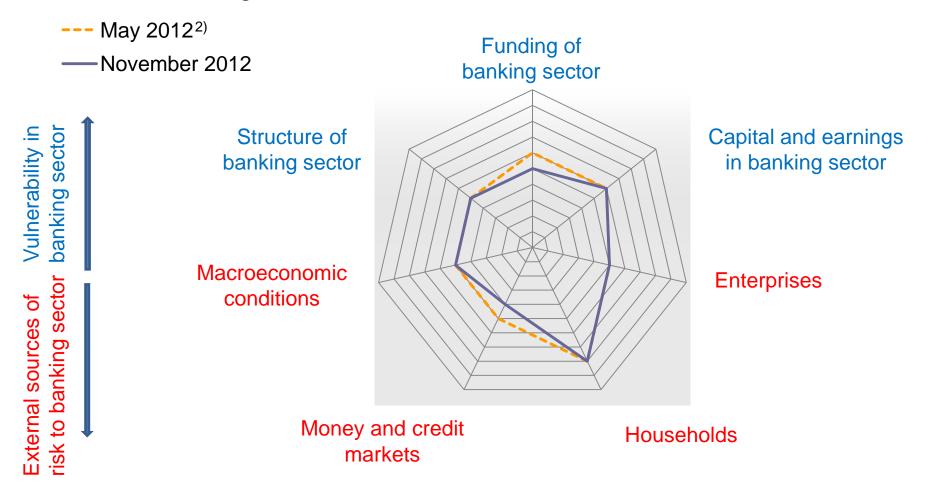
## Financial Stability 2/12

Charts

**%NB**% NORGES BANK

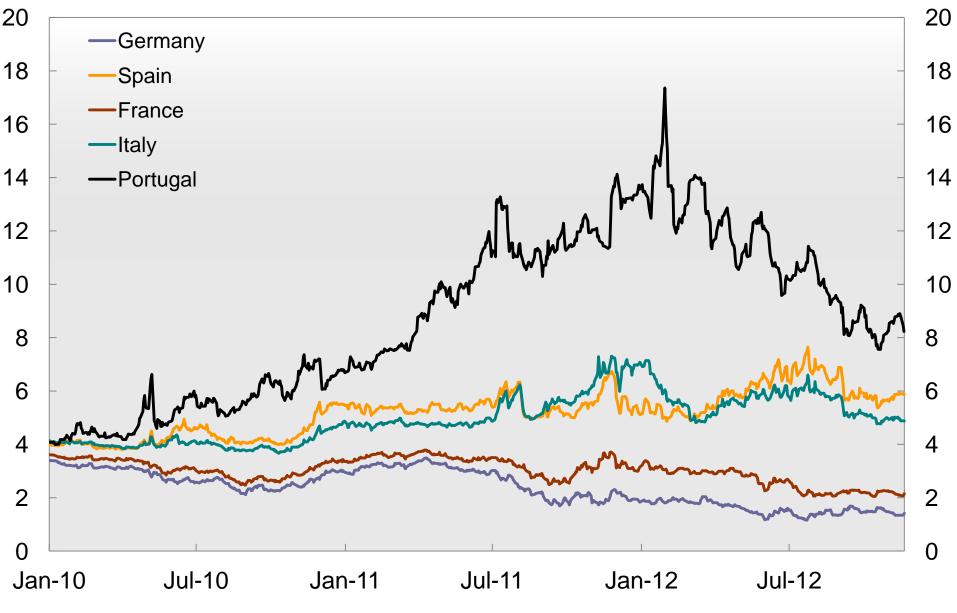
Chart 1.1 Vulnerabilities in the Norwegian banking sector and external sources of risk to the banking sector<sup>1)</sup>



- 1) A value of 0, i.e. origo, denotes the lowest level of risk or vulnerability. A value of 10 denotes the highest level of risk or vulnerability.
- The method used to estimate vulnerability related to capital and earnings has been adjusted. The May 2012 estimate for capital and earnings in the banking sector has therefore been revised.

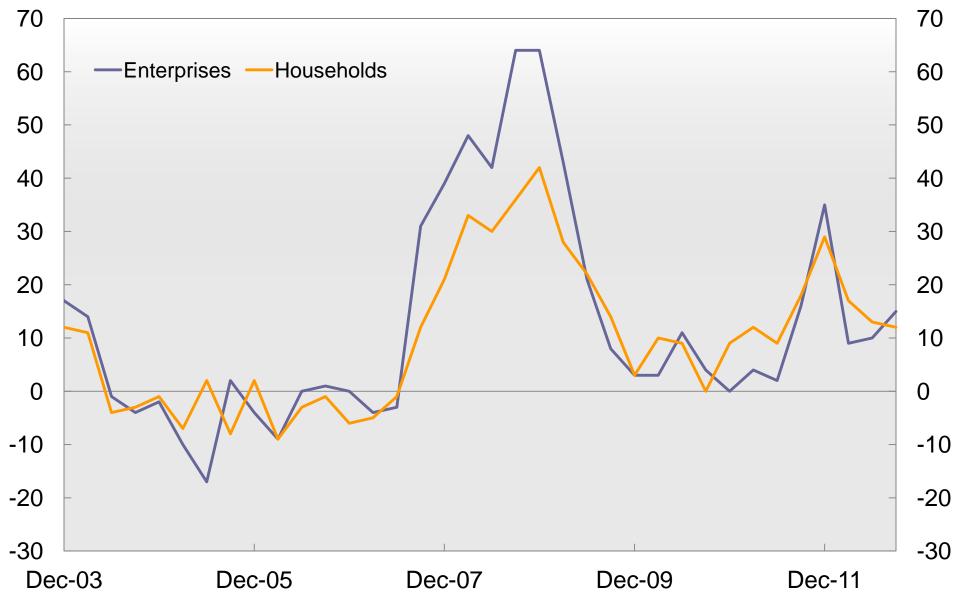
Source: Norges Bank

Chart 1.2 Ten-year government bond yields in European countries. Percent. Daily figures. To 20 November 2012



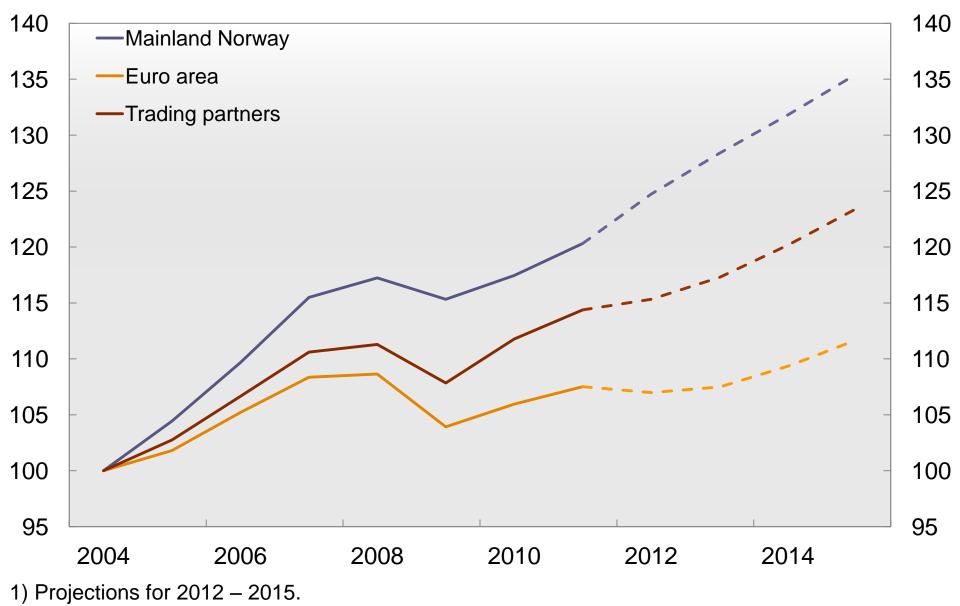
Source: Thomson Reuters

Chart 1.3 Bank lending surveys in the euro area. Net share of banks that have tightened credit standards. Quarterly figures. To 2012 Q3



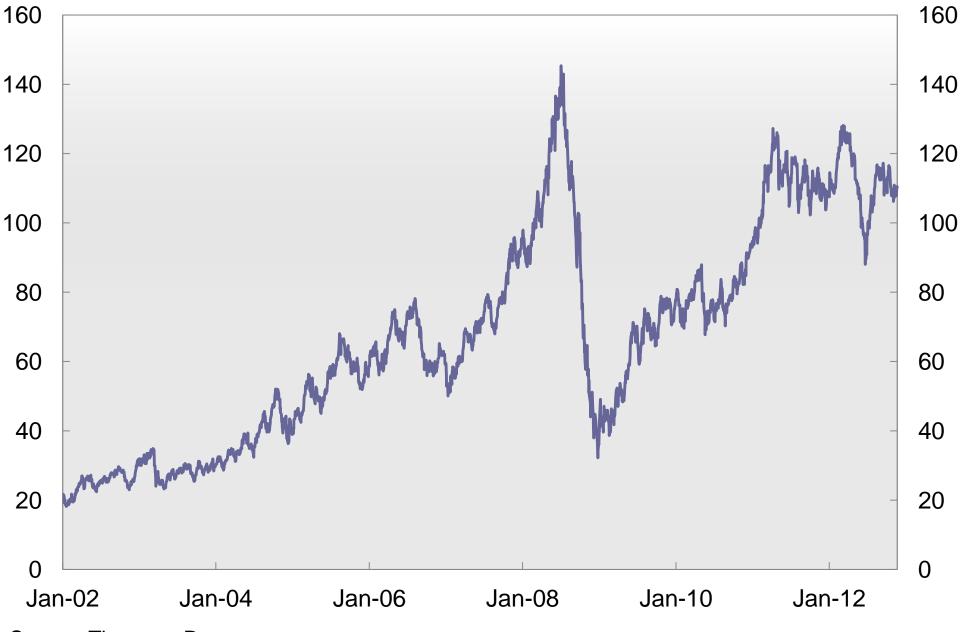
Source: ECB

Chart 1.4 GDP for mainland Norway, the euro area and trading partners. Index (at constant prices). 2004 = 100. To  $2015^{1}$ 



