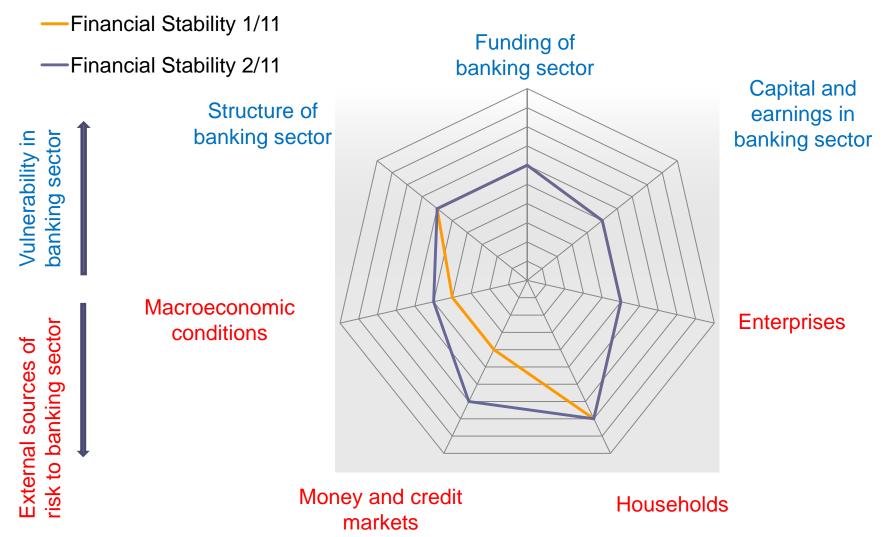
## Financial stability 2/11

Charts

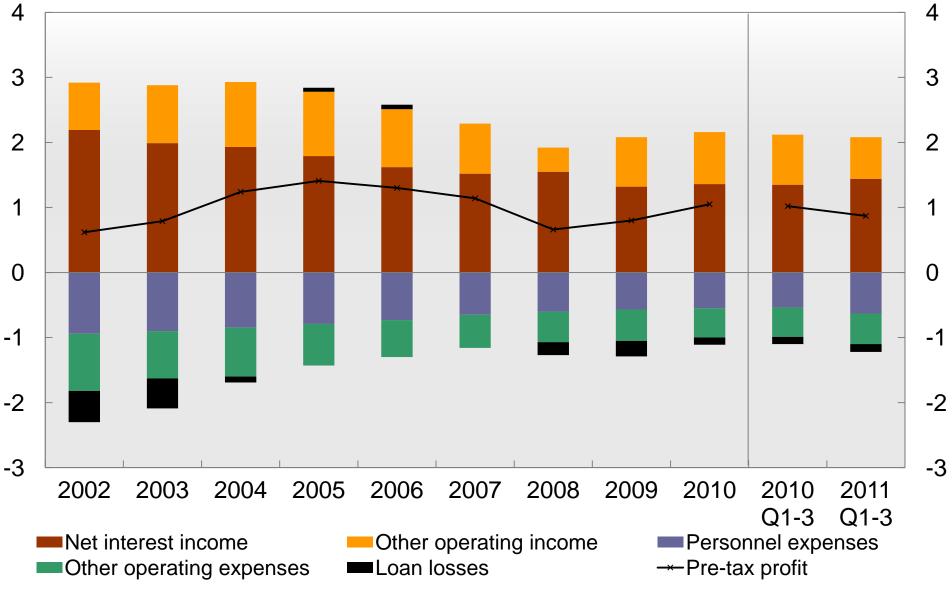


Chart 1.1 Vulnerabilities in the Norwegian banking sector and external sources of risk to the banking sector<sup>1)</sup>



1) A value of 0, ie. origo, denotes the lowest level of risk or vulnerability. A value of 10 denotes the highest level of risk or vulnerability.

Chart 1.2 Banks<sup>'1)</sup> pre-tax profit as a percentage of average total assets. Per cent. Annual figures. 2002 – 2010. 2010 Q1 – Q3 and 2011 Q1 – Q3



1) All banks excluding branches of foreign banks in Norway

Chart 1.3 Return on equity. Norwegian banks<sup>1)</sup> and enterprises. Per cent. Annual figures. 1988 – 2010

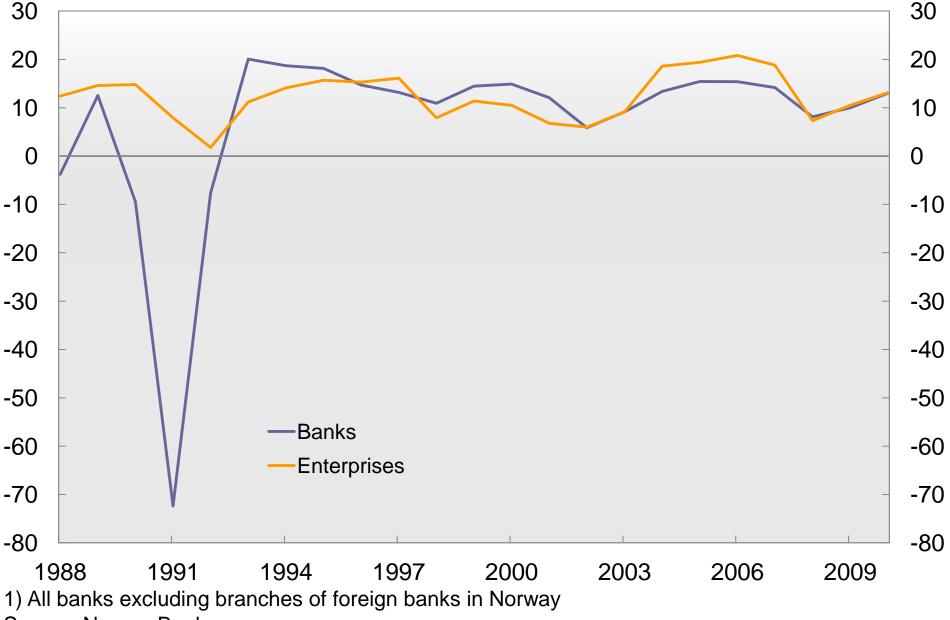
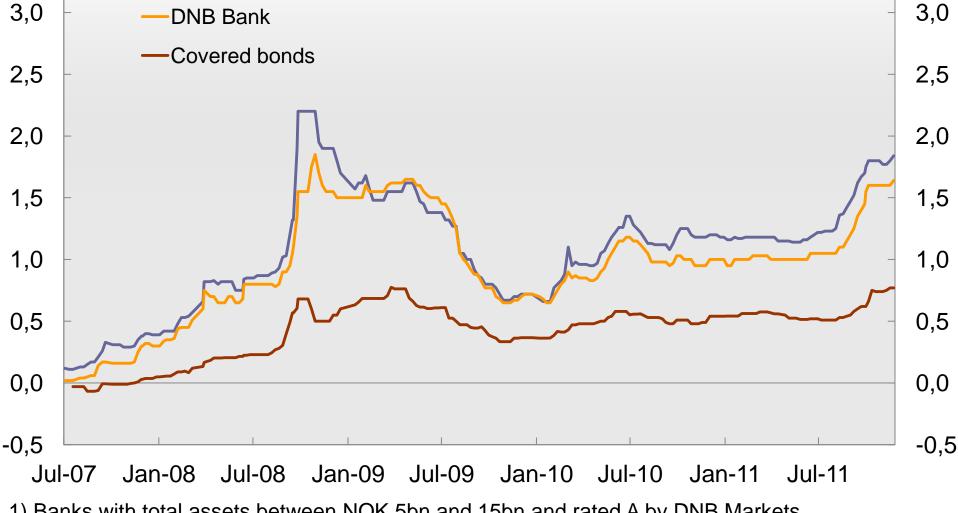


Chart 1.4 Indicative risk premiums on 5-year Norwegian bank bonds and covered bonds. Spread against swap rates. Percentage points. Weekly figures. 2 July 2007 – 23 November 2011

-Small banks with high rating<sup>1)</sup>

3,5

3,5



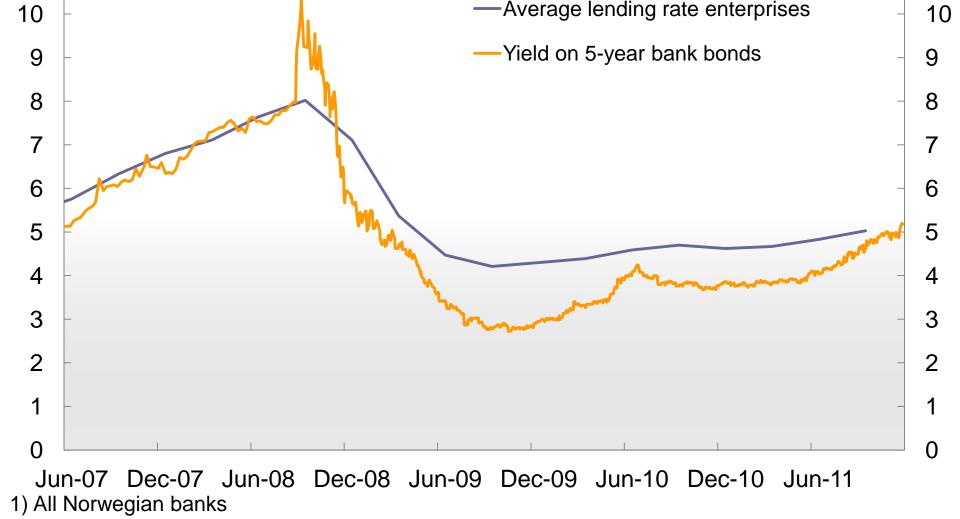
1) Banks with total assets between NOK 5bn and 15bn and rated A by DNB Markets Source: DNB Markets

Chart 1.5 Yield on 5-year covered bonds<sup>1)</sup> and weighted average lending rate on new residential mortgages<sup>2)</sup>. Per cent. Daily figures. 2 July 2007 – 23 November 2011



2) Interest rate on new residential mortgages of NOK 1m within 60% of purchase price with variable interest rate. Figures for the 20 largest banks, weighted by market share Sources: Norsk Familieøkonomi AS, DNB Markets and Norges Bank

Chart 1.6 Average bank lending rate for non-financial private enterprises<sup>1)</sup> and yield on 5-year bank bonds<sup>2)</sup>. Per cent. Quarterly and daily figures. 2007 Q2 – 2011 Q3 and 2 July 2007 – 23 November 2011



2) Sum of 3-month NIBOR and indicative credit spreads on 5-year bank bonds Sources: Statistics Norway, DNB Markets and Norges Bank

Chart 1.7 Banks'1) securities holdings as a percentage of total assets. Per cent. Annual figures. 1987 – 2010 and 2011 Q3

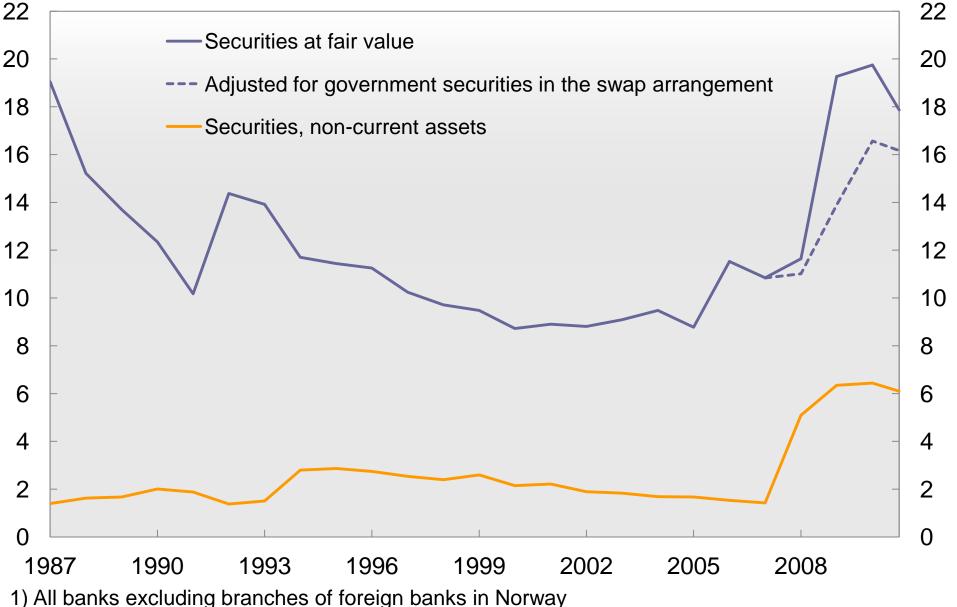
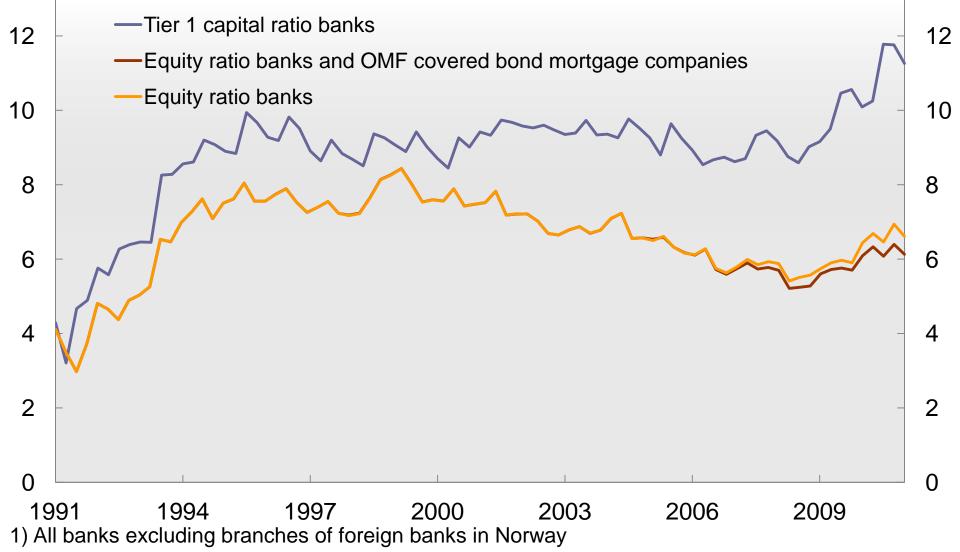
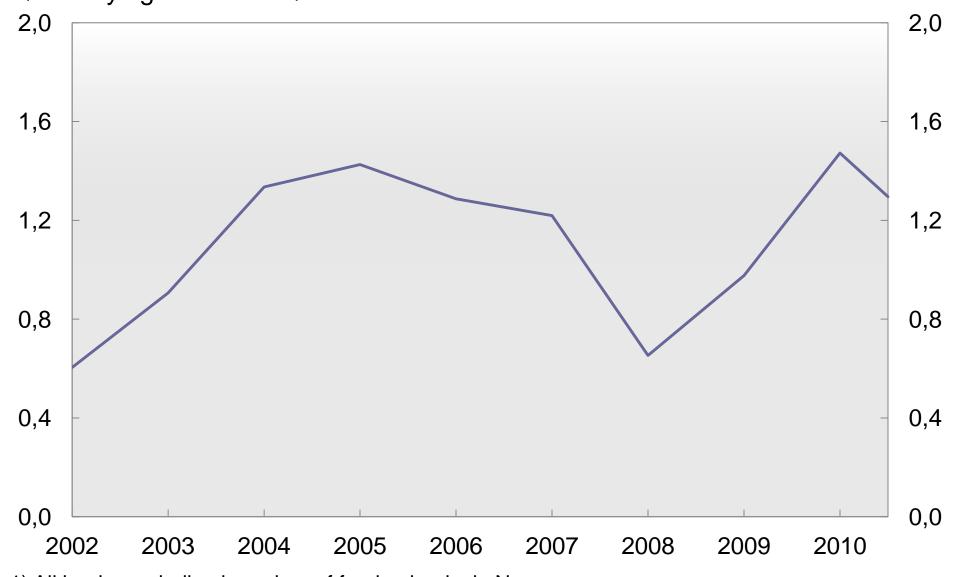


