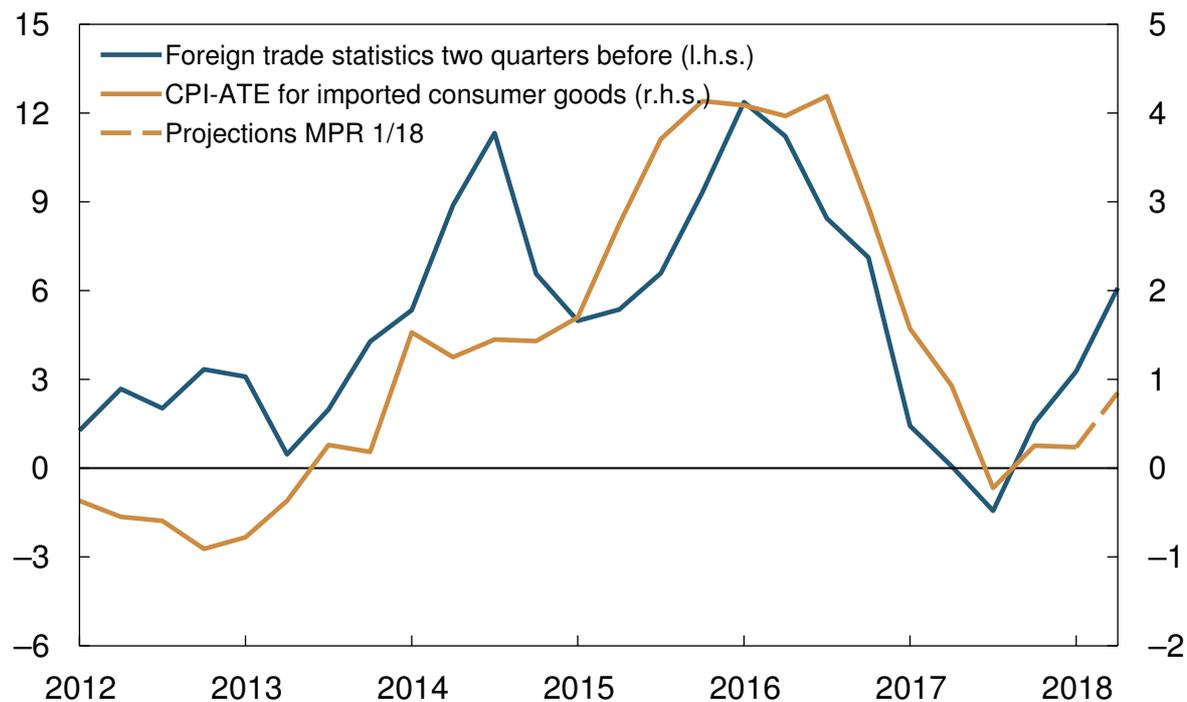
Sources: Statistics Norway and Norges Bank

Chart 3.25 CPI-ATE ¹⁾ by goods and services. Contributions to twelve-month change. ²⁾ Percentage points. January 2016 – February 2018



1) CPI adjusted for tax changes and excluding energy products.
 2) The contributions do not sum to the twelve-month rise in the CPI -ATE due to rounding.
 Sources: Statistics Norway and Norges Bank

Chart 3.26 Prices for imported consumer goods from the foreign trade statistics and imported consumer goods in the CPI-ATE¹⁾. Four-quarter change. Percent. 2012 Q1 – 2018 Q2 ²⁾

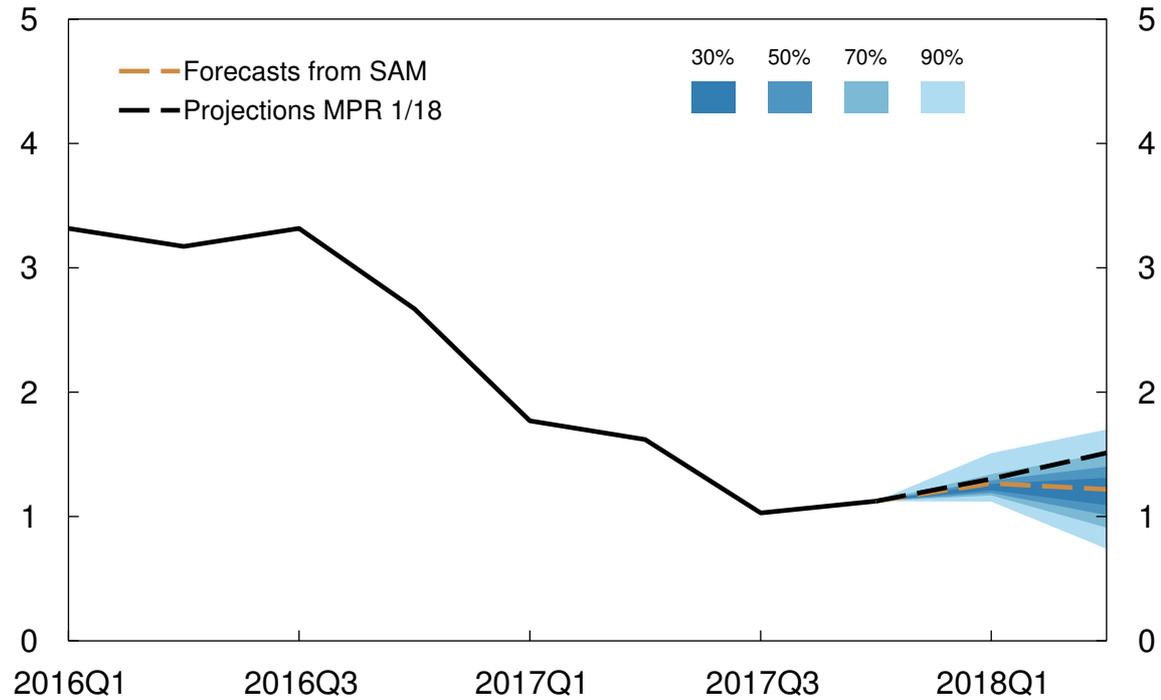


1) CPI adjusted for tax changes and excluding energy products.

2) Projections for 2018 Q1 – 2018 Q2.

Sources: Statistics Norway and Norges Bank

Chart 3.27 CPI-ATE¹⁾ with fan chart given by SAM²⁾. Four-quarter change. Percent. 2016 Q1 – 2018 Q2³⁾



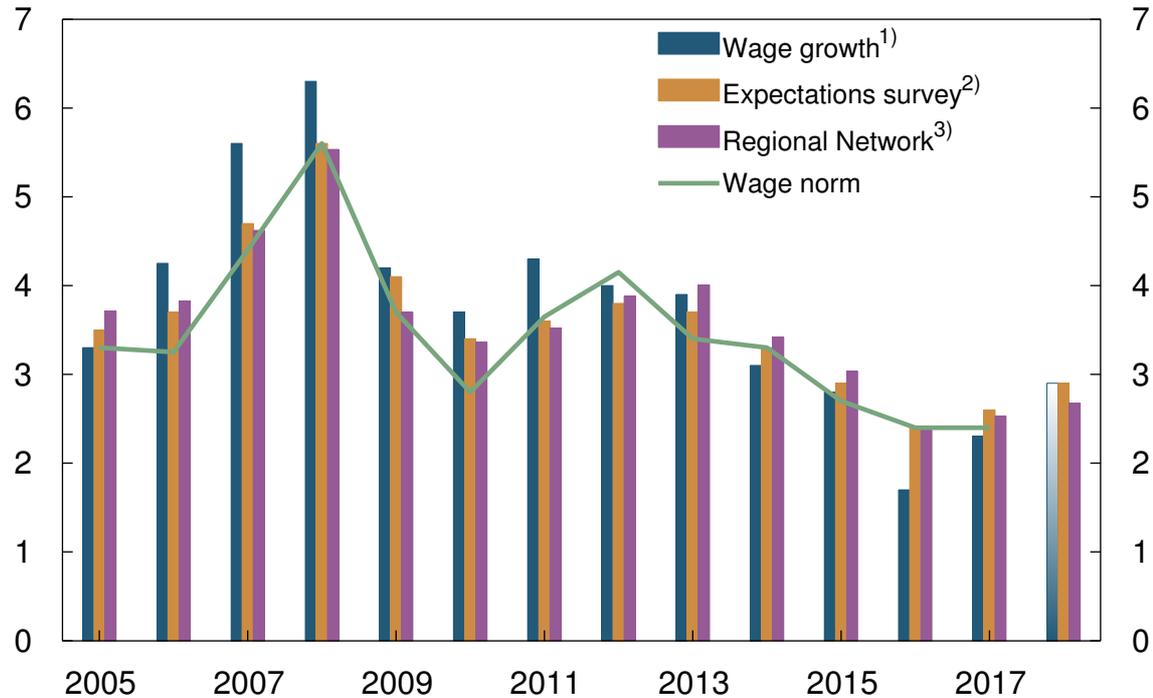
1) CPI adjusted for tax changes and excluding energy products.

2) System for Averaging short-term Models.

3) Projections for 2018 Q1 – 2018 Q2.

Sources: Statistics Norway and Norges Bank

Chart 3.28 Wage growth, wage norm and wage expectations. Annual change. Percent. 2005 – 2018



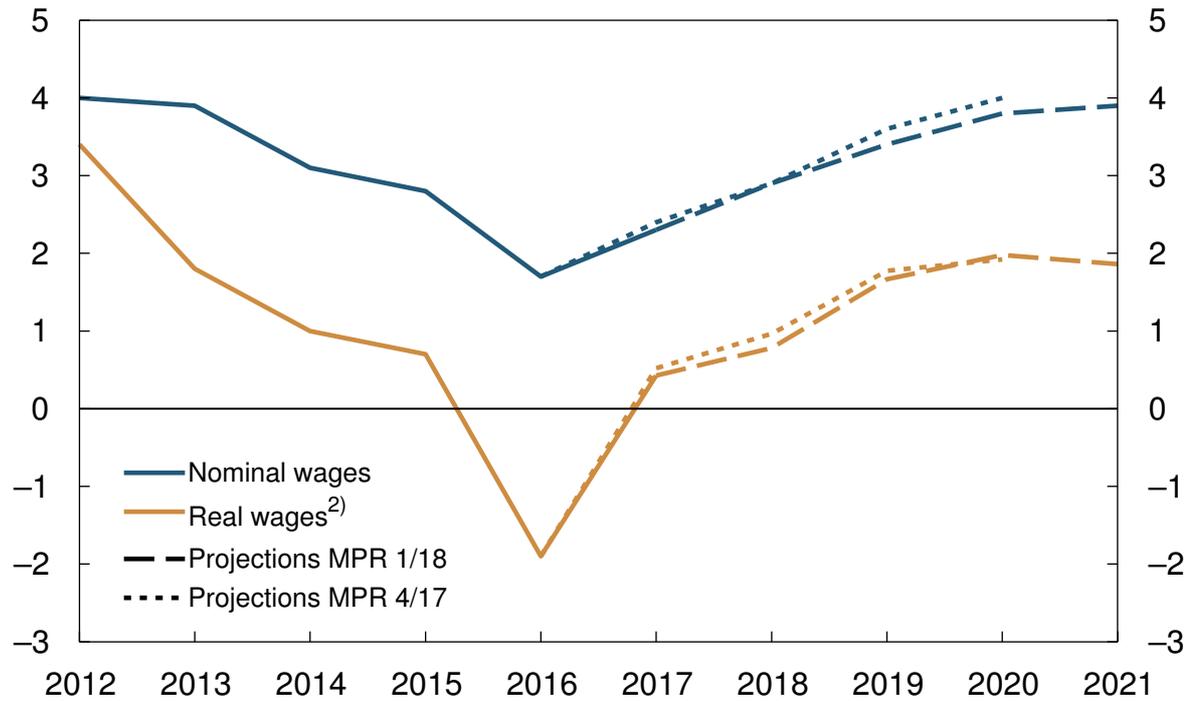
1) Historical annual wage growth from Statistics Norway. Norges Banks' projections for 2018 (shaded bars).

2) Social partners' wage growth expectations for the current year as measured by Norges Banks expectations survey in Q1 each year.

3) Expected wage growth for the current year as reported by the Regional Network in Q1 each year.

Sources: Epinion, Statistics Norway and Norges Bank.

Chart 3.29 Wages. Annual change. Percent. 2012 – 2021¹⁾

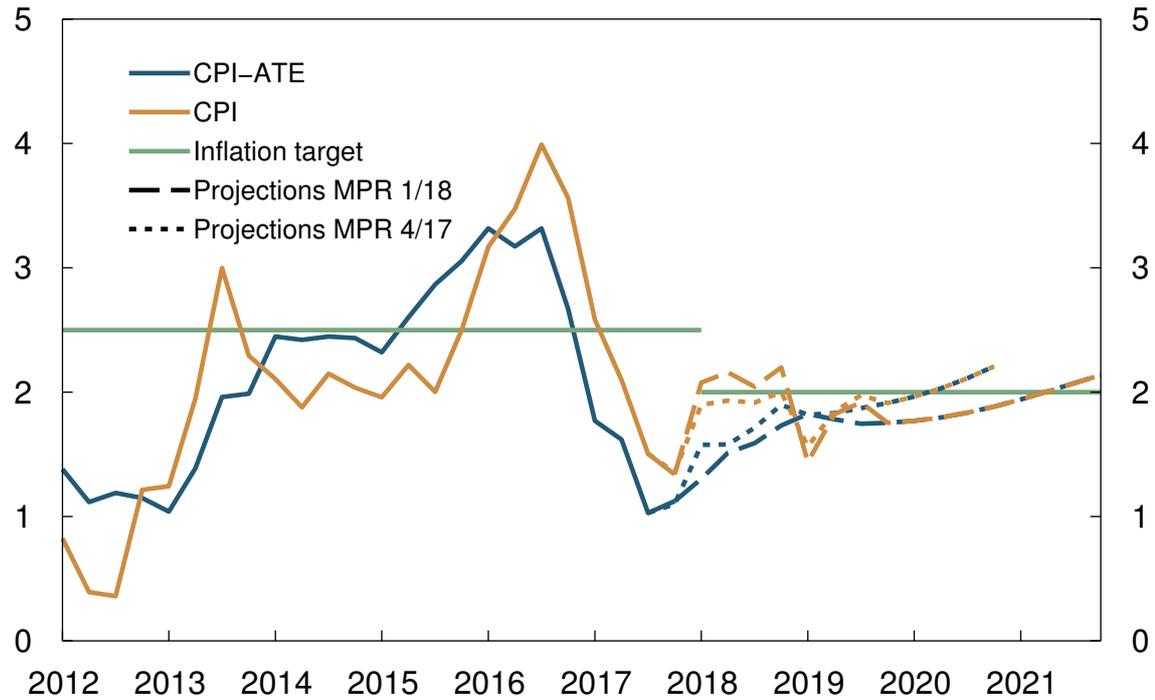


1) Projections for 2018 – 2021.

2) Nominal wage growth deflated by the CPI.

Sources: Norwegian Technical Calculation Committee for Wage Settlements, Statistics Norway and Norges Bank

Chart 3.30 CPI-ATE¹⁾ and CPI. Four-quarter change. Percent.
2012 Q1 – 2021 Q4 ²⁾

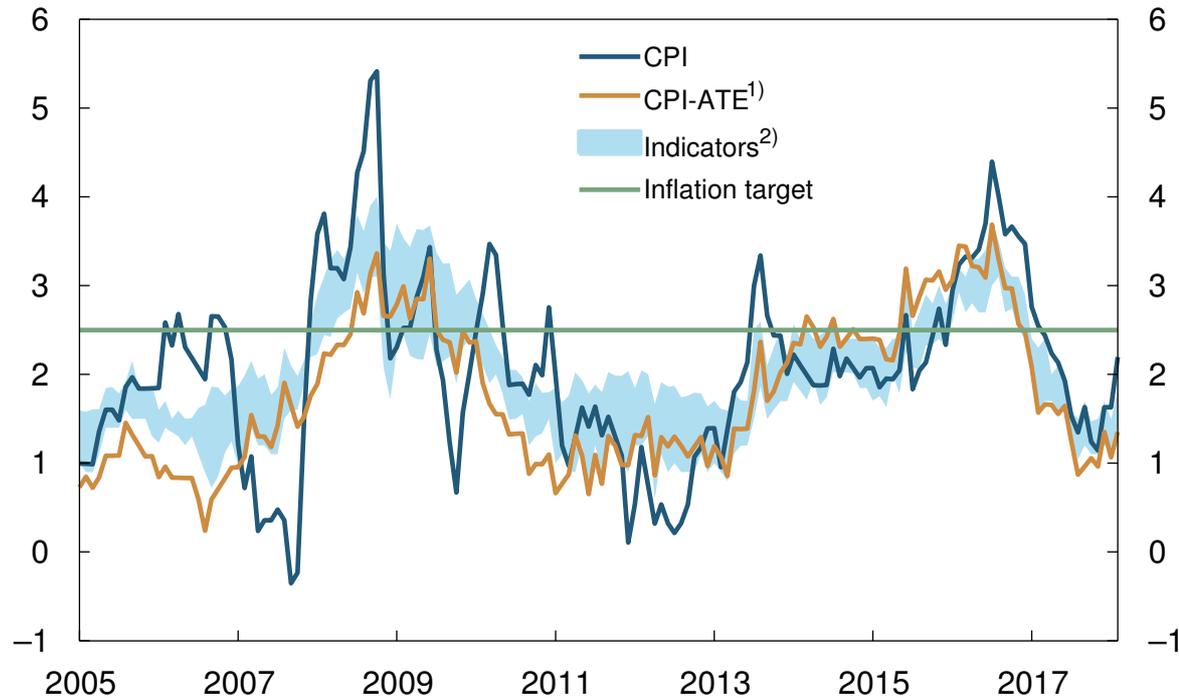


1) CPI adjusted for tax changes and excluding energy products.

2) Projections for 2018 Q1 – 2021 Q4.

Sources: Statistics Norway and Norges Bank

Chart 3.31 CPI and indicators of underlying inflation. Twelve-month change. Percent. January 2005 – February 2018

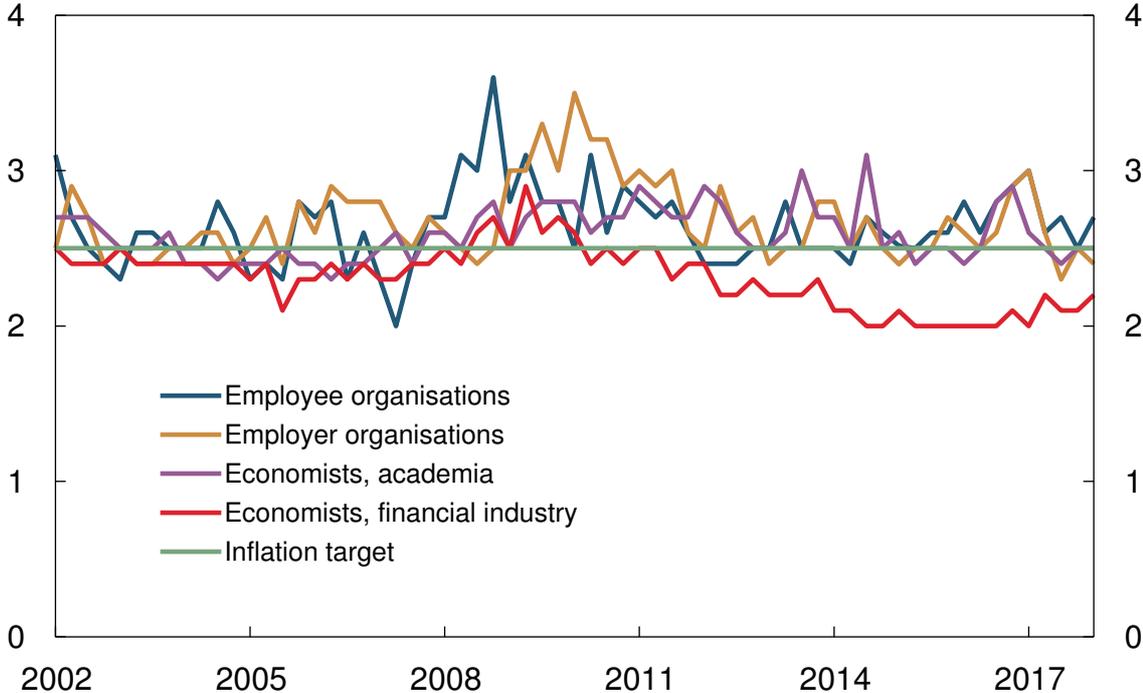


1) CPI adjusted for tax changes and excluding energy products.

2) The band shows the highest and lowest values for CPIM, CPIXE, 20% trimmed mean, CPI-XV and CPI common. For a review of the indicators, see Husabø, E. (2017) "Indicators of underlying inflation in Norway". *Staff Memo* 13/2017. Norges Bank.

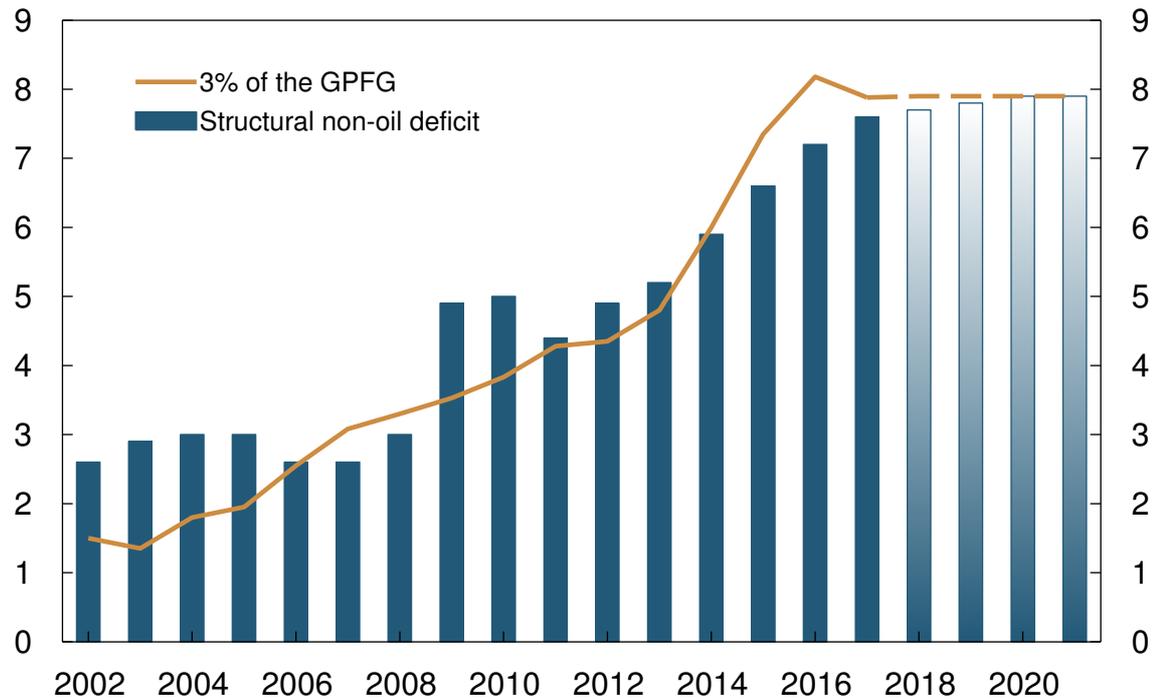
Sources: Statistics Norway and Norges Bank

Chart 3.32 Expected consumer price inflation five years ahead.
Twelve-month change. Percent. 2002 Q1 – 2018 Q1



Sources: Epinion, Opinion and TNS Gallup

Chart 3.33 Structural non-oil deficit and 3% of the GPFG¹⁾.
Share of trend GDP for mainland Norway. Percent. 2002 – 2021²⁾

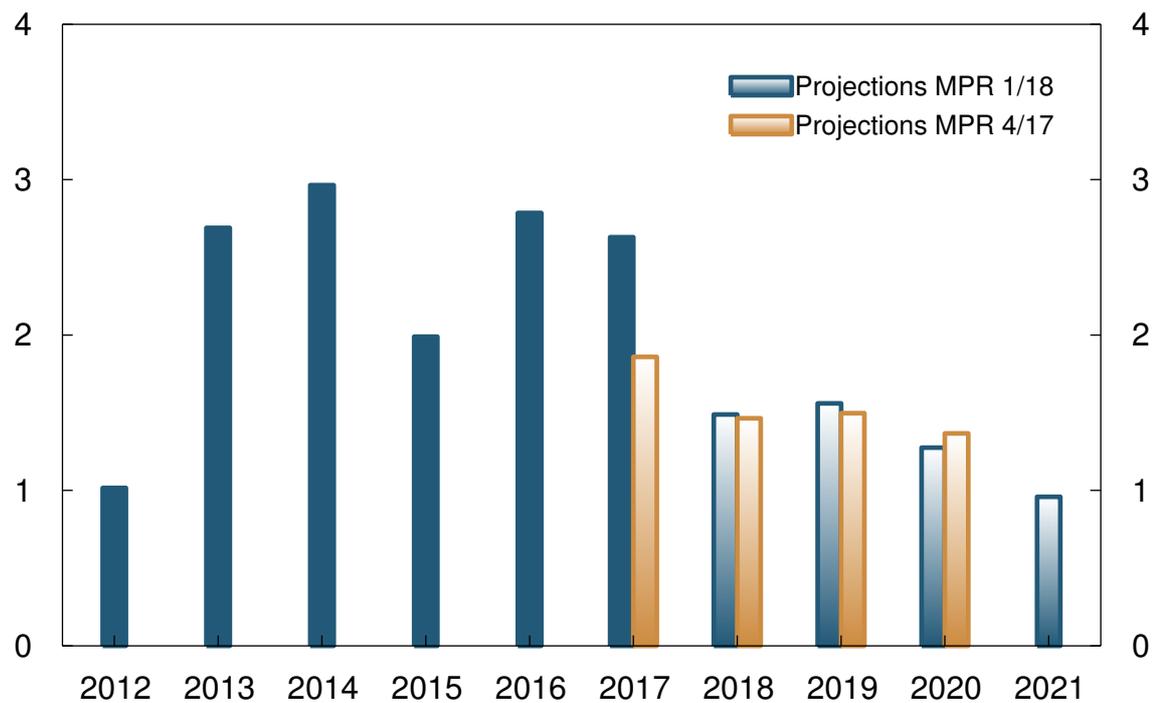


1) Government Pension Fund Global.