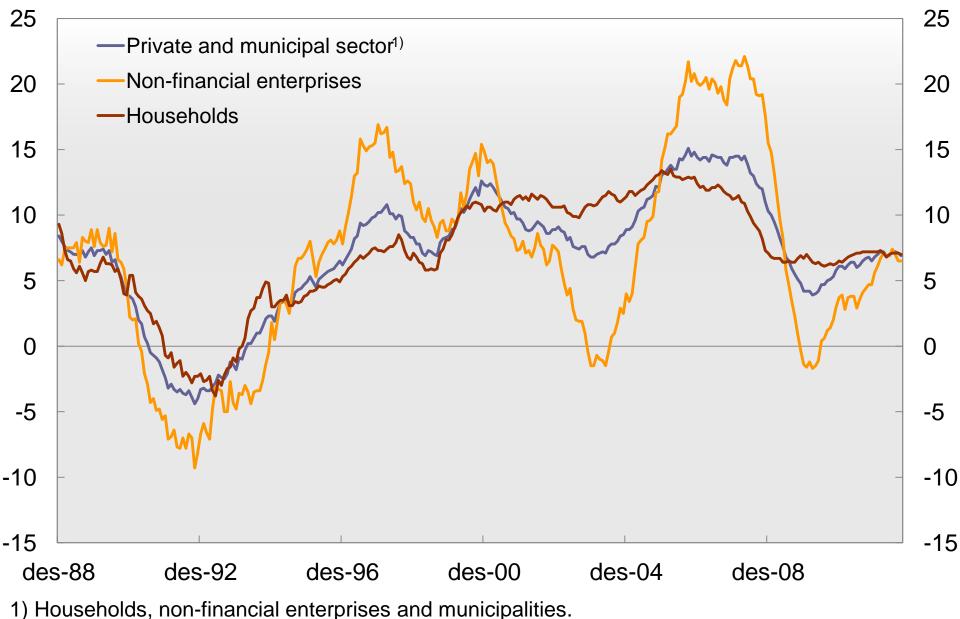
Sources: Thomson Reuters and Norges Bank

Chart 1.5 Oil price in USD. Daily figures. To 20 November 2012



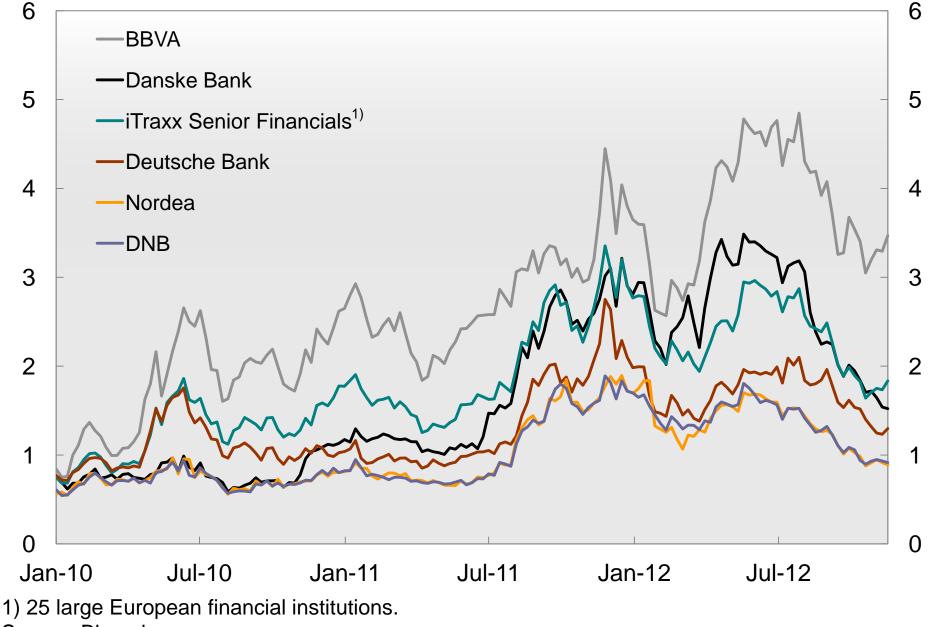
Source: Thomson Reuters

Chart 1.6 Domestic debt (C2). 12-month change. Percent. To September 2012



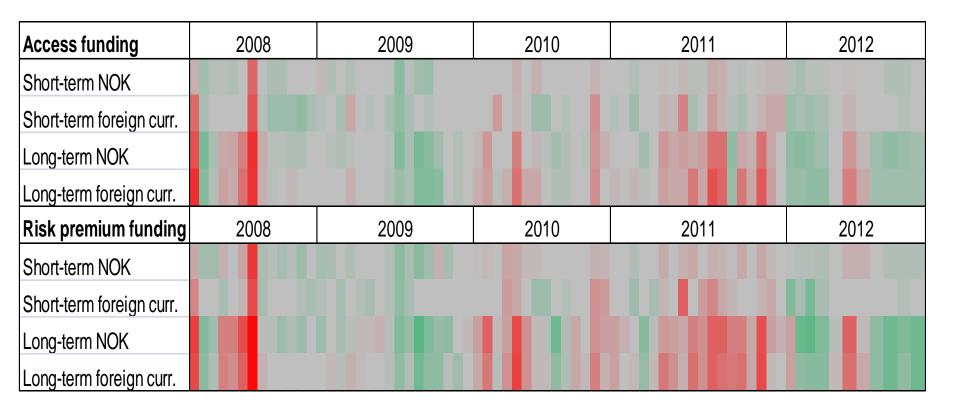
Source: Statistics Norway

Chart 1.7 CDS prices 5-year senior bond debt. Weekly figures. Percent. To 16 November 2012



Source: Bloomberg

Chart 1.8 Banks' and mortgage companies' qualitative assessment of access to and premiums on market funding.<sup>1)</sup> Monthly data. To October 2012

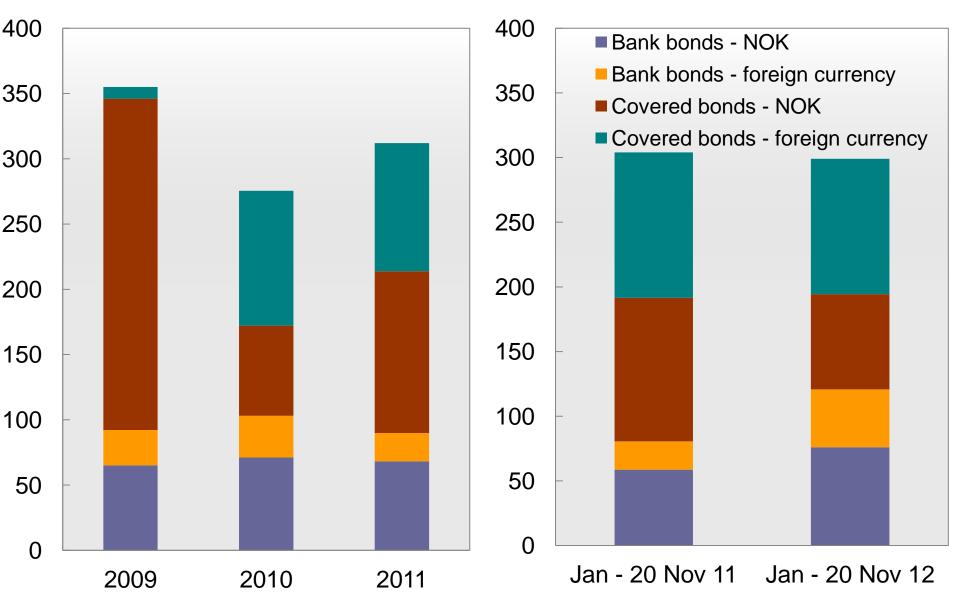


1) Average reported by banks in Norges Bank's liquidity survey.

Red indicates reduced access and higher premiums, grey indicates unchanged, green indicates increased access and lower premiums.

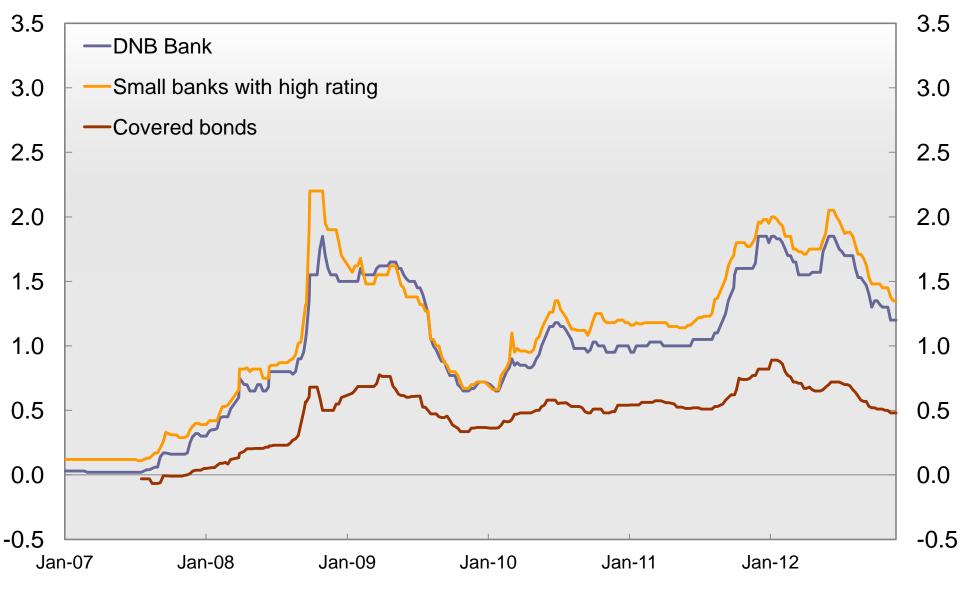
Source: Norges Bank

Chart 1.9 Volume of bonds and covered bonds issued by Norwegian banks and mortgage companies. In billions of NOK. To 20 November 2012



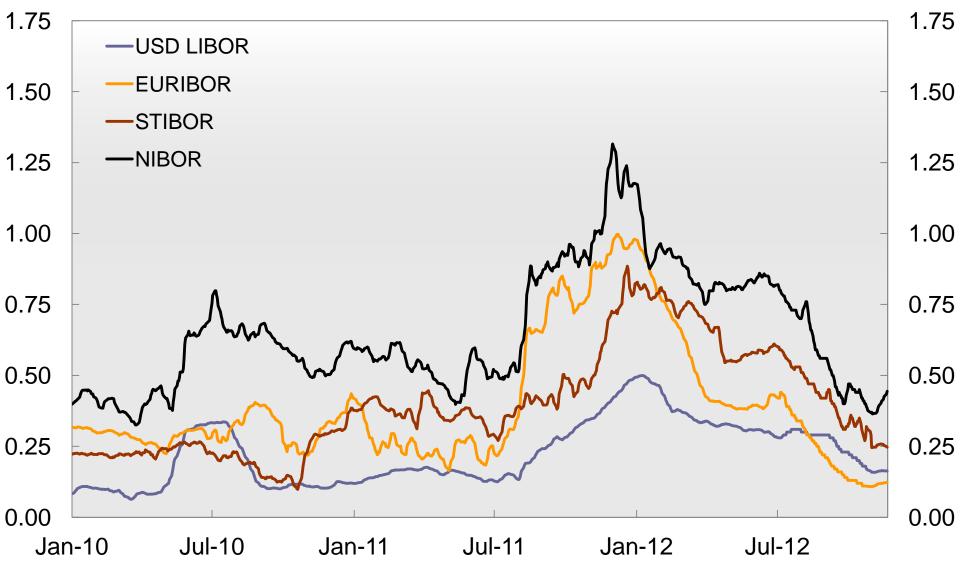
Sources: Stamdata and Bloomberg

Chart 1.10 Indicative risk premiums on 5-year Norwegian bank bonds and covered bonds. Spread against swap rates. Percentage points. Weekly figures. 1 January 2007 – 20 November 2012