Chart 1.8 Banks<sup>'1)</sup> and OMF covered bond mortgage companies<sup>'2)</sup> Tier 1 capital ratio and equity ratio. Per cent. Quarterly figures. 1991 Q2 – 2011 Q3<sup>3</sup>)



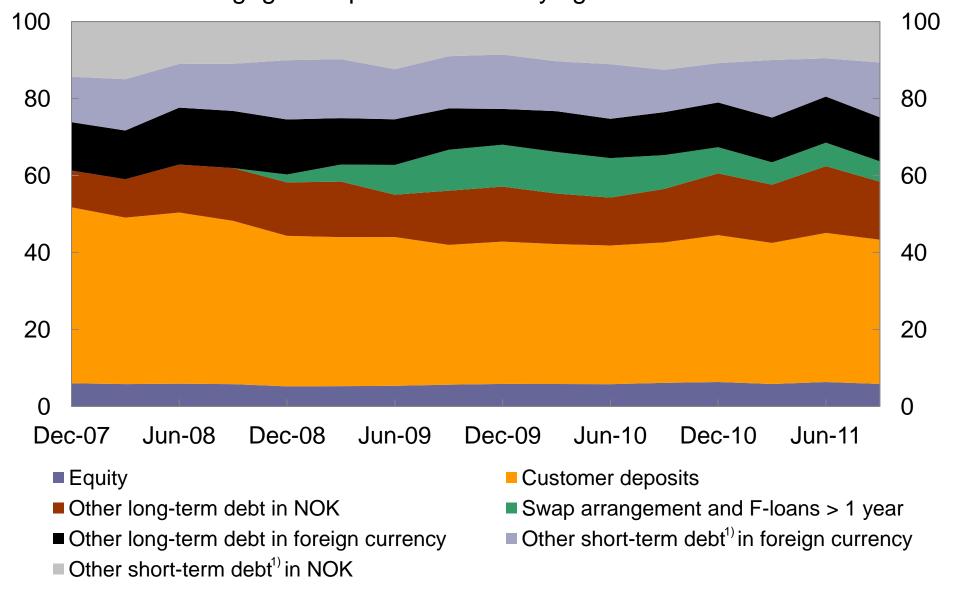
- 2) Norwegian OMF covered bond mortgage companies
- 3) Figures for Tier 1 capital ratio as at 2011 Q2
- Sources: Finanstilsynet (Financial Supervisory Authority of Norway) and Norges Bank

Chart 1.9 Banks<sup>'1)</sup> after-tax profits as a percentage of risk-weighted assets. Sum of previous four quarters. Per cent. Annual figures 2002 – 2010. Quarterly figures 2011 Q2



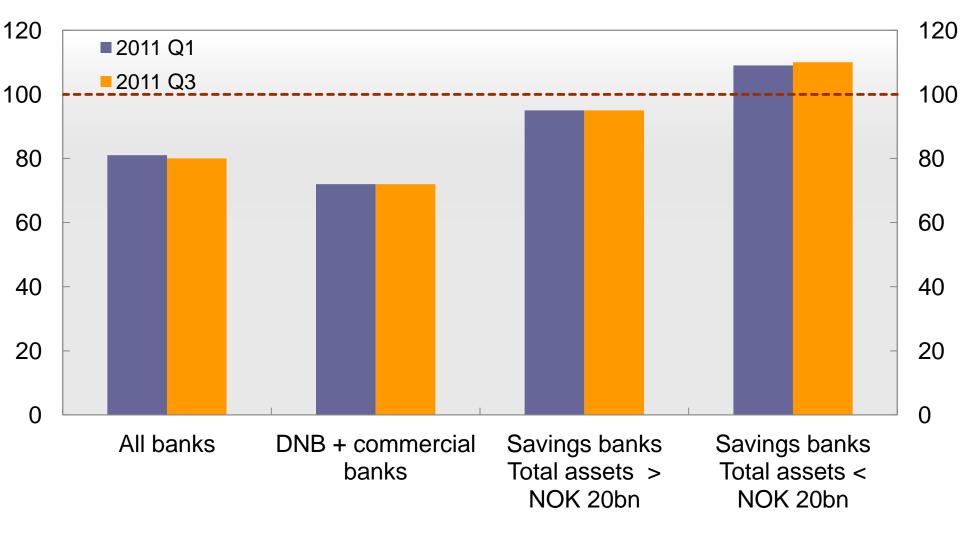
1) All banks excluding branches of foreign banks in Norway Source: Norges Bank

Chart 1.10 Funding as a percentage of assets. Norwegian-owned banks and covered bond mortgage companies. Quarterly figures. 2007 Q4 – 2011 Q3



1) Short-term debt is debt with a maturity of 1 year or less Source: Norges Bank

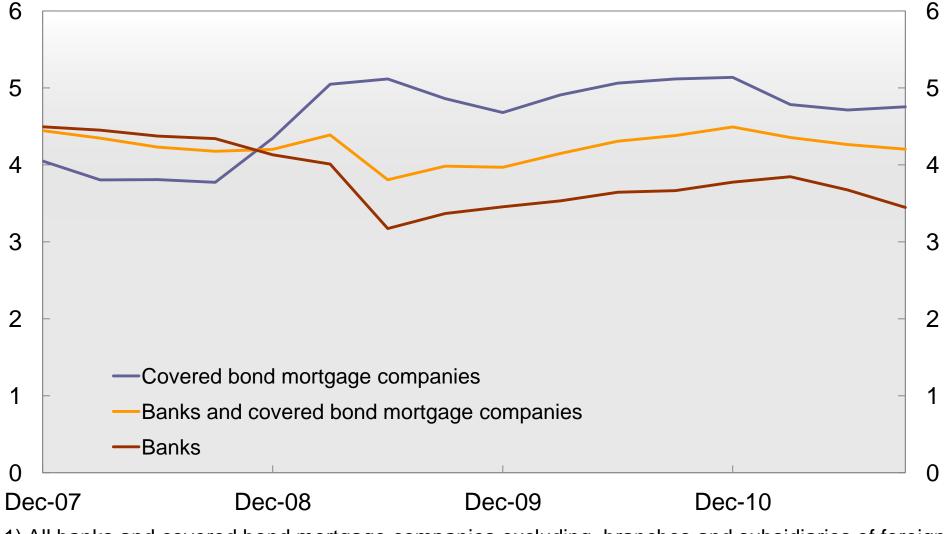
Chart 1.11 Banks'1) stable funding as a percentage of stable funding requirement (NSFR).2) Weighted average for group. End of quarter



The broken line shows the requirement under the Net Stable Funding Ratio (Basel III)

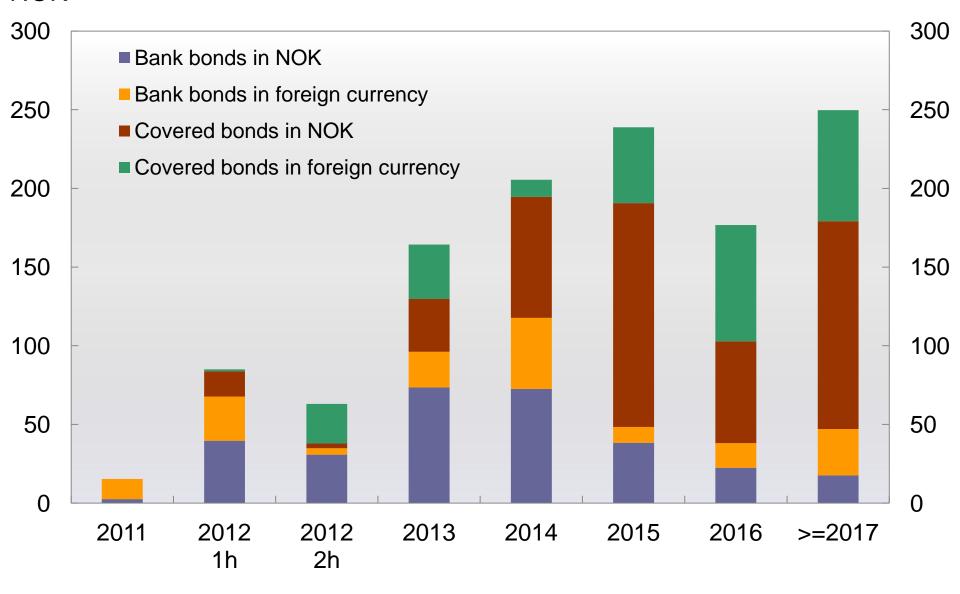
- 1) All banks excluding branches of foreign banks in Norway.
- 2) Norges Bank's estimate Source: Norges Bank

Chart 1.12 Banks and covered bond mortgage companies<sup>'1)</sup> weighted residual maturity of gross market funding maturing in more than one year. In years. Quarterly figures. 2007 Q4 – 2011 Q3



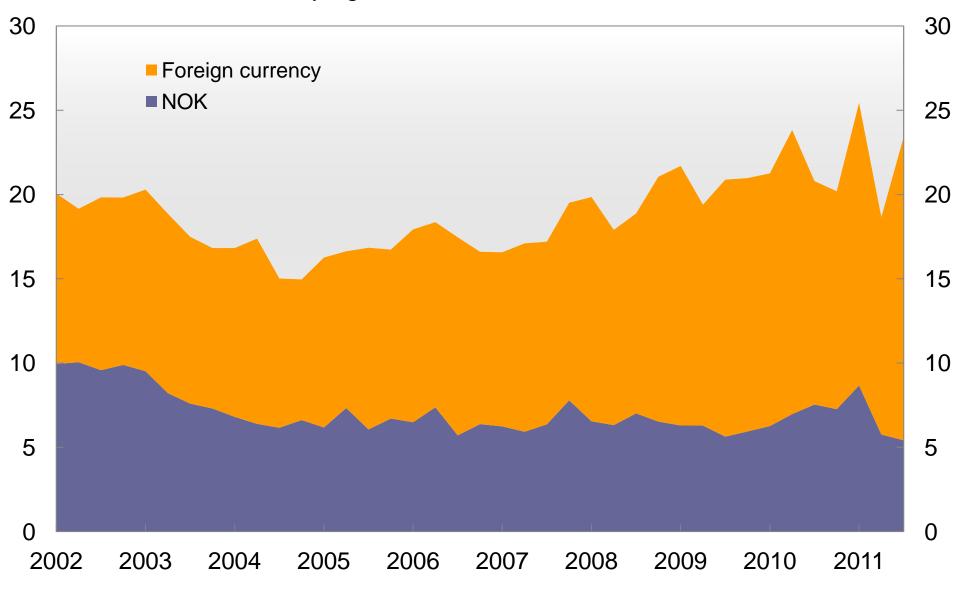
1) All banks and covered bond mortgage companies excluding branches and subsidiaries of foreign institutions in Norway. Break in series in 2009 Q2 as a result of more closely defined intervals Source: Norges Bank

