

Financial Stability and Monetary policy

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Outline

- How do we define financial stability?
- Assessments of financial stability
- The link between price stability and financial stability (and how we work to achieve both)
- Financial stability and econometric models

Financial stability: Definition

- "Financial stability implies that the financial system is robust to disturbances in the economy and can channel capital, execute payments and redistribute risk in a satisfactory manner."

Norges Bank's Financial Stability Reports

Financial stability: Definition (contd.)

- "(...) Experience shows that the foundation for financial instability is laid during periods of strong debt growth and asset price inflation."

Norges Bank's Financial Stability Reports

Financial stability: Assessment

- Analyse strenght and robustness of the financial system and it's counterparties
- Identify sources of risk and vulnerabilities
- Analyse potential effects if the identified risks were to materialise (so-called stresstests)
- (What can be done about the sources of risk?)

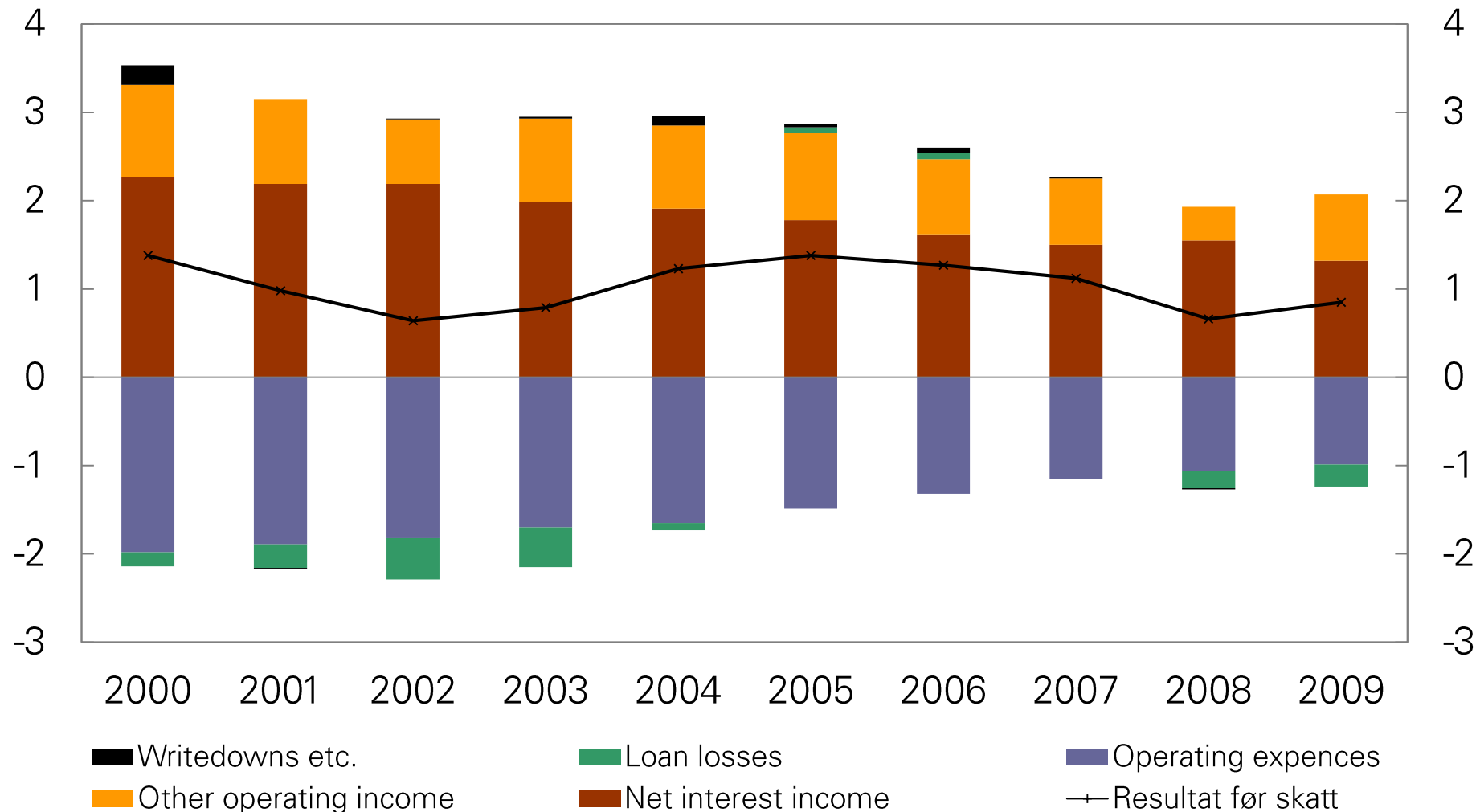
Financial stability: Assessment

- "The outlook for financial stability has improved somewhat in the short and medium term since the previous report.
- Banks are strengthening their financial position, thus improving their capacity to absorb losses and provide credit."

Norges Bank's Financial Stability Report 2/09

Banks' ¹⁾ pre tax profits as a percentage of average total assets

Annual figures. 2000 – 2009

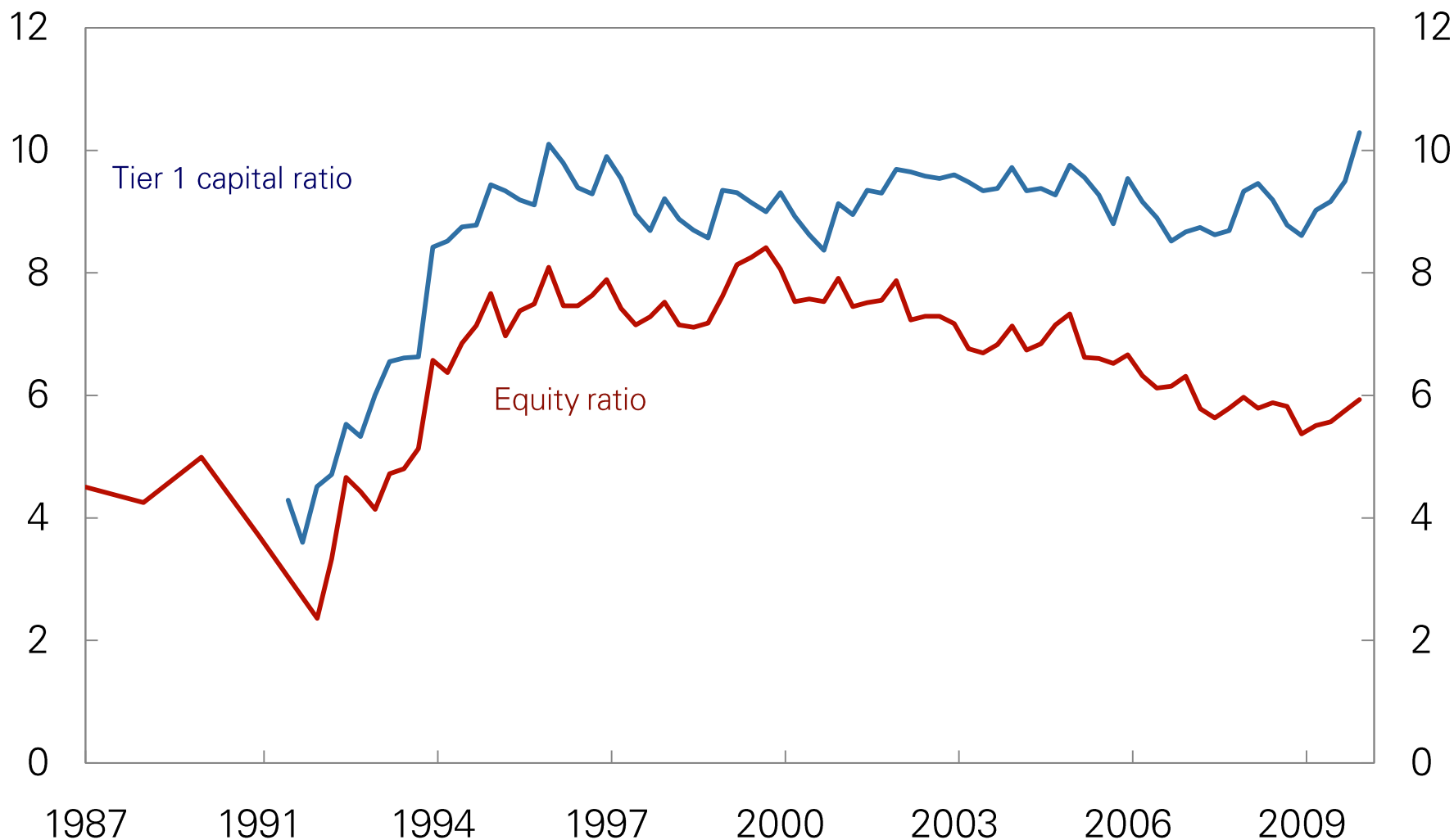


1) All banks excluding branches of foreign banks in Norway

Source: Norges Bank

Banks' ¹⁾Tier 1 capital ratio and equity ratio

Per cent. Quarterly figures. 1987 Q4 – 2009 Q4



1) Alle banker i Norge unntatt utenlandske filialer i Norge. EK-andel før 1990 er for alle banker

