

# THE FINANCIAL MARKET IN NORWAY 2009

Risk Outlook



# The Financial Market in Norway 2009: Risk Outlook

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Unless otherwise stated, Finanstilsynet is the source of charts and tables. This report is the full version of the Norwegian report *Tilstanden i finansmarkedet 2009*.

#### Editorial note

Kredittilsynet changed its name to Finanstilsynet on 21 December 2009.

To simplify matters for the reader, the new name is used throughout this report.

The Financial Market in Norway 2009 **Finanstilsynet** 

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# Introduction

The financial system redistributes capital and risk and attends to payment and settlement functions. Financial stability, well functioning markets and confidence in the financial system are needed if the system is to function satisfactorily. Through its supervision of firms and markets, Finanstilsynet contributes to financial stability and well functioning markets. Strong financial institutions with good risk management and internal control are particularly important to ensuring financial stability.

The ongoing international financial crisis has highlighted the importance of financial stability in assuring a sound, stable development of the real economy. In many cases stability problems arise as a result of macroeconomic shocks that trigger vulnerabilities in the financial system. The Nordic bank crises in the 1990s are pertinent examples. The present international crisis has its origin to a greater degree in weaknesses in the financial system itself and the system's framework conditions. Common to the Nordic bank crises and the ongoing crisis, however, is the fact that both came about after a period of vigorous and persistent credit growth combined with sharply rising prices in real estate and securities markets.

Since 1994 Finanstilsynet has analysed and assessed potential stability problems in the Norwegian financial industry in the light of developments in the Norwegian and the international economy. This is a necessary supplement to the ongoing supervision of individual institutions. Significant aspects of the assessments of individual institutions' profitability and financial strength need to be carried out against the background of the general state of the financial system. As from 2003 these assessments of the state of the financial market have been made public. The work forms part of a tripartite collaboration between the Ministry of Finance, Norges Bank and Finanstilsynet designed to ensure financial stability.

#### **Highlights**

- The financial crisis in 2008 and 2009 has thrown the world economy into the worst recession since the 1930s, taking unemployment to very high levels in many countries. Weaknesses of regulation and supervision, global imbalances and deficient risk management at financial institutions led to a credit-driven house price bubble in a number of countries. Massive fiscal and monetary policy measures have rekindled international growth and improved financial markets, but also spawned very substantial public deficits and rising indebtedness in many industrialised countries. Private consumption appears as yet unable to take over as the driving force when government stimulus measures are gradually phased out, and the prospects for the world economy are encumbered with considerable uncertainty.
- The Norwegian economy has been hit significantly less hard by the crisis in the international
  economy than most countries. The reasons are manifold: fiscal room for manoeuvre with
  considerable stimulatory action, effective monetary policy, a less vulnerable industrial structure,

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holistic and effective regulation and supervision, along with satisfactory risk management and low exposure to structured credit products at Norwegian financial institutions. The rapid reduction in the central bank's key policy rate from autumn 2008 to summer 2009 curbed the downturn in the Norwegian economy, reversed the fall in Norwegian house prices and helped to restore households' and firms' confidence in the economy.

- Norwegian banks have weathered the international financial crisis well. However, for a period
  after Lehman's demise Norwegian banks, like banks elsewhere, had problems refinancing their
  funding. Expanded liquidity supply and the establishment of a swap arrangement assured banks
  requisite funding and pre-empted a severe credit tightening.
- Norwegian banks performed better in 2009 than was expected at the start of the year, and losses were lower than feared. No Norwegian banks failed as a result of the international financial crisis. Results in 2009 were good despite pressures on underlying earnings and increased losses, primarily thanks to high revenues from securities and currency-related business. In dialogue with Finanstilsynet, and without being instructed to do so, Norwegian banks bolstered their financial positions in 2008 and 2009. A significant portion of the net profit posted in 2009 was retained. By virtue of stock market issues and capital supplied by the Norwegian State Finance Fund, banks' tier 1 capital adequacy increased markedly, and at the start of 2010 was at a satisfactory level throughout.
- Banks' underlying earnings are under pressure due to strong competition and squeezed margins, increased loan losses, weaker growth and higher funding costs than before the crisis. Lower revenues from securities and currency trading are also a significant uncertainty factor for the banks. Substantial uncertainty attends Norway's housing market. Low interest rates have kindled renewed, vigorous growth in house prices. Slower growth in the Norwegian economy as a result of the international setback, or normalisation of the interest rate level in Norway, could trigger a slump in the housing market and reduced domestic demand. Banks need sufficient capital buffers to tackle these challenges. This requires continued profitable operation, which can be achieved through further cost efficiencies and risk pricing.
- Since life insurers' liabilities are long-term, the crisis had limited impact on their liquidity. However, the stock market plunge and the negative trend for credit bonds caused a substantial reduction in buffer capital. Since life insurers' equity component at the start of the year was low, they benefited little from the stock market recovery in 2009. The low interest rate level poses a considerable challenge, and stress tests show that life insurers' buffer capital levels are below that required under the Solvency II proposals. Through dialogue with Finanstilsynet, life insurers strengthened their buffer capital by the start of 2010, in part by increasing supplementary provisions.
- The financial crisis brought to light serious weaknesses in the regulation and supervision of institutions and markets in many countries. Wide-ranging reforms are under way to remedy the shortcomings including new, higher requirements on liquidity and solvency, changes in accounting rules, standardised depositor guarantees, measures vis-à-vis unregulated business, restrictions on remuneration, procedures for crisis management and changes in the international architecture for coordination, monitoring and decision-making in respect of systemic risk. Finanstilsynet supports this reform effort.
- Finanstilsynet has submitted to the Ministry of Finance draft regulations on remuneration of risk-taking staff in financial institutions. In March changes will be proposed in the rules

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governing hybrid capital, management of liquidity risk and large exposures. The proposals build on changes in the EU capital requirements directives. Finanstilsynet recommends considering the introduction of quantitative liquidity requirements earlier than at the end of 2012, which is the time set in the Basel Committee's recommendations. However, the financial position of Norwegian banks suggests there is now no need to speed up the introduction of stricter capital requirements due at the international level.

• A strong upswing in house prices, high indebtedness, high loan-to-value ratios on home mortgage loans, floating interest rates and little in the way of principal repayments render a large number of Norwegian households vulnerable to higher interest rates and economic setbacks. Finanstilsynet has drawn up a set of guidelines for prudent lending practice with a view to curbing the volume of large loans, both in relation to income and property value. The guidelines were circulated to the banks 3 March 2010. More robust home financing and a more stable housing market are important both for financial stability and the individual household.

#### **Summary**

#### The international financial crisis

In 2009 the international financial crisis led to the world economy being hit by the severest downturn since the 1930s. Several factors explain why a global financial crisis arose and why the ensuing real economic impacts were so serious. Substantial deficiencies have been brought to light in the regulation and supervision of the financial industry in many countries, along with shortcomings in many financial institutions' risk management, business models and conduct of business. Additionally, large macroeconomic imbalances had arisen in a period of rapid global growth. Several Asian countries, in particular China, had a huge trading surplus and invested heavily in shares, bonds and real estate in western countries. Whereas China and other emerging countries were running substantial external surpluses, the trade balance in particular in the US but also in the UK and some euro countries was markedly negative. The flow of capital from savings-surplus countries to savings-deficit countries led to rapid liquidity growth in the markets and low risk premiums in the US and other western countries. This took place in a period of very low interest rates. Concurrently financial institutions' credit assessments were impaired, in particular in the US, fuelling a credit-driven bubble in the housing market. The years prior to the financial crisis also saw vigorous growth in securitisation of loans, often backed by residential mortgage loans. The growth was particularly strong in the unregulated segments of the market. Securitisation undermined market transparency. Due to its complexity, responsibilities were blurred and valuation of instruments was difficult, making the volume and distribution of losses highly uncertain. As a result, when the bubble burst in the US the losses spread across the global financial markets on an unexpectedly large scale. In the summer and autumn of 2008 the turbulence hit the stock markets. Share values more than halved in several countries in the period to February 2009, exacerbating the scale of the crisis.

The real economic effects of the crisis proved very large, especially as housing market bubbles had developed in several countries. Higher interest rates in the US and some other countries had brought growing debt-servicing problems and diminished households' consumption and residential investments. When the bubbles burst and house prices plunged, households' wealth was sharply reduced. Lower household demand sparked a negative spiral through lower business sector activity levels, falling

investment and rising unemployment. In the US and the EU alike the jobless rate rose to 10 per cent by the end of 2009. Substantial government stimuli in most industrial countries have halted the downturn, and growth is now positive. The result, however, is government budget deficits which cannot be sustained over time. This is particularly the case in the US, Japan and some EU countries where public debt has also climbed to dangerously high levels. If central government finances compel governments to withdraw their stimulus packages before the private sector is in a position to take over as the driving force, the industrialised countries could enter a new period of downturn. There is also a risk that the uncertainty associated with public debt may lead to higher risk premiums for private sector actors. The growth in the world economy is led by the emerging economies with China at the fore. The Chinese authorities, too, stimulated the economy heavily in the wake of the financial crisis, but have now initiated tightening action. Credit growth has quickened sharply, and there is a danger of a credit-driven bubble building up in the real estate market. A setback in the Chinese economy would dampen international growth and probably bring a decline in the price of oil and other commodities.

#### Effects of the financial crisis on the Norwegian economy

The Norwegian economy has been hit significantly less hard by the financial crisis than other countries. This is due to factors in the economy and the business sector and in the financial system, but also to regulation and supervision. Industrial production in particular has weakened internationally. Norway's manufacturing sector is small, raw materials based and exports largely to emerging countries with relatively higher growth rates. Deliveries to the oil sector have also made a positive contribution. The authorities have much economic freedom of action and the rapid, hefty interest rate reduction combined with substantial fiscal policy stimuli has kept unemployment low and stimulated household consumption. Moreover, all sections of the Norwegian financial market are subject to regulation, capital requirements and supervision. The negative trend in the international stock markets also spread to Norway. From autumn 2007 to February 2009 the value of companies on the Oslo Stock Exchange more than halved, bringing a large reduction in non-financial firms' and households' financial wealth and impaired results for life insurers and pension funds. The turbulence in the money and bond markets brought a sharp increase in risk premiums and substantial liquidity problems for the banks, which were resolved by resolute intervention on the part of the authorities.

How the economic climate and markets develop ahead will be of key importance for the banks, but also for other financial institutions. The Norwegian business sector will be affected by lower growth among main trading partners and in domestic demand. Bankruptcies are still on the rise, albeit at a slightly lower pace. The trend varies however from sector to sector. Construction and manufacturing are still in difficult straits. Prospects are in particular poorer for export-oriented business which is hit by a stronger krone and higher cost growth than among trading partners. The sharp fall in international trade combined with a large supply of new ships has brought negative prospects for shipping, an observation supported by Finanstilsynet's annual survey of banks' exposure to selected industries. Thus far the losses on shipping exposures have been low, but if the upturn in the international economy proves weak in 2010 and 2011, higher losses can be expected. Another cyclically sensitive industry on which a close supervisory eye is kept is commercial property. From autumn 2008 into 2009 prices of office premises fell sharply, turnover was sluggish and rental prices subsided, especially for upmarket premises. Rising activity levels and falling interest rates stabilised prices during the autumn. However, what the future will bring in terms of building starts and a possible increase in interest rates is uncertain. For banks exposed to the Baltics, the

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deep setback in these countries has prompted substantial write-downs and higher credit risk on this part of the loan portfolio.

In recent years household sector finances have been marked by growing indebtedness, little repayment of debt and high loan-to-value ratios on home mortgage loans. These factors have heightened vulnerability in the event of an economic setback, as warned against by Finanstilsynet in recent years. The interest rate increases during 2008 and concerns over the international financial crisis triggered a downward trend in household behaviour in autumn 2008. The substantial interest rate cuts by Norges Bank have dampened vulnerability in the short term, but may increase vulnerability in the somewhat longer term. House prices rose rapidly throughout 2009, consumers appear to be taking a brighter view of future and credit growth may be about to quicken anew. Finanstilsynet's home loan survey conducted in autumn 2009 shows a slight decline in loans granted with a high loan-to-value ratio since the survey one year previously. The signs of a more sober lending practice observed in the survey from spring 2009 were only partially confirmed, and there is a danger of a return to the elevated proportion of high loan-to-value home loans seen in 2008. The trend in house prices, lending practice and household debt is of key significance for financial stability in Norway. A more sober lending practice for home loans can help to reduce the risk of stability problems.

#### Norwegian financial institutions

Thus far Norwegian banks have emerged well from the financial crisis compared with banks in other European countries. This is thanks to government measures to curb the effects of the financial crisis on the Norwegian economy and financial markets, to the fact that regulation and supervision did not have the same shortcomings as in many of the countries that were hardest hit, and that Norwegian banks were minimally exposed to high-risk credit products at the start of the crisis. Norwegian banks also had relatively high deposit-to-loan ratios and long-term funding compared with other countries' banks, and their capital situation was good. For the banks the situation has improved in the past year. The financial markets are functioning better, and lower funding costs and easier access to funding have reduced liquidity risk somewhat.

After weak results in 2008, 2009 was again a good year for Norwegian banks. No Norwegian bank had to close its doors. The banks are stronger at the start of 2010 than one year ago. Sound profits have largely been devoted to increasing equity capital. Earnings were good, mainly thanks to high revenues from the banks' securities and currency trading business. Banks' interest margin rose slightly from autumn 2008 on the back of higher risk premiums on business loans. However, given the intense competition for depositors and residential borrowers, there is a risk that interest margins may remain. Nor can banks' funding costs be expected to fall to the same level as prior to the financial crisis. After a long period devoid of loan losses, loss figures rose towards the end of 2008 and early in 2009, thereafter stabilising before subsiding somewhat towards year-end. Given the time lag between real economic decline and higher defaults, and between default and loss recognition, the increased risk in banks' business portfolios may not have fully translated into banks' impairment write-downs. Much uncertainty surrounds the trend in the international economy ahead. This, combined with pressure on banks' underlying earnings, has made it imperative for banks to increase their equity capital by retaining a significant portion of the profit recorded in 2009. The confidence enjoyed by the banks in the community will be well served if they continue to keep bonuses at a moderate level both for 2009 and coming years. It would be risky to expect revenues from securities and currency trading in the years ahead to make up for poor underlying earnings due to squeezed margins. While losses have so far been lower than might have been feared, there is no knowing to what degree business sector developments will give rise to new losses in the period ahead.

The international financial crisis significantly impaired Norwegian banks' access to funding, creating liquidity problems. Finanstilsynet intensified its monitoring of the liquidity situation in the financial markets and financial institutions in 2008 and 2009. The crisis showed a need to further bolster banks' financial strength from both a market and a regulatory point of view. Finanstilsynet scrutinised and gave feedback on the risk and capital situation at all banks in 2008, and all large and most small banks in 2009. Several were asked to raise their capital targets and capital ratios. Finanstilsynet warned that it would consider ordering them to do so if they failed to comply. In response, and to weather a period of lower activity in the real economy and higher market requirements on the level and quality of tier 1 capital, the banks took steps to improve their financial position. In 2009 they strengthened their tier 1 capital in 2009 through earnings growth, capital infusions from the Norwegian State Finance Fund and by bringing in capital from the market.

Life insurers' results in 2008 were heavily impaired by the highly negative trend in the stock market and the market for corporate bonds. A positive trend in the securities market in 2009 improved life insurers' results and increased their buffer capital. Life insurers had entered 2009 with low buffer capital, resulting in reduced flexibility in asset management and a low equity component in their balance sheets. Hence they benefited little from the buoyant return available in the stock market. Although they increased their equity component somewhat in 2009, they hold a larger proportion of fixed interest securities than previously. Low interest rates will pose a challenge to the companies ahead. Finanstilsynet has urged life insurers to turn the good results in 2009 to account by strengthening their financial positions, and they have acted accordingly. Even so, stress tests show that Norwegian life insurers' buffer capital levels are low compared with the requirements heralded by Solvency II.

#### Reforms and regulation

The international banking system would most likely have collapsed in the absence of government action to assure institutions' liquidity and financial position and the introduction of wide-ranging fiscal and monetary policy support. The existing body of rules proved to be substantially flawed. Not least, the capital requirements to which the investment banks were subject were very low, and there was little focus on prudential supervision. A comprehensive reform effort has been initiated to remedy the deficiencies brought to light. This involves new requirements on liquidity, financial strength, depositor guarantees, accounting rules, capital in securitised portfolios and uncleared derivative positions, measures vis-à-vis unregulated business and restrictions on bonuses that incentivise risk taking. Some requirements have already materialised in EU directives, others are in draft form, while yet others are still at the discussion stage. Finanstilsynet considers such reforms to be highly necessary.