Chart 1.13 Banks and covered bond mortgage companies' senior bond debt by maturity in NOK and foreign currency. As of 23 November 2011. In billions of NOK



Sources: Bloomberg and Stamdata

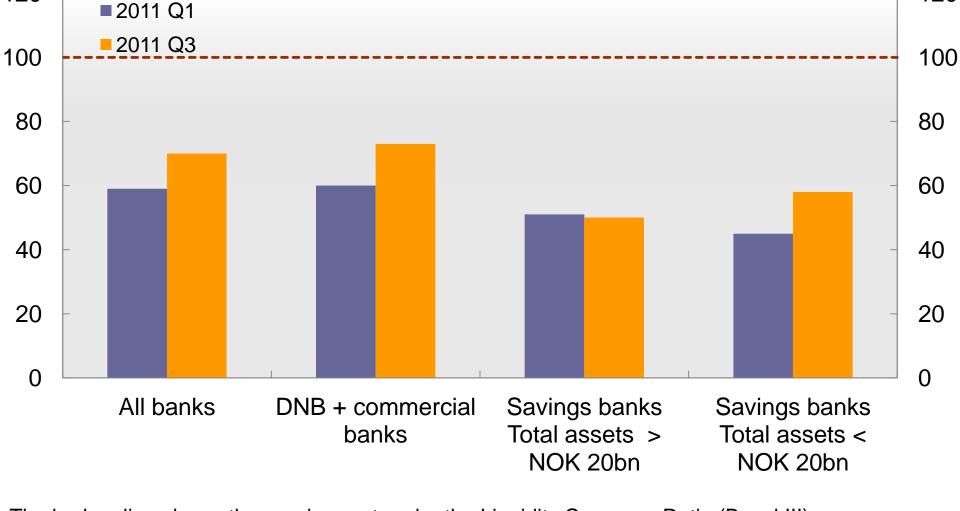
Chart 1.14 Banks'1) gross short-term market funding as a percentage of total assets. Per cent. Quarterly figures. 2002 Q1 – 2011 Q3



1) All banks excluding branches and subsidiaries of foreign banks in Norway. Source: Norges Bank

Chart 1.15 Banks'1) liquid assets as a percentage of required liquid assets (LCR).2) Weighted average for group. End of quarter

120



The broken line shows the requirement under the Liquidity Coverage Ratio (Basel III)

- 1) All banks excluding branches of foreign banks in Norway.
- 2) Norges Bank's estimate Source: Norges Bank

120

Chart 1.16 Funding structure of Norwegian banks<sup>1)</sup>. Division into groups based on total assets (TA).<sup>2)</sup> Percentage of total assets. Per cent. As at 2011 Q2

Subordinated debt

160

160

Equity

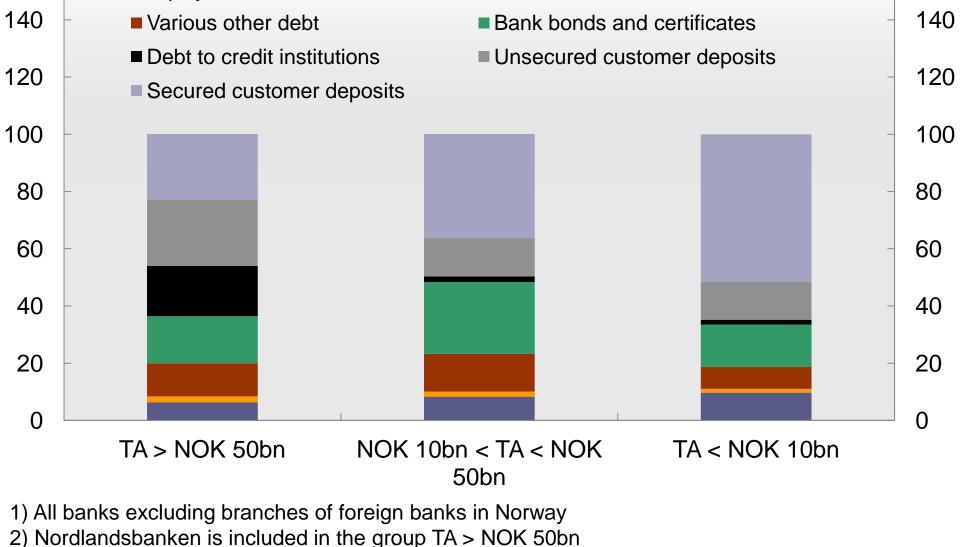
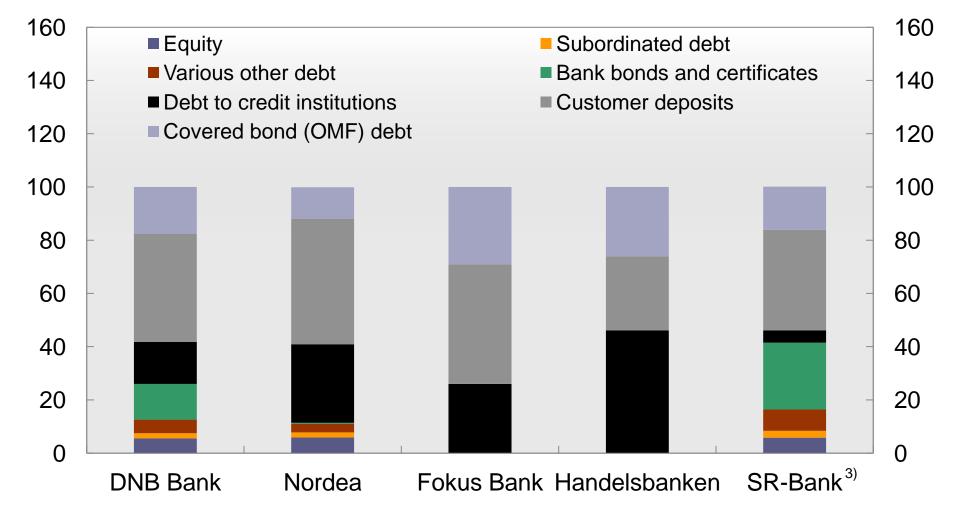
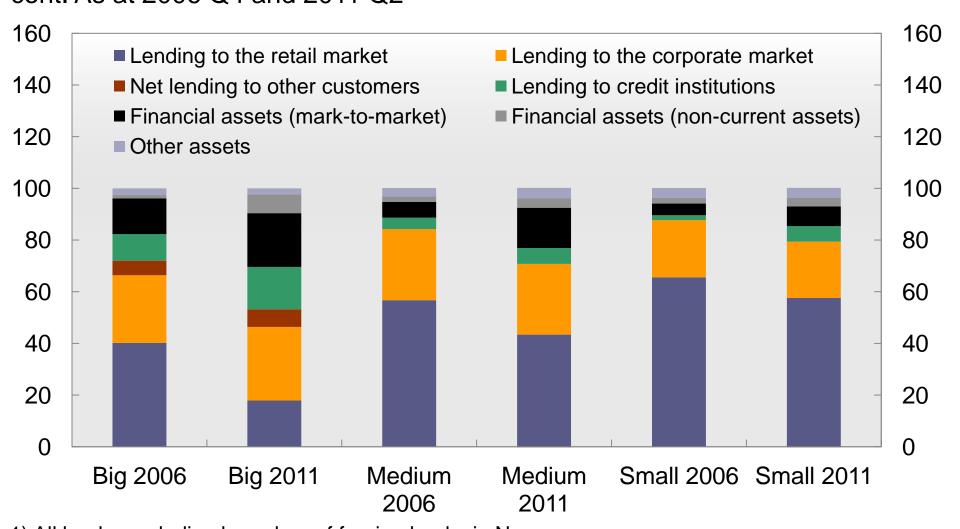


Chart 1.17 Funding structure of the five largest banking groups.<sup>1)</sup> Percentage of total assets.<sup>2)</sup> Per cent. As at 2010 Q4



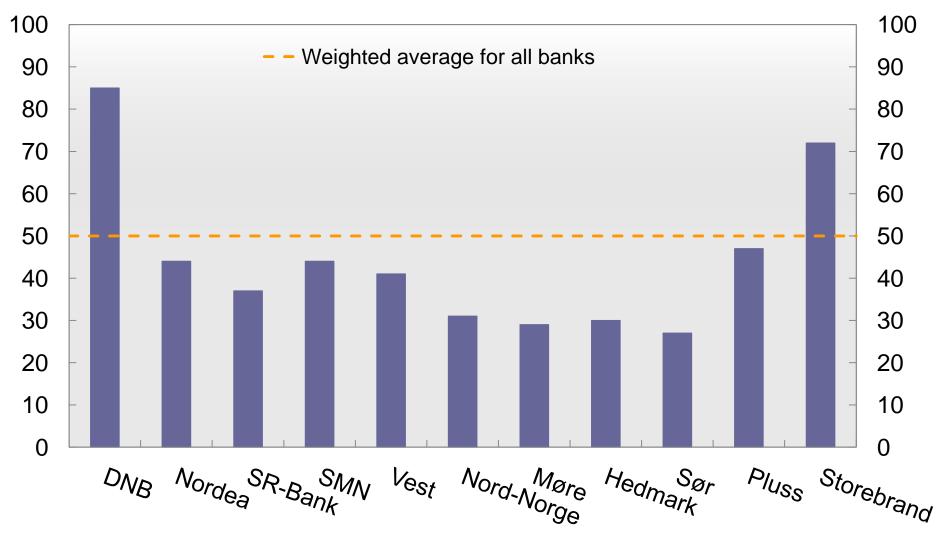
- 1) DNB Bank, Nordea Bank Norge, Fokus Bank filial av Danske Bank, Handelsbanken NUF and SpareBank 1 SR-Bank
- 2) Shares of lending for Fokus Bank filial av Danske Bank and Handelsbanken NUF
- 3) Including loans transferred to SpareBank 1 Boligkreditt
- Sources: Public financial information from the institutions and Norges Bank's estimates

Chart 1.18 Composition of Norwegian banks<sup>1</sup> assets. Division into groups based on total assets (TA) as at 2011 Q2.<sup>2</sup> Percentage of total assets. Per cent. As at 2006 Q4 and 2011 Q2



- 1) All banks excluding branches of foreign banks in Norway
- 2) Big: TA > NOK 50bn, medium: NOK 10bn < TA < NOK 50bn, small: TA < NOK 10bn Nordlandsbanken is included in the group of big banks

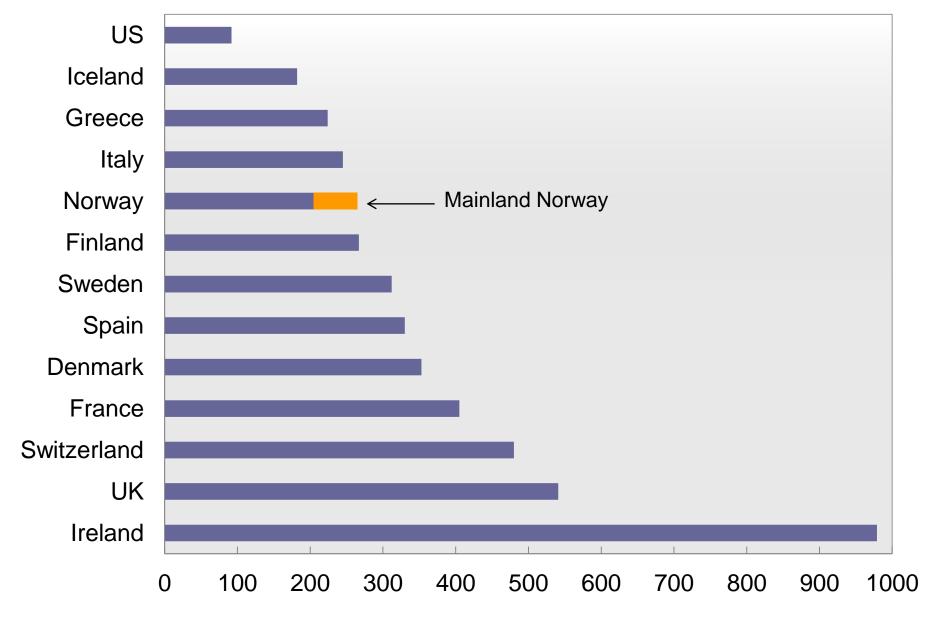
Chart 1.19 Share of mortgage loans that banks<sup>1)</sup> have transferred to covered bond mortgage companies. Average for all banks.<sup>2)</sup> Per cent. As at 2011 Q2<sup>3)</sup>



- 1) Banks with more than NOK 35bn in total assets as at 2011 Q2
- 2) All banks excluding branches of foreign banks in Norway
- 3) As at 2010 Q4 for Nordea Bank Norge

