

Outline of presentation



- Briefly on the institutional setup, the Norwegian economy and banking system
- Past episodes of financial instability in Norway, and experiences from the latest international crisis
- Macroeconomic surveillance as part of Finanstilsynet's (The Financial Supervisory Authority of Norway) prudential supervision
- Some issues on macroprudential supervision and macroprudential tools

Finanstilsynet - institutional setup



- History of banking supervision stretches back to 1900
- Finanstilsynet was the first integrated supervisor in Europe, established in 1986, due to the emergence of financial groups and need for consolidated supervision. (Denmark in 1988 and Sweden in 1991.)
- An independent government agency reporting to the Ministry of Finance
- Finanstilsynet's Board of Directors is appointed by the Ministry. The nonexecutive members mainly from the private sector (lawyers, professors etc).
 The Central Bank of Norway (Norges Bank) is an observer to the Board.
- Budget determined as part of Government Budget, financed by levies on the supervised entities

cont.



- Finanstilsynet has a staff of appr 270, organised in four departments: Finance and Insurance Supervision, Capital Markets Supervision, Accounting and Auditing Supervision, Administration
- Very wide area of responsibilities, including accountants, auditors, debt collection agencies, real estate agencies, prospectuses
- Main goal: To promote financial stability and well-functioning markets. Main goals accompanied by 8 intermediate goals. Latest strategy (2010) highlights i.a. macroprudential supervision and investor and consumer protection.
- Norway is not part of EU. As an EEA (European Economic Area) member, Norway adopts EU directives and is an observer to the European Supervisory Authorities.
- Extensive Nordic cooperation, including through the colleges. A Nordic-Baltic MoU on crisis management established in 2010.

Financial stability – who does what?



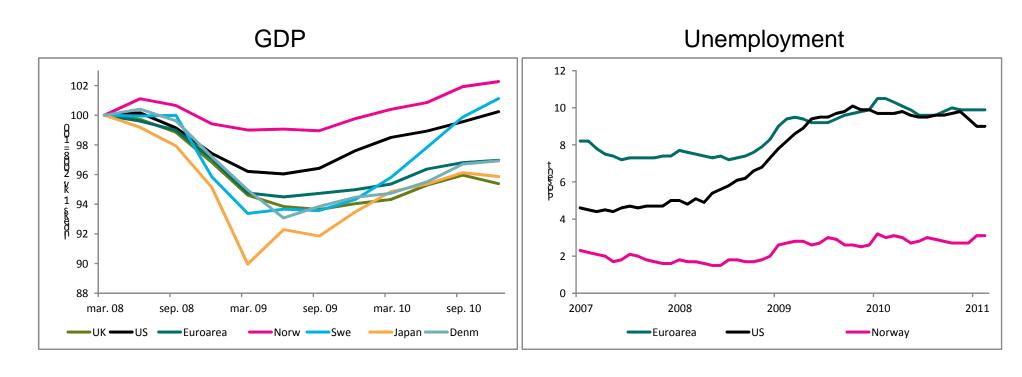
- Responsibility for safeguarding financial stability is split between The Ministry of Finance, the Central Bank and Finanstilsynet.
- The Ministry of Finance has the overall responsibility for financial stability and the regulatory framework.
- The Central Bank has the operating responsibility for monetary policy
- Finanstilsynet is responsible for supervision of institutions and market places, and prepares a significant part of regulatory changes.
- The Central Bank and Finanstilsynet monitor institutions, markets and payment systems to identify threats to financial stability.
- All three authorities publish regularly assessments of financial stability. The Ministry assesses stability in the annual White Paper on financial market issues. Financial stability reports from the Central Bank and Finanstilsynet are used as input.
- In addition to bilateral meetings to discuss stability issues, tri-partite meetings have been arranged since 2006, to secure a common understanding of the situation and coordinate measures. Frequent meetings during the international crisis.

The Norwegian economy and banking system



- Norway is a small, open resource-based economy
- Large current account surpluses and net government assets of appr. 150% of GDP. The Government Pension Fund-Global has more than 3000 bn NOK (120% of GDP, invested abroad). Fiscal rule governing spending of petroleum revenues.
- Norway has benefitted from strongly improving terms-of-trade. Oil and gas near half of total exports. The manufacturing sector relatively small - appr 1/10 of GDP, compared to 1/5 for oil/gas and shipping.
- Growth around 3 per cent with low unemployment, low inflation and a strong currency. Interest rates low, property prices rising at near 10 per cent, credit growth picking up and household indebtedness rising from a high level.





