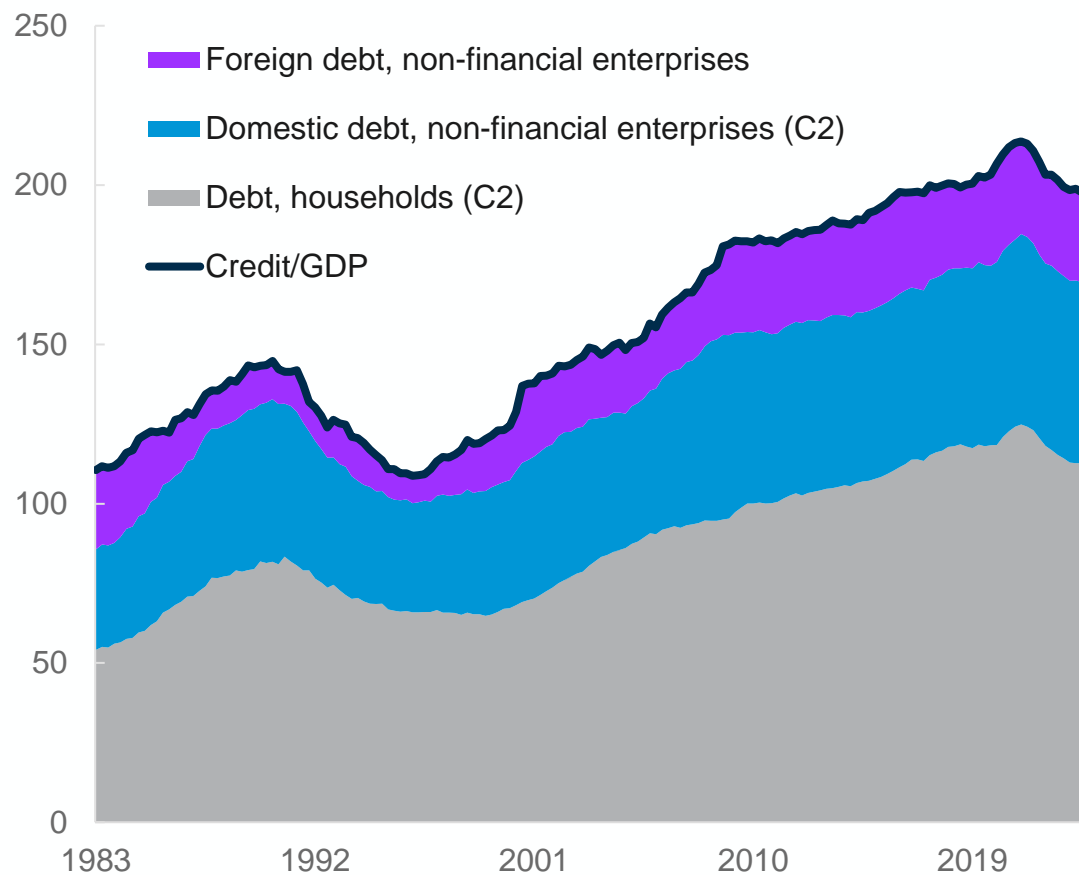


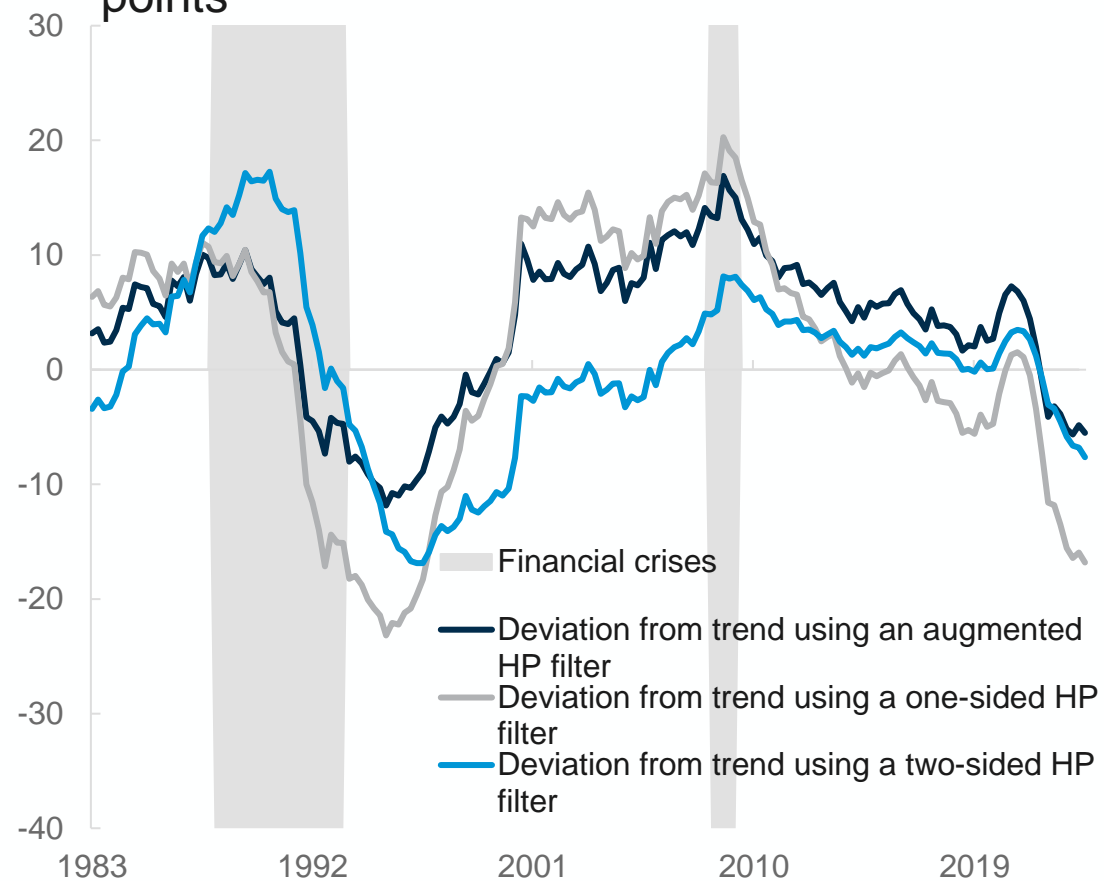
# 1. Credit as a share of GDP

Mainland GDP. 1983 Q1 – 2023 Q3

Credit/GDP. Percent



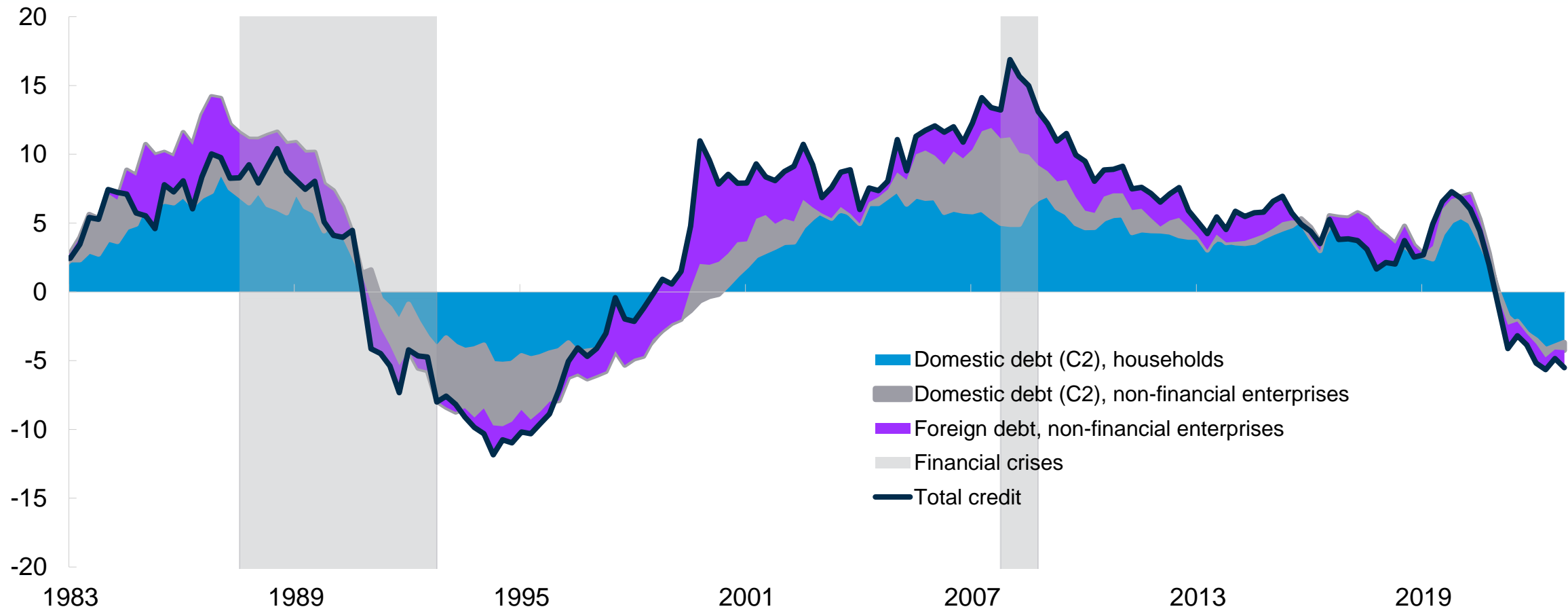
Deviation from estimated trends. Percentage points



Sources: IMF, Statistics Norway and Norges Bank

## 2. Decomposed credit gap

Credit as a share of GDP. Mainland Norway. Gap calculated as deviation from trend.<sup>1)</sup>  
Percentage points. 1983 Q1 – 2023 Q3

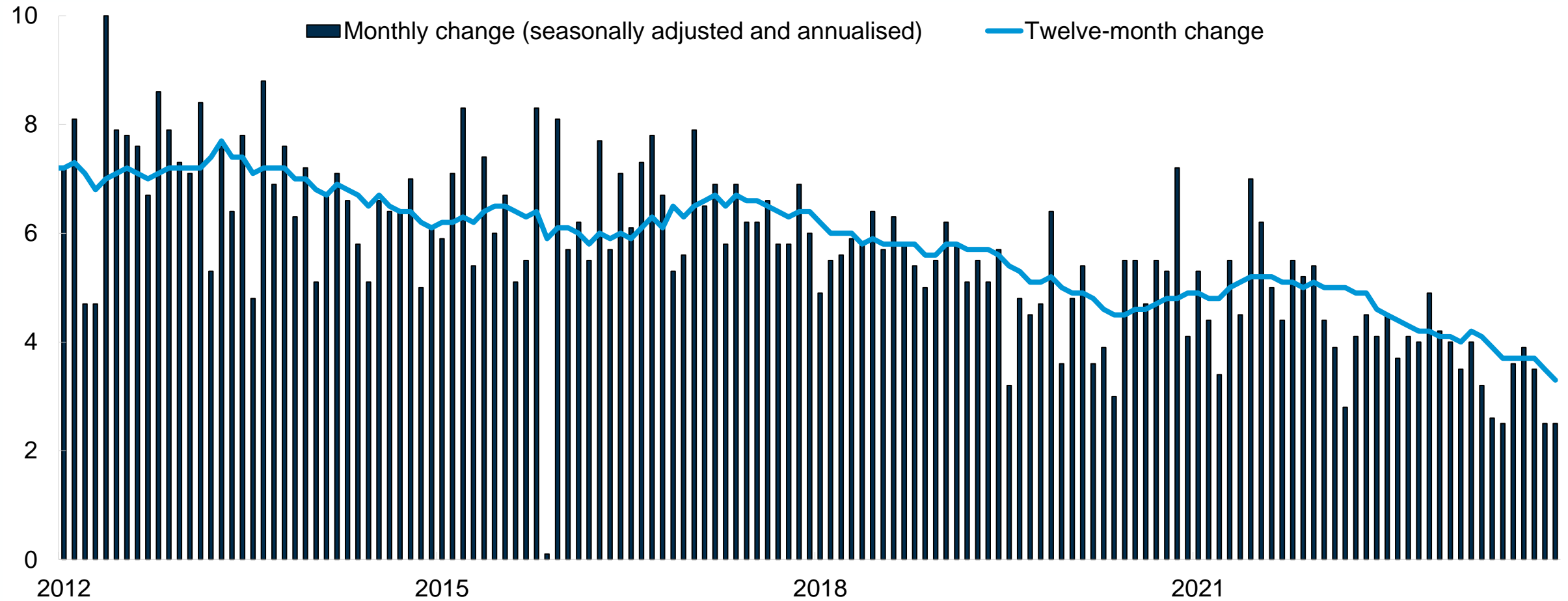


1) One-sided Hodrick-Prescott filter estimated on data augmented with a simple projection. Lambda = 400 000  
Sources: IMF, Statistics Norway and Norges Bank



### 3. Household credit growth

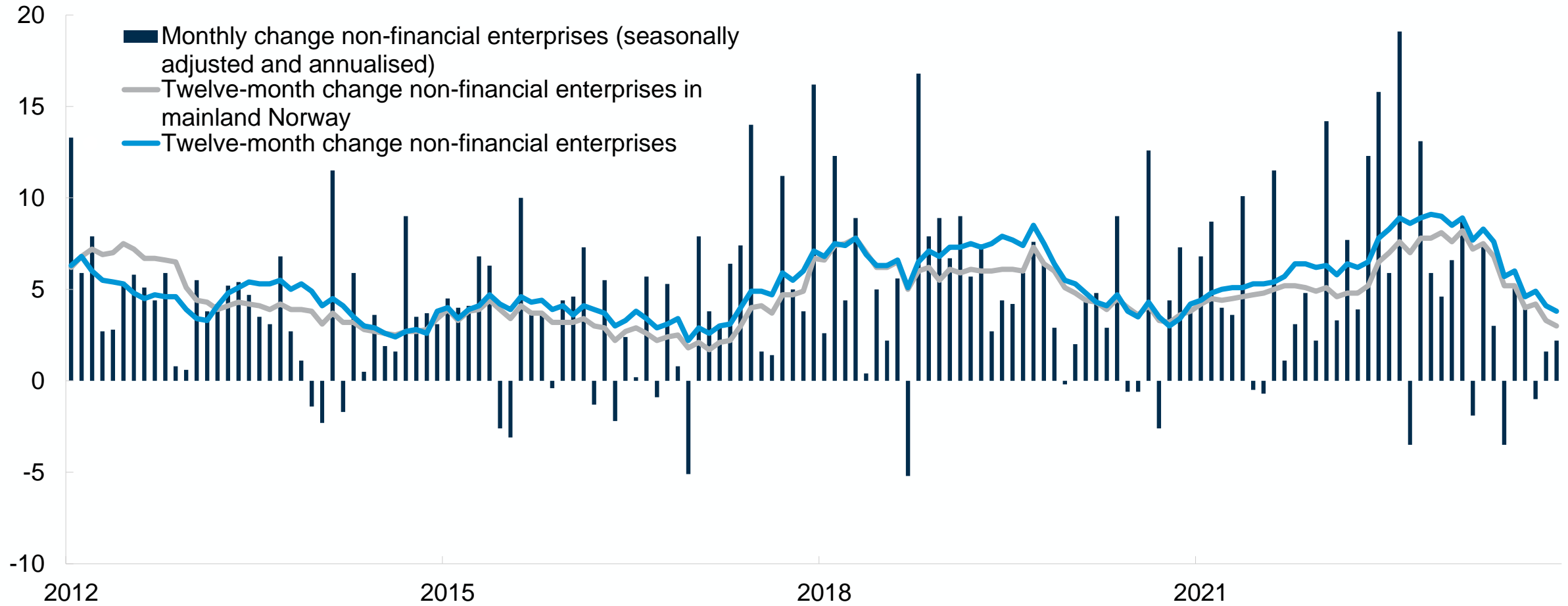
C2. Increase in transactions. Percent. January 2012 – November 2023



Source: Statistics Norway

## 4. Corporate credit growth

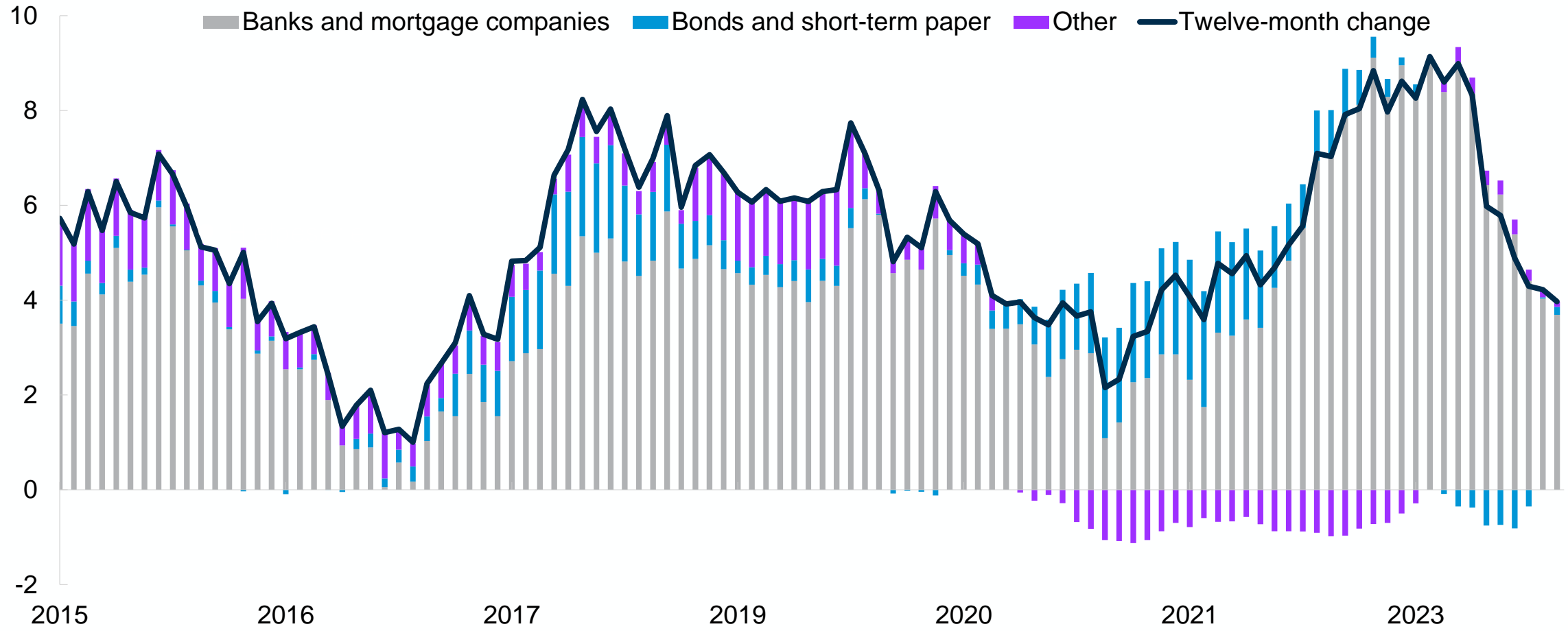
C2. Increase in transactions. Percent. January 2012 – November 2023