2) Projections for 2018 – 2021 (broken line and shaded bars).

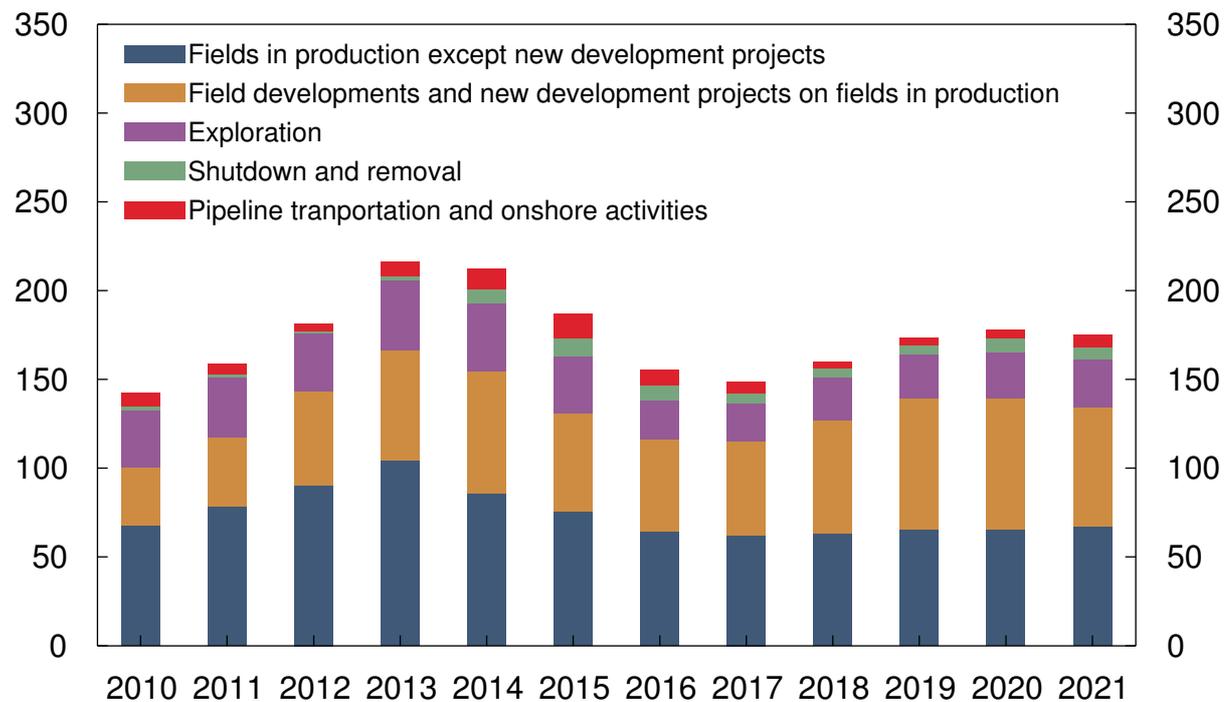
Sources: Ministry of Finance and Norges Bank

Chart 3.34 Public sector demand. Annual change. Percent. 2012 – 2021 ¹⁾



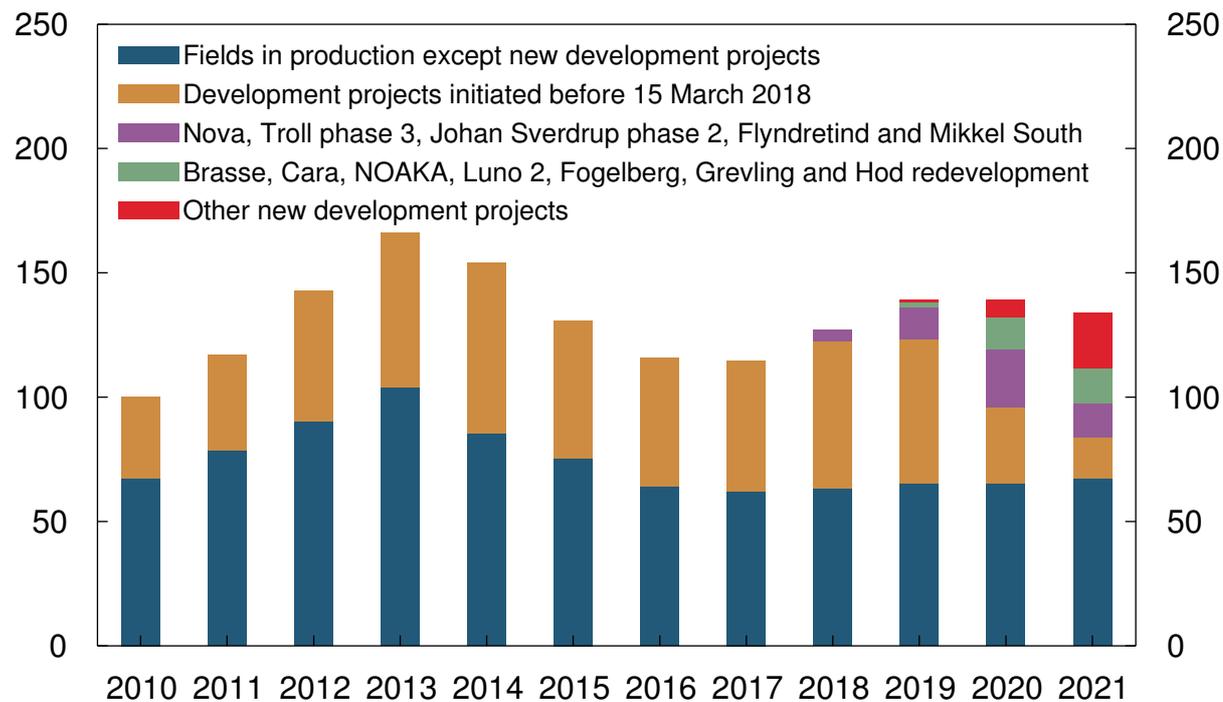
1) Projections for 2018 – 2021.
Sources: Statistics Norway and Norges Bank

Chart 3.35 Petroleum investment. In constant 2018 prices. In billions of NOK.
2010 – 2021 ¹⁾



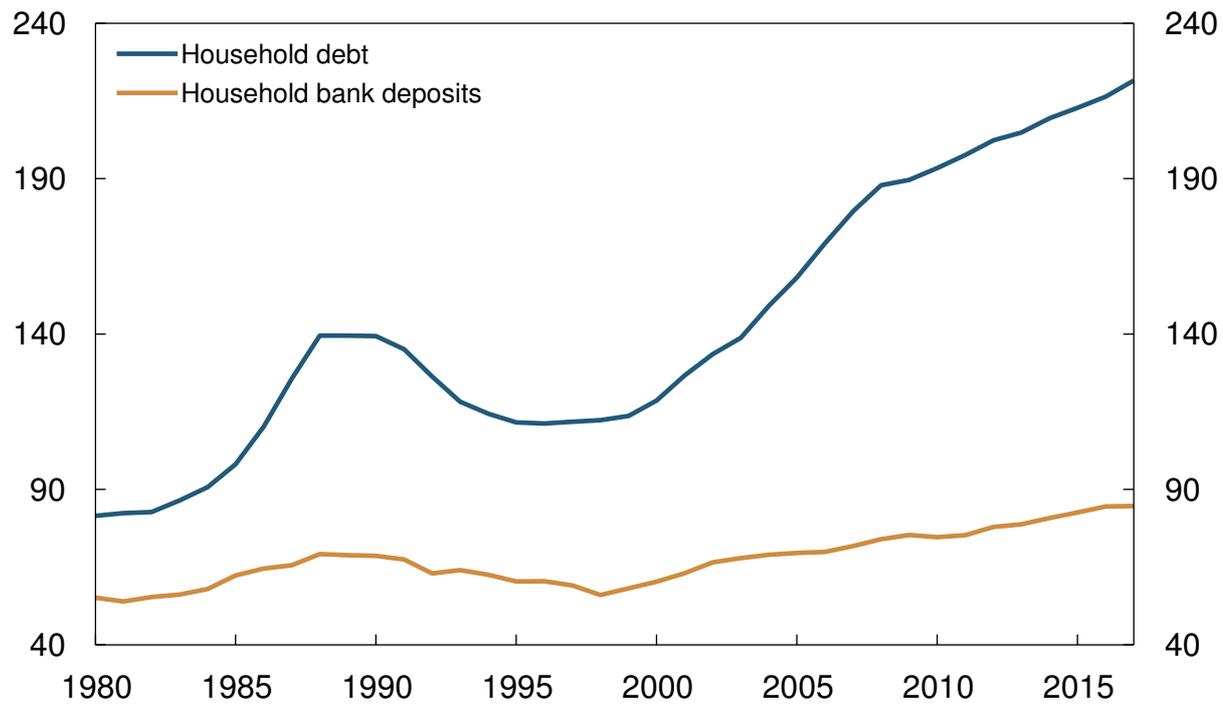
1) Projections for 2018 – 2021. Figures for 2010 – 2017 are from the investment intentions survey by Statistics Norway and deflated by the price index for petroleum investment in the national accounts. The index is projected to remain unchanged between 2017 and 2018.
Sources: Statistics Norway and Norges Bank

Chart 3.36 Investment in field development and fields in production.
 In constant 2018 prices. In billions of NOK. 2010 – 2021 ¹⁾



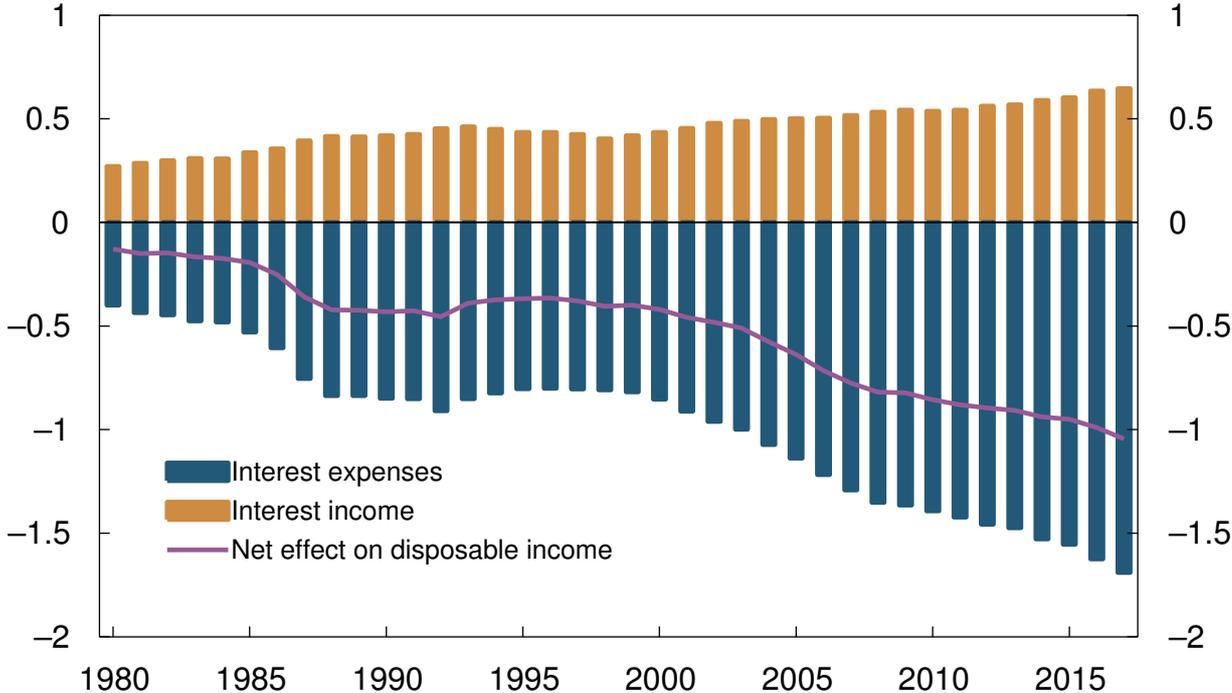
1) Projections for 2018 – 2021. Figures for 2010 – 2017 are from Statistics Norway's investment intentions survey and deflated by the price index for petroleum investment in the national accounts. The projections are based on reports to the Storting, impact analyses, forecasts from the Norwegian Petroleum Directorate, Statistics Norway's investment intentions survey and current information about development investments. Sources: Statistics Norway and Norges Bank

Chart 1 Household bank deposits and debt. Share of disposable income excluding dividends. Percent. 1980 – 2017



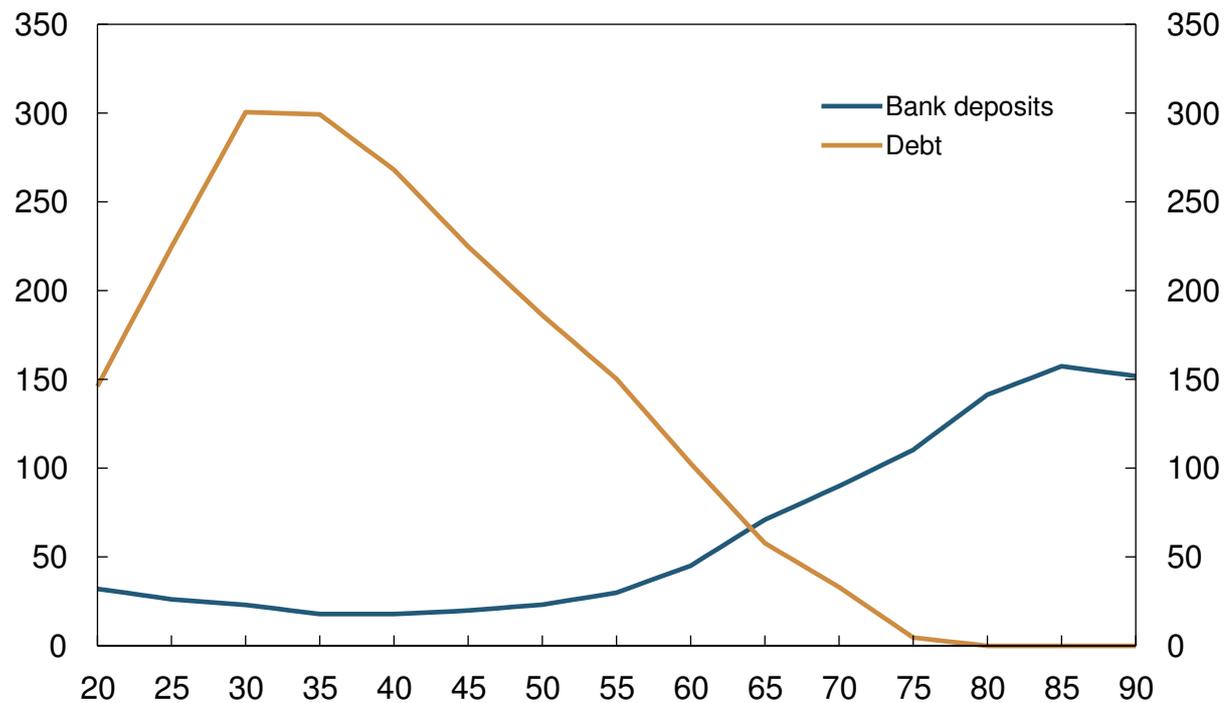
Sources: Statistics Norway and Norges Bank

Chart 2 Effect of a 1 percentage point increase in lending and deposit rates on disposable income excluding dividends. Percent. 1980 – 2017



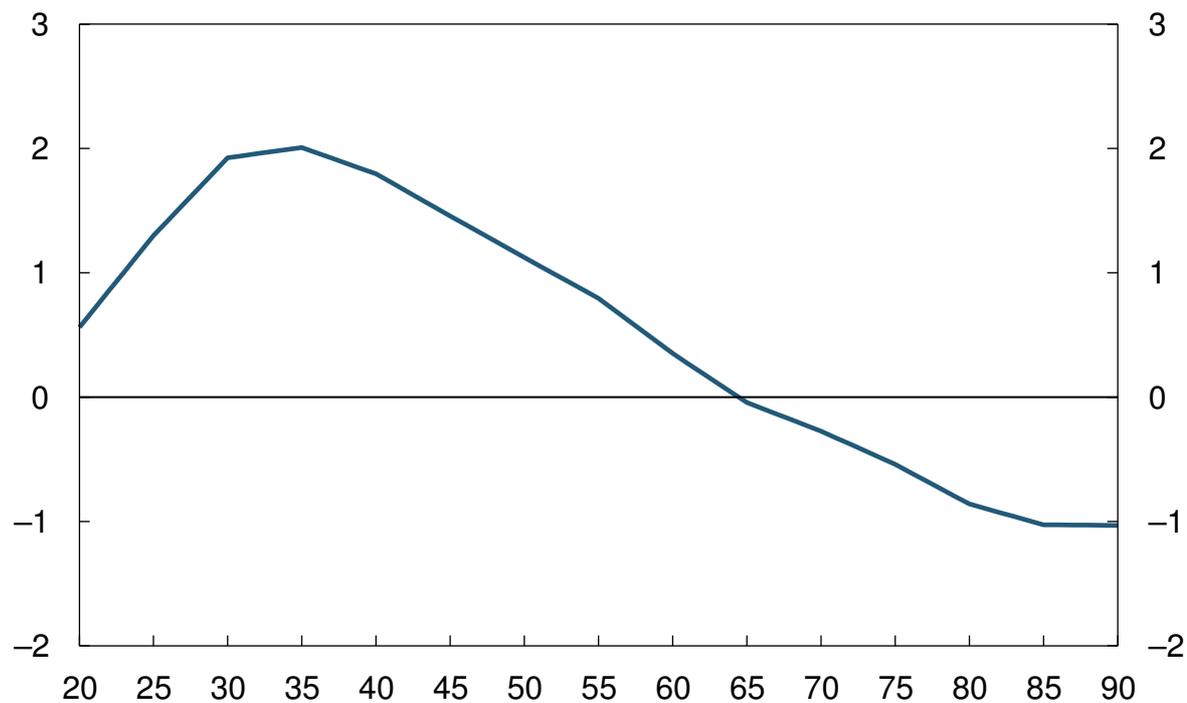
Sources: Statistics Norway and Norges Bank

Chart 3 Debt and bank deposits. Share of disposable income. By age cohort.¹⁾
Percent. 2015



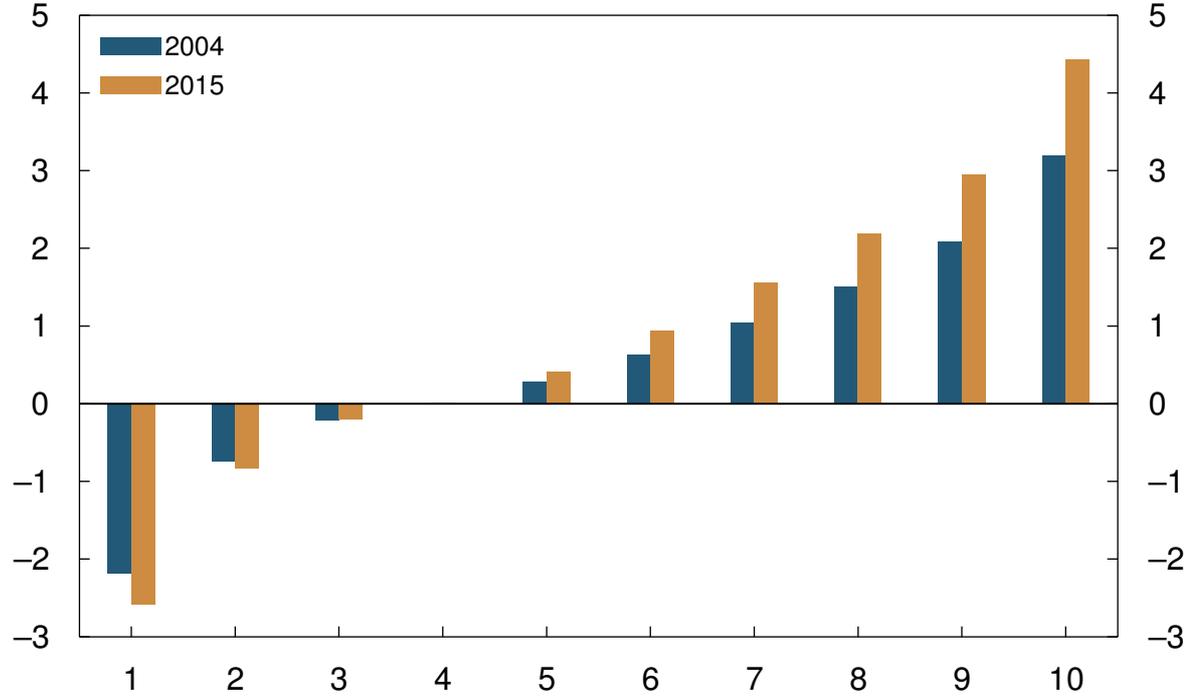
1) Median share for each age cohort.
Sources: Statistics Norway and Norges Bank

Chart 4 Change in net interest expenses following a 1 percentage point interest rate increase. Share of disposable income. By age cohort.¹⁾ Percent. 2015



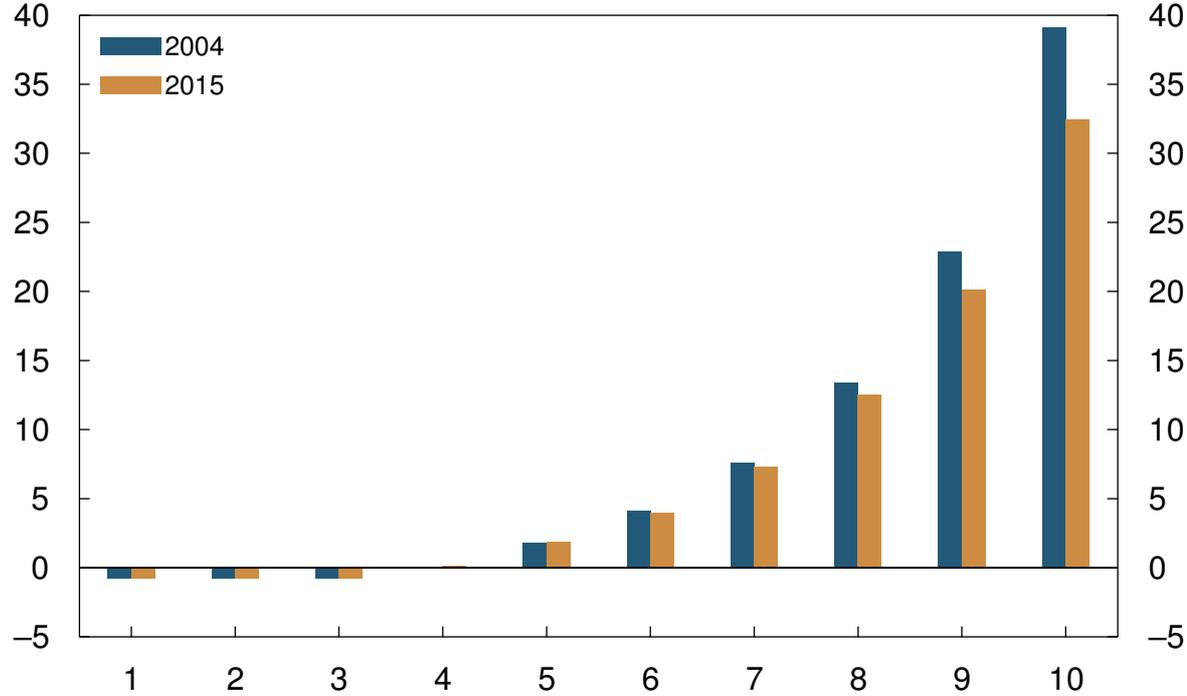
1) Median share for each age cohort.
Sources: Statistics Norway and Norges Bank

Chart 5 Change in net interest expenses following a 1 percentage point interest rate increase. Share of total after-tax income. By deciles for net debt as a share of after-tax income.¹⁾ Percent. 2004 and 2015