Reuters EcoWin

Reuters EcoWin and NAV



- The financial market is dominated by financial groups/alliances
 - The 7 largest appr. 70 per cent of total assets.
 - The 3 largest 55 per cent
- The banking market is less concentrated than other Nordic markets, with market shares appr.:
 - 1/3 DnB NOR (the largest institution)
 - 1/3 savings banks (110+) and a small number of commercial banks (20)
 - 1/3 foreign owned subsidiaries and branches (mostly Nordic)
- Only DnB NOR has foreign operations of some importance, i.a. in the Baltics.
- Housing loans are the dominating part of household loans, loans to commercial real estate and shipping are the most important corporate loans.
- Significant foreign funding of banks

Past episodes of financial instability in Norway



- Several financial crises in Norway; in the 1870s, in the 1890s, in the 1930s and in the 1990s
- All of the crises with significant macroeconomic elements. They were
 preceded by economic booms, strong credit expansion, rising leverage and
 strong asset price inflation. The crises coincided with recession.
- 1870s: International downturn, affecting shipping
- 1899: Real estate and stock market crash, after a period of strong growth international and in Norway
- 1920s: Strong lending growth preceded the crisis. Contractionary monetary policy to restore the gold standard at pre-war parity contributed. More than 130 banks failed.



- Norway, Sweden and Finland had a severe banking crises in the early 1990s ("The Nordic Banking crisis").
- The crisis of the 90s had classic "boom-bust" features:
 - Deregulation and liberalization,
 - Largely pro-cyclical macroeconomic policies
 - Exceptional lending growth
 - Relaxation of capital regulation and supervision
 - A macro shock (oil prices triggered devaluation, fiscal policy tightening, interest rate increase to defend the then fixed exchange rate and private sector consolidation.
 - A deep recession led to large loan losses, wiped out capital in several institutions.
 Smaller banks merged with larger banks, and the three largest banks were nationalised, after writing down the value of equity to 0.
- Important background for the establishment of macroeconomic surveillance in supervision

The latest international financial crisis/crises



- The main impacts on Norwegian banks through the drying-up of funding markets, and the reduced economic activity (but entering from a strong cyclical upturn). No solvency issues
- Low direct exposures to structured credit and sovereign debt in GIIPS-countries
- Banks' return on equity increased from 8 per cent in 2008 to 13 per cent in 2010.

The resilience of the Norwegian economy and financial sector to the international financial crisis can be attributed to several factors:

- Wide ranging policy actions to reduce the negative spillovers from the crisis. No guarantees were given.
- The structure of the economy and improving terms of trade
- The strong fiscal and external stance
- Robust regulation and supervision of the financial sector
- The collective memory among senior staff from the 1990-crisis probably important (in the Ministry, the Central Bank and Finanstilsynet, as well as in banks)

Regulation and supervision – some aspects



- A consolidated approach to regulation covering all parts of the financial market
- Capital requirements on consolidated, sub-consolidated and solo levels
- Strict regulation of securitisation
 - New regulation in 2007, Covered bonds issued only by mortgage companies
- Conservative approach to hybrid capital; a minimum requirement of 7% to raise tier-2 hybrid
- Limited impact on Norwegian banks of the Basel III proposals to raise the quality and level of capital.
- Liquidity requirements in Basel III challenging, i.a. due to low supply of government bonds and proposed haircuts on deposits
- Robust deposit guarantee scheme (covering up to NOK 2 mill, appr EUR 250 000)



- Supervision has contributed to moderate risk appetite, robust capital buffers and relatively high long-term funding
- A risk-based supervisory approach with strong emphasis on on-site inspections
 - Near 70 on-site inspections in banks (and finance companies) in 2010 (appr 270 in 2006-2010)
 - Focus on governance, strategies, risk control, risk exposures and stress tests
 - Final reports from inspections published
 - Recruitment of staff with experience from the industry.
- Regular dialogue and meeting (at least semiannually) with top management of the largest institutions
- Active use of pillar-2 and the use of pillar-2 capital add-ons
 - Due to i.a. concentration risk, macro-risks, IRB- model and calibration risks
- More supervisory attention on long-term funding and liquidity risk after events in 2002. After 2008 further stepping up of supervision of liquidity risk.

Macroeconomic surveillance



- Introduced in 1994, based on experiences from the 1990 banking crisis. This crisis, as well as a high number of international crises, was macroeconomic in its origin.
- Motivation: Assess potential stability problems in the Norwegian financial industry on the background of economic developments domestically and internationally
- Integrated part of the supervisory practice, and a necessary supplement to the ongoing "traditional" supervision of single institutions, recognising that....
-assessment of single institutions' profitability and financial strength have to be carried out with a view to the economic cycle and the general state of the economy.
- The need for staff with background in macroecomics and finance to run the analytical work, was recognised. Finanstilsynet does not run its own macroeconomic models.
- It was and is assessed necessary to do the analytical work in-house in order to have a proper understanding of risks related to the cycle and asset markets.