Source: Statistics Norway

## 5. Growth in corporate credit by source

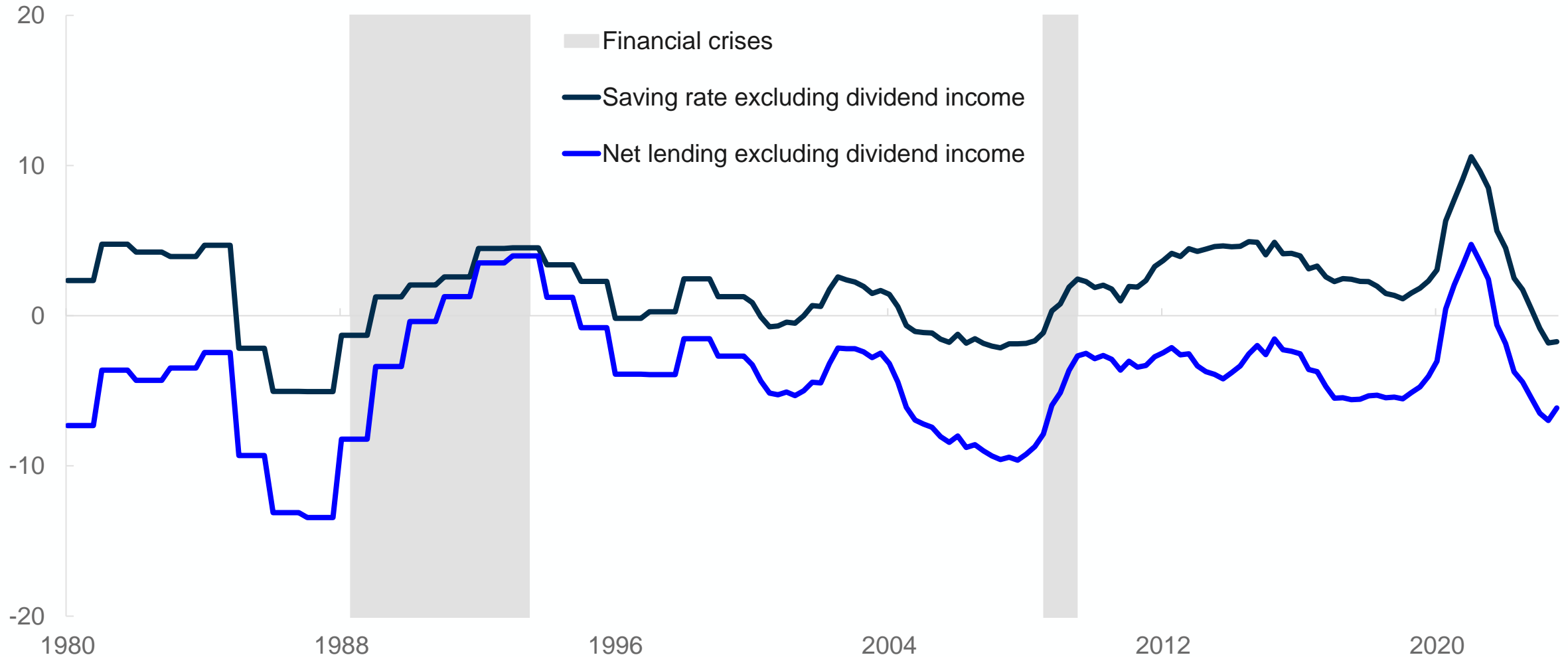
C2.Twelve-month change in stock. Decomposed by credit source.  
Percent. January 2015 – November 2023



Sources: Statistics Norway and Norges Bank

## 6. Households' saving and net lending<sup>1)</sup>

Share of disposable income. Four-quarter moving average. Percent. 1980 Q1 –2023 Q3<sup>2)</sup>



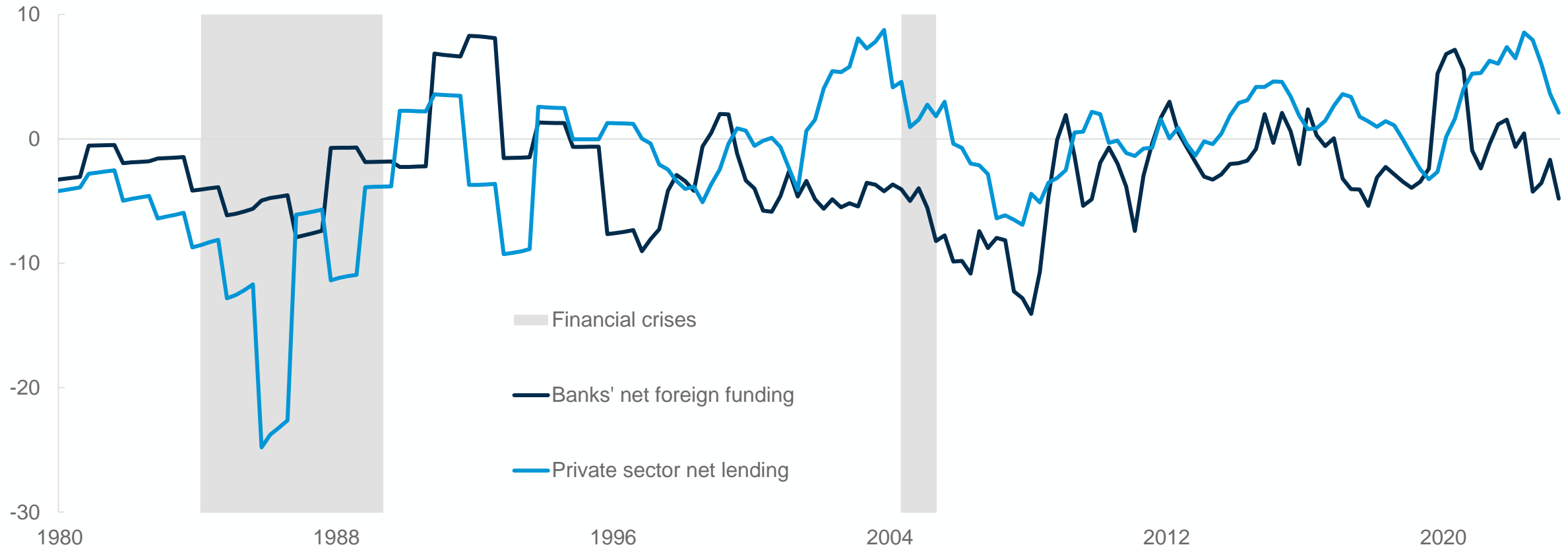
1) Saving and net lending of households and non-profit institutions serving households. Saving and net lending is adjusted by excluding dividend income received. Disposable income is adjusted by excluding dividend income received and adding savings in pension funds.

2) Annual data before 2002

Sources: Statistics Norway and Norges Bank

## 7. Private sector's net lending<sup>1)</sup> and banks' net lending abroad

Share of GDP. Four-quarter moving average. Percent. 1980 Q1 – 2023 Q3<sup>2)</sup>



1) Total net lending less net public sector lending.

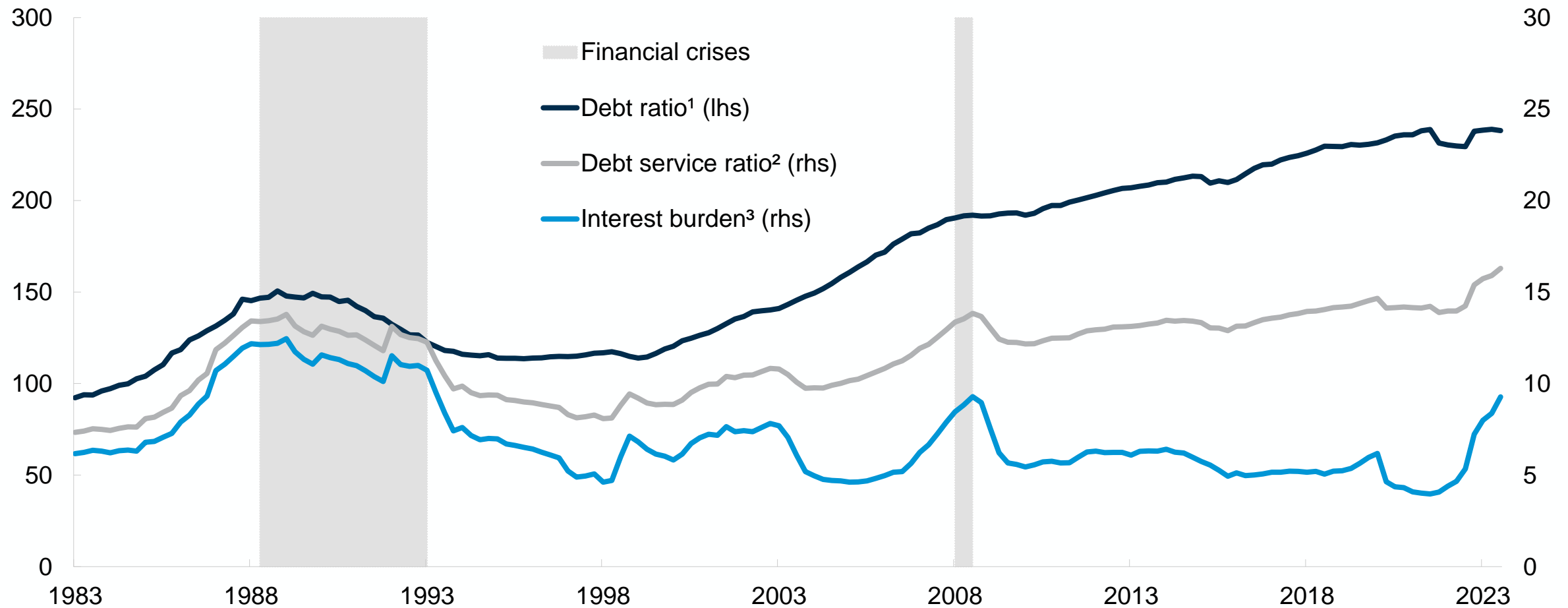
2) Annual data before 2002.

Sources: Statistics Norway and Norges Bank



## 8. Household debt ratio, debt service ratio and interest burden

Percent. 1983 Q1 – 2023 Q3



1) Loan debt as a percentage of disposable income.

2) Interest expenses and estimated principal payments as a percentage of disposable income and interest expenses.

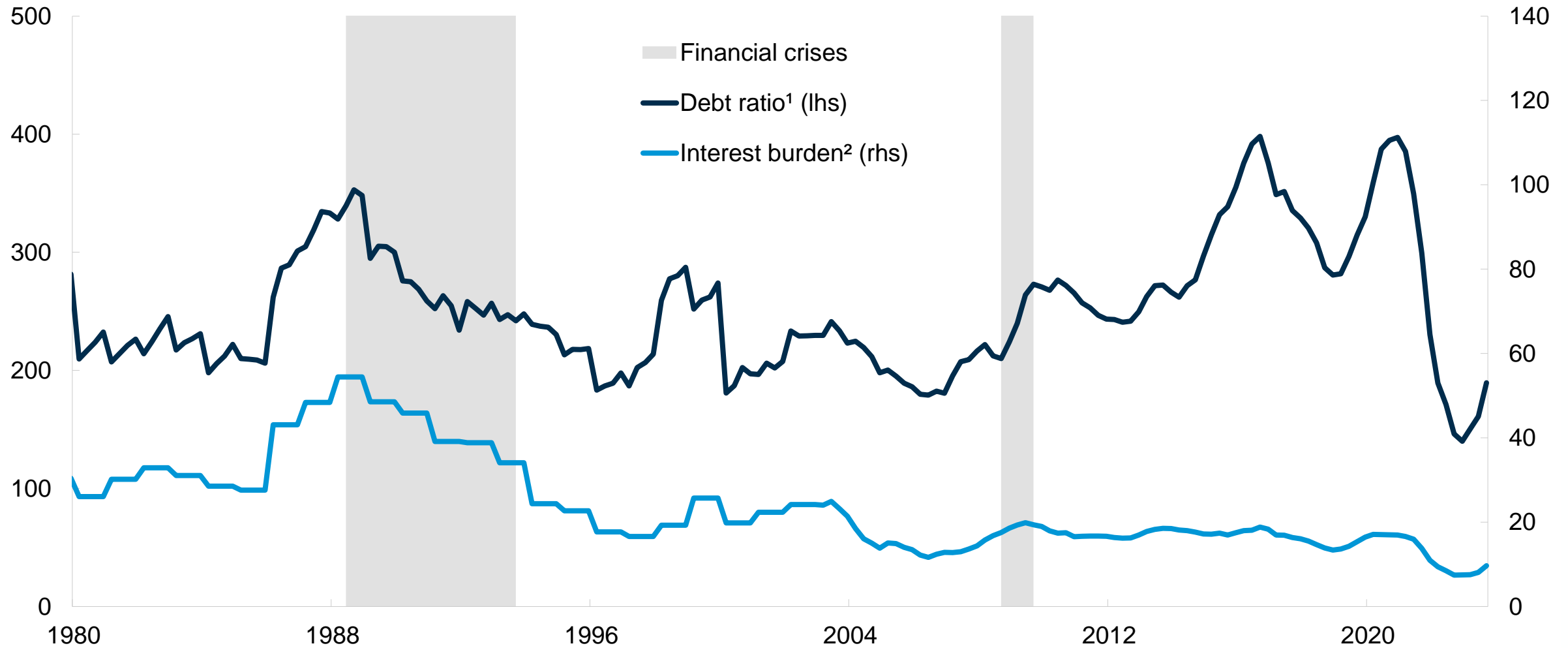
3) Interest expenses as a percentage of disposable income and interest expenses.

Sources: Statistics Norway and Norges Bank



## 9. Non-financial enterprises' debt ratio and interest burden

Percent. 1980 Q1 – 2023 Q3



1) Loan debt as a percentage of disposable income, dividends paid and interest expenses.

2) Interest expenses as a percentage of disposable income. Dividends paid and interest expenses.

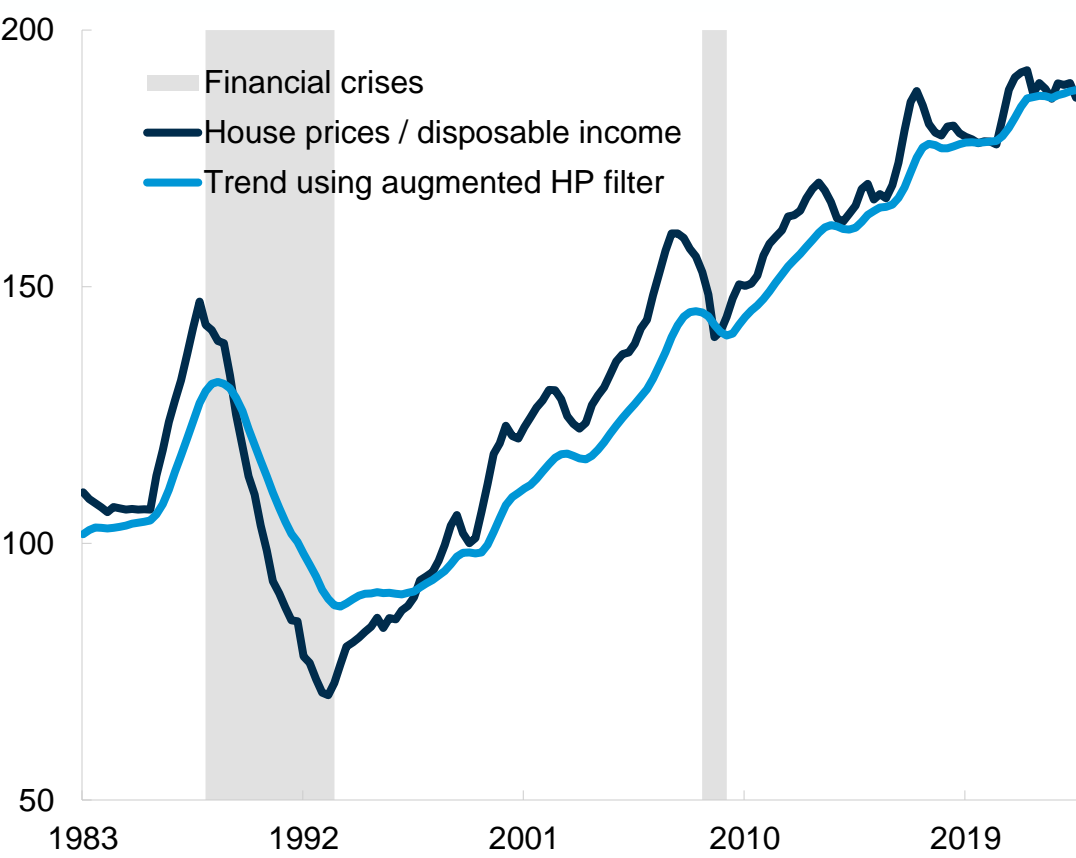
Sources: Statistics Norway and Norges Bank