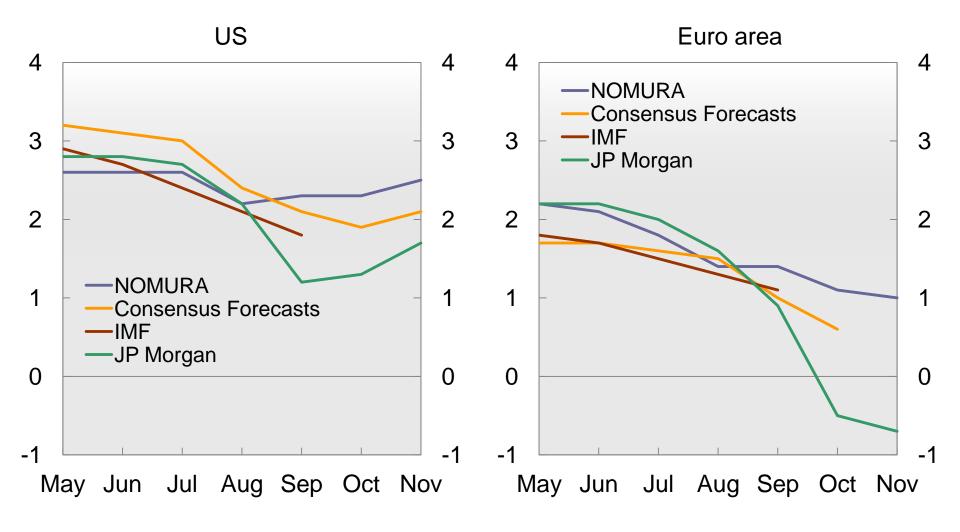
Sources: Public financial information from the institutions and Norges Bank's estimates

Chart1 Total assets in the banking sector as a share of GDP in different countries. Per cent. As of 31 December 2010



Sources: Central banks, Thomson Reuters, FDIC, Statistics Norway and Norges Bank

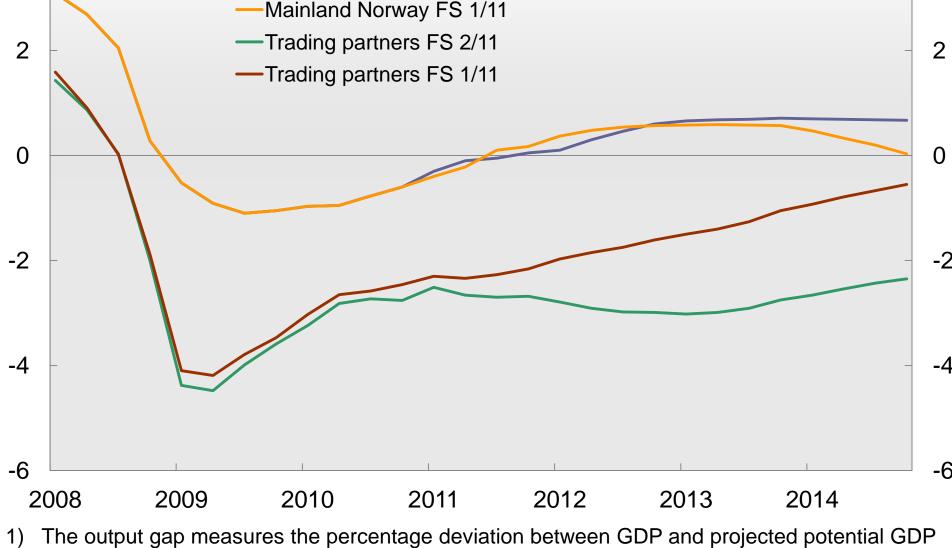
Chart 1.20 Projected GDP growth in 2012, US and euro area. Per cent. Monthly figures. Projections through 2011



Sources: Nomura, Consensus Economics, IMF and JP Morgan

Chart 1.21 Projected output gap<sup>1)</sup> for mainland Norway and Norway's trading partners. Per cent. Quarterly figures. 2008 Q1– 2014 Q4

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1) The output gap measures the percentage deviation between GDP and projected potential GDP Sources: Statistics Norway, IMF and Norges Bank

Chart 1.22 Bank lending surveys in the euro area. Net share of banks that have tightened credit standards. Quarterly figures. 2003 Q1–2011 Q3

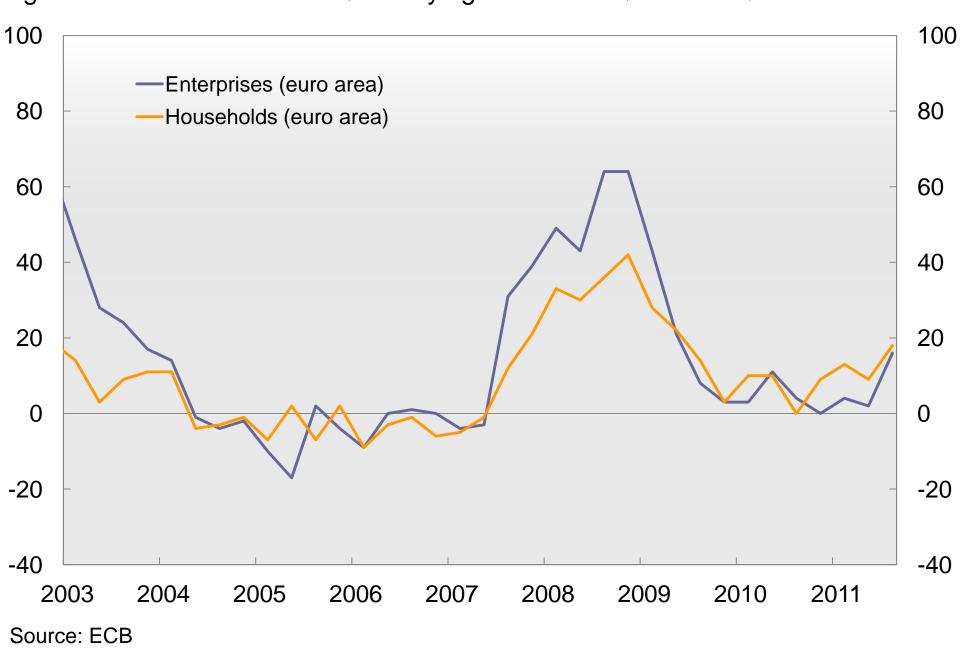
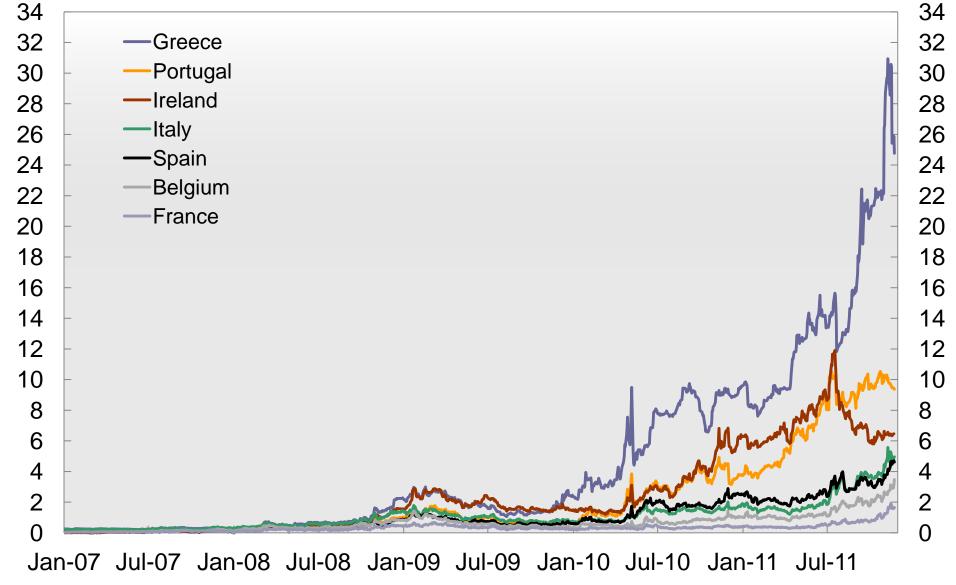


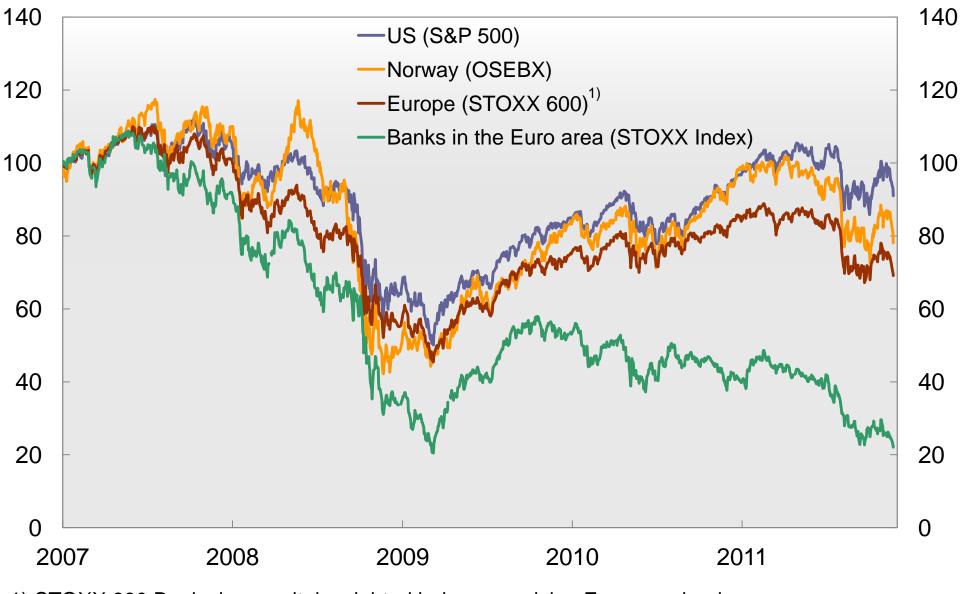
Chart 1.23 Government bond spreads. Compared with German government bonds. 10-year maturity. Percentage points. Daily figures.

1 January 2007 – 23 November 2011



Source: Thomson Reuters

Chart 1.24 Equity index prices. Indices. 1 January 2007=100. Daily figures. 2 January 2007 – 23 November 2011



1) STOXX 600 Banks is a capital-weighted index comprising European banks Source: Thomson Reuters

Chart 1.25 Risk premium on European and US bank bond indices. 5-year average maturity. AA-rating. Basis points.

30 December 1996 – 23 November 2011

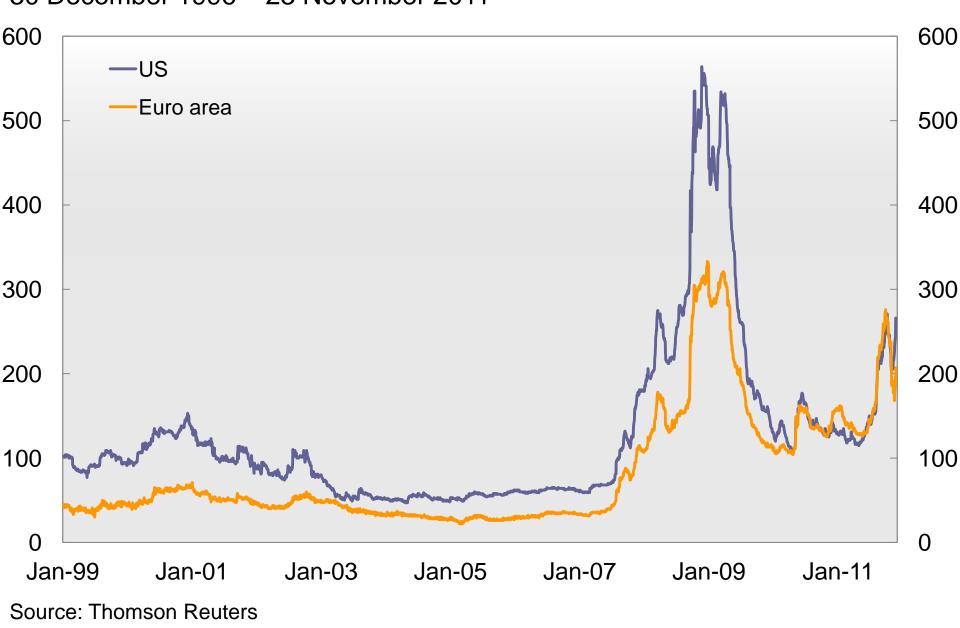
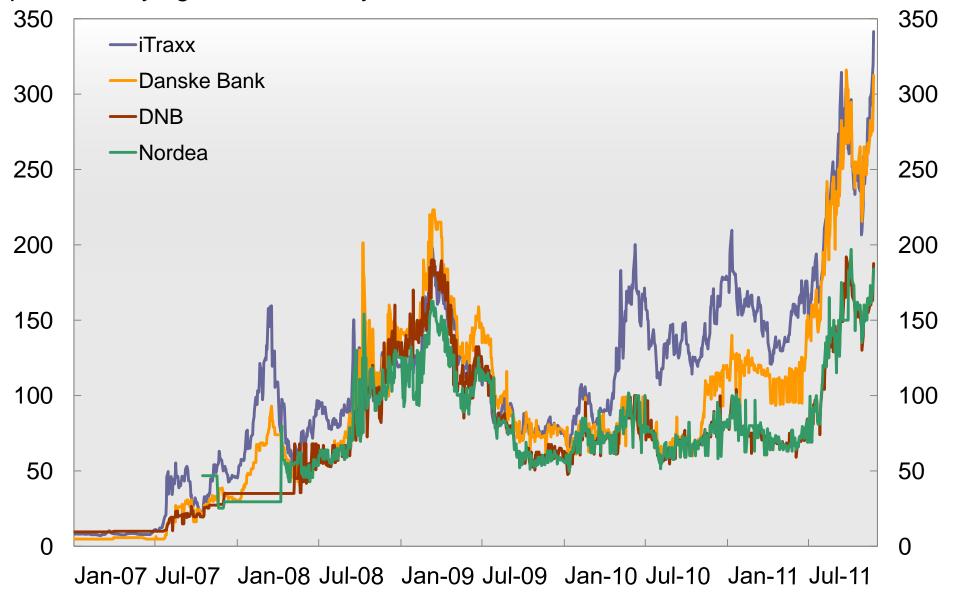