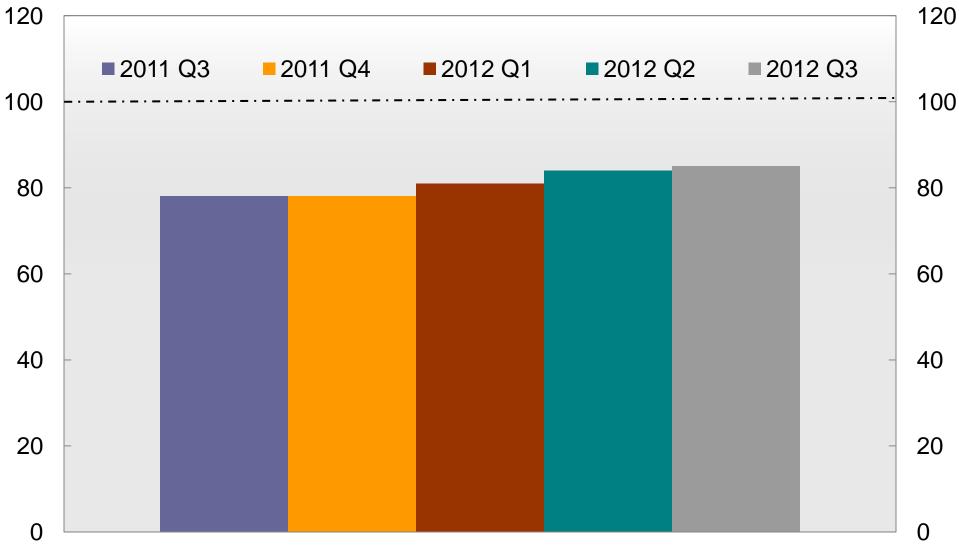
Source: DNB Markets

Chart 1.11 Spread between 3-month money market rate and market key rate expectations. Percentage points. 5-day moving average. Daily figures. To 20 November 2012



Sources: Bloomberg, Thomson Reuters and Norges Bank

Chart 1.12 Banks<sup>'1)</sup> stable funding as a percentage of net stable funding requirement (NSFR). Consolidated figures. At end of quarter

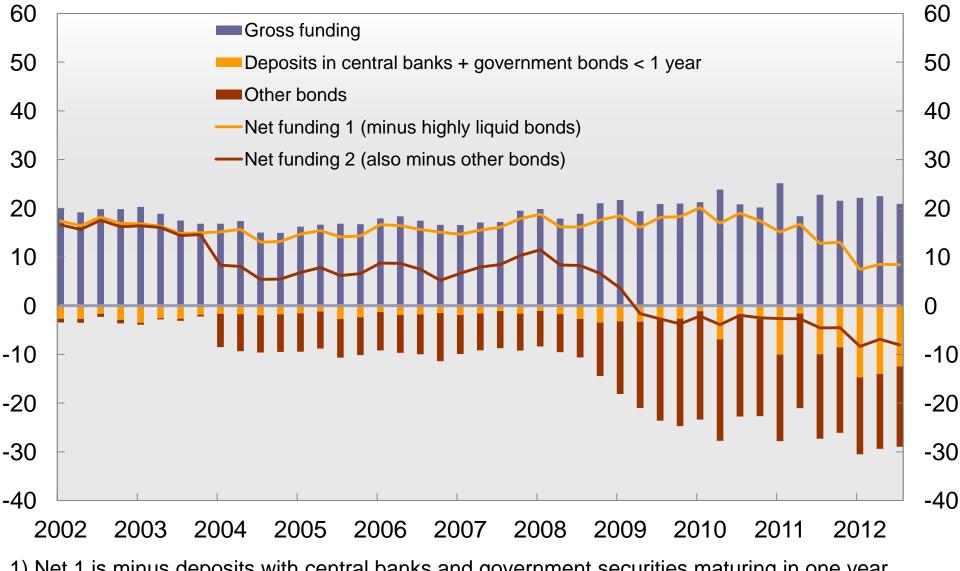


## Weighted average

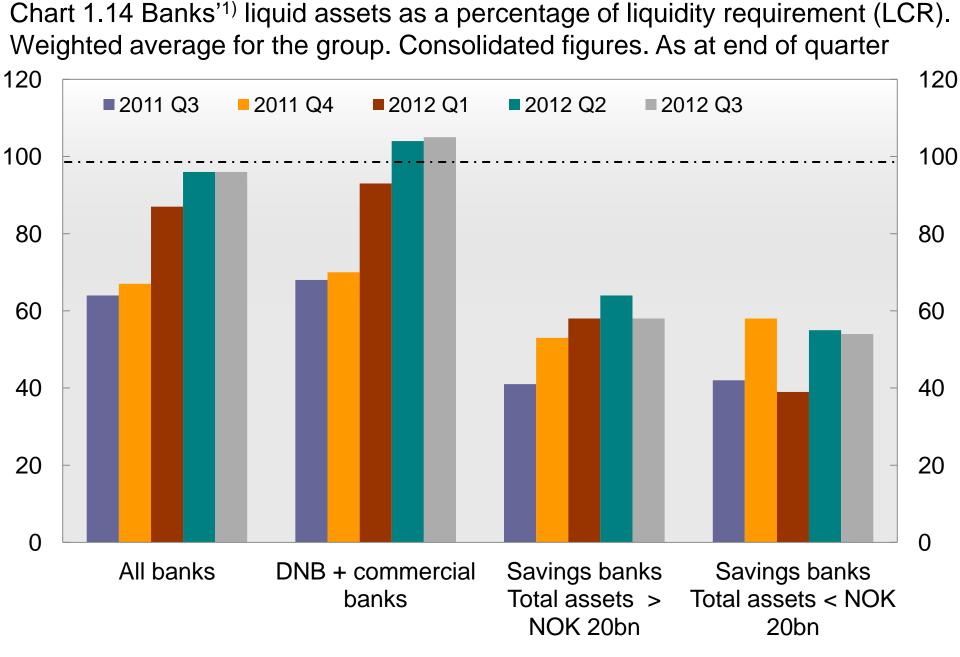
1) Sample consists of 17 banks in Norway, primarily the largest.

Sources: Finanstilsynet (Financial Supervisory Authority of Norway) and Norges Bank

Chart 1.13 Norwegian-owned banks' net<sup>1)</sup> short-term market funding as a percentage of total assets. Quarterly figures. To 2012 Q3



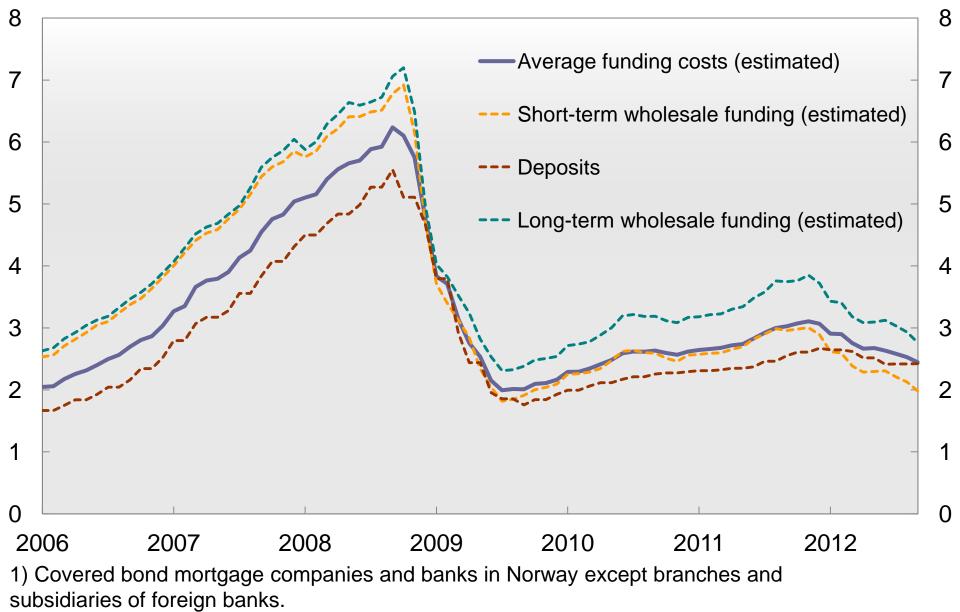
1) Net 1 is minus deposits with central banks and government securities maturing in one year or less. Net 2 is also minus other bonds. Source: Norges Bank



1) All banks in Norway except branches of foreign banks.

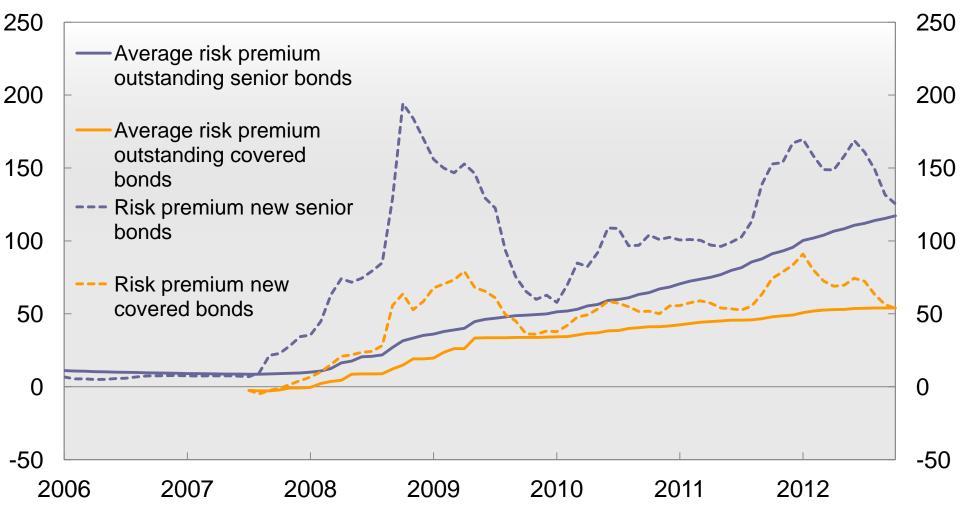
Sources: Finanstilsynet (Financial Supervisory Authority of Norway) and Norges Bank

Chart 1.15 Funding costs for Norwegian banking groups<sup>1)</sup>. Percent. Monthly figures. To September 2012



Sources: Bloomberg, Stamdata, DNB Markets and Norges Bank

Chart 1.16 Estimated average risk premium<sup>1)</sup> on new and outstanding bond debt for Norwegian banking groups<sup>2)</sup>. Monthly average. Basis points. To October 2012