Finanstilsynet supports international moves to introduce concrete liquidity requirements and strengthen capital requirements. In Finanstilsynet's assessment, the capital situation in Norway does not warrant introducing stricter capital requirements at an earlier stage than called for by the international process. The final timetable for implementing new capital adequacy rules should be considered more closely in light of the economic situation and after the Nordic countries have coordinated their approach. Similarly, little purpose would be served by introducing measures targeting systemically important banks in Norway before matters are clarified at the international level.

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Some changes in international liquidity rules have already been adopted and must be followed up in a short space of time, i.e. rules imposing stricter quality requirements on institutions' liquidity management. Finanstilsynet will submit a proposal for new rules in this regard to the Ministry of Finance in March 2010. The changes will not be particularly burdensome. Currently no internationally harmonised quantitative liquidity requirements apply, but the design of such requirements is under discussion in Basel and the EU and quantitative impact studies are under way. Once the results of these studies are clear, and the effect for Norwegian institutions has been assessed, Finanstilsynet recommends that consideration be given to introducing quantitative requirements even if this takes place earlier than envisaged in the Basel Committee's recommendations or under any new directive. Since a consultation process is required before such requirements can be put in place, they can apply from 2011 at the earliest. Even so, this could be 1½ to two years before the time-limit for implementing the new Basel liquidity framework expires. Finanstilsynet's viewpoints in these areas were communicated to the Ministry of Finance by letter of 1 February 2010.

Finanstilsynet has now published a circular giving guidelines for prudent lending practice for home mortgage loans. The circular sets requirements for thorough application processing based on quality-assured information on the borrower's financial position. It emphasises that the banks should have guidelines for calculating customers' debt-servicing ability and that the loan-to-value ratio should not normally exceed 90 per cent of property value. The guidelines will underlie supervisory follow up of the banks' practice in this area.

Although growth has picked up somewhat of late, much uncertainty attends the trend in the international economy ahead. The same is true of Norway's housing and stock markets. An adverse development may impair confidence in the economy, making it highly important to secure sufficient capital buffers in the financial system and to improve the system's ability to handle liquidity risk. While this may cause market practitioners extra expense, it seems a reasonable insurance against the costs that follow from financial instability.

### 1. The financial crisis

#### The financial crisis internationally

#### Causes

The world's financial and commodity markets have become increasingly intertwined. Integration has encouraged greater economic efficiency, but has at the same time given rise to a financial system more vulnerable due to its increased complexity, reduced transparency and the speed with which financial turbulence in a market or country spreads to other markets and countries.

A number of factors in conjunction explain why a global financial crisis arose in the period 2007 – 2009. Inadequate regulatory and supervisory regimes in many countries failed to deal with sizeable economic imbalances that had developed. In the years prior to the financial crisis the world economy grew rapidly, especially in the period from 2003 to 2007. Emerging economies such as China and India accounted for the first time for a larger share of world GDP growth than the industrialised countries. Burgeoning GDP was paralleled by rising house prices, share prices and prices of raw materials such as oil, metals and grain products. China ran substantial surpluses on its balance of trade and invested heavily, above all in bonds but also in other assets in financial markets in western countries. While China and other emerging economies had major trade surpluses, the trade balance, especially in the US but also in the UK and some euro countries, was markedly negative.

Both the OECD and the IMF warned that the large trade deficits in the western economies, in particular the US, was not sustainable. Most economies are expanding, and the growth can be used by the public and private sector to repay principal and interest on debt. This is sustainable so long as the build-up of debt is consistent with the economy's ability to generate future growth and revenues. The imbalances in the world economy that were allowed to develop without the corrections needed either from markets or governments are a contributory cause of the financial crisis.

The underlying cause of the crisis in the US and some European countries is a combination of very high credit growth and the development of a housing bubble. Growth in lending to the private sector had been significantly higher than the prospect for growth in disposable income. A number of households with insufficient debt-servicing capacity were granted substantial credit, largely for house purchase. The demand for housing spurred a rise in house prices, thus providing the basis for heavier borrowing. Credit growth and house prices became divorced from the underlying economic realities (households' income base), and a credit and house price bubble developed.

The credit and house price bubble can be explained by capital markets' faulty pricing of home mortgages in particular and of loans in general. Risk premiums, especially credit and liquidity risk premiums, were set too low in relation to the real risk. Low risk premiums result in high prices on risky assets. This may also have been the case in the stock market. Faulty pricing in the capital markets is related to the global

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imbalances. The flow of capital from savings-surplus countries to savings-deficit countries led too much liquidity and too low risk premiums in the US and many western countries.

The house price and credit bubble built up in a period of generally low interest rates. After the dotcom bubble in the stock market burst in 2000, many central banks pursued a low-interest-rate policy to prevent decline in the real economy. Concurrently cheap imports from China and other emerging economies dampened inflation in the industrialised countries. Low inflation prompted central banks with inflation targets to maintain low key policy rates. The US Federal Reserve also gave much weight to inflation targeting. Like its counterparts in many other western countries, including Norway, it has faced a conflict between ensuring a low general rise in prices and preventing strong growth in the prices of assets such as property and shares.

One of the banks' core tasks is to ensure that loans are in proportion to borrowers' debt-servicing ability. Households and firms have an independent responsibility not to incur larger loans than they can service. These 'control mechanisms' have not been effective. Irrational expectations (or systematic flaws in actors' expectation formation) and psychological mechanisms can explain the build-up of credit, housing and share bubbles. Such explanatory factors are in stark contrast to economic thinking where markets are cleared, prices at all times reflect all relevant available information and systematic faulty pricing does not arise over time.

There is now ample documentation showing that financial institutions' credit assessment procedures and credit terms and conditions, in particular in the US, were impaired in the years preceding the financial crisis. In Norway financial institutions are clearly delimited, defined and regulated in the legislation whereas in the US and a number of European countries the term 'financial institution' covers various types of undertakings, including undertakings not regulated or subject to supervision to the same extent as traditional banks. Collateral requirements were lowered, full financing of house purchases became common, income requirements were reduced and control procedures were in many cases not complied with (such as checks on income and wealth position and employment status). Loans were granted with no principal repayments required. In several cases financial institutions added all or parts of the interest to the loan (negative amortisation). In other cases the mortgage rate was low at the start, only to increase markedly after a few years. Several cases of misleading advice have been brought to light. Many loan structures built on the assumption that the loan would be refinanced at the time the interest on the original loan was contractually scheduled to rise. With rising house prices the original loan could be repaid and a new one contracted at a still low mortgage rate. Much of this business was not subject to regulation and supervision. In the aftermath the question has been asked why supervisory authorities in central banks and elsewhere failed to address untoward lending practice.

For many years it has been common practice to securitise not only home mortgage loans but also loans for the purchase of other types of property, consumer loans (credit card loans) and loans backed by other types of assets. In the US a great deal of home loan securitisation was handled through Fannie Mae and Freddie Mac, which operated with implicit federal guarantees. Financial institutions' incentives to make thorough credit assessments and monitor creditworthiness may be weakened where the loans are in any case going to be sold on to investors in the capital market.

The years preceding the financial crisis saw very strong growth in the volume of securitised loans. The quality of the underlying home mortgages gradually weakened, without this prompting the credit rating

agencies to downgrade the bonds. During the banking crisis further problems associated with securitisation came to light. Much of the credit risk remained in the financial sector, both because financial institutions themselves opted to retain such bonds and because they implicitly or explicitly guaranteed the bonds. By investing in the bonds, financial institutions could record a current surplus (the spread between the average lending rate and the coupon rate on the bonds), which was also the basis for bonus payments to those involved in securitisation at financial institutions. In the US and other countries the capital requirement for securitised home mortgage loans was far lower than for home mortgage loans directly. Financial institutions consequently had an incentive to convert home loans to bonds backed by residential property. European financial institutions invested substantial sums in US home loan bonds.

Financial institutions and credit rating agencies worked closely on securitising home mortgage loans. Incomes depended on the volume that could be securitised and how bonds backed by the mortgages could be packaged together and transformed into new securities. An aim of the repackaging was to achieve the highest possible credit rating on the largest possible portion of the bonds. The credit rating agencies' lack of independence, and their self-interest in generating the largest possible volume of home loan bonds with a good credit rating, proved to be a fundamental weakness of the securitisation model.

Subsequently much criticism has been levelled at the incentive systems' design in the financial sector. Many bonus systems have a payment profile similar to that of options. In years where profit targets are attained, bonuses are paid whereas, in years where the targets are not met, incomes are not subject to deductions. Hence it may pay participants in an incentive programme to increase the institution's risk exposure. It has not been customary to risk adjust achieved results. Hence bonus recipients also receive compensation in cases where the profit target is met because the placements are exposed to systematic risk factors with positive expected return in the market. Bonus systems often have a short-term horizon in the sense that bonus is paid on an annual basis even where the investment horizon and the type of risk taken indicate that a multi-year investment horizon is advisable. Incentive systems in the financial industry have shortened the investment horizon, undermined sobriety of institutions' advice to customers and heightened risk.

In the aftermath of the financial crisis attention has been drawn to shortcomings in financial institutions' overall corporate governance in general, and more specifically in their measurement and analysis of market, credit, liquidity and operational risk. The risk measurement and analysis systems have failed to foresee the effect of extreme events such as crises in the financial system. Further, institutions' governing bodies and control functions have lacked competence and capacity and there has been insufficient separation between control entities and trading entities.

The "shadow banking" sector comprises inter alia various types of special purpose vehicles, investment banks, money market funds, hedge funds and venture funds. Common to these is that that they were either not subject, or only limitedly subject, to prudential regulation. Growth in this part of the financial sector has been explosive. The financial sector's overall leverage consequently soared. A significant portion of the funding was short-term and market-based, and the liquidity risk was accordingly high. Supervisory regimes have been less comprehensive than in the case of traditional banking. The capital requirements to which investment banks were subject were very low, and there was little focus on prudential supervision. The sector had strong direct and indirect links to traditional financial institutions and the securities and property markets. In addition to facilitating and investing in securitised bonds,

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institutions in this sector set up credit default swaps and asset swaps which effectively increased the overall credit and liquidity risk.

Widescale growth in lending, securitisation and financial derivatives combined with more complex instruments and institutional set ups, along with the emergence of large international financial conglomerates, have reduced the transparency of the financial system. This made it difficult to identify risk in the system and the channels through which financial instability spread. Various supervisory bodies are responsible for maintaining oversight of various parts of the financial system within some important countries. This put heavy demands on coordination, which were evidently not met in a satisfactory manner in the years up to the eruption of the financial crisis. Several countries focused on institutional supervision and to a lesser degree on monitoring overall risk in the system. Important market segments and various types of associated companies were not subject to regulation and supervision. The globalisation of financial markets has increased the need for coordination of supervisory authorities at the international level. International forums are discussing how best to assure the requisite coordination of rules and supervision across national borders.

The impact of the financial crisis on financial markets varies widely from country to country. Countries featuring strong banks and sound regulatory and supervisory regimes such as Canada, Australia and some Nordic countries are less affected than many other countries.

The accounting rules for investments in securities and derivatives are designed in such a way that variation in market and model prices is largely reflected in the accounts. When prices fall, results weaken, whereas they improve when prices rise. Good results provide the basis for increased activity, while poor results lead to reduced activity. The rules governing loss recognition are also, in many countries, designed to increase financial institutions' profits and to promote lending in good times, whereas they weaken profits and encourage curbs on institutions' lending in a downturn.

The capital adequacy rules also have procyclical effects. Increased own funds resulting from good performances in an expansion phase provide regulatory room for increased lending. Reduced capital adequacy in harder times may prompt a regulatory injunction to improve capital ratios. This is achievable through reduced lending, which would exacerbate the downturn, or by bringing in new equity capital.

The Basel II capital adequacy rules are more risk sensitive and reinforce the procyclical elements of Basel I. Models that estimate likelihoods of bankruptcy in particular and changes in credit quality in general are used to calculate expected and unexpected loss in credit portfolios. Many of these models are such that estimated bankruptcy probabilities are reduced in good times, thereby reducing the capital requirement and making room for further lending growth. In downturns, bankruptcy probability estimates increase, potentially compelling institutions to curb lending growth. Use of pillar 2 to raise capital buffers above the minimum requirement lessens the danger of increased procyclicality. Supervisory authorities, central banks and international forums are studying the links between accounting rules, capital adequacy rules, financial stability and financial crises, and various initiatives are afoot to change the rules.

#### **Effects**

Possibly the greatest risk associated with economic crises is that the country's population will lose confidence in society's institutions, organisation and governance. Increased unemployment and income

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may lead to social unrest. The larger the setback in the economy, the larger the risk that the population of a country will lose confidence in the established mode of governance.

Crises bring increased unemployment and reduced economic growth. The costs of crises are substantial in the short and long term, both for the government and for firms and households. In the years prior to the crisis unemployment in the OECD area averaged about 6 per cent, which was regarded as the natural rate of unemployment in the area. During the financial crisis OECD unemployment rose to 8.5 per cent and is expected to rise to 9 per cent in 2010. The OECD puts the decline in the OECD's GDP at about 3.5 per cent in 2009 after a rise of 0.5 per cent in 2008. The output gap resulting from the crisis is estimated at 4.5 per cent. The OECD anticipates substantially lower-than-normal production in 2010 and 2011 too. The World Bank expects the number of people living in extreme poverty to increase by several tens of millions as a result of the financial crisis. It is difficult to estimate costs related to crises in the long term. The greatest fear is that the increase in unemployment in the short term will become entrenched over time and that investment levels in the business sector will be lower in the long term as a result of the crisis. The IMF projects considerable long-term costs owing to permanently lower production potential.

#### Government action

Government action to stabilise a financial system in crisis comprises a number of components. Such action can be split into two phases: the liquidity phase and the solvency phase. In fact the phases overlap time-wise. In the first phase the central bank, in its capacity as lender of last resort, supplies the bank system with liquidity, subject to provision of satisfactory collateral. The intention is to prevent liquidity problems in the banking sector being transformed into a full-blown financial crisis. All liquidity crises share three characteristics that drive the government's response:

- 1) Lenders' horizon shortens, making it difficult to borrow long-term.
- 2) Lenders accept fewer types of securities as loan collateral.
- 3) Lenders approve fewer institutions as counterparties.

Central banks' liquidity measures are implemented along these three dimensions. The length of central bank lending increases, collateral requirements are reduced and more types of institutions are given access to loans.

If the liquidity crisis transmutes into a phase in which lenders only lend money overnight at extraordinarily high interest, stronger government action is taken. The rescue operation then comprises as a rule two stages:

- 1) Stabilisation in the short term. The authorities direct their attention at the financial sector to prevent system collapse. Standard tools are loan guarantees, recapitalisation and amalgamations.
- 2) Long-term solution. The authorities' focus switches to the macroeconomy. A plan is drawn up to curtail the setback in the real economy to enable the system to restore itself.

All central banks in countries affected by the crisis in the financial system have lowered their key policy rates and supplied considerable volumes of liquidity. Requirements on collateral for central bank loans have been lowered, loan maturities lengthened and types of institutions in addition to traditional banks given access to central bank financing. Short-term interest rates are record low as a result of the decline in the key policy rates and the sharp increase in money market liquidity. Government bond rates have also declined, as a result of central banks' market operations and reduced/low inflation expectations.

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Credit risk premiums are considerably lower, as a result of the liquidity measures, the steps taken to improve financial sector solidity and the general macroeconomic stimulus packages.

The period prior to the financial crisis saw a considerable increase in the total assets of central financial conglomerates. During the financial crisis in autumn 2008 merger and acquisition activity gathered momentum bringing increasing consolidation and (partial) nationalisation above all in the US, but also in the European financial sector. This was a direct consequence of the crisis. Concentration of financial activity and rapid growth in the total assets of important financial undertakings heightens the vulnerability of the financial sector. In the EU, and in particular in the US, measures are afoot to limit the size of the largest financial institutions.

Supply of government capital and takeover of problem assets are among the measures taken by governments to stabilise the financial markets. In many countries the authorities have also guaranteed banks' funding.

The US authorities have established a series of wide-ranging support measures. These have enabled several US banks to raise capital in the private markets, and to repay much of the public support received. Because the worst of the crisis is over, some crisis measures have been terminated or scaled back, and a comprehensive effort to remedy regulatory and supervisory shortcomings has been initiated. The UK government have also set in train substantial measures to reduce the damaging effects of the financial crisis, and a comprehensive effort to reform regulation and supervision of financial institutions is under way. Wide-ranging action has been taken to dampen the negative effects of the financial crisis in Denmark, Sweden, Germany and other European countries. Supply of government capital, guarantee arrangements and general macroeconomic stimuli through lowered key policy rates and increased government purchasing of goods and services have been and remain key policy instruments.