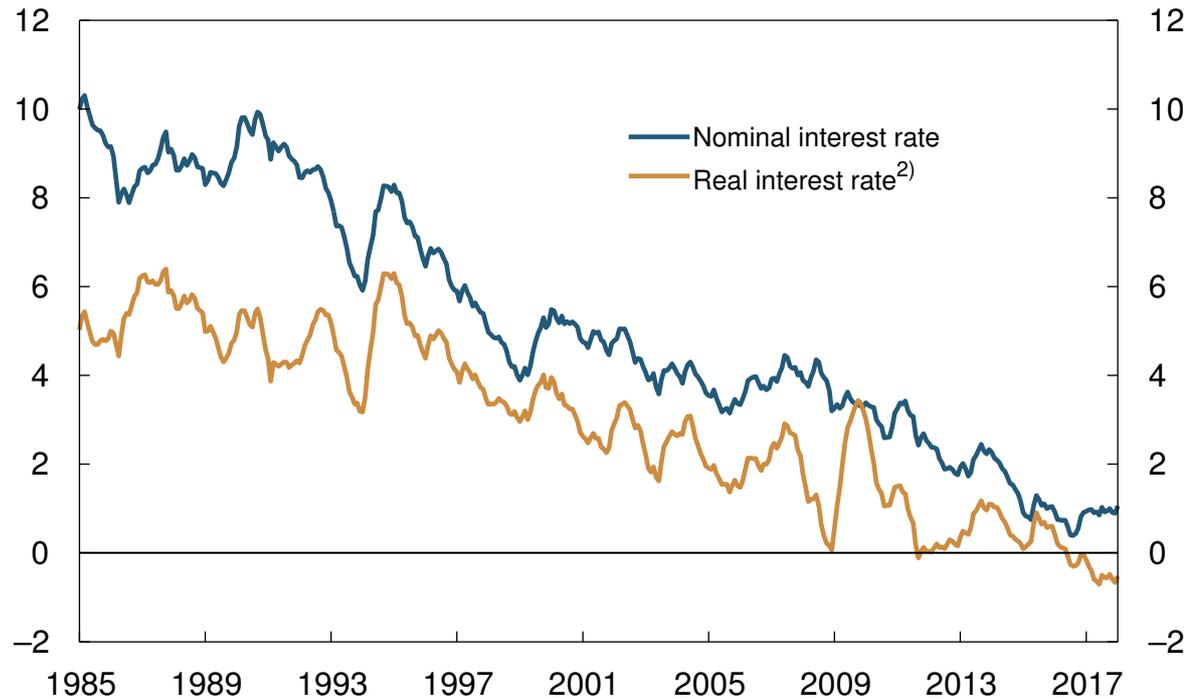
1) Net debt is debt less bank deposits. Median share in each group.
Sources: Statistics Norway and Norges Bank

Chart 6 Change in net interest expenses following a 1 percentage point interest rate increase. Share of bank deposits. By deciles for net debt as a share of after-tax income.¹⁾ Percent. 2004 and 2015



1) Net debt is debt less bank deposits. Median share in each group.
Sources: Statistics Norway and Norges Bank

Chart 4.1 Interest rates for 10-year government bonds. 14 OECD countries including Norway.¹⁾ Percent. January 1985 – January 2018

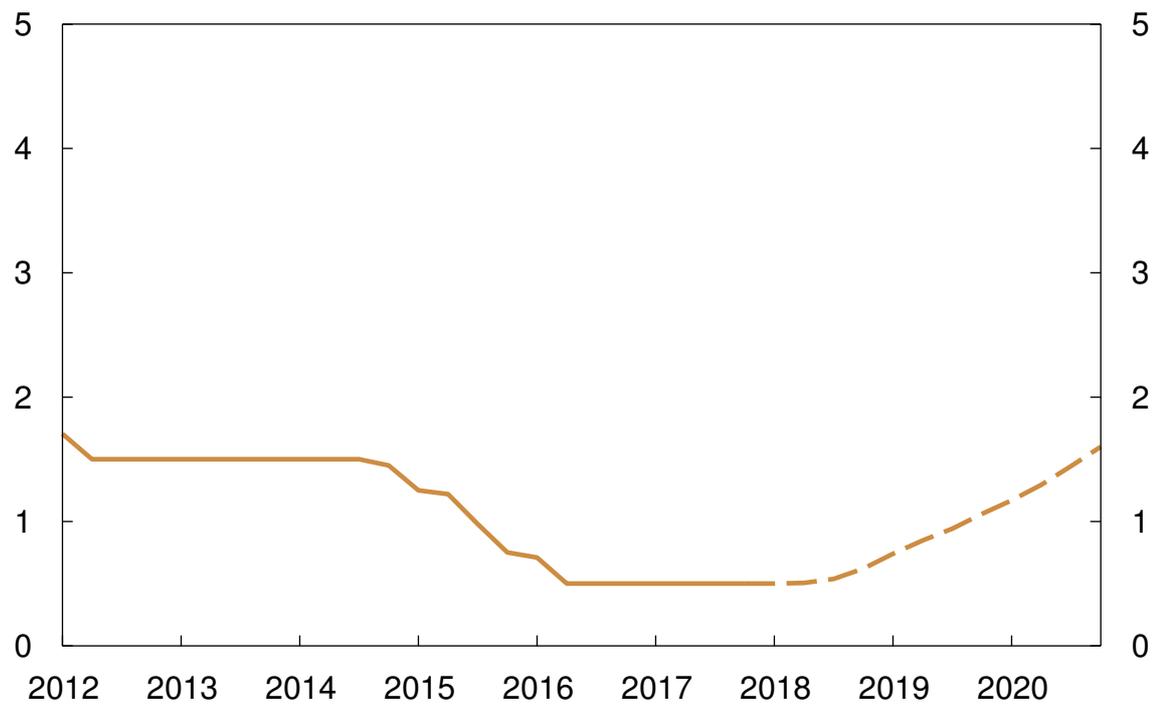


1) The other countries are Austria, Belgium, Canada, Denmark, France, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, UK and US. Unweighted average.

2) The real interest rate is the nominal government bond yield less the average inflation rate over the past year.

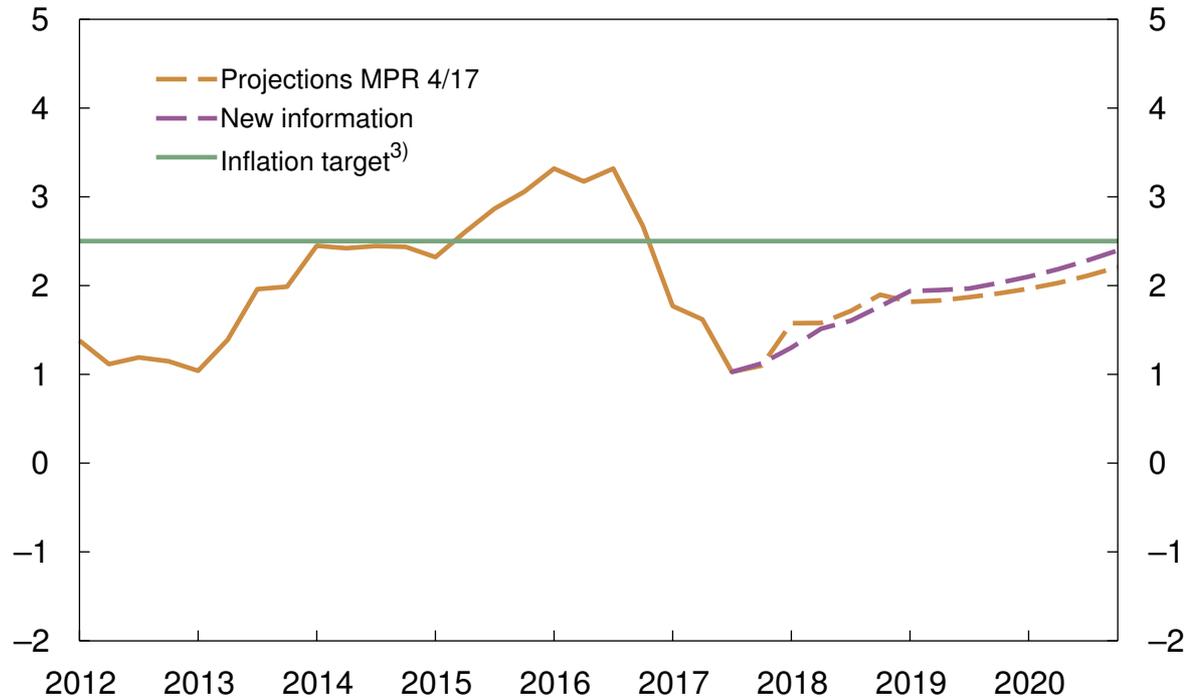
Sources: OECD and Norges Bank

Chart 4.2a Key policy rate. Projections in MPR 4/17.
Percent. 2012 Q1 – 2020 Q4¹⁾



1) Projections for 2017 Q4 – 2020 Q4 (broken line).
Source: Norges Bank

Chart 4.2b CPI-ATE¹⁾. Projection conditional on new information and key policy rate forecast in MPR 4/17. Four-quarter change. Percent. 2012 Q1 – 2020 Q4²⁾



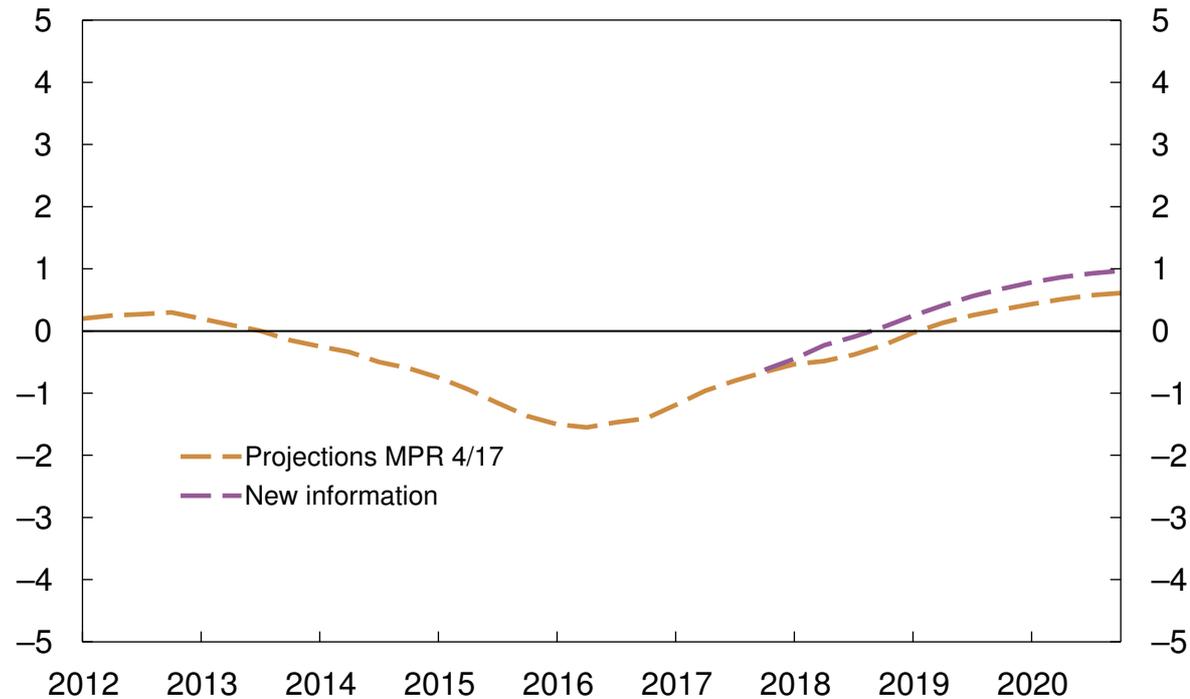
1) CPI adjusted for tax changes and excluding energy products.

2) Projections for 2018 Q1 – 2020 Q4.

3) This analysis disregards the change in the inflation target.

Sources: Statistics Norway and Norges Bank

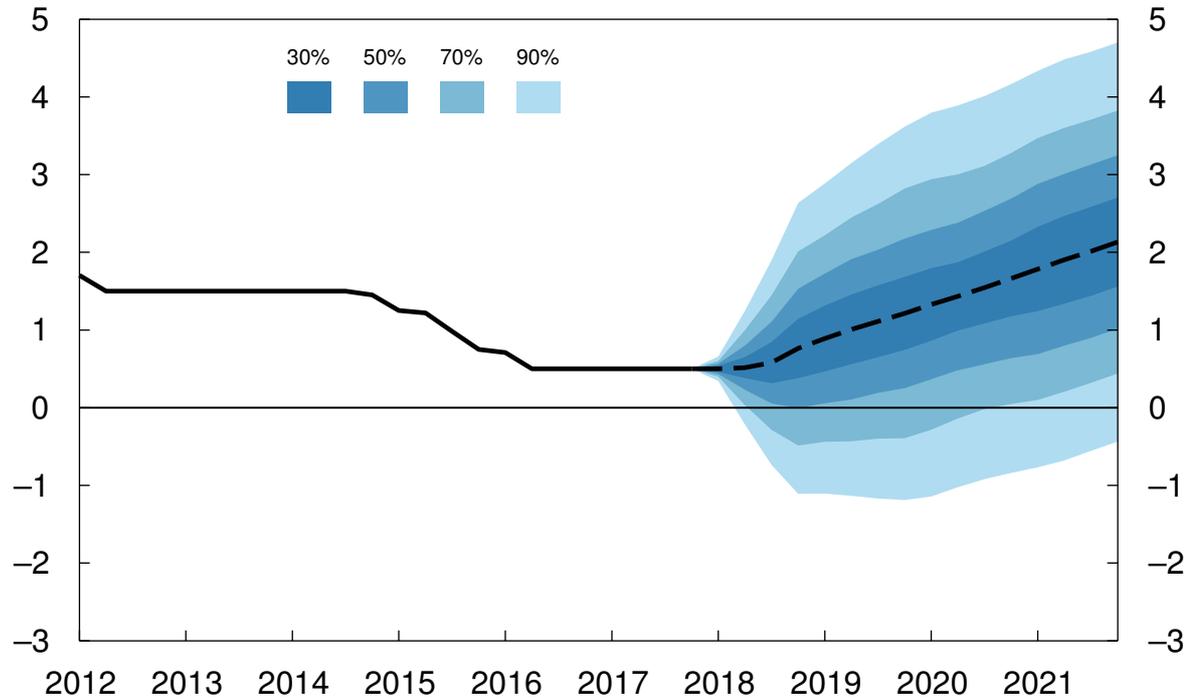
Chart 4.2c Projected output gap¹⁾. Projection conditional on new information and key policy rate forecast in MPR 4/17. Percent. 2012 Q1 – 2020 Q4



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

Source: Norges Bank

Chart 4.3a Key policy rate with fan chart¹⁾. Percent. 2012 Q1 – 2021 Q4²⁾

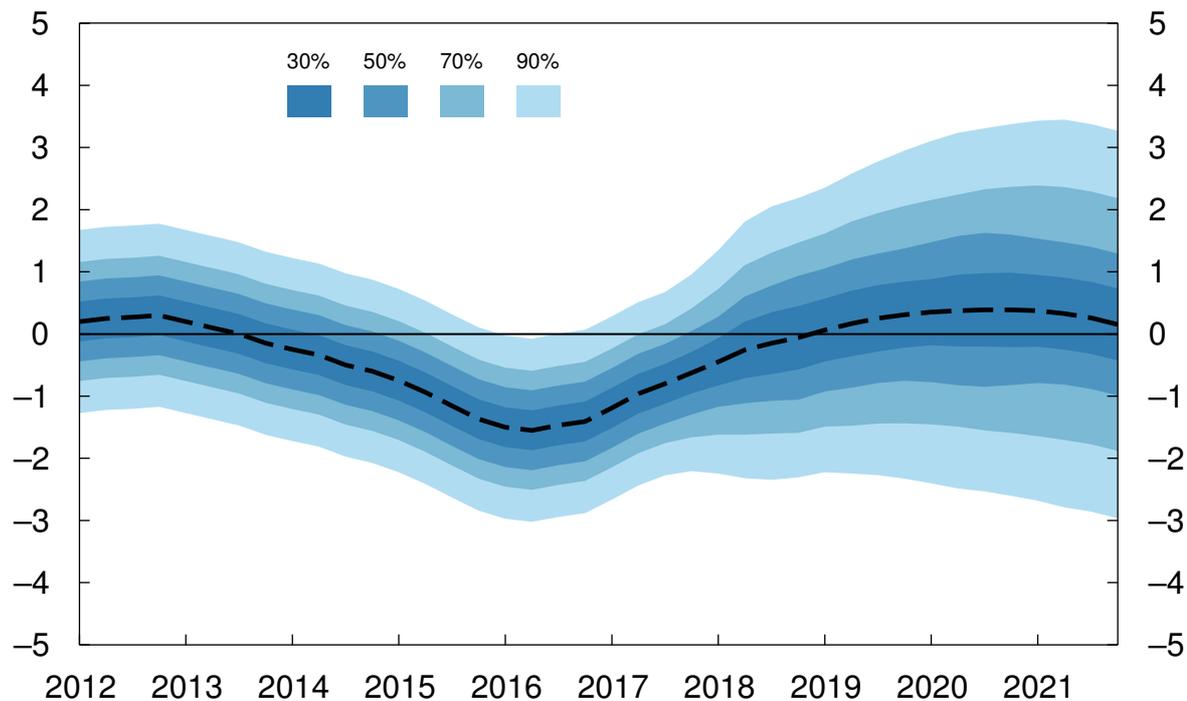


1) The fan chart is based on historical experience and stochastic simulations in Norges Bank's main macroeconomic model, NEMO. It does not take into account that a lower bound for the interest rate exists.

2) Projections for 2018 Q1 – 2021 Q4 (broken line).

Source: Norges Bank

Chart 4.3b Projected output gap¹⁾ with fan chart²⁾.
Percent. 2012 Q1 – 2021 Q4

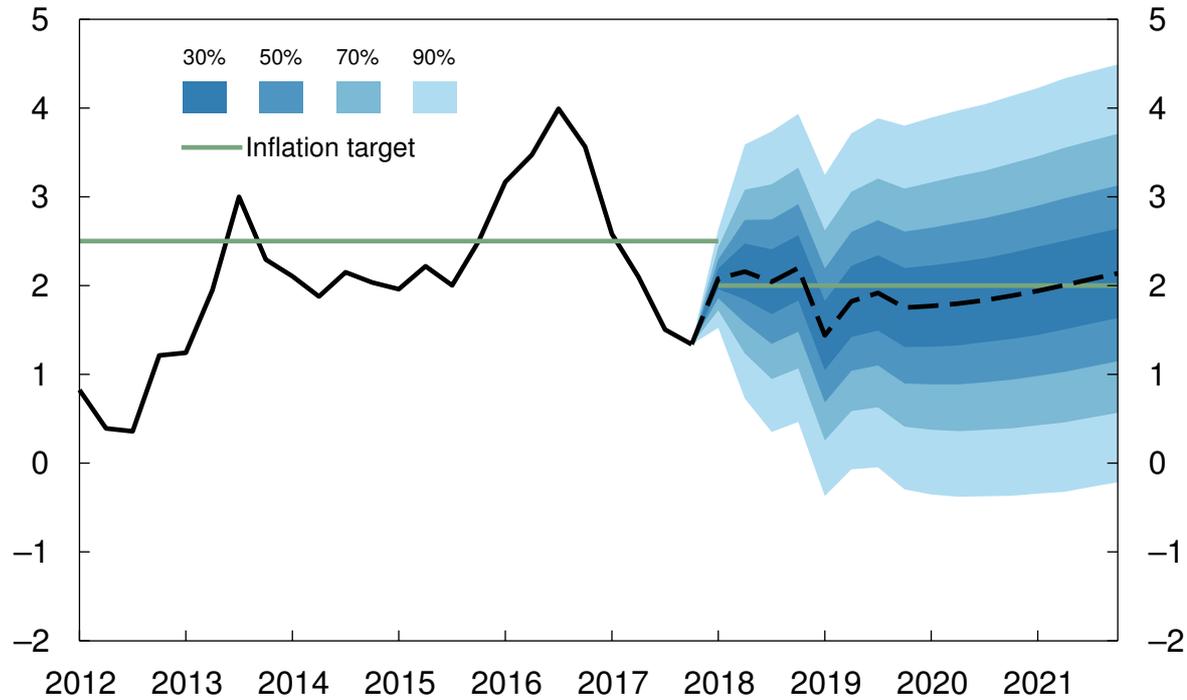


1) The output gap measures the percentage deviation between mainland GDP and projected potential mainland GDP.

2) The fan chart is based on historical experience and stochastic simulations in Norges Bank's main macroeconomic model, NEMO.

Source: Norges Bank

Chart 4.3c CPI with fan chart¹⁾.
 Four-quarter change. Percent. 2012 Q1 – 2021 Q4²⁾

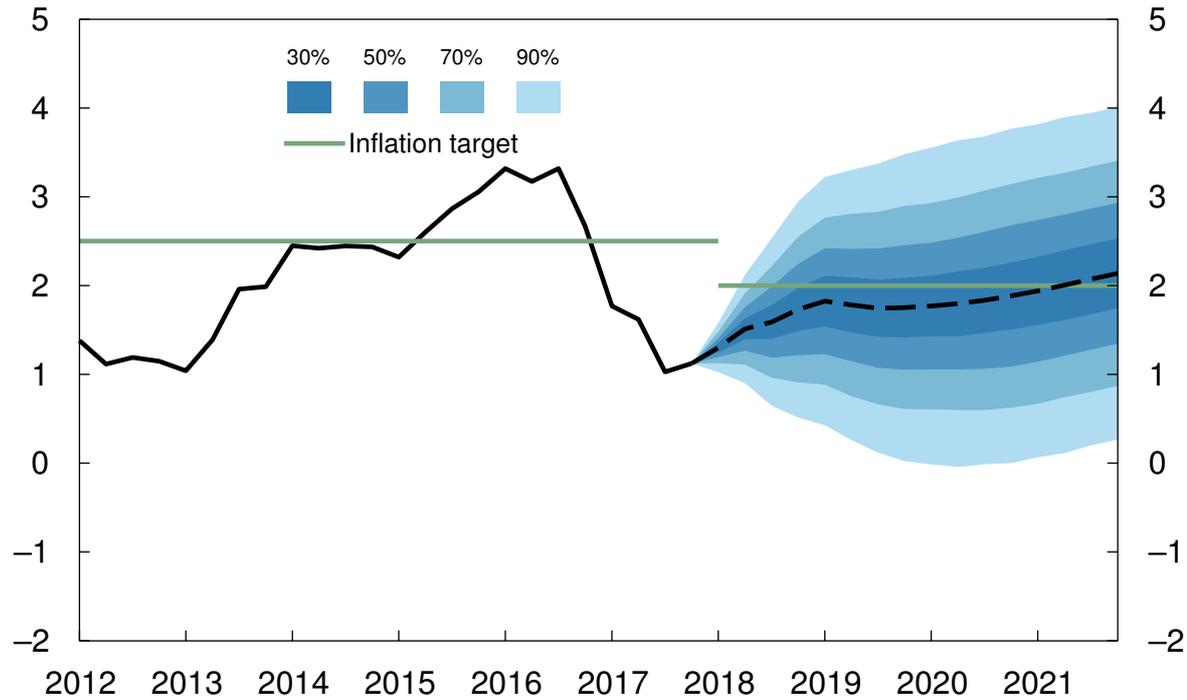


1) The fan chart is based on historical experience and stochastic simulations in Norges Bank's main macroeconomic model, NEMO.

2) Projections for 2018 Q1 – 2021 Q4 (broken line).

Sources: Statistics Norway and Norges Bank

Chart 4.3d CPI-ATE¹⁾ with fan chart²⁾.
 Four-quarter change. Percent. 2012 Q1 – 2021 Q4³⁾



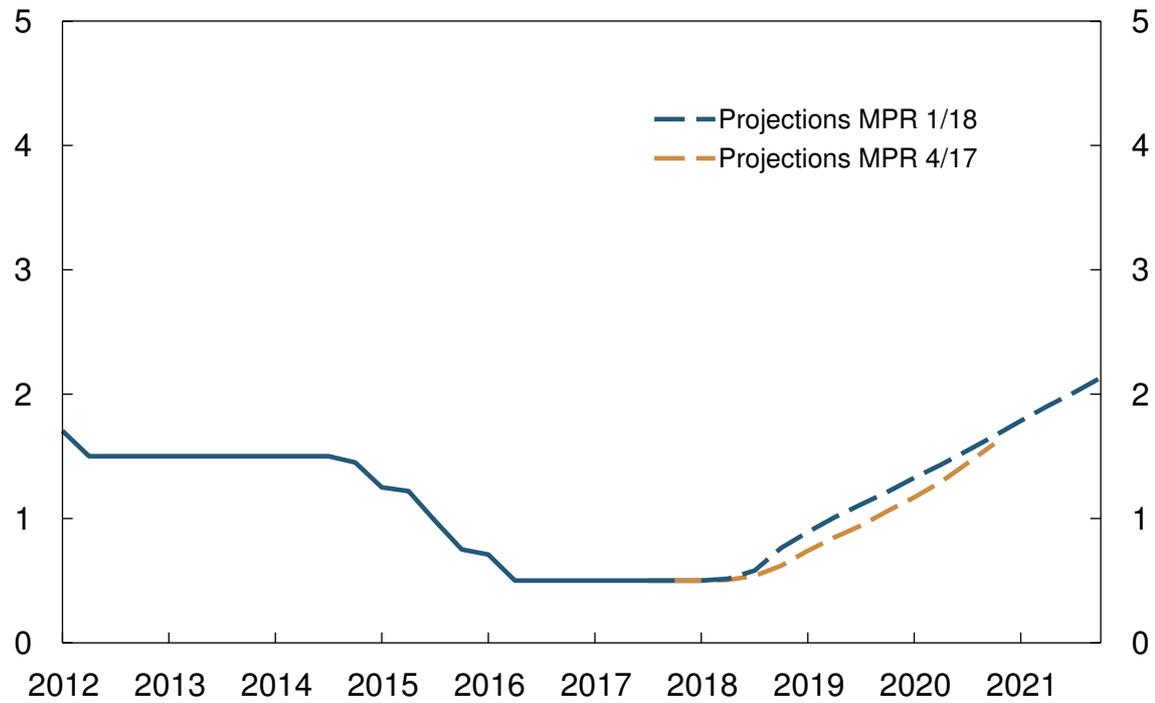
1) CPI adjusted for tax changes and excluding energy products.