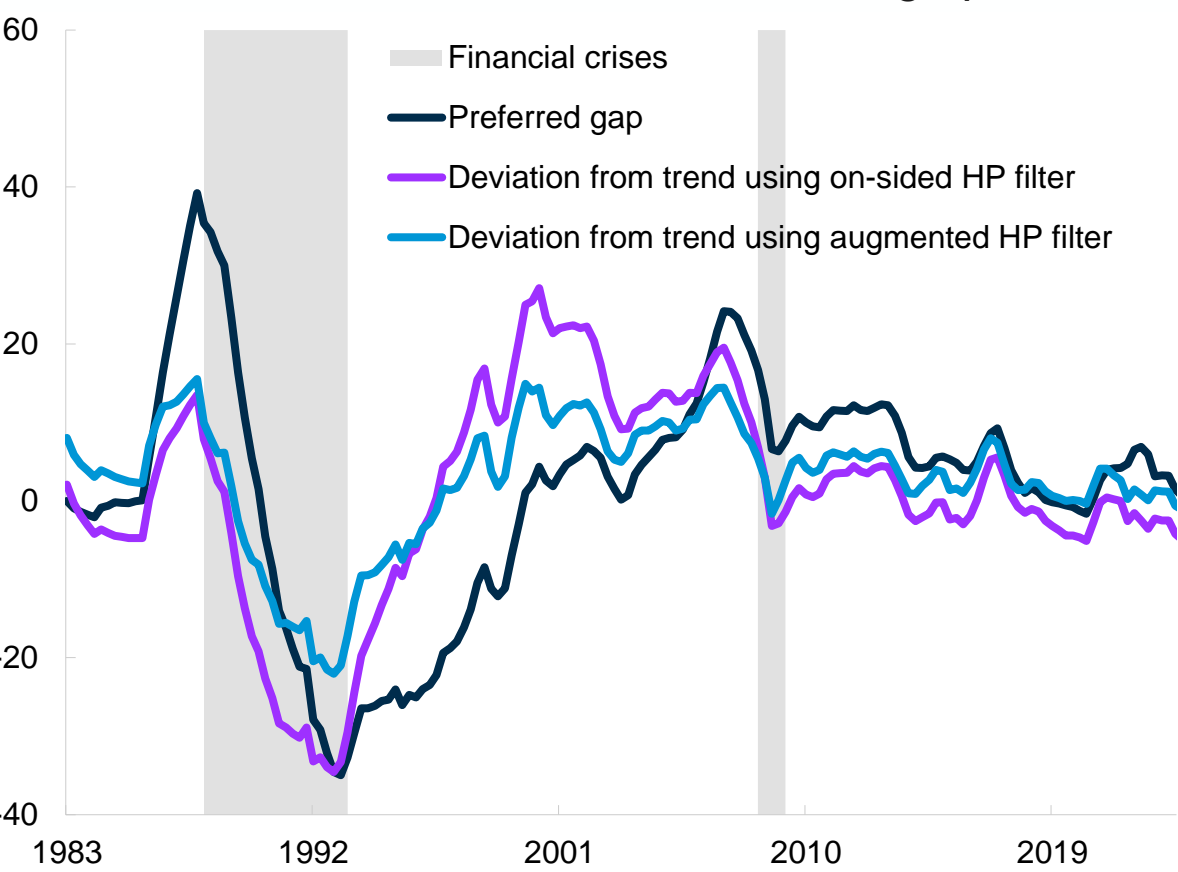
# 10. Ratio of house prices to disposable income

Percent. 1983 Q1 – 2023 Q3

Index. 1998 Q4 = 100



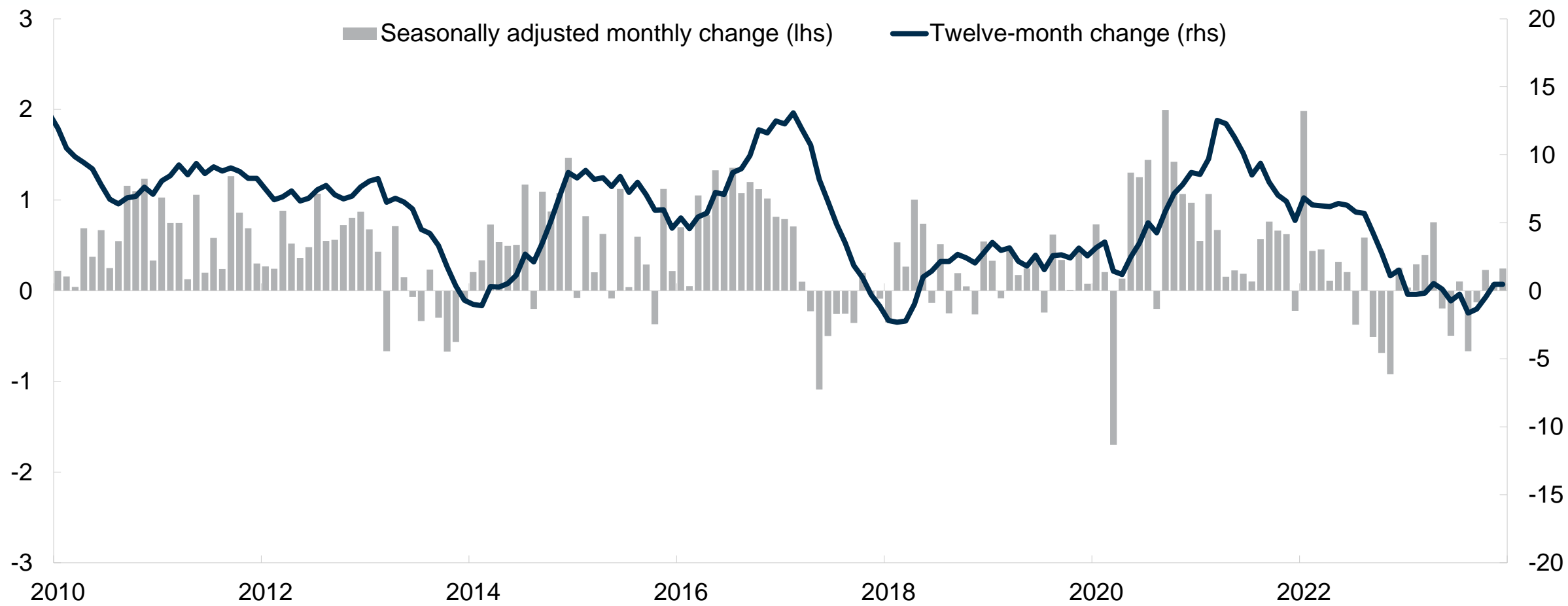
Deviation from estimated trends. Percentage points



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

# 11. House price inflation

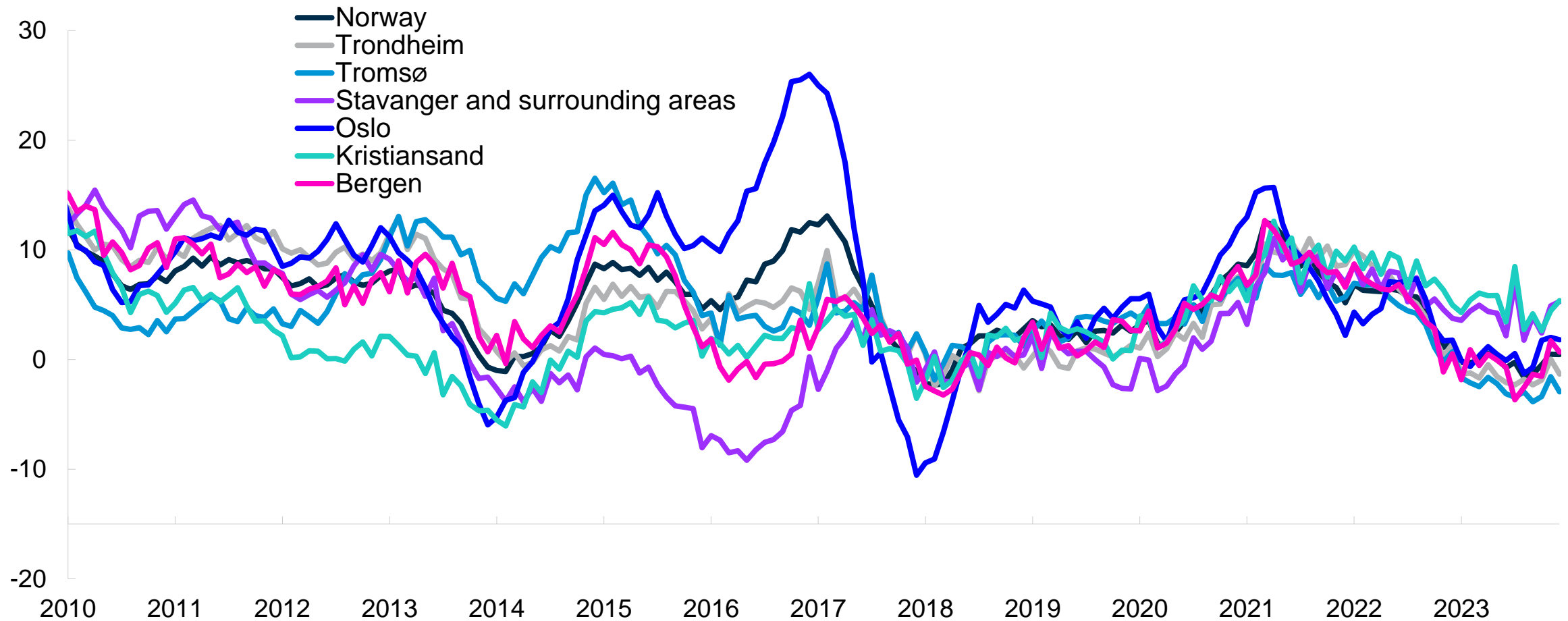
Percent. January 2010 – December 2023



Sources: Eiendomsverdi, Finn.no and Real Estate Norway

## 12. House price inflation in cities

Twelve-month change. Percent. January 2010 – December 2023

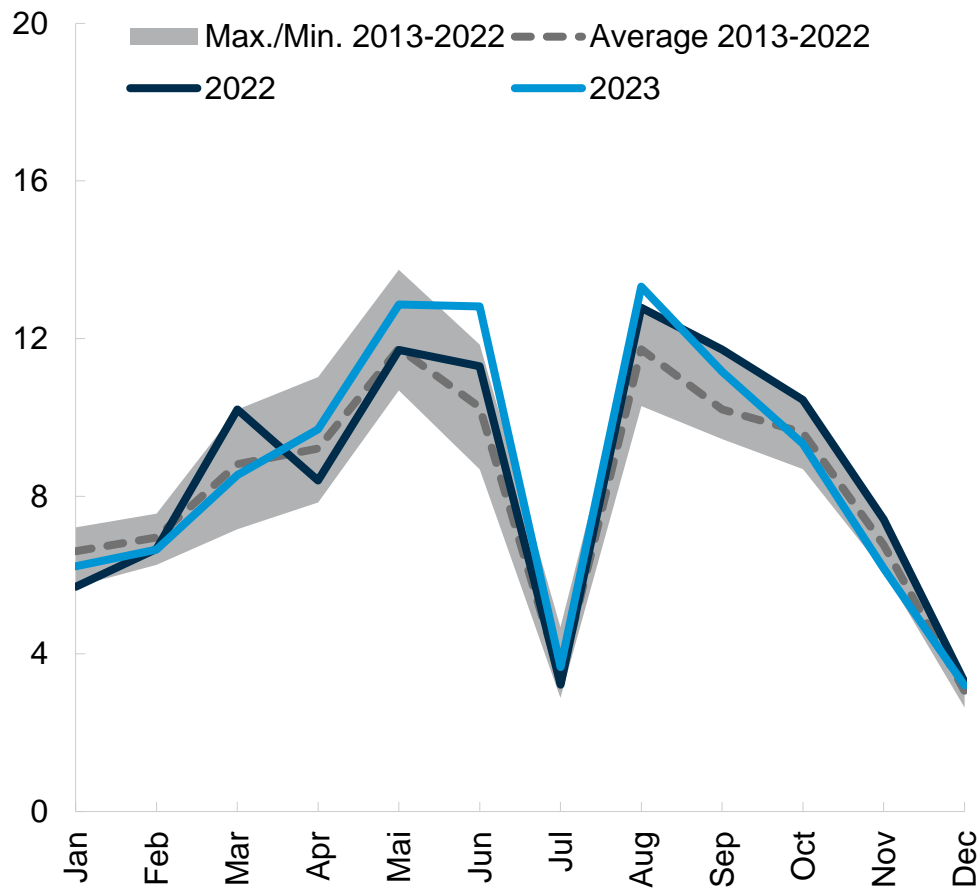


Sources: Eiendomsverdi, Finn.no and Real Estate Norway

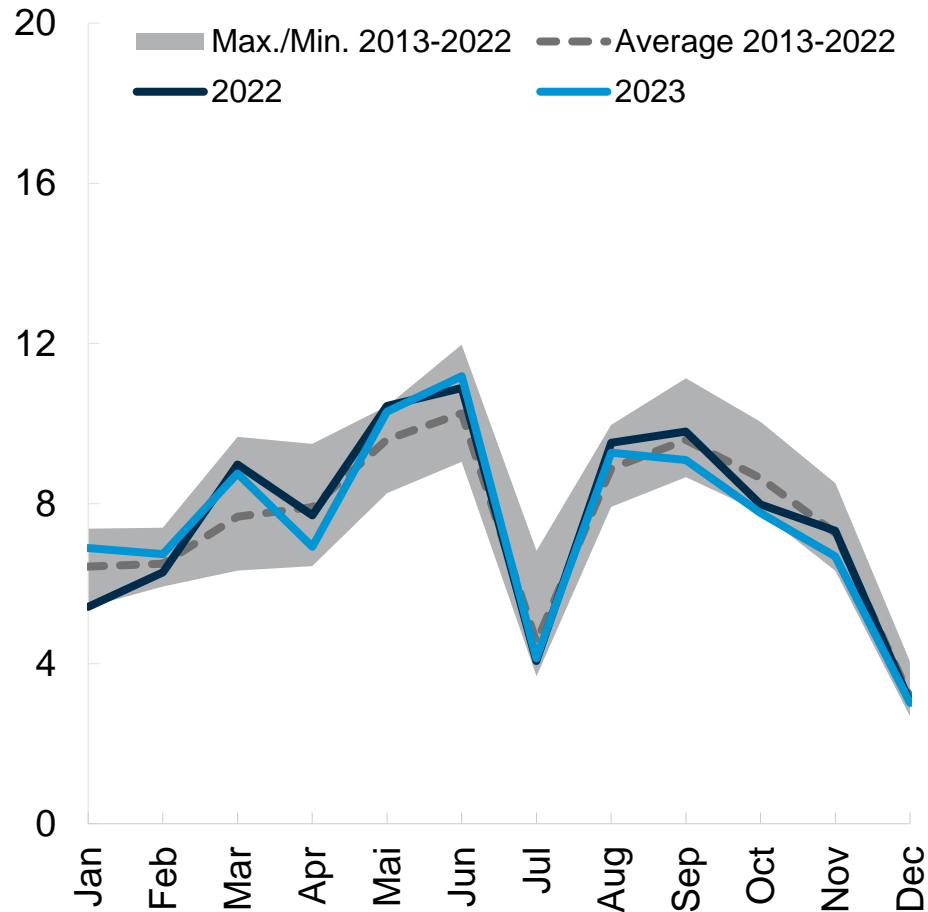
# 13. Activity in the market for existing homes

In thousands of existing homes. January 2013 – December 2023

Listed for sale



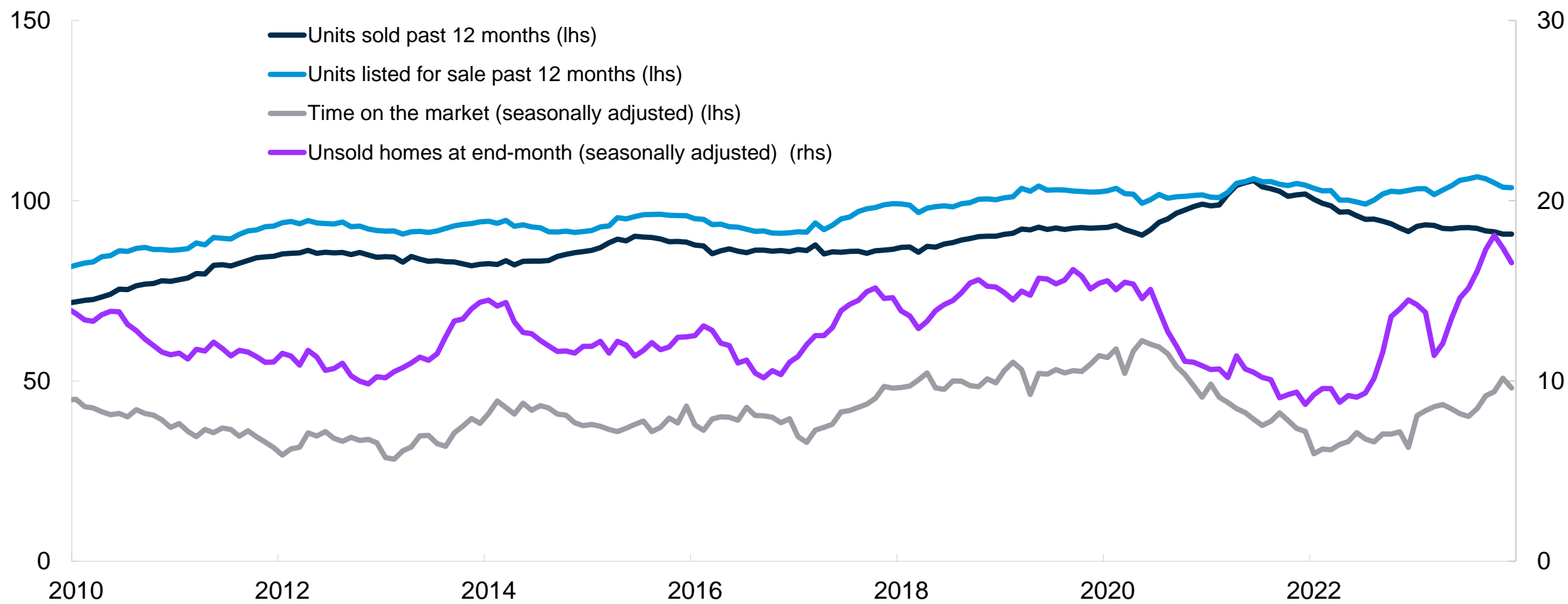
Turnover



Sources: Eiendomsverdi, Finn.no and Real Estate Norway

# 14. Activity in the market for existing homes

Thousands of existing homes. Selling time in days. January 2010 – December 2023



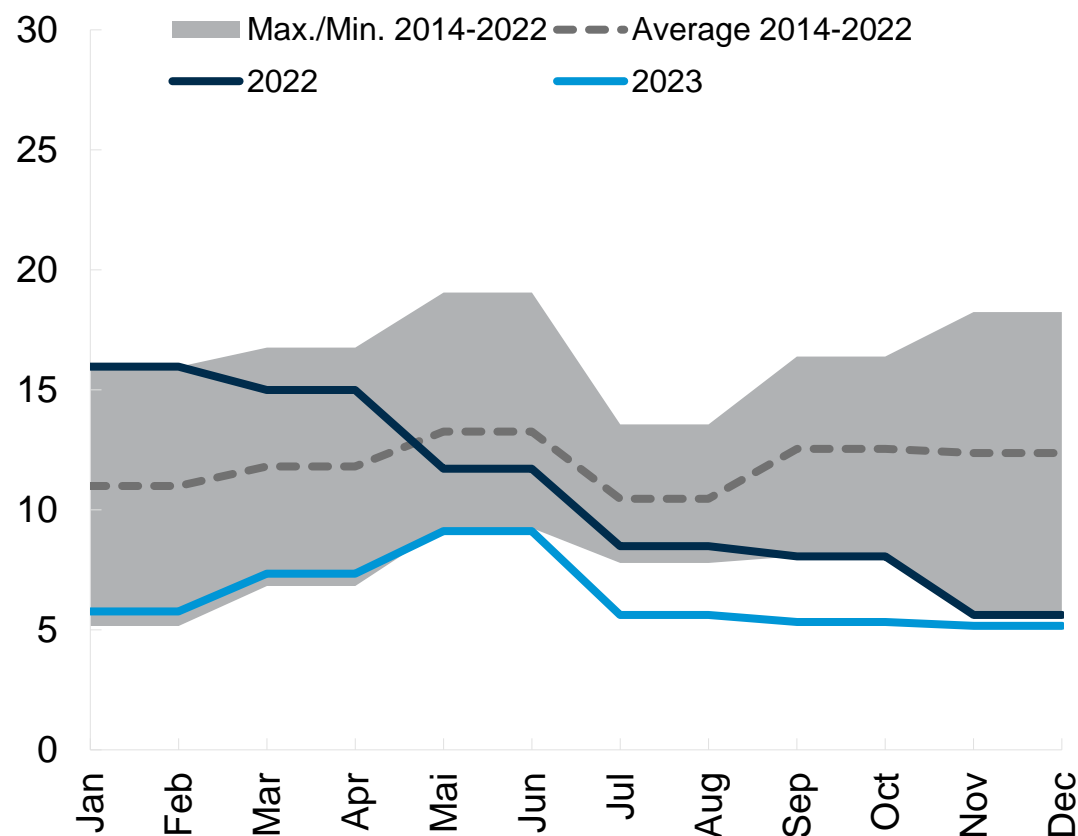
Sources: Eiendomsverdi, Finn.no, Real Estate Norway and Norges Bank