#### Why was the crisis so deep?

The financial crisis of 2007-2009 has had far deeper repercussions for the real economy than for example the stock market crash in 1987 and the dot-com bubble that burst in 2000. In contrast to the dot-com bubble, the fall in household sector wealth this time round was related to high debt-financed housing wealth. Moreover, home ownership is far more common than share ownership, and shares are to a larger extent owned by high-income groups than is the case for homes. In the US a large proportion of home loans carried floating interest and were structured in such a way that the loan was either refinanced after 2-3 years or the borrower defaulted. Such loan agreements were accordingly utterly dependent on house price developments and were thus systemic by nature. A house price shock would for these reasons alone have greater consequences for the real economy than the stock market slump in 2000. Alongside the growth in housing credit, the volume of consumer borrowing rose in tandem with rising corporate sector indebtedness. The degree of leverage in the economy rose substantially until the crisis was an established fact.

The period 2004 to 2007 in the US saw dramatic growth in loans of relatively poor credit quality compared with previous financial crises in modern times. This time round, the requirements on firms' and households' earnings, equity capital and quality and level of collateral were lower. The volume of loans relying on poor documentation rose at the same time as the sum borrowed rose in proportion to collateral value. The vigorous growth in low-quality loans was related to the increase in securitisation.

In securitisation processes the original lender's aim is to rid himself of the credit risk posed by the home mortgage loans. In the run-up to the crisis a significant portion of the bonds ended up in the balance sheets of financial institutions, which concurrently gave the bondholders wide-ranging liquidity and credit guarantees. In many instances where explicit guarantees were not given, the financial institutions nevertheless opted for purely reputational reasons to compensate the investors. The financial sector was therefore left with a significant portion of the credit and liquidity risk, and systemic risk rose substantially. Moreover, financial institutions' leverage rose, resulting in substantially higher exposure to the housing market and thus also in a markedly higher loss potential. This was possible since the institutions variously circumvented the capital adequacy rules in force and engaged in political lobbying to have the minimum regulatory capital requirements reduced. These are new elements compared with earlier crises in modern times.

Wishing to achieve a higher return on equity, a large number of European financial institutions invested heavily in structured credit products from the US, thereby making the European bank sector highly vulnerable to the crisis that was unfolding in the US and rapidly spread to Europe. Of the major European countries, the UK and Spain in particular were hard hit. Leverage and house prices in these countries were already very high. Of the smaller countries, Iceland and the Baltics in particular were heavily exposed. Leverage and house prices in Iceland had no basis in economic realities and, moreover, the banking sector was undergoing explosive growth. In the Baltics consumption was extremely high and wages were rising rapidly. The Baltics had become dependent on exports to Western countries. Since these markets contracted during the crisis, large trade deficits developed. Substantial tightening action was necessary.

#### The effects of the financial crisis in Norway

The fact that Norway has been hit less hard by the international financial crisis than many other countries is due to factors in the economy and business sector, in the financial system, and to regulation and supervision. A general collapse of confidence made it very difficult for Norwegian financial institutions to refinance borrowings in the money and capital markets for a period. However, the solidity of Norwegian institutions was never under threat, and no Norwegian banks failed.

#### Macroeconomic backdrop

The Norwegian economy was generally speaking on an excellent trend from about the mid-1990s to the outbreak of the financial crisis. There were however sub-periods when the economic trend was weaker, as in the years 1998-1999 and 2002-2003. The period 2003 to 2007 saw a particularly strong recovery in the Norwegian economy. Real investments in both the petroleum sector and the mainland corporate sector rose markedly. Wage growth was limited for some time, and interest rates were relatively low. In time, households' growing purchasing power fuelled a strong increase in consumption at the same time as saving declined. The Norwegian economy reached its cyclical peak at the end of 2007 and start of 2008. Higher interest rates contributed to lower housing investments and weaker growth in private consumption. Concurrently mainland firms invested less and international growth subsided. When the financial crisis erupted in earnest in autumn 2008, activity levels in the Norwegian economy were already reduced.

At the start of the financial crisis the financial vulnerability of Norwegian households was higher than normal. Household debt as a share of disposable income had reached an unprecedented level. The debt

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built-up was largely driven by the growth in house prices and low interest rates. In parallel with rising indebtedness the saving rate fell markedly as a result of reduced net financial investment. This period also saw some liberalisation of banks' credit practices which resulted in an increase in fully loan-financed house purchases. Demand for equity release loans picked up. Opinions are divided on whether the increase in house prices in this period can be explained by fundamental factors such as high income growth and low unemployment. Strong growth in house prices can lead to unrealistic expectations of a continued strong upturn and reinforce investment-motivated housing demand at the same time as appreciation of the risk of sizeable price falls is undermined. In the corporate sector profitability has been buoyant for several years, resulting in high capital levels at many firms. Debt-servicing ability also developed positively, only weakening in 2007 as a result of rapid growth in corporate indebtedness.

From the mid-1990s up to the financial crisis banks' loan losses were generally low and profits largely good, particularly in periods of strong economic expansion. In fact the losses seen in 2008 and 2009 were lower than in the years 2002 and 2003, and the effects of the financial crisis on Norwegian banks' lending have in that respect been moderate. In the 2000s up to the financial crisis, growth in bank lending was high and losses low at the same time as interest margins were reduced. The growth in bank lending to particularly cyclically exposed industries such as real estate, shipping and shipbuilding was substantial. The switch to new capital adequacy rules led to lower capital requirements for Norwegian banks and foreign banks operating in Norway alike. The freeing up of capital made room for quicker lending growth. Total equity capital in % of total assets was reduced in the 2000s. At the onset of the financial crisis it was higher than immediately prior to the banking crisis in the 1990s, but low if a longer historical perspective is applied. The deposit component fell in the 2000s in general, and for the major banks in particular. The fall in the deposit component has heightened banks' dependence on market funding.

#### Macroeconomic differences relevant to the crisis path

The financial crisis and the ensuing downturn in the international real economy have hit Norway to a lesser extent than other countries. Employment has fallen in Norway too, but by an appreciably smaller margin than in for example Sweden, Denmark, the UK and the US. Much of the reduction in private sector workforces has been made good by growth in the number of public sector employees. The decline in GDP is limited compared with other countries.

There are several reasons why the crisis has hit the Norwegian economy less hard than the economies of other countries. An important factor is the difference in industry structure. Manufacturing has weakened more than any other sector internationally, and Norway's relatively small non-oil industry sector is therefore a reason why the international downturn has affected Norway to only a limited degree. Moreover, in addition to being smaller, Norwegian manufacturing has a different composition from many other countries. Hence the dramatic setback suffered by suppliers to the car and consumer electronics industries was not matched in Norway to the same extent. Further, oil investments have made a positive contribution to the growth of the Norwegian economy.

Norway has a larger public sector than other countries. The vigorous growth in public spending and demand for goods and services has made a substantial contribution to growth in Norway. This strong growth in public consumption and investment was made possible by, for one thing, the excellent shape of Norway's government finances prior to the onset of the financial crisis and the fact that oil revenue spending was below the 4 per cent limit set by the 'fiscal rule'. Fiscal policy stimuli in Norway have

been substantial compared with previous stimulus packages, also in terms of their size relative to the packages introduced by governments elsewhere.

The steep interest rate decline in Norway probably has a more stimulatory effect than in other countries. Most home mortgage interest rates in Norway are floating, and households carry a high level of debt since Norwegians are largely home owners. Hence a reduction in the interest rate level substantially reduces households' interest burden. Between October 2008 and June 2009 the key policy rate was reduced by 4.5 percentage points. The strong monetary policy measures in Norway combined with the effectiveness of the interest rate channel led to stabilisation and ensuing growth in house prices and private consump-tion. After weakening markedly in autumn 2008, the krone appreciated in 2009. The weakening in the second half of 2008 probably dampened the decline in production in competitively exposed industries.

By international standards Norway has good income protection schemes. When economic activity levels fall and unemployment rises, the schemes dampen the decline in household incomes and demand. Such schemes also reduce the risk faced by wage-earners and others in cyclical downturns and crises. Increased uncertainty about the future probably reduces demand by a smaller margin in countries with good protection schemes than in those with poorer schemes.

#### The housing market in 2007 and autumn 2008

House prices in Norway were fairly stable from end-June to end-September 2007. In the fourth quarter prices fell for the country as a whole by more than 2 per cent according to Statistics Norway's house price index. This replaced a long period of price growth in the housing market. In the Oslo area prices of apartment block flats fell more than 5 per cent in the quarter. As early as in autumn 2007 uncertainty began to spread among actors in the housing market. In the first half of 2008 price growth resumed on a national basis, while prices of apartment block flats in Oslo continued to fall. In summer 2008 uncertainty increased further. Sentiment in the housing market was heavily affected by Norges Bank's gradual increase of the key policy rate from summer 2005 when it stood at 1.75 per cent to a maximum of 5.75 per cent in autumn 2008. These rate increases led to an increase in banks' mortgage interest rates from about 3.5 per cent in summer 2005 to close to 7.5 per cent in the third quarter 2008. After a long growth period, household debt was at a historically high level relative to disposable income. In autumn 2008 the international financial crisis was an undeniable fact, and its depth and gravity were recognised by government and the public. The risk of increased unemployment, loss of income and impaired debtservicing capacity rose markedly, and expectations for the future turned negative. In the third quarter 2008 house prices for the country as a whole fell by almost 3.5 per cent and in the fourth quarter by 7 per cent. House purchases plunged and sale periods lengthened. Sales of cars and consumer durables fell and the knock-on effects of reduced demand surfaced both in commerce and the construction sector. Banks introduced a more restrictive lending policy, and the requirements on bridging finance for house purchase were tightened. The changes in expectations and behaviour in autumn 2008 were sufficiently dramatic to pose a potential threat to financial stability.

The fall in Norwegian house prices in autumn 2008 is ascribable to the gradual rise in the central bank's key policy rate and a powerful exogenous shock in the form of an international financial crisis. The house price fall was accompanied by a tightening of household consumption and corporate investment. Large price falls in the housing and stock markets are serious as they are likely to bring an appreciable

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fall in economic activity or to exacerbate an already negative trend. Such price falls can spark a general collapse of confidence on the part of households and firms. House prices in Norway began to rise anew in the first quarter 2008 on the back of a sharp interest rate decline and generally improved prospects for the future.

#### Norwegian versus international banks

Norwegian banks have weathered the financial crisis well. An important contributor is Norway's macroeconomy which has performed far better than that of most other countries. Further contributors are structural and regulatory factors along with government measures.

All aspects of the Norwegian financial market are subject to regulation, capital requirements and supervision. There is no shadow banking system. Subsidiaries of financial institutions are subject to consolidation and supervision. Compared with foreign banks, Norwegian banks have a larger proportion of loans and smaller holdings of shares, securities and deposits in other financial institutions. The bulk of Norwegian banks' loan portfolio consists of loans to Norwegian households and firms. To date the losses on such loans have been limited and significantly smaller than in most Western countries. Norway's moderate losses are due to a relatively speaking favourable macroeconomic trend with little unemployment. Norwegian banks also appear to have had satisfactory risk management systems. The low proportion of loans to foreign firms and households has shielded Norwegian banks from the problems faced by many foreign financial institutions. Further, Norwegian banks have minimal investments in foreign securities markets, and were little exposed to structured credit products. They had no exposure of note to subprime loans, Lehman Brothers, Madoff or Icelandic banks.

The crisis in the Norwegian banking system early in the 1990s focused attention on the design of the rules in general and of the capital adequacy requirements in particular. Capital requirements in Norway were accordingly set higher in some areas than the minimum requirement under Basel I. For example, loans to commercial property were assigned a higher risk weighting in Norway than the minimum requirement, and the requirements on subordinated debt and hybrid capital were more stringent.

There is reason to believe that the bank crisis at the start of the 1990s provided important lessons and encouraged higher risk aversion and more conservative credit practices. In addition, the government's write-down of share capital during the bank crisis reduced the problem of moral hazard, i.e. banks' incentive to heighten risk in the knowledge that the government would bear the costs should a crisis arise.

Abroad, in particular in the US, large parts of the loans secured by residential property were securitised. Strong lending growth was followed by reduced capital adequacy and impaired credit quality. In Norway the rules prevented such an outcome. Under the Norwegian OMF scheme (covered bonds), mortgage companies that issue covered bonds are subject to capital requirements on a par with lending banks. Moreover, mortgage loans in Norway are linked to the borrower and not to the dwelling – in contrast to, for example, the US. Consequently, in Norway, the borrower does not rid himself of his housing debt by selling his home. Moreover, Norwegian financial institutions are obliged to discourage anyone lacking debt-servicing ability from taking out a loan.

In Norway the banks' problems were associated with financing their ongoing business (liquidity risk) and not with their earnings and solidity. Norwegian banks rely less on market funding and more on ordinary deposits than banks in, for example, Sweden and Denmark. In recent years, however, the money and

bond markets have become more important sources of funding for Norwegian banks too. Moreover, funding has become shorter-term. A large proportion of the largest Norwegian banks' market funding comprises debt to foreign lenders. This part of their funding has grown over time, as has their dependence on efficiently functioning currency markets. The large proportion of foreign funding has brought increased liquidity risk and exacerbated the liquidity problems seen during the financial crisis. Customer deposits have however been a large and stable source of funding both prior to and during the financial crisis. In Norway as elsewhere deposit-to-loan ratios in the banking sector have fallen. Good deposit guarantee schemes meant that only a limited volume of deposits were removed from Norwegian banks during the financial crisis.

Life insurers have very long-term liabilities. The value of their investments in shares, bonds and property is affected by the trend in the respective markets. The price slump in these markets in 2008 impaired life insurers' performance and buffer capital, and compelled Norwegian operators to reduce their exposure to the stock markets. In Norway defined benefit schemes are more common than defined contribution schemes, and the companies bear most of the risk associated with the investments. Defined contribution schemes are however becoming more common. So long as the defined benefit schemes are solid and have sufficient buffer capital, policyholders are largely shielded, at any rate in the short term, from falls in the value of the companies' investments. With defined contribution schemes, which are more common in other countries, the policyholders are directly affected, and in those cases where the policyholder has just a few years left to retirement the impact may be very large. Schemes involving a high stock component will normally be more risky than schemes with a low share component. For young persons in defined contribution schemes the effect of a slump in market prices is less serious since they have a long working life ahead of them and good opportunities to save for a future pension. In Norway defined contribution schemes are still 'young' and the immediate effects of a price fall in the markets is therefore limited.

#### Government measures

Norwegian authorities responded rapidly in autumn 2008 once it became clear that banks' funding costs were rising dramatically and it was soon virtually impossible to refinance ongoing activities in the money and bond markets. Norway is one of few countries where it was not necessary to increase the deposit guarantee. Finanstilsynet facilitated a controlled liquidation of the Icelandic crisis banks in Norway: Kaupthing and Glitnir. This was achieved without harmful effects for the Norwegian financial market, and no customers lost money on deposits in the two banks.

Finanstilsynet initiated a series of measures in 2008-2009 in connection with the financial crisis. Several meetings were held with managements at larger banks with a particular focus on liquidity risk, financial strength and lending capacity. The frequency of meetings with the larger insurers was intensified and monitoring and preparedness in relation to smaller financial institutions were heightened.

The Ministry of Finance, Norges Bank and Finanstilsynet met regularly to exchange information on and analyses of the state of the financial markets, discuss possible actions and assess crisis management preparedness. Finanstilsynet informed the public about the situation in the financial sector by means of numerous talks and presentations and publishing of reports and analyses.

Finanstilsynet intensified its monitoring of the liquidity situation in the financial markets and institutions in 2008 and 2009. It did this through its contacts with liquidity managers at the larger banks and through

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inspections and extraordinary reporting, including reporting of movements in large bank deposits. Regular meetings were held between Norges Bank and Finanstilsynet.

Finanstilsynet reviewed and provided feedback on risk factors and the capital situation at all banks in 2008 and all larger and most small banks in 2009. Several were asked to raise their capital targets and capital ratios. Finanstilsynet's assessments emphasised the need to maintain normal lending activity.

In October 2008 the Ministry of Finance introduced an arrangement enabling banks to exchange covered bonds for government securities. Finanstilsynet commented on a draft version of the requisite regulations and recommended measures ahead of the establishment of the 'swap' arrangement, which is administered by Norges Bank. The arrangement prompted a number of banks to set up mortgage companies that accepted residential mortgages from the parent bank and funded the purchases by issuing covered bonds. Finanstilsynet issued a total of 16 licences after October 2008, and by the end of 2009 22 mortgage companies had been set up with a licence to issue covered bonds.