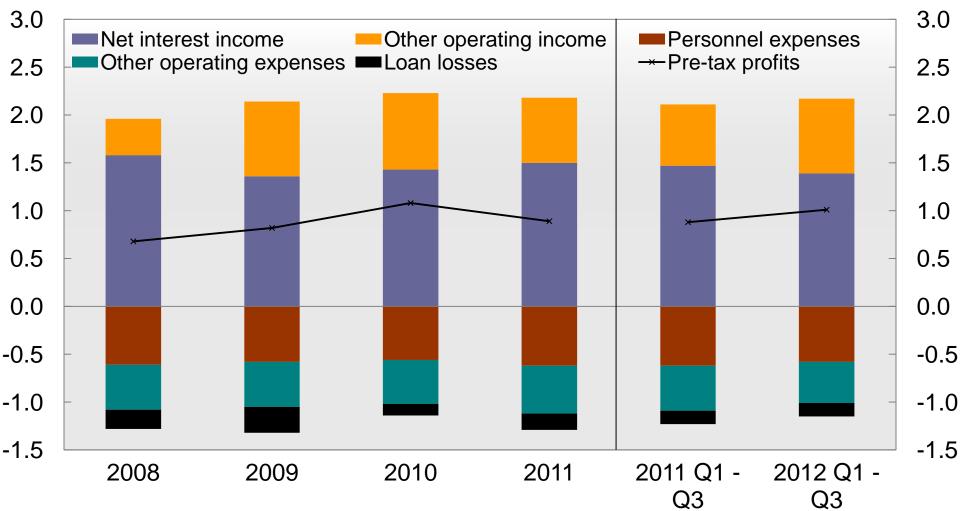


1) Difference against swap rates.

2) Covered bond mortgage companies and banks in Norway except branches and subsidiaries of foreign banks.

Sources: Bloomberg, Stamdata, DNB Markets and Norges Bank

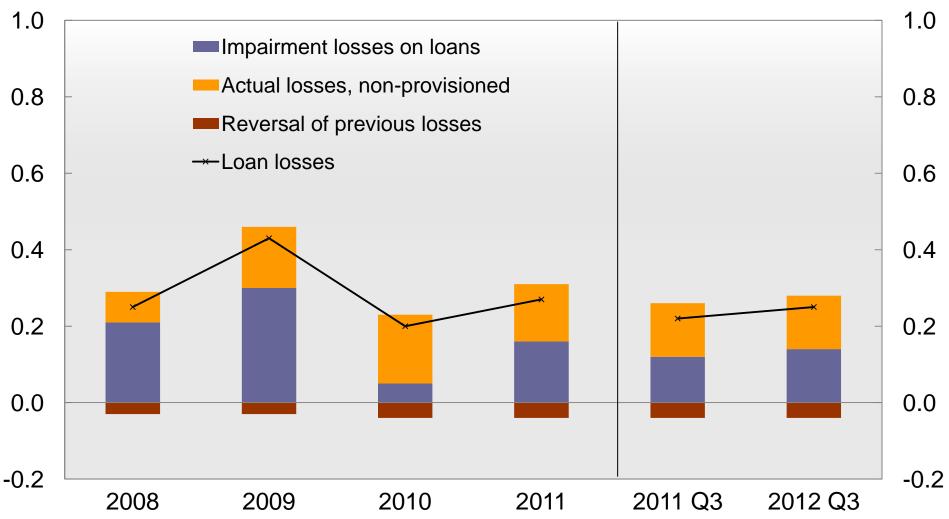
Chart 1.17 Banks<sup>1)</sup> pre-tax profits as percentage of average total assets. Percent. Annual and figures for the year to Q3. 2008 – 2011 and 2011 Q1 – Q3 and 2012 Q1 – Q3



1) All banks excluding branches of foreign banks in Norway, but including branches of Norwegian banks abroad.

Source: Norges Bank

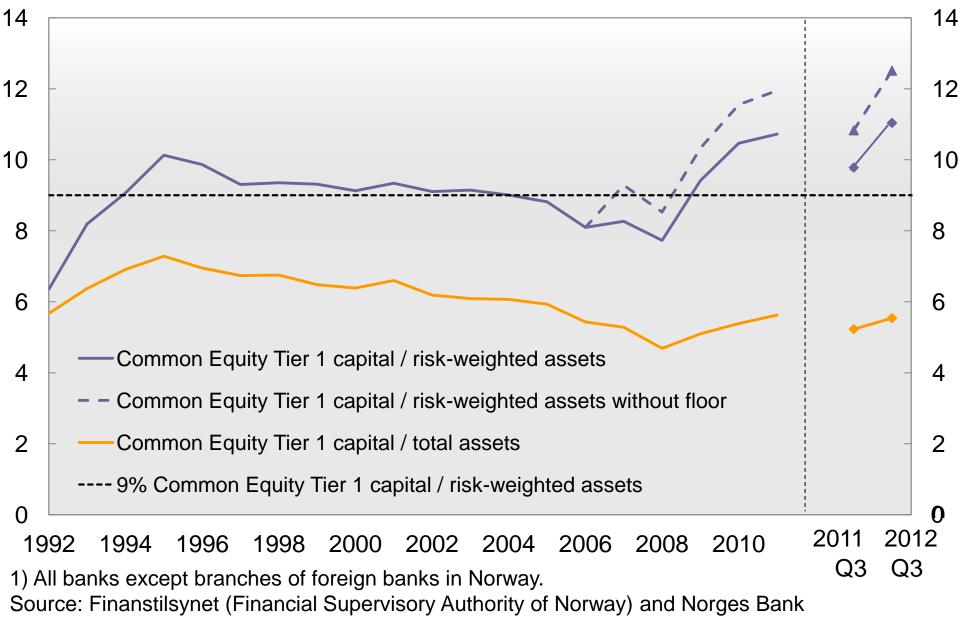
Chart 1.18 Components of banks<sup>1)</sup> loan losses as a percentage of gross retail lending. Percent. Annual and figures for the year to Q3. 2008 – 2011 and as at end-2011 Q3 and end-2012 Q3



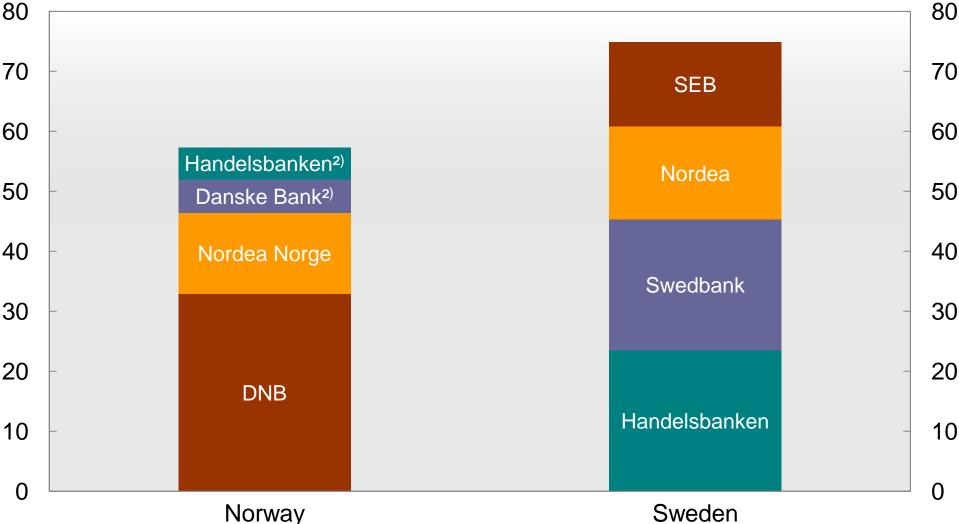
1) All banks excluding branches of foreign banks in Norway, but including branches of Norwegian banks abroad.

Source: Norges Bank

Chart 1.19 Common Equity Tier 1 capital in banks<sup>1</sup>) and residential mortgage companies. Percent. Annual and third quarter. 1992 – 2011. 2012 Q3 and 2012 Q3



## Chart 1.20 Largest banks in Norway and Sweden<sup>1)</sup> by lending market share. Percent. End-2011

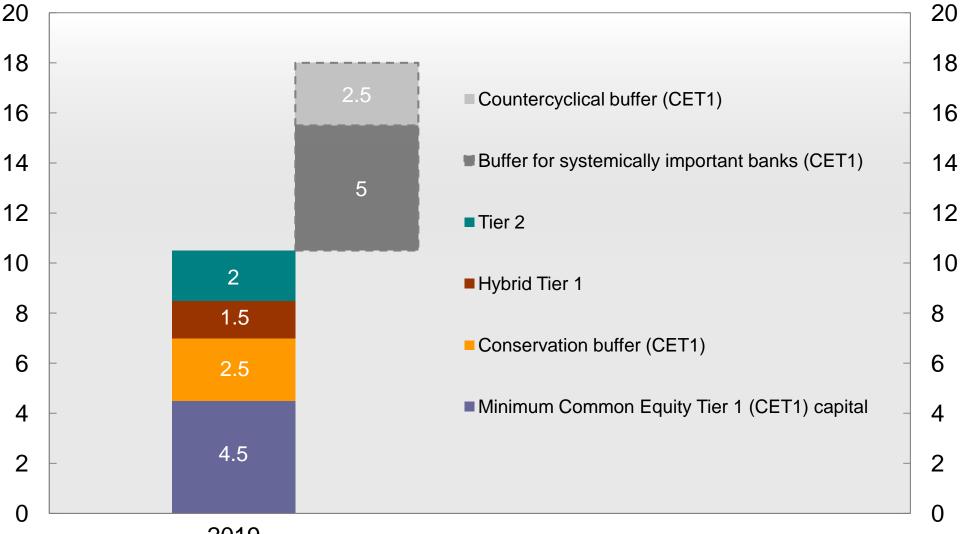


1) Market shares for corporate and residential mortgage lending applied for Sweden, while lending to retail and corporate markets are applied for Norway.

2) Handelsbanken and Danske Bank are branches in the Norwegian market.