Kilder: Kredittilsynet og Norges Bank

Financial stability: Sources of risk

Endogenous	Exogenous
Institutions-based <ul style="list-style-type: none">-Financial risks (credit, liquidity etc.)-Operational risk-Concentration risk	Macroeconomic disturbances
Market-based <ul style="list-style-type: none">-Counterparty risk	Event risk
Infrastructure-based <ul style="list-style-type: none">-Clearance, payment and settlements risk-Domino effects	

Source: Houben, Kakes and Schinasi (2004)

Financial stability: Assessment

- Risks to financial stability in Norway
 - Continued shortage of funding
 - Continued weak growth abroad
 - Higher losses on commercial property loans
 - Excessive optimism in the housing market

Norges Bank's Financial Stability Report 2/09

The link between price stability and financial stability

- Price stability contributes to financial stability
- A smoothly functioning financial system contributes to promoting macroeconomic stability (and enhances the effect of changes in the CB's policy rate on money market rates)



In most cases no conflict between the two objectives

Criteria for an appropriate interest rate path

- Stabilising inflation close to target in medium term
- Provide reasonable balance between path for inflation and path for capacity utilisation.

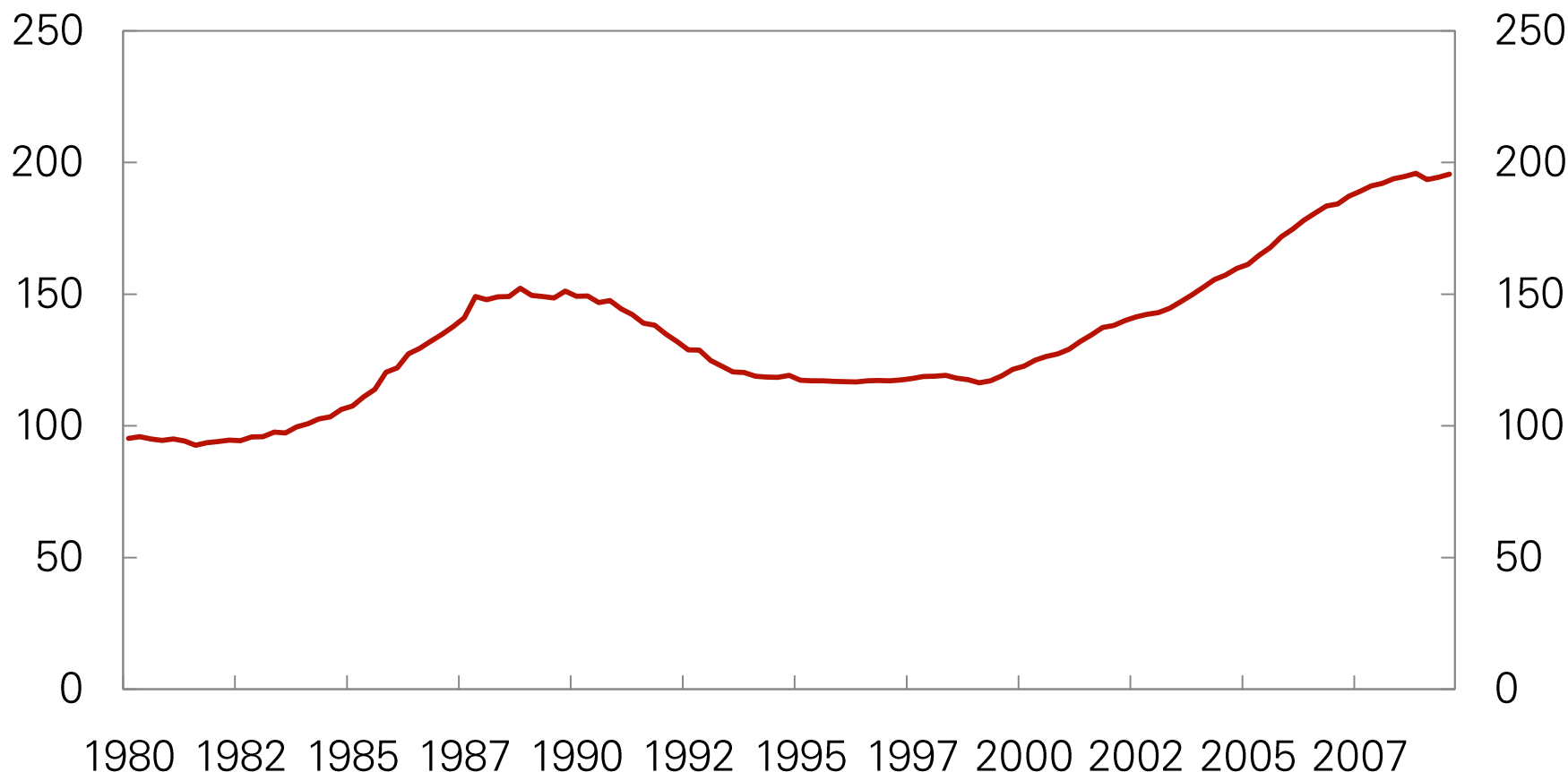
In the assessment potential effects of asset prices (...) on the prospectus for output, employment and inflation are also taken into account.

- Interest rate developments should result in acceptable developments also under alternative assumptions
- Gradual and consistent
- Cross-checked with simple monetary policy rules

- Advice to the Governor
 - every monetary policy meeting
- Potential financial vulnerabilities that might have a significant impact on inflation and output in the future
- Structural changes (laws, regulation etc.), changes in business conduct or competition that might affect the transmission mechanism
- Interest rate decision that would best safeguard financial stability (and hence price stability in the longer run)

Household debt burden¹⁾

Per cent. Quarterly figures. Q1 1980 – Q3 2009



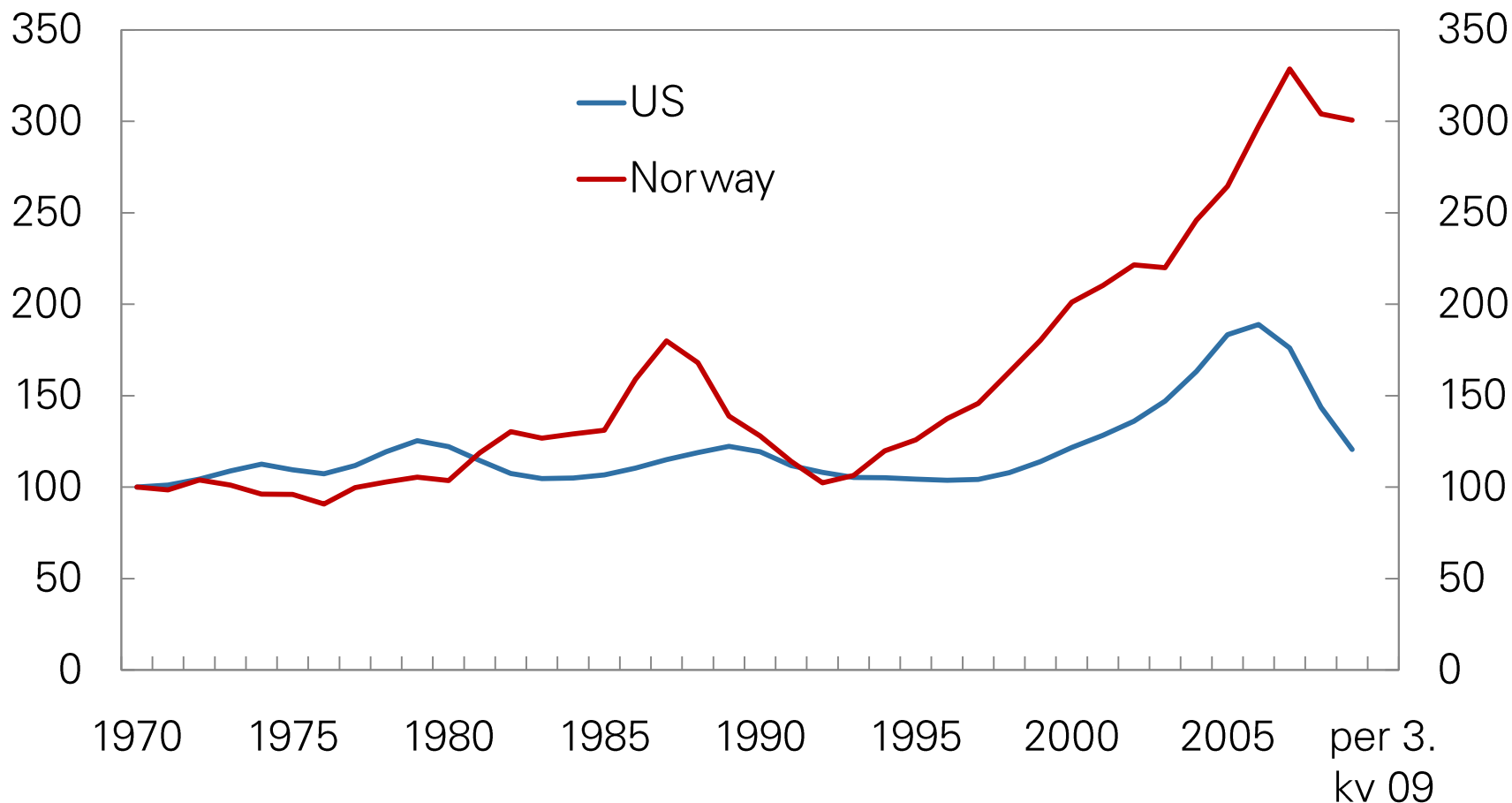
1) Debt as a percentage of disposable income