2) The fan chart is based on historical experience and stochastic simulations in Norges Bank's main macroeconomic model, NEMO.

3) Projections for 2018 Q1 – 2021 Q4 (broken line).

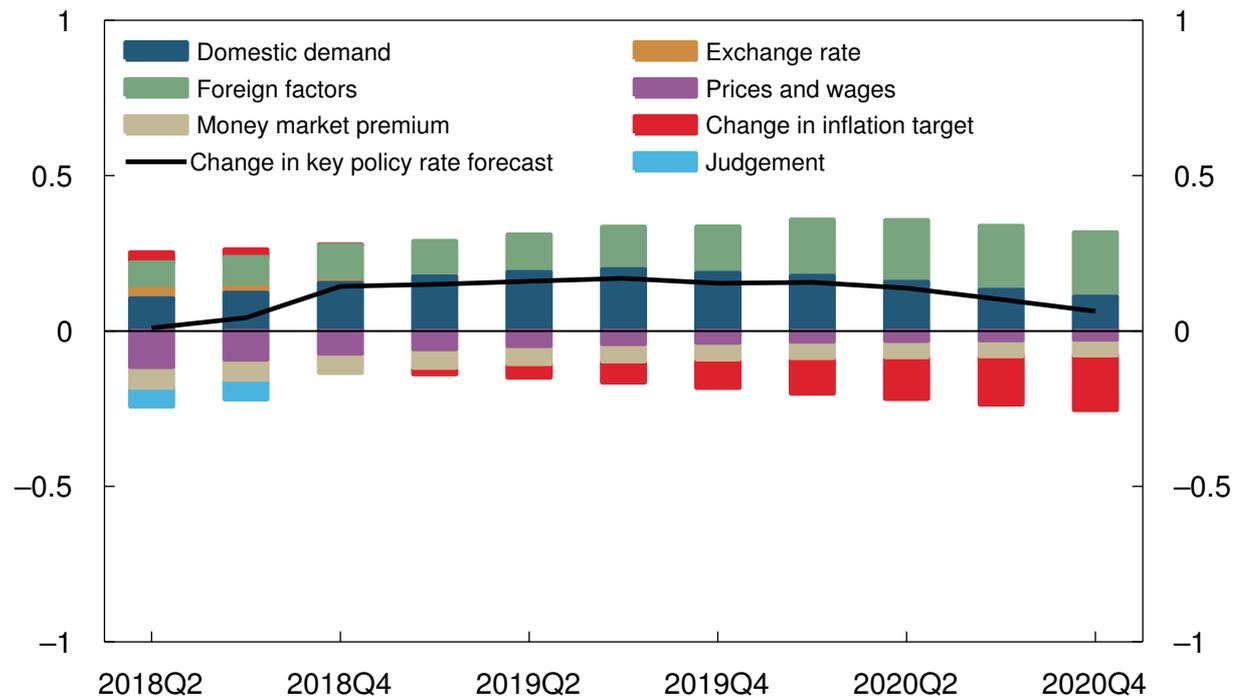
Sources: Statistics Norway and Norges Bank

Chart 4.4 Key policy rate. Percent. 2012 Q1 – 2021 Q4¹⁾



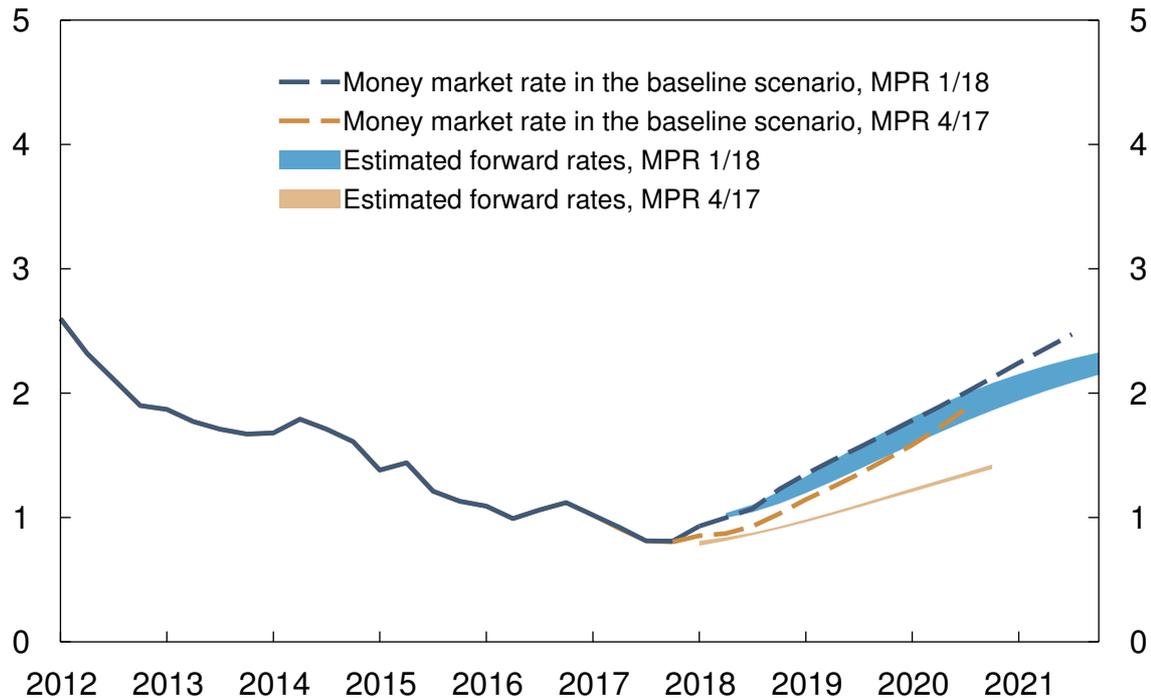
1) Projections for 2018 Q1 – 2021 Q4.
Source: Norges Bank

Chart 4.5 Factors behind changes in key policy rate forecast since MPR 4/17.
 Cumulative contribution. Percentage points. 2018 Q2 – 2020 Q4



Source: Norges Bank

Chart 4.6 Three-month money market rate in the baseline scenario¹⁾ and estimated forward rates²⁾. Percent. 2012 Q1 – 2021 Q4³⁾



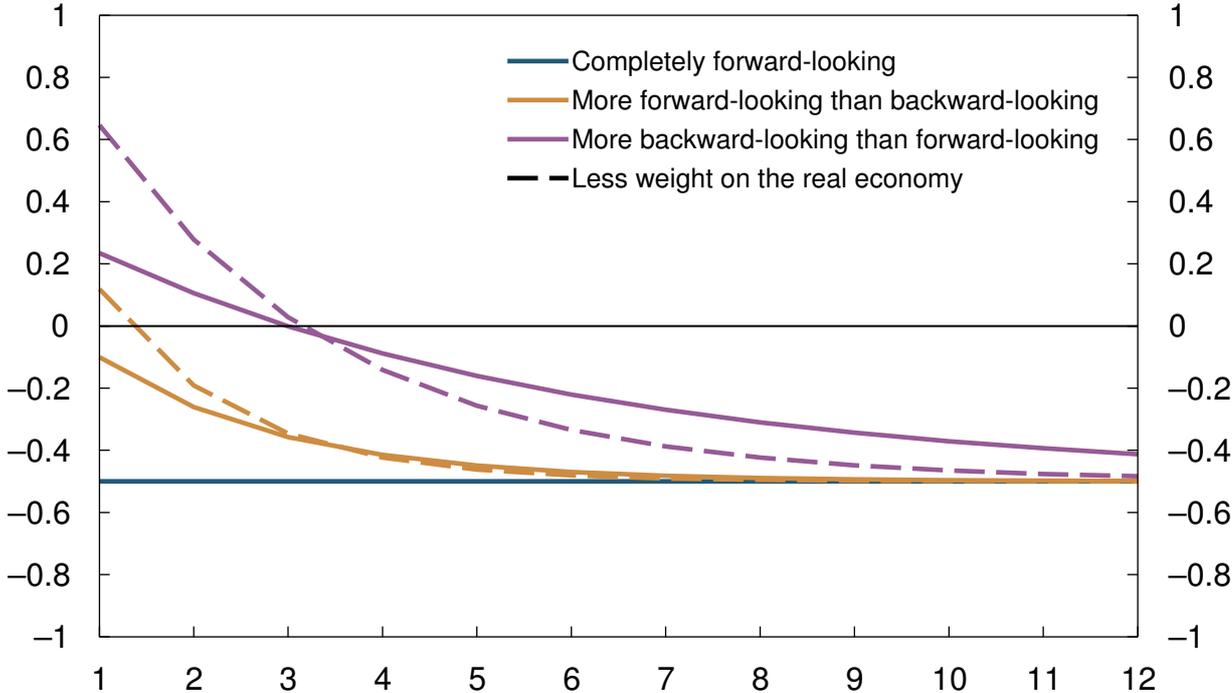
1) Key policy rate in the baseline scenario plus Norwegian money market premiums. The calculations are based on the assumption that the key policy rate forecast is priced into the money market.

2) Forward rates are based on money market rates and interest rate swaps. The orange and blue bands show the highest and lowest rates in the period 27 November – 8 December in 2017 and 26 February – 9 March in 2018, respectively.

3) Projections for 2018 Q1 – 2021 Q4.

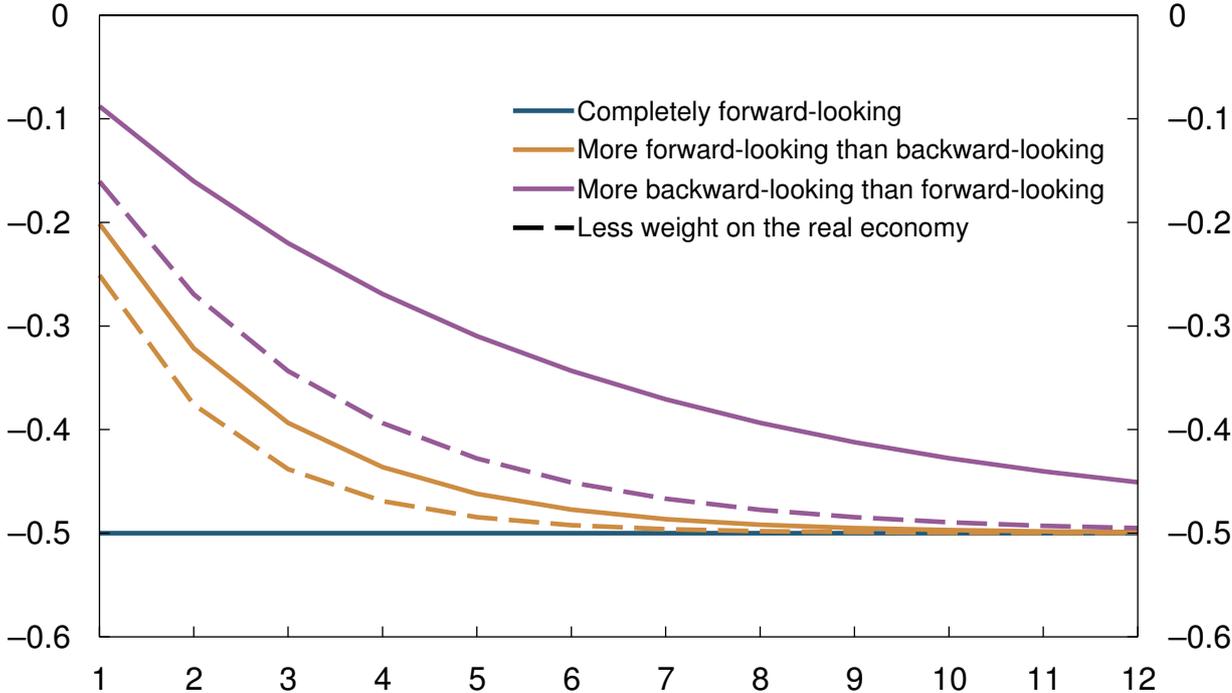
Sources: Thomson Reuters and Norges Bank

Chart 1a Change in the nominal interest rate following a 0.5 percentage point reduction in the inflation target. Different scenarios for expectations formation. Percentage points. Number of quarters ahead



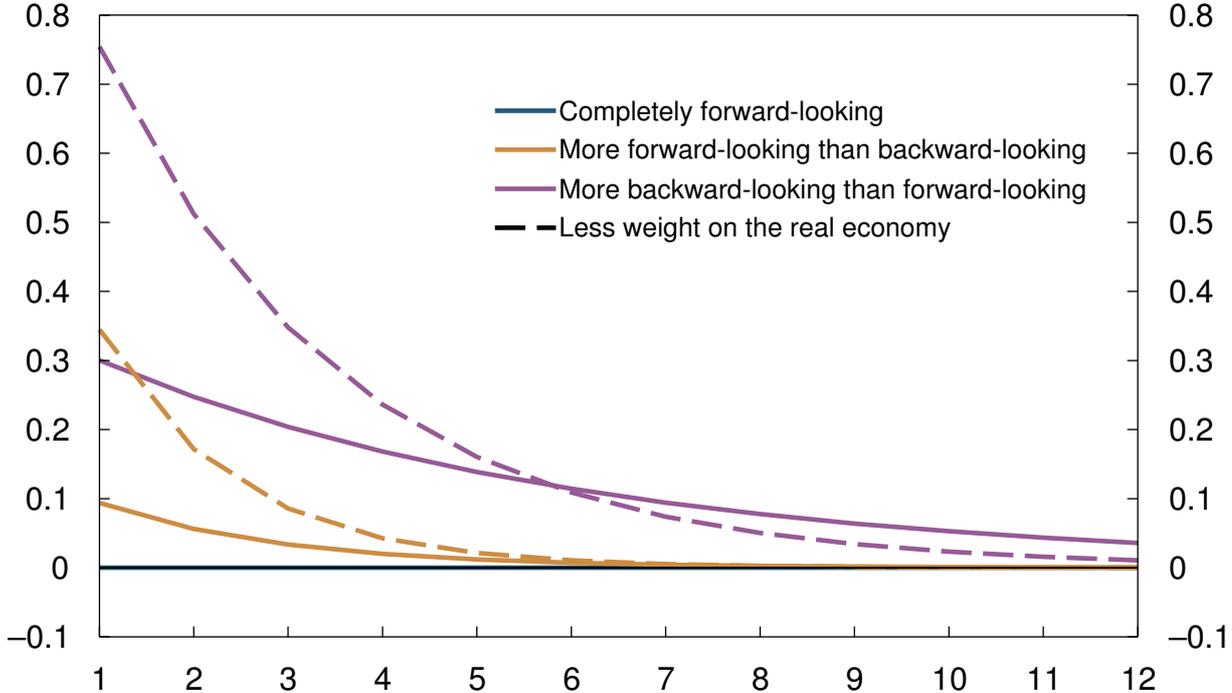
Source: Norges Bank

Chart 1b Change in inflation following a 0.5 percentage point reduction in the inflation target. Different scenarios for expectations formation. Percentage points. Number of quarters ahead



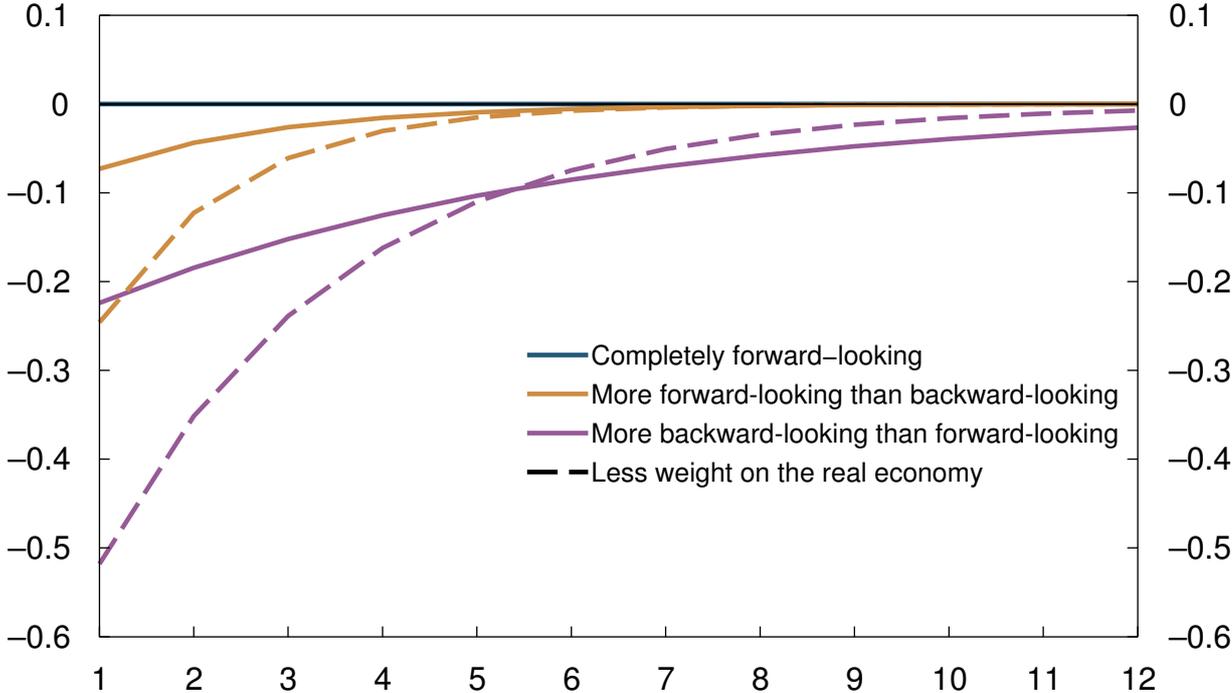
Source: Norges Bank

Chart 1c Change in the real interest rate following a 0.5 percentage point reduction in the inflation target. Different scenarios for expectations formation. Percentage points. Number of quarters ahead



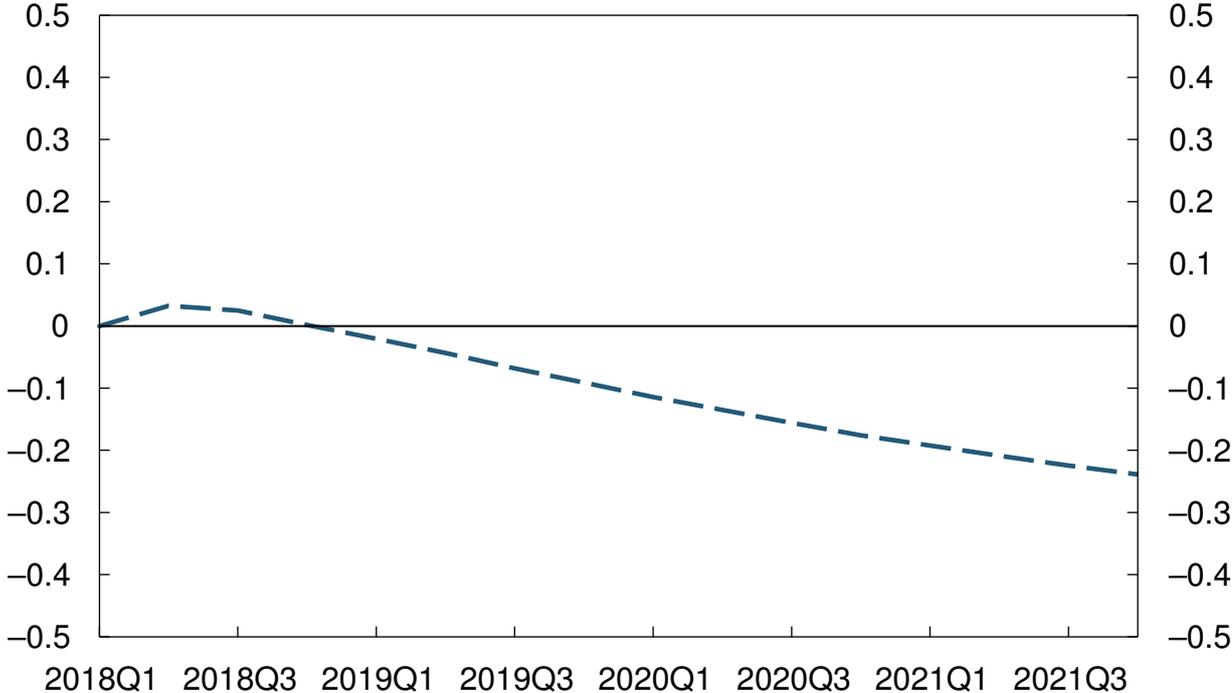
Source: Norges Bank

Chart 1d Change in the output gap following a 0.5 percentage point reduction in the inflation target. Different scenarios for expectations formation. Percentage points.
Number of quarters ahead



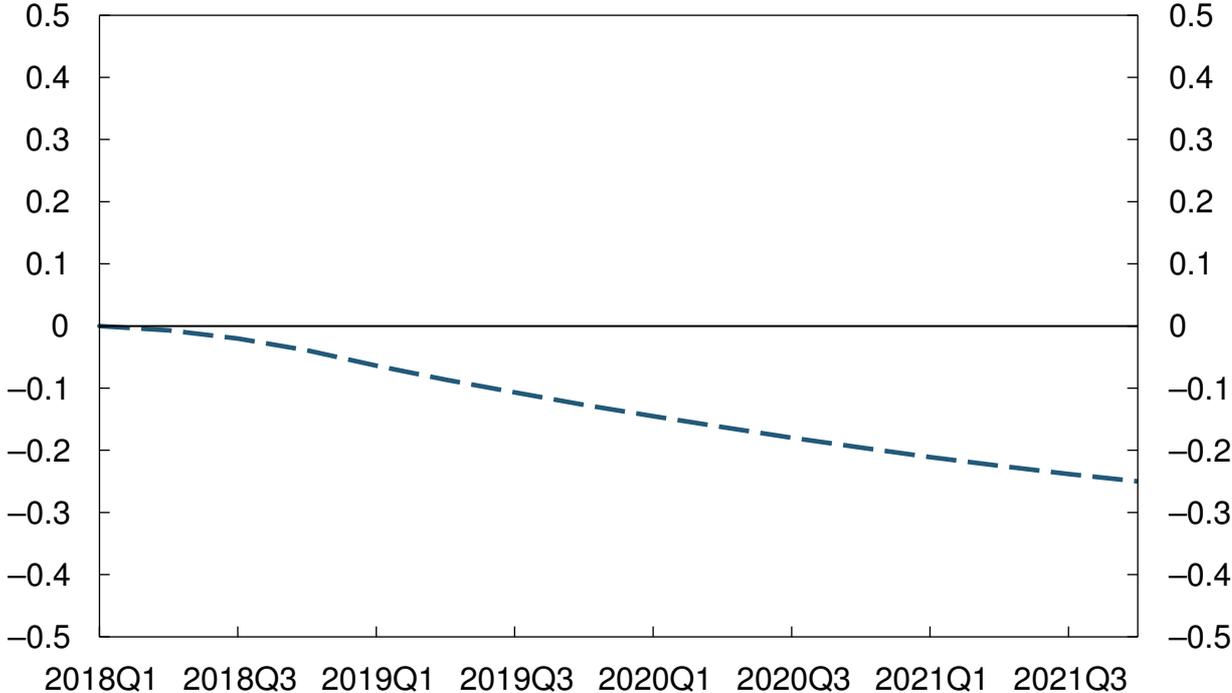
Source: Norges Bank

Chart 2a Change in the key policy rate following a 0.5 percentage point reduction in the inflation target. Percentage points. 2018 Q1 – 2021 Q4