Sources: Norges Bank, Finansinspektionen, Swedbank, Statistics Norway

Chart 1.21 Potential capital requirement for a large bank<sup>1)</sup> in 2019. As a percentage of risk-weighted assets

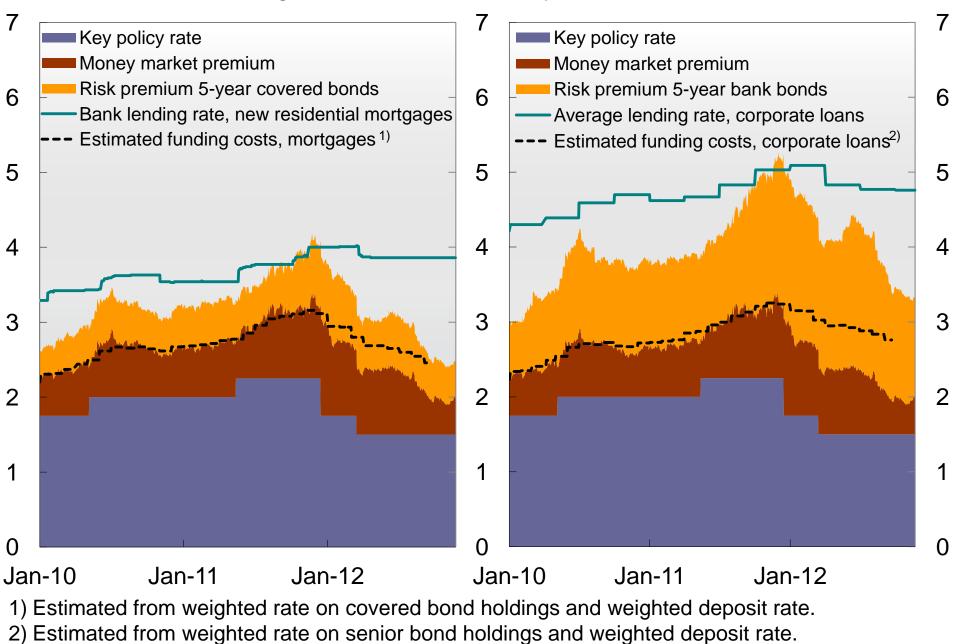


## 2019

1) Bank assuming maximum countercyclical buffer and maximum buffer for systemically important banks.

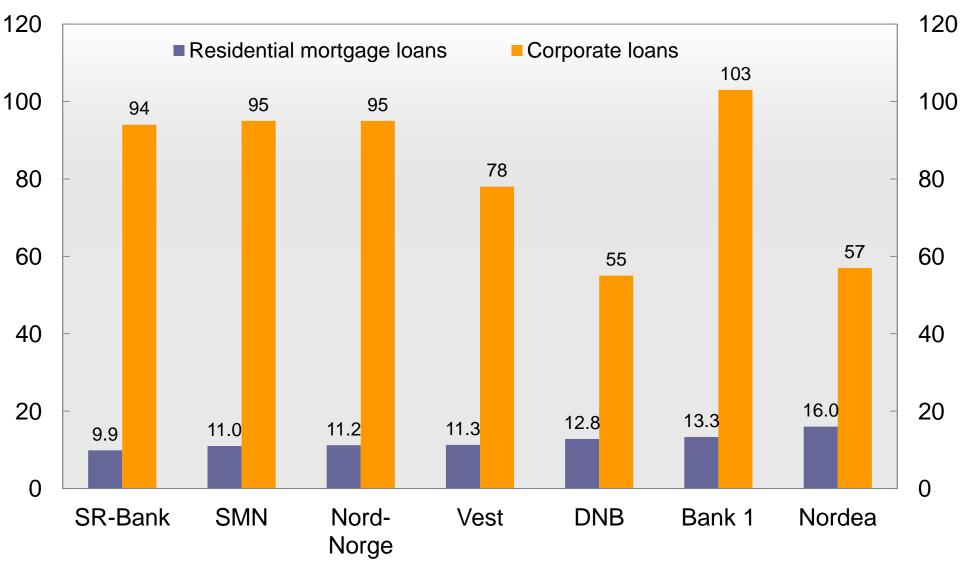
Sources: Basel Committee on Banking Supervision and Norges Bank

Chart 1.22 Interest margins. Percent. 1 January 2010 – 20 November 2012



Sources: DNB Markets, Norsk familieøkonomi, Statistics Norway and Norges Bank

Chart 1.23 Average risk weights for residential mortgage loans and corporate loans<sup>1)</sup> for Norwegian IRB banks. Percent. At 31 Dec 2011<sup>2)</sup>

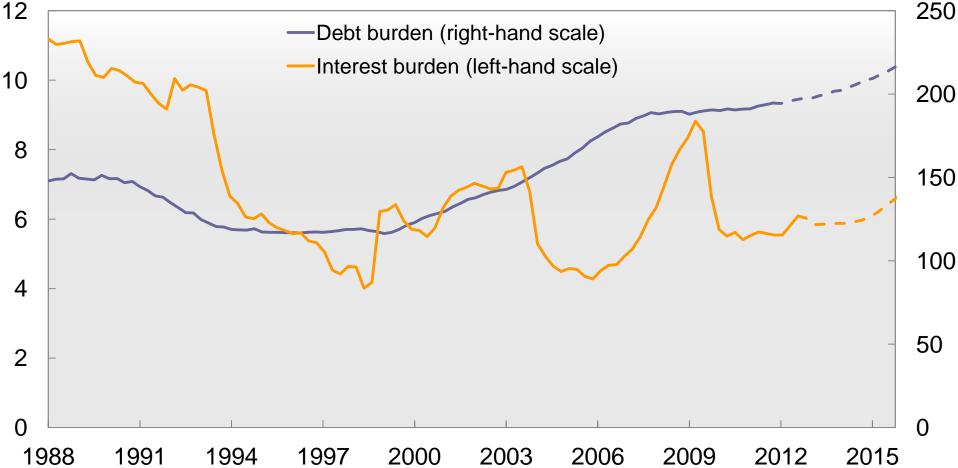


1) Sum of specialised and other corporate lending for banks in SpareBank 1-alliansen.

2) SpareBank 1 Nord-Norge as at 31 December 2010.

Sources: Pillar 3 reports from the institutions and Norges Bank

Chart 1.24 Household debt burden<sup>1)</sup> and interest burden<sup>2)</sup>. Percent. Quarterly figures. To 2015 Q4<sup>3)</sup>



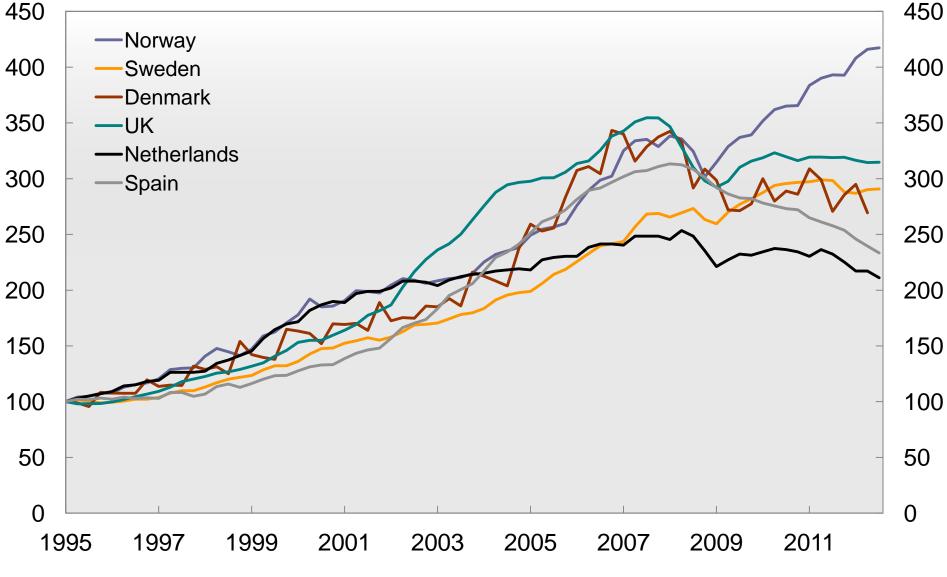
1) Debt as a percentage of disposable income adjusted for estimated reinvested dividend income for 2000 – 2005 and redemption/reduction of equity capital for 2006 – 2015.

2) Interest expenses after tax as a percentage of disposable income adjusted for estimated reinvested dividend income 2000 – 2005 and redemption/reduction of equity capital for 2006 – 2015, plus interest expenses.

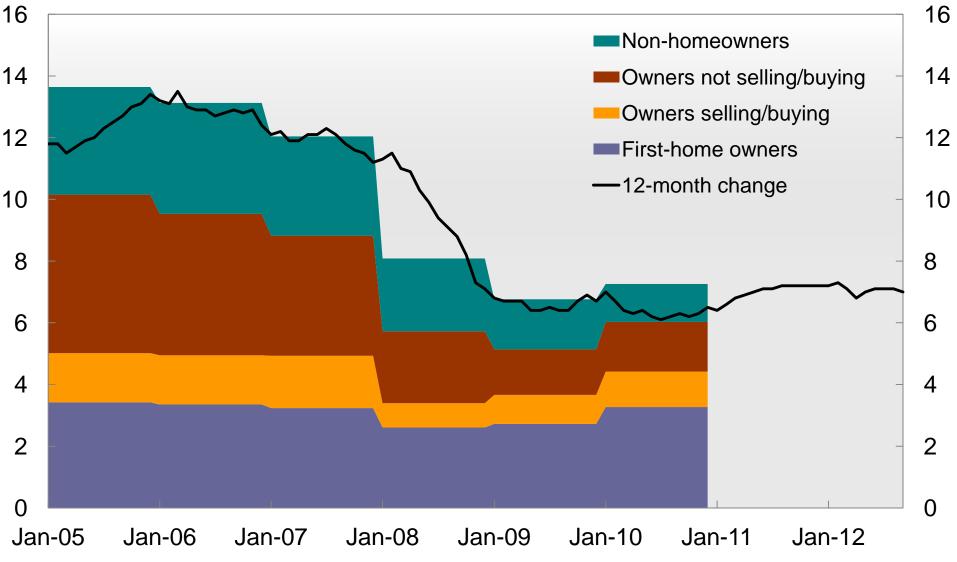
3) Projections for 2012 Q1 – 2015 Q4 from Monetary Policy Report 3/12.

Sources: Statistics Norway and Norges Bank

Chart 1.25 House prices in selected countries. Indices. 1995 Q1 = 100. Quarterly figures. To 2012 Q3<sup>1)</sup>



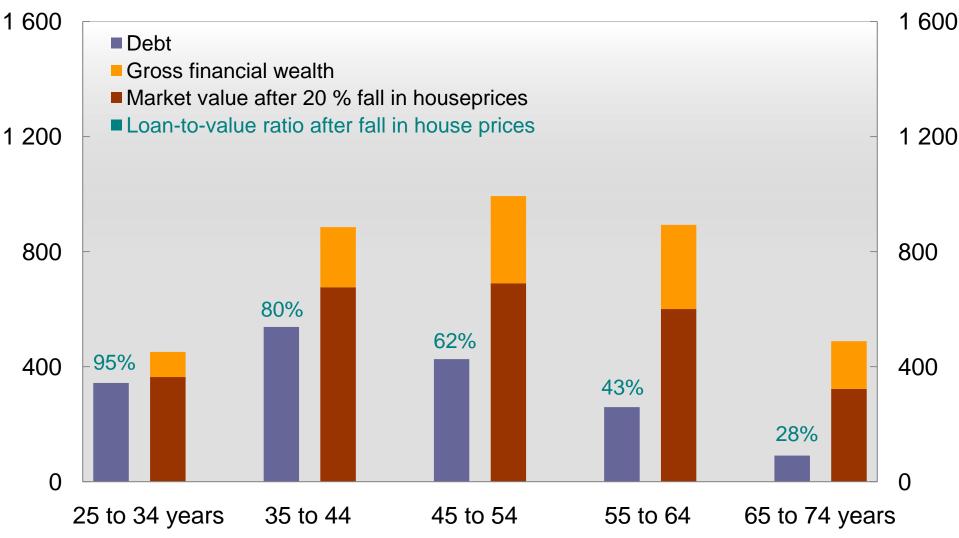
1) For Denmark to 2012 Q2. Source: Thomson Reuters Chart 1.26 Domestic credit to households (C2). 12-month change. Contributions to growth in the retail market<sup>1)</sup> by position in the housing market. Percent. To September 2012



1) Households excluding self-employed.