Sources: Statistics Norway and Norges Bank

Vulnerabilities

Real house prices in US and Norway

Annual figures. Indices. 1970=100. 1970 – 2009¹⁾



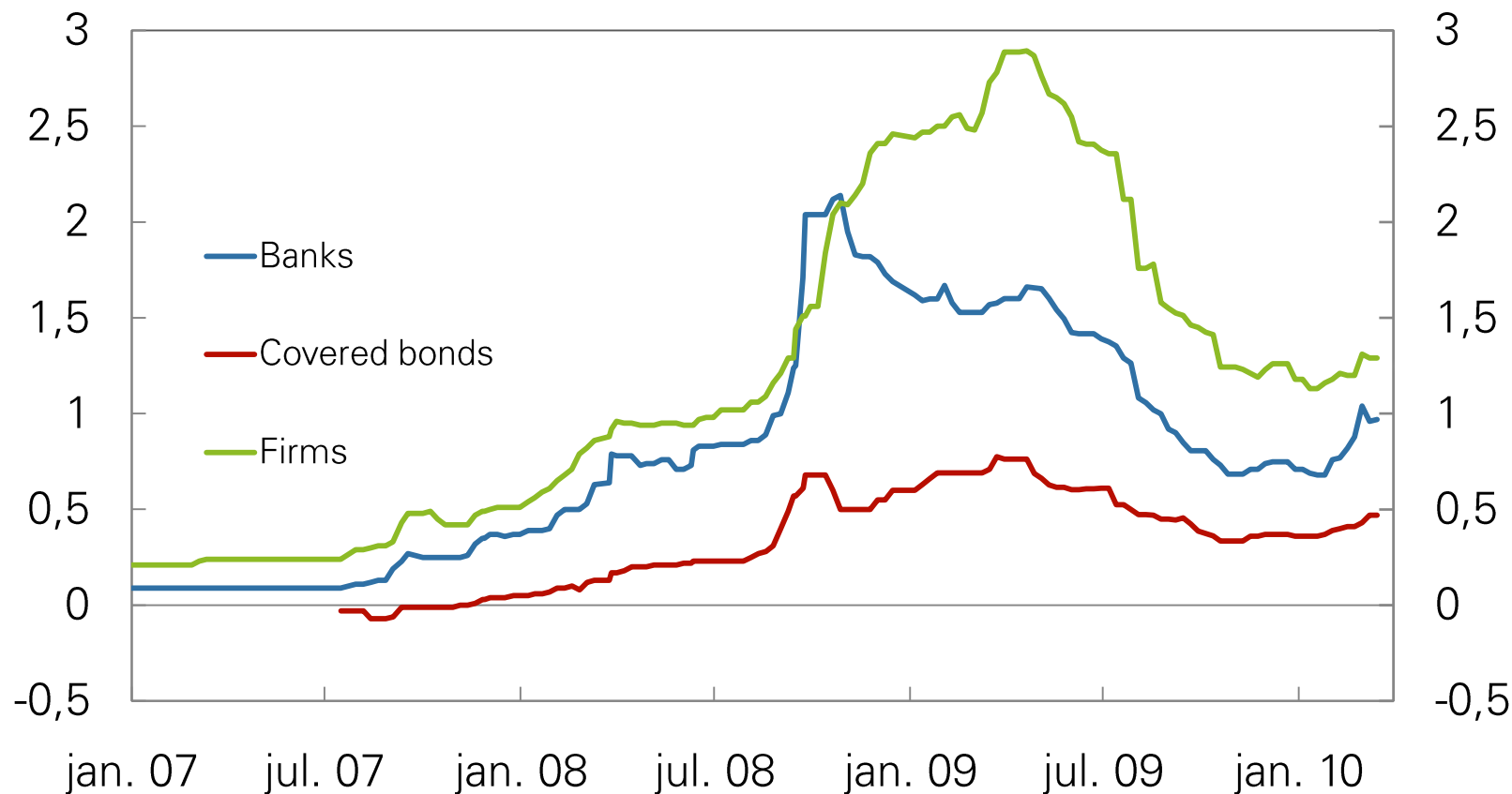
1) Projections for 2009 based on data Jan-Jul 2009

Sources: NEF, ECON Pöyry, Finn.no, EFF, First Securities and Norges Bank

Transmission mechanism

Risk premiums on Norwegian bonds

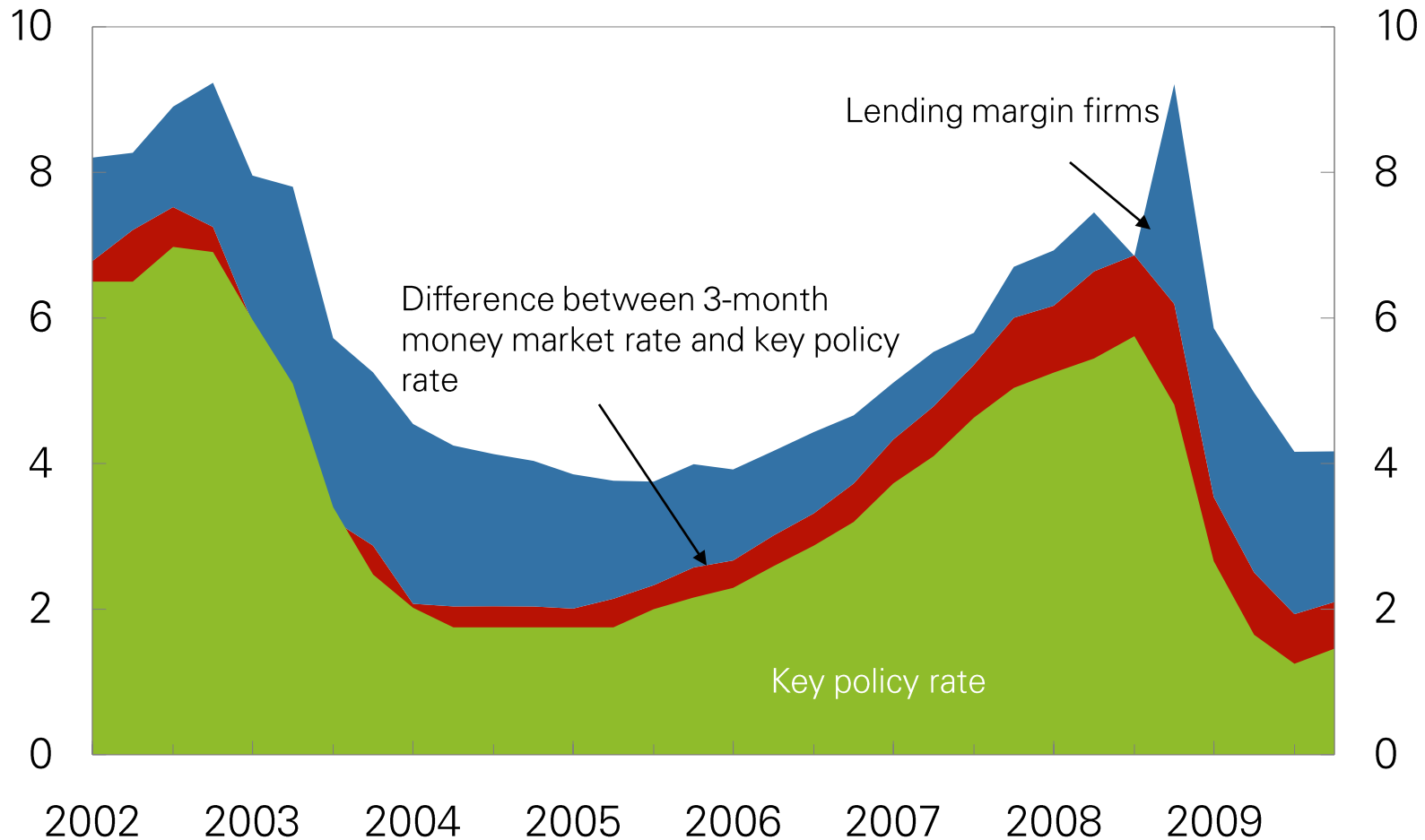
Indicative prices. 5-year maturity. Compared with swap rates. Percentage points.
Weekly figures. 3. januar 2007 – 17. mars 2010