Chart 1.26 CDS prices. iTraxx Senior Financials<sup>1)</sup> and Nordic banks. Basis points. Daily figures. 1 January 2007 – 23 November 2011



1) iTraxx Senior Financials comprises 25 large European financial institutions Source Bloomberg

Chart 1.27 Volume of bonds and OMF covered bonds issued by Norwegian banks and mortgage companies. In billions of NOK. Annual and monthly figures. 2005–2010. January – November<sup>1)</sup> 2010 and 2011

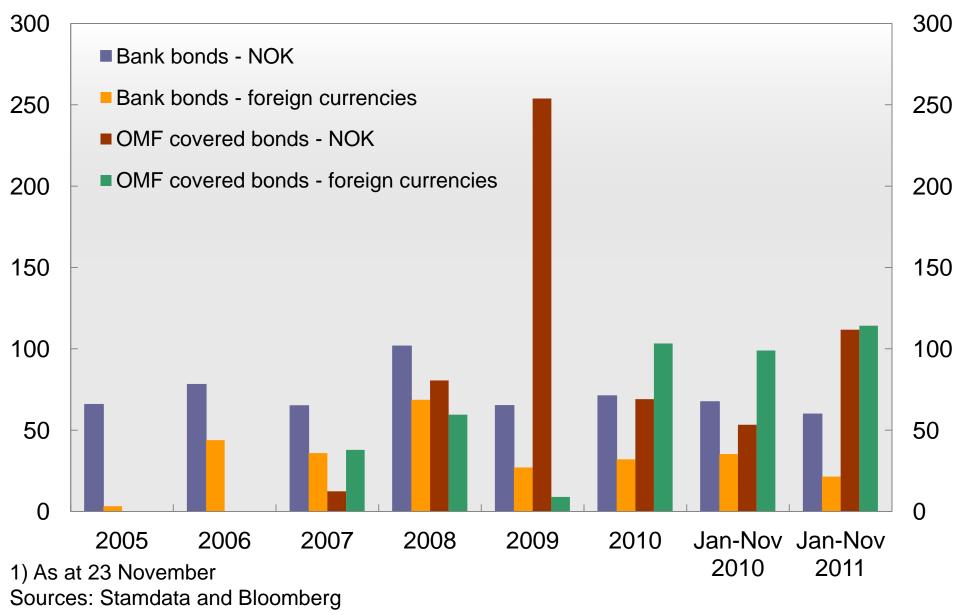
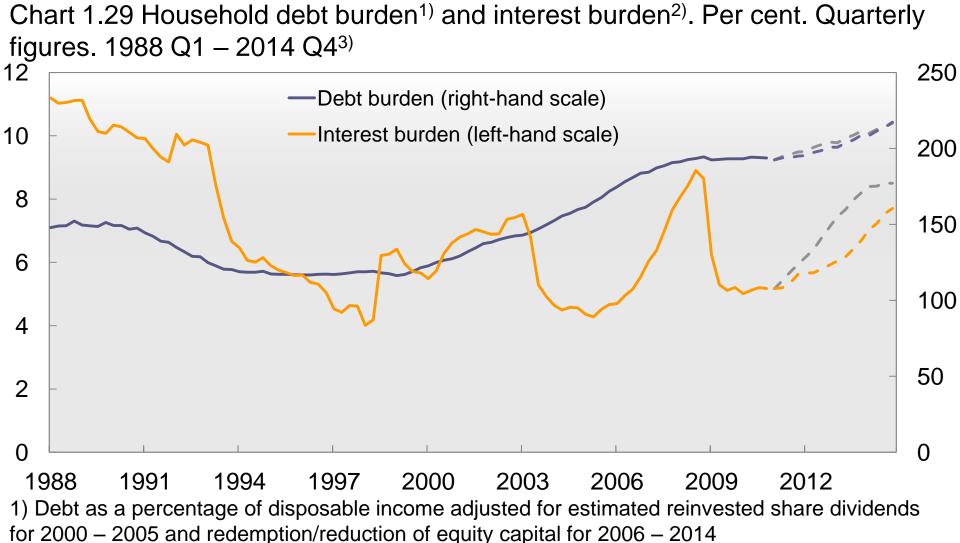


Chart 1.28 Spread between 3-month money market rate and market expectations as to the key rate. Percentage points. 5-day moving average. Daily figures. 5 January 2007 – 23 November 2011



1) Expected key rates are derived from Overnight Indexed Swaps (OIS). OIS for Norway estimated by Norges Bank

Sources: Bloomberg, Thomson Reuters and Norges Bank



2014, plus interest expenses

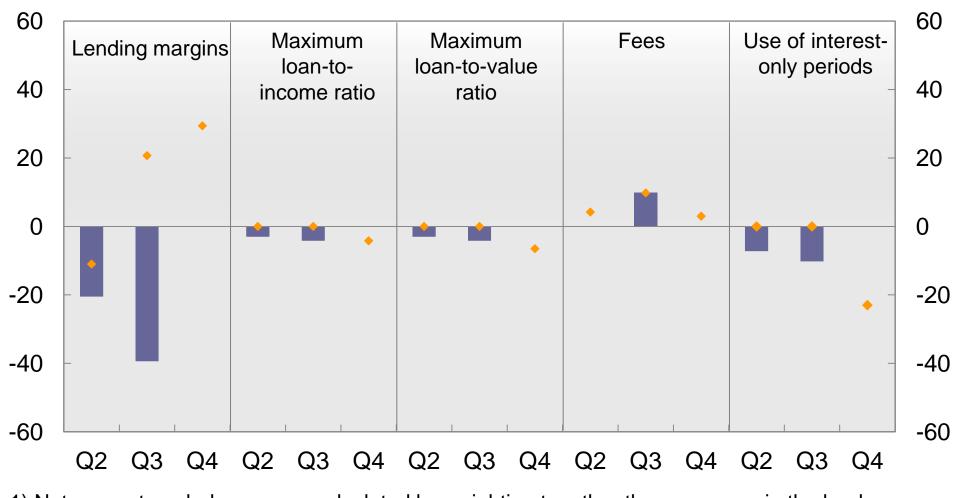
3) Projections for 2011 Q1 – 2014 Q4 from *Monetary Policy Report* 3/2011. The grey broken lines show projections from *Monetary Policy Report* 2/2011

2) Interest expenses after tax as a percentage of disposable income adjusted for estimated

reinvested share dividends 2000 – 2005 and redemption/reduction of equity capital for 2006 –

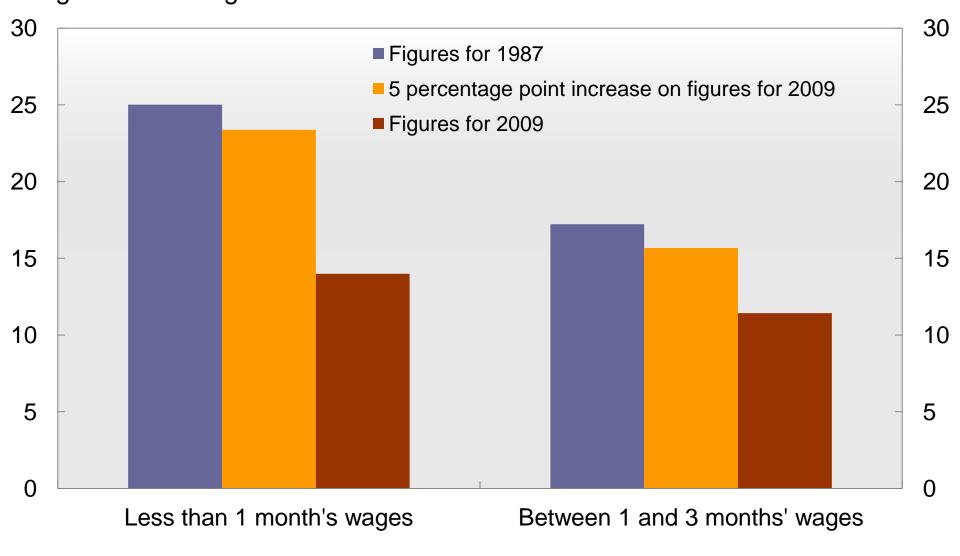
Sources: Statistics Norway and Norges Bank

Chart 1.30 Change in loan conditions for households. Factors affecting credit standards. Net percentage balances.<sup>1) 2)</sup> As at 2011 Q3



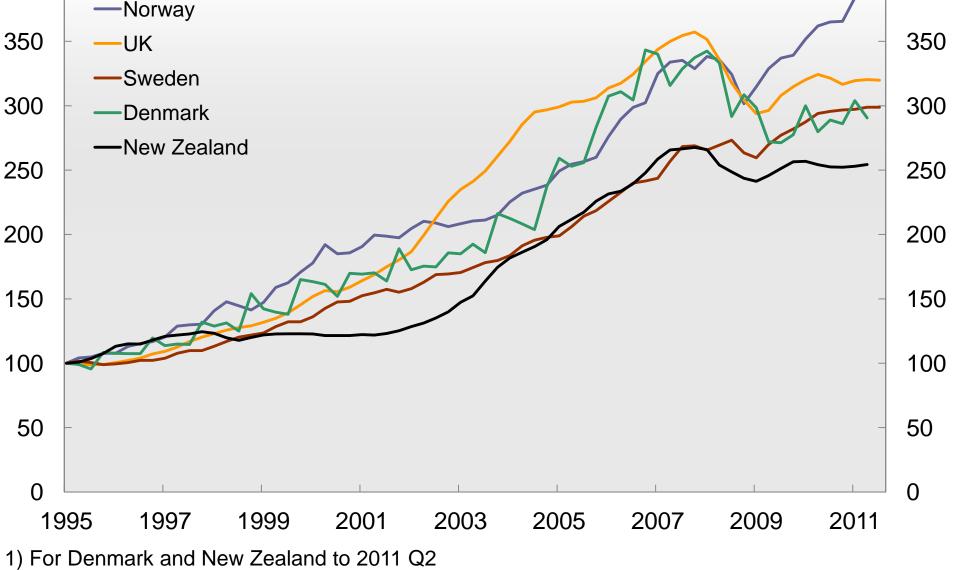
 Net percentage balances are calculated by weighting together the responses in the bank survey. The blue bars show developments in the past quarter. The yellow diamonds show expectations for the next quarter. The yellow diamonds have been moved forward one quarter
 Positive net percentage balances for lending margins and fees indicate tighter credit Standards. Negative net percentage balances for the other factors denote tighter credit standards Source: Norges Bank

Chart 1.31 Share of households with less than three months' wages as financial margin<sup>1)</sup>. Annual figures. 1987 and 2009



1) Financial margin is yearly wages after tax less interest expenses and standard living expenses (as defined by National Institute for Consumer Research, SIFO) Sources: Statistics Norway and Norges Bank

Chart 1.32 House prices in selected countries. Indices. 1995 Q1 = 100. Quarterly figures. 1995 Q1 - 2011 Q3<sup>1</sup>)

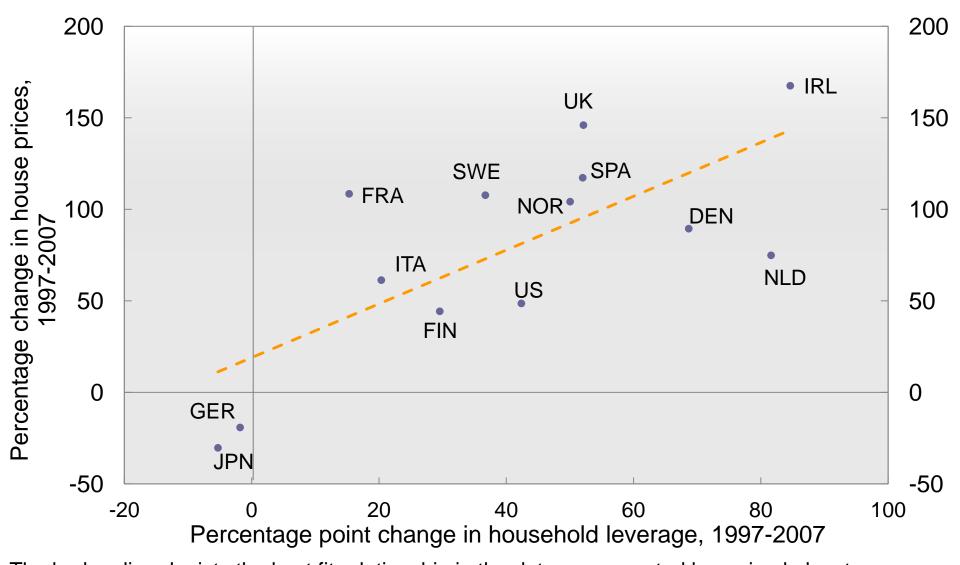


400

1) For Denmark and New Zealand to 2011 Q2 Source: Thomson Reuters

400

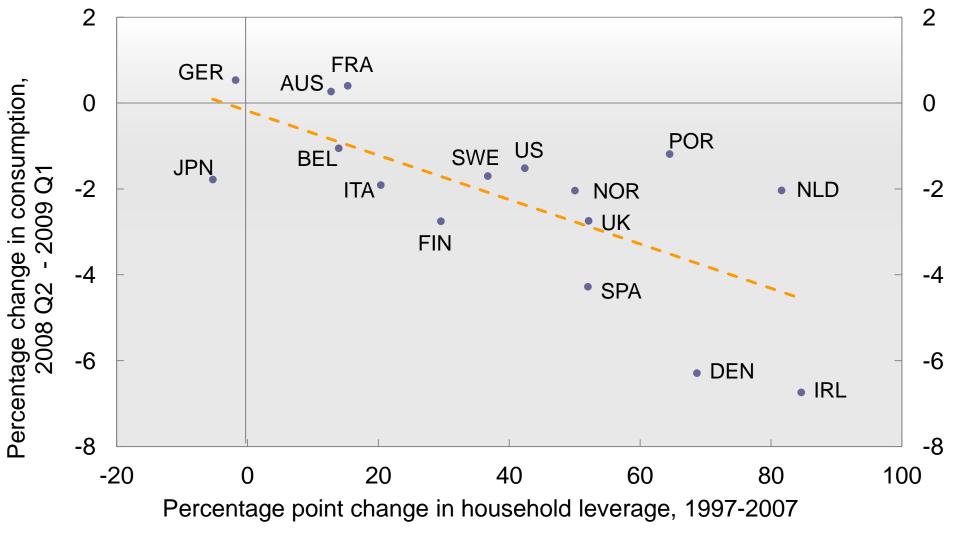
Chart 1.33 Change in household leverage and house prices before the financial crisis. Per cent. Annual figures. 1997-2007