The banks replaced the mortgage loans in their balance sheets with covered bonds which they 'swapped' for liquid, secure government securities. The government securities thereby acquired could either be sold or furnished as security for borrowings in the market. The arrangement improved banks' opportunity to obtain long-term funding, reduced the problems in the interbank market and contributed to more efficient redistribution of liquidity. The 'swaps' have a maximum duration of five years, and the arrangement is capped at NOK 350 billion. Treasury bills worth about NOK 230 billion were distributed to the banks via 24 auctions. The last 'swap' entered into will be reversed in September 2014, bringing the scheme to a close. The final auctions were called off because interest had waned.

Norges Bank lowered its key policy rate by a total of 4.5 percentage points to 1.25 per cent in the period October 2008 to June 2009. To ensure that money market rates shadowed the key policy rate's downward path and to assure banks' access to funding, Norges Bank supplied the market with substantial volumes of credit. The volume of lending increased and F-loans (the central bank's fixed-rate lending facility) were granted with maturities approaching three years, far longer than normal. This was done to ease the situation for banks that had not set up residential mortgage companies. In addition, the central bank granted loans to banks in US dollars to assure them access to dollar liquidity. In the first instance the central bank supplied dollar liquidity via currency swaps. An integral part of the measures consisted of reducing the requirements on collateral which the banks normally have to furnish when borrowing from the central bank. With the markets now normalised, Norges Bank is in the process of winding down the extraordinary liquidity measures.

In October 2008 the International Accounting Standards Board amended the IFRS financial instruments standard by introducing (in IAS 39) a limited ability to reclassify financial assets from fair value measurement to amortised cost measurement. Where the accounts for 2008 were concerned this was permitted with retroactive effect to allow values as at 1 July 2008 to be used for reclassification purposes. The Norwegian rules were similarly amended for banks not presenting their accounts under IFRS. This move reduced financial institutions' book losses on securities.

In November 2008 the government decided to expand Kommunalbanken Norway's equity capital by NOK 300 million to improve local government access to funding. Moreover, the government granted a loan to the Norwegian Institution for Export Financing (Eksportfinans) in December 2008 capped at NOK 50 billion with drawings permitted for a two-year period and a maturity of up to five years.

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Eksportfinans, which funds Norway's export industry, encountered difficulties in obtaining long-term finance in autumn 2008. Eksportfinans' capital adequacy was monitored by Finanstilsynet over the autumn. The exposure limit of the Norwegian Guarantee Institute for Export Credits (GIEK) was concurrently raised by NOK 50 billion. The GIEK guarantees a large portion of government-supported loans granted by Eksportfinans.

The Government Bond Fund (SOB) was established in March 2009 to increase access to funding in the Norwegian credit bond market. Finanstilsynet played an active role in shaping the fund's guidelines. The Government Bond Fund, which is managed by the National Insurance Scheme Fund (Folketrygdfondet), has an investment ceiling of NOK 50 billion. So far only a limited portion of its resources has been deployed, but the fund can reasonably be assumed to have promoted normalisation of the bond market.

The Norwegian State Finance Fund (SFF) was also established in March 2009, as a legal person with capital resources of NOK 50 billion. The fund, whose mission was to invest in hybrid capital and preference capital of Norwegian banks, was designed to secure banks long-term sound capital to prevent balance sheet reductions with the negative consequences this could have for businesses and households. Finanstilsynet played a part in establishing the State Finance Fund and contributed to shaping the regulations which provided the legal framework for the two main instruments made available to the banks by the State Finance Fund. In this connection the Ministry of Finance drew on Finanstilsynet's experience and insight, as well as on important contributions from Norges Bank and other expert bodies.

In conformity with the provisions governing the State Finance Fund, Finanstilsynet assessed banks' compliance with the tier 1 capital requirement and hence their eligibility to apply for a capital infusion from the fund. The agency issued 38 confirmations in the application period. All payments were completed by mid-December 2009. The fund supplied tier 1 capital to 28 banks in a total amount of NOK 4.1 billion. Most of the increase in recipient banks' tier 1 capital adequacy, averaging about 2 percentage points, was through hybrid capital issues. The establishment of the State Finance Fund was an important element in governmental efforts to maintain confidence in financial institutions and financial markets.

The fiscal budget tabled by the government in October 2008 was moderately expansionary. Towards the end of January 2009, however, the government launched a fiscal policy stimulus package which was subsequently reinforced by the Revised National Budget presented in spring 2009. All in all this entailed an increase of about NOK 50 billion (2010-kroner) in oil revenue spending from 2008 to 2009, which historically for Norway and in the international financial crisis context constituted a substantial stimulus.

In press releases of 8 and 9 October 2008, Finanstilsynet stated that in its view any investment firms or investors making short sales, covered or uncovered, in shares or primary capital certificates issued by financial institutions would be in breach of the Securities Trading Act section 3-9 prohibiting unreasonable business methods. The statement was issued in light of the extraordinary market situation and unusual market movements. The prohibition has now been lifted.

Finanstilsynet has participated in a number of international bodies in which reforms of international rules are under discussion in light of the financial crisis, and work on preparing the implementation of changes to the international body of rules has started.

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# 2. Regulatory changes in light of the financial crisis

#### Introduction

Both this financial crisis and previous crises have shown that price formation in property, credit and stock markets is in periods irrational and that asset prices tend to rise sharply and then to fall too far. The reason for excessive price increase may be that actors are overly optimistic as regards future economic growth, or that they understate the risk associated with their investments and set too low a hurdle rate or it may be because they systematically underestimate future interest rate levels. In periods of economic expansion confidence in the economy increases, and firms, households and financial institutions base themselves on a too optimistic vision of the future. This perception may rapidly shift to a general collapse of confidence and self-augmenting pessimism once the actors realise that the growth has not been based on a rational assessment of the future. It is very difficult to foresee when bubbles will burst or what events will cause optimism to turn to pessimism. Often a series of bad news can trigger a market collapse. Prior to the crisis many economists, central banks and supervisory authorities assumed that markets were efficient and actors rational and that this should largely be reflected in the regulatory regime. The market collapse brought to light by the crisis has prompted a substantial reassessment of perceptions of market efficiency and greater appreciation of the merits of regulation.

The financial market turbulence and the imminent danger of collapse, not only of individual institutions but of the entire financial system, has led to the introduction of more long-term reforms intended to remedy the shortcomings uncovered by the crisis. The capital adequacy rules turn out not to have brought about sufficiently solid institutions, and regulation of liquidity risk has not been satisfactory. It is also clear that

- institutions' incentive systems have exacerbated the crisis,
- · credit rating agencies have underestimated risk,
- market actors have understood neither the instruments nor the risk that accumulated,
- the accounting rules have amplified the fluctuations,
- coordination of supervision nationally and internationally has not been satisfactory,
- there has been insufficient focus on the accumulation of systemic risk in the financial system,
- important institutions have evaded regulation,
- the complexity of the financial system has made it difficult to gauge the level of risk and to uncover the channels through which financial instability spreads.

#### G-20, the Basel Committee and the EU Commission

After the acute measures taken essentially at national level from September 2008 onwards, the established international bodies have come more into play and taken over the work on regulatory intervention. The aim of this effort is to change existing and introduce new regulation to prevent or reduce the likelihood of new crises developing in the financial system. As early as in November 2008 the G-20 summit drew up common principles for financial market reform. At the summit on 2 April 2009 a number of decisions were taken with a view to stabilising the markets and changing the mandates of central institutions such as the Financial Stability Board and the Basel Committee to enable them to make a start on the work required. In the EU, the Commission's statement to the Council's 2009 spring session gave an overview of commenced or planned reform work along with a timetable. The statement reflected and operationalised areas focused on by the G-20 within the EU system. Of particular importance are the studies of and proposals for a new supervisory structure in the EU.

When the financial turmoil spread in earnest some way into 2008, it surfaced principally in individual institutions' loss of confidence in other institutions' ability to honour their obligations. Distrust of institutions' liquidity was rooted in ignorance of the loss situation and hence of institutions' financial soundness. The EU's Capital Requirements Directives (2006/48/EC and 2006/49/EC) were implemented in Norwegian law with effect from 1 January 2007. This framework, building on recommendations from the Basel Committee (Basel II), is now the object of much analysis and discussion. There is a clear consensus among central banks and supervisory authorities that while Basel II should continue, it should be strengthened and further developed. Some revisions have been adopted and others are at various stages of preparation or consultation.

A consultation document of December 2009 from the Basel Committee recommends measures to strengthen global capital and liquidity regulation that are likely to tighten the capital requirements directives in several areas. The document proposes new rules on liquidity and changes in the rules on own funds. Under Basel Committee and EU auspices work is under way on rules for the introduction of a leverage ratio, one of the aims being to prevent excessive growth in lending. 'Leverage ratio', often defined as the ratio of non-risk-weighted exposures to high-quality capital, will supplement current risk-based measures of regulatory capital.

The Basel Committee is also working on rules designed to strengthen the quality of banks' capital (with stricter requirements on loss-bearing capacity in a going-concern situation), to contribute to increased international harmonisation and to secure better information to the market about the composition of own funds at individual banks. The Basel Committee is furthermore studying rules designed to cover further types of risk, increase capital charges for counterparty risk and incentivise use of recognised clearing houses for OTC contracts. The Basel Committee is also reviewing the need for countercyclical buffers to reduce the problem of procyclicality. Moreover, a number of measures for handling risk in system-important institutions are being discussed, including the introduction of extra capital requirements.

The Basel Committee considers it too early to decide whether or not the minimum requirements under current rules are too cyclically sensitive, but has initiated data collections and calculation studies to assess, and in the event reduce, the cyclical sensitivity of capital requirements and risk parameters. Supervisory authorities are already entitled to demand cycle-dampening measures under the capital requirements directive (pillar 1 and pillar 2). As a contribution to the work on new accounting standards

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the Committee has proposed changing the rules governing impairment write-downs to bring them more into line with expected losses through the business cycle and started work on revising its own guidelines for 'sound credit risk assessment and valuation for loans'. Under the Basel Committee's proposal regarding countercyclical capital buffers, institutions with a tier 1 capital adequacy above the minimum requirement but below the buffer requirement would have limited leeway when it comes to distribution of profit. The buffer has yet to be quantified and must naturally enough be viewed in the context of the capital requirements.

#### Liquidity regulations

Financial institutions have on average a longer lock-in period on their loans and other investments than they have on funding and deposits. This difference in maturity imposes liquidity risk on banks which has to be measured, analysed and controlled. The first repercussion of the financial crisis was that financial institutions' sources of funding dried up. The EU has already adopted amendments to the capital requirements directive to strengthen supervision of institutions' liquidity. Supplementary rules have been laid down that cover procedures for managing liquidity risk and detail the factors to be considered by the supervisory authorities. These rules are based on work done by the Committee of European Banking Supervisors (CEBS) and the Basel Committee.

The CEBS and the Basel Committee presented a number of consultation documents concerning liquidity in 2009. Both bodies make recommendations that are more detailed than previously and set requirements as to the depth and breadth of liquidity to ensure that assets are present that can rapidly generate liquidity with predictable value. The Basel Committee recommends the introduction of quantitative minimum requirements on liquidity. The Net Liquidity Coverage Ratio and the Net Stable Funding Ratio cover respectively the high-quality liquid assets needed to survive a stress period of 30 days and the need for stable, long-term funding sources. The committee has in addition drawn up a proposal for common indicators for monitoring liquidity risk. These will make it easier for the supervisory authorities to identify and analyse the level of liquidity risk both at individual banks and more generally in the bank system as a whole.

The Basel Committee's standards for measuring and monitoring liquidity risk will in a modified form be incorporated in relevant EU directives. A calculation study of the effects of such rules is under way in Norway, as elsewhere.

#### Deposit guarantees

Deposit guarantee schemes are designed to protect ordinary depositors' confidence in the banking system and reduce the likelihood of a classical 'run on the bank'. A potential problem with such schemes is that they reduce depositors' incentive to consider the risk of depositing funds with banks.

The importance of depositor protection was brought to a head as from autumn 2008. In a short space of time one nation state after another provided guarantees to bank depositors whose banks were headquartered in the respective state. Had depositors not received the necessary guarantees, massive deposit withdrawals would have further aggravated the banks' liquidity problems. The EU's reform efforts need to be seen in this light.

The EU raised the minimum guarantee level from EUR 20,000 to EUR 50,000 in 2009. The period in which payments were to be made was concurrently substantially shortened. All depositors will now be

entitled to have their deposits up to the minimum guarantee level disbursed in the course of 20 days. The amendments to the Deposit Guarantee Schemes Directive include a further increase in the minimum guarantee level to EUR 100,000 with effect from 1 January 2010. The amount will be fully harmonised on the same date so that countries currently offering larger guarantees will have to reduce them. Unless derogations are made when the directive is incorporated in the EEA Agreement, Norway's deposit guarantee limit will have to be reduced from today's NOK 2 million to an amount equivalent to EUR 100,000. Work on this matter is in abeyance pending formal inauguration of the new Commission in February 2010.

Besides assessing the already adopted change in the minimum guarantee level, the EU Commission is working to strengthen robustness and confidence in the deposit guarantee schemes. Consideration is being given to a common definition of protected deposits, mandatory funding of the guarantee schemes and deposit guarantee schemes with risk-adjusted premiums. Consideration is also being given to the introduction of a form of mutual liability or European superstructure over and above the national guarantee schemes in order to increase the capacity of the depositor protection funds and in particular to take responsibility for major cross-border banks. The Commission is also considering the merits of further reducing the period for payments to depositors from the current 20 working days.

In parallel with the effort to strengthen the deposit guarantee schemes, the Commission is drawing up a proposal for the introduction of protection schemes in insurance. For Norway's part any EU requirement as to guarantee schemes in insurance will require the current guarantee scheme for non-life insurance to be matched by an equivalent scheme for life insurance.

#### Capital regulation

The crisis showed that the capital adequacy rules failed to secure institutions sufficient solidity. There are several reasons for this, the central one being that the capital requirement was too low in relation to the risk the capital was to support and that the quality of the capital was inadequate in the sense that it could not be used to cover loss. Too low capital is ascribable to several factors, such as unsatisfactory risk modelling. In addition, important institutions were only limitedly subject to capital requirements. The possibility that the capital adequacy rules have amplified fluctuations in the economy is also being discussed.

The EU has drawn up and adopted revised requirements for the quality of own funds. Maximum limits for various classes of hybrid capital have been introduced along with general requirements for characteristics of hybrid and tier 1 capital. The requirements will be clarified in guidelines from the CEBS. The limit for hybrid capital is set to 50 per cent of tier 1 capital and cannot be derogated from in national legislation (maximum harmonisation). Within the 50 per cent limit there are three intervals with differing quality requirements.

The EU has also amended the rules governing large exposures, entailing a tightening and further harmonisation. The possibility for national choice is removed; this includes the maturity-based exemption in respect of interbank exposure since risk weighting no longer applies. Further, new provisions are introduced allowing certain collateral to be taken into account along with provisions regarding indirect investment schemes.

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The EU and the Basel Committee have adopted increased requirements for positions in the trading portfolio where internal models are used to calculate the capital requirement. The requirement will now be fixed using model Value at Risk estimates calculated under the assumption of a long period of unfavourable market conditions (stressed VaR). Further, the capital charge for receivables in the trading portfolio calculated using the VaR method will not only cover the risk of default but also the possibility of value impairment resulting from reduced credit quality in general.

The EU Commission has circulated for comment amendments proposed in the capital adequacy rules. One of the amendments would require dynamic loss provisions for exposures outside the trading portfolio which would be income-deductible in periods of economic expansion and which could be drawn on to cover losses in periods of contraction. According to the proposal the provisions would not count as regulatory capital and would be based on schematic calculations leaving no room for discretionary judgement. The proposal does not allow for use of internal models. Another proposal entails a substantial tightening of the capital charge for well-secured home mortgages (under the standard method) and a further proposal entails separate charges for home mortgages denominated in foreign currency.

A calculation study including the banks is to be carried out based on the Basel proposals of December 2009. The final design of the rules will depend in part on the results of the calculation study.

#### Accounting rules

The accounting rules were in focus at an early stage of the crisis. Use of the market value principle fuelled substantial fluctuations and falls in the value of banks' assets. The question was raised of whether this was consistent with a rational and prudent valuation of institutions' assets. The International Accounting Standards Board (IASB) has a number of projects under way to consider amendments to the International Financial Reporting Standards (IFRS). Changes are being considered in accounting for financial instruments, especially for loans. The present event-based incurred loss model in IAS 39 has come in for criticism on the grounds that it delays accounting for expected loss since it requires objective evidence that a loss event has occurred before write down is permitted.

The response deadline is 30 June 2010. A final standard is planned for completion by the end of 2010, with mandatory application as from 2013 and optional application for companies before that point. The new standard will be reviewed by the EU for possible application to European Companies, and for when, in the event, it should take effect. The EU Commission has indicated that it will consider the need for special rules on dynamic loss provisioning in the capital adequacy framework as a result of any amendments to the accounting rules.

