

Economic outlook for Norway

Governor Svein Gjedrem
Norges Bank
19 November 2008

Financial market imbalances

Financial events

US

- 7 september: **Fannie Mae** and **Freddie Mac** placed into conservatorship
- 14 September: **Lehman Brothers** files for bankruptcy
Merrill Lynch + Bank of America
- 17 September: **AIG** emergency loan
- 22 September: **Goldman Sachs** and **Morgan Stanley**
- 25 September: **Washington Mutual** into receivership
- 29 September: **Wachovia**
- 11 November: **AIG** restructuring of financial support
New large losses **Fannie Mae** and **Freddie Mac**

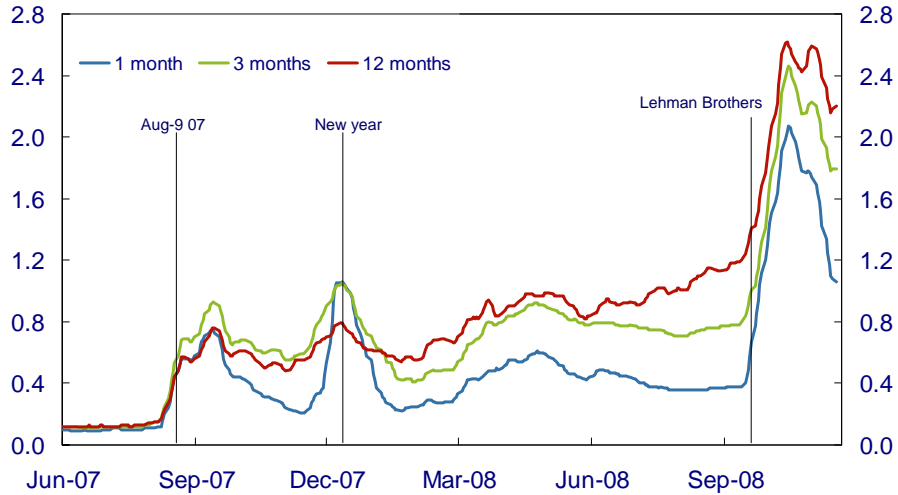
Financial events

UK

- 17 September: **HBOS** + Lloyds TSB
- 29 September: **Bradford & Bingley** nationalised
- Europe**
- 22 September: **Ebh bank** receives liquidity
- 29 September: **Fortis**
Bonusbank + Vestjysk Bank
- 30 September: **Dexia**
- 5 October: **Hypo Real Estate**
- 7 – 9 October: **Glitnir**, **Landsbanki** and **Kaupthing** into receivership

Difference between money market rates and expected key rates. Percentage points.

Average for US, euro area and UK¹⁾. 1 June 2007 – 17 November 2008



1) 5-day moving average

Sources: Bloomberg and Norges Bank 4

US measures

- 14 September: Collateral for the Term Securities Lending Facility expanded
- 18 September: Coordinated provision of dollar liquidity:
 - Federal Reserve, Bank of Canada, ECB, Bank of England, Swiss National Bank, Bank of Japan
 - Reserve Bank of Australia, Riksbanken, Nationalbanken and Norges Bank (24 September)
- 29 September: Increased lending from Federal Reserve
- 3 October: The Emergency Economic Stabilization Act passed by Congress
- 7 October: Fed will purchase commercial paper directly from eligible issuers
- 8 October: Coordinated reduction in policy interest rates G10 + China
- 13 October: Broadened access to liquidity for major central banks
- 14 October: Increased availability of credit for businesses and households
- 21 October: New liquidity measure: Money Market Investor Funding Facility
- 29 October: Fed reduces key policy rate by 0.50 percentage points
- 12 November: Change in strategy in the Emergency Economic Stabilization Act

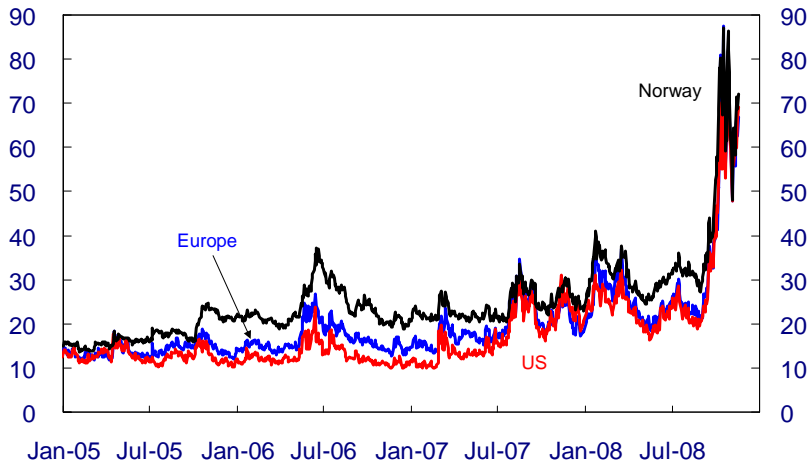
UK measures

- 3 October: Raised bank deposit guarantee (from GBP 35 000 to GBP 50 000)
- 7 October: Liquidity to be supplied through next year
- 8 October: Coordinated policy rate reductions G10 + China
- 8 and 13 October: Series of measures to stabilise financial markets
- inject equity capital (GBP 50 billion)
 - GBP 37 billion into banks RBS, Lloyds TBS and HBOS
Government obtains majority stake in RBS
 - guarantee schemes for new loans
- 12 October: Agreement on coordinated measures in euro area and UK
- 6 November: Bank of England reduces key policy rate by 150 percentage points