- Reporting on financial stability started in 1994 as biannual reports to the Board. The reports were discussed with the Central Bank and the Ministry of Finance.
- The Central Bank started systematic reporting on financial stability somewhat later, but earlier than central banks in other countries. These are published biannually.
- Finanstilsynet's reports published annually from 2003 ("Risk Outlook"). An update of the report published from 2010. Reports are presented at press conferences. English translations to be found on our website (<u>www.finanstilsynet.no</u>).
- Internal reports being produced, without the same confidentiality constraints as in the published report. Single institutions addressed in the internal reports.
- In addition to the stability reports, Finanstilsynet publishes quarterly reports on financial institutions' performance, where macroeconomic developments are being used as background information.



- The latest Risk Outlook report, published in March, has the following build-up
 - Summary and assessment
 - Economic trends and markets
 - Profitability and financial soundness
 - Risk factors
 - Special analyses of risk factors
 - The financial crisis, regulation and economic costs
 - Structure of financial and securities markets
- Under the heading special analyses, the following topics were covered:
 Macroeconomic stress tests, concentration risk, banks' counterparty
 exposures. mortgage exposures, households' interest burden, consumer
 loans and debt collection trends, loans against financial instruments, banks'
 sale of financial instruments

Some characteristics of the surveillance



- A set of indicators followed regularly to identify possible imbalances and vulnerabilities
 - Indicators on the economic cycle, including asset markets
 - Financial fragility indicators for households and corporates
 - Indicators on structural changes and competition in the financial sector
 - Indicators on risk, profitability and solvency in the financial sector
- Ad-hoc studies of emerging trends/developments of potential significant importance
 - Surveys, research projects, seminars with the industry
- Stress tests
 - Banks, insurance companies
 - Top-down/bottom-up tests, in cooperation with the Central Bank
 - Households, corporates, industries (on micro data using macro input)
 - Linking macro-based stress scenarios on corporates (micro) to banks' exposures (micro), as benchmarks in SREP/ICAAP and on-site inspections.



- Emphasis in macroeconomic surveillance on build-up of credit risk in the banking system. Systemic risk generated by collective behaviour of small banks recognised.
- Insurance companies included from the start, as part of financial conglomerates and important institutional investors.
- The set of indicators and the scope of macroeconomic surveillance further developed to increase focus on capital markets issues, market liquidity risk and the link between well-functioning markets and financial stability.
- A project underway preparing reporting on well-functioning markets
- While emerging risk due to macroeconomic development must be integrated in supervision of single institutions, important information on possible build-up of systemic risk can also be identified in the micro-supervision.
 - Regular meetings between analytical staff doing macroeconomic surveillance and staff doing on-site work.
 - Some trends might be identified before reflected in aggregate data

Use of macro surveillance



- Identified areas of concern from the macroeconomic surveillance have been fed into several supervisory processes in Finanstilsynet
 - General background information in on-site supervision
 - Input in prioritisation of institutions subject to on-site inspection
 - Linking of macroeconomic developments and banks' risk concentrations
 - Selection of areas for "theme-based"—inspections in larger institutions., e.g.
 - In 2007 residential property exposures and risk control
 - In 2008 commercial property exposures and risk control
 - In 2010 shipping
 - In 2010/11 mortgage financing
 - Use of risk assessments on the economy and asset markets an important element in pillar-2 (SREP and feedback on banks' ICAAP).



- Regulatory initiatives, e.g.
 - Increased risk weighting of residential exposures in Basel I
 - Recommendations and guidelines on LTVs and credit practices in mortgage lending
 - Calibration of Basel II capital requirements on residential and commercial property
 - Cyclical capital buffers in IRB model approvals
- Information, raising public awareness, e.g. through speeches, reports, press releases, press conferences
- Raising attention on financial stability issues to other authorities

Why macroeconomic surveillance?



- Several types of market imperfections create systemic risk. The main triggers:
 - Macroeconomic shocks affecting several institutions/markets at the same time
 - Idiosyncratic shocks and contagion
 - Operational shocks in clearing or payment systems
- The systemic risk triggered by a given macroeconomic or idiosyncratic shock increases with the extent of weaknesses or vulnerabilities,
 - Fragilities in the non-financial sector
 - Imbalances or "bubbles" in markets
 - Interconnectedness and/or common risk exposures in the financial system
 - "Structural" weaknesses in financial institutions' balance sheets (mismatch, concentration, leverage), risk controls, regulation, supervision etc
- Often mutually re-enforcing effects and non-linearities, aggravated by loss of confidence
- Systemic risk is emerging gradually, often as sectoral problems. When systemic risk
 has reached a certain level and all lights are flashing red, it is probably too late to
 avoid a crisis.