Source: DnB NOR Markets

Lending rate for firms

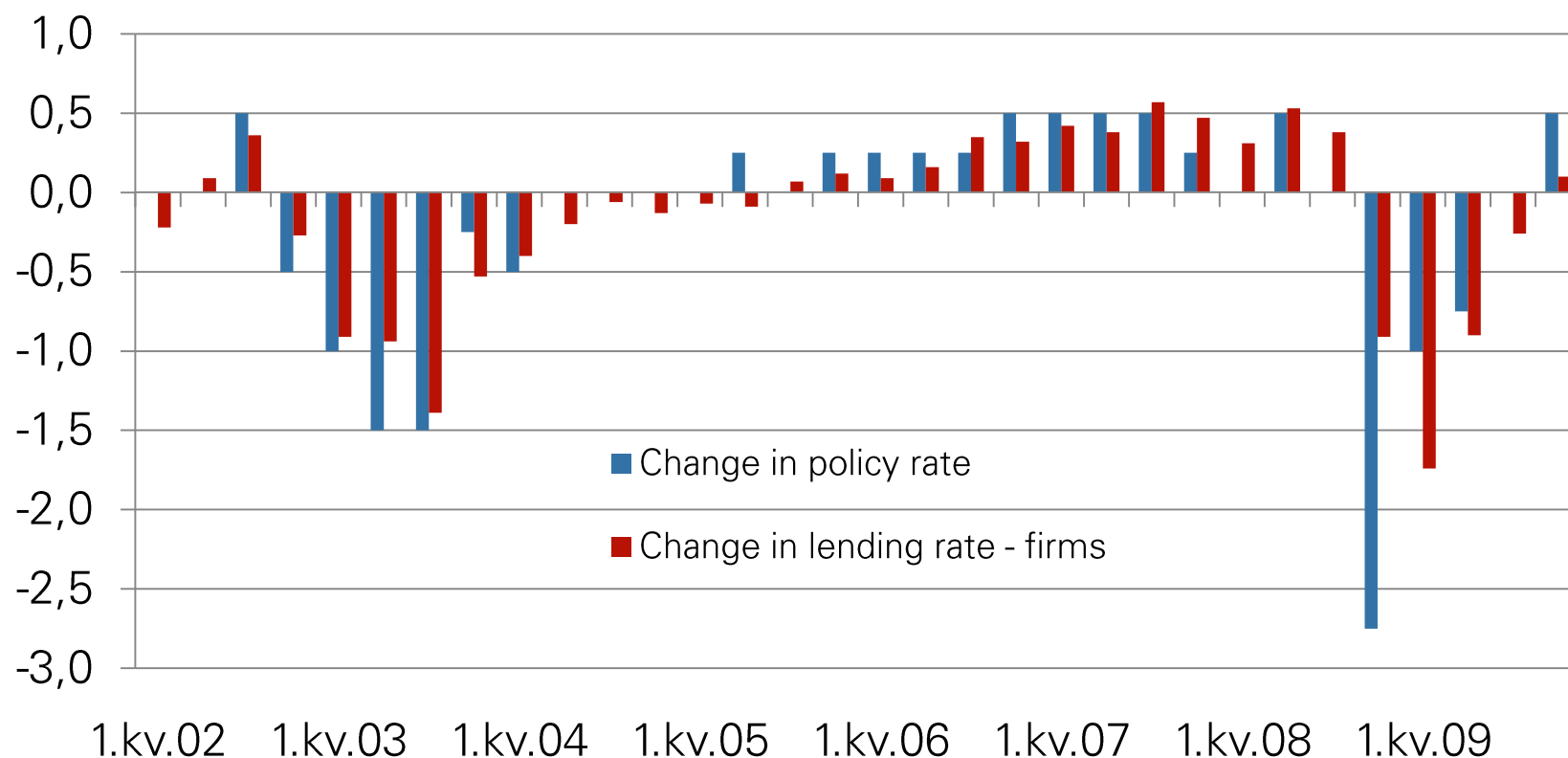
Per cent. End of quarter. Q1 2002 – Q4 2009



Kilder: Statistisk sentralbyrå og Norges Bank

Changes in policy rate and in lending rates on loans to firms

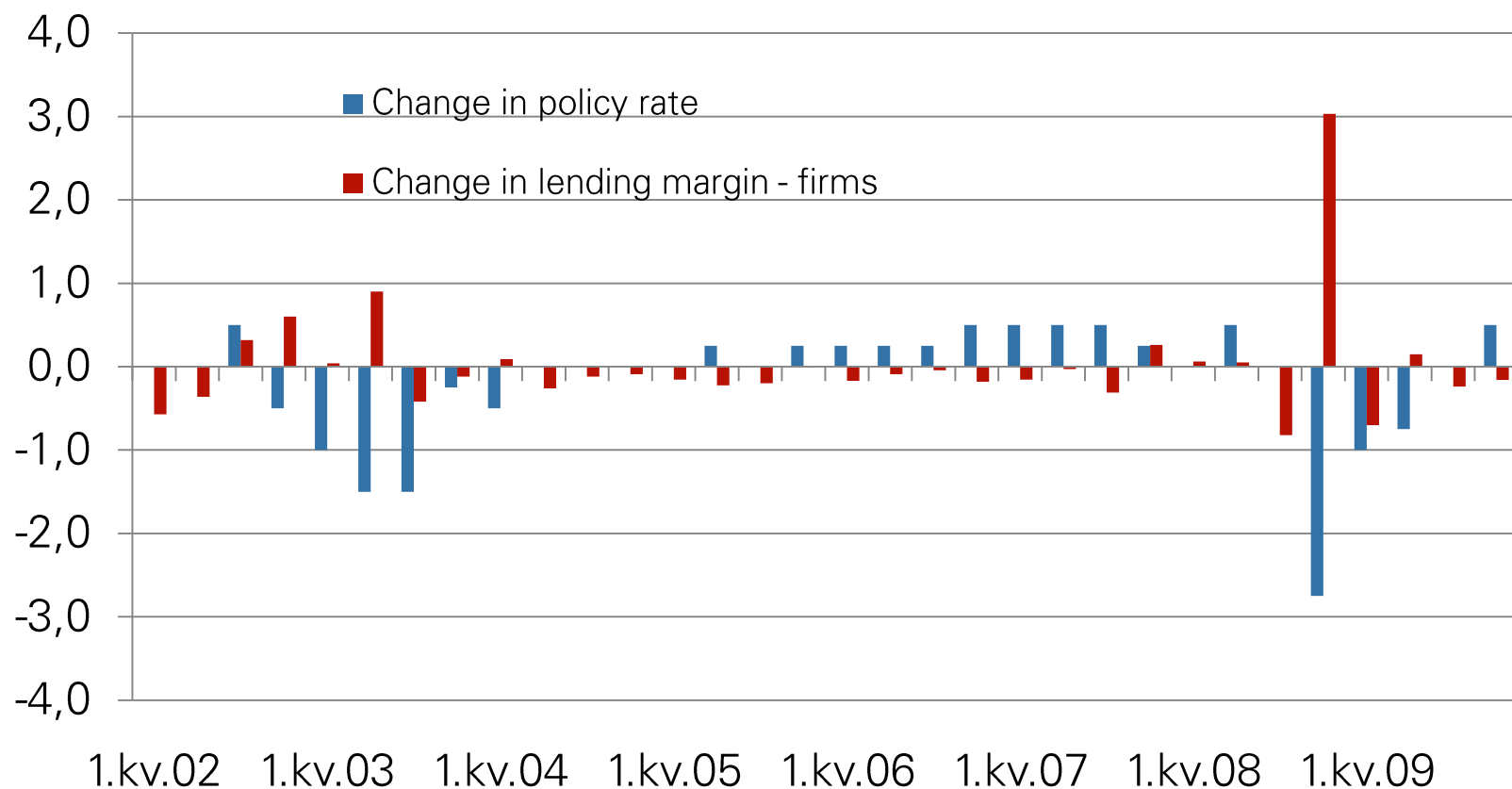
End of quarter. Percentage points



Sources: Statistisk sentralbyrå and Norges Bank

Changes in policy rate and in lending margins on loans to firms

End of quarter. Percentage points



Sources: Statistisk sentralbyrå and Norges Bank

- Advice to the Governor – three times a year
 - Monetary policy strategy best suited to avoid the build-up of financial imbalances in the long run (in connection with preparations of the Monetary Policy Report)
 - Relies on our econometric models