Sources: Statistics Norway (tax assessment data) and Norges Bank

Chart 1.27 Debt<sup>1)</sup>, housing wealth and financial assets<sup>2)</sup> for indebted homeowning households<sup>3)</sup>. In billions of NOK. 2010



- 1) Total debt excluding student loans.
- 2) According to tax assessments, excluding insurance claims.
- 3) Excluding self-employed.
- Sources: Statistics Norway (tax assessment data) and Norges Bank

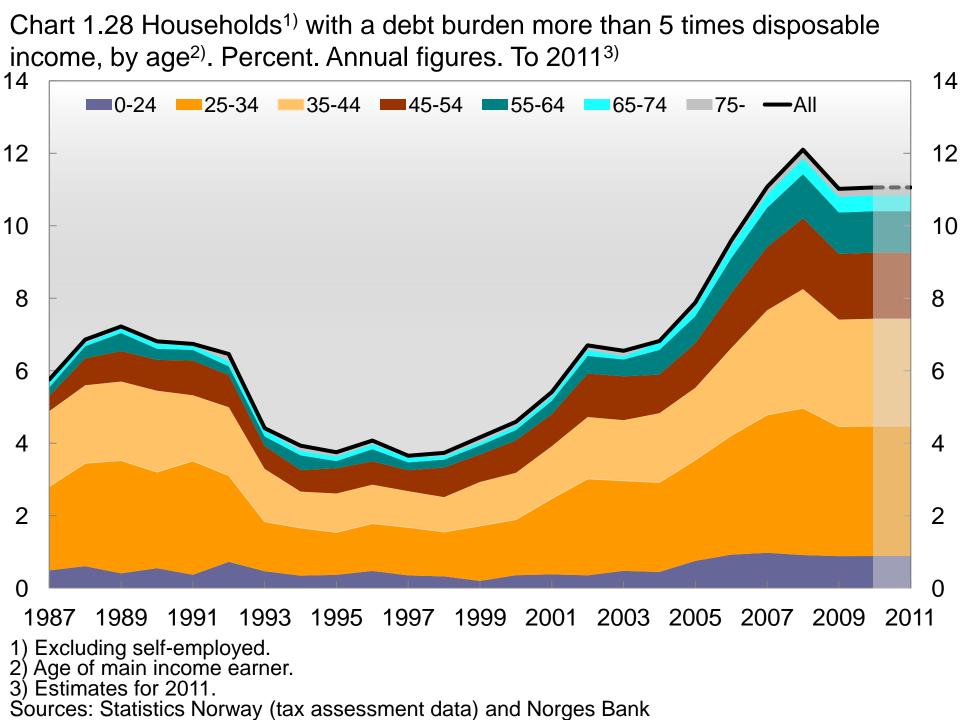
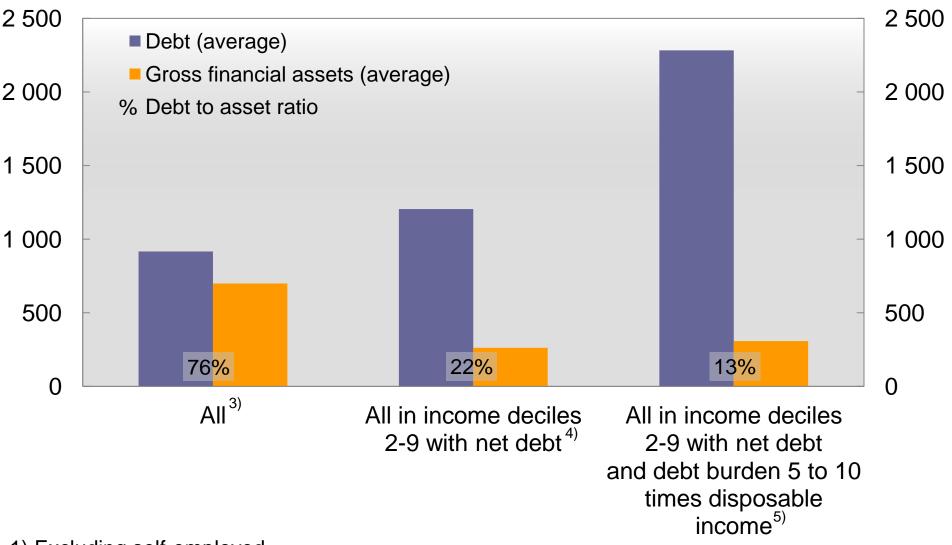
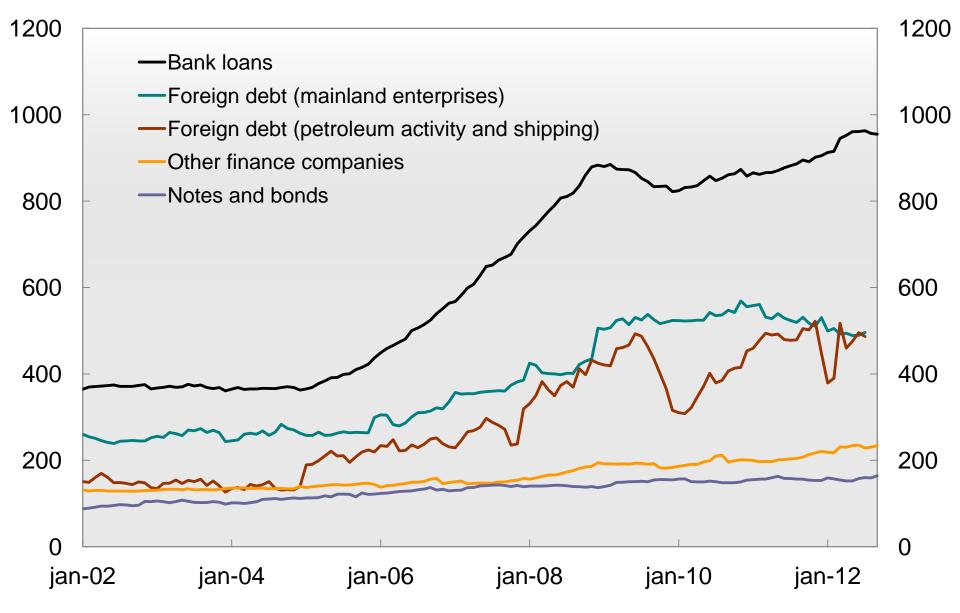


Chart 1.29 Total household<sup>1)</sup> debt and gross financial assets<sup>2)</sup>. Average. In thousands of NOK. 2010



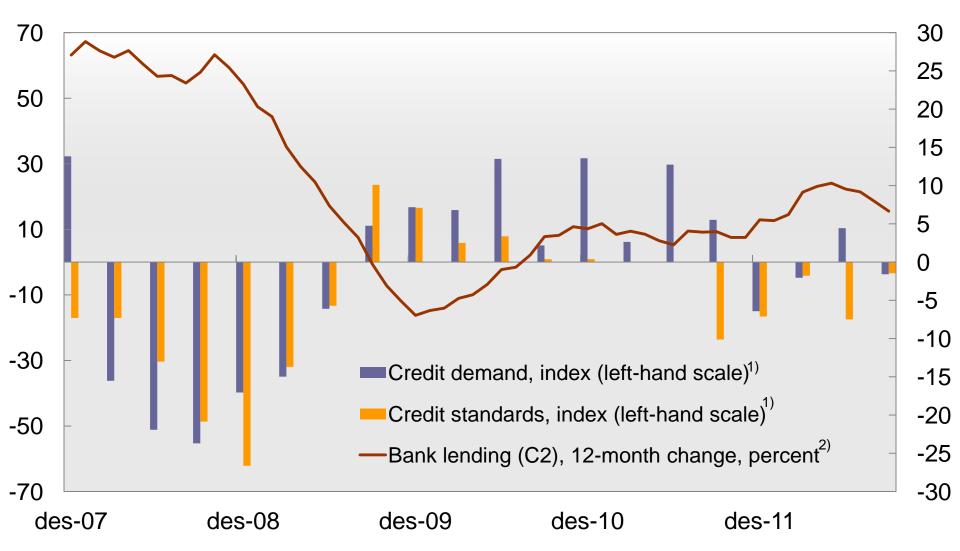
- 1) Excluding self-employed.
- 2) According to tax assessments, excluding insurance claims.
- 3) 2.19m households. 4)1.16m households. 5) 166 000 households.
- Sources: Statistics Norway (tax assessment data) and Norges Bank

Chart 1.30 Corporate debt by credit source. Stock. In billions of NOK. Monthly figures. To September 2012



Source: Statistics Norway

Chart 1.31 Bank lending to enterprises – supply and demand. To 2012 Q3

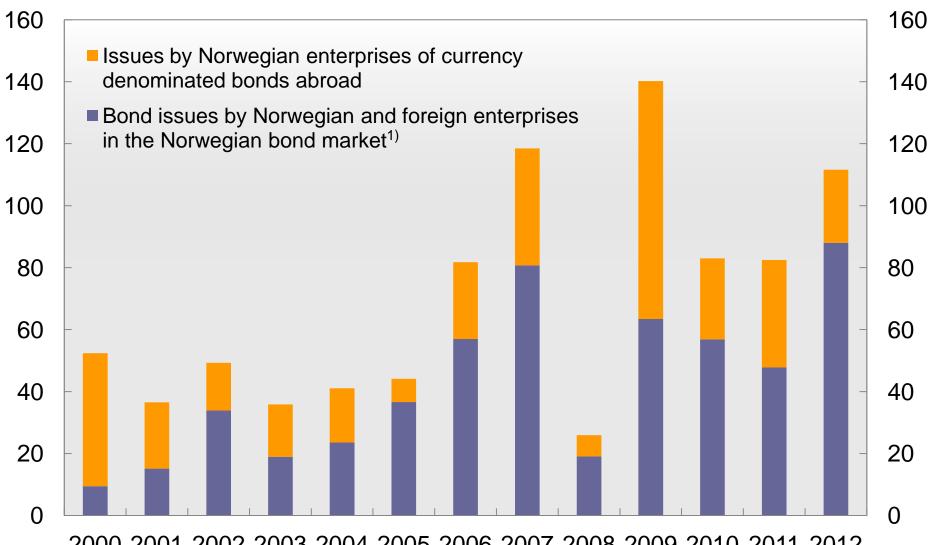


1) A positive value implies an easing of credit standards/higher loan demand, a negative value implies a tightening of credit standards/lower loan demand.