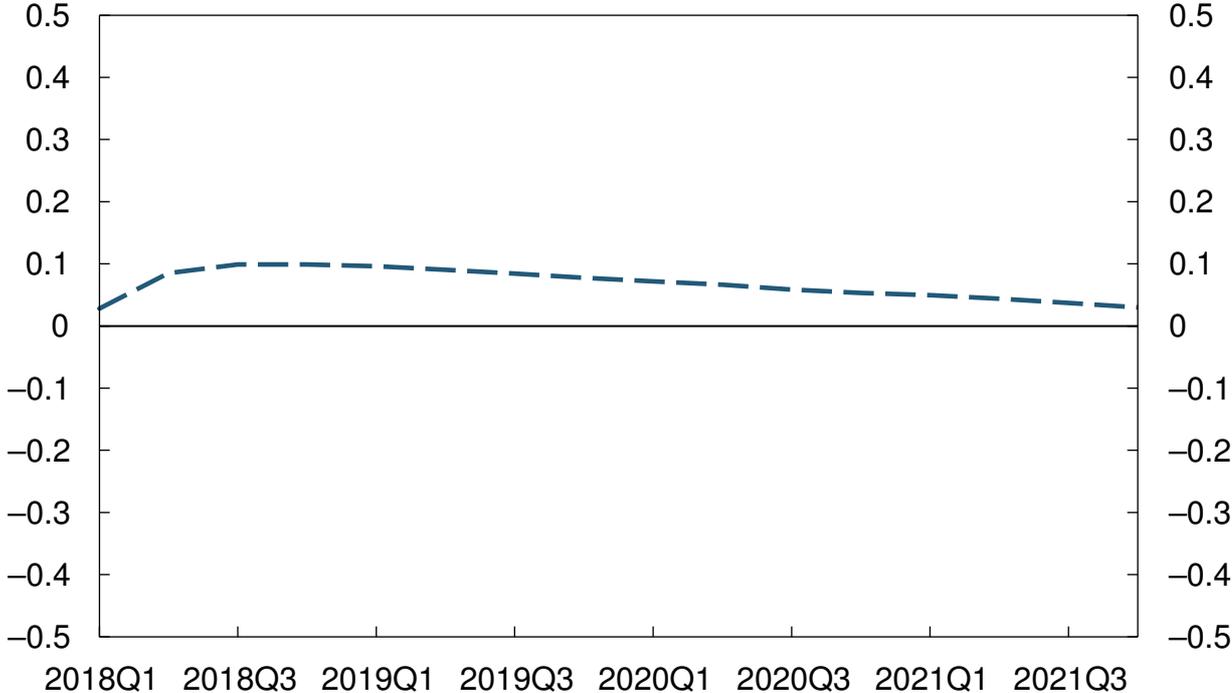
Source: Norges Bank

Chart 2b Change in inflation following a 0.5 percentage point reduction in the inflation target. Percentage points. 2018 Q1 – 2021 Q4



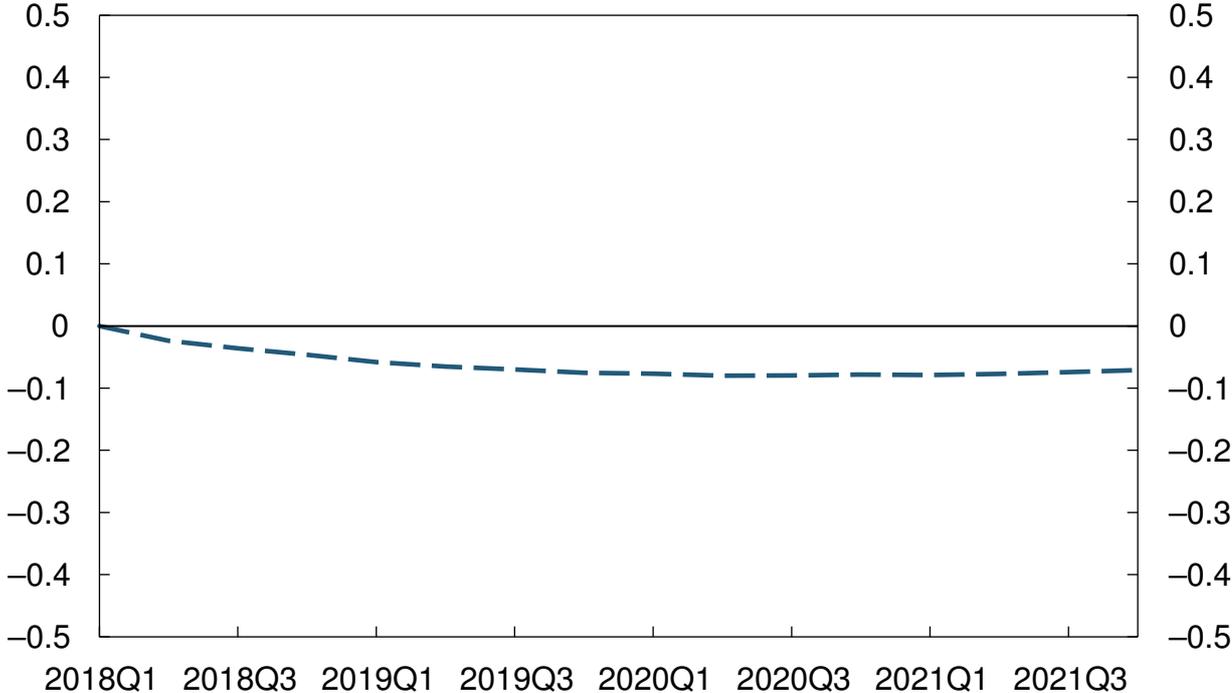
Source: Norges Bank

Chart 2c Change in the real interest rate following a 0.5 percentage point reduction in the inflation target. Percentage points. 2018 Q1 – 2021 Q4



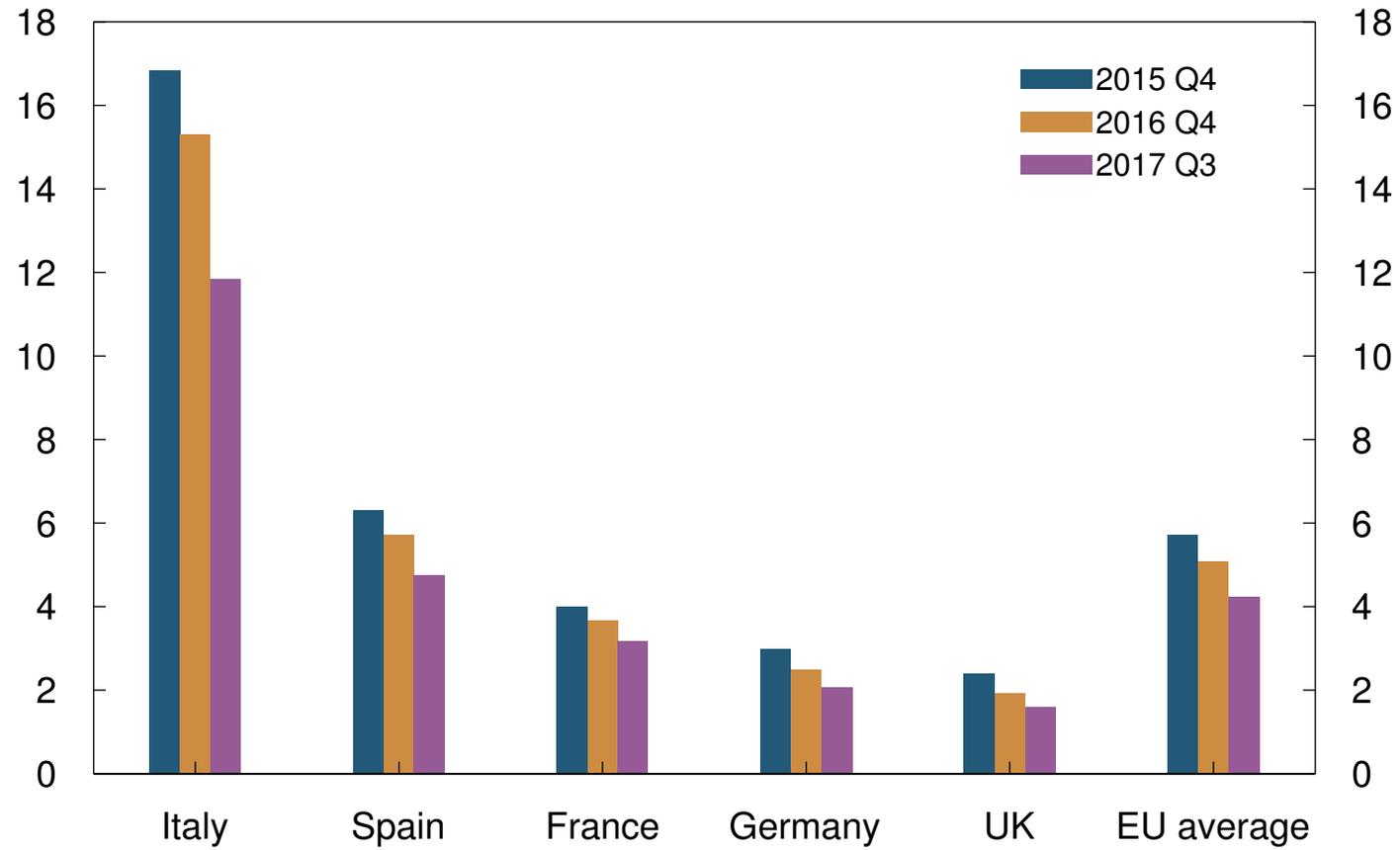
Source: Norges Bank

Chart 2d Change in the output gap following a 0.5 percentage point reduction in the inflation target. Percentage points. 2018 Q1 – 2021 Q4



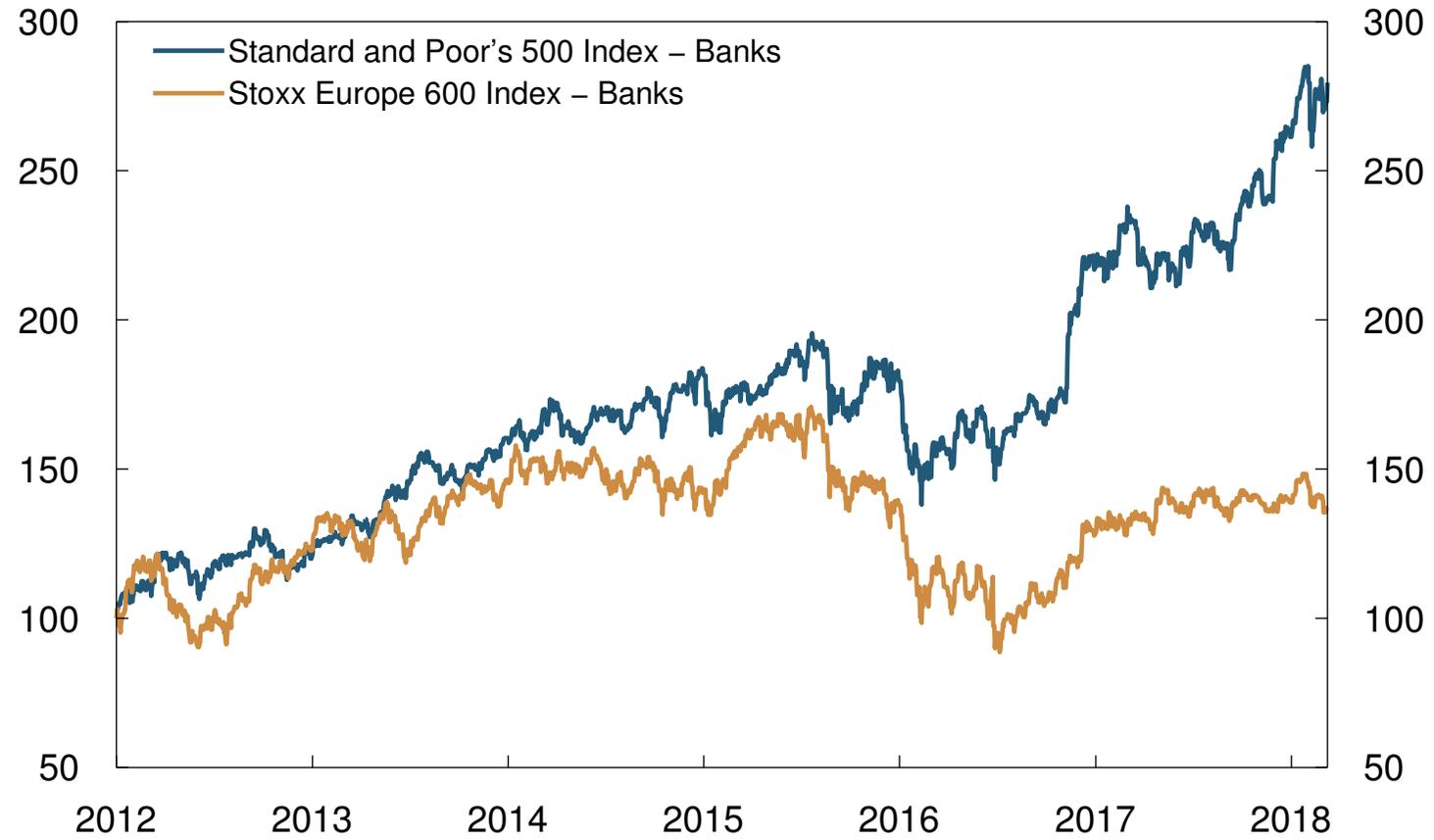
Source: Norges Bank

Chart 5.1 Non-performing loans as a share of total bank lending in selected EU countries. Percent



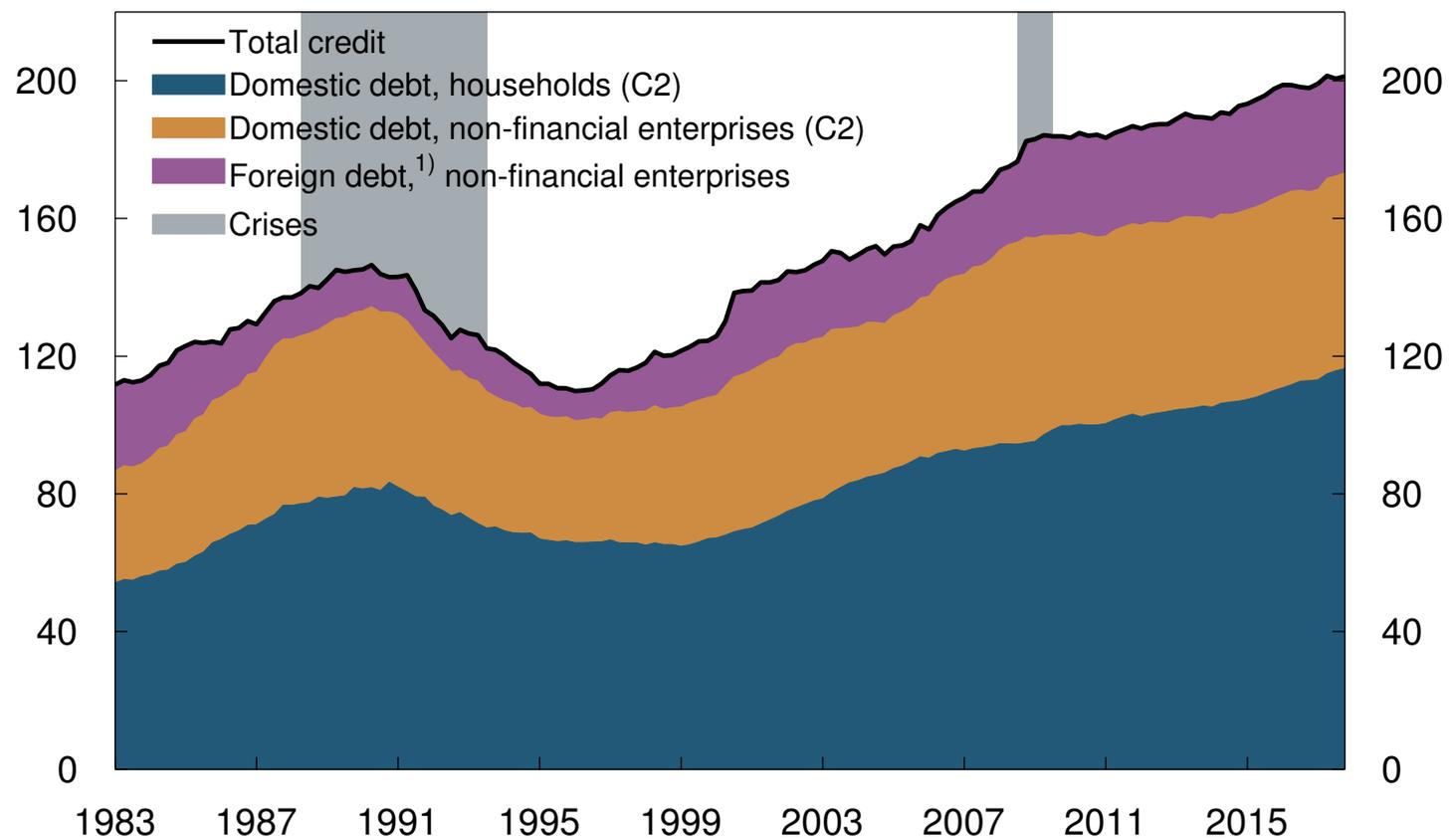
Source: European Banking Authority (EBA), Risk Dashboard 2017 Q3

Chart 5.2 Index of prices for US and European bank shares.
Index. 1 January 2012 = 100. 1 January 2012 – 9 March 2018



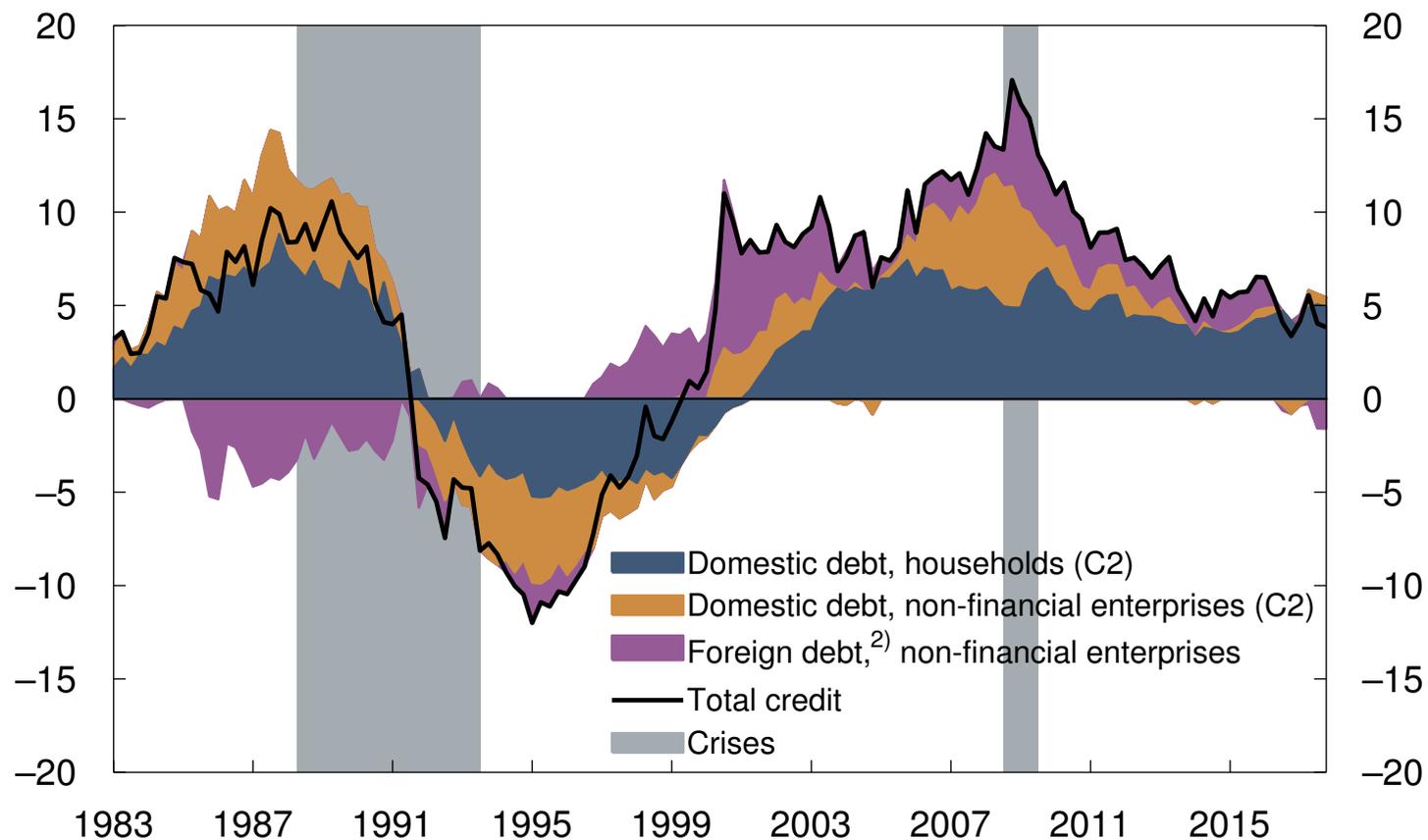
Source: Thomson Reuters

Chart 5.3 Credit mainland Norway as a share of mainland GDP.
Percent. 1983 Q1 – 2017 Q4



1) Preliminary figures on foreign debt for 2017 Q4.
Sources: IMF, Statistics Norway and Norges Bank

Chart 5.4 Decomposed credit gap¹⁾. Credit mainland Norway as a share of mainland GDP. Percentage points. 1983 Q1 – 2017 Q4

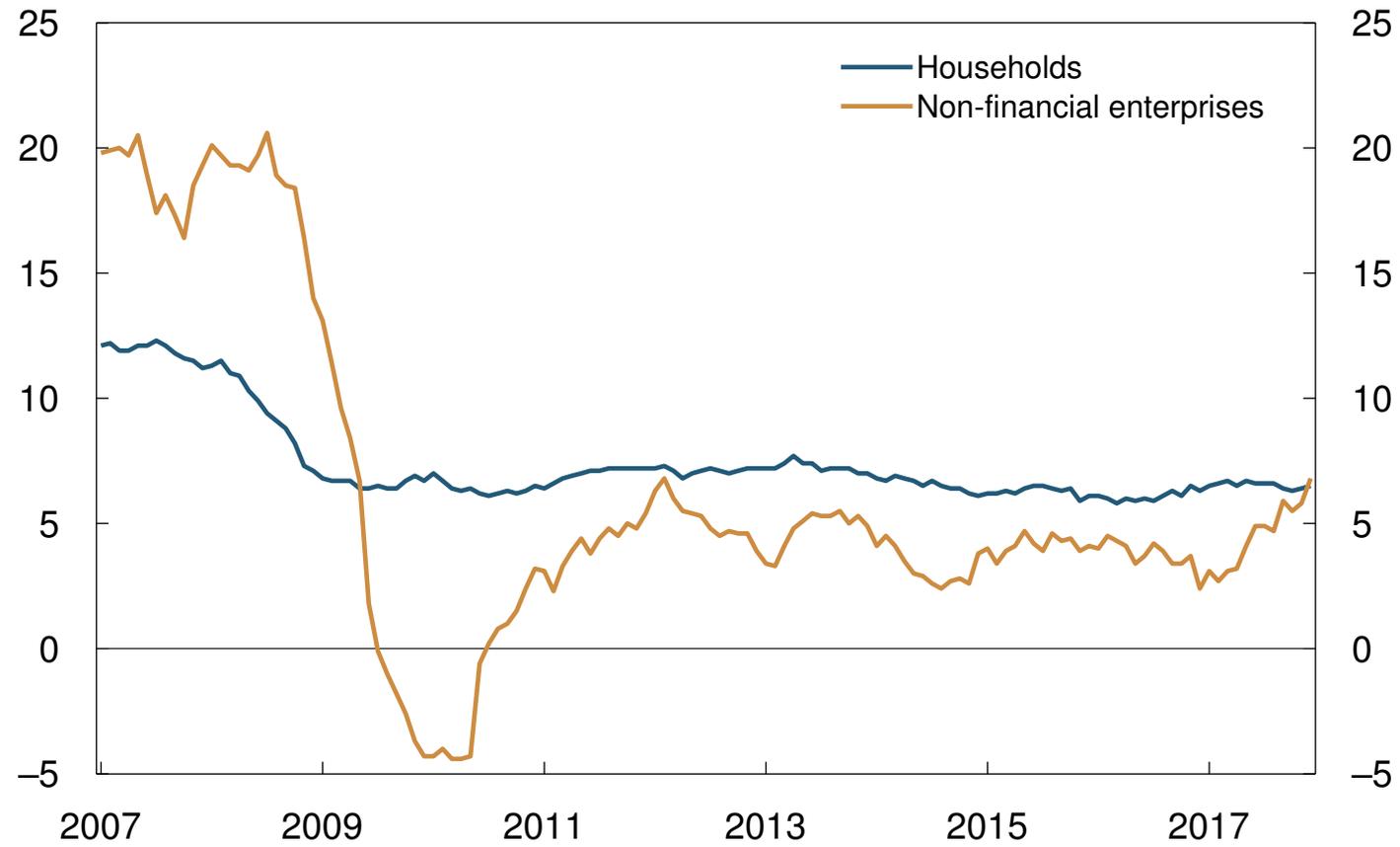


1) Deviation from trend with augmented Hodrick-Prescott (HP) filter. One-sided HP filter estimated on data augmented with a simple projection. Lambda = 400 000.

2) Preliminary figures on foreign debt for 2017 Q4.