#### Rules for supervision, crisis management and crisis preparedness

The crisis demonstrated a need for improved coordination between national supervisory authorities. Rules clarifying the division of responsibilities between home country and host country have already been incorporated in the Capital Requirements Directive. Rules are in place for the establishment of supervisory colleges designed to promote uniform supervisory practice, and to assure collaboration on supervision of large banking groups operating in two or more countries and the involvement of host countries in the crisis management of system-important branches. Supervisors collaborating in a college will draw up joint risk assessments and decisions concerning capital requirements on a consolidated basis. Some changes will be made in the Capital Requirements Directive as a result of the submitted

proposals for a new supervisory structure in Europe, including the establishment of the European Banking Authority. Technical standards will be developed in areas where the CEBS has thus far published guidelines, and further provisions will be drawn up on collaboration and coordination of supervisory activities both on a current basis and in crisis situations. Under CEBS auspices and at the EU Commission work is under way with a view to strengthening supervisors' power to intervene vis-à-vis banks during a negative phase of development. Many European countries lack the legal bases needed to intervene vis-à-vis institutions before the minimum requirements for regulatory capital and liquidity are breached.

Through 2008 and 2009 it became steadily clearer that complex bank structures impede effective crisis action, and often leave the authorities with no choice but to bail out institutions. The knowledge that these effects are present may reinforce institutions' appetite to take increasingly large risks since the upside of risk taking is large potential gains and bonus payments, while the downside is covered by the taxpayer. In the Basel Committee, the US and Europe alike this has prompted discussions with a view to reducing this form of moral hazard. It must be realised that in future it will not be acceptable, particularly for large institutions, to devise corporate structures that make appropriate crisis resolution impossible. Requiring institutions to draw up 'living wills' (winding-up and restructuring plans) containing a credible plan for downscaling and winding up in a crisis situation without recourse to public funds could be an effective tool for supervisors to demand that institutions organise their business in a simple and transparent manner.

# Mandatory clearing of standardised derivatives contracts and use of contract registers

Financial institutions have lost substantial sums on credit derivative positions during the crisis. Exposure to these instruments also gave rise to much uncertainty as to the size of uncovered positions and brought to a head the collapse of confidence between institutions. This contributed significantly to the most serious aspect of the acute phase of the crisis in October 2008. The Basel Committee proposes that capital requirements for banks should depend on whether or not the credit derivatives have been cleared. In addition, the EU Commission wants to see amendments made to the capital requirements framework as regards requirements on security for derivative contracts that are settled bilaterally, including changes in the size of the capital requirement. Further, the EU Commission is working to change the regulation of infrastructural undertakings to ensure efficient, secure and robust derivatives markets.

In line with a resolution by the G-20 leaders in September and with support from the EU Council, the aim is to introduce mandatory clearing of standardised derivatives contracts through a central counterparty and mandatory reporting to a contract register of derivatives contracts that are not cleared. The object of this regulation is to reduce counterparty and operational risk and to increase system transparency. Institutions will also be subject to regulation, supervision and monitoring. The EU Commission aims to present common European rules for infrastructural undertakings in the course of 2010.

#### Credit rating agencies

The markets largely based their assessments of financial institutions and securitised portfolios on credit rating agencies' assessments. During the crisis the quality of the portfolios and the financial soundness of the banks proved to be significantly poorer than their ratings suggested, prompting queries abut the role

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of the credit rating agencies. The EU responded by setting new rules for credit rating agencies, subjecting them to a licensing requirement and supervision. The rules are designed to ensure that the agencies avoid conflicts of interest with firms they are rating and to promote better-quality ratings. The recommendation is that, for capital requirement purposes, institutions should only use ratings produced by agencies registered by the CESR (Committee of European Securities Regulators) – or the ESMA (European Securities Market Authority), as soon this body is established. Further rules on the agencies' organisational set-up and business operation have been proposed.

#### Securitisation

As early as spring 2008, when Bear Stearns ran into problems, it was seen that banks' establishment of securitised vehicles removed too little of the risk present in loan portfolios. The risk rebounded to the banks' balance sheets, causing risk to spread across the system. In particular, securitisation and credit derivatives in combination produced a simultaneous dissemination and concentration effect never experienced before in the financial system. The EU has adopted stricter rules for the treatment of resecuritisation exposures (securitisations with other securitisations as the underlying) and stricter requirements on information in the capital requirements directive. Where specific risk is calculated for securitisation positions in the trading portfolio, the same risk weights are to be used as in the case of other portfolios. A further requirement is that the originator retains some of the risk on his own books.

#### Remuneration and incentives

Supervisors and legislators, including G20 and the CEBS, are agreed that inappropriate remuneration models have played a part in the development of the financial crisis. A point particularly highlighted is that the incentive systems have led to greater risk-taking and short-term adjustments on the part of institutions. A directive introduced by the EU declares that institutions' remuneration policy must comply with principles of good risk management and that remuneration policy should be incorporated in the SREP (Supervisory Review Evaluation Process), i.e. the supervisors' evaluation of institutions' capital assessment processes. A central point is the introduction of requirements as to compensation committees at financial institutions of a certain size.

In Finanstilsynet's view the relatively moderate scale of bonus schemes at Norwegian banks has enabled risk-taking to be consistently kept to an appropriate level. Finanstilsynet has forwarded to the Ministry of Finance draft regulations based in part on EU rules. Essentially the proposal requires remuneration schemes to be designed in such a way as to promote good risk management at all banks irrespective of size and business as well as at mortgage and finance companies, investment firms and fund management companies engaged in active asset management. The proposal calls for disclosure of information about remuneration of staff whose work influences the institution's risk profile. More detailed guidelines are proposed in the case of large banks.

#### Alternative investment funds (AIFM Directive)

Already prior to the financial crisis discussions were in progress within the EU on whether hedge funds should be regulated at the European level or left to national authorities. The crisis brought to light shortcomings which sped up the process and have decided its direction. On a general basis it has been argued that these funds have raised the degree of leverage and reduced transparency in the financial system, exacerbated volatility in the markets in general and fuelled the development of bubbles in the credit and stock markets in particular.

The draft directive proposes that anyone in the EU who manages alternative funds (AIFM) must be authorised to do so by the public authority responsible for establishing rules for supervision. Requirements are imposed as to documentation of the management's fitness and propriety, as to use of a depository and valuers and requirements as to reporting to the authorities about organisation, risk management and handling of conflicts of interest etc. Under the proposal funds will be required to present an annual report, and there are rules governing the information to be given to investors prior to purchasing units. The proposal aims to regulate funds of significance for financial stability. Exemptions from the draft directive are established for this reason.

#### Packaged Retail Investment Products (PRIPS)

The build-up phase of the crisis from 2002 onwards saw an accelerating development and distribution of financial products to ever wider strata of society. In Norway this crystallised in the Terra affair. Some of the products involved were captured by the MiFID regime which came at the end of the period of expansion. However, it turned out that deficient regulation gave producers and distributors substantial opportunities to circumvent the rules. This prompted the EU Commission to propose harmonised rules governing information about and sales of a number of investment products. The rules will typically apply to investment funds, life insurance products and structured products offered to the mass market. Product information is to be given in a concise, suitable form. The rules governing prospectuses and distribution build on the rules currently applying to UCITS KID and investment firms (MiFID). The sale process must protect the customer's interests. Conflicts of interest, including conflicts related to remuneration systems, shall be identified, and sellers must fully understand the characteristics of the products concerned.

#### Finanstilsynet's initiatives

Finanstilsynet has by letter of 1 February 2010 to the Ministry of Finance expressed its support for initiatives taken at the international level with a view to introducing concrete liquidity requirements and strengthening the capital requirements. Finanstilsynet sees no immediate need to hasten the introduction of more stringent capital requirements given that Norwegian banks' capital adequacy appears to be satisfactory across the board. Finanstilsynet has taken the initiative to have the forthcoming rule changes discussed at the Nordic level to achieve the highest possible degree of Nordic harmonisation. However, rapidly rising house prices and banks' full financing of house purchases pose a challenge. A setback in the housing market could have major knock-on effects for the entire economy. Finanstilsynet released on 3 March a circular to the banks setting out guidelines for prudent home mortgage loan practice.

It was primarily Norwegian banks' liquidity situation that was hit by the international financial crisis. In its letter to the Ministry of Finance, Finanstilsynet states that changes in the Norwegian liquidity rules may be called for. Finanstilsynet further cites the directive amendments adopted in September 2009 entailing more stringent qualitative requirements on liquidity management. The amendments are to be implemented in Norwegian law by the end of October 2010, and Finanstilsynet will draft new rules to be submitted to the Ministry of Finance in March 2010. As yet no internationally harmonised quantitative liquidity requirements exist, but the Basel Committee has presented a proposal for such requirements with implementation expected by the end of 2012. Finanstilsynet will follow the international process in forthcoming months and participate in the announced calculation study in the first half of 2010. This will give a better idea of the consequences of any quantitative requirement as well as a better basis for arriving at an appropriate calibration upon implementation in Norway. Consideration will also be given

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to any conditions specific to the Norwegian market which should be taken into account, including how the requirement as to liquidity buffers should be designed in light of conditions in the Norwegian money and capital markets. Against this background an effort to implement regulations should be made before 2012. Since the supervisory responsibility for branches' liquidity under the directive provisions is assigned to the host country, branches of foreign institutions can also be subjected to quantitative requirements under Norwegian rules. A dialogue on a joint Nordic corporation in this area is under way with Nordic supervisory authorities.

## 3. Markets and economic trends

Economic trends and markets are of great significance for financial institutions and for financial stability. The Norwegian economy is small, open, commodity-producing, has free movement of capital and is therefore heavily affected by the international economy. The banks are most exposed to cyclical fluctuations and the credit risk resulting from changes in the real economy and developments in the property markets. Insurance companies and pension funds are most exposed to the share and bond markets, although the property markets are also of significance for these institutions.

#### International real economy

In the past year the world economy has been in the throes of the severest cyclical downturn since the 1930s. In the second half of 2009, however, growth picked up in all regions. But there are still substantial differences in growth rates, and production in the industrialised countries is rising at a significantly slower rate than in the emerging economies. Whereas the upturn in domestic demand, and to a certain extent the normalisation of global trade, are the main contributors in the developing countries, it is essentially policy stimuli that are rekindling growth in the industrialised countries. Indeed these were the countries hardest hit by the financial crisis. In the industrialised countries as a whole there are few signs that the private sector can take over as the driving force. Unemployment has risen to unprecedented levels, housing markets are sluggish and households' debt burden is substantial in a number of countries. Concurrently capacity utilisation is low, damping private investment. The financial markets are in the process of normalising, but banks are likely to continue to be wary of increasing lending in view of the build-up of capital and the write-downs that will be necessary in the period ahead. Weaker-than-normal growth is therefore expected in the next two years or so. There is however much uncertainty, and reversing the stimuli without stifling the recovery poses a tough challenge for government authorities. In addition, levels of public deficits and indebtedness are in some countries rising to levels requiring fiscal retrenchment to ensure sustainable central government finances; see table 3.1.

Table 3.1 Fiscal balances in per cent of PPP-weighted GDP

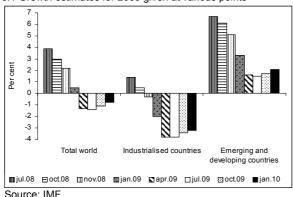
	2007	2009	2010	2014
G 20	-1,0	-7,9	-6,9	-3,7
Advanced G 20 economies	-1,9	-9,7	-8,7	-5,3
Emerging G 20 economies	0,3	-5,1	-4,1	-1,3

Source: IMF

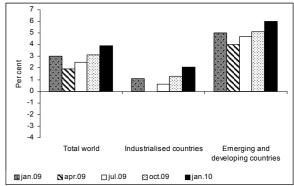
After a fall of 0.8 per cent in overall production in the world economy in 2009, the IMF expects 3.9 per cent growth in 2010, the main contributors being the emerging countries. As shown in charts 3.1 and 3.2, the forecasts were gradually revised down in 2008 and 2009 followed by an upward revision in the past half-year. This shows the great uncertainty attending economic forecasts; it is particularly difficult to estimate cyclical turning points.

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#### 3.1 Growth estimates for 2009 given at various points



3.2 Growth estimates for 2010 given at various points



Source: IMF

#### A closer look at some countries

Preliminary national accounts data for the US show that GDP contracted by 2.4 per cent in 2009. Private investments were the main downward factor, although household consumption and exports also made negative contributions. The economy was concurrently shored up by substantial government stimulation measures. Unemployment climbed rapidly during 2009, reaching 10 per cent at the end of December. The rate of increase in GDP quickened in the course of the year and was all of 5.9 per cent (annual rate) in the fourth quarter, driven essentially by increased inventories, exports and private consumption. However, parts of the upturn are ascribable to temporary measures to stimulate car purchases and the housing market, and growth is not expected to continue at this pace ahead. Housing investments have increased in the past two quarters, albeit from a low level. The budget proposal for 2010 shows a deficit of 10.6 per cent of GDP, which must be reduced in the next few years. How far the private sector can take over as the economy's driving force as the public measures are scaled back is uncertain. House prices show signs of levelling off, but from a level far lower than prior to the crisis. At the end of 2009 15 per cent of all home mortgage borrowers were either in default or subject to repossession proceedings, according to the Mortgage Bankers Association. At the same time households are burdened by high leverage and high unemployment. Hence moderate growth should be expected in the US economy ahead.

Table 3.2 Forecasts of GDP growth, consumer price growth and unemployment

	USA			Japan			Euro area		
	2009	2010	2011	2009	2010	2011	2009	2010	2011
GDP*	-2,5	2,7	2,4	-5,3	1,7	2,2	-3,9	1,0	1,6
GDP	-2,4	3,1	3,0	-5,3	1,5	1,5	-3,9	1,3	1,5
Inflation	-0,3	2,3	2,0	-1,4	-1,0	-0,3	0,3	1,2	1,5
Unemployment	9,3	9,8	9,3	5,3	5,3	5,0	9,4	10,4	10,5

Sources: IMF. World Economic Outlook Update, January 26, 2010\*. Consensus Forecasts, February 8, 2010.

In the Asian countries growth has picked up substantially, bringing a marked rise in commodity prices. This is particularly true of China, where GDP appears to have risen by 8.7 per cent in 2009. Growth was especially strong in the second half-year. The Chinese authorities have heavily stimulated the economy in the wake of the international financial crisis, resulting in a steep increase in domestic credit and a danger of bubbles forming in the property markets. In Japan the stage is set for a decline of more than 5 per cent in GDP in 2009 as a result of large falls in net exports and investments. The upturn in neighbouring countries will probably provide important growth impulses to exports ahead, while continued weak private domestic demand pulls in the opposite direction. The authorities have provided significant

stimulus to the economy, as a result of which Japan has the weakest central government finances in the OECD with public debt close to double GDP.

Production in the euro area fell by 4 per cent in 2009. The fall was especially pronounced in Germany, Italy and Spain, somewhat less so in France. In the euro area too, the cyclical trough has probably been passed, and growth picked up weakly in the second half-year. Exports and public stimuli were the main positive contributors, while private demand was very weak. Unemployment has reached 10 per cent and is still growing. Public deficits and debt have reached unsustainable levels in some countries, first and foremost Greece, but also in Italy, Ireland, Portugal and Spain. Retrenchments will have a dampening effect and the stage is set for weak growth ahead. The UK was hit very hard by the financial crisis and the fall in GDP has been almost double that in the US. A substantial sterling depreciation could increase exports in 2010, but very high household debt combined with a sharp rise in unemployment is damping consumption and holding down overall growth.

Among the Nordic countries, Iceland was hit hardest by the financial crisis due to a long period of imbalanced growth and banks that expanded far beyond their limits of sustainability. Finland too is strongly affected as a result of its high dependence on exports of industrial goods, and GDP is estimated to have fallen by 7 per cent in 2009. In Sweden and Denmark the decline in overall production in 2009 appears to have been about 4.5 per cent. For Iceland a further decline in GDP is expected in 2010, while for the other Nordic countries growth is set to be slightly positive. The Baltic countries saw a disastrous development in 2009 with production falling between 15 and 18 per cent, and unemployment rising to more than 15 per cent. The strength of the decline seems to be levelling off, but a reduction in GDP is foreseen in all three countries in 2010.