Other European measures

- 30 September: Irish government safeguards all deposits for the six largest banks
- 2 and 6 October: Riksbanken: provides loans with 3- and 6-month maturity
- 6 October: Danish government establish institution that will take over insolvent banks
- 7 and 8 October: ECB widened and extended liquidity provision
- 8 October: Coordinated policy rate reduction G10 + China
- 9 October: ECB reduces standing facilities corridor
- 1 – 10 October: Governments in many countries announce that all bank deposits are guaranteed
- 12 October: Agreement on coordinated measures in euro area and UK
- 13 and 14 October: National authorities in Europe set aside funds for capital infusion in banks and deposit guarantee schemes
- 6 November: ECB reduces key policy rate by 0.50 percentage point

Implied volatility from stock options Per cent. 1 January 2005 – 17 November 2008

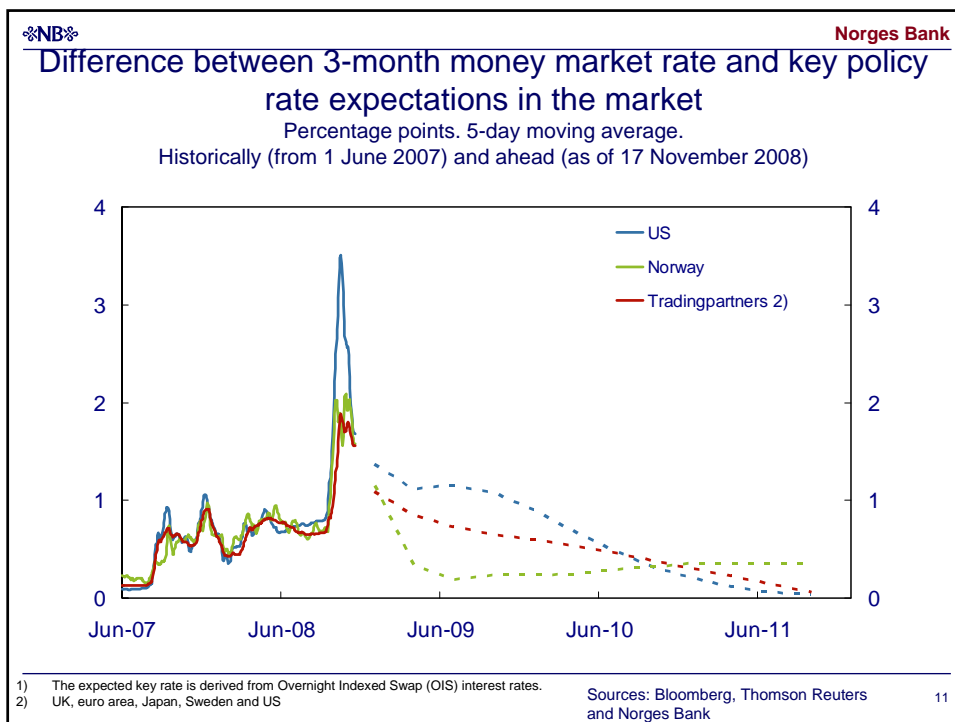
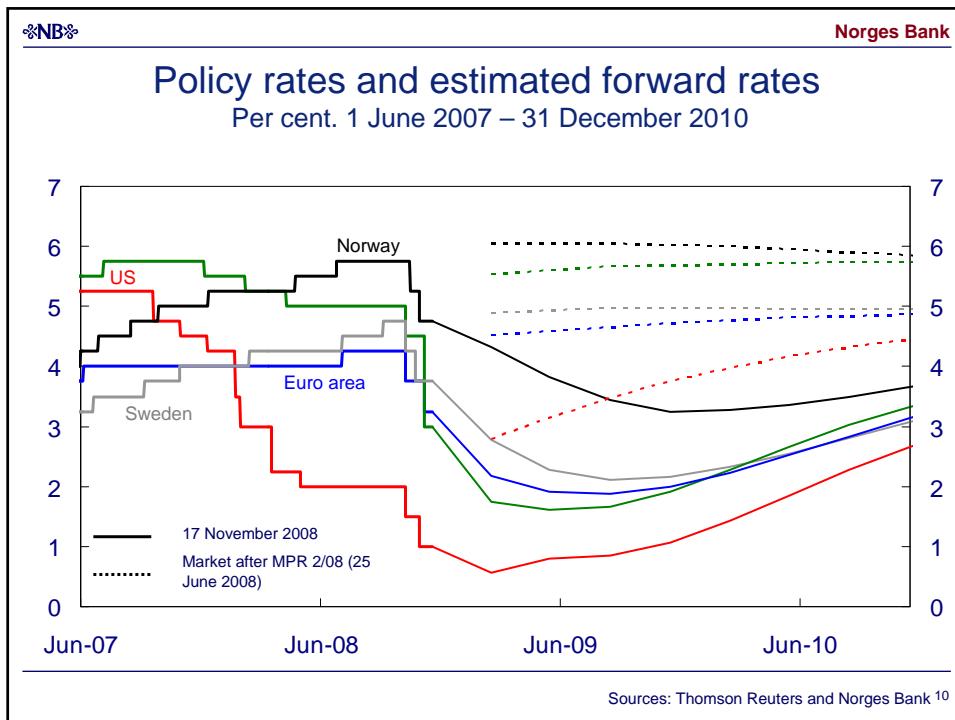