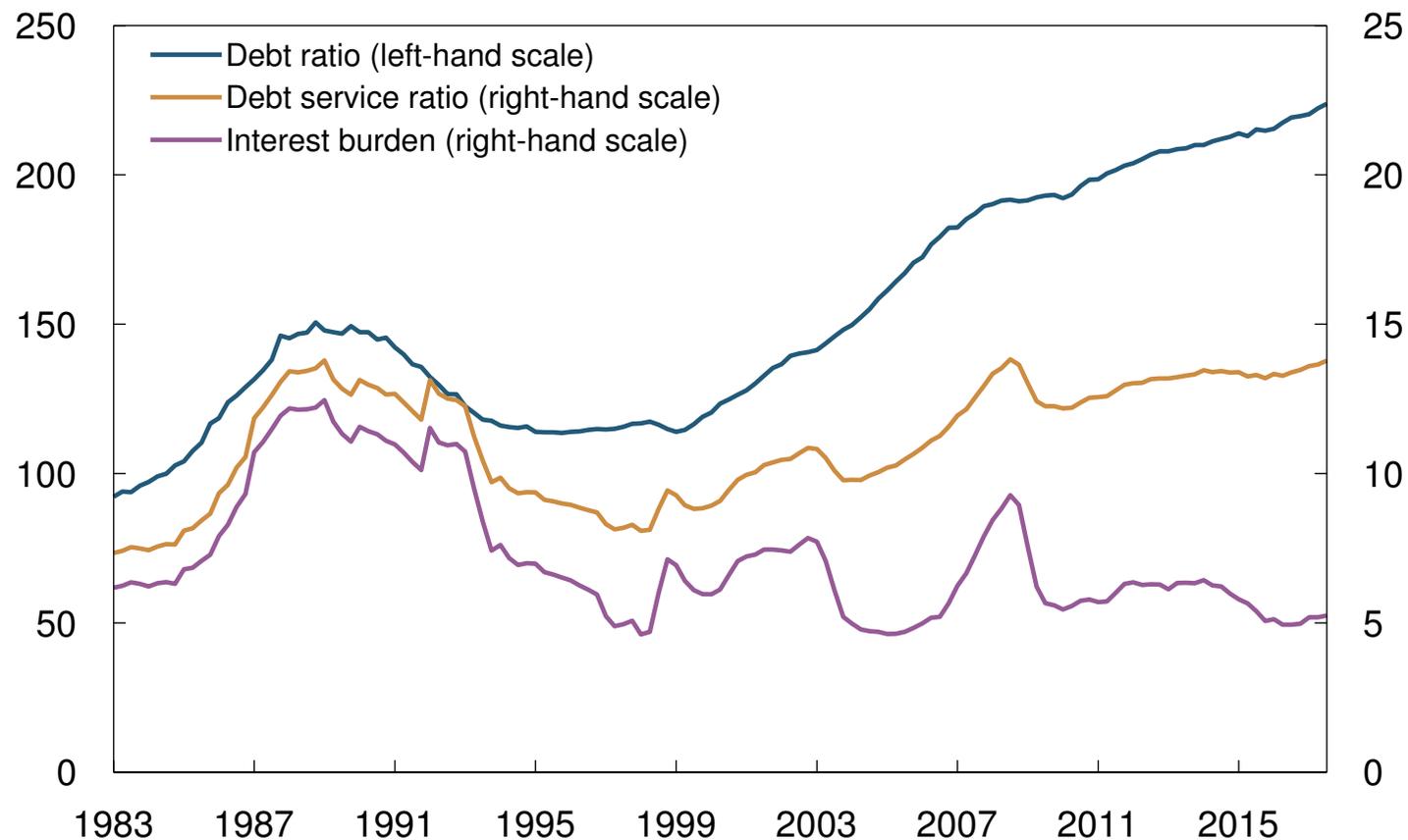
Sources: IMF, Statistics Norway and Norges Bank

Chart 5.5 Credit to households and non-financial enterprises in mainland Norway. Twelve-month change. Percent. January 2007 – December 2017



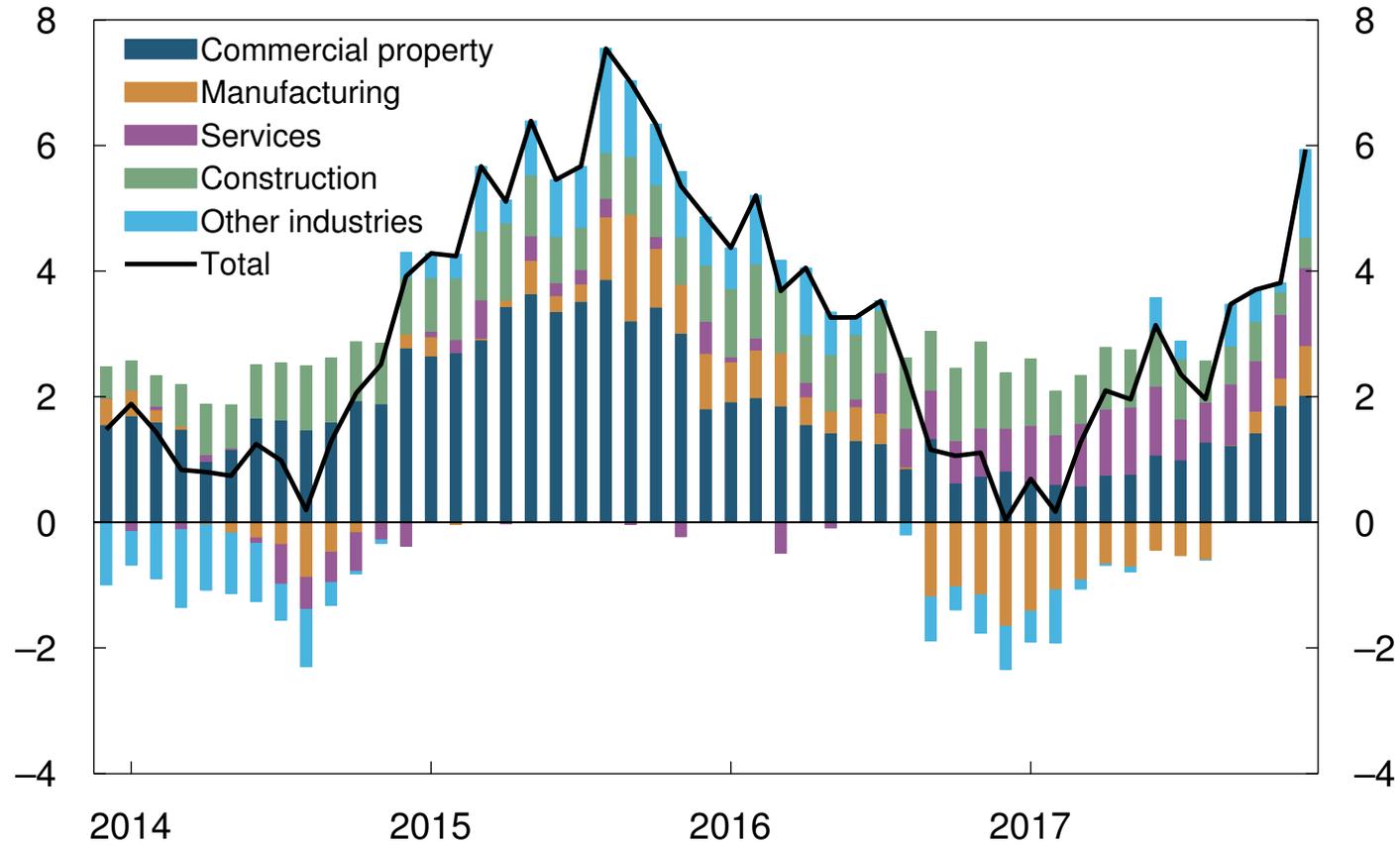
Sources: Statistics Norway and Norges Bank

Chart 5.6 Household debt ratio, debt service ratio and interest burden.¹⁾
 Percent. 1983 Q1 – 2017 Q3



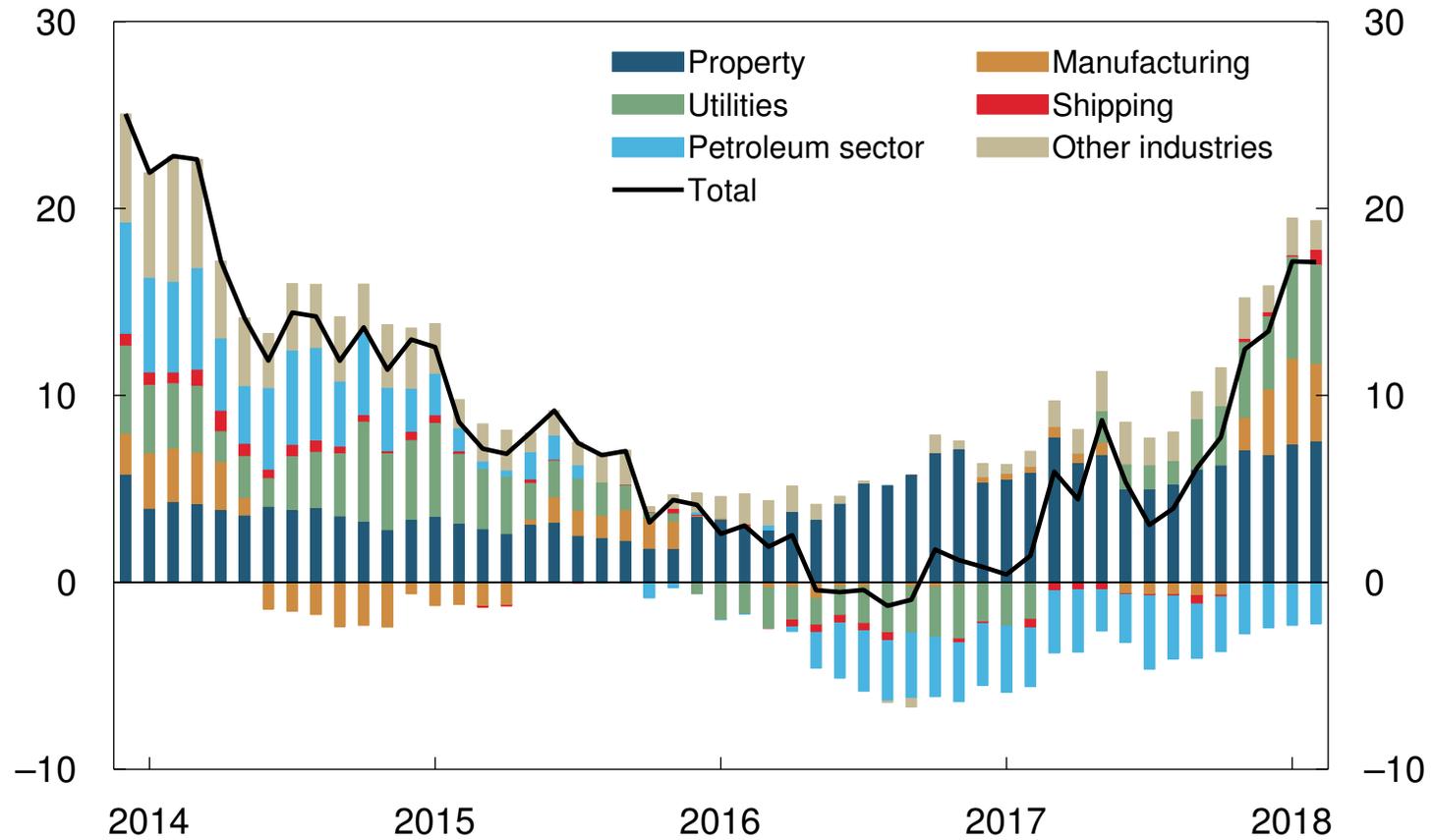
1) The debt ratio is loan debt as a percentage of disposable income. The interest burden is calculated as interest expenses as a percentage of disposable income plus interest expenses. The debt service ratio also includes estimated principal payments on an 18-year mortgage. Disposable income is adjusted for estimated reinvested dividend income for 2000 Q1 – 2005 Q4 and reduction of equity capital for 2006 Q1 – 2012 Q3. For 2015 Q1 – 2017 Q3 growth in disposable income excluding dividends is used. Sources: Statistics Norway and Norges Bank

Chart 5.7 Bank and mortgage company lending to non-financial enterprises by industry. Twelve-month change in stock. Percent.
December 2013 – December 2017



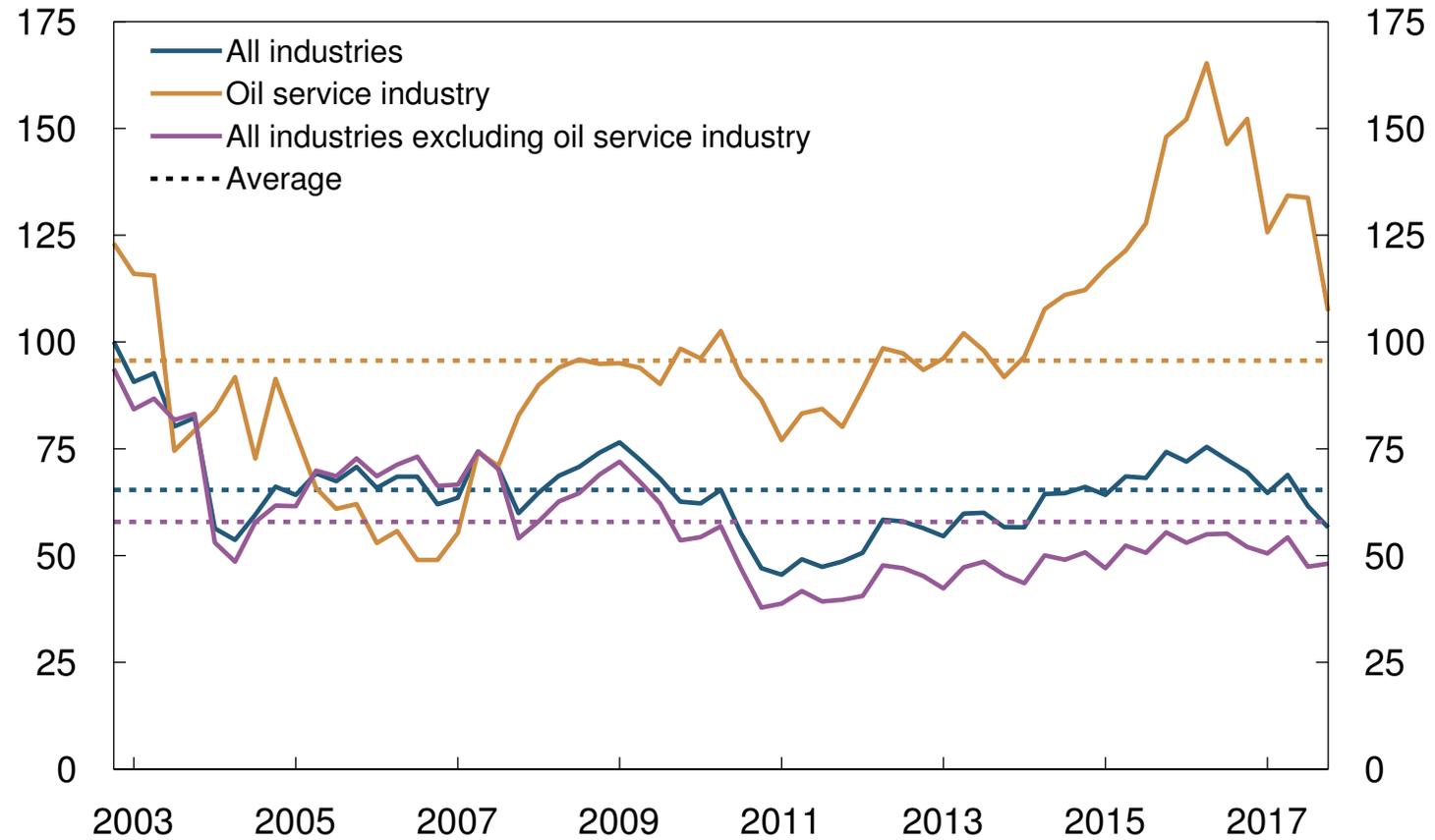
Sources: Statistics Norway and Norges Bank

Chart 5.8 Lending to Norwegian non-financial enterprises in the Norwegian bond market by industry. Twelve-month change in stock. Percent. December 2013 – February 2018



Sources: Stamdata and Norges Bank

Chart 5.9 Net debt ratio.¹⁾ Listed companies.²⁾
 Percent. 2002 Q4 – 2017 Q4

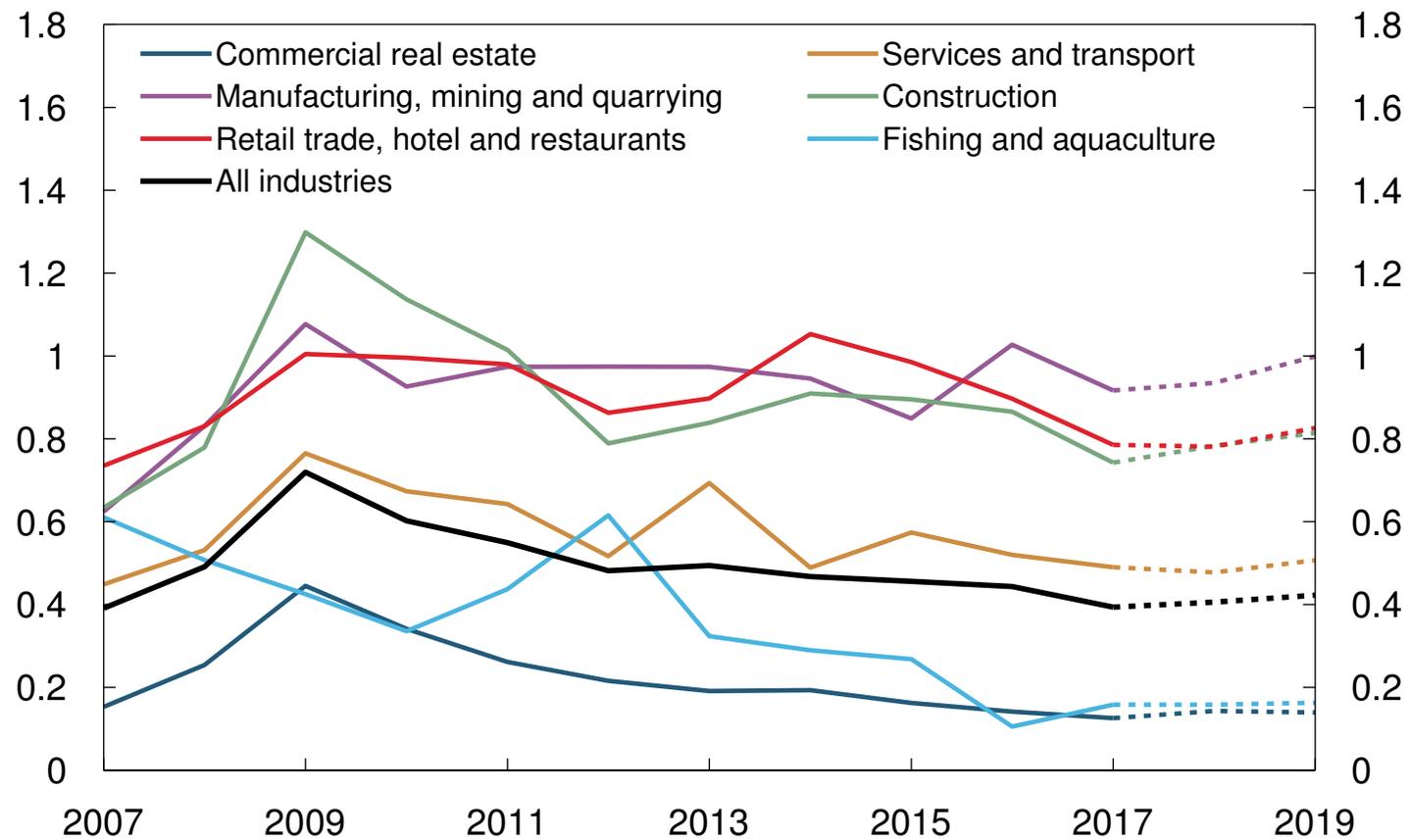


1) Net interest-bearing debt as a share of equity.

2) Norwegian non-financial enterprises listed on Oslo Børs, excluding oil and gas extraction.

Sources: Bloomberg and Norges Bank

Chart 5.10 Estimated credit risk¹⁾ by industry.
Percent. 2007 – 2019²⁾

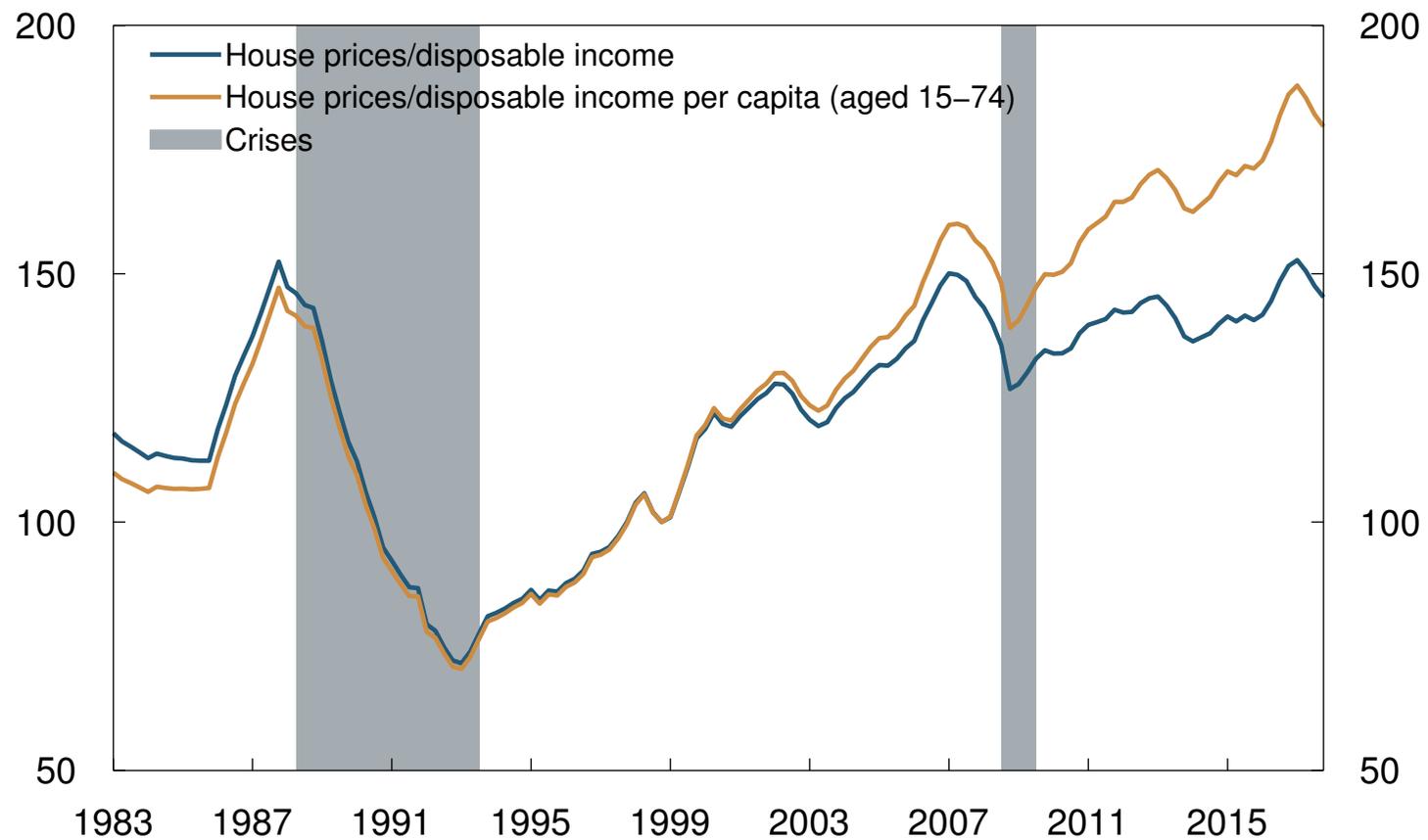


1) Estimated bankruptcy-exposed bank debt as a share of total bank debt in each industry.

2) Broken lines are projections.