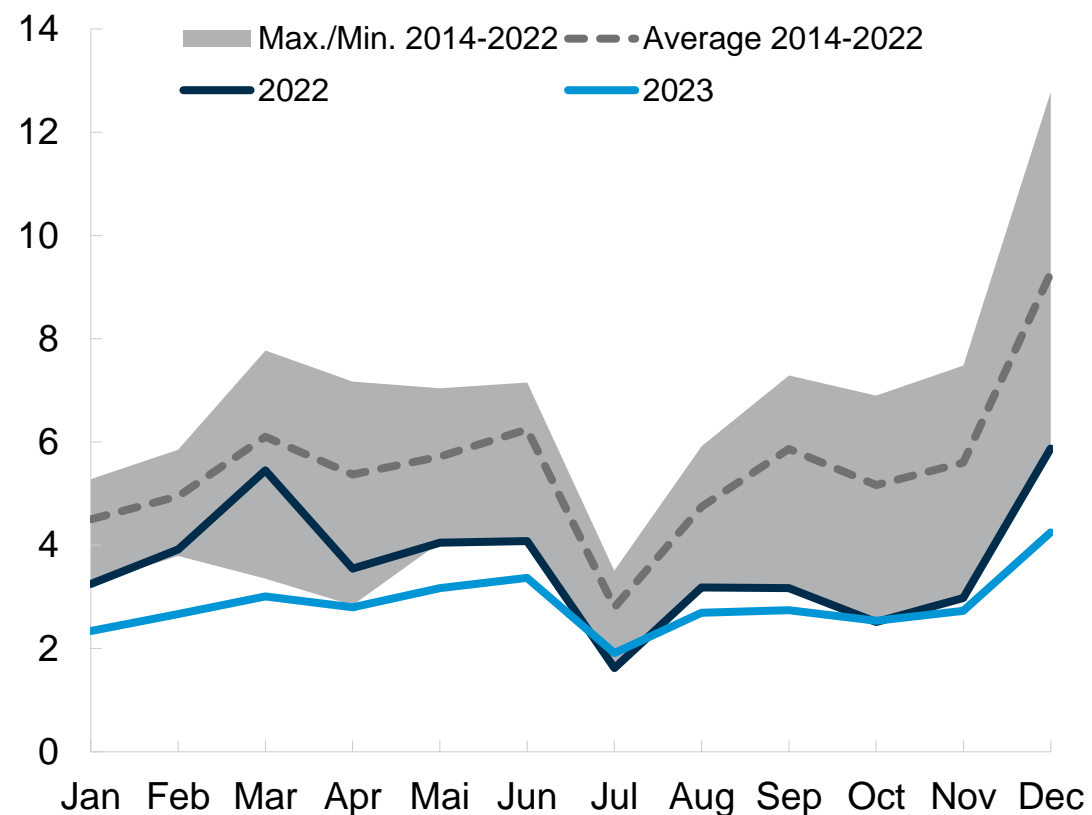
# 15. Activity in the market for new homes

Turnover. Hundreds of new homes. January 2014 – December 2023

Flats<sup>1)</sup>



Detached and semi-detached<sup>2)</sup>

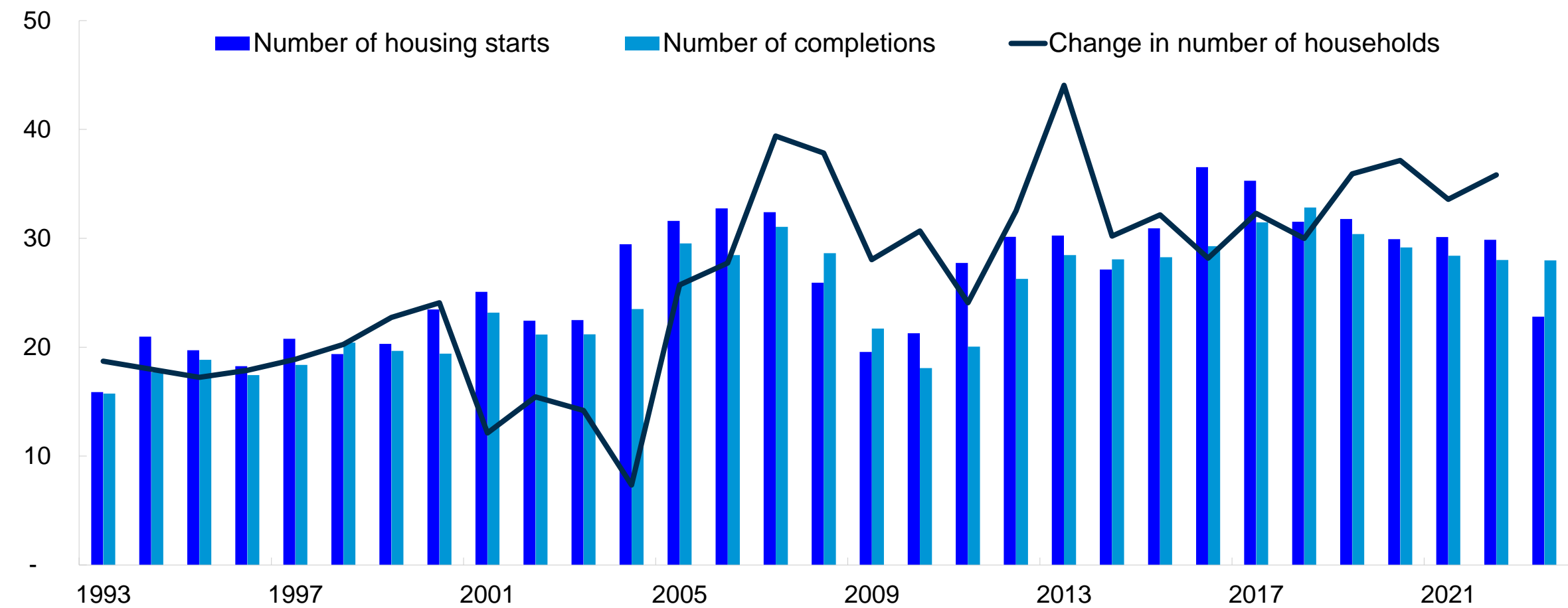


Flats data are from Economics Norway's «ECON Nye Boliger» database and only include projects of more than 15 units. The data have been converted from bi-monthly to monthly frequencies with the same distribution. 2) Detached and semi-detached house data are from the Norwegian Homebuilders' Association.

Sources: Norwegian Homebuilders' Association, Economics Norway's ECON nye boliger and Norges Bank

# 16. Residential construction and household formation

Housing starts, completions and annual change in number of households.  
1993 - 2023



Sources: Statistics Norway and Norges Bank

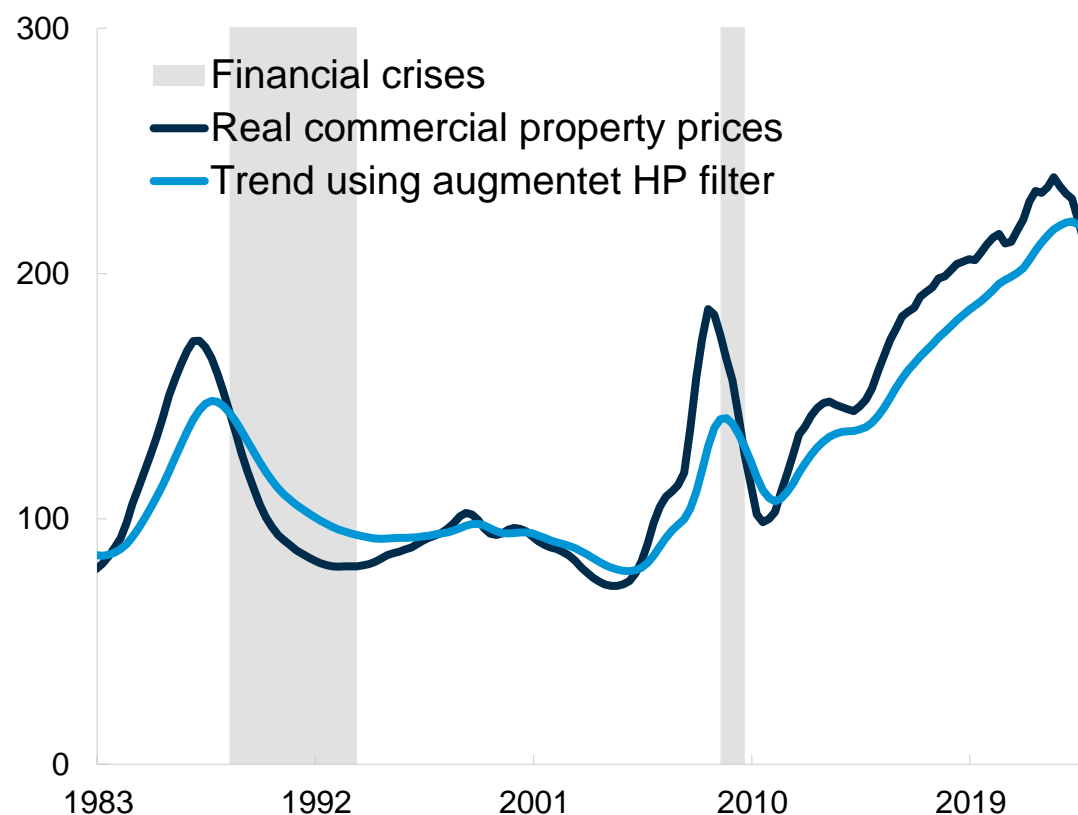




# 17. Real commercial property prices

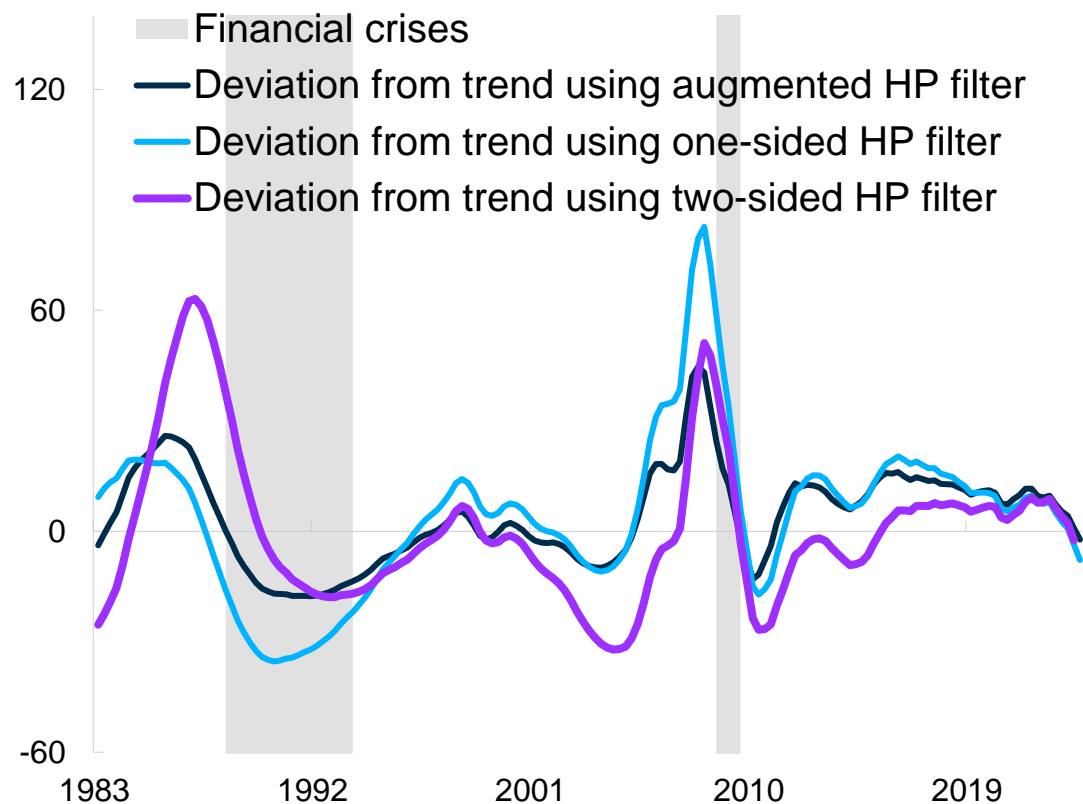
1983 Q1 – 2023 Q3

Index. 1998 = 100



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

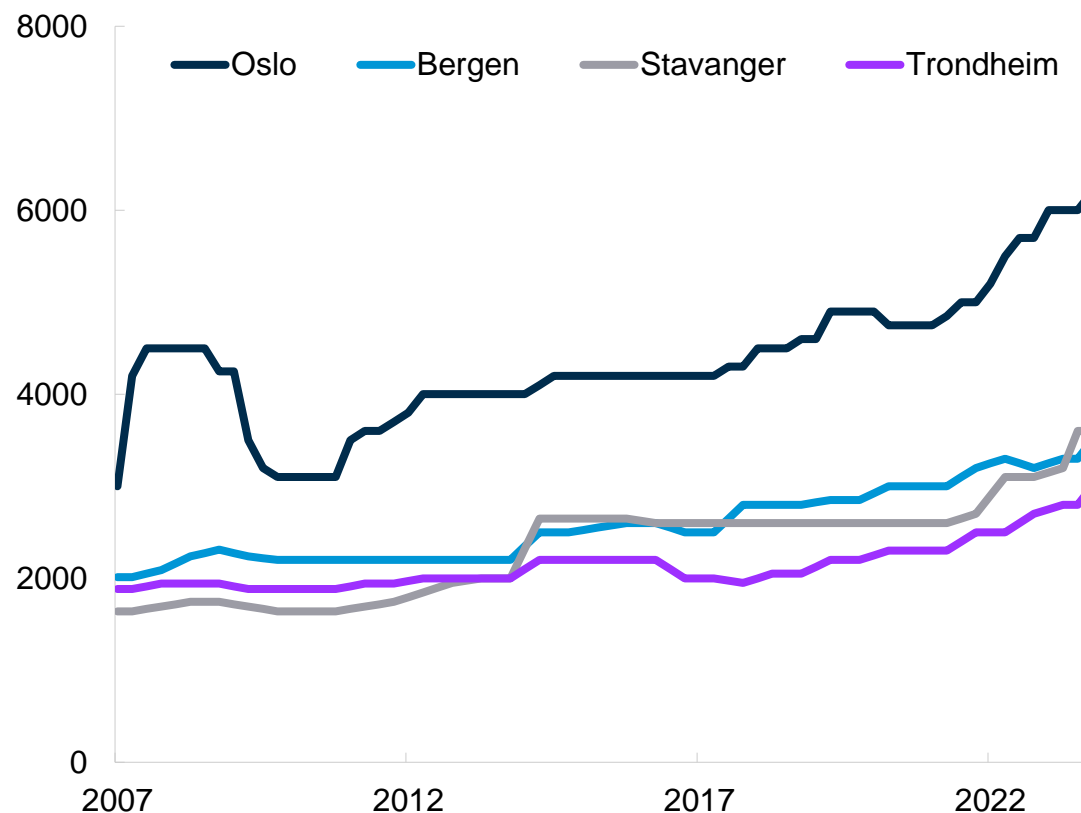
Deviation from estimated trends. Percentage points