Financial stability and econometric models

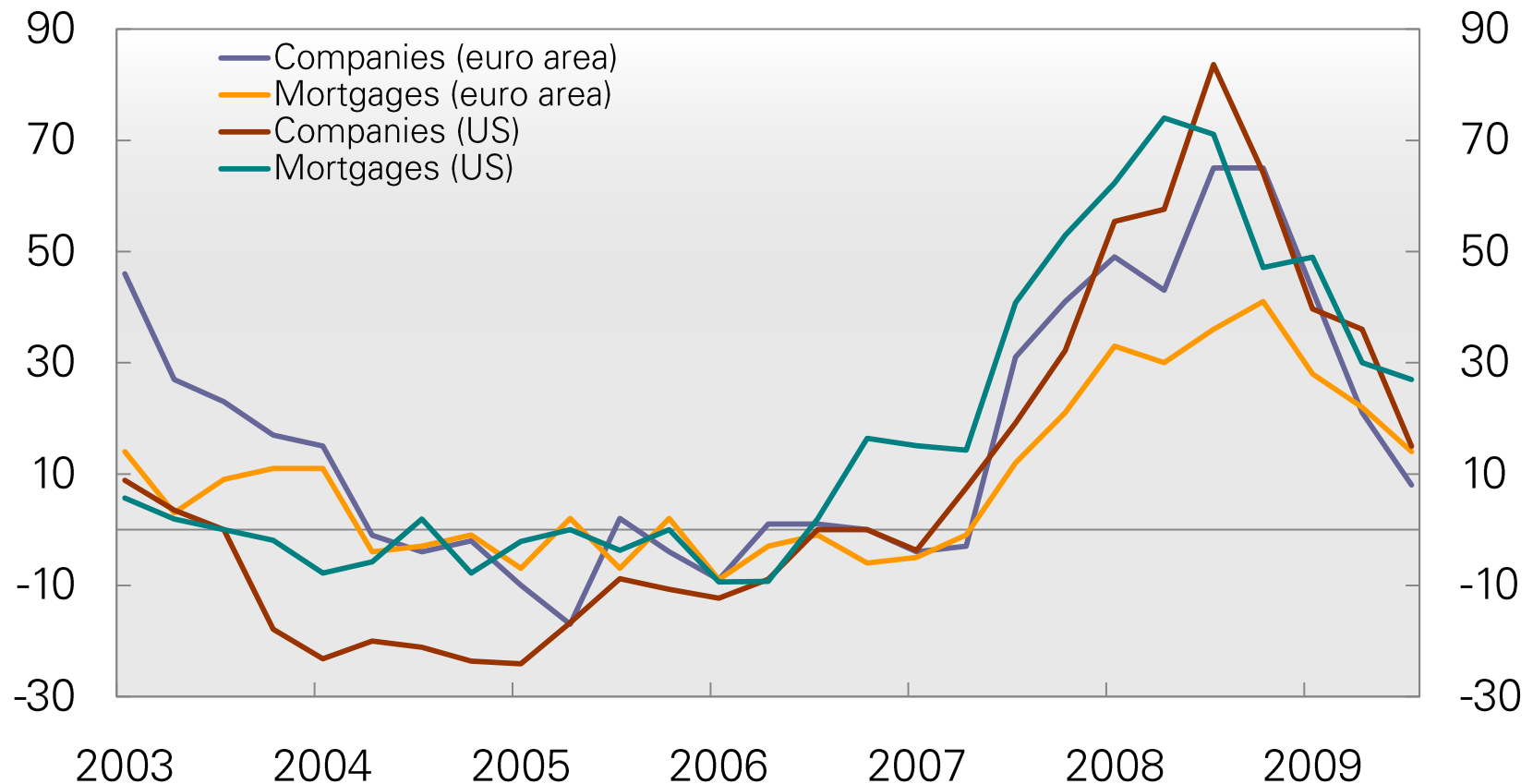
- The credit channel and the relationship between asset prices, credit and the real economy
- How we use the models

“History demonstrates conclusively that a modern economy cannot grow if its financial system is not operating effectively”

Ben Bernanke, January 2009

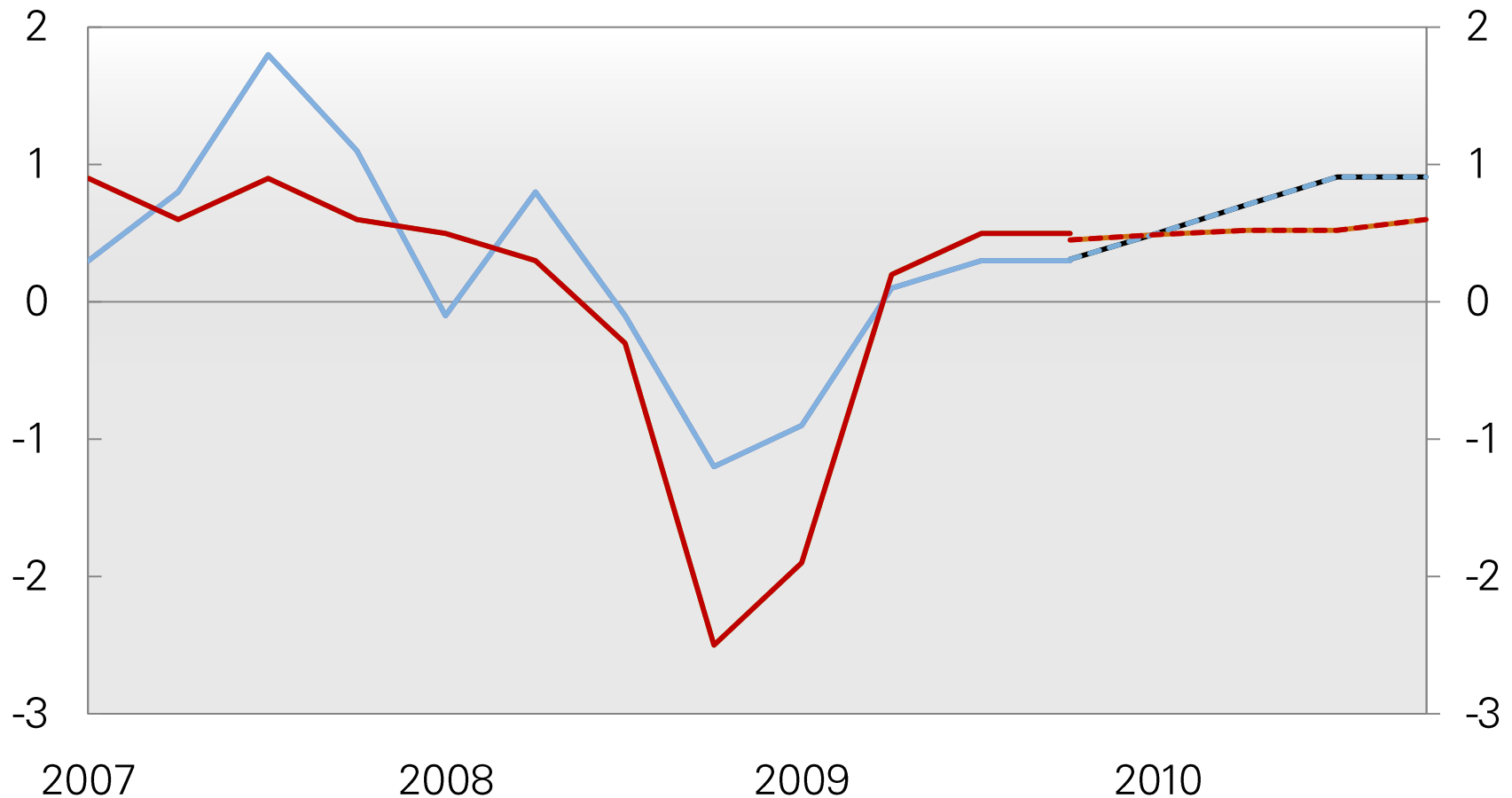
Asset prices, credit and the real economy

Chart A.7 Bank lending surveys in US and euro area. Net share of banks that have tightened credit standards. Per cent. Quarterly figures. Q1 2003 – Q3 2009