Source: Norges Bank

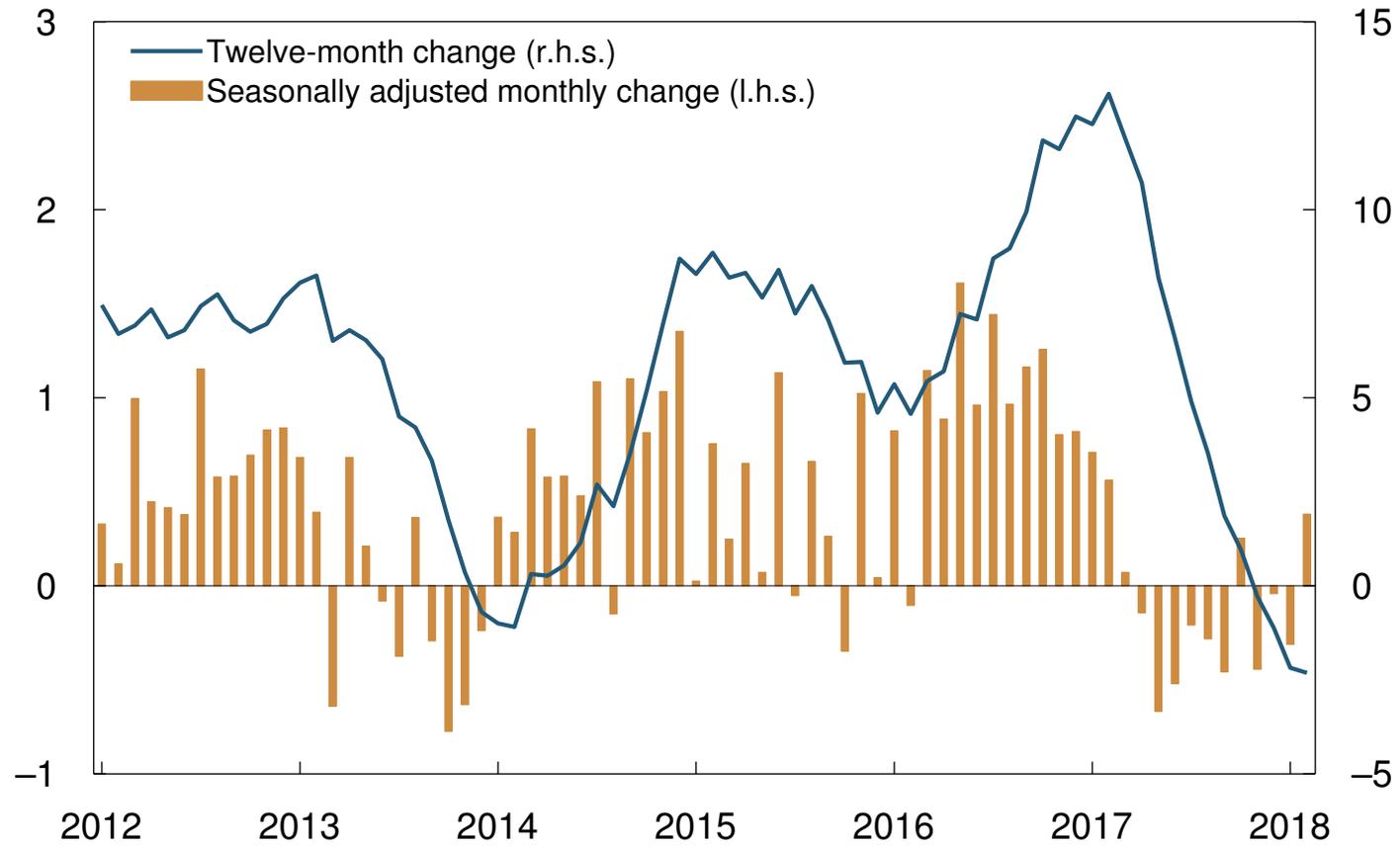
Chart 5.11 House prices relative to disposable income.¹⁾
 Index. 1998 Q4 = 100. 1983 Q1 – 2017 Q4



1) Disposable income adjusted for estimated reinvested dividend income for 2003 – 2005 and reduction of equity capital for 2006 Q1 – 2012 Q3. Change in disposable income excluding dividend income is used for 2015 Q1 – 2017 Q4.

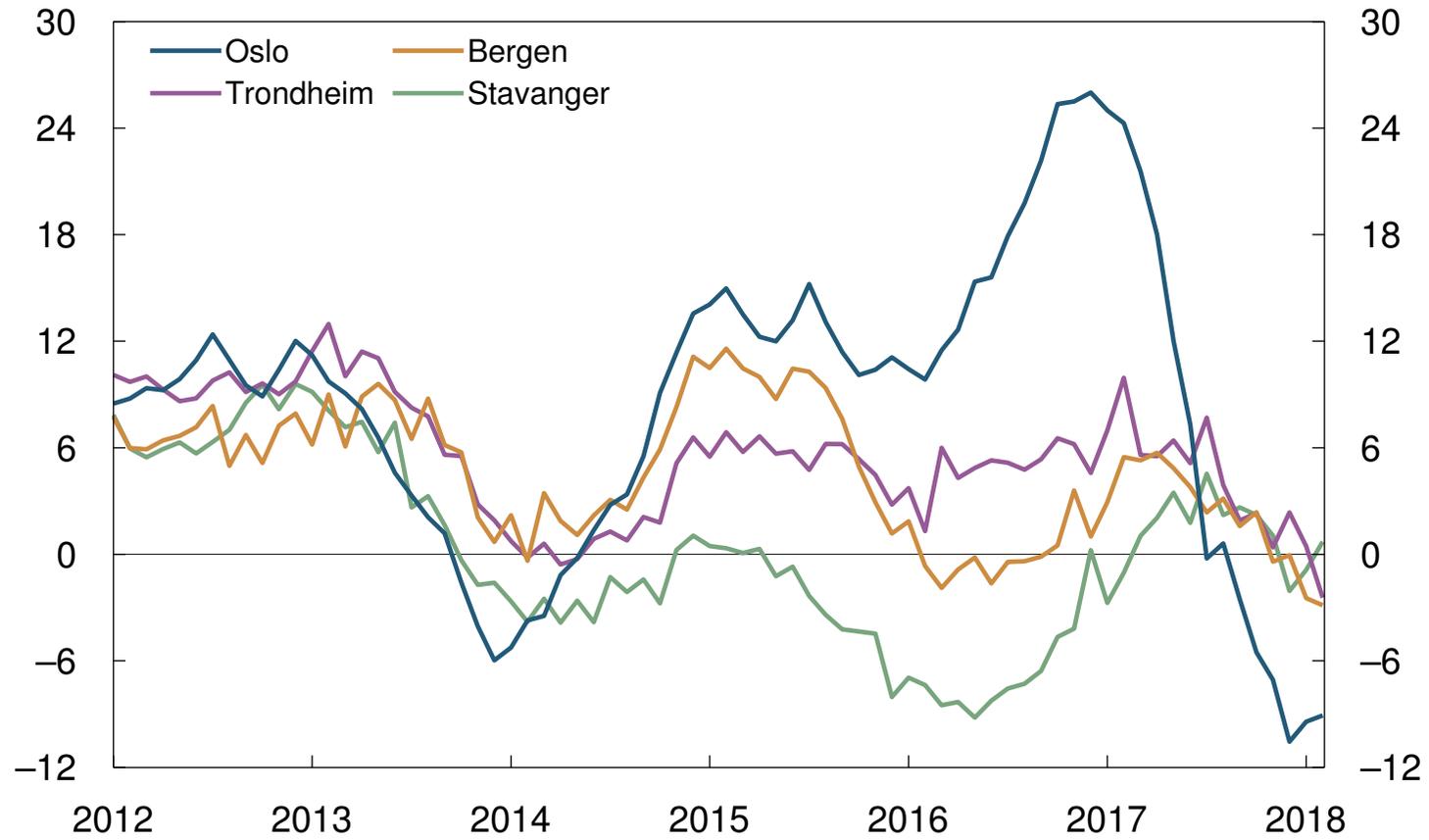
Sources: Eiendomsverdi, Finn.no, Norwegian Association of Real Estate Agents (NEF), Real Estate Norway, Statistics Norway and Norges Bank

Chart 5.12 House prices. Twelve-month change and seasonally adjusted monthly change. Percent. January 2012 – February 2018



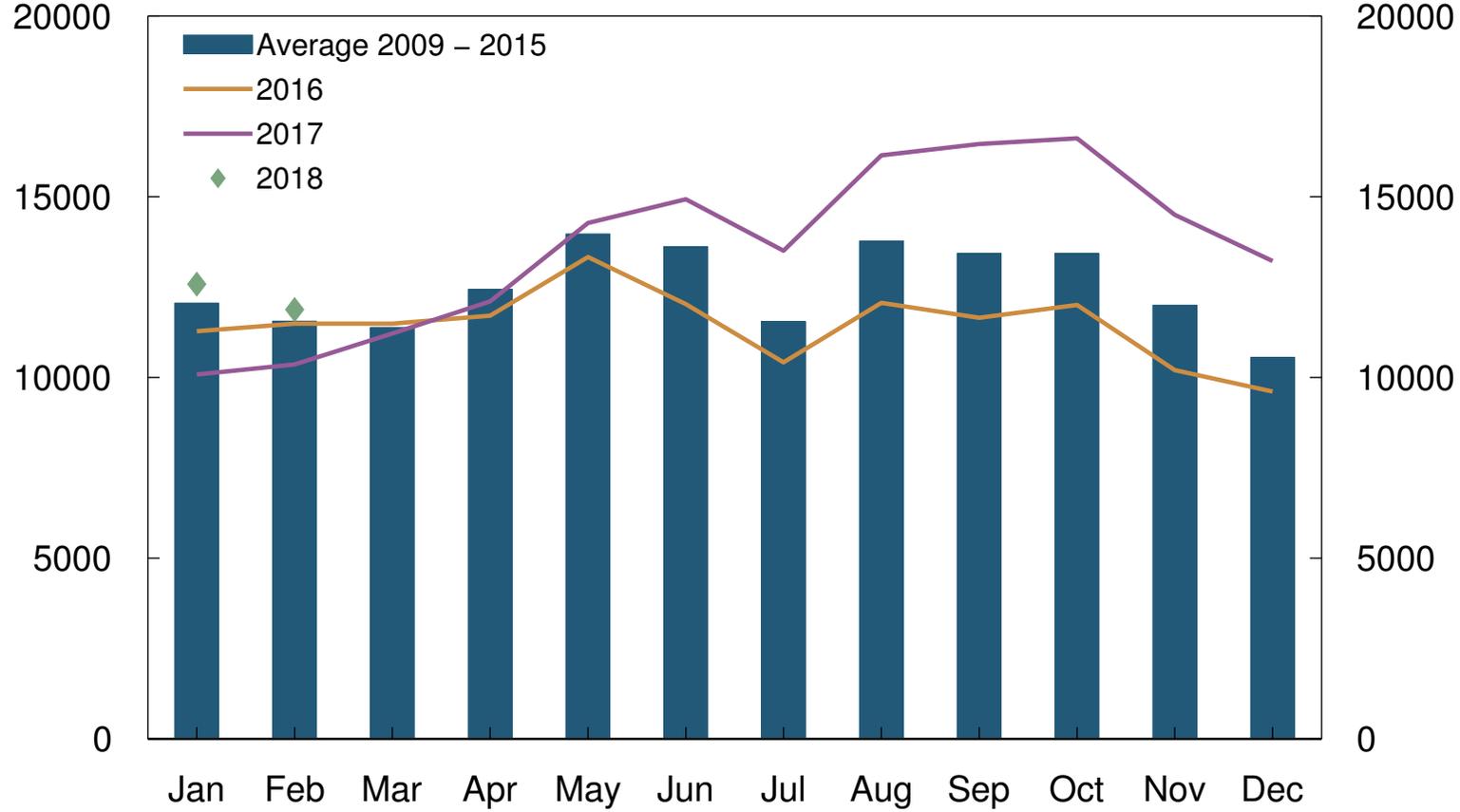
Sources: Eiendomsverdi, Finn.no and Real Estate Norway

Chart 5.13 House prices in Norwegian cities.
Twelve-month change. Percent. January 2012 – February 2018



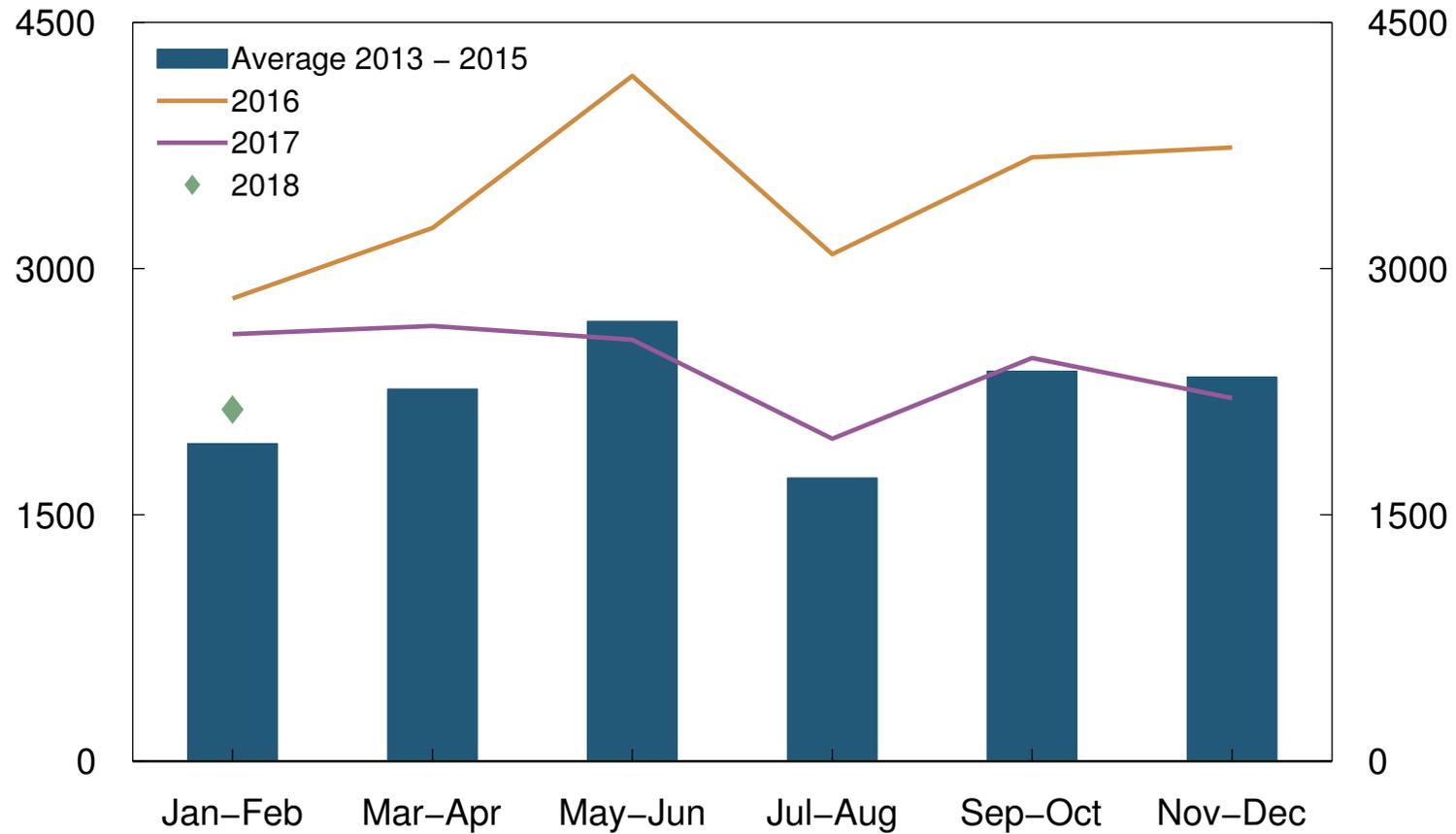
Sources: Eiendomsverdi, Finn.no and Real Estate Norway

Chart 5.14 Stock of unsold existing homes at month-end.
Number of homes



Sources: Eiendomsverdi, Finn.no and Real Estate Norway

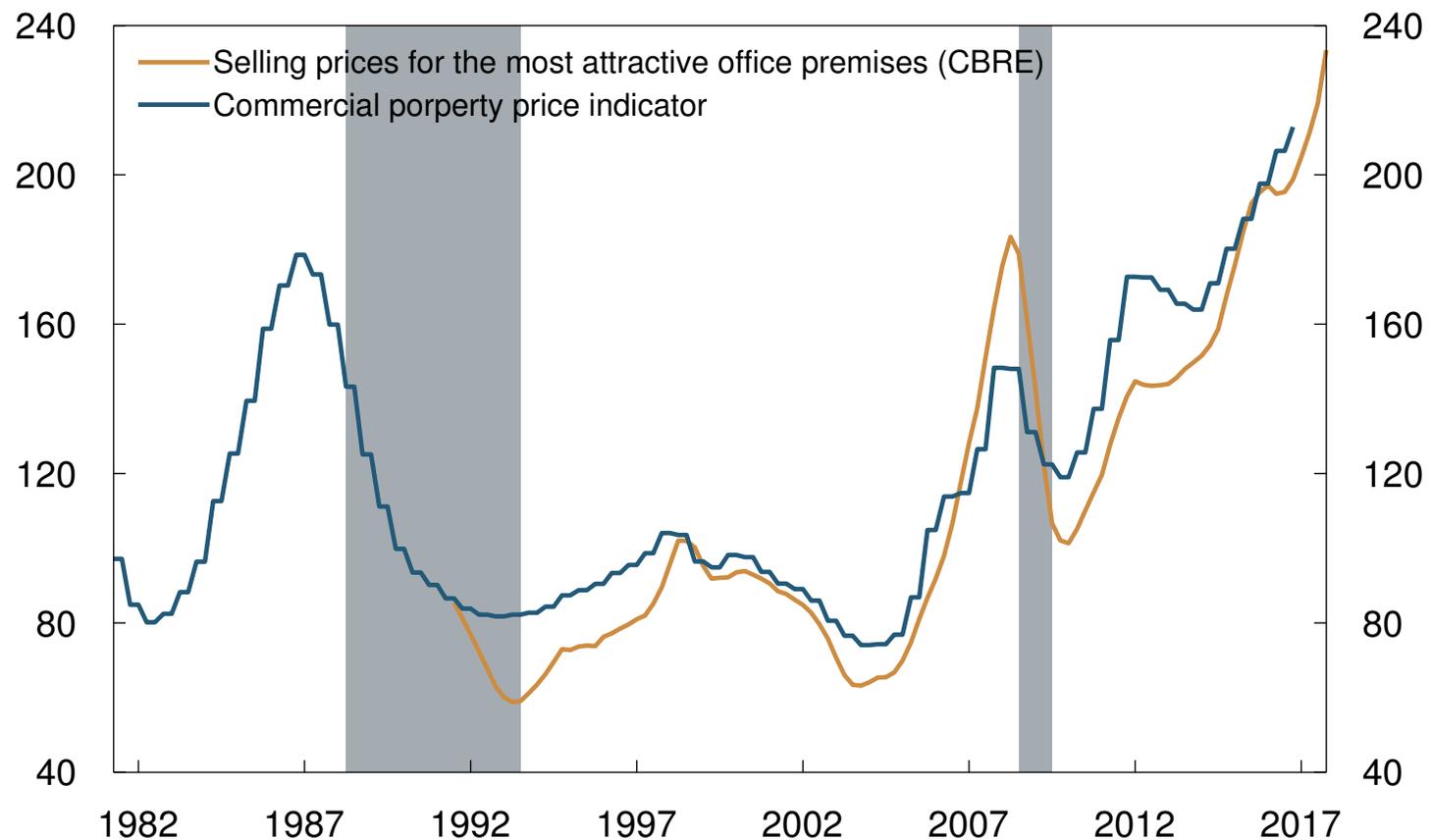
Chart 5.15 Total new home sales in Norway.¹⁾ Number of homes



1) Statistics for Norway as from October 2013. Figures for the earlier part of 2013 have been chained back in time using the rise in sales for eastern Norway. The statistics only include homes sold in housing projects of more than 15 units. The statistics cover most of the housing market in eastern Norway and a somewhat smaller share in the other regions.

Source: Economics Norway

Chart 5.16 Commercial property price indicator¹⁾ and selling prices for the most attractive office premises in Oslo²⁾. Deflated by the GDP deflator. Index. 1998 = 100. 1981 Q2 – 2017 Q4

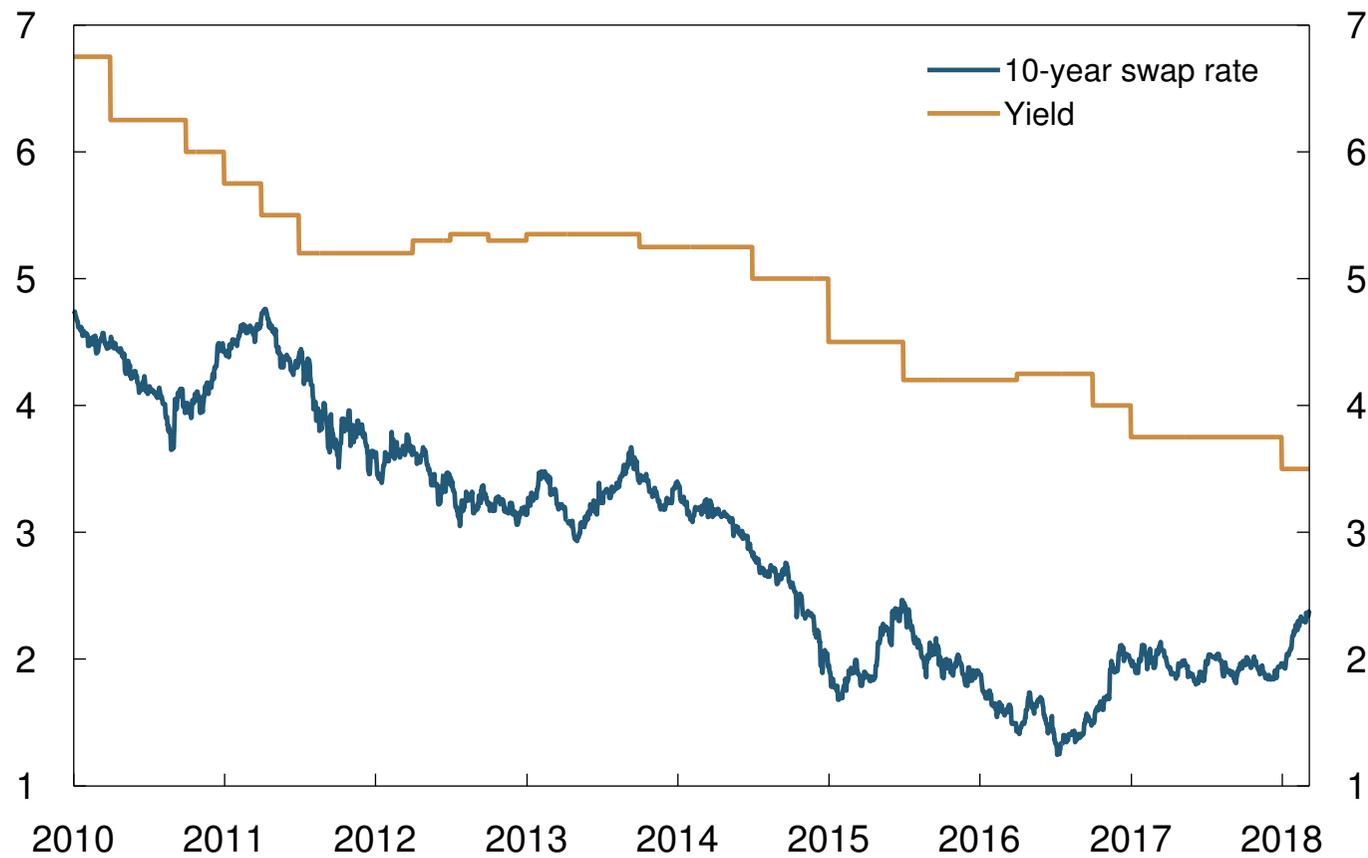


1) The most recent figures for the commercial property price indicator are from 2016 Q4.

2) Calculated based on average selling prices for the past four quarters. Annual figures 1991–1994 only. Quarterly figures are constructed using linear interpolation.