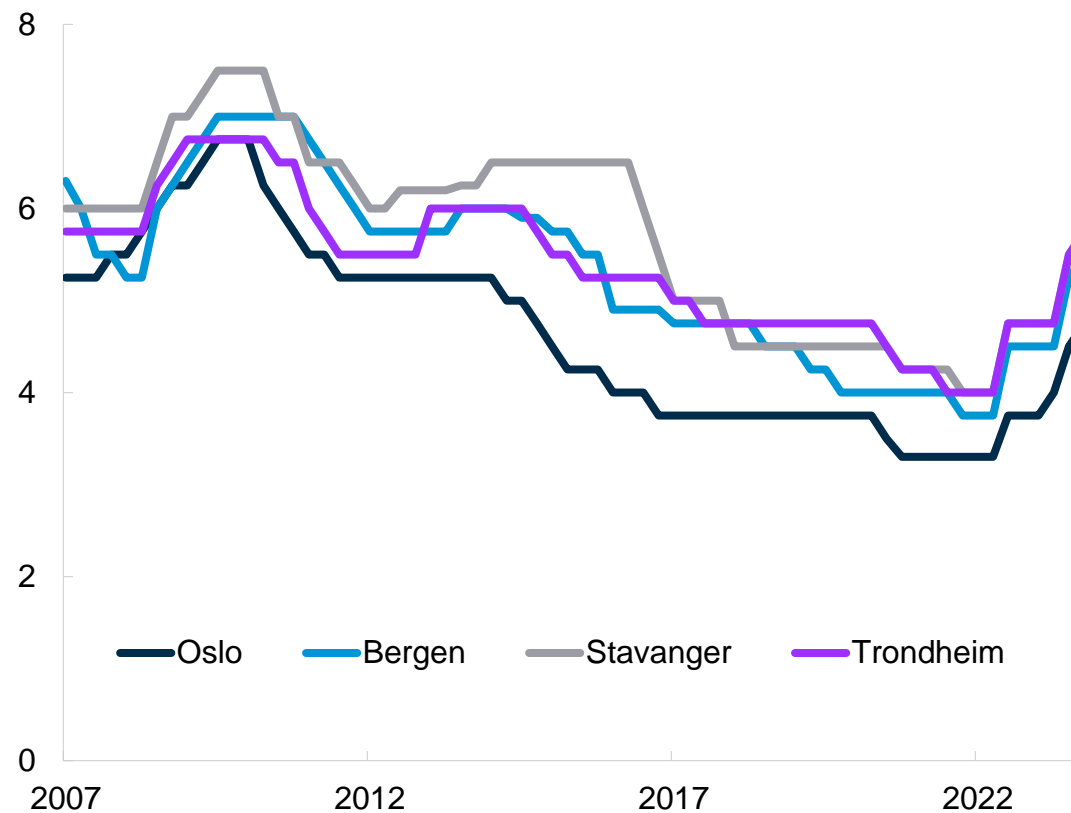
# 18. Rents and yields

Prime real estate in cities. 2007 Q1 – 2023 Q4

Rents.<sup>1)</sup> NOK per square metre



Yields. Percent

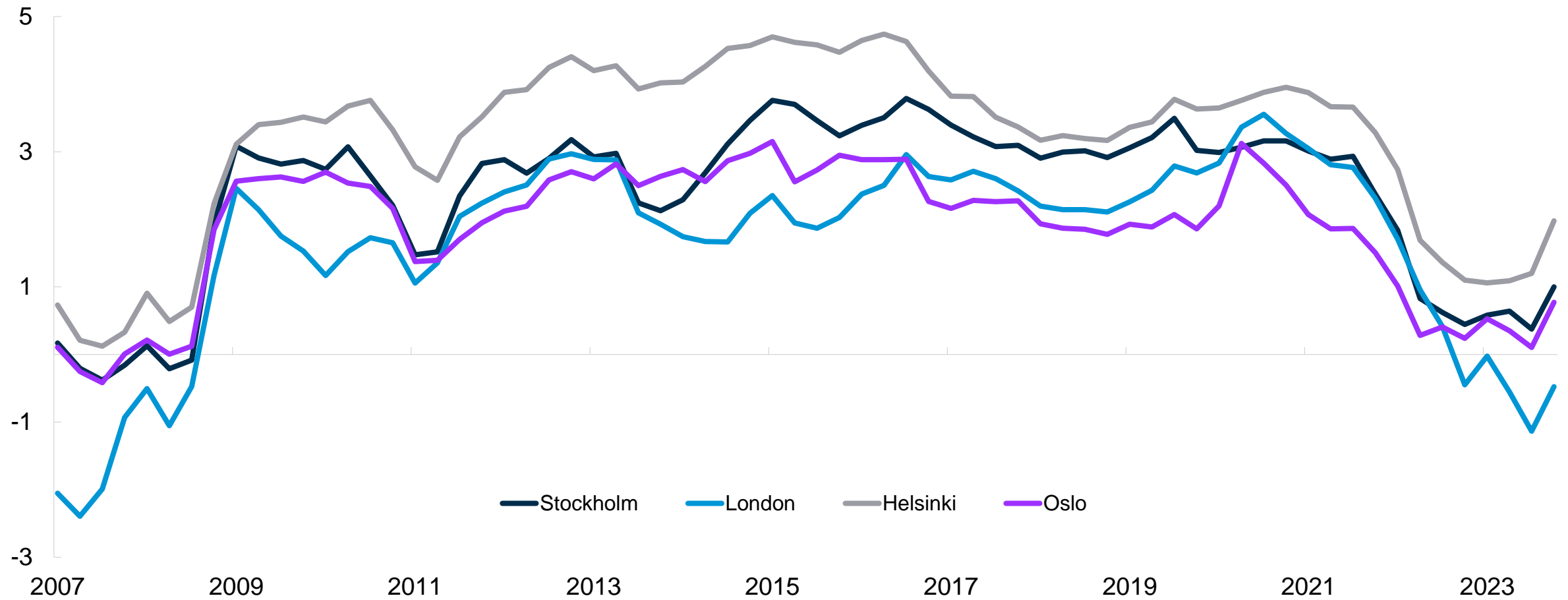


1) Quarterly data for Bergen, Trondheim and Stavanger are estimated using linear interpolation of semi-annual observations

Sources: Akershus Eiendom and JLL

## 19. Estimated risk premium in commercial real estate

Yields less than five-year swap rate. Prime real estate. Percentage points.  
2007 Q1 – 2023 Q4

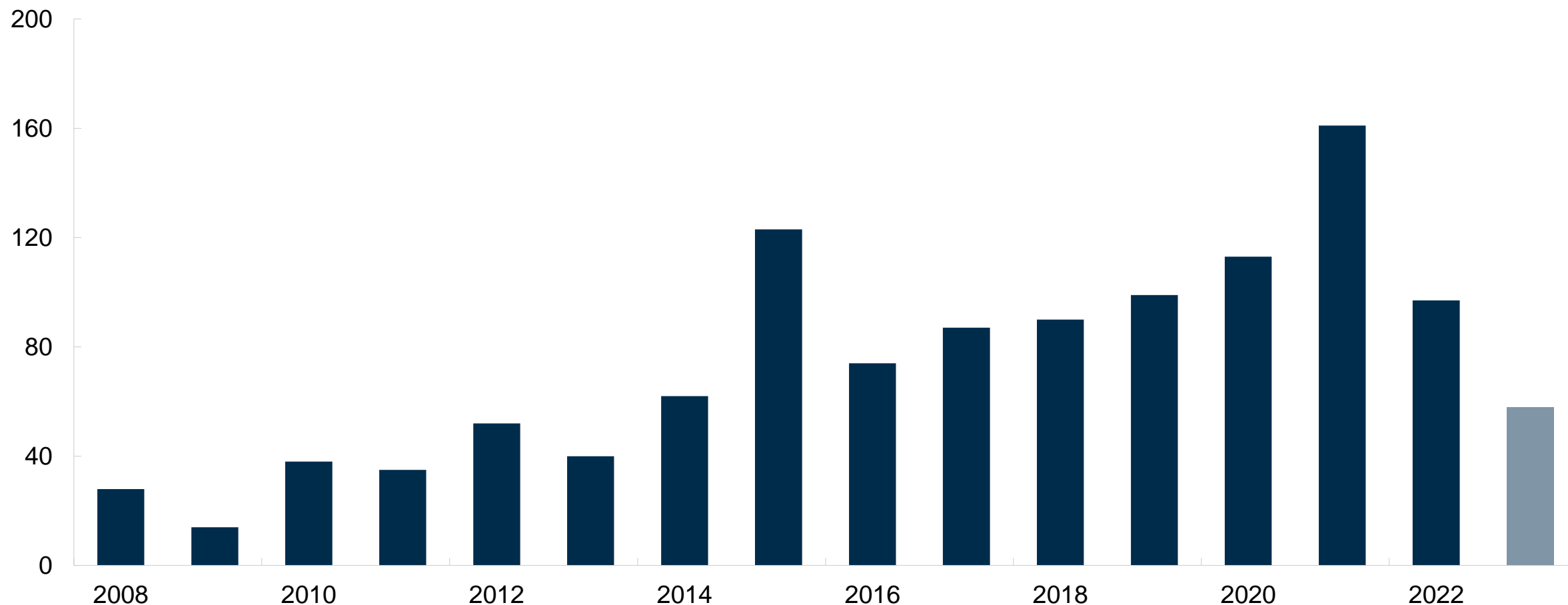


Sources: Datastream and JLL



## 20. Volume of CRE transactions

In billions of NOK. 2008 – 2023. Projection for 2023

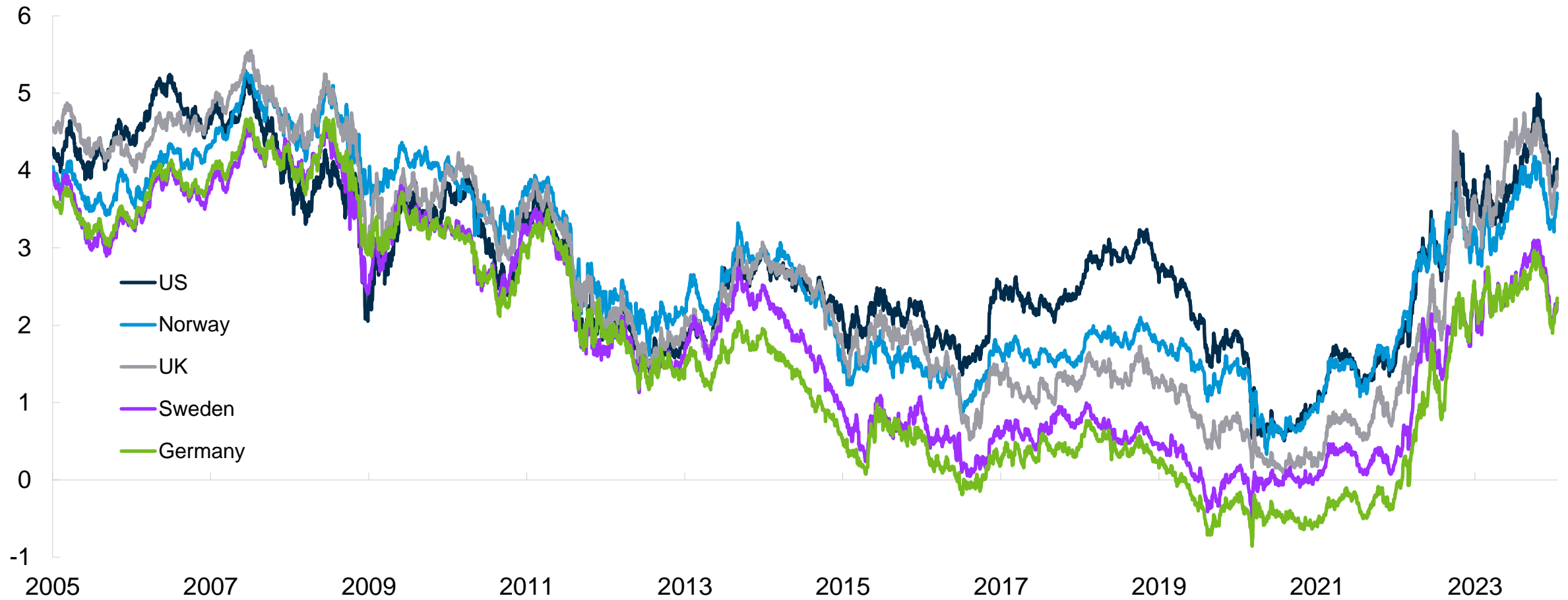


Sources: Akershus Eiendom and Entra konsensusrapport 2023 Q3



## 21. Long-term government bond yields

Ten-year government bonds. Percent. 1 January 2005 – 19 January 2024

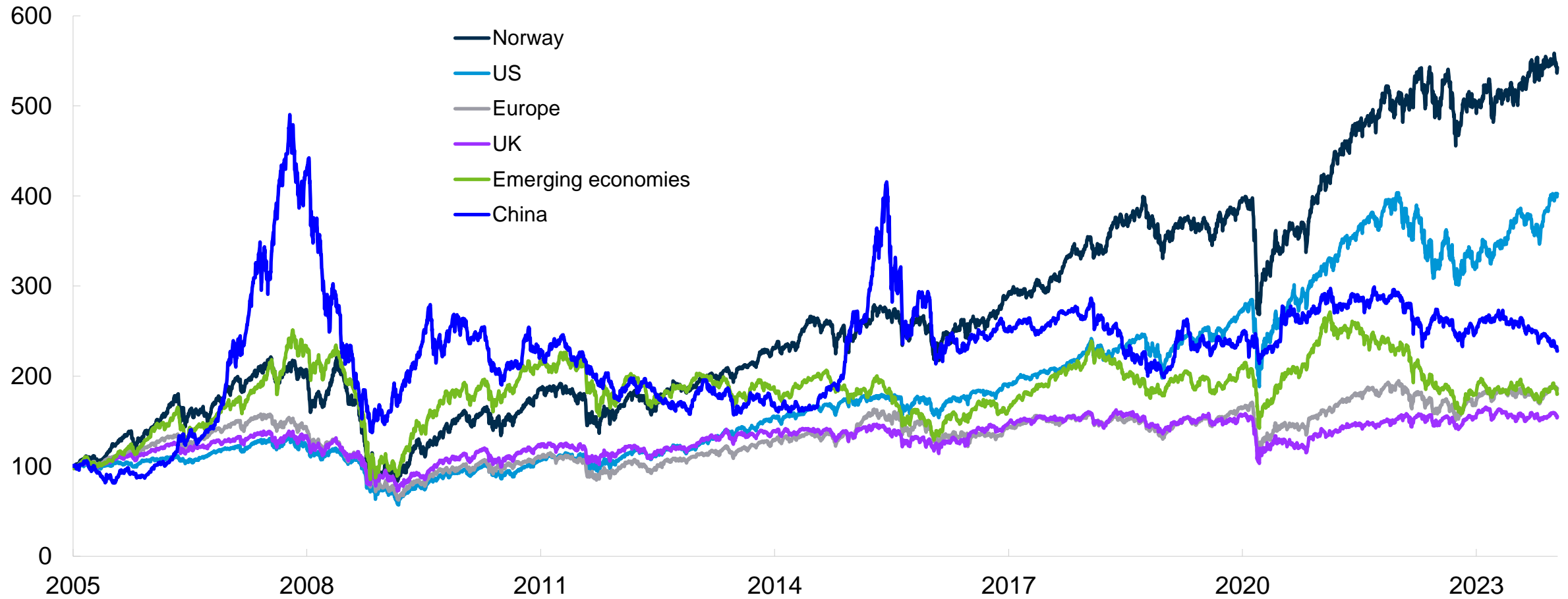


Sources: Bloomberg and Norges Bank



## 22. Stock prices

Selected equity markets. Index. 4 January 2005 = 100. 1 January 2005 – 19 January 2024

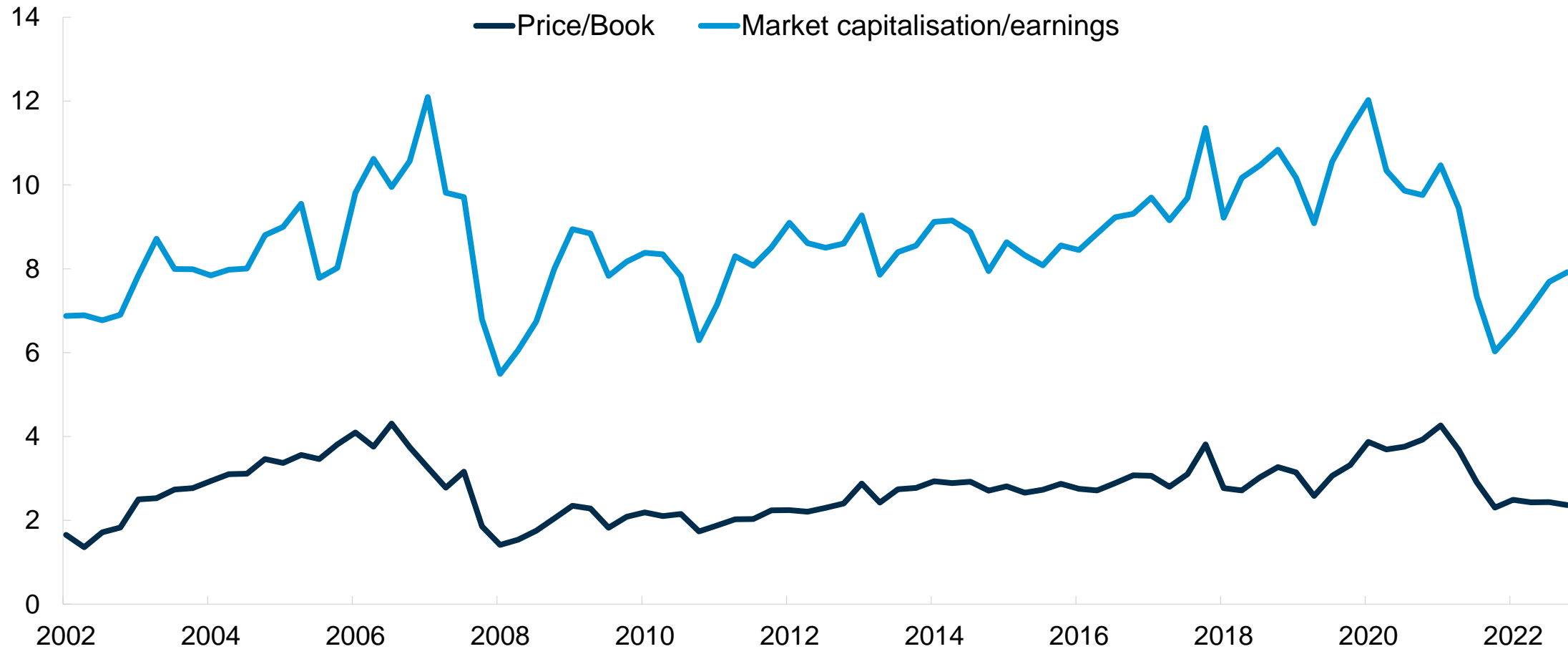


Sources: Bloomberg and Norges Bank



## 23. Market capitalisation-to-earnings and price-to-book ratio

Norwegian non-financial companies on Oslo Stock Exchange.<sup>1)</sup> 2002 Q4 – 2023 Q3



1) Oil and gas extraction companies are excluded from the sample. Market capitalisation is the value of a company's equity and interest-bearing debt less cash. Earnings are a four-quarter rolling sum of operating earnings before depreciation, amortization and impairment. Price/book is the ratio of the market value of the company's equity to its book value excluding intangible assets.