The broken line depicts the best fit relationship in the data as generated by a simple least square statistical regression

Sources: OECD, Haver Analytics and Eurostat

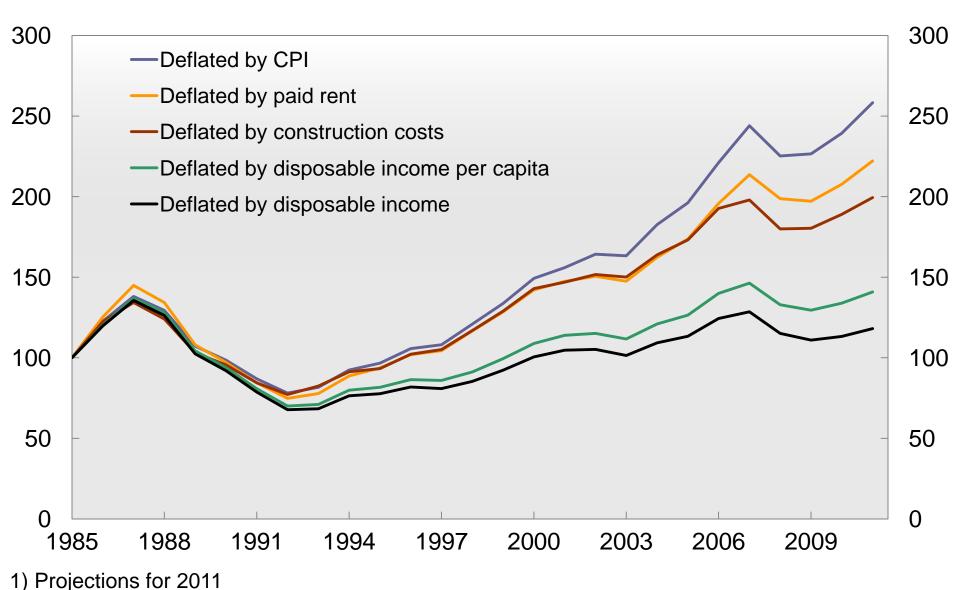
Chart 1.34 Change in household leverage before the financial crisis and consumption during the financial crisis. Per cent. Annual and quarterly figures. 1997-2007 and 2008 Q2 – 2009 Q1



The broken line depicts the best fit relationship in the data as generated by a simple least square statistical regression

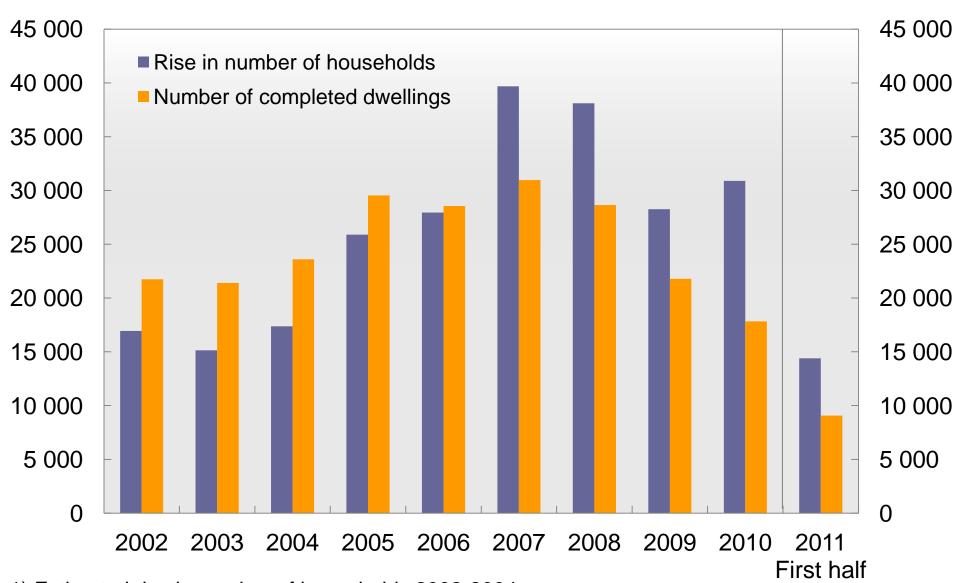
Sources: OECD, Haver Analytics and Eurostat

Chart 1.35 Deflated house prices. Indices. 1985 = 100. Annual figures.  $1985 - 2011^{1}$ 



Sources: Association of Norwegian Real Estate agents, Association of Real Estate Agency firms, Finn.no, Econ Pöyry, Statistics Norway and Norges Bank

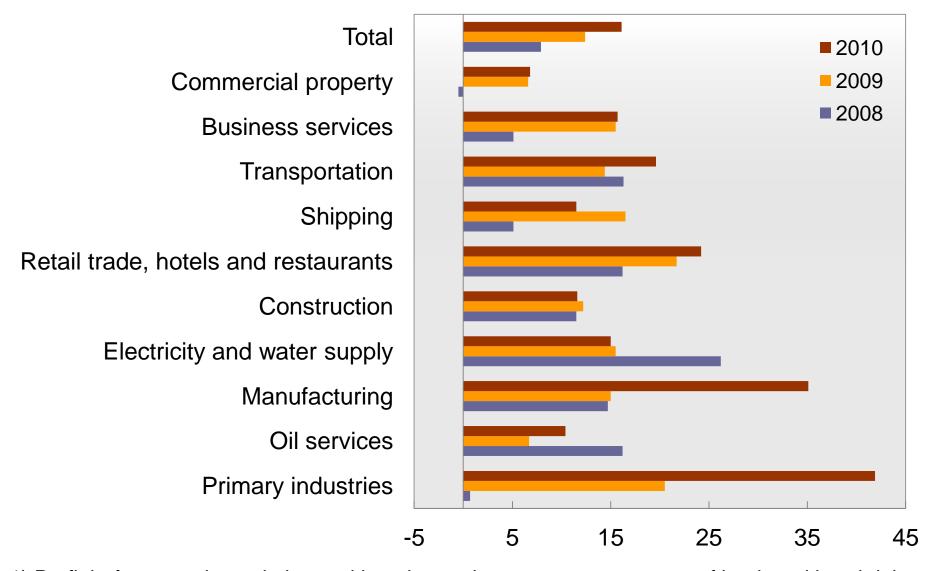
Chart 1.36 Rise in number of households<sup>1)</sup> and completed dwellings. Annual figures. 2002 – 2011<sup>2)</sup>



1) Estimated rise in number of households 2002-2004

<sup>2)</sup> Rise in number of households for first half of 2011 is based on population growth in this period Sources: Statistics Norway and Norges Bank

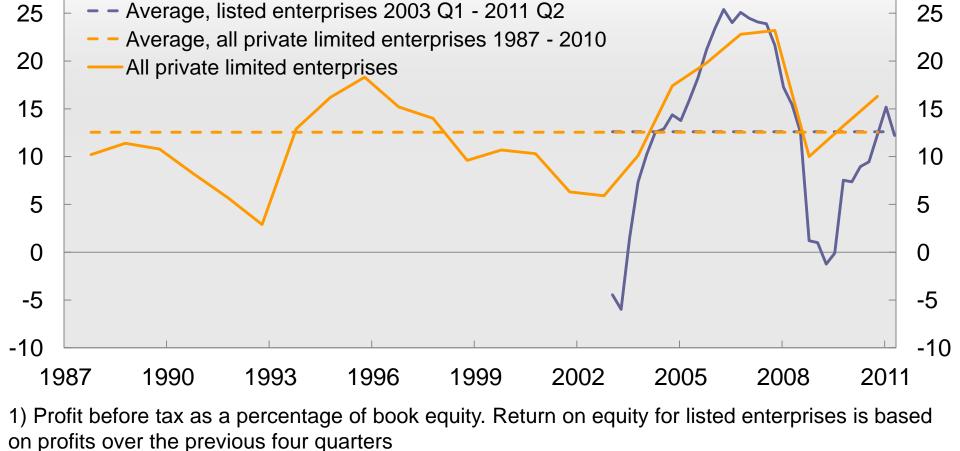
Chart 1.37 Debt-servicing capacity<sup>1)</sup> for different industries. Per cent. Annual figures. 2008 – 2010



1) Profit before tax, depreciation and impairment losses as a percentage of bank and bond debt. Intragroup funding is not included. Only enterprises with debt are included Source: Norges Bank

Chart 1.38 Return on equity<sup>1)</sup> for listed enterprises<sup>2)</sup> and all private limited enterprises<sup>3)</sup>. Quarterly figures for listed enterprises, annual figures for all private limited enterprises. Per cent. 1987 – 2011

30



- 2) Non-financial listed enterprises (excl. Statoil)3) Public administration, bank/insurance and extraction of primary resources are not included in the sample
- Sources: Statistics Norway and Norges Bank

Listed enterprises

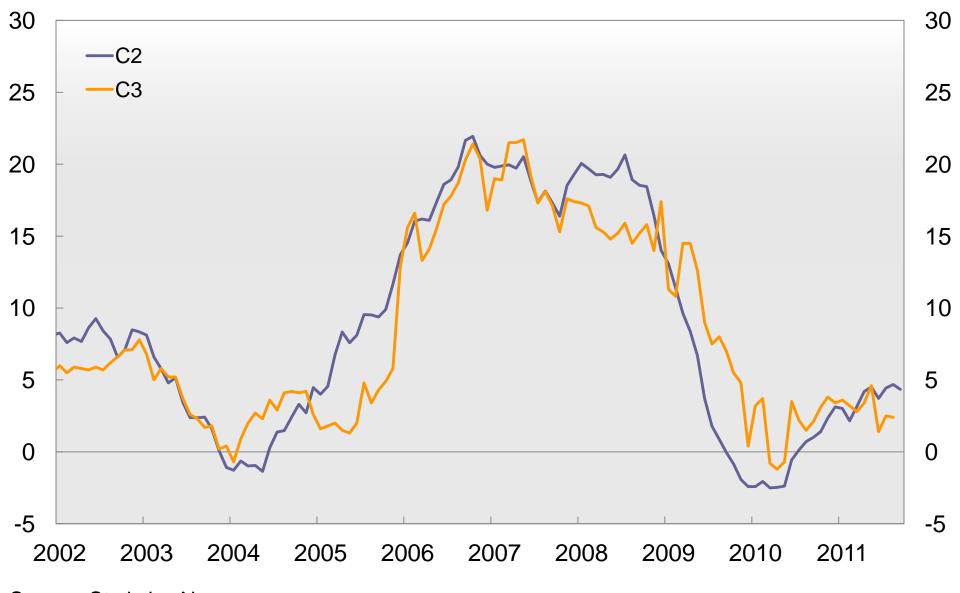
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Chart 1.39 Output growth. Enterprises in Norges Bank's regional network. Aggregated. Annualised index<sup>1)</sup> (left-hand scale) and per cent (right-hand scale). October 2002 – September 2011. Estimate for March 2012



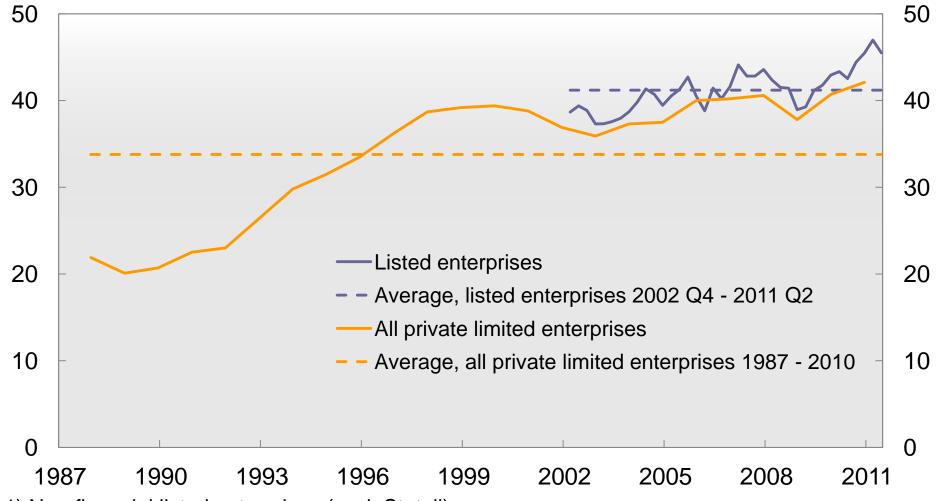
1) The index ranges from -5 to 5, where -5 indicates a sharp fall and +5 indicates strong growth Source: Norges Bank's regional network