- Several definitions of systemic risk and of macro prudential supervision.
- One definition of macro prudential supervision is a supervision that seeks to limit distress to the financial system as a whole, while microprudential supervision seeks to limit distress to individual institutions
- According to this definition, the first aims at (avoiding GDP loss due to) financial stability, while the latter aims at consumer protection.
- In this weak sense of the terms, Finanstilsynet's approach, covers important
 parts of what today seems to be called macro prudential supervision. This may
 also be the case for other supervisors.
- The definition of microprudential is, in my opinion, based on an oversimplified distinction between micro and macro, and probably originates from some supervisory approaches aiming at idiosyncratic risk and legal compliance

Macroprudential tools



- The ongoing reform to increase financial system resilience includes:
 - Increased buffers of capital and liquidity
 - Reduced procyclicality and interconnectedness
 - Improved system for crisis resolution
 - Institutional changes (e.g. European Systemic Risk Board, the US Financial Stability Oversight Council etc.)
- Most macroprudential tools coincide with "traditional" microprudential tools (but by some agencies used for another purpose)
- New tools include:
 - LTVs, possible time varying
 - Risk weights, possible time varying
 - Countercyclical buffers
 - Capital surcharges on SIFIs
 - Liquidity risk charges and/or charges on central bank borrowing
 - Quantitative limits on credit in boom periods? Glass-Steagal type regulation?



- Monetary policy and fiscal policy are obvious macroprudential tools. The
 objection to using monetary policy, is that it cannot be used both for price
 stability and financial stability.
- The effects of some of the proposed new tools are empirically uncertain, and experiences are limited.
- Rules or discretion? Due to the lack of fundamental knowledge on financial stability, it is difficult at this stage to imagine supervision without a discretionary component.
- There is a blurred distinction between micro- and macro prudential tools.
 E.g.: Is discretionary use of liquidity and capital requirements in pillar-2 a micro-prudential instrument if it addresses concentration risk in the banking sector due to a possible build-up of a housing bubble?



- The institutional arrangement for macroprudential policy entails several dimensions:
 - Who will decide: Supervisors or Central Banks? This is also linked to a discussion on different skills and cultures
 - Interrelations between policies monetary vs macroprudential policy macroprudential vs microprudential policy
 - Independence and accountability
 - Legal powers
- The discussion of who does what seems to run ahead of agreeing on the contents of an effective macroprudential tool-box
- Significant cross-country differences in institutional setups and approaches
 to address financial stability, as well as past experiences from financial
 instability episodes, suggests avoiding "one-size-fits-all".

Countercyclical buffers - Norway

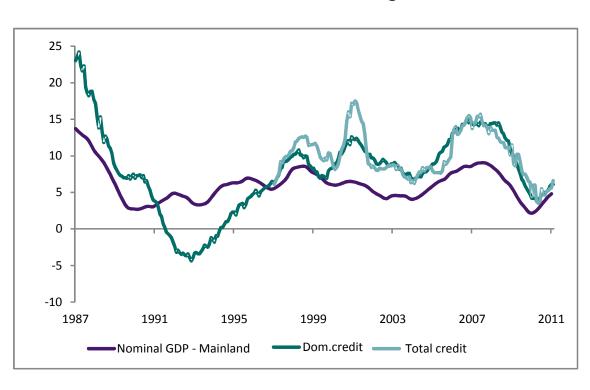


- The countercyclical buffer (CCB) aims at increasing resilience to possible stress following a period of strong credit growth. A potential moderating effect on credit growth is a possible side effect, but will probably not be a significant effect. Reciprocity, whereby CCP applies to foreign branches, is important.
- The interaction between pillar-2 and the CCB is an important, but open issue
- Due to Finanstilsynet's use of pillar-2 and banks' actual capital level, the CCB of 2,5% will for most banks not be binding. It may have an effect through necessary buffers above the minimum (including the CCB).
- The use of CCB cannot be solely rules-based, and involves some technical issues,
 i.a. relating to trend calculations.
- The Central Bank has proposed that they do the assessment, and that Finanstilsynet follows the principle of "comply or explain", and executes the implementation and compliance.
- Finanstilsynet has proposed that assessments should be done by both institutions.
 The decision should be made by the Ministry, possibly being delegated to Finanstilsynet.