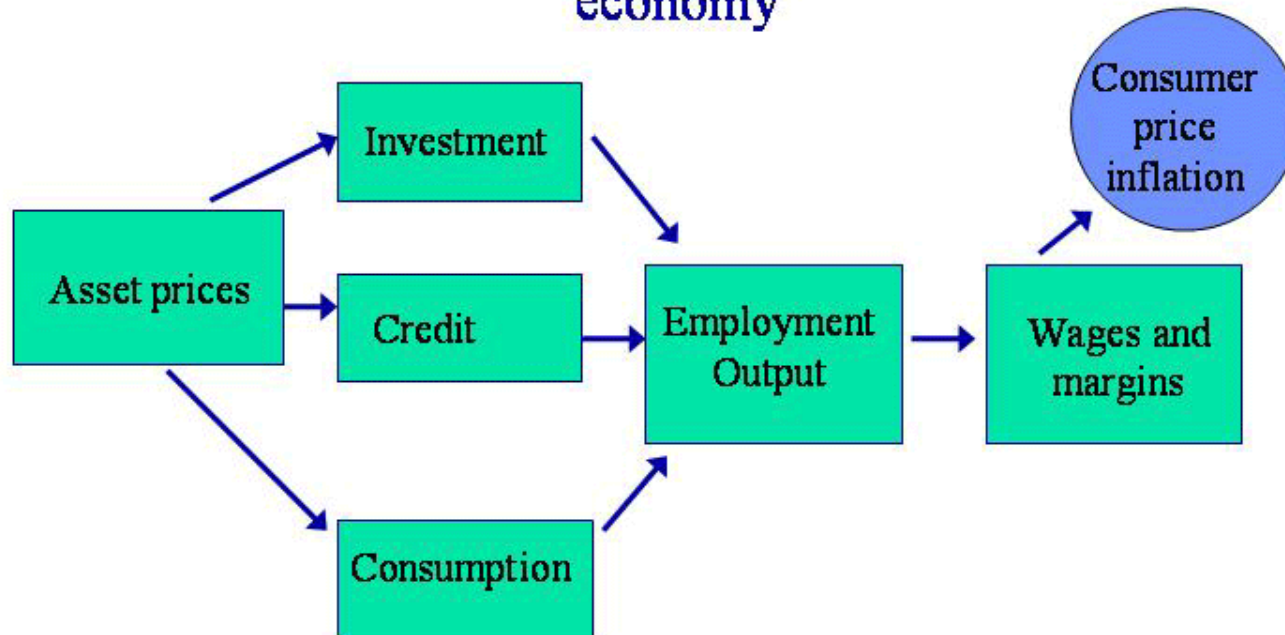
Asset prices, credit and the real economy

GDP growth from previous quarter. Mainland Norway and Trading partners

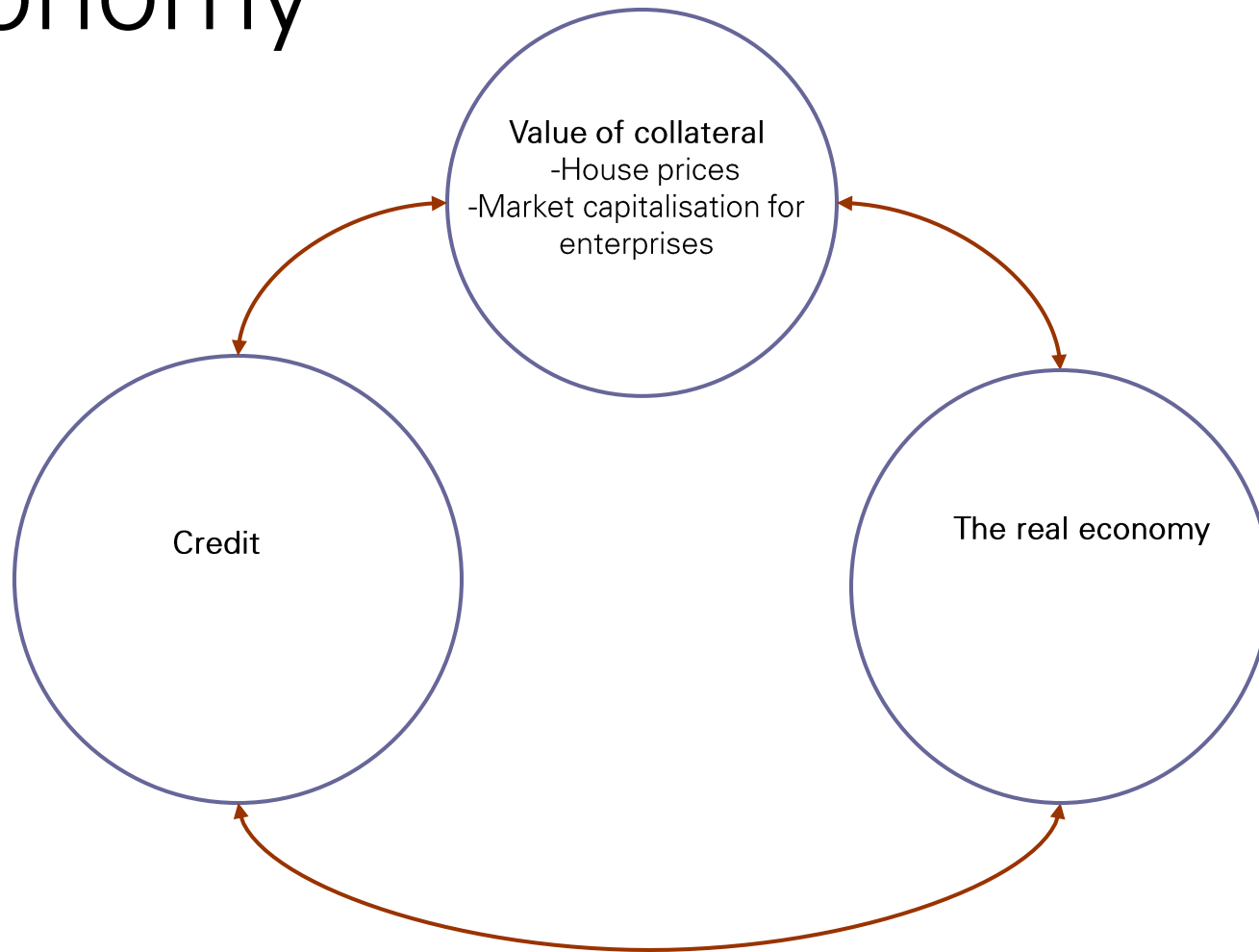


Asset prices, credit and the real economy

Relationship between asset prices, debt and the real economy



Asset prices, credit and the real economy



Asset prices, credit and the real economy

A reduced form GDP-equation for Mainland Norway

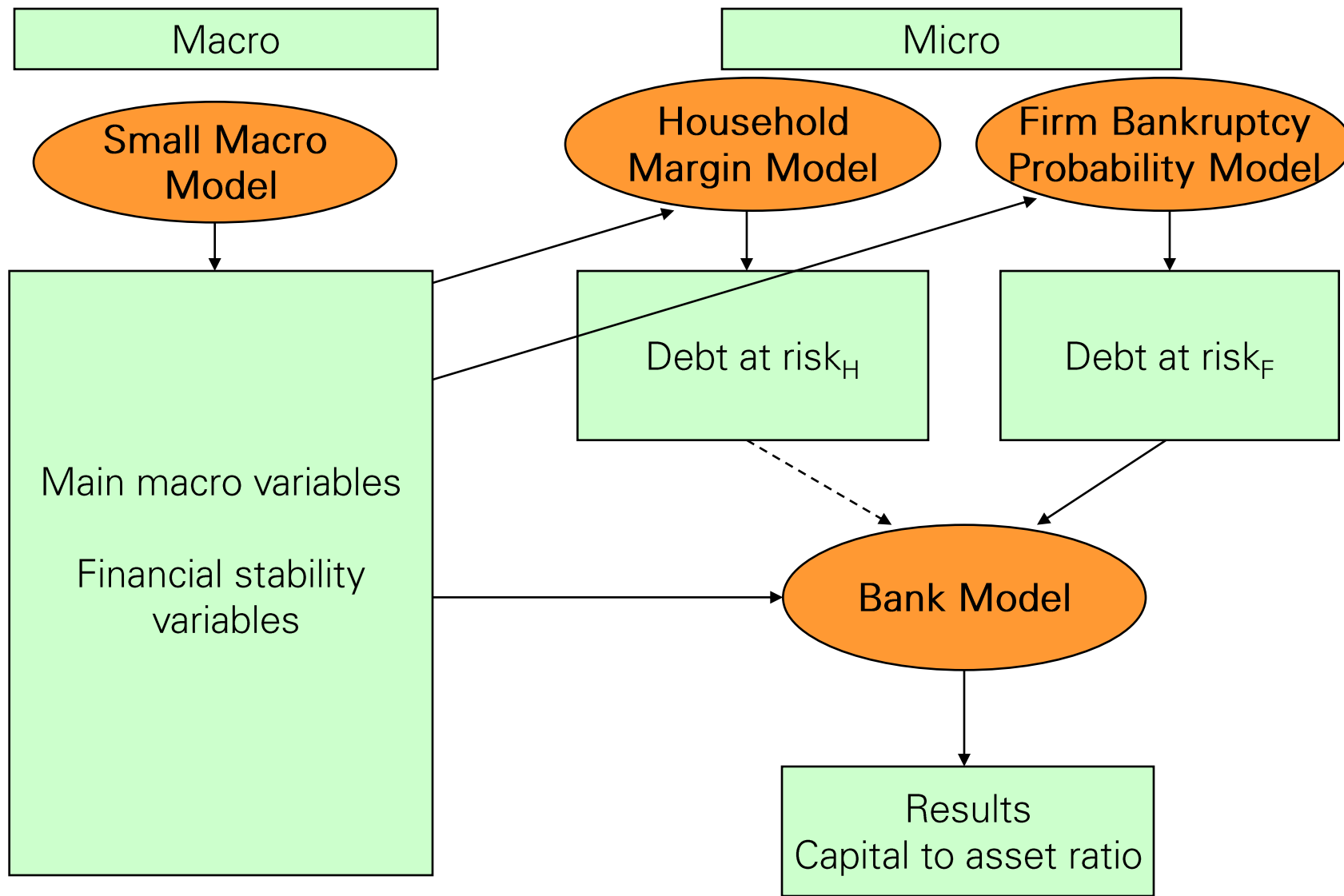
$$\begin{aligned}\Delta y_t = & -0.6\Delta y_{t-1} + 0.7\Delta g_t + 0.4\Delta g_{t-1} \\ & + 0.1\Delta(ph - p)_{t-1} + 0.2\Delta(cr_h - p)_{t-3} + 0.1\Delta(cr_f - p)_{t-1} \\ & - 0.3[(y + 0.01(r - \Delta_4 p) - 0.1(e + p^* - p) - 0.8g - 0.1(cr_h - p)]_{t-j}\end{aligned}$$