Sources: Bloomberg and Norges Bank

## 24. Enterprise value-to-earnings ratio

Oslo Stock Exchange. Earnings in the next four quarters.<sup>1)</sup> 2006 Q2 – 2023 Q4



1) Earnings are operating profit before depreciation, impairment, interest income and interest expenses.

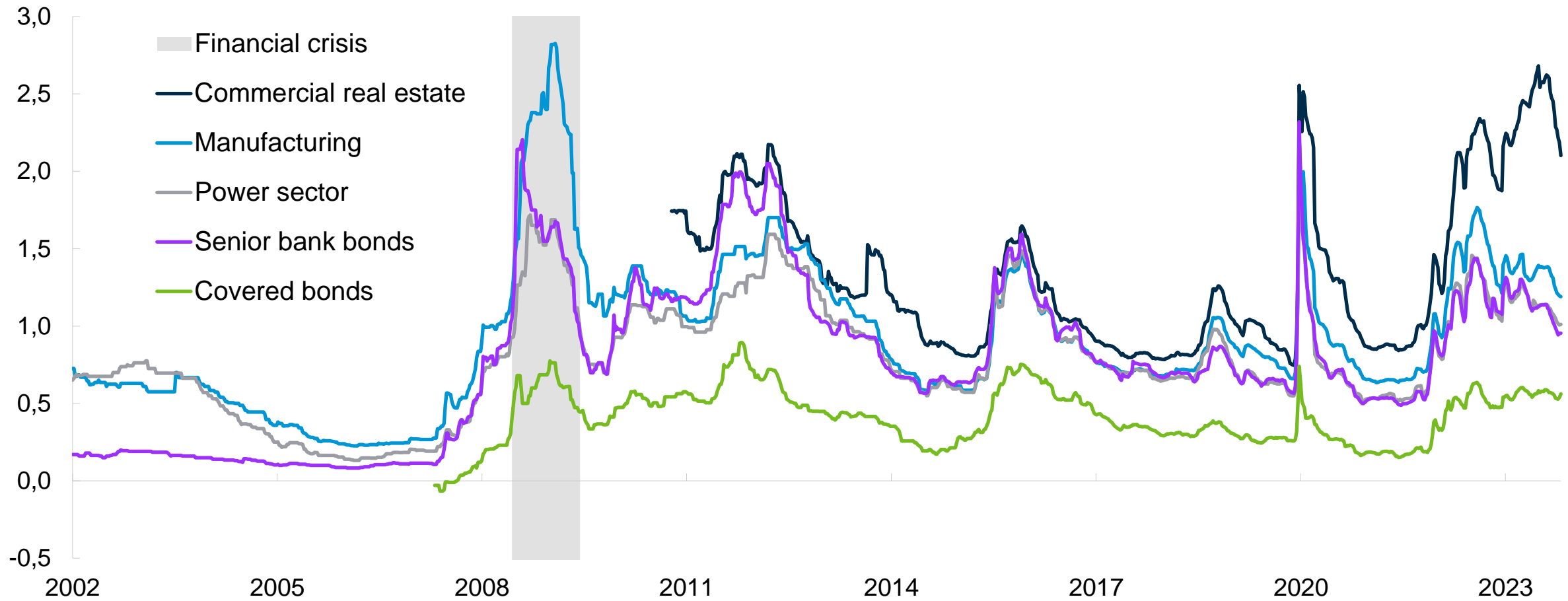
Source: Bloomberg





## 25. Bond market risk premium<sup>1)</sup>

Investment grade. Five-year maturity. Percentage points over three-month Nibor.  
Week 13 2002 – week 3 2024<sup>2)</sup>



1) Indicative risk premium on senior five-year bonds issued by banks and companies with high credit rating (BBB- or better)

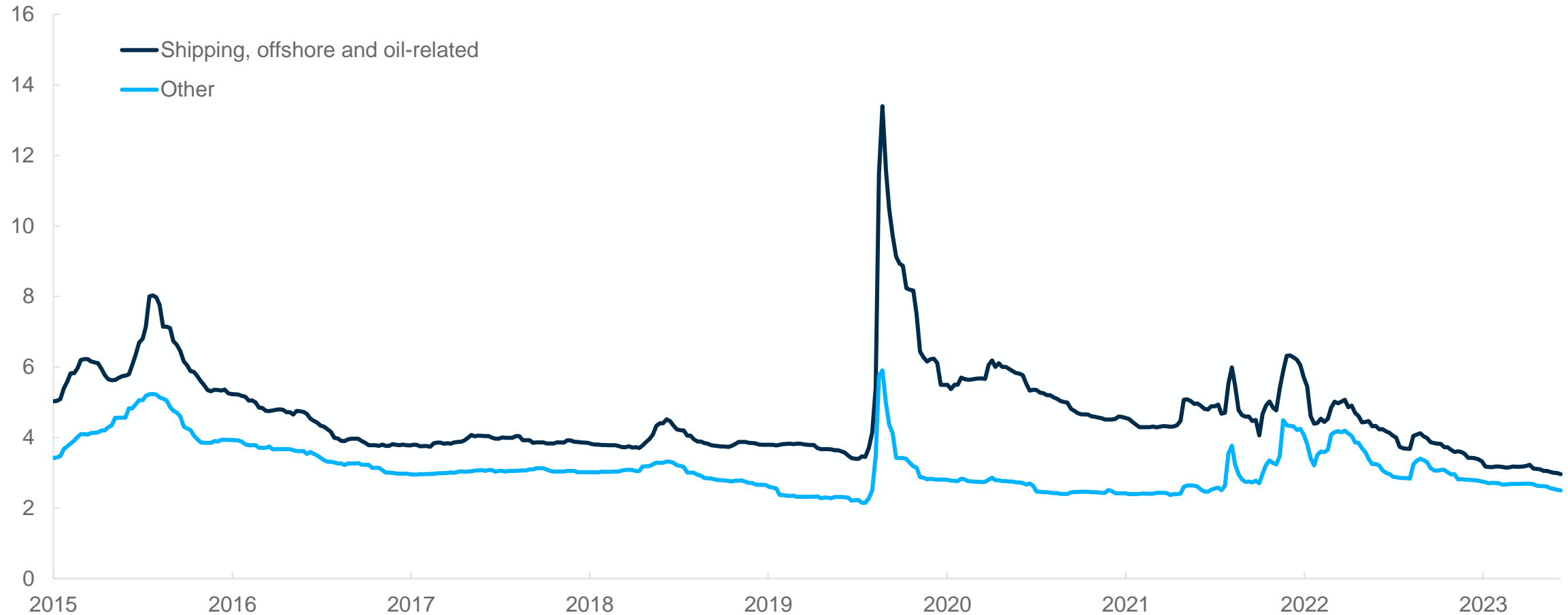
2) There is a break in the series owing to a change in the data source from DNB Markets to Nordic Bond Pricing in August 2015. Covered bonds data from week 27 2007. Commercial real estate data from week 1 2011.

Sources: DNB Markets and Nordic Bond Pricing



## 26. Bond market risk premium

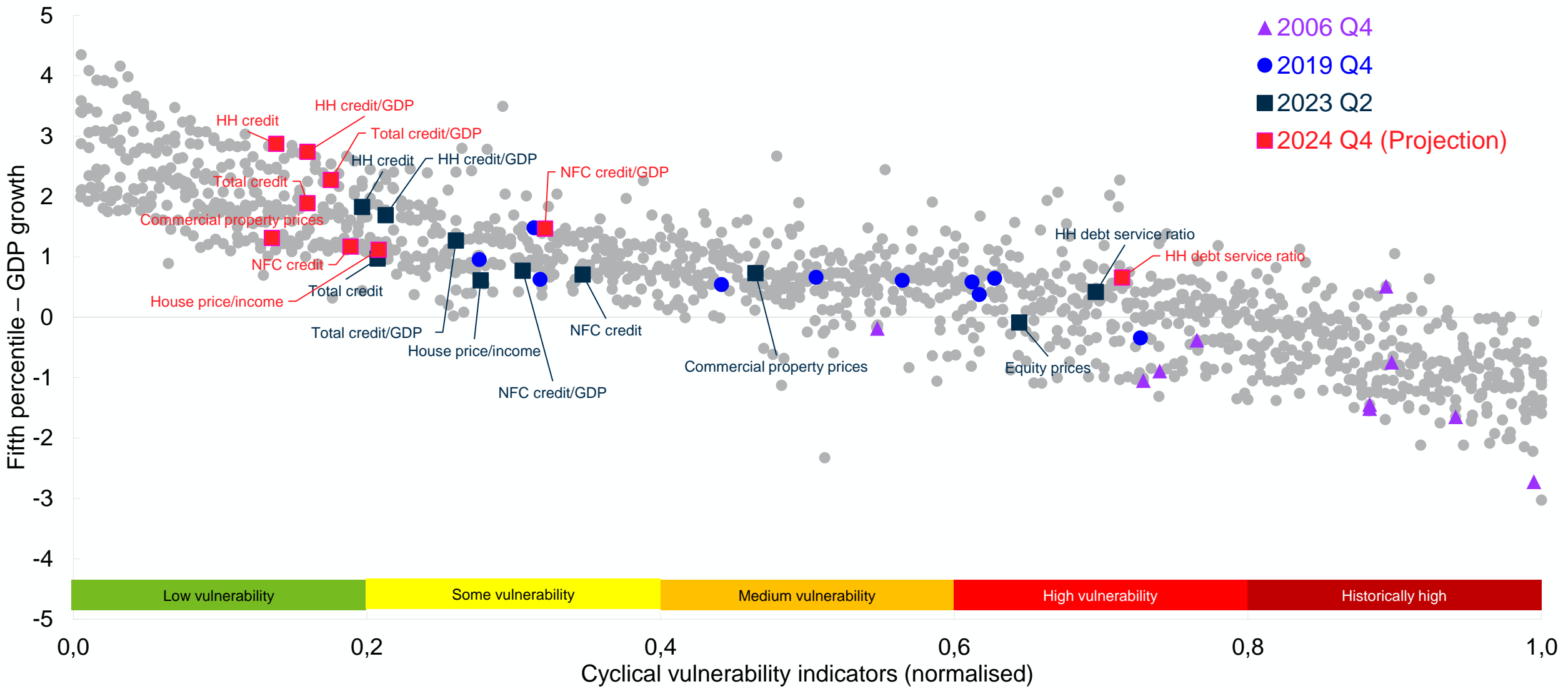
High-yield. Five-year maturity. Percentage points over three-month Nibor.  
Week 23 2015 – Week 2 2024



Source: Nordic Bond Pricing

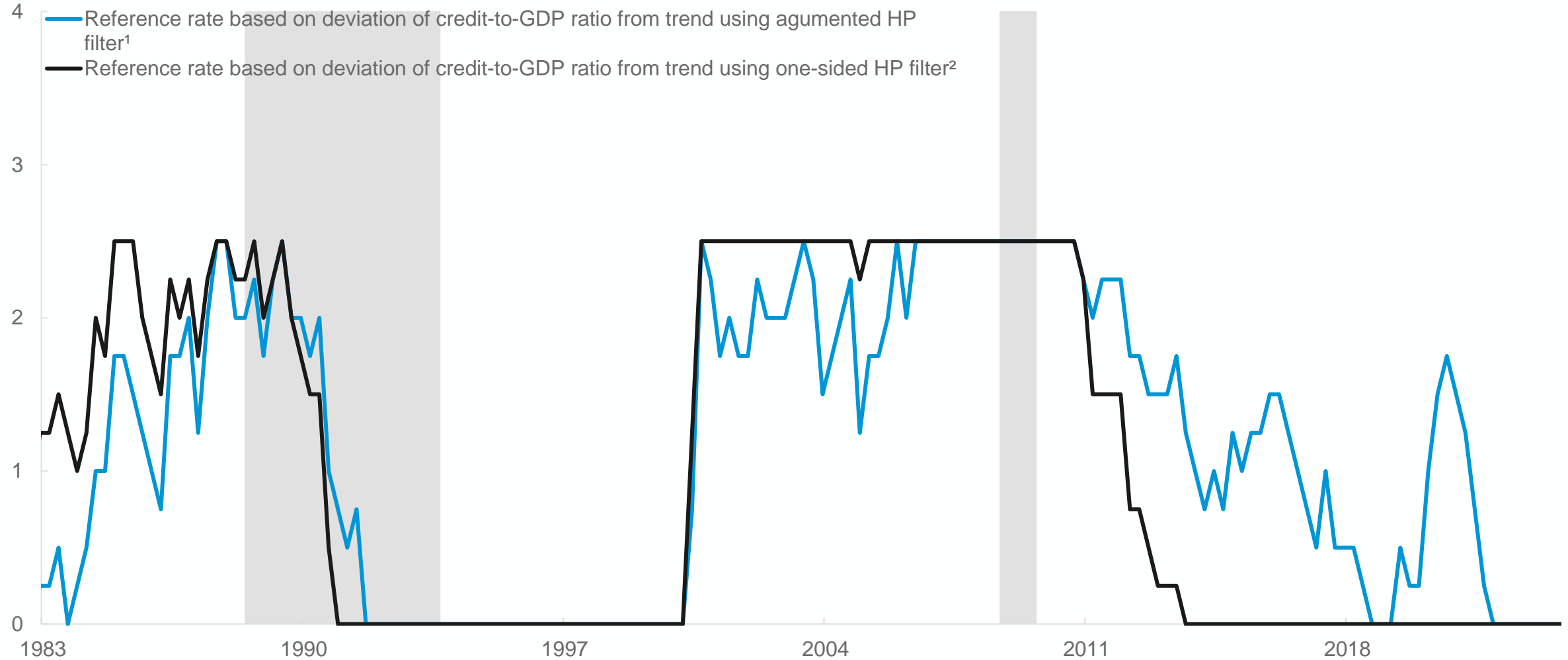
# 27. Linkages between cyclical vulnerabilities and GDP growth

Indicators of cyclical vulnerabilities (normalised) on the horizontal scale and 5th percentile projections for GDP growth on the vertical scale. 1985 Q1 – 2023 Q2. Predictions from 2023 Q3 from MPR 3/23 and FSR 2023 H2



## 28. Reference rates for the countercyclical capital buffer under alternative trend estimates

Percent. 1983 Q1 – 2023 Q4



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

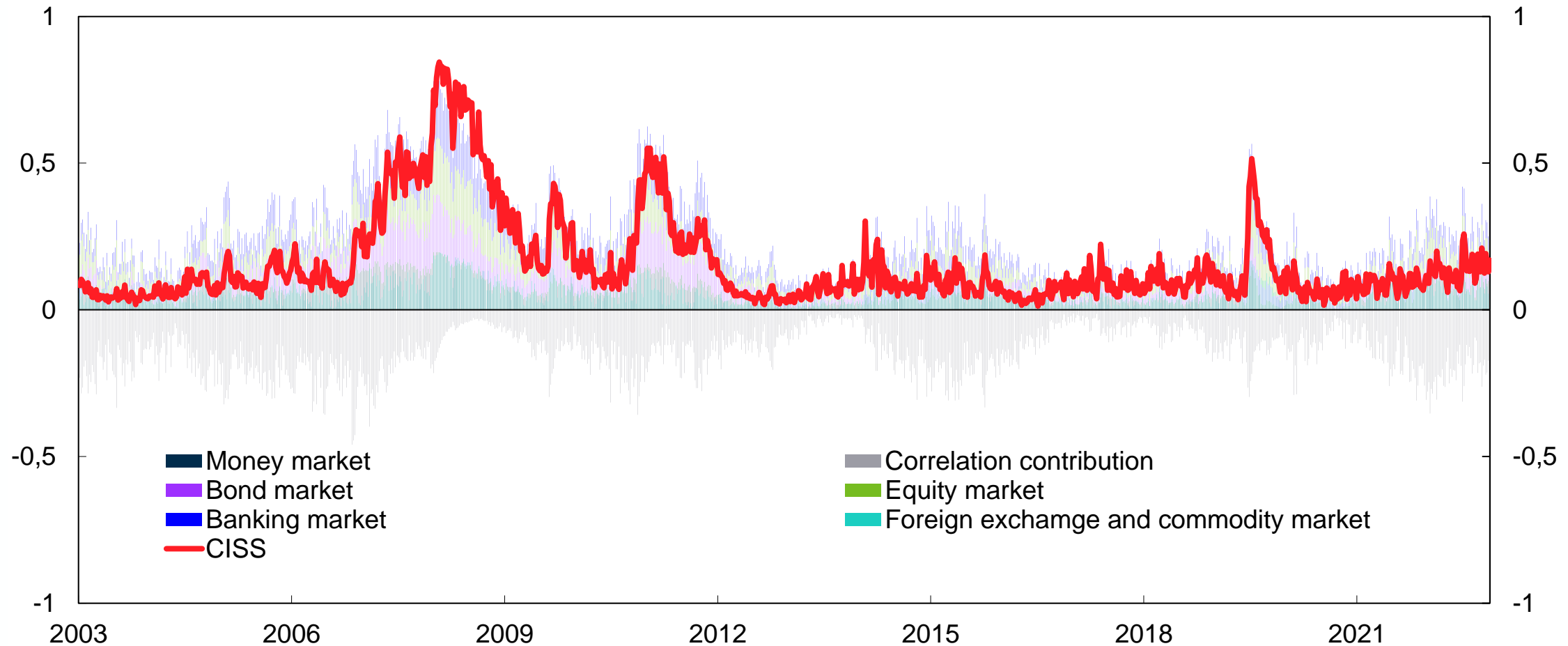
2) One-sided Hodrick-Prescott filter. Lambda = 400 000.