Sources: Thomson Reuters and Oslo Stock Exchange 8

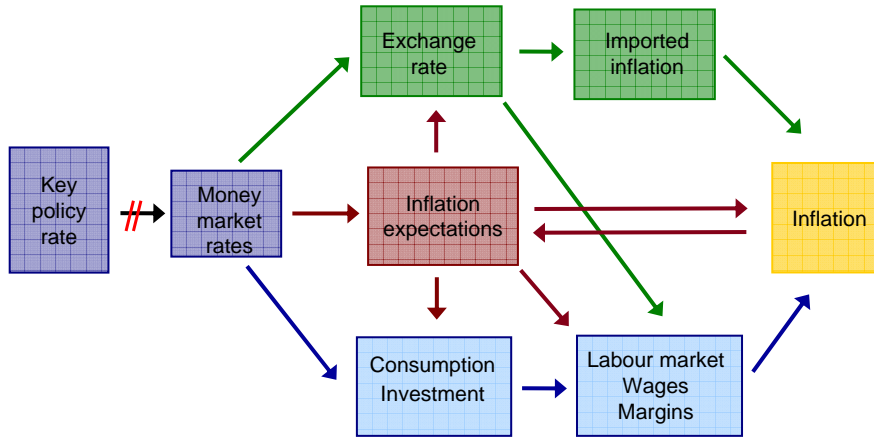
Developments in equity markets Index. 1 January 2007 – 17 November 2008



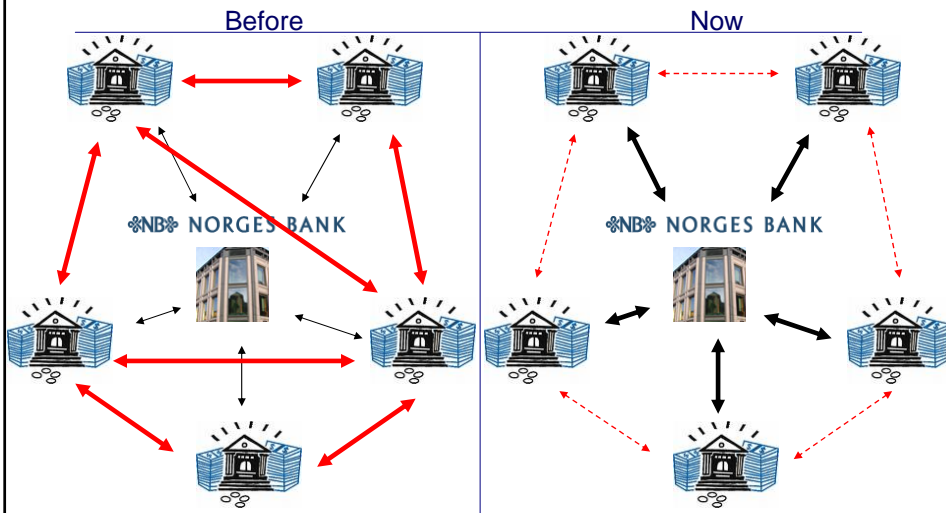
Source: Thomson Reuters 9



Transmission mechanism



Norwegian money market



Measures in Norway 16 September – 14 October

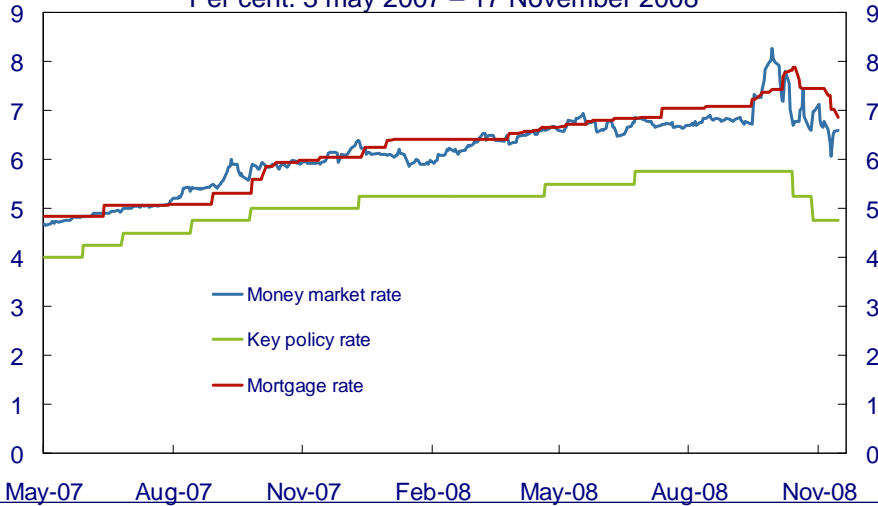
- 16, 23, 30 September: Swap auctions, supply of USD
- 24 September: F-loans maturing next year (settlement 1, 16 and 30 October)
Establish credit agreement with Fed (USD 5 billions)
- 29 September: Credit agreement with Fed expanded (to USD 15 billions)
- 6 October: Eligible collateral for loans in Norges Bank expanded
- 8, 15 October: Swap auction, provision of NOK liquidity for EUR
- 10 October: 6-month F-loans for small banks (settlement 20 Oct.)
- 12 October: Measures to improve banks' liquidity funding:
 - Exchange of RMBSs for government bonds
 - 2-year F-loans for small banks
 - Easing of collateral requirements for loans in Norges Bank
- 14 October: 1-week USD loans (settlement 16 October)