- Credit and house price effects on GDP
 - Rationing
 - Frictions
 - Wealth effect in consumption and a housing investments effect

Use of models

- A suite-of-models
- Policy analysis
- Stress-testing

Use of models

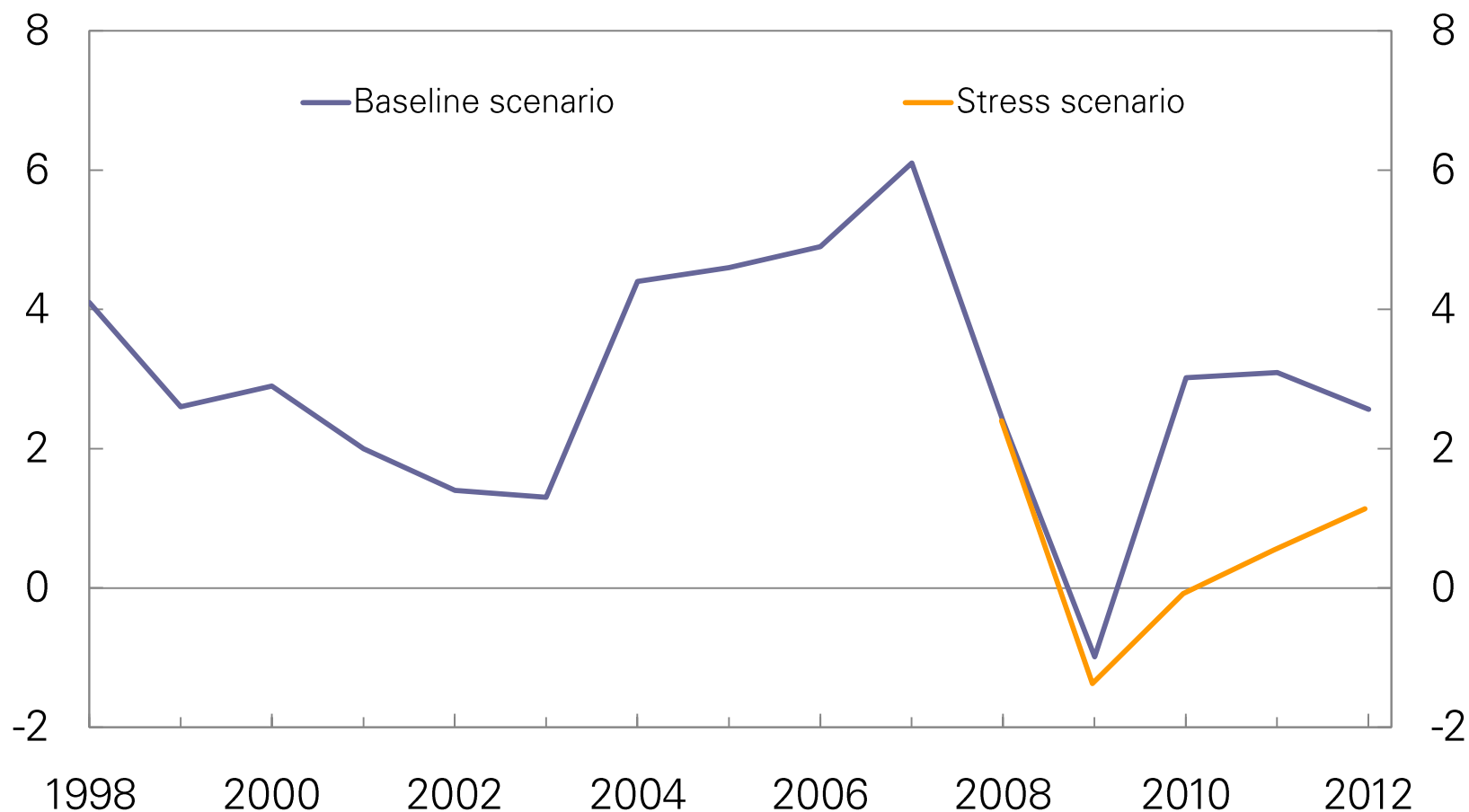


Outlook and risks in FS 2/09

- Weak real economic outlook give challenges to banks (and other financial institutions)
- Risks to financial stability in Norway
 - Assumptions:
 - Prolonged international real economic downturn
 - Oil price falls
 - "Flight to quality"- effect on currency
 - High losses on lending to the shipping industry and the Baltic region