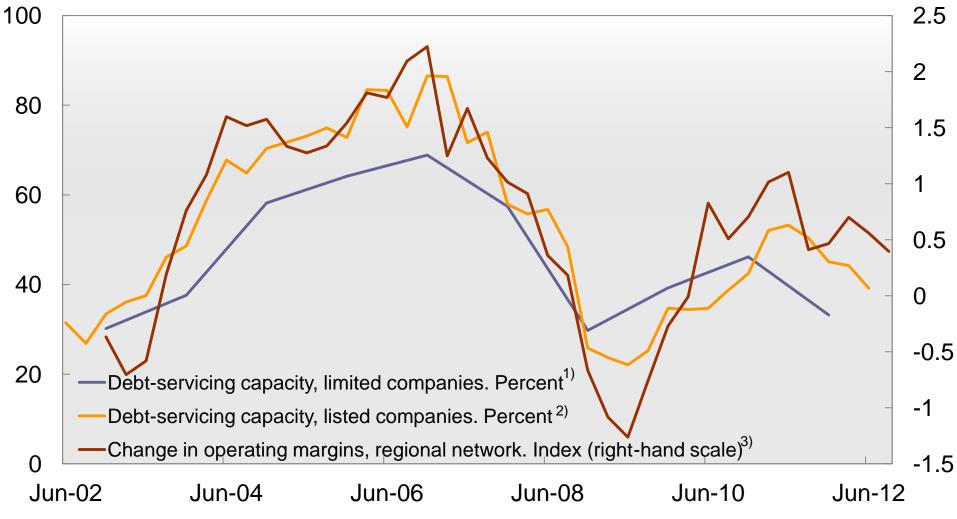
2) The Norwegian standard for institutional sector classification was changed as from 1 January 2012. For credit growth this implies a break in the series from March 2012.

Sources: Statistics Norway and Norges Bank's lending survey

Chart 1.32 Corporate bond issues. In billions of NOK. Daily figures. To 20 November



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 1) All bonds registered in VPS, the Norwegian Central Securities Depository. Including bonds denominated in NOK and foreign currency. Sources: Stamdata and Bloomberg Chart 1.33 Debt-servicing capacity and change in operating margins. Quarterly and annual figures. To 2012 Q3



- 1) Limited companies with debt to credit institutions.
- 2) OBX index excluding Statoil and financial enterprises.

3) Change in operating margins past 3 months compared with same period a year earlier. The index ranges from -5 to +5, where -5 indicates a sharp fall and +5 indicates strong growth. Sources: Bloomberg and Norges Bank

Chart 1.34 Bank and OMF mortgage company lending by industry. Percentage of total corporate lending. As at end-2011

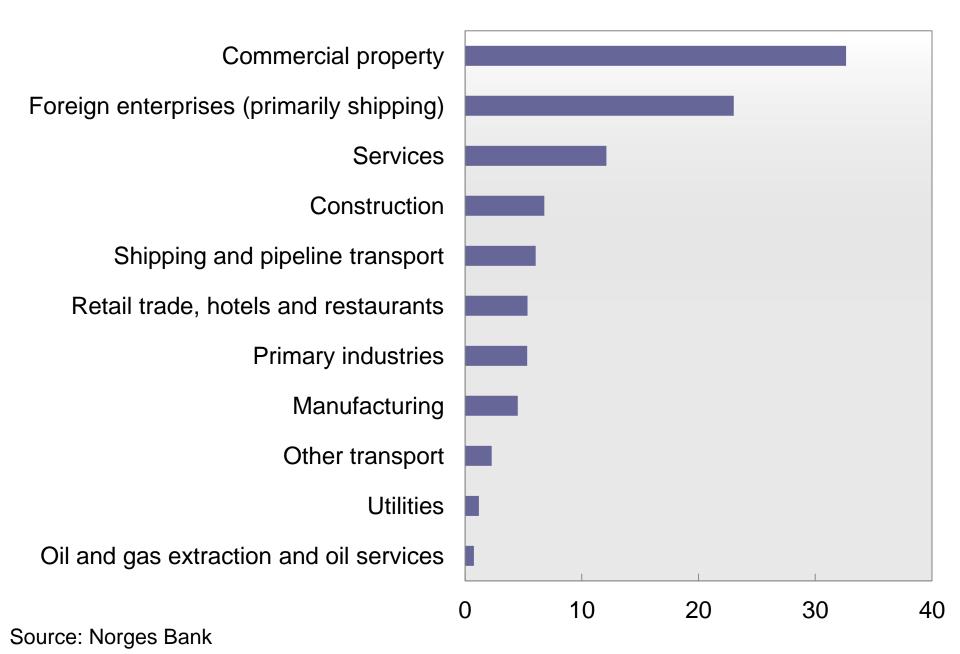
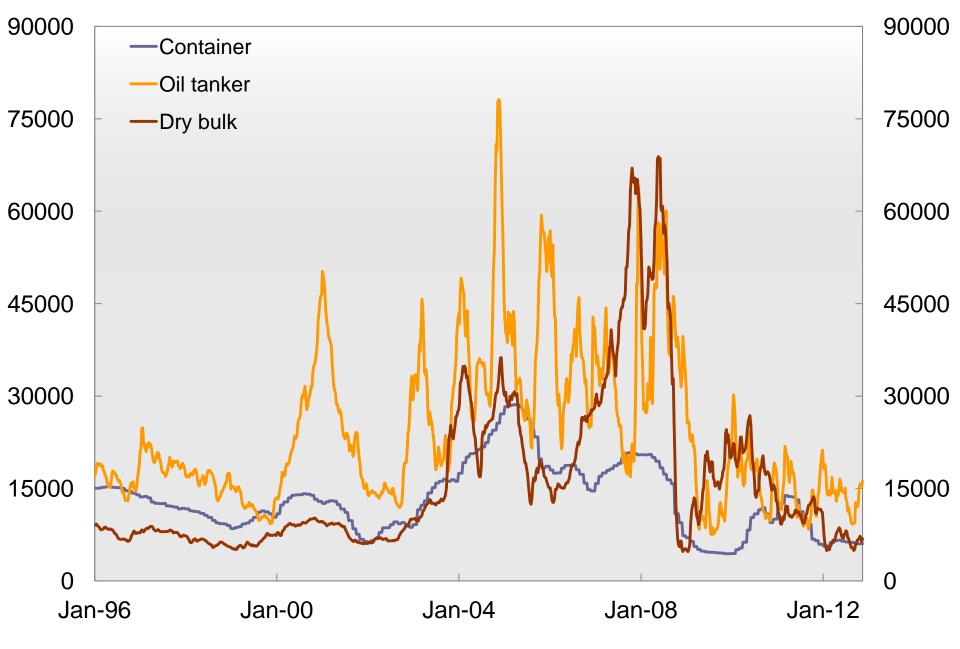
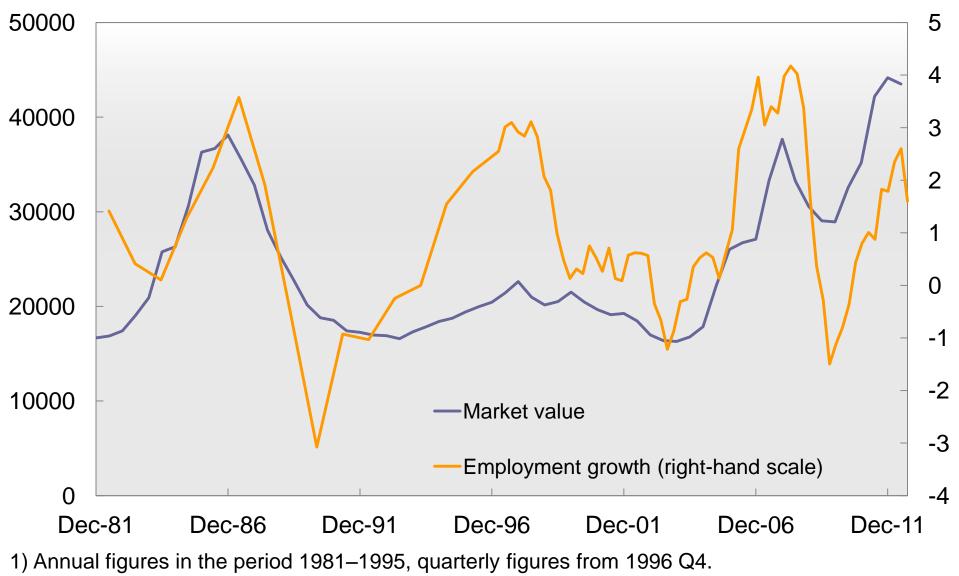


Chart 1.35 Freight rates. USD per day. Weekly figures. To 16 November 2012



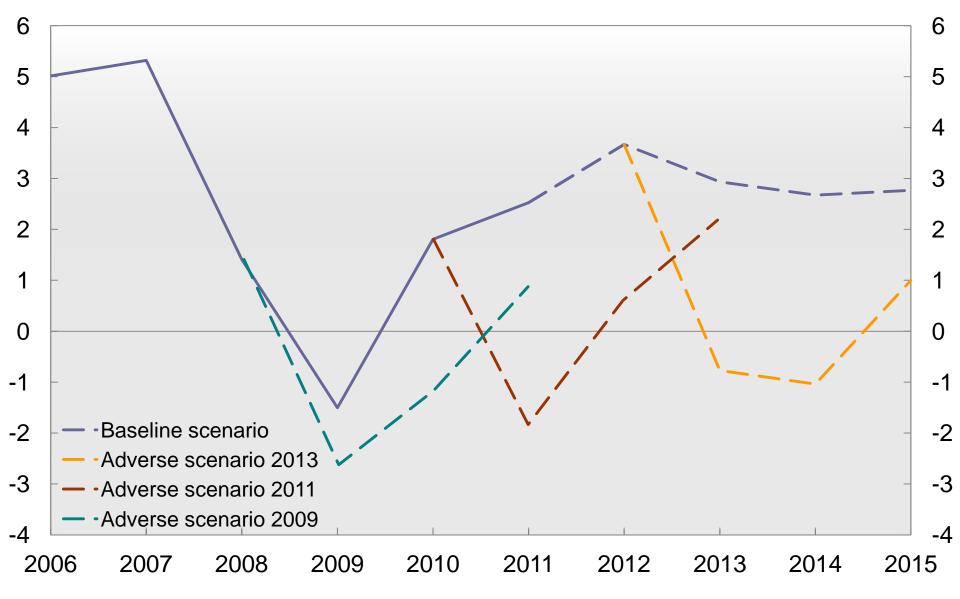
Source: Clarksons LTD

Chart 1.36 Market value of office premises in Oslo and employment growth<sup>1)</sup>. NOK per square metre (at constant 2012 prices) and 12-month change in percent. Semi-annual and quarterly figures. To 2012 Q3