Measures in Norway 15 October – 18 November

- 15 October: - 3-month F-loans (settlement 16 Oct)
- Provision of NOK liquidity for EUR in 1-week foreign exchange swap (settlement 17 Oct)
- 20 October: 6-month F-loans for small banks
- 23 October: Provision of dollar liquidity through 28-day loans
- 24 October: - Provision of NOK liquidity for EUR at 1-week maturity
- Announcement of guidelines for exchange of government securities with collateral in or in return for covered bonds
- 29 October: Easing of collateral requirements
- 5 November: Provision of NOK liquidity for USD in foreign exchange swap
- 18 November: Provision of USD liquidity with collateral in securities

Key policy rate, money market rate¹⁾ and banks' lending rate on new loans²⁾.

Per cent. 3 May 2007 – 17 November 2008



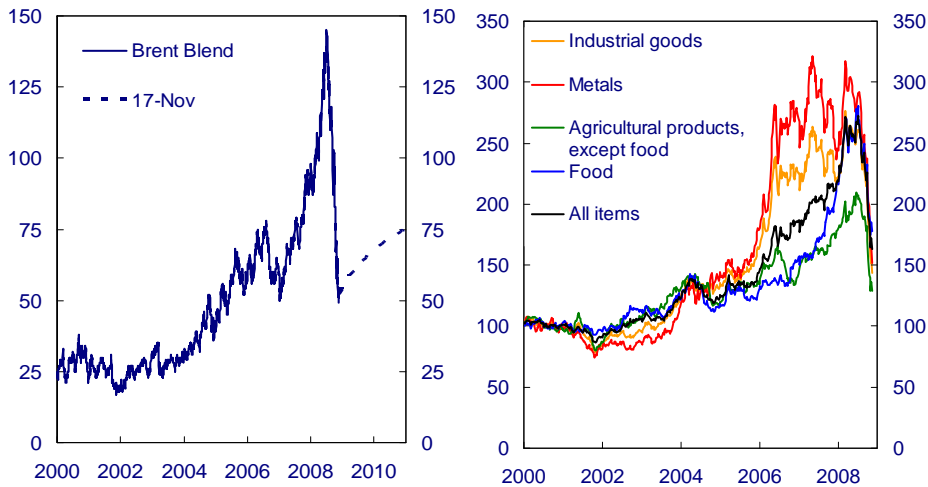
1) 3-month NIBOR (effective)

2) Interest rate on new mortgage loans of NOK 1 million within 60% of purchase price with floating interest rate. Figures for the 20 largest banks, weighted according to market share. Sources: Norsk familieøkonomi AS and Norges Bank

Oil price (Brent Blend) International commodity prices in USD per barrel

Futures prices (broken lines)

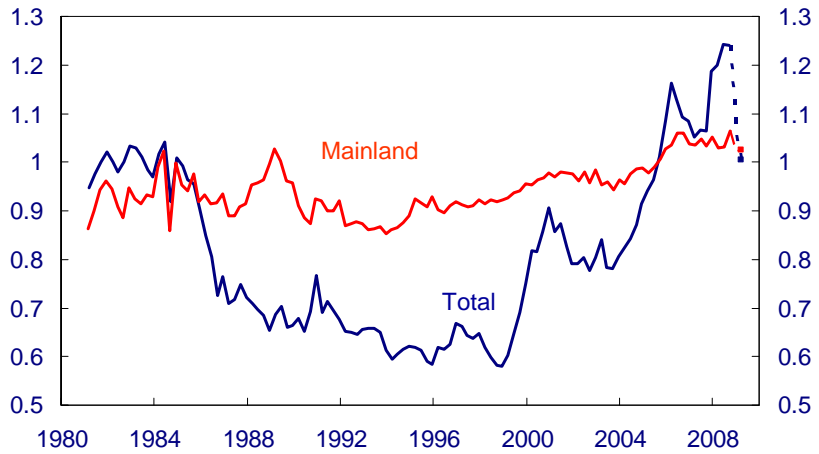
In USD. Index. Week 1 2000 – week 46 2008