#### Norway's real economy

Norway has escaped the knock-on effects from the international financial crisis to a greater degree than most industrialised countries. Both good investment growth in oil-related industries and strong monetary and fiscal policy measures have contributed, at the same time as the banks have fared better than in many countries. Even so, GDP, both in the aggregate and in Mainland (non-oil) Norway, fell in 2009 for the first time in 20 years. Both the financial crisis and the rapid growth in the years prior to the crisis are behind the downturn. A more moderate increase in unemployment than first assumed and very low interest rates brought rapid growth in house prices in 2009. While signals have emerged suggesting that fiscal policy will gradually return to the 4 per cent oil revenue spending rule, the international trend suggests that the key policy rate in Norway will remain at a low level in the next two years or so. Statistics Norway estimates that activity levels in the Norwegian economy will continue to pick up in the period ahead, but anticipates no clear-cut cyclical upturn before the turn of 2013.

GDP contracted in the third and fourth quarters of 2008, and the negative trend continued in the first quarter of 2009. Since then GDP has grown at a slow pace. According to national accounts data, all private demand components contributed to the weak production figures in 2009, while public consumption and investments counteracted the downturn. Whereas household consumption showed zero growth, public consumption grew by 5.2 per cent in 2009. Uncertain prospects for the future and low capacity utilisation have brought a substantial fall in mainland (non-oil) investment since summer 2008. In 2009 the fall was 14.5 per cent. The negative trend appears to be continuing in 2010. The international

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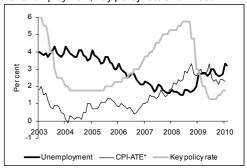
> cyclical setback resulted in a marked decline in traditional exports at the start of 2009. Over the year exports of industrial commodities and engineering products improved, but overall traditional exports fell by almost 8 per cent in 2009.

Table 3.3 Forecasts for the Norw, economy, Average annual fig. in %

Table 6:61 Greeke for the Herw. Committy: 7 Wordge armaar ng. m. 76							
	Accounts	2010			2011		
	2009	SN	MoF	NB	SN	NB	
GDP	-1,5	1,5	1,3	1 3/4	1,9	2,5	
GDP mainland sector	-1,5	2,0	2,1	2 3/4	2,7	3,25	
Inflation	2,1	1,7	1,25	1,75	1,3	2 ,25	
Unemployment	3,2	3,5	3,7	3,75	3,9	3 ,5	

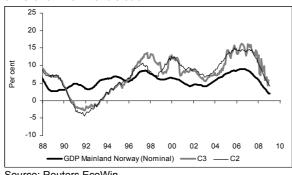
Sources: Statistics Norway (SN): Economic Survey 1/2010, Norges Bank (NB): Monetary Policy Report 3/2009 and Ministry of Finance (MoF): Report to the Storting No. 1 (2009-2010)

3.3: Unemployment, key policy rate and inflation



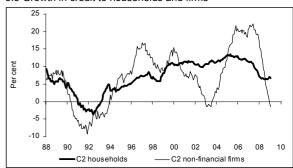
The decline in activity was followed by somewhat higher unemployment, which by the end of 2009 had risen to 3.2 per cent compared with 2.6 per cent at the end of 2008. The labour market deterioration is far smaller than first expected. A strong increase in public sector demand for labour and changes in corporate behaviour may have contributed. Through 2009 employment in the private sector fell by some 65,000 persons, while employment in the public sector rose by 25,000. At the same time a number of firms appear to have deferred dismissals and/or layoffs pending an increased order intake. A reduction in the labour force, both through young people taking more education and through foreign workers returning home, has also helped. The forecasts point to growing unemployment ahead; see table 3.3.

3.4 Growth in GDP and credit



Source: Reuters EcoWin

3.5 Growth in credit to households and firms



Source: Statistics Norway

Monetary policy has been actively applied to counteract the effects of the financial crisis. A renewed upturn in the Norwegian economy in autumn 2009 prompted the central bank to once against raise the key policy rate, the first in Europe to do so, to 1.75 per cent at the end of the year. The still low interest rate is keeping down household interest expenditure and continuing to provide positive impulses to household demand.

The cyclical downturn caused growth in credit to the non-financial private sector (households and firms, but also including municipal administrations) from domestic sources (C2) to recede to 4.1 per cent at end-2009, mainly as a result of a steep fall in corporate credit growth; see chart 3.5. Total annual growth in credit, including credit from foreign sources (C3), declined as shown in chart 3.4. Although slower, credit growth remains higher than nominal GDP growth for Mainland (non-oil) Norway. Foreign

borrowing to firms in the mainland economy continues to show strong growth, while credit to the oil sector is slowing.

#### Real estate markets

#### International real estate markets

Developments in housing markets have played a significant role for the economic contraction in many industrial countries. Low interest rates and an ample supply of credit from the millennium onwards kindled the formation of price bubbles in several countries. When interest rates rose, the economy went into reverse and the financial crisis was an undeniable fact, and many households found it difficult to service their mortgages. Rising joblessness further aggravated debt problems, causing house prices to fall dramatically. This was true in the US and UK in particular, although housing markets in Ireland, Spain and Denmark showed a similar trend. The setback was particularly marked in the Baltics where property markets have collapsed in the wake of the financial crisis. The past half year has seen signs of improvement in a number of countries' housing markets. In the UK prices of existing homes rose through 2009 while the fall slowed in the US. The picture is largely due to the pronounced interest rate reduction and temporary public measures put in place to stimulate the housing markets. What will transpire when the stimulus measures are scaled back is uncertain. Household consumption, which is the most important driver of GDP growth in many western countries, above all the US, will be weak so long as house prices fall and households repay debt.

The financial crisis has brought a steep fall in prices of commercial property in the industrialised countries, although some signs of stabilisation were noted in the second half of 2009. Sales picked up in the euro area, particularly in the fourth quarter of 2009, with prices continuing to fall. In the UK market prices rose in 2009 but are still far below the 2007 peak. The picture in the US is far poorer. Prices are still falling on a 12-month basis and bank losses on loans to commercial property are expected to increase significantly ahead. Small US banks in particular have substantial exposure to commercial property.

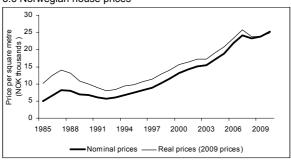
#### Norwegian real estate markets

Growth in house prices quickened considerably in 2009. After falling by about 13 per cent between the peak in summer 2007 and end-2008, house prices were in January 2010 back at the peak level according to real estate agency statistics. In 2009, as previously, prices of apartments rose most. In January 2010 house prices were 13.1 per cent higher than in January 2009. Compared with the previous trough year in the Norwegian house price cycle (1992), house prices at the start of 2010 were all of 347 per cent higher. The real rise in prices in the period was 212 per cent. Prices of apartments rose far more than prices of detached dwellings in this period. Statistics Norway's price index for existing dwellings shows substantial regional differences in price trend. Prices in Stavanger have risen more than 50 per cent since 2005, while prices in Trondheim and Bergen by a mere 18 per cent. The period 1992 to 2010 has seen sizeable fluctuations in the rate of house price growth. The standard deviation (annualised) is estimated at about 10 per cent.

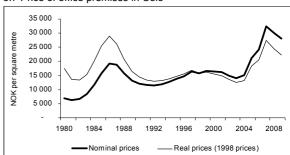
In the past year the Norwegian housing market has shown a different trend from international housing markets, probably as a result of the high proportion of floating interest rate contracts on home mortgages, the 'swap' arrangement at Norges Bank and a weaker rate of increase in unemployment. In 2010 Statistics Norway expects house prices to rise by 7.2 per cent.

At the same time as house price growth has picked up, sale periods have increased and the number of sales has fallen compared with before the financial crisis. Hence the differences in the housing market appear to have been reinforced with attractive properties selling quickly and at high prices, while less sought-after dwellings are proving harder to sell. In January 2010, 12,870 dwellings were registered for sale at Finn.no, compared with 21,871 in the peak month December 2008. Sales of existing homes picked up towards the end of 2009. According to Statistics Norway there was an increase of 21 per cent in registered property sales on the open market from the fourth quarter of 2008 to the fourth quarter of 2009; the number was almost back to the level recorded in the fourth quarter of 2007.

#### 3.6 Norwegian house prices



3.7 Price of office premises in Oslo



Sources: NEF, EFF, FINN.no and ECON Pöyry

Source: OPAK

In the past two years the market for commercial property has been marked by falling market values, lower rental prices, increased vacancy rates and low sales. However, autumn 2009 saw signs of improvement when cautious optimism and an increased willingness to invest spurred higher sales. Concurrently the fall in rental prices has slowed in light of an improved labour market and fewer bankruptcies than previously expected. However, vacancy rates are growing, and are now estimated to peak at about 8 per cent in 2010. 2009 saw 28 per cent less floorage developed for commercial and public sector buildings than in the previous year. (See chapter 7 for further details of the market for commercial property.)

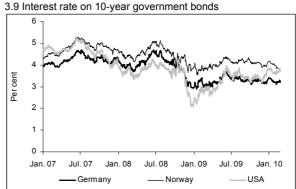
## Securities markets

Norwegian non-financial firms, life insurance companies and pension funds have substantial exposure to the stock market, a market where prices vary widely over time. Norwegian households have some exposure to shares, while banks' investment in the stock market is minimal. The stock market is an important source of finance for financial and non-financial firms. A fall in share prices affects households' expectations and wealth situation and weakens firms' financial soundness, leading to reduced consumption and investment. At the same time firms find it more difficult to raise new capital. A stock market crash can in the worst case lead to financial instability or aggravate an already adverse trend in the economy. Life insurers, pension funds and banks also have large investments in the bond market, although value changes in these investments are smaller than those observed in the stock market. The bond and money markets are an important source of finance for banks. The financial crisis has shown that this source can dry up in turbulent times. Foreign investors have invested heavily in both the Norwegian fixed income market and stock market. Foreign investors are more likely to reduce their exposure to Norwegian securities in an economic slowdown.

## Securities markets in 2009

After steep falls in international and Norwegian stock markets in 2008, a substantial recovery ensued in 2009. The turning point came in March after a number of companies reported better-than-expected results. An improved business climate also encouraged greater risk willingness among investors. This led to an upturn both in US and European stock market, and for the year as a whole share prices measured by S&P 500 and Eurostoxx rose by 23.5 and 24.4 per cent respectively. The Oslo Stock Exchange performed significantly better, with an increase of all of 68.4 per cent in the Benchmark Index from end-2008 to end-2009. The particularly strong recovery on the Oslo Stock Exchange is ascribable to high commodity prices and a better trend in the Norwegian real economy compared with most industrial countries. In the first two months of 2010 international and Norwegian stock markets declined, in part as a result of disquiet over central government finances in a number of industrial countries.





Source: Reuters EcoWin

Source: Reuters EcoWin

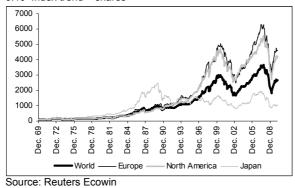
The financial crisis and the ensuing market turmoil prompted investors to seek secure investment alternatives, putting government bond rates under heavy pressure. At the start of 2009 the yield on US 10-year government bonds was as low as 2 per cent, as shown in chart 3.9. In keeping with market actors' increased risk willingness, combined with growing inflation expectations due to central banks' large supply of liquidity, government bond yields rose through 2009. By year-end the yield on US 10-year government bonds had risen to 3.8 per cent while equivalent yields in Germany and Norway had risen to 3.4 and 4.3 per cent respectively. In the course of 2009 the spread between yields on various countries' government bonds widened appreciably, with countries with large budget deficits and high public debt seeing a substantial rise in rates. This was particularly true of Greece where developments have sparked uncertainty in relation to the euro collaboration ahead. Between year-end and the start of February a renewed slight decline was noted in government bond yields.

# Uncertainty and risk in the securities markets International stock markets

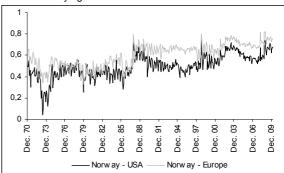
European stock markets turned down in May 2007, whereas both the North-American portfolio and the world market portfolio peaked in October 2007; see chart 3.10. In the period to February 2009 these markets plunged about 50 per cent. After index values began to rise anew, the value increase for the three regions to the end of February has varied between 46 and 55 per cent. In February the indexes were 25 to 27 per cent below the maximum, and still somewhat short of the 2007 peak.

The international stock markets are highly risky, see chart 3.10, and have in several instances risen to levels that cannot be explained in terms of underlying fundamentals. The ensuing price falls have been very substantial. Non-financial firms, life insurers and pension funds (and the Norwegian state) invest considerable resources in these markets. While this is positive since it helps to diversify the share portfolio, it concurrently increases vulnerability to international developments.

3.10 Index trend - shares



3.11 Time varying correlations - shares



Sources: Reuters EcoWin and Finanstilsynet

The international stock markets are closely interwoven. Information flows freely across borders and is normally available in the markets simultaneously. High positive correlation between returns in two markets means that above-average return in one market is on average accompanied by above-average return in the other market. Similarly, below-average return in one market is followed by below-average return in the other market.

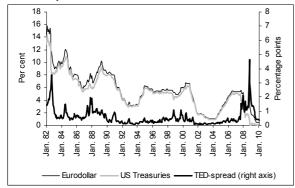
The correlations between, respectively, the return in the Norwegian market and in the US market and between the return in the Norwegian market and in the European stock markets for the entire period is estimated at respectively 0.50 (US) and 0.60 (Europe). The correlations appear to have increased over time; see chart 3.11. This tallies with international results. The increased correlations indicate that the Norwegian stock market has become more integrated with the international stock markets. As a result, international stock market crashes will rapidly feed through to the Norwegian market, and the same is true of the build up of bubbles in the international arena. A quicker rate of spread poses greater challenges to economic management in general and to financial stability in Norway.

## International money and bond markets

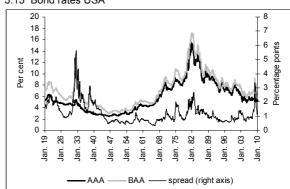
Interest rates in the international money markets fell substantially in the period from spring 2007 to February 2009. The rate on US three-month government bonds turned down as early as May 2007, while the fall in the eurodollar started in October 2007. The level of eurodollar rates has never been lower than at the end of February 2010; see chart 3.12. The marked decline is due to governmental monetary policy responses to the financial crisis.

The difference between the rate on eurodollar deposits and US Treasuries (the TED spread) peaked at 4.6 percentage points (460 base points) in October 2008, which was far higher than normal. This spread is a much used indicator of liquidity and credit risk in the money market. The spread is at a normal level.

#### 3.12 Money market rates USA



3.13 Bond rates USA



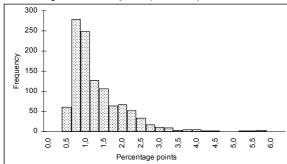
Source: Federal Reserve

Source: Federal Reserve

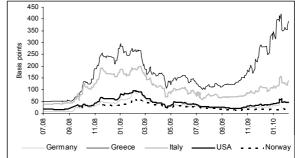
Chart 3.13 shows the rates on US corporate bonds with low and high credit risk and the difference between these rates for the period 1919 to 2009. For AAA-rated bonds the rate is at its lowest level since the 1960s. Between that time and the present there has been a long period of relatively high inflation (the 1970s and early 1980s). For much of this period rates on AAA and BAA-rated bonds largely moved in step. The exceptions refer to turbulent periods in the economy such as the crisis in the 1930s and the financial crisis in 2007-2008. The average spread for the entire period is put at 1.2 percentage points. A peak of 5.6 percentage points was reached during the crisis in the 1930s. In the post-war period the spread was at its highest in December 2008 when it reached 3.4 percentage points. At end-January 2010 the spread was at a level below the average for the period, which is ascribable to normalisation of risk aversion and improved prospects for the future.

The empirical distribution of the credit spread is asymmetric, and risk systems that are calibrated on data from normal periods or which presuppose a normal distribution of the risk factors will therefore predict too low risk; see chart 3.14. Both skewness and fat tails are highly important in relation to assessments of stability in the financial system, pricing of risk and the level of various types of buffers. Right skewed distributions entail a greater probability that the realised outcome will be significantly higher than the expectation than that it will be substantially lower. Distributions with fatter tails than the normal distribution have a greater likelihood of extreme outcomes in both directions than does the normal distribution.