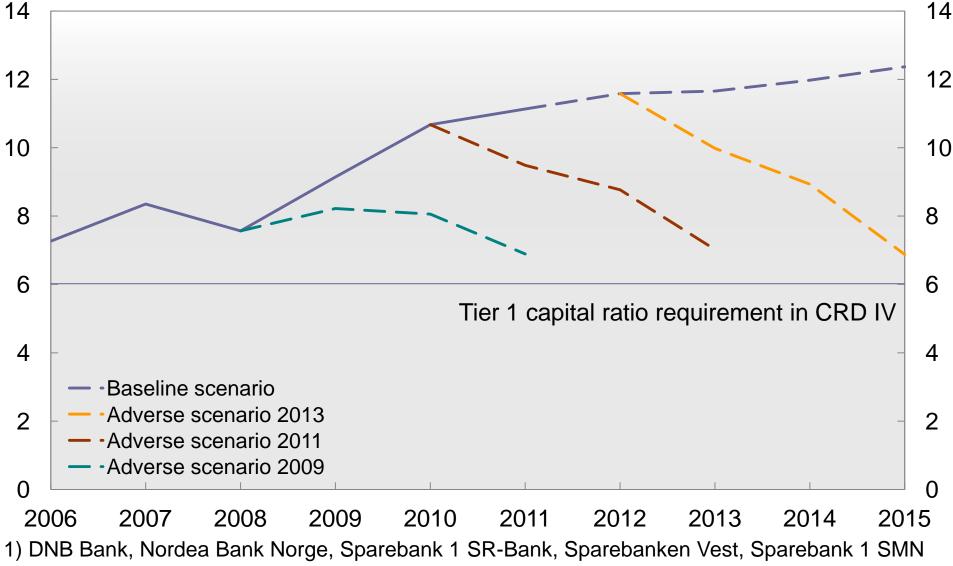


Sources: OPAK and Statistics Norway

Chart 2.1 Mainland GDP. Annual volume change. Percent. Annual figures. 2005 – 2015<sup>1)</sup>



1) Projections for next three years. Sources: Statistics Norway and Norges Bank Chart 2.2 Banks<sup>'1)</sup> Tier 1 capital ratios. Baseline scenario and adverse scenario. Percent. Annual figures. 2006 – 2015<sup>2)</sup>

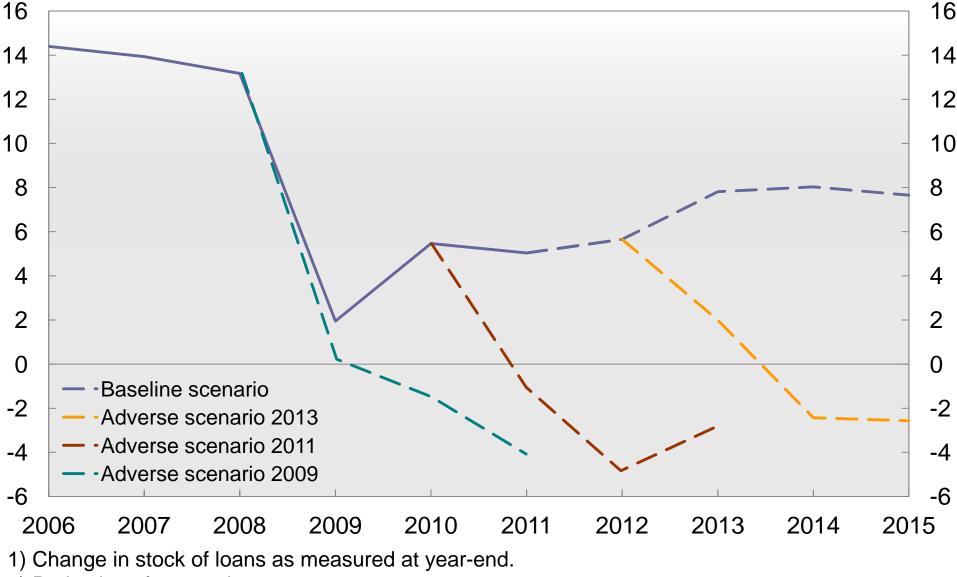


and SpareBank 1 Nord-Norge.

2) Projections for next three years.

Sources: Finanstilsynet (Financial Supervisory Authority of Norway) and Norges Bank

Chart 2.3 Weighted growth in credit to enterprises (C3) and households (C2). Year-on-year growth.<sup>1)</sup> Percent. Annual figures.  $2005 - 2015^{2)}$ 



2) Projections for next three years.

Sources: Statistics Norway and Norges Bank

Chart 2.4 Bank<sup>1)</sup> losses in adverse scenarios with different starting points for projections.<sup>2)</sup> In billions of NOK

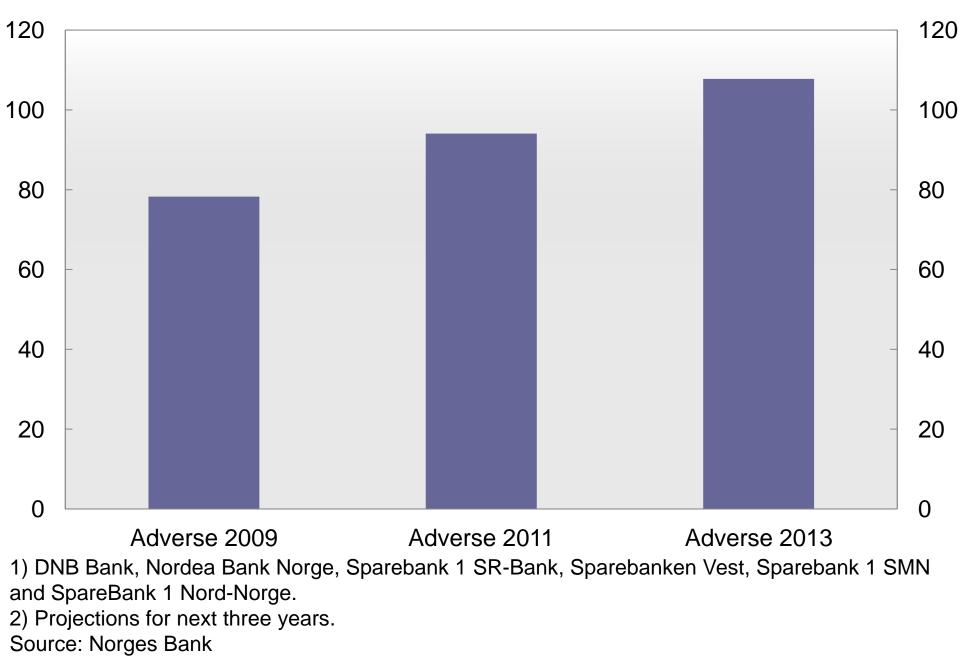
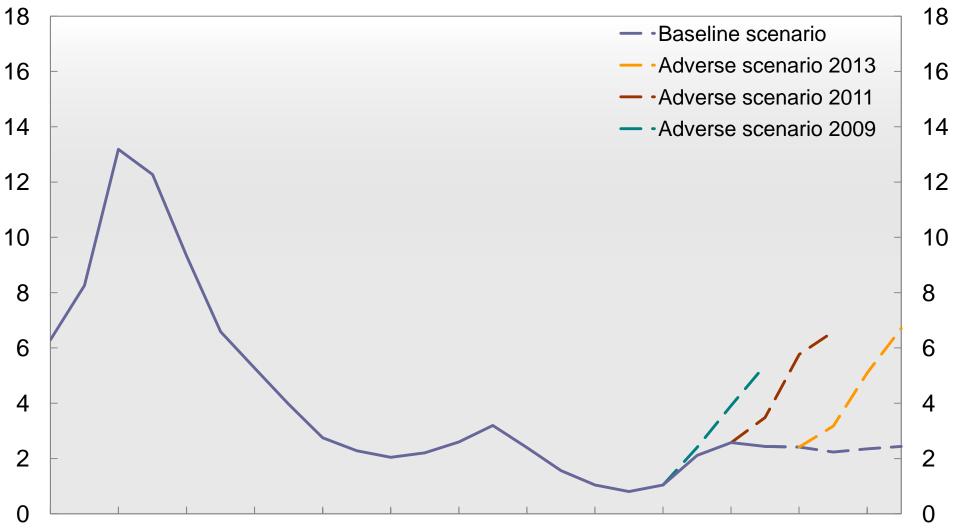


Chart 2.5 Banks<sup>'1)</sup> problem loans as a percentage of gross lending. Annual figures. 1990 – 2015<sup>2)</sup>

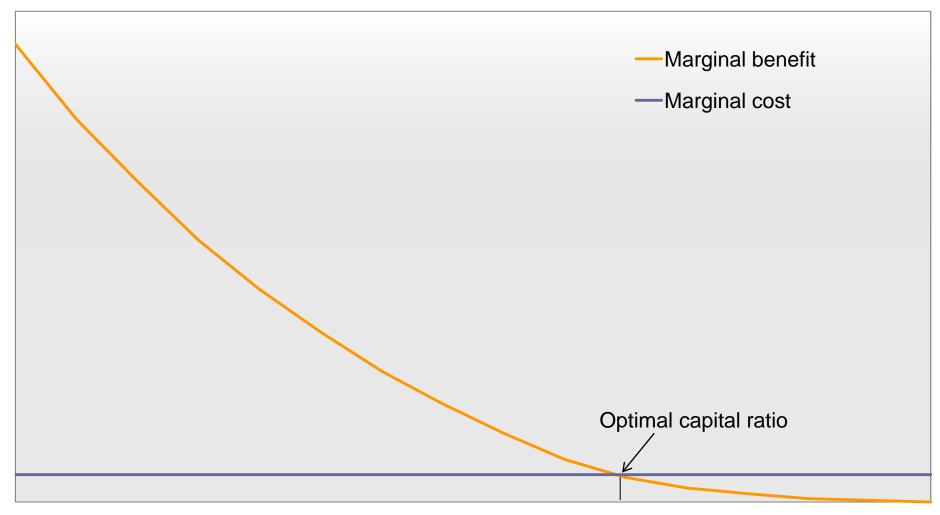


1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 1) All banks in Norway.

2) Projections for next three years.

Sources: Statistics Norway and Norges Bank

Chart 1 Analytical framework. Marginal benefit and marginal cost of a one percentage point increase in capital ratios from different levels. Percent of GDP



Common Equity Tier 1 capital ratio

Source: Norges Bank

Chart 2 Scatter diagram for optimal capital adequacy ratios of Norwegian banks. Common Equity Tier 1 capital without the Basel I transition floor. Percent