Sources: Thomson Reuters and Norges Bank

Terms of trade

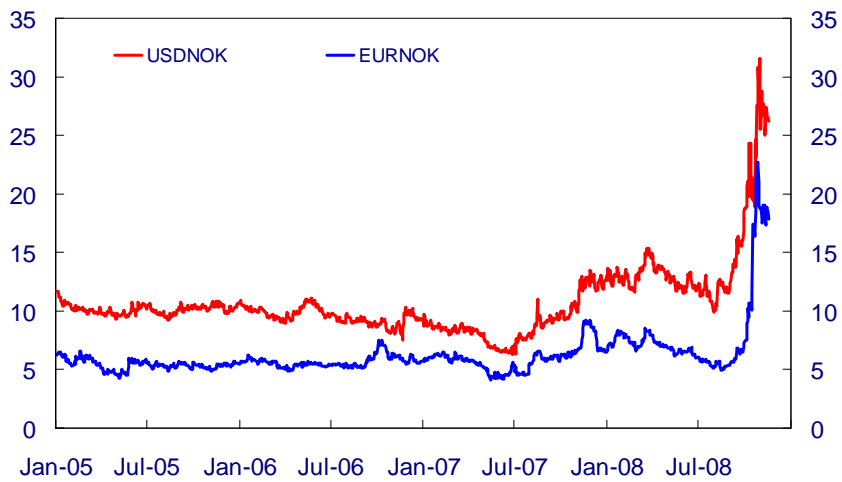
Projections for 2008 Q4 and 2009 Q1



Sources: Norges Bank, Statistics Norway and Ecwin 18

Implied volatility in the Norwegian exchange market

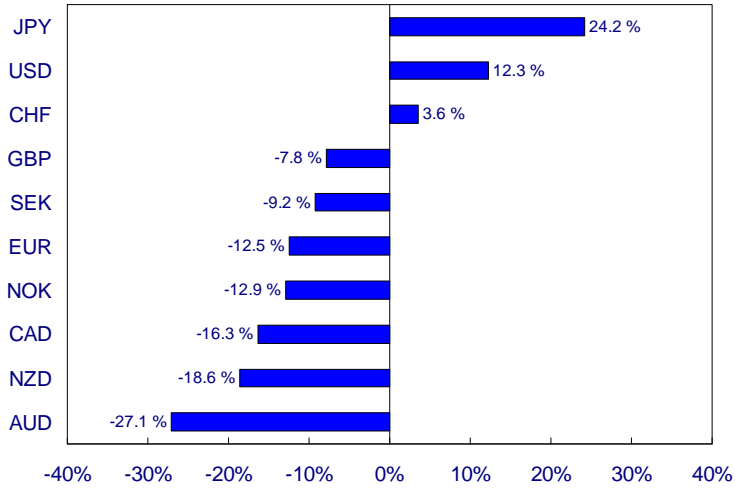
Based on 1-month currency option prices. Per cent.
3 January 2005 – 17 November 2008



Source: Bloomberg 19

Effective exchange rates

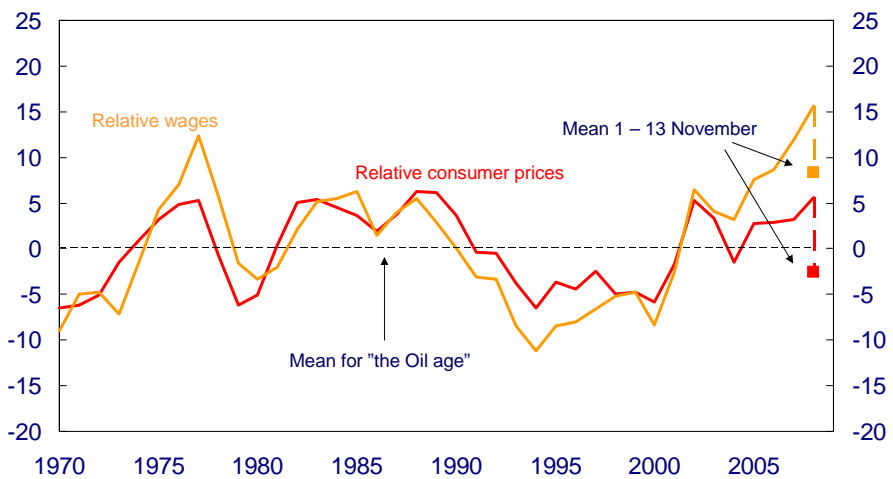
Changes since June 2008. G10 currencies.
17 November 2008



Sources: Bloomberg and Norges Bank₂₀

Real exchange rates

Deviation from mean 1970 – 2008. Per cent



Figures for 2008 is mean January – October

Sources: Statistics Norway, Technical Reporting Committee on Income Settlements, Ministry of Finance and Norges Bank

Effects on output, employment and inflation

Projections of GDP growth in other countries

Change from previous year. Per cent

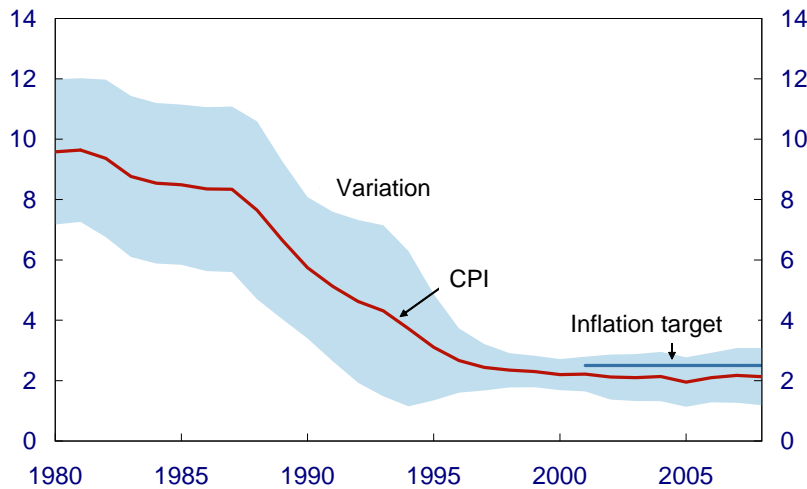
	2008	2009	2010-2011¹⁾
US	1 ½	- ½	2 ¼
Euro area	1	0	1 ¾
Japan	½	¼	1 ¼
UK	1	- ½	2
Sweden	1 ¼	¼	2 ¼
China	9 ½	8 ½	8 ¾
Trading partners ²⁾	1 ¾	½	2 ¼