Sources: IMF, Statistics Norway og Norges Bank



## 29. CISS indicator for Norway<sup>1)</sup>

Week 38 2003 – week 43 2023



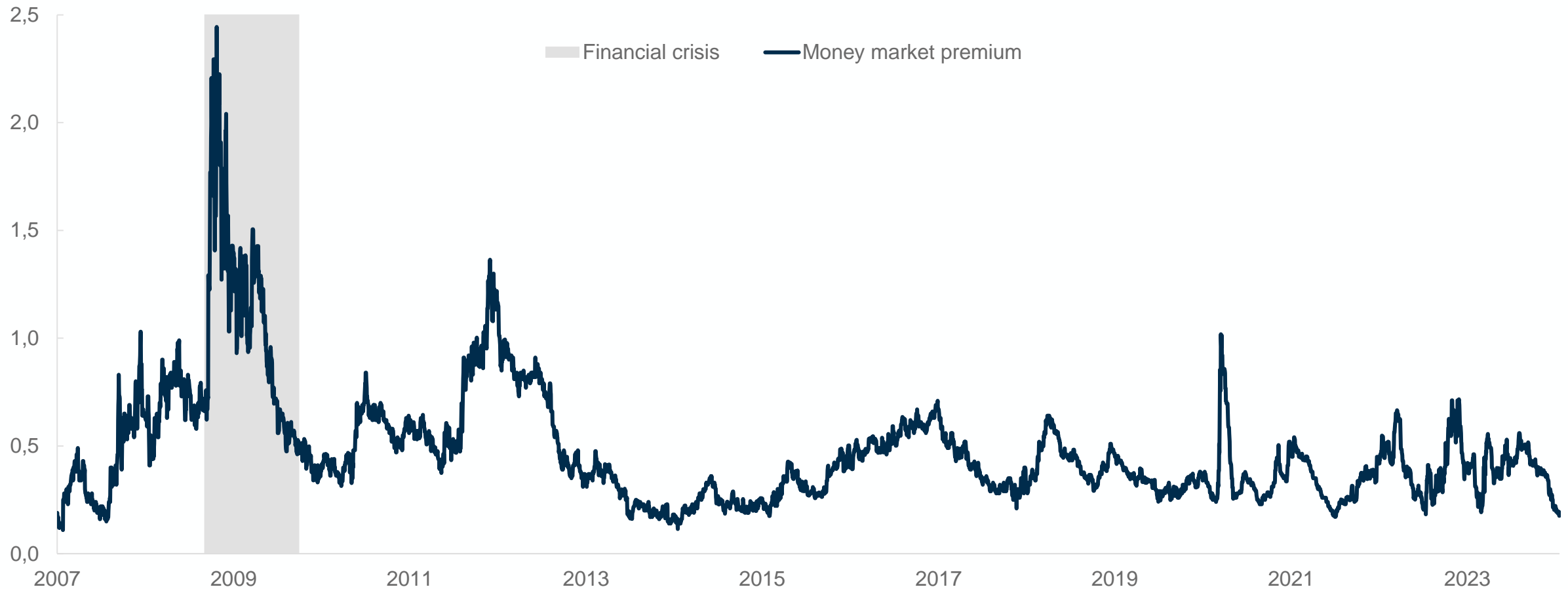
1) The CISS, shown by the red line, is higher the more stress there is in the different market segments (the coloured areas above zero increase) and the more correlation is between market segments (the grey area below zero decreases). The CISS is described in Monetary Policy Report 1/19 and Hagen, M. and P.M. Pettersen (2019) « An improved composite indicator of systemic stress (CISS) for Norway». Staff Memo 3/19. Norges Bank.

Sources: Bloomberg, DNB Markets, Refinitiv Datastream and Norges Bank



## 30. Spread in Norwegian three-month monet market rate<sup>1)</sup>

Percentage points. 1 January 2007 – 18 January 2024



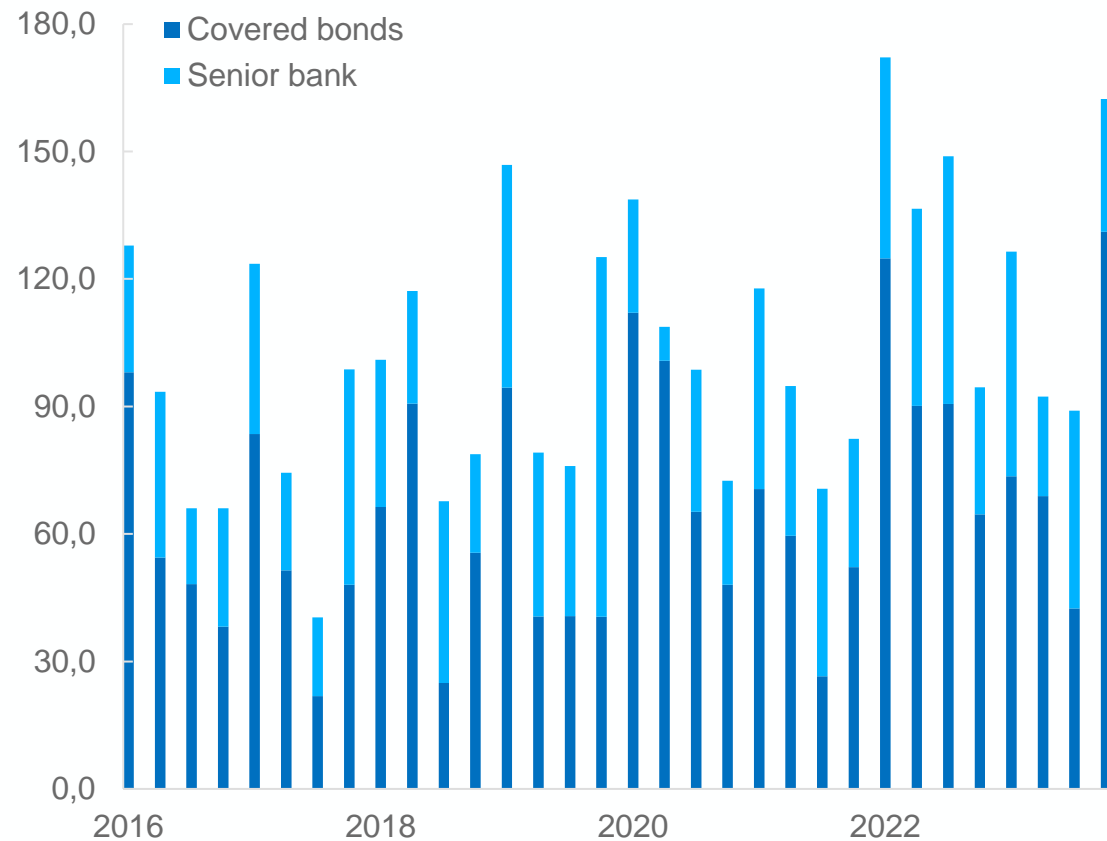
1) Norges Bank's projections of the difference between three-month money market rate and expected policy rate.

Sources: Refinitiv Datastream and Norges Bank

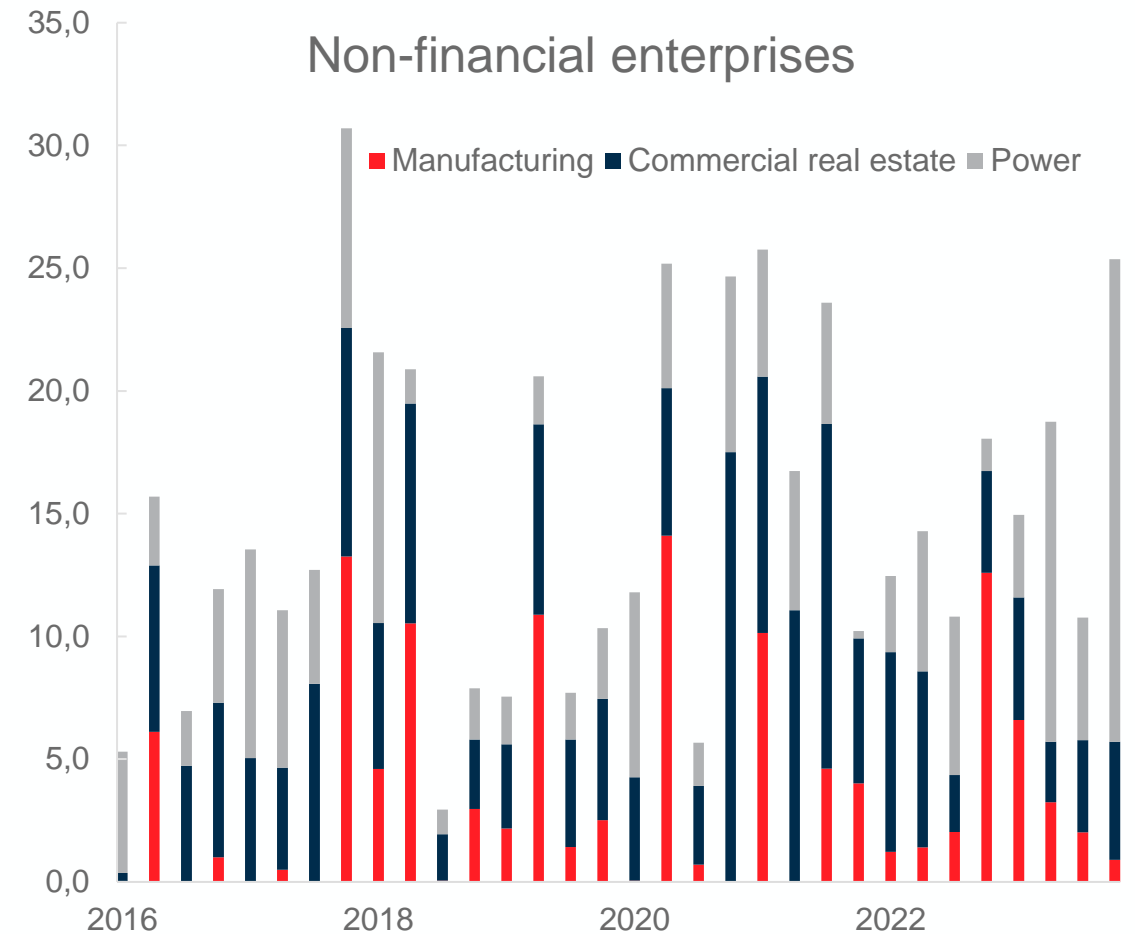
# 31. Bond market activity

In billions of NOK. Norwegian issuers. 2016 Q1 – 2023 Q4

## Banks



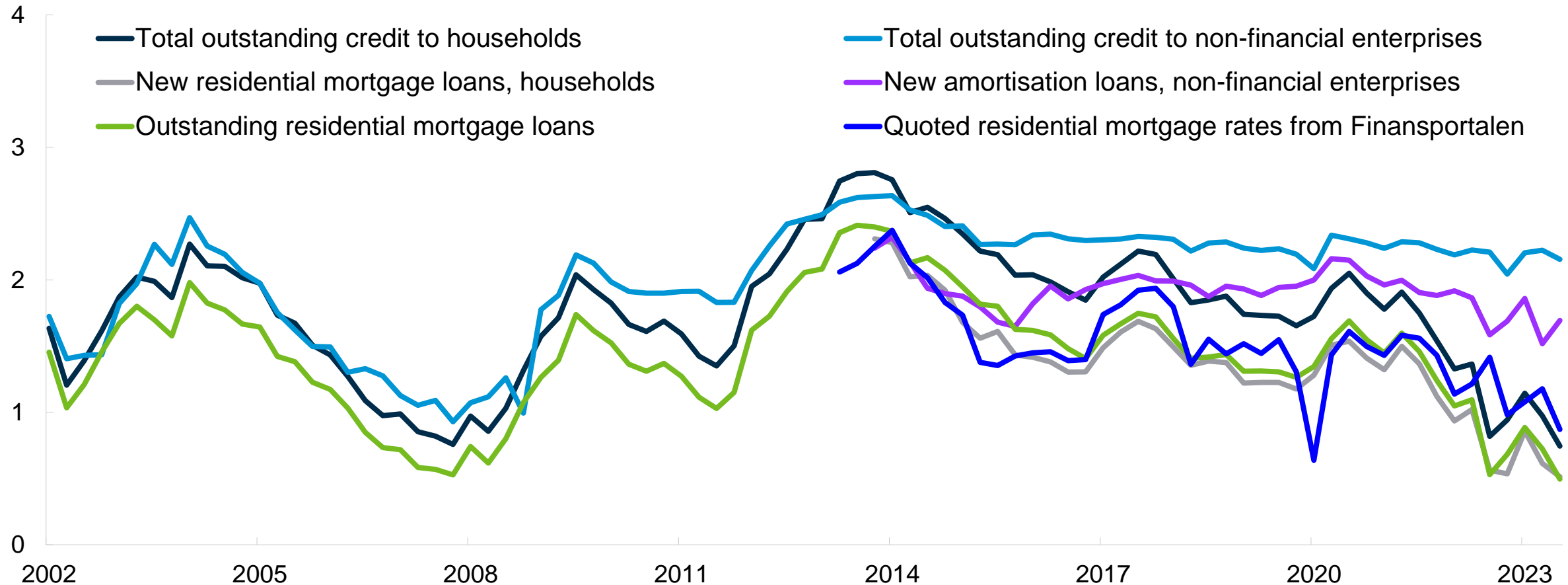
## Non-financial enterprises



Sources: Bloomberg and Stamdata

## 32. Loan margins from banks and mortgage companies

Percentage points over three-month Nibor. 2002 Q1 – 2023 Q3<sup>1)</sup>

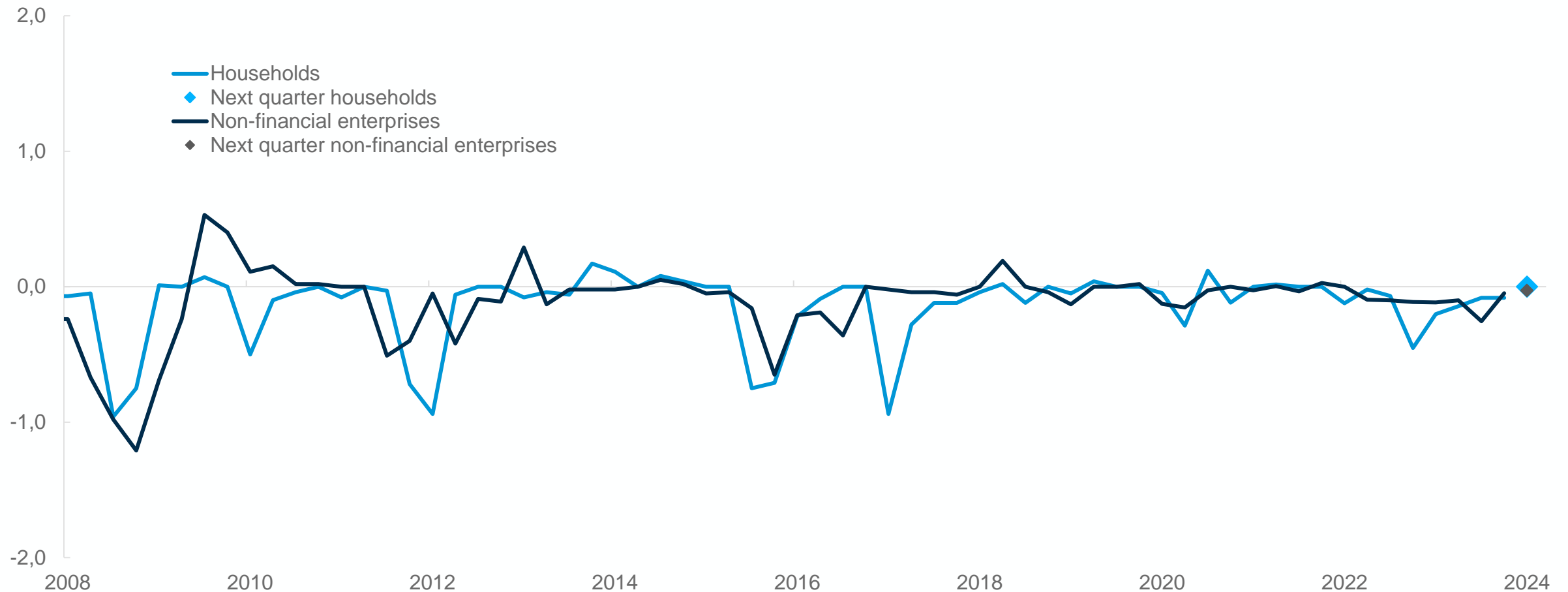


1) Quoted rates from 2013 Q2. New loans from 2013 Q4.  
Sources: Finansportalen, Statistics Norway and Norges Bank



### 33. Banks' credit standards for households<sup>1)</sup> and enterprises<sup>2)</sup>

Change from previous quarter.<sup>3)</sup> Survey of bank lending. 2008 Q1 – 2023 Q4

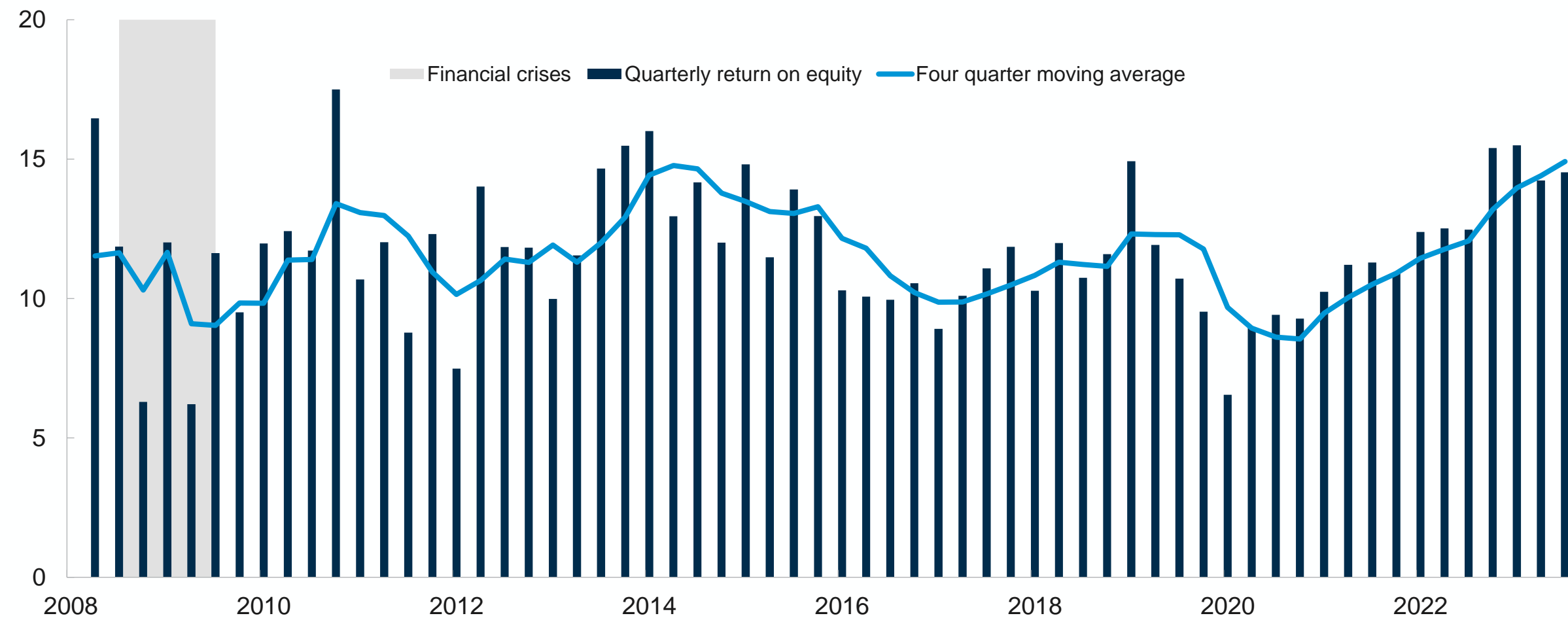


1) Residential mortgages. 2) Total credit to non-financial enterprises. 3) Scale: 2/1 = Much/somewhat easier to obtain credit, 0 = Approx. unchanged, -1/-2 = Somewhat/much tighter credit standards.