Chart 1.40 12-month growth in domestic credit (C2) and total debt (C3) to non-financial enterprises. Mainland Norway. Per cent. Monthly figures. January 2002 – September 2011



Source: Statistics Norway

Chart 1.41 Equity ratio for listed enterprises<sup>1)</sup> and private limited enterprises<sup>2)</sup>. Quarterly figures for listed enterprises, annual figures for all private limited enterprises. Per cent. 2002 – 2011



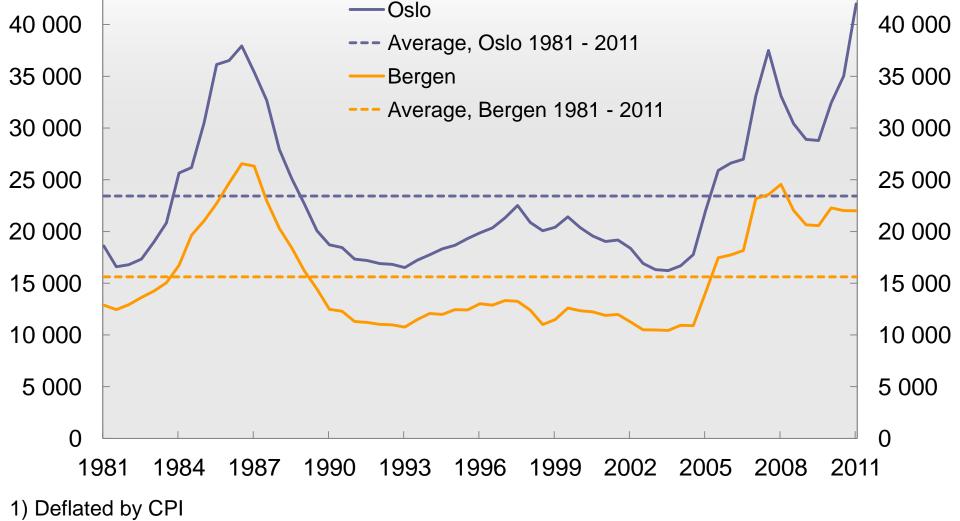
- 1) Non-financial listed enterprises (excl. Statoil)
- 3) Public administration, bank/insurance and extraction of primary resources are not included in the sample

Sources: Statistics Norway and Norges Bank

Chart 1.42 Real selling prices<sup>1)</sup> for office premises in Oslo and Bergen.<sup>2)</sup> NOK per square metre. Semi-annual figures. June 1981 – June 2011

45 000

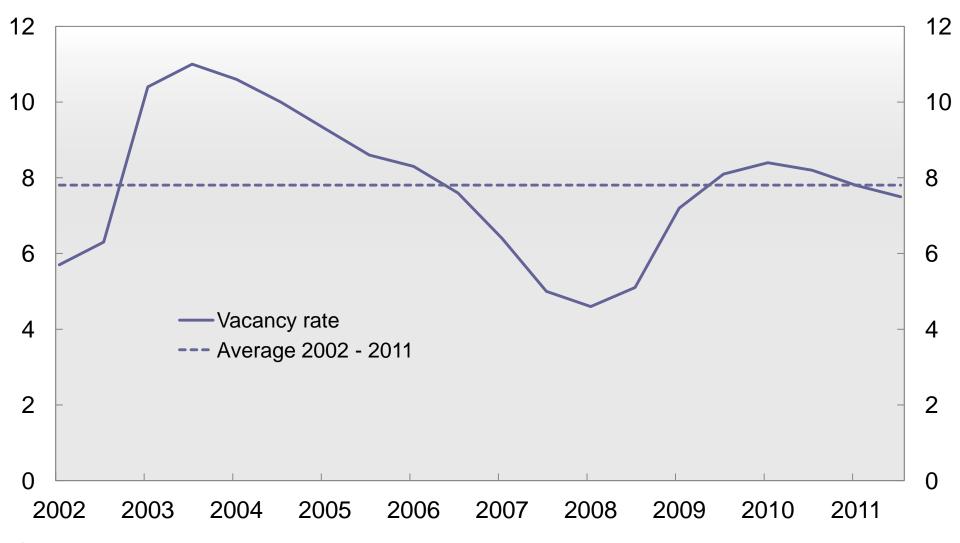
45 000



2) Average market value for high-standard offices centrally located in Oslo and Bergen Sources: OPAK, Statistics Norway and Norges Bank

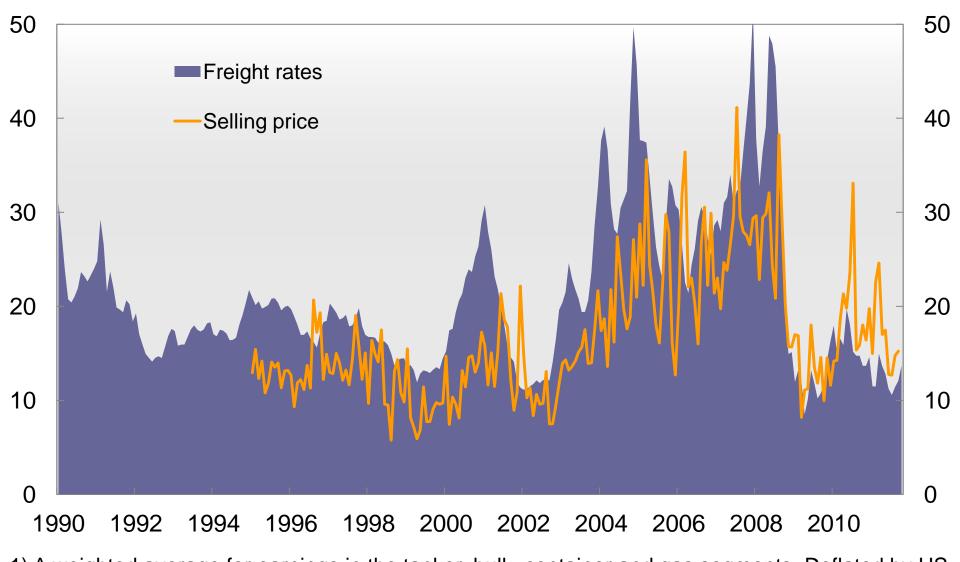
Chart 1.43 Vacancy rate<sup>1)</sup> for office premises in Oslo, Asker and Bærum. Per cent of total square metres. Semi-annual figures.

March 2002 – September 2011



1) DNBs definition of office vacancy rate includes both direct lease and sublease and areas that will be ready for new tenants within the next 12 months Source: DNB Næringsmegling

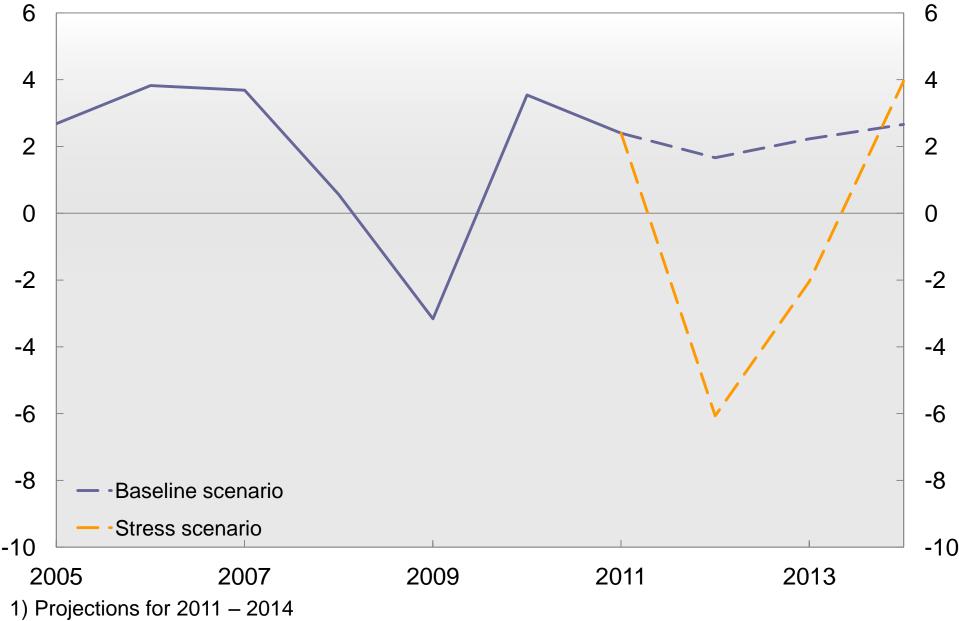
Chart 1.44 Freight rates (Clarksea index)<sup>1)</sup> in USD per day and selling price of ships in millions of USD. Monthly figures. January 1990 – October 2011



1) A weighted average for earnings in the tanker, bulk, container and gas segments. Deflated by US CPI

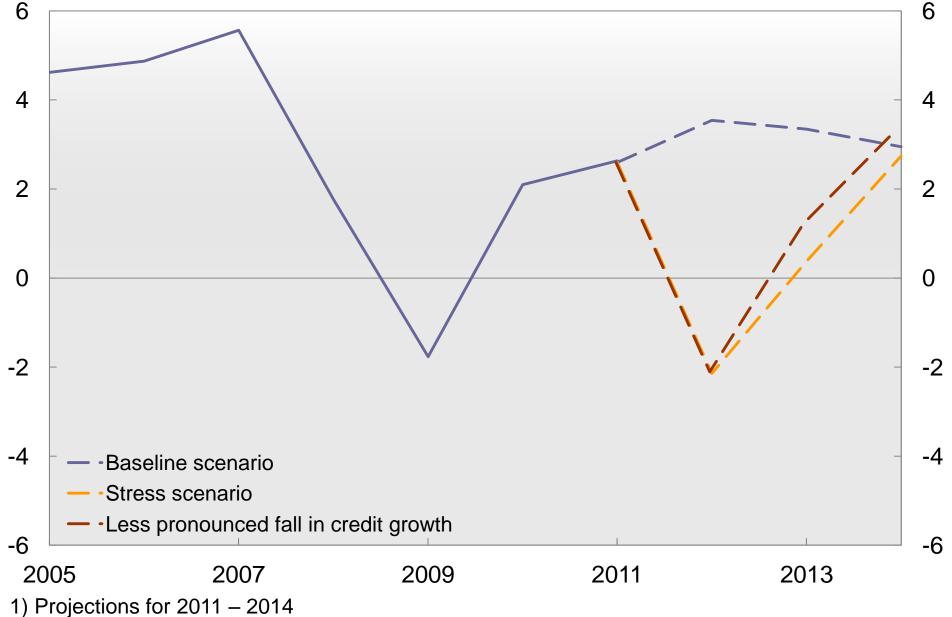
Source: Clarkson Research Services Ltd

Chart 2.1 GDP trading partners. Annual volume change. Per cent. Annual figures. 2005 – 2014<sup>1)</sup>



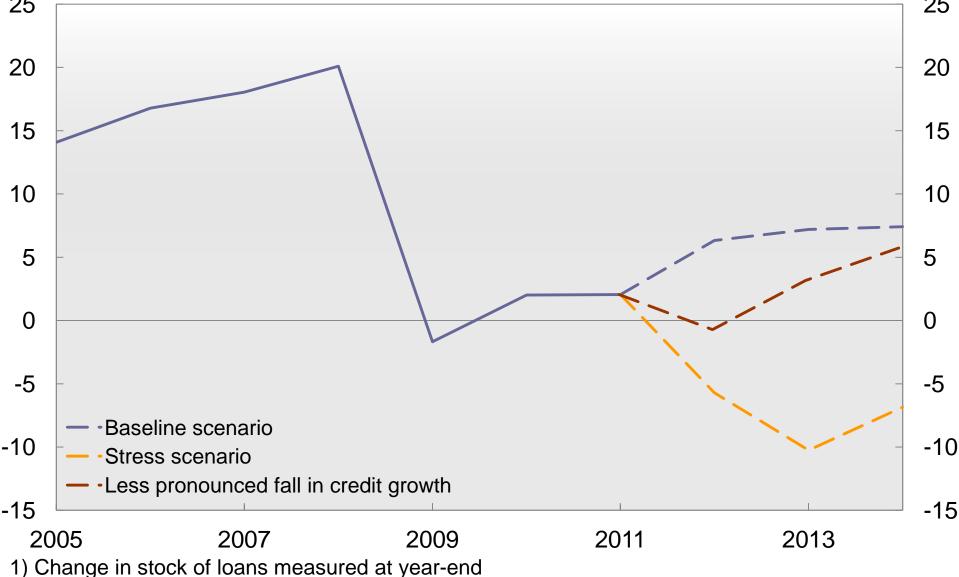
Sources: Statistics Norway, IMF, Thomson Reuters and Norges Bank

Chart 2.2 Mainland GDP. Annual volume change. Per cent. Annual figures. 2005 – 2014<sup>1)</sup>