¹⁾Average annual growth

²⁾Export weights, 26 trading partners

Inflation

Moving 10-year average¹⁾ and variation²⁾ in CPI. Per cent. 1980 - 2008



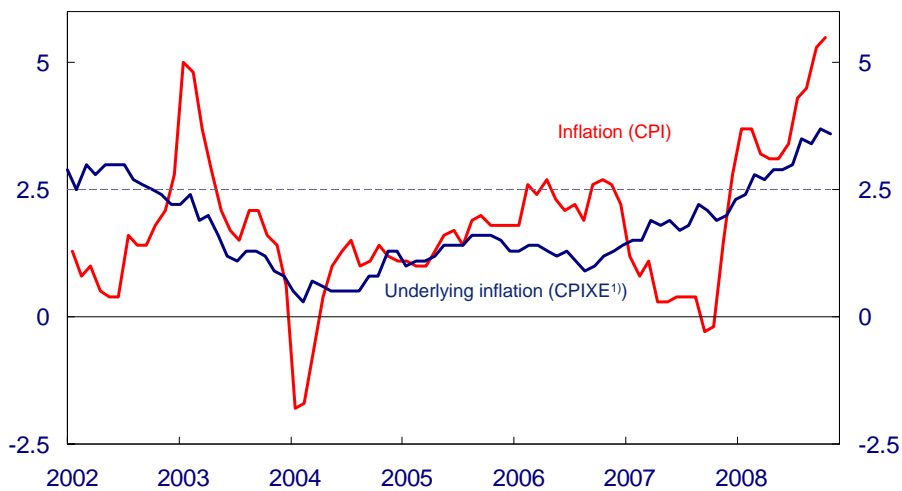
¹⁾ The moving average is calculated 7 years back and 2 years ahead.

²⁾ The band around the CPI is the variation in the CPI adjusted for tax changes and excluding energy products in the average period, measured by +/- one standard deviation.

Sources: Statistics Norway and Norges Bank 24

Inflation indicators

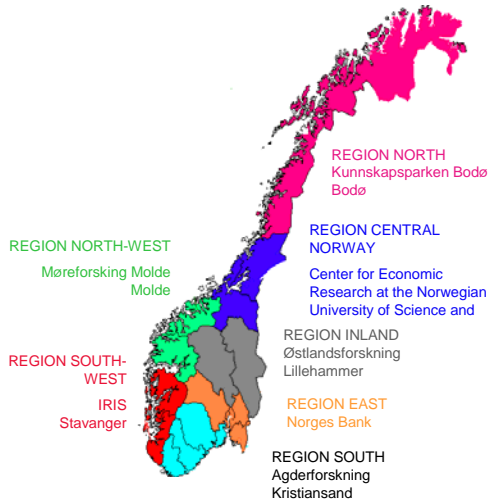
12-month change. Per cent. January 2002 – October 2008



¹⁾ CPI adjusted for tax changes and excluding temporary changes in energy prices

Sources: Statistics Norway and Norges Bank 25

Norges Bank's regional network



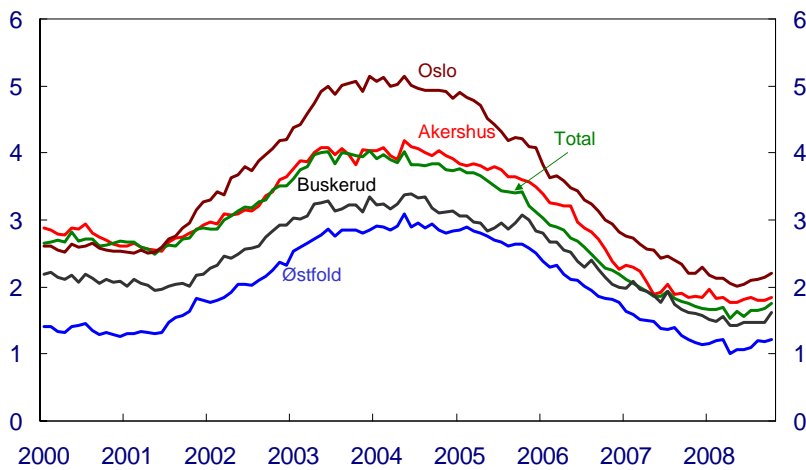
Region East:

- Reduced demand and tighter credit
- A situation of uncertainty about the future
- Prospects of lower inflation ahead
- The majority report that they will reduce investments next year

Source: Norges Bank 26

Registered unemployment

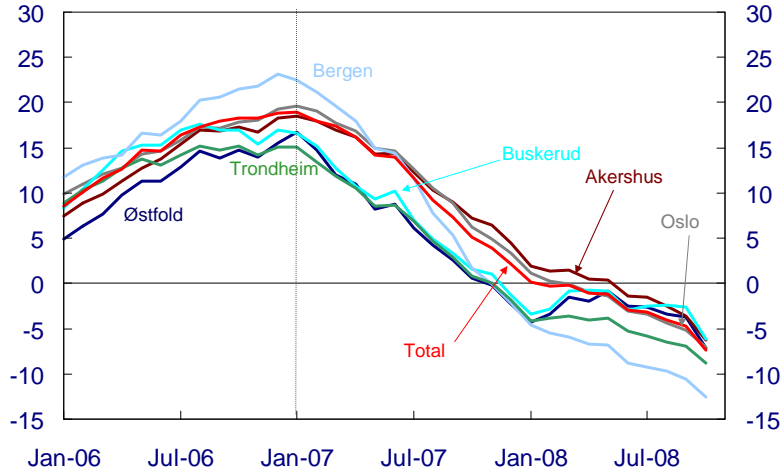
Seasonally adjusted. Percentage of labour force