Source: Norges Bank

# 34. Return on equity for large Norwegian banks

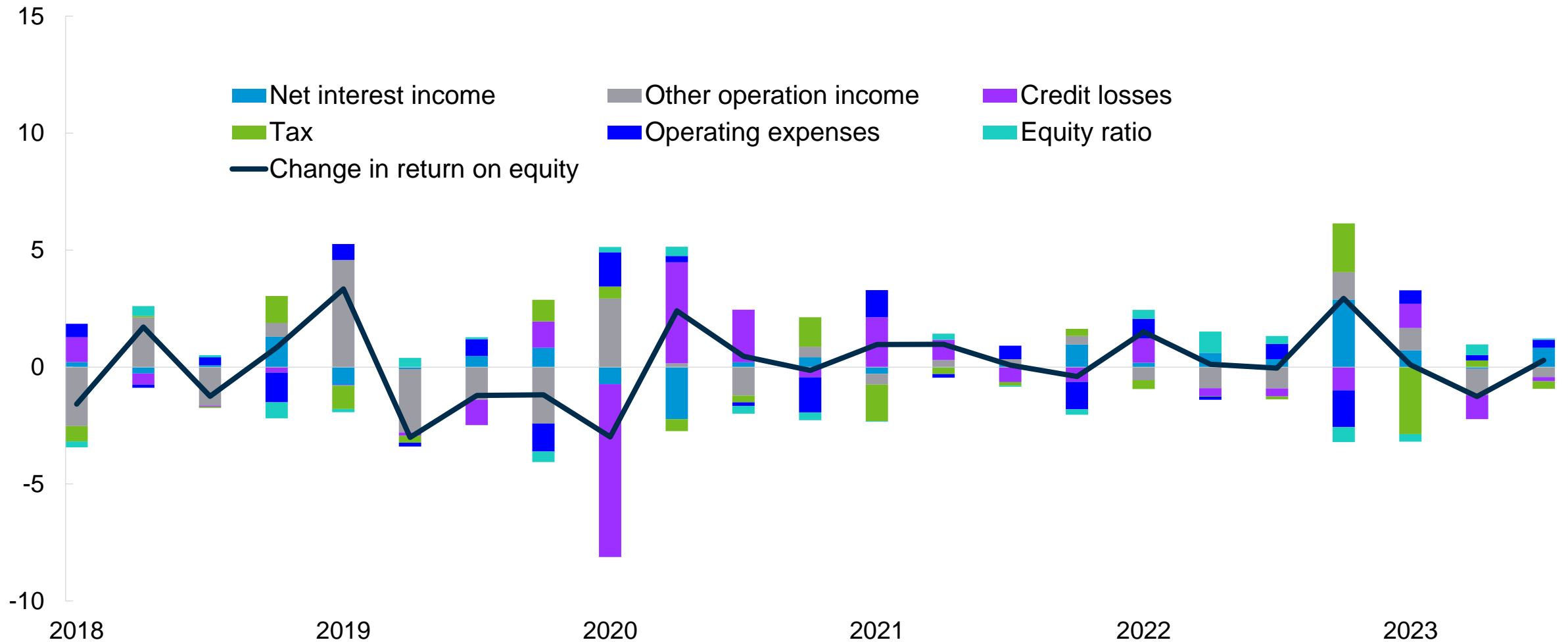
Percent. 2008 Q2 – 2023 Q3



Sources: S&P Capital IQ and Norges Bank

## 35. Contributions to change in return on equity

Large Norwegian banks.<sup>1)</sup> Percent. 2018 Q1 – 2023 Q3

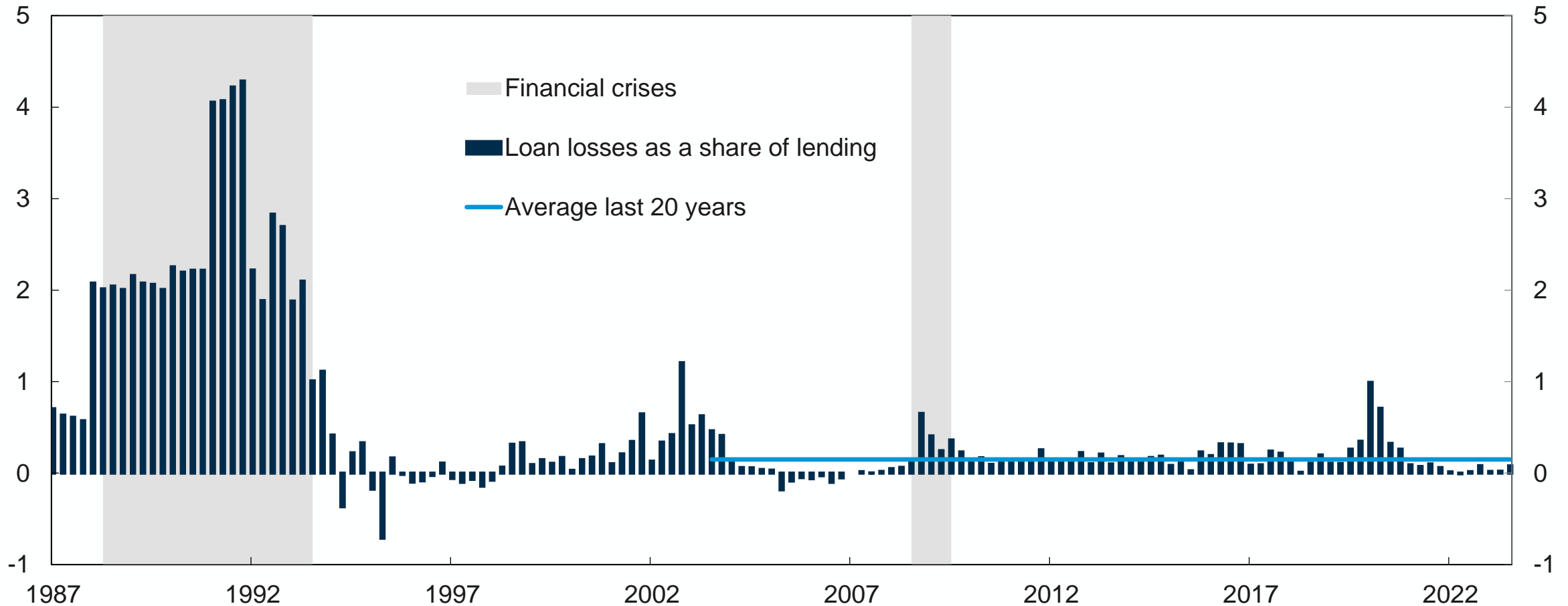


1) Weighted average of DNB, SP1 SR-Bank, Sparebanken Vest, SP1 SMN, Sparebanken Sør, SP1 Østlandet and SP1 Nord-Norge.

Sources: Banks' quarterly reports and Norges Bank

## 36. Credit losses as a share of gross lending

Annualised. All banks and mortgage companies in Norway.  
Percent. 1987 Q1 – 2023 Q3<sup>1)</sup>



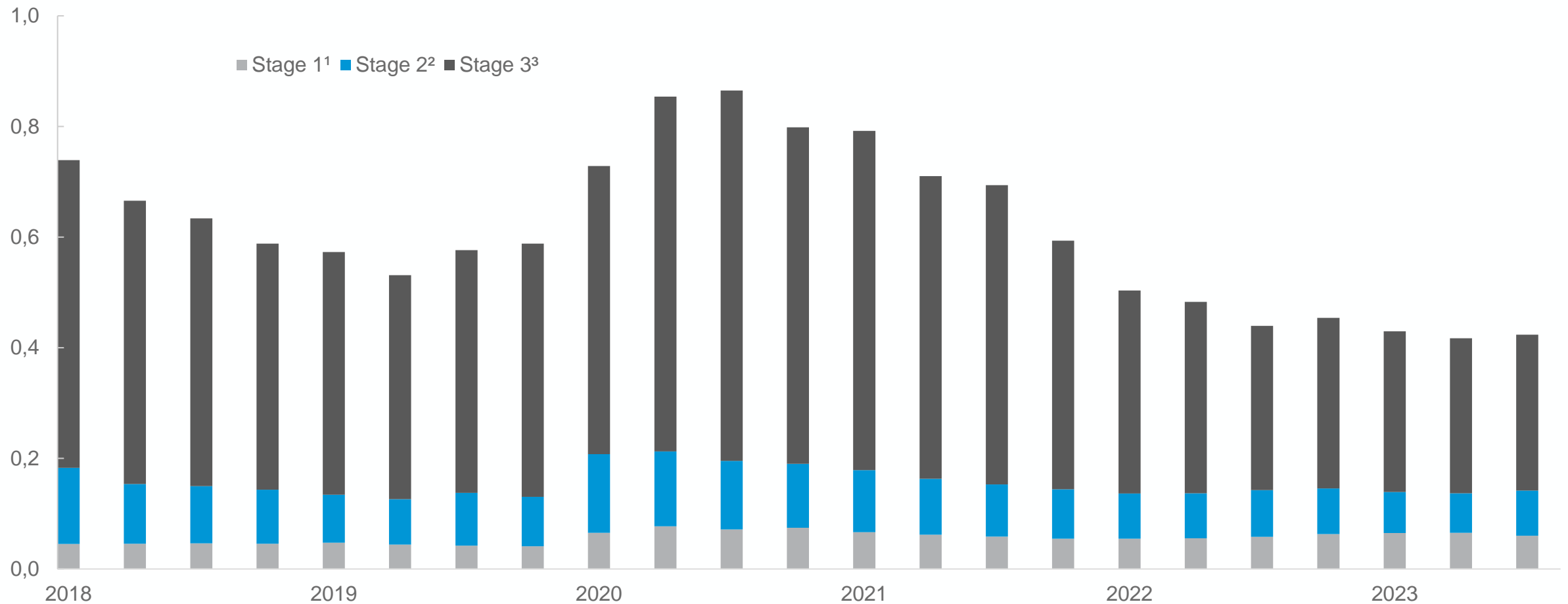
1) Annual data on credit losses in the period to end- 1991. Annual figures are distributed equally across the quarters

Source: Norges Bank



## 37. Impairment losses by stage under IFRS9

Large Norwegian banks. Share of gross lending. Accumulated.  
Percent. 2018 Q2 – 2023 Q3

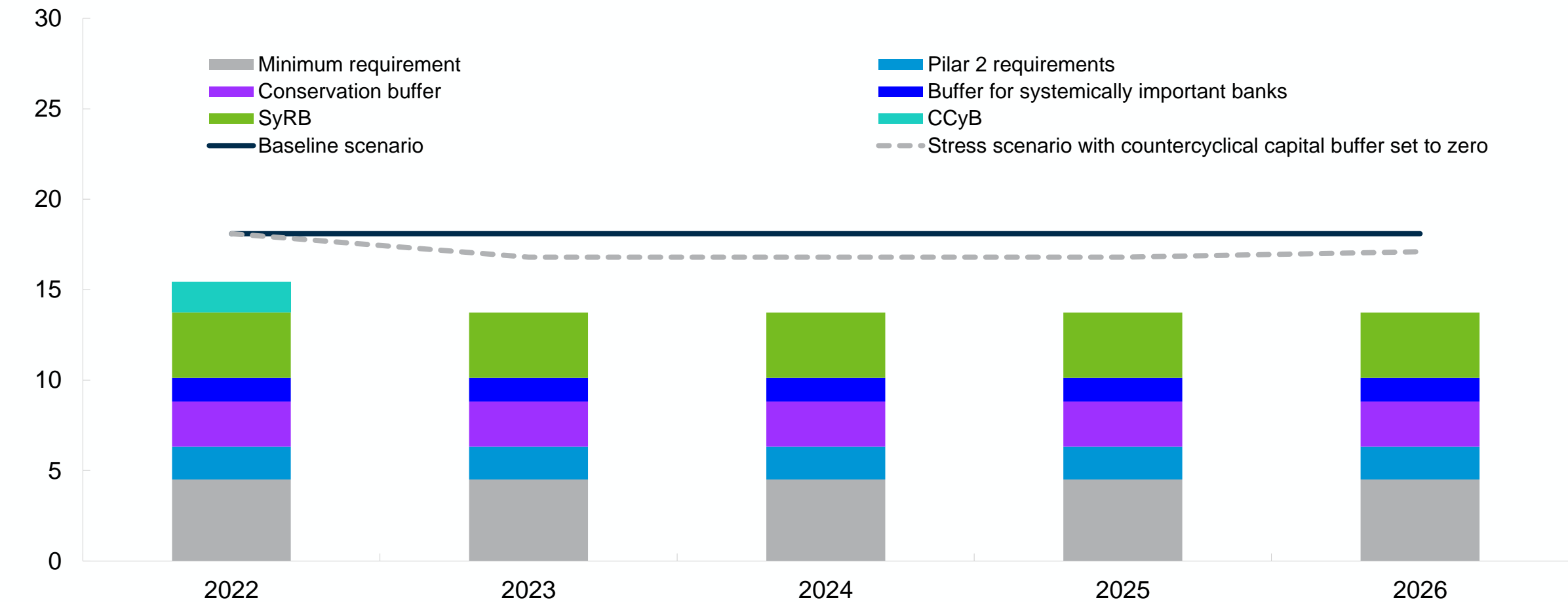


1) Classification at initial recognition (performing loans) 2) Significant increase in credit risk. 3) Significant increase in credit risk + objective evidence of impairment

Sources: Banks' FINREP reporting and Finanstilsynet

# 38. Stress scenario in Financial stability 2022

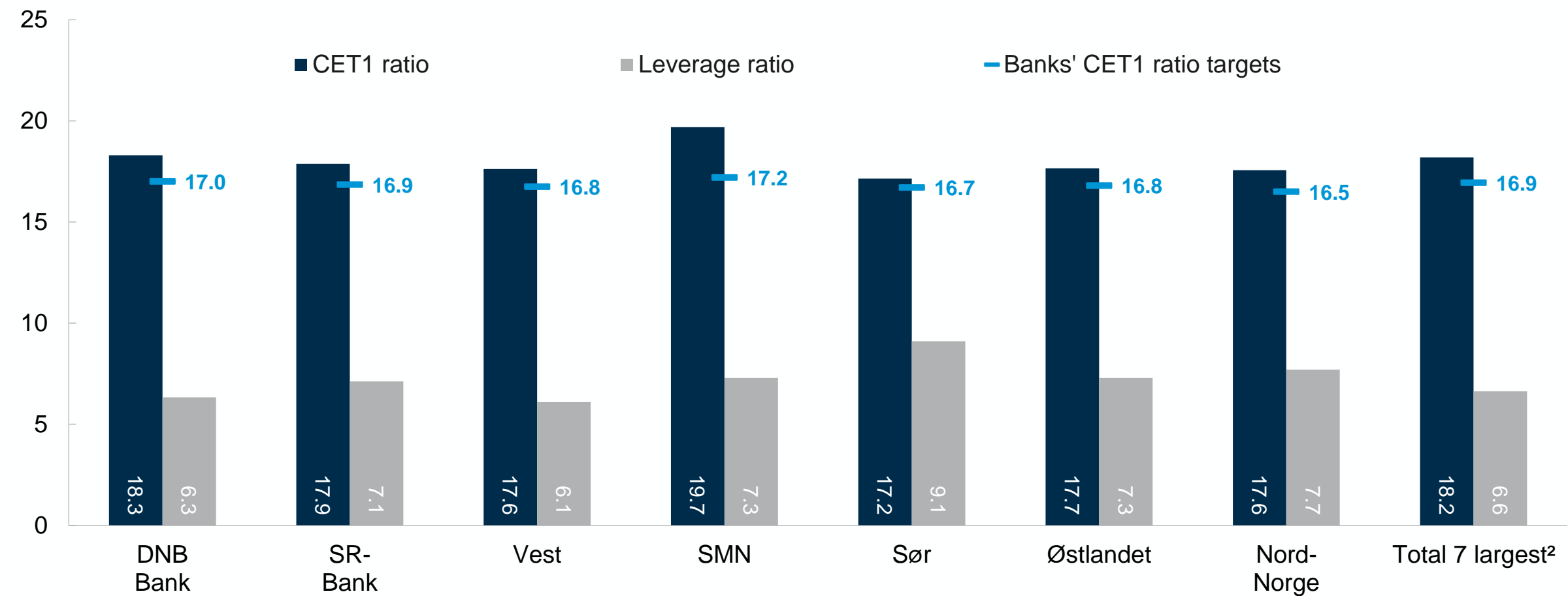
Macro bank’s capital requirements and CET1 capital, baseline and stress scenario. Percent



Sources: Banks’ quarterly reports, Finanstilsynet (Financial Supervisory Authority of Norway), S&P Capital IQ and Norges Bank

# 39. Capital ratios in large Norwegian banks

At 2023 Q3. Percent



1) Banks' regulatory requirements as of 31 December 2023 with an added capital requirement margin.

2) Total 7 largest is a weighted average of the seven banks in the chart.

Sources: Banking groups' quarterly reports and Norges Bank