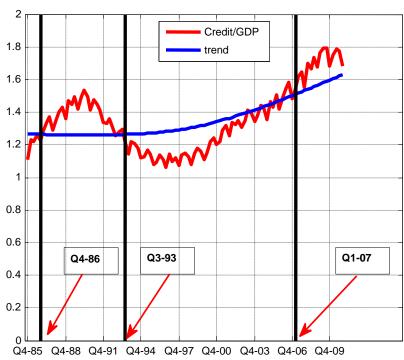
Countercyclical buffer - illustration



Nominal GDP and credit - growth



Credit /GDP – Mainland economy



Statistics Norway

Statistics Norway

Loan-to-value - Norway



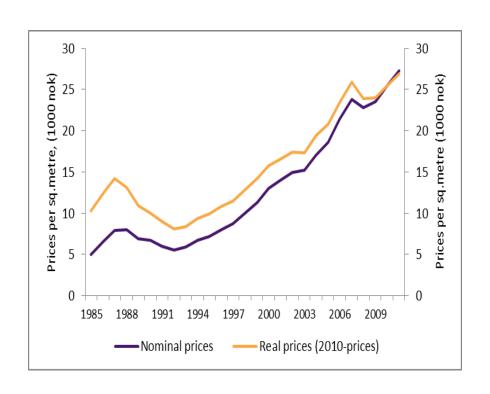
- House price inflation and household indebtedness in the current low-interest and low unemployment environment is the most important financial stability issue in Norway, besides challenges related to the sovereign debt problems in Europe.
- Surveys have shown high LTVs for a significant part of new loans. This is combined
 with increasing indebtedness, increasing part of loans without downpayment, and
 predominantly floating rates.
- Explicit guidelines on mortgage financing were introduced in the beginning of 2010, due to both financial stability and consumer protection considerations. Banks should i.a. not exceed a LTV of 90%, and if used, a LTI of 3.
- On-site inspection on mortgage financing and guidelines compliance will be followed by a new survey in August this year. It will then be decided if a tightening of guidelines or stricter regulation is necessary.

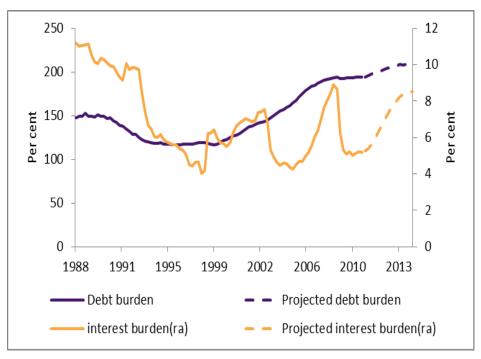
Households



Residental property prices

Households' interest and debt burden





Sources: NEF, EFF, Econ Pöyry, Finn.no

Sources: Statistics Norway and Norges Bank

Capital, liquidity and risk-weights - Norway



- IRB risk weights on mortgages are too low, even if the important second-round effects following mortgage related problems surface in corporate loans
- Finanstilsynet has followed a conservative approach as to approvals of models within the Basel II framework, requirering i.a. calibration based on data including the 1990banking crisis
- Basel II transitional floors are effective for most Norwegian banks and limit the reduction in risk-weighted assets and pillar-1 minimum requirements.
- CRD IV is to be published by the EU this summer, Finanstilsynet supports assessing
 a possible Nordic harmonised implementation of the new liquidity and capital
 requirements, including CCB, earlier than the EU time schedule
- Maximum harmonisation in EU will restrict possibilities of stricter implementation of minimum requirements in CRD IV, including possible measures to address the low IRB risk-weights.
- Maximum harmonisation may lead to increased importance of pillar-2 as a macroprudential tool.

Summing up



- The advantage of a supervisor in macro prudential supervision lies in the possibility of combining insight into micro behaviour with macro information. This interaction should be further strengthened by supervisors.
- Experiences from the banking crisis in the early 1990s and a significant macroprudential element in supervision and regulation has made supervision in Norway more effective.
- Macroeconomic surveillance has strengthened Finanstilsynet as an organisation.
 The approach has made dialogue with other authorities and with the financial industry
 more effective on issues highly important for individual banks as well as for the
 system as a whole.
- Macroprudential issues have been integrated in the operational supervisory work, addressed in assessments of risk control and capital in pillar-2, raised in the regular meetings with banks' top management, influenced regulatory initiatives and been central in risk warnings from the supervisor to institutions and the general public. Finanstilsynet will strive to complement this approach with the use of new and effective macroprudential tools.

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