Sources: Norwegian Labour and Welfare Administration (NAV) and Norges Bank 27

Regional house prices

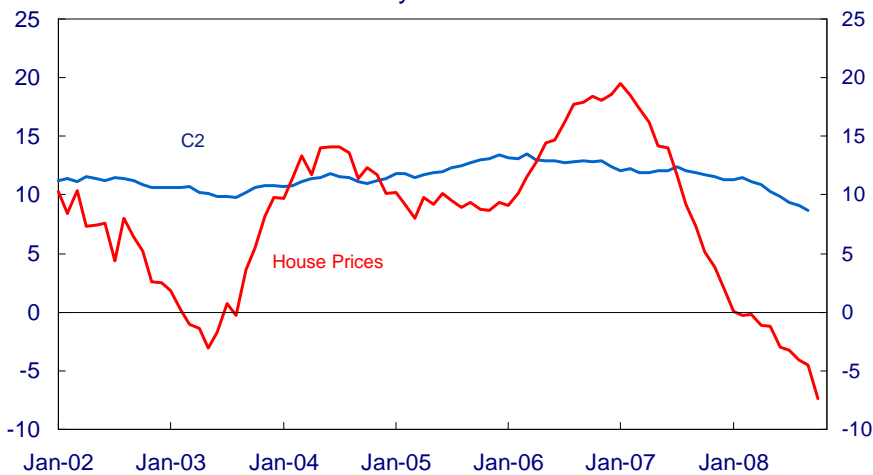
12-month change. Per cent. January 2006 – October 2008



Sources: Norwegian Association of Real Estate Agents, Association of Real Estate Agency Firms, FINN.no, ECON Pöyry, Statistics Norway and Norges Bank 28

House prices and credit

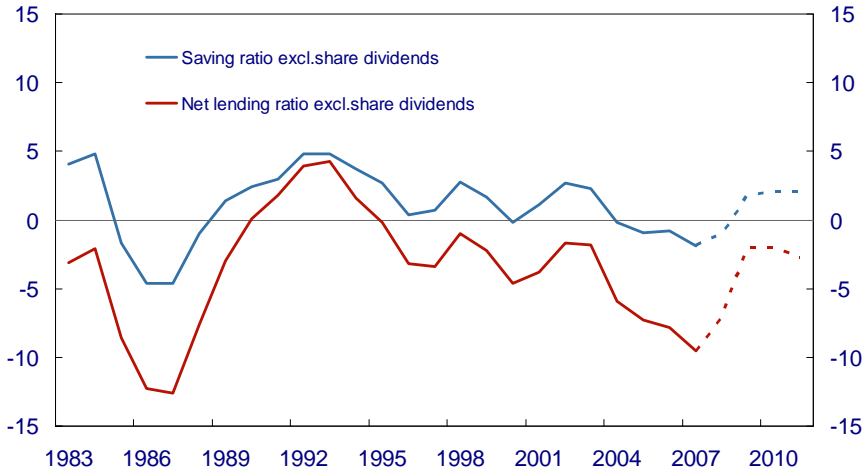
Change from same month/half-year from previous year. Per cent. January 2002 – October 2008



Sources: Statistics Norway and Norges Bank 29

Household saving and net lending as a share of disposable income

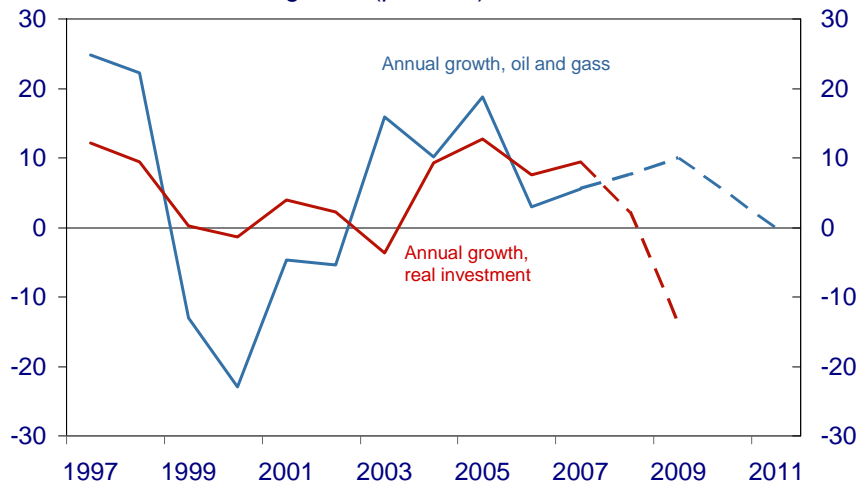
Per cent. 1983 - 2011



Sources: Statistics Norway and Norges Bank 30

Investment in oil and gas recovery including pipeline transport and real investment for mainland Norway