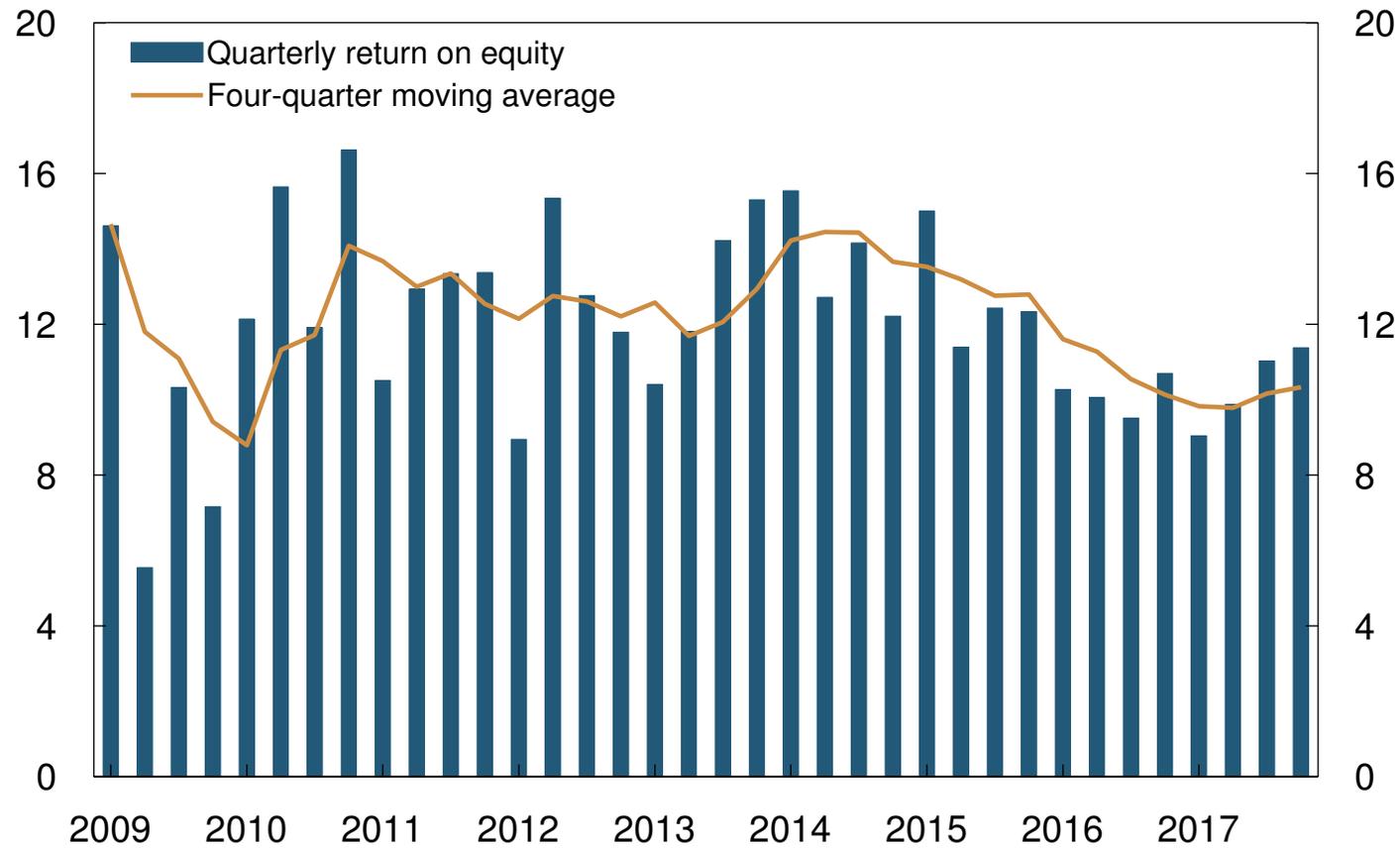
Sources: CBRE, Dagens Næringsliv, OPAK, Statistics Norway and Norges Bank

Chart 5.17 Yields¹⁾ for the most attractive office premises in Oslo and 10-year swap rate. Percent. 1 January 2010 – 7 March 2018



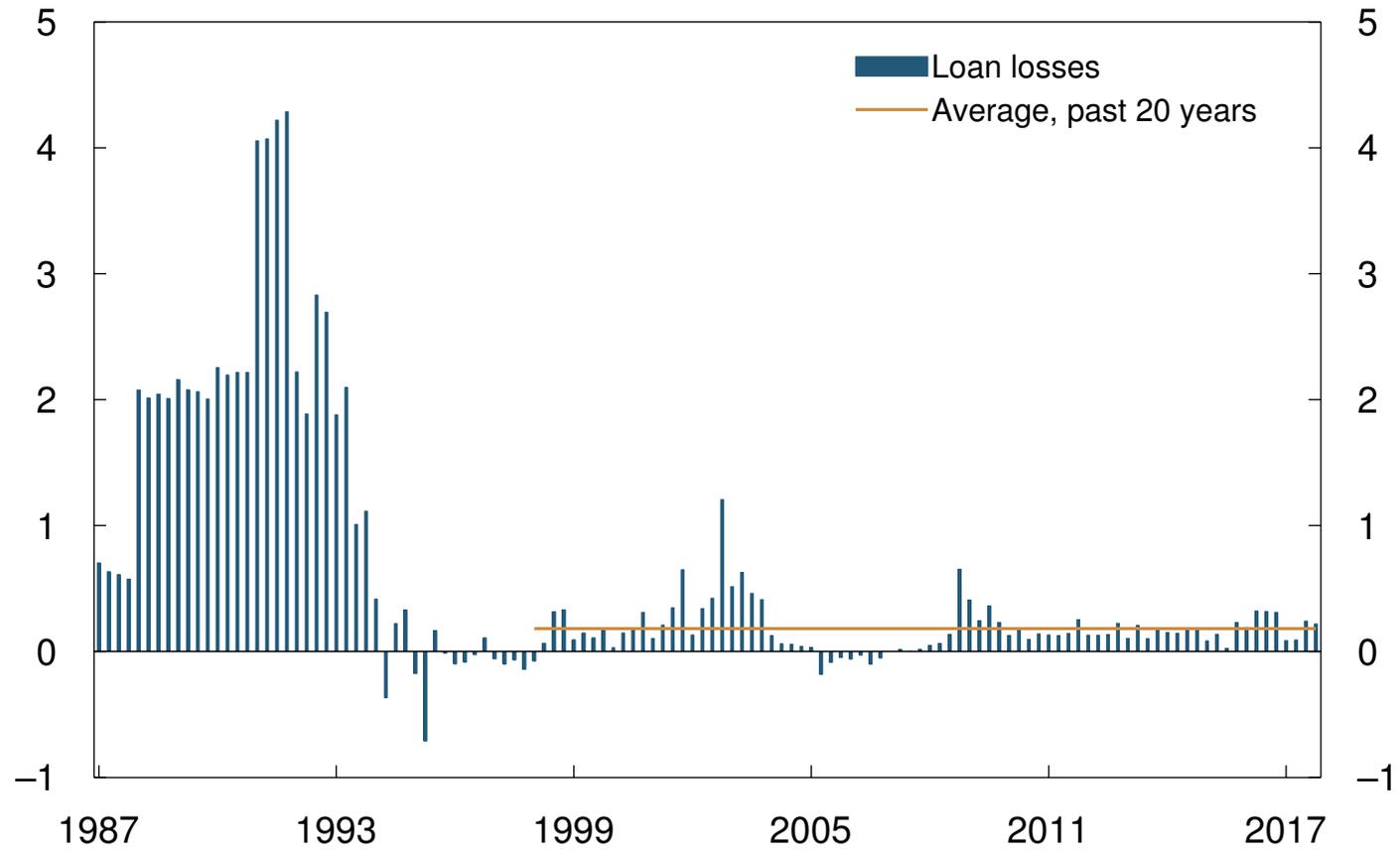
1) The yield is based on data from CBRE. Quarterly observations.
Sources: CBRE, Dagens Næringsliv and Thomson Reuters

Chart 5.18 Return on equity for large Norwegian banks.¹⁾
 Percent. 2009 Q1 – 2017 Q4



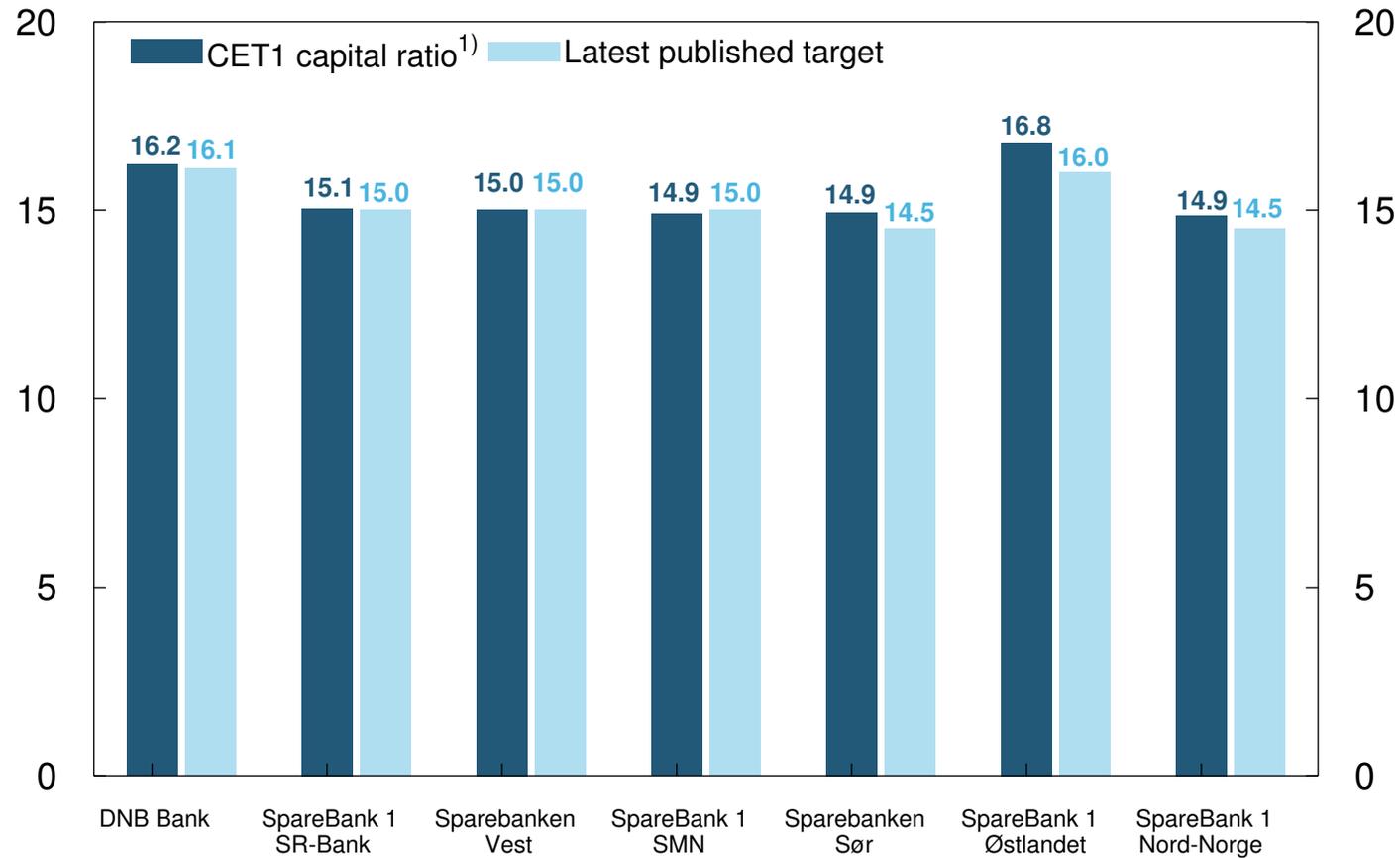
1) Banks included in 2017: DNB bank, Sparebank 1 SR-bank, Sparebanken Vest, Sparebank 1 SMN, Sparebanken Sør, Sparebank 1 Nord-Norge and Sparebanken Østlandet.
 Sources: Banks' quarterly reports and Norges Bank

Chart 5.19 Banks' loan losses as a share of gross lending to customers. Quarterly annualised. All banks and mortgage companies in Norway. Percent. 1987 Q1 – 2017 Q4



Source: Norges Bank

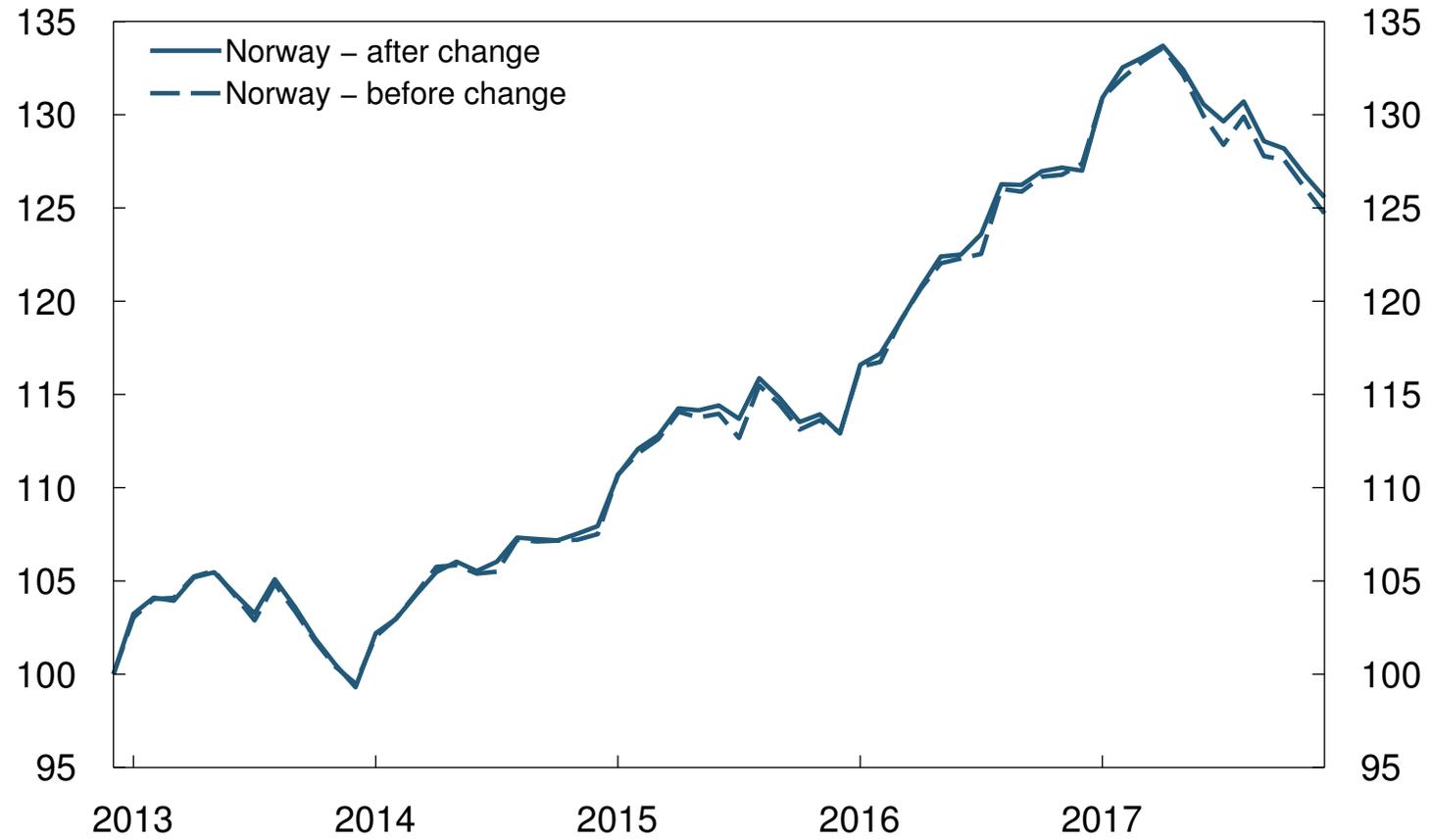
Chart 5.20 Large Norwegian banks' Common Equity Tier 1 (CET1) capital ratios and targets at 2017 Q4. Percent



1) Banks' reported figures for 2017 Q4, which take account of their proposed dividend payout ratios.
Sources: Banks' quarterly reports and Norges Bank

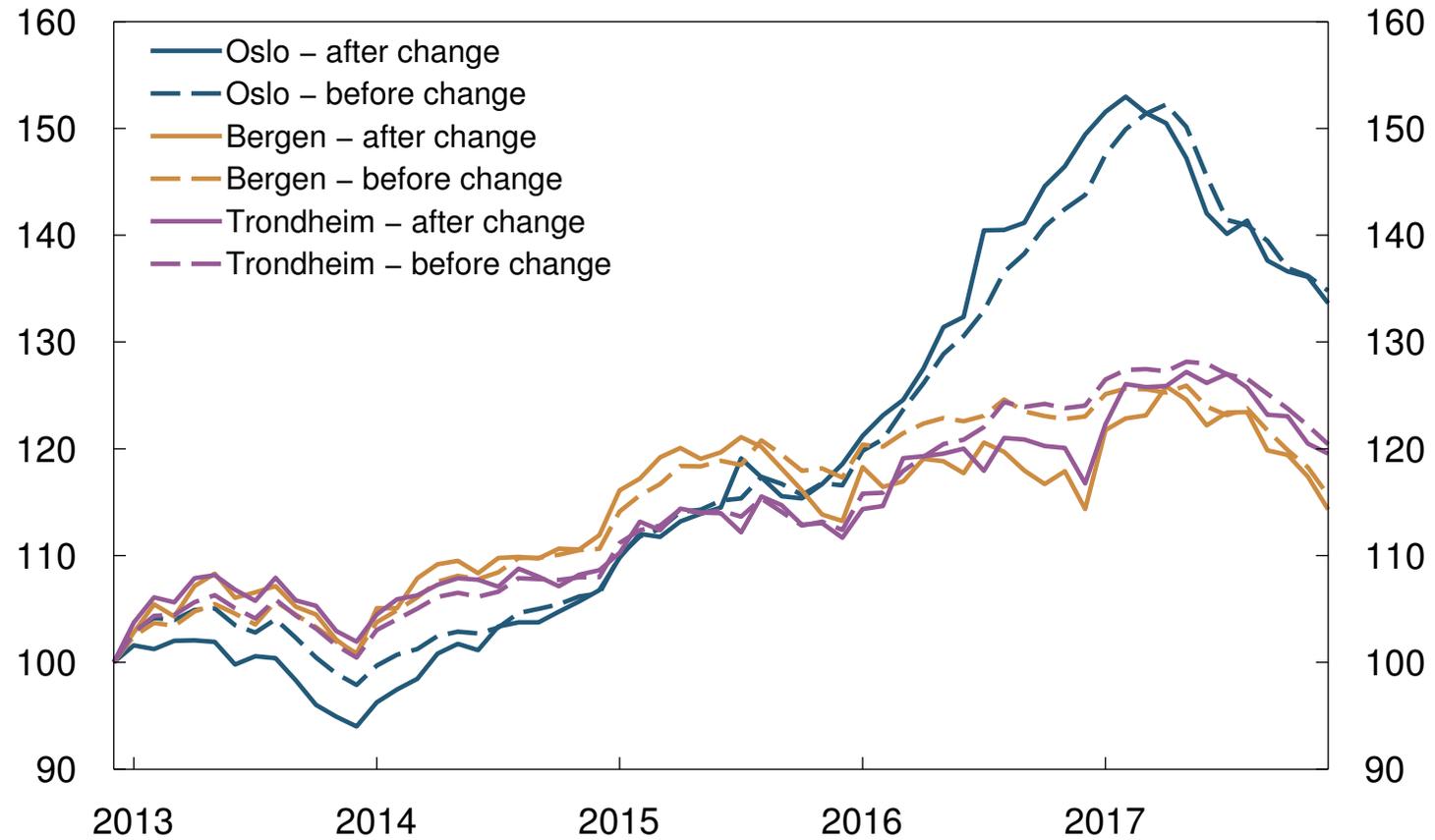
Chart 5.21 House prices before and after the methodological change to the calculation of house price statistics.

Index. December 2012 = 100. December 2012 – December 2017



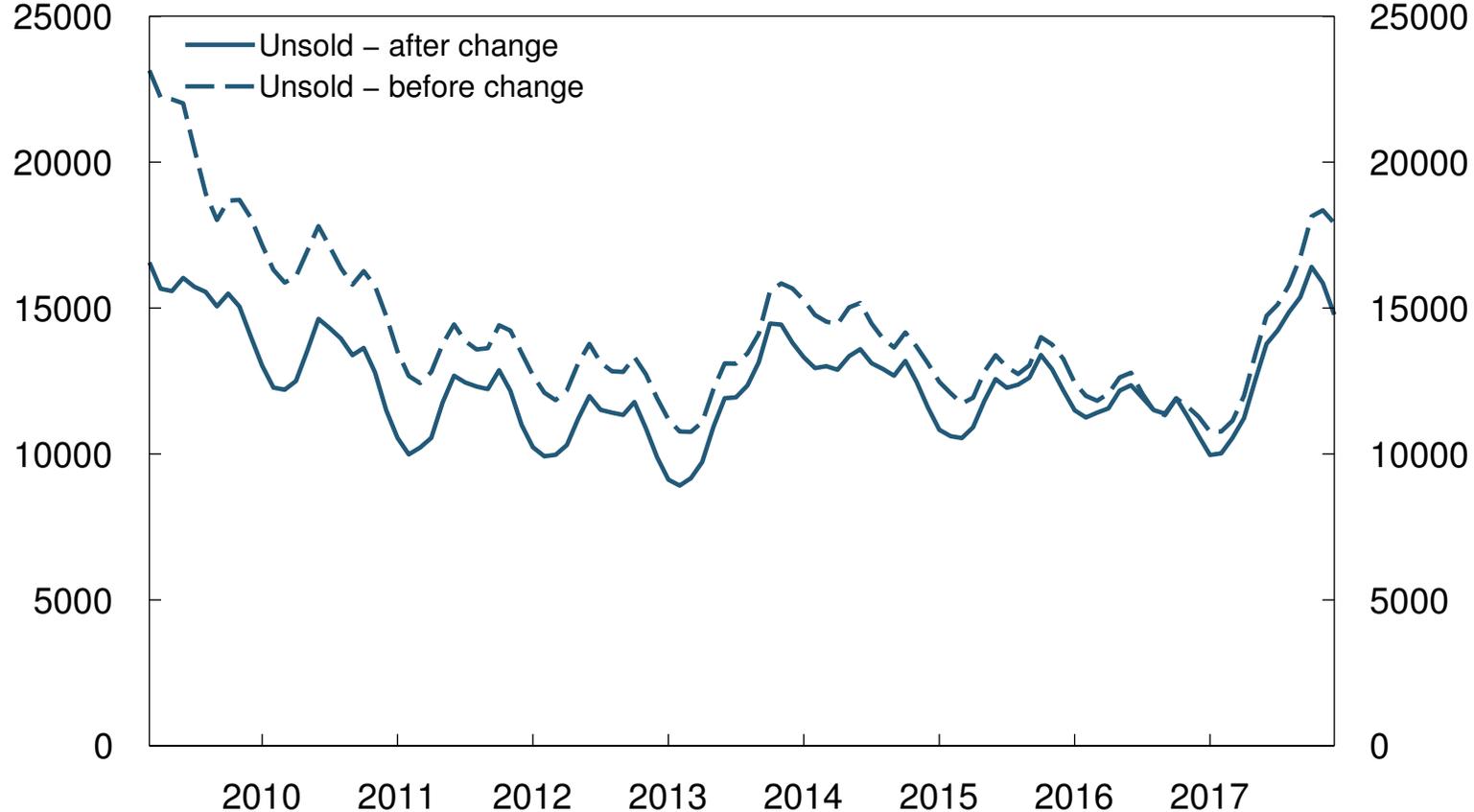
Sources: Eiendomsverdi, Finn.no and Real Estate Norway

Chart 5.22 House prices before and after the methodological change to the calculation of house price statistics. Norwegian cities.
 Index. December 2012 = 100. December 2012 – December 2017

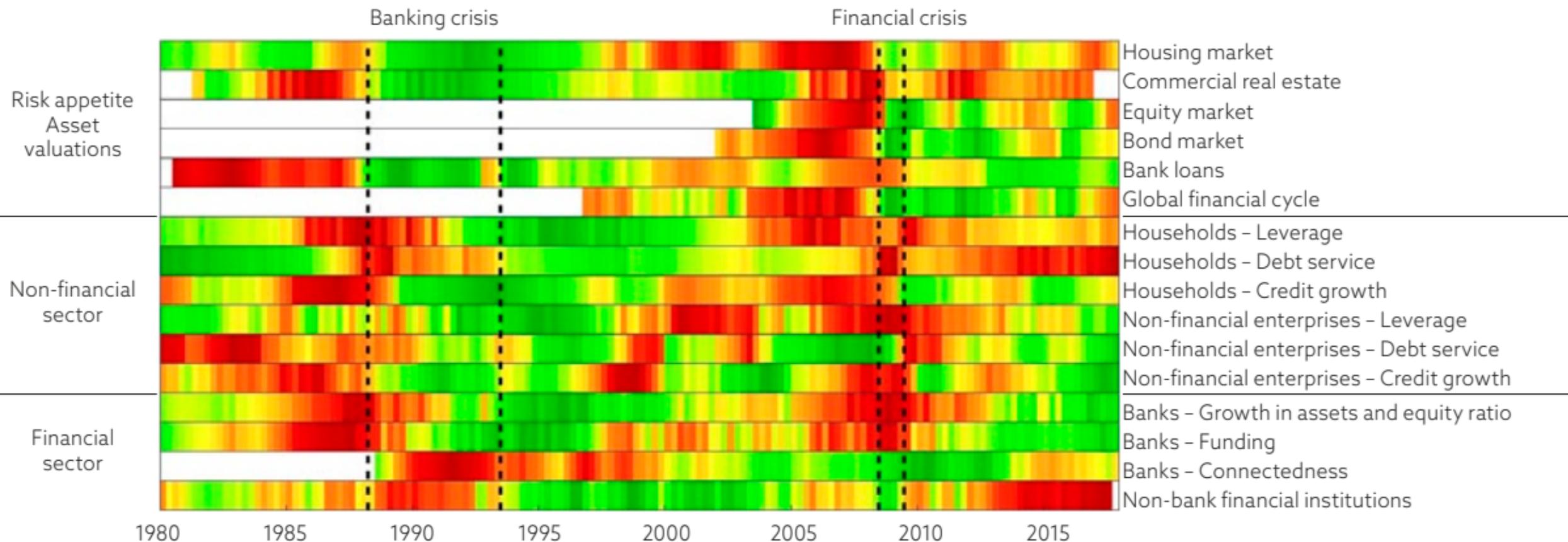


Sources: Eiendomsverdi, Finn.no and Real Estate Norway

Chart 5.23 Stock of unsold homes before and after the methodological change.¹⁾
 Three-month moving average. Number of homes. March 2009 – December 2017



1) Before the methodological change, homes that had not been recorded as sold were excluded after nine months. Following the methodological change, homes are now excluded after six months.
 Sources: Eiendomsverdi, Finn.no and Real Estate Norway



Sources: BIS, Bloomberg, Dagens Næringsliv, DNB Markets, Eiendomsverdi, Finn.no, Norwegian Association of Real Estate Agents (NEF), OECD, OPAK, Real Estate Norway, Statistics Norway, Thomson Reuters and Norges Bank