Sources: Statistics Norway and Norges Bank

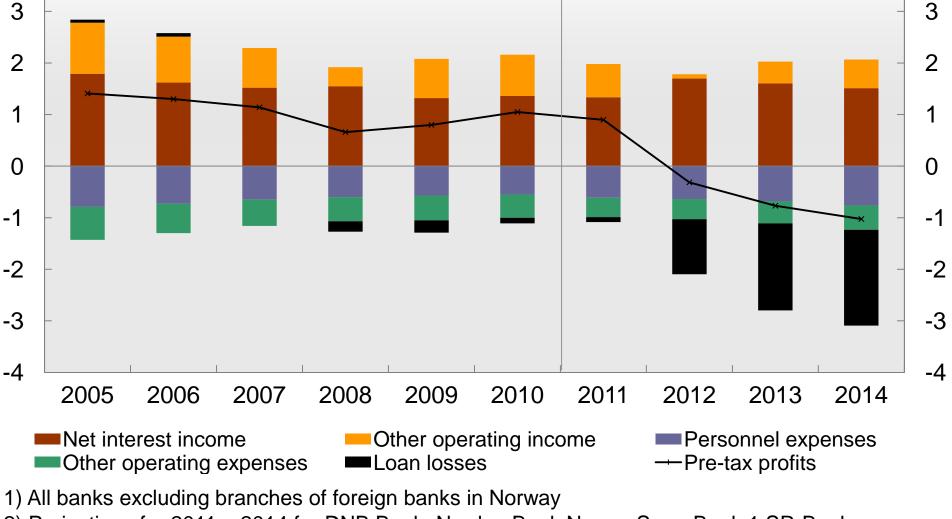
Chart 2.3 Growth in credit to enterprises (C3). Year-on year growth<sup>1)</sup>. Per cent. Annual figures. 2005 – 2014<sup>2)</sup>



- 2) Projections for 2011 2014
- Sources: Statistics Norway and Norges Bank

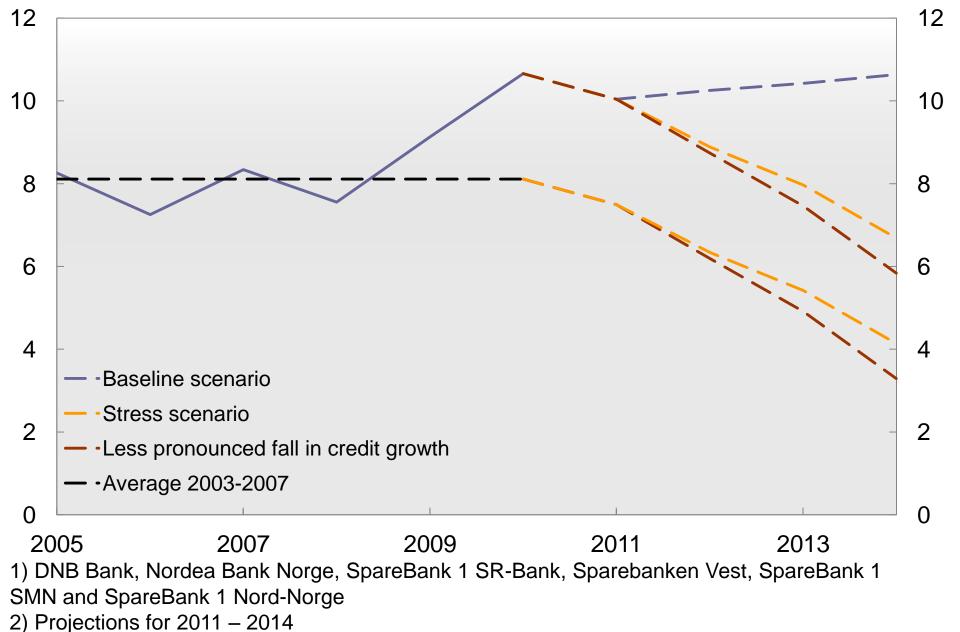
Chart 2.4 Banks'1) pre-tax profits as a percentage of average total assets. Stress scenario. Per cent. Annual figures. 2005 – 2014<sup>2)</sup>

4



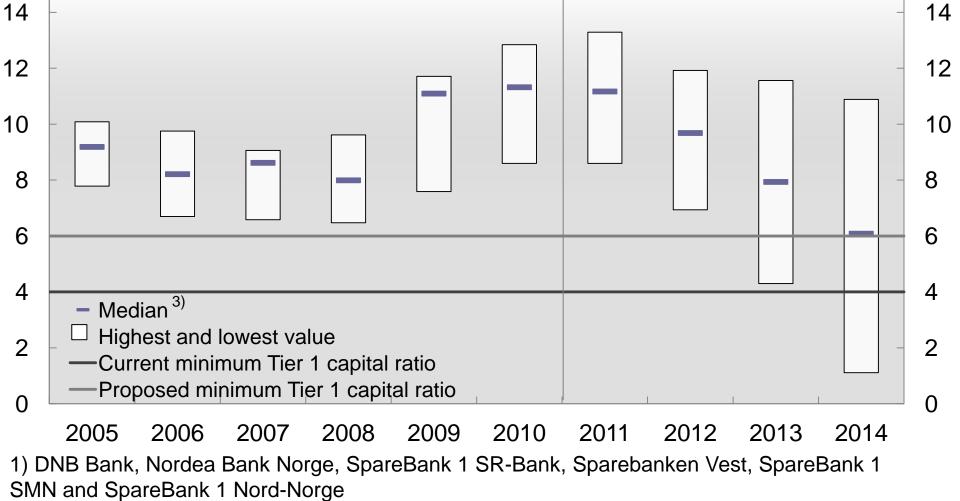
2) Projections for 2011 – 2014 for DNB Bank, Nordea Bank Norge, SpareBank 1 SR-Bank, Sparebanken Vest, SpareBank 1 SMN and SpareBank 1 Nord-Norge Sources: Statistics Norway and Norges Bank

Chart 2.5 Banks<sup>'1)</sup> Tier 1 capital ratio. Per cent. Annual figures. 2005 – 2014<sup>2)</sup>



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

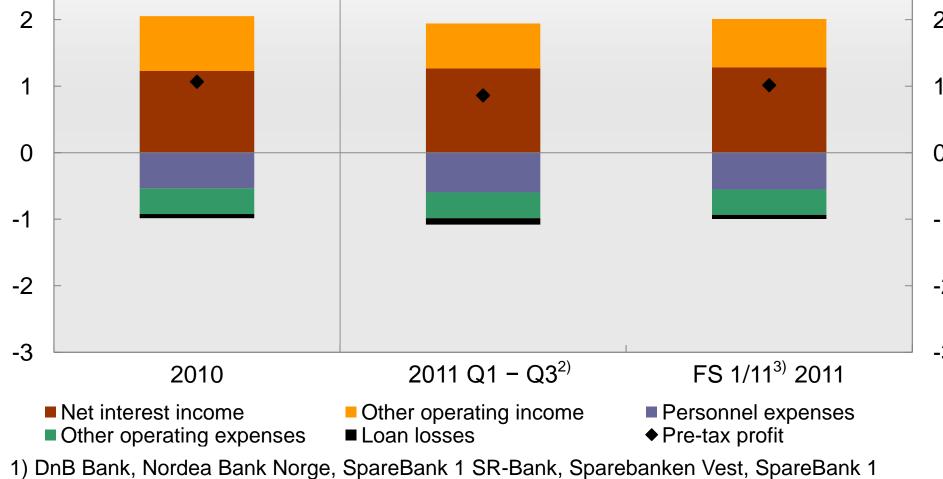
Chart 2.6 Banks<sup>(1)</sup> Tier 1 capital ratios with less pronounced fall in credit growth. Banks are ranked by Tier 1 capital ratio. Per cent. Annual figures. 2005 – 2014<sup>2)</sup>



- 2) Projections for 2011 2014
  3) Median is defined here as the middle bank in a list where half the banks have a
- 3) Median is defined here as the middle bank in a list where half the banks have a lower Tier 1 capital ratio than the median bank Sources: Finanstilsynet (Financial Supervisory Authority of Norway) and Norges Bank

Chart 1 Banks'1) pre-tax profits as a percentage of average total assets. Per cent. Annual figures. 2010 – 2011. 2011 Q1 – Q3

3

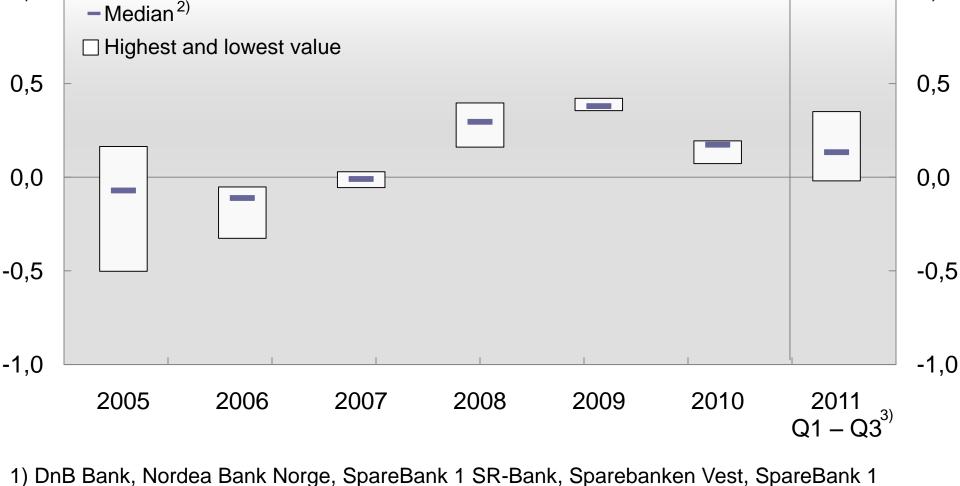


- SMN and SpareBank 1 Nord-Norge
- 2) Annualized

3

3) Baseline scenario in *Financial Stability Report* 1/2011 Sources: Statistics Norway and Norges Bank

Chart 2 Banks'1) loan losses as a percentage of gross lending. Per cent. Annual figures. 2005 – 2010. 2011 Q1 – Q3

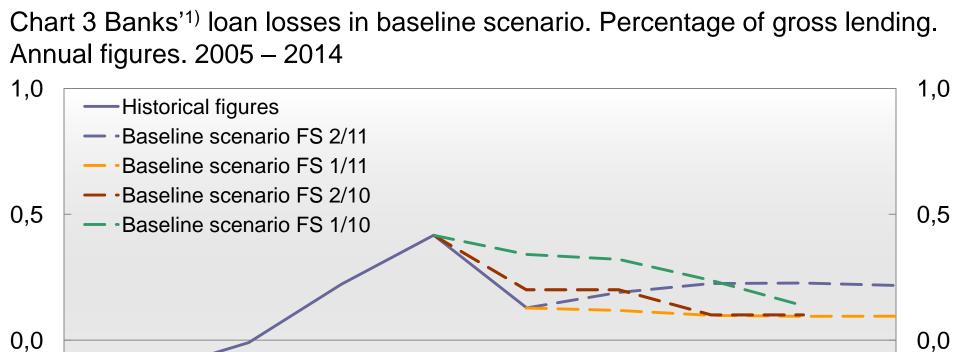


1,0

- SMN and SpareBank 1 Nord-Norge
  2) Median is defined here as the middle bank in a list where half the banks have lower loan losses than the median bank
- 3) Annualized

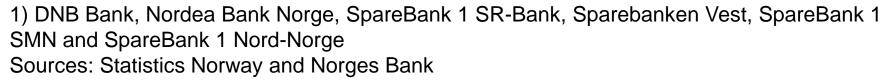
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Sources: Statistics Norway and Norges Bank



-0.5

-1,0

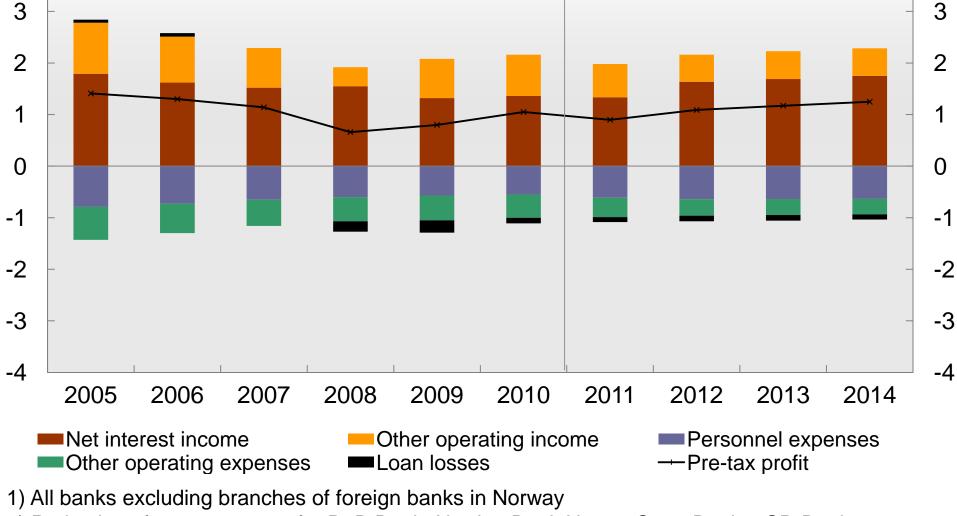


-0,5

-1,0

Chart 4 Banks'1) pre-tax profits as a percentage of average total assets. Baseline scenario. Per cent. Annual figures. 2005 – 2014<sup>2)</sup>

4



4

2) Projections for 2011 – 2014 for DnB Bank, Nordea Bank Norge, SpareBank 1 SR-Bank, Sparebanken Vest, SpareBank 1 SMN and SpareBank 1 Nord-Norge Sources: Statistics Norway and Norges Bank