Annual growth (per cent). 1997 – 2011¹⁾

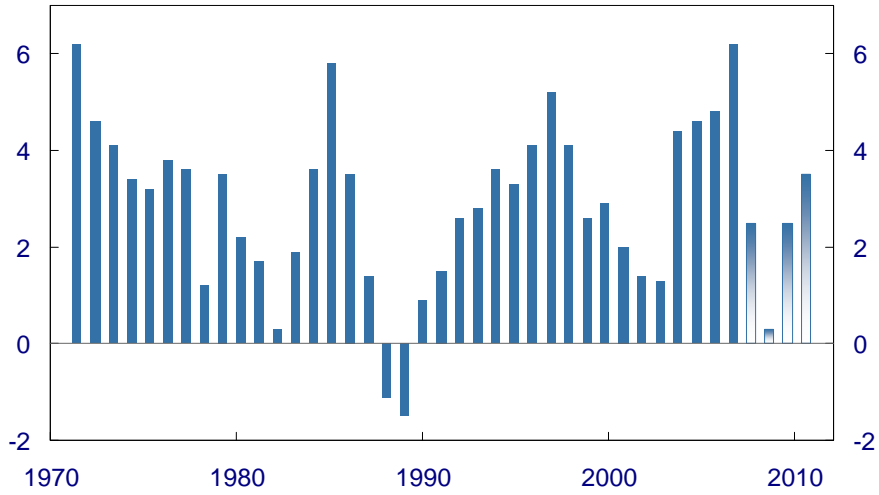


¹⁾ Projections for 2008 – 2011

Sources: Statistics Norway and Norges Bank 31

Mainland GDP

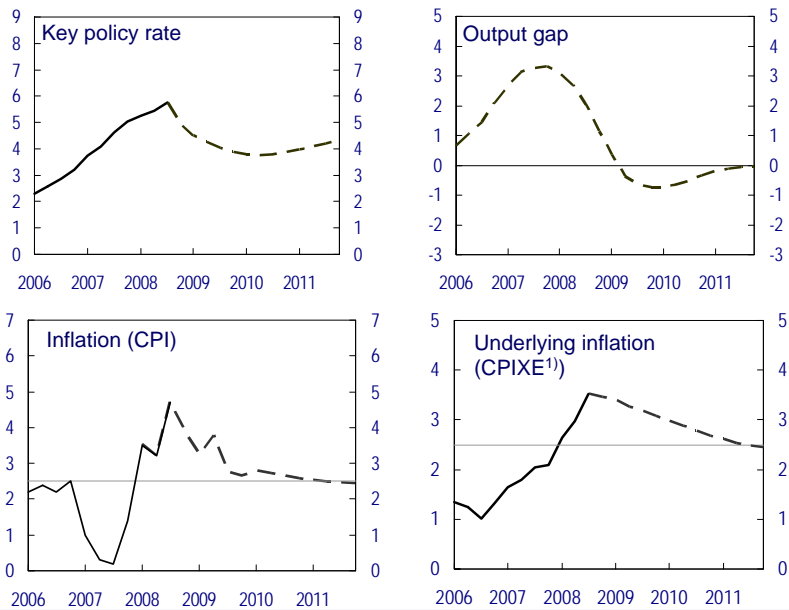
Annual growth in volume. Per cent. 1971 – 2011¹⁾



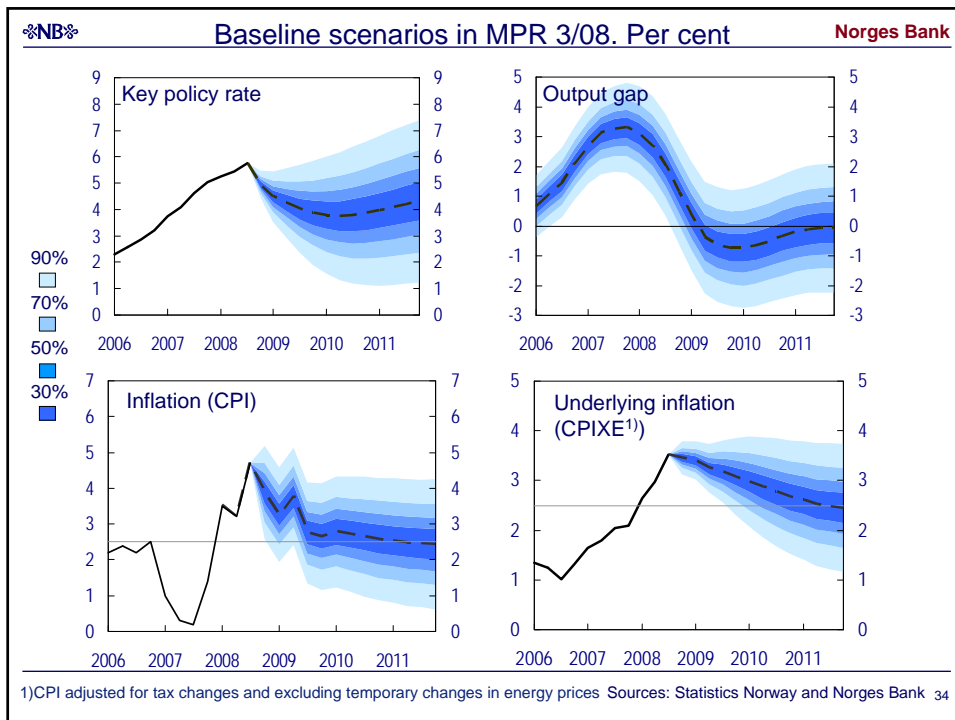
¹⁾ Projections for 2008 – 2011

Sources: Statistics Norway and Norges Bank

Baseline scenarios in MPR 3/08. Per cent



¹⁾ CPI adjusted for tax changes and excluding temporary changes in energy prices Sources: Statistics Norway and Norges Bank



⌘NB⌘ Norges Bank

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