3.14 Histogram - credit spread (AAA-BAA)



3.15 CDS spread on nation states



Source: Federal Reserve

Source: Reuters Ecowin

Credit spreads in the international money and bond markets are substantially reduced in the period after the financial crisis peaked. This indicates market normalisation, probably very closely related to the governmental measures taken. These measures have concurrently significantly lowered interest rates both at the short and the long end of the maturity curve

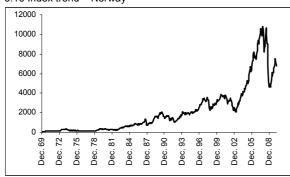
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Since autumn 2009 the spreads on credit default swaps where the underlying is a government loan or government bond have once again risen considerably for a number of countries; see chart 3.15. Put simply, their size reflects the expensiveness of insuring against bankruptcy or default on government debt. While this type of insurance is cheaper for Norway, it has become extremely expensive to ensure, for example, Greek national debt. The spreads have also risen markedly in the case of government debt issued by Spain, Portugal, Ireland, Italy and the UK. The increased credit spread is ascribable to the greater attention given to the state of government finances, which in many countries were greatly exacerbated by the fiscal measures needed during the financial crisis. There is a risk that the problems in the public sector will feed through to the private sector by way of the financial markets and financial institutions. Great uncertainty pervades the international money and bond markets. Any worsening of the situation will rapidly affect Norwegian credit and liquidity prices.

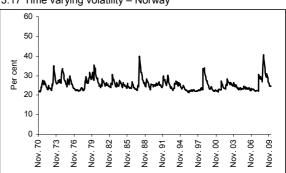
### Norwegian stock market

From its index peak in October 2007, the stock market plunged by about 57 per cent to its trough in March 2009. The market has subsequently risen by 47 per cent to the end of February 2010, but is still 37 per cent below the peak recorded before the crisis took hold. Several sub-periods have seen a relative fall in share prices of about the same margin as during the financial crisis in 2008; see chart 3.16.

3.16 Index trend - Norway



3.17 Time varying volatility - Norway



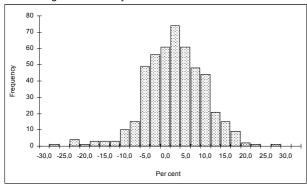
Source: Reuters Ecowin Sources: Reuters EcoWin and Finanstilsynet

Rates of return vary widely. Volatility (annualised standard deviation) for the period 1970-2009 is estimated at almost 26 per cent, entailing that a value fall or a value increase of 26 per cent in the course of a year would be relatively common. In 1979 the index rose by about 180 per cent, whereas the fall in 2008 was about 54 per cent. The decline in 2008 is equivalent to about 2 standard deviation. A price fall of this magnitude is a relatively rare occurrence, although more frequent than many expect.

Risk varies widely over time; see chart 3.17. Volatility during the share crash in autumn 1987 is estimated at more than 40 per cent, during the Russia crisis in 1998 at about 35 per cent and during the present crisis at just over 40 per cent. The empirical distribution of returns in the Norwegian stock market is skewed to the left and has fatter tails than the normal distribution; see chart 3.18.

International surveys indicate that the stock market is at times priced too high in relation to underlying fundamentals, and that bubbles burst at regular intervals. These factors make it risky to invest in shares. The recent vigorous increase in prices has to some extent been corrected by the price fall in January and February 2010.

#### 3.18 Histogram of monthly rates of return

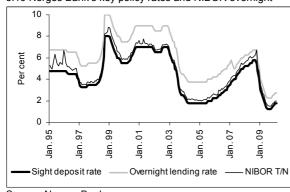


Source: Reuters Ecowin and Finanstilsynet

## Norwegian money and bond markets

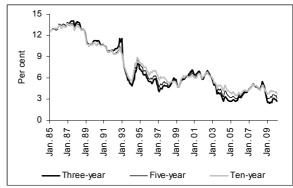
The level of interest rates in the money market shows how costly it is for firms and financial institutions to borrow short term. Interest rates in the money market are largely determined by Norges Bank's key policy rates and liquidity supply; see chart 3.19. The price of short-term bank funding directly affects banks' lending rates with varying lag times. Money market rates at end of February 2010 were very low.

3.19 Norges Bank's key policy rates and NIBOR overnight



Source: Norges Bank

3.20 Government bond rates



Source: Norges Bank

The difference (spread) between short rates of private institutions and government rates with the same maturity expresses the price of credit risk. The spread rose substantially in the course of autumn 2007 and remained relatively stable up to autumn 2008 when it showed a further rise. The three-month spread (Norwegian Interbank Offered Rate less Treasury bill rate) is now roughly on a par with the average for the period before the crisis started. Conditions in the money market in general have normalised.

The level of bond yields reflects inter alia market actors' inflation expectations. In step with falling inflation, interest rates in the government bond market have also been significantly reduced; see chart 3.20. At end-February 2010 the three-year rate was below 3 per cent and the 10-year rate below 4 per cent, which is low compared with the historical interest rates within the same inflation regime.

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Government bond yields fell markedly at the time of the financial crisis. This is because government securities are, relatively speaking, more attractive in times of crisis. The monetary policy action taken pulled in the same direction.

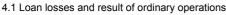
Turbulence in the money and bond markets may cause a significant increase in funding costs both for financial institutions and households, as shown during the financial crisis. In the worst case liquidity is weakened to the point where it becomes difficult to fund new business and refinance existing business. Norwegian interest rates are currently low in historical terms. Hence risk ahead is essentially on the upside. Higher rates lead both to higher funding costs and to falling values in bond portfolios. In the somewhat longer term, higher interest rates will lead to higher return on investment portfolios. The price of credit and liquidity risk was for some time low in the run-up to the financial crisis. The international macroeconomic situation, and especially government authorities' handling of the crisis measures, will be crucial for the trend in the price of credit and liquidity risk at both the short and long end of the maturity spectrum in the period ahead. Over time risk premiums must reflect the underlying risk, and it is by no means evident that risk premiums in the longer term will remain at the low level seen prior to the crisis.

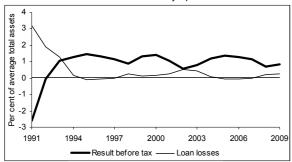
# 4. Profitability and financial soundness

Financial institutions' profitability and financial soundness need to be assessed in light of the trend in economic conditions and markets discussed in Chapter 2. The present chapter summarises results reported in 2009 by banks, life insurers, investment firms and pension funds. The results of finance companies, mortgage companies, non-life insurers, investment firms and fund management companies along with the largest Nordic financial conglomerates are also covered.

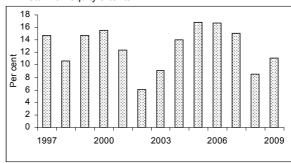
## **Banks**

Norwegian banks have thus far emerged well from the financial crisis compared with banks in other European countries. Norwegian banks' equity capital was of better quality than that of their counterparts in most other countries. Their investments in securities based on US subprime loans were minimal and they were little exposed to Icelandic banks, Madoff, Lehman etc. This, combined with moderate loan losses, explains why there was no solvency crisis in Norway (see chapter 1). No Norwegian-owned banks have ceased operations as a result of the financial crisis.





4.2 Return on equity after tax

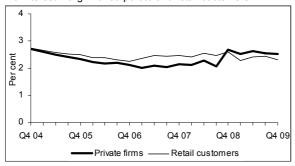


After distinctly weaker results in 2008 than in the preceding four years, mainly as a result of increased loan losses and losses on securities, 2009 proved to be another good year for Norwegian banks. The banks (parent banks) recorded an aggregate pre-tax profit of NOK 26.8 billion in 2009, which was NOK 7.1 billion better than in 2008. In terms of average total assets (ATA) this was an increase of 0.1 percentage point to 0.8 per cent. Return on equity rose from 9 per cent to 11 per cent. High revenues from securities and currency trading maintained profits as a percentage of ATA, and compensated for the decline in net interest revenues and higher loan losses. Six banks reported a deficit in 2009, most of them newly established. This compares with 20 banks in 2008, of which three were large (ATA in excess of NOK 10 billion).

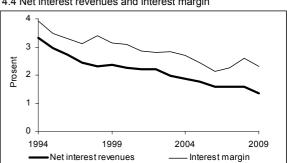
The most important revenue component for Norwegian banks is net interest revenues, which made up almost 80 per cent of banks' revenues (other than securities earnings) in 2009. In terms of ATA net

interest revenues fell from 1.58 to 1.35 per cent from 2008 to 2009. After a period of interest margins that were probably too low to cover the risk faced, banks raised the risk premium on lending due to higher credit risk from autumn 2008 onwards. This increased their margins on lending to the business sector. However, weaker growth, higher levies to the Banks' Guarantee Fund and lower margins on deposits brought a fall in net interest revenues. In the period ahead, intense competition for depositors' and residential borrowers' funds could lead to margins being once again reduced to a lower level. In addition, the requirement of a larger proportion of long-term financing, which is normally costlier than short-term financing, and lower return on liquid assets, could bring a reduction in net interest revenues.

4.3 Interest margin for corporate and retail customers

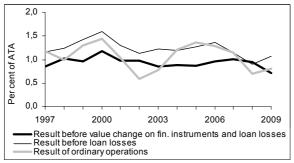


4.4 Net interest revenues and interest margin

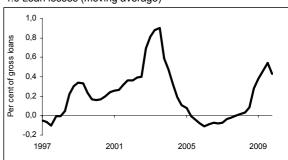


Any fall in banks' net interest revenues puts pressure on their underlying earnings. Pre-tax profits and revenues from securities and currency trading showed a decline for the banks as a whole. For many years banks have focused on expenses and other revenues in order to maintain satisfactory profits. Expenses in per cent of total assets have fallen over time, but a continued decline in net interest revenues and the possibility of heavier loan losses call for further cost reductions. Revenues from commissions and charges have fallen slightly due to lower business volumes and a larger proportion of charge-free services. Securities and currency trading have made considerable contributions to banks' results, but these revenues vary with the trend in securities markets. In 2009 earnings in this area were good, and the largest banks in particular recorded substantial revenues from trading in currency and fixed income instruments. Increased revenues on shares also contributed to a particularly high level of incomes in 2009. Revenues from financial instruments accounted for 43 per cent of banks' overall pre-tax profit.

4.5 Result trend for all banks

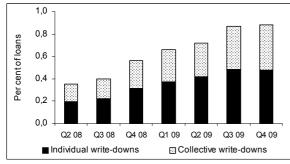


4.6 Loan losses (moving average)

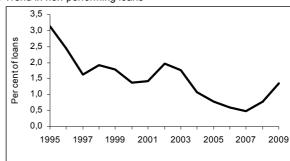


Many years of low loan losses have brought good results for banks. Towards the end of 2008, and at the start of 2009, loan losses rose. Later in 2009 losses stabilised and edged down slightly towards the end of the year. Loan losses were lower than feared in 2009, and below the levels seen in the previous economic contraction in 2002 to 2003. Norwegian banks, not including DnB NOR's exposure in the Baltics through DnB NORD, recorded loan losses of NOK 9 billion in 2009, i.e. 0.4 per cent of their gross lending. When the losses incurred on DnB NORD are included, the overall loss figure was close to NOK 13 billion. For the banks as a whole, the majority of write-downs were on exposures to the business sector. Both individual and collective write-downs on exposures in the fields of shipping, acquisition financing and commercial property have risen. Some increase in write-downs on credit card portfolios has also been noted.

#### 4.7 Trend in loan write-downs



4.8 Trend in non-performing loans

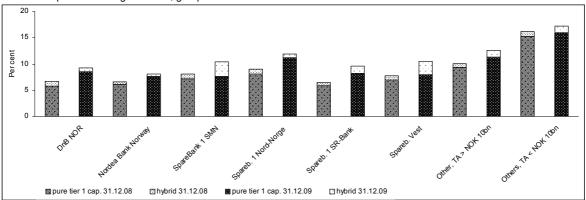


The volume of defaulted exposures rose markedly in 2008, and continued to do so in 2009. Defaults levelled off somewhat in the second half-year, and the level in relation to loans was still moderate at the end of 2009. Defaults on loans to corporates in particular have risen.

#### Financial soundness

Banks launched measures to improve their financial position in 2009 in an effort to tackle a period of lower activity in the economy and higher requirements on both the level and quality of their tier 1 capital. The largest Norwegian banks have been authorised to use internal models (IRB) to computer capital charges for credit risk.

4.9 Tier 1 capital at Norwegian banks, group



As shown in chart 4.9, the IRB banks strengthened their tier 1 capital adequacy in the course of 2009. Of the weighted increase of 2.5 per cent, 1.5 percentage points refer to increased tier 1 capital through profit retention and capital obtained from the State Finance Fund and the market. SpareBank 1 Midt-Norge and Sparebanken Vest availed themselves of the State Finance Fund to bolster their capital, while DnB NOR and SpareBank 1 SR-bank brought in capital from the market when the markets' functioning improved during autumn 2009. In order to prevent unintended large reductions in the capital requirement for IRB

banks, lower limits for the capital requirement, based on the earlier framework (Basel I) were established in a transitional period. In 2009 this 'floor' was 80 per cent of the Basel I requirement, a floor that is continued in 2010 and 2011. Both the change in the floor and the reduction in risk-weighted assets have brought some increase in tier 1 capital adequacy.

Other banks use the standard method to compute capital. Average tier 1 capital adequacy for banks with total assets in excess of 10 billion rose by 2.6 percentage points to 12.6 per cent by the end of 2009. For the smallest banks, tier 1 capital adequacy rose by 1 percentage point to 17.2 per cent in the same period. Several mid-size and small banks strengthened their capital position by recourse to the State Finance Fund.

Banks' tier 1 capital can contain a maximum of 15 per cent hybrid capital. With the establishment of the State Finance Fund this ceiling was raised to 20 per cent. Capital from the Fund was granted mainly in the form of tier 1 hybrids, i.e. hybrid capital. In other countries hybrid capital can constitute 50 per cent of overall tier 1 capital. Norway has been more restrictive than other countries in terms of capital eligible for inclusion in tier 1 capital. Norwegian banks' regulatory capital has accordingly been of higher quality than has been the case in many other countries. This was an important regulatory device that reduced Norwegian banks' vulnerability.

As mentioned in chapter 2, the Basel Committee is considering supplementing the capital adequacy requirements with a non-risk-weighted constraint, the leverage ratio, which is likely to be formulated as the ratio of high quality capital to a measure of non-risk-weighted exposure. Norwegian institutions have large exposure to home mortgage loans with a low risk weighting, enabling them to maintain high exposure ratios under non-risk-weighted capital requirements. Setting minimum requirements for leverage ratios may therefore have consequences for Norwegian institutions in general, and residential mortgage companies in particular. In summer 2009, under CEBS auspices, Finanstilsynet participated in a calculation study of the impact of introducing leverage ratio requirements. In Norway a level of 2 per cent would affect only three such mortgage companies. The majority (of the total assets) of Norwegian banks have a leverage ratio in the range 3-3.5 per cent. The capital requirement floors, based on the risk-insensitive Basel I requirement, mean that for the time being the figures reported by IRB institutions do not reflect risk-based capital requirements. In some other countries a leverage ratio of 2 per cent would affect a large proportion of the bank sector.

Table 4.1 Leverage ratios as of Q1 2009. Share of aggregate total assets in brackets. Branches not included

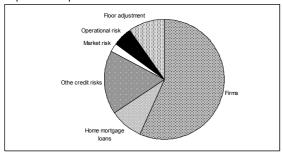
	No. of institutions	LR < 2 %	LR < 2,5 %	LR < 3 %	LR < 3,5 %	LR < 4 %
Savings banks	121	0 (0 %)	0 (0 %)	3 (10 %)	6 (75 %)	8 (79 %)
Commercial banks	16	0 (0 %)	0 (0 %)	1 (5 %)	3 (80 %)	5 (90 %)
Mortgage companies	18	3 (60 %)	5 (85 %)	6 (85 %)	7 (90 %)	10 (94 %)
Finance companies	32	0 (0 %)	2 (6 %)	2 (6 %)	2 (6 %)	3 (8 %)

## A closer look at the IRB banks

Under IRB, risk weights are calculated for each loan exposure using the banks' own estimates of default probabilities and their own estimates, or government-determined values, of loss ratios in the event of default. The risk weights are intended to reflect the risk associated with the exposures to a greater degree than the schematic values used in the standard model. However, the risk weights will also reflect characteristics of the underlying models. The rules go a long way towards requiring the estimates to

reflect long-term risk and explicitly require loss ratio estimates to be based on cyclical downturns. However, banks have some leeway to choose how far estimated default probabilities apply through the economic cycle or vary with it. Despite extensive collaboration between supervisors in various countries, particularly in the Nordic region, supervisory practice may well differ so that some banks' models may be less conservative than others.

4.10 Distribution of capital requirements on type of risk and exposure – representative IRB banks



As chart 4.10 shows, credit risk posed by corporate exposures accounts for a substantial portion of the capital requirement for the IRB banks, and risk weights for such exposures are thus the most important single factor. The large difference in capital requirements between residential and corporate exposures reflects the difference in risk weighting between the exposure types. This difference in risk weighting also applies under the standard method, albeit to a slightly lesser extent.