Mainland GDP

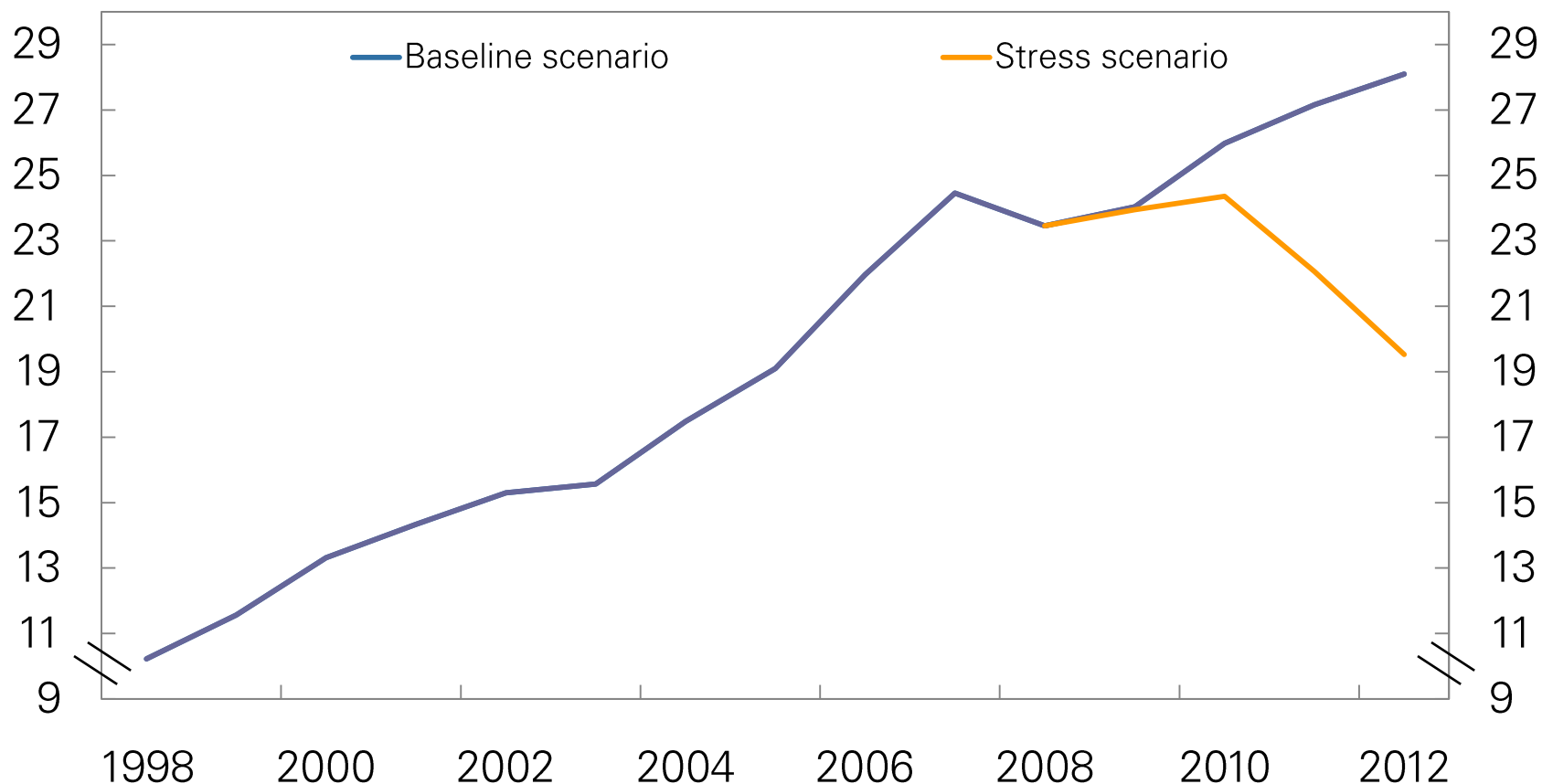
Annual volume change. Per cent



Sources: Statistics Norway and Norges Bank. Financial Stability 2/09

House prices

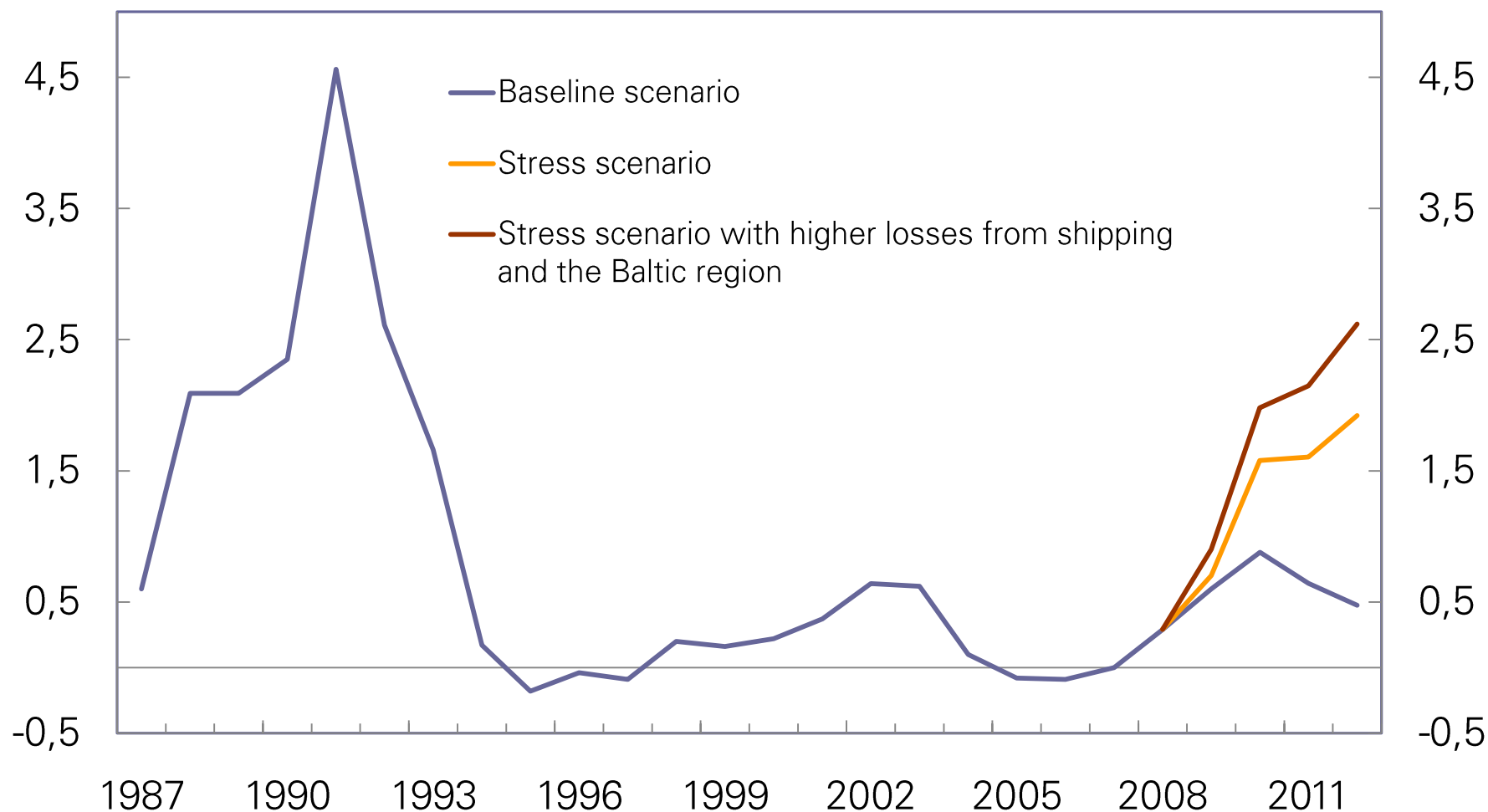
NOK 1000 per sq. m. Annual figures



Sources: Association of Real Estate Agents, ECON Pöyry, FINN.no, Association of Real Estate Agency Firms and Norges Bank. Financial Stability 2/09

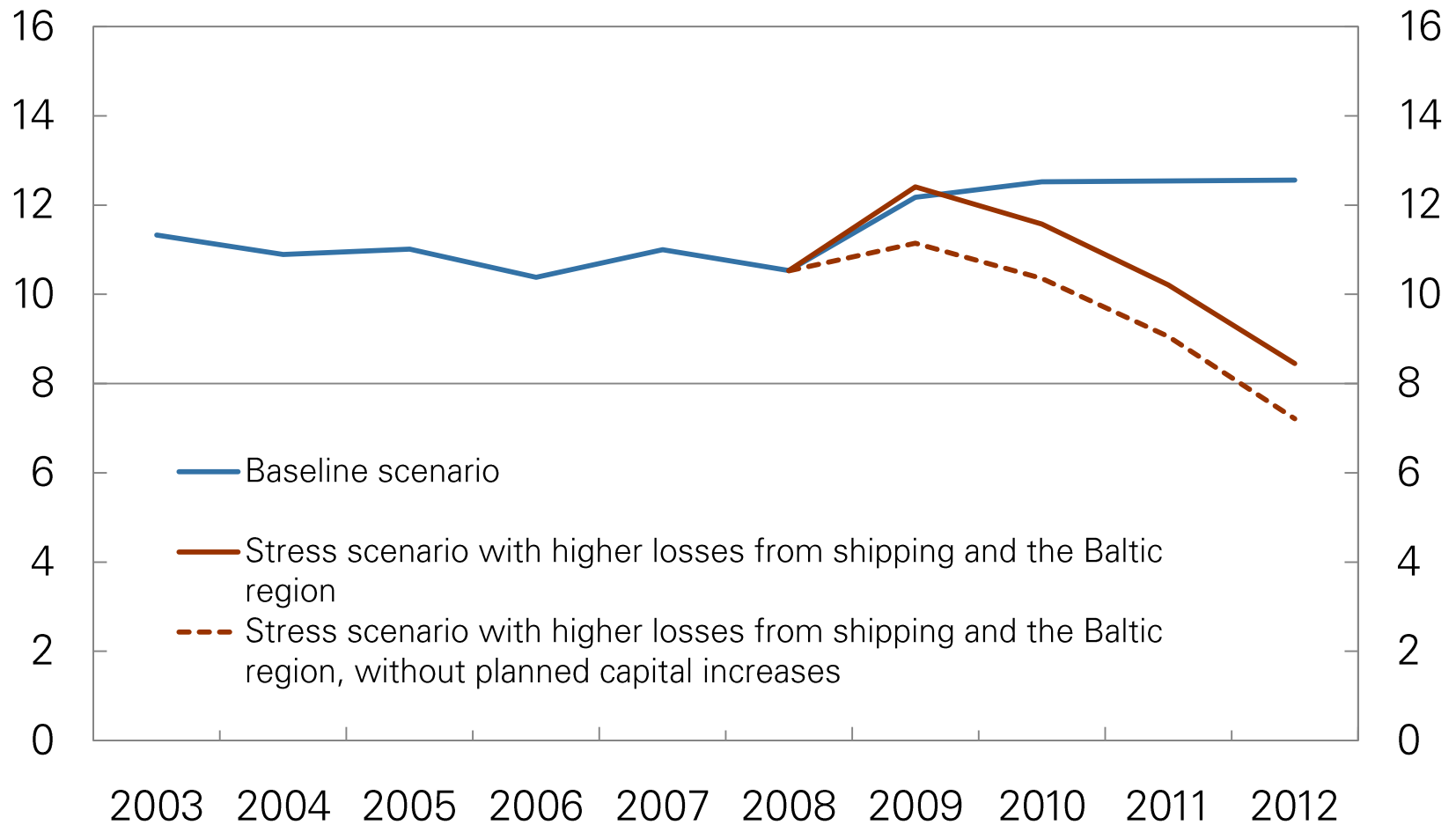
Bank losses

Percentage of gross lending



Source: Norges Bank. Financial Stability 2/09

Regulatory capital adequacy in Norway's six largest banks



Source: Norges Bank. Financial Stability 2/09