Banks' public reporting of parameter values (pillar 3 reporting) shows wide variations in banks' risk weighting of firms: at the start of 2009 average risk weights varied between 60 and 110 per cent (100 per cent risk weight under the standard method). These risk weights are relatively high compared with the major Nordic banks. The largest Danish banks using the most advanced IRB method (including use of own loss ratio estimates in the event of default, with extended rights as regards use of eligible collateral) reported 35-40 per cent average risk weights for firms, while others reported average values in the range 50-75 per cent. In the case of home mortgage loans, most Nordic IRB banks employ average risk weights of 10-15 per cent (35 per cent risk weight under the standard method provided the loan-to-value ratio is below 80 per cent).

The mark-up to capital requirements consequent on the transitional arrangements varies widely between banks. Since the floor is based on the risk-insensitive Basel I framework, it may have a major impact for banks that are heavily exposed to low-risk segments such as home mortgage loans.

#### Banks' assessment of actual capital needs

In addition to the minimum capital requirements under the pillar 1, pillar 2 of the capital adequacy framework requires banks, finance companies and mortgage companies each year to conduct an Internal Capital Adequacy Assessment Process (ICAAP) to ascertain their need for capital. This need covers risk not taken into account in the calculation of the minimum requirement under Pillar 1. The capital need also covers risk associated with risk arising because quantification of risk and capital needs is based on uncertain methods and data. Institutions must also recognise that the capital need has to be forward-looking and reflect business plans and access to capital markets. The capital base must be sufficient to weather an economic downturn with negative results in which it is difficult to raise fresh capital in the market.

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> The supervisory authorities are required to evaluate the ICAAP process and the result of the process at the individual institution (Supervisory Review Evaluation Process – SREP). In 2007 ICAAP assessments were conducted of six IRB banks and seven other banks that opted to employ the standard method to compute capital. In 2008 the agency provided responses on ICAAP documentation from 137 banks and 17 finance companies and mortgage companies. About 70 per cent of them were asked to consider measures to increase their actual tier 1 capital ratio and/or raise their tier 1 capital ratio target. In 2009 priority was given to maintaining a close dialogue with institutions which had been asked in the previous year's ICAAP response to increase their actual tier 1 capital ratio. In 2009 15 banks received a letter from Finanstilsynet citing low tier 1 capital adequacy and recalling that in connection with the ICAAP assessments for 2009 the agency would consider ordering them to increase their tier 1 capital adequacy. A total of 104 ICAAPs were evaluated in 2009, and more than 20 banks were requested to take steps to strengthen their tier 1 capital adequacy. The banks acknowledged the need to strengthen their capital base, primarily by retaining profit and via ordinary stock issues in the market or by recourse to the State Finance Fund. There was no need to issue formal orders in 2009, and Finanstilsynet expected the banks themselves to manage the process of providing information to the market about the measures taken by them.

> When evaluating the banks' ICAAPs, Finanstilsynet attaches importance to the management board's responsibility for the process and to the institution's actual tier 1 capital target. An assessment is made of the adequacy of the buffer between estimated capital need, the bank's capital target and actual capital ratio on the one hand and institutions' strategy and overall risk on the other. Particular emphasis is given to institutions having sufficient tier 1 capital, since it is this capital which in the longer term can meet any losses (loss absorption in a going concern). This is also in keeping with signals from international supervisory authorities and the trend in financial markets.

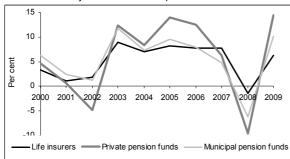
Finanstilsynet assesses on a continuous basis the need to ask banks to issue new stock, reduce risk, restrict operations or take other steps should tier 1 capital ratios fall towards internally stipulated minimum levels. The agency draws up overall risk assessments of the largest bank groups. These are internal analyses designed to compare risks in the largest banks and are included in the agency's ICAAP evaluation.

## Life insurance companies and pension funds

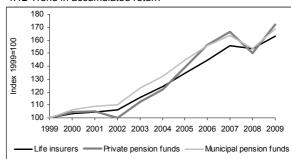
Norwegian life insurers and pension funds were in 2008 affected by the financial crisis through the hefty turbulence in the share and fixed income markets. The stock market slump in particular led to impaired capital returns. The upturn in the securities markets has improved the situation both for life insurers and pension funds in 2009. Adjusted return on capital reported by life insurers was 6.2 per cent in 2009 compared with minus 1.6 per cent in 2008. Although pension funds also have minimum requirements with regard to annual return, their share divestments were smaller than those of life insurers. Private pension funds in particular had a large share component in their balance sheets in 2008 and on into 2009. This brought very weak return on capital in 2008 and a sizeable improvement in 2009. Adjusted return on capital was 14.4 per cent at the private pension funds compared with minus 9.6 per cent in 2008. Equivalent figures for municipal pension funds were 10.1 per cent and minus 6.1 per cent.

For life insurers and pension funds alike the upswing in Norwegian and international stock markets brought increased share portfolio values in 2009. For life insurers the positive trend in share prices had a substantial impact on results despite, historically speaking, low equity components. Interest revenues on bonds and short-term paper also made a positive contribution to the profits of life insurers and pension funds. Held-to-maturity bonds ensure a stable current return while assuring unchanged asset values in the accounts. Bond portfolio valuation in fair value terms depends largely on portfolio composition, and there are wide differences between the companies in this respect. Credit spreads narrowed significantly in 2009, and this had a positive profit effect for companies with a high proportion of credit bonds in their portfolios.

4.11 Trend in adjusted return on capital

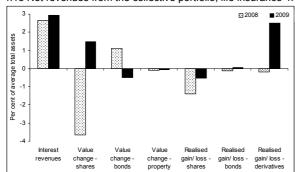


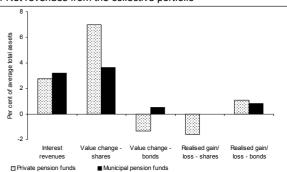
4.12 Trend in accumulated return



Investment property accounted for about 15 per cent of life insurers' collective portfolio. In view of the highly uncertain trend in the property market, a number of companies wrote down property value in 2009. Due to the small number of transactions in the market, correct property valuation poses a challenge to insurers. The regulations governing insurers' annual accounts set substantial information requirements in relation to valuation of investment properties, including in regard to valuation methods. Finanstilsynet has set up an internal working group to look into life insurers' methods for valuation of investment properties.

4.13 Net revenues from the collective portfolio, life insurance 4.14 Net revenues from the collective portfolio



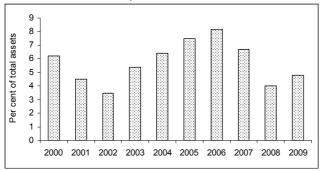


#### Financial soundness

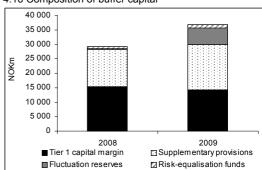
For life insurers and pension funds, financial soundness is imperative with a view to meeting continued uncertainty in the international economy and markets and to ensure good, long-term asset management. Life insurers' buffer capital was heavily reduced in 2008 due both to the use made of supplementary provisions and because fluctuation reserves were exhausted. However, sound ongoing risk management ensured that there was no danger of companies being unable to discharge their obligations. Life insurers'

buffer capital is designed to cushion their market risk and other risk. Buffer capital comprises surplus tier 1 capital, supplementary provisions with an upward limit of one year's interest guarantee (less supplementary provisions used to compute regulatory capital), fluctuation reserves and risk equalisation funds. Supplementary provisions are exclusively customer assets, fluctuation reserves are mainly customer assets while tier 1 capital is the company's assets.

4.15 Life insurers' buffer capital

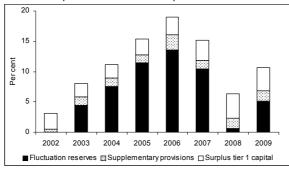


4.16 Composition of buffer capital

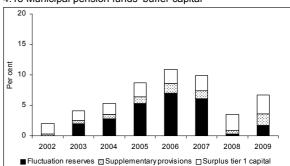


Good results and increased fluctuation reserves and supplementary provisions strengthened buffer capital in 2009. At year-end buffer capital was NOK 8 billion higher than at the end of 2008, bringing it to 4.7 per cent of total assets, an increase of 0.9 percentage points from the previous year. All life insurers met the minimum capital adequacy requirement and the solvency margin requirement at the end of 2009.

4.17 Private pension funds' buffer capital



4.18 Municipal pension funds' buffer capital



Pension funds' buffer capital also increased, rising to 10.7 per cent of private pension funds' total assets and 6.7 per cent of municipal pension funds' total assets. As in that case of life insurers, fluctuation reserves grew substantially at private pension funds as a result of the stock market recovery in 2009. The fluctuation reserves are now the clearly largest element of buffer capital, followed by surplus tier 1 capital. This is partly related to the fact that a number of municipal pension funds were supplied with capital from their sponsors in 2008. At the end of 2009 pension funds' capital adequacy averaged 15.0 per cent, compared with 15.4 per cent at the end of 2008.

## Follow-up of life insurance companies and pension funds

Finanstilsynet attaches importance to strengthening these companies' risk-bearing capacity. Life insurers' supplementary provisions were at a uniformly low at the start of 2009, and Finanstilsynet wrote to all life insurers in December 2009 calling for a significant portion of the surplus return in 2009 to be devoted to strengthening supplementary provisions. Finanstilsynet expected the companies, when assessing the need

to bolster supplementary provisions, to have an eye to the level of buffer capital and any need to strengthen premium reserves. To ascertain how the companies planned their year-end appropriations, a survey was made of large life insurers in January 2010. The additions to supplementary provisions were assessed in conjunction with the increase in asset revaluation reserves, the increase of technical provisions and the companies' total buffer capital. The survey confirmed that the companies complied with Finanstilsynet's request, and no orders needed to be issued.

After the pension fund survey conducted by Finanstilsynet in autumn 2008, a close dialogue was held with a number of pension funds in need of recapitalisation. In the first half of 2009 some pension funds had again been supplied with capital on account of weak results in 2008. The level of pension funds' supplementary provisions varied widely from company to company at the start of 2009. After a general assessment of expected surplus returns in 2009, pension funds were asked in December 2009 to assess the need to bolster supplementary provisions based on the same criteria as for life insurers.

Finanstilsynet is required for prudential reasons to stipulate the highest interest rate that life insurers and pension funds can apply when calculating premiums and technical provisions. Finanstilsynet resolved in August 2009 not to change the maximum calculatory interest rate in life insurance after 1 January 2010. The decision was prompted inter alia by the limited effect that a reduction in the calculatory interest rate would have on the average interest guarantee. Finanstilsynet was expected at the end of 2009 to consider the merits of ordering life insurers and pension funds to make supplementary provisions in connection with closing of the books for 2009. Moreover, life insurers were enjoined to take all relevant factors into account when pricing the interest guarantee, and to intensify efforts to conform to the requirements regarding valuation of insurance liabilities consequent upon Solvency II.

A new directive covering risk-based solvency rules for insurance companies (the Solvency II Directive) was adopted by the European Parliament on 22 April 2009. The Directive will supersede all current EU directives in the insurance field. The Solvency II framework is to be transposed into national insurance legislation by the end of October 2012, in other words the new rules will apply to the full from and including the accounting year 2013. In October 2009 Finanstilsynet wrote to all insurers requesting a report on processes initiated in preparation for Solvency II. Insurers were also asked for their preliminary assessment of capitalisation needed under the new framework. Twenty-five insurance companies are considering using internal models to compute parts of the solvency requirements, as permitted under Solvency II. Developing internal models poses a challenge to insurers, as do the general requirements on governance and controls under the Solvency II framework. The capital needs of many companies are with a basis in the quantitative impact study QIS4 and stress tests reported to Finanstilsynet. Judging by the proposals tabled, the solvency requirements will be significantly tightened as a result of Solvency II, entailing major challenges for life insurers.

Under the existing business rules for life insurers, companies are paid for the risk they assume in their asset management through the price charged on the interest guarantee to their customers. Seen from the prudential angle, it is important that insurers take all risk factors into account in their pricing. Indeed this was a theme at meetings held by Finanstilsynet with the larger life insurers after the third quarter of 2009. The companies indicate that they calculate the price of the interest guarantee using their own models, but that due to the competition in the market they fail to achieve prices on a par with those implied by the

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calculations. Finanstilsynet will focus on this issue in its ongoing supervisory activities in the period ahead.

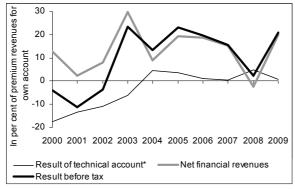
## Other financial institutions

**Mortgage companies** offer in the main mortgage loans to finance commercial business and house purchases. Mortgage companies' pre-tax profit, excluding Eksportfinans, was NOK 4.1 billion in 2009, NOK 1.4 billion higher than in 2008. In terms of average total assets, the result was stable at 0.5 per cent. Of 26 Norwegian mortgage companies, 15 were set up as residential mortgage companies, the majority as a result of the central government stimulus package, and started operations in 2009. Loans granted by residential mortgage companies totalled NOK 489 billion, and by end-2009 they had issued covered bonds worth NOK 379 billion.

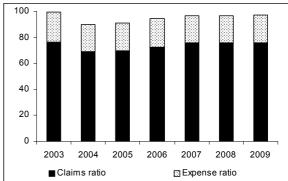
**Finance companies** offer various forms of special purpose financing to corporate and retail customers with the emphasis on leasing, factoring, car financing and consumer financing. Norwegian finance companies overall reported a pre-tax profit of NOK 2.3 billion in 2009, an increase of NOK 0.6 billion on 2008. Return on equity was 14 per cent in 2009 compared with 12 per cent the previous year. Nonperforming loans measured 3.7 per cent of gross loans, a substantially higher level than for the banks. This is partially because several of the largest finance companies are engaged in pure consumer financing without collateral (see chapter 7). Finance companies recorded negative lending growth in 2009.

The market for **non-life insurance** is a composite market featuring a range of different providers. The four largest non-life insurers (Norwegian and foreign) have a market share of 64 per cent measured by gross premiums due.

#### 4.19 Results in non-life insurance



4.20 Claims ratio and expense ratio (combined ratio)



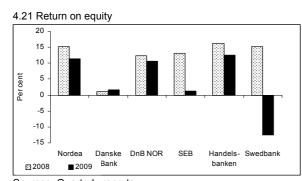
Non-life insurers recorded a profit of NOK 4.8 billion on ordinary operations in 2009, compared with NOK 0.5 billion in 2008 (excluding captive companies). The improvement is attributable to substantially higher net financial revenues. Competition has been intense in the non-life market for some time, making it difficult for them to raise premium levels. Even so, several new actors have entered the market, and companies have managed to increase their premium revenues in step with costs. As a result, the combined ratio (the ratio of claims and operating expenses as a percentage of premiums) has remained stable in recent years.

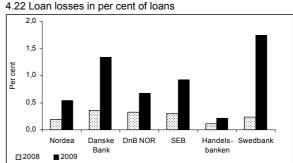
<sup>\*</sup> Less allocated return on investment

There are 154 Norwegian **investment firms**, of which 32 are banks. A distinction is drawn between investment firms that are banks offering investment services in connection with ordinary banking operations, and investment firms that are not banks. Banks' revenues from investment services largely derive from trading in debt and foreign-exchange instruments. Compared with 2008, revenues were up NOK 0.8 billion to NOK 7.6 billion. Operating revenues of **non-bank investment firms** were reduced by NOK 1.4 billion to NOK 6.8 billion in the same period. Their principal revenue components are related to stock issuance and advisory activity along with broking of equity and debt instruments, in addition to active management of portfolios on behalf of insurance companies, pension funds and private firms. The overall operating profit of these entities was NOK 1.0 billion in 2009, NOK 0.3 billion lower than in 2008.

There are 25 Norwegian **fund management companies**, 12 of which are also licensed to provide active management services. Securities funds are collective investment schemes and are independent legal entities. Hence capital invested in securities funds is not affected in the event of the management company's failure. Management companies' revenues largely consist of fees for managing securities funds. Their aggregate operating profit was NOK 1.0 billion in 2009, an increase of 40 per cent compared with 2008. Capital under active management totalled NOK 307 billion at the end of 2009. Total assets at securities funds rose in the same period by NOK 119 billion to NOK 407 billion, mainly due to a strong upturn in stock markets.

## Nordic financial conglomerates





Sources: Quarterly reports

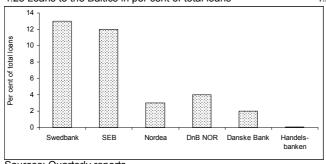
The results of the largest Nordic financial conglomerates were affected by the international financial crisis, and the negative trend in economies and markets in Eastern Europe in particular brought heavy loan losses and impaired profitability for some conglomerates. Return on equity at all the largest Nordic conglomerates was lower in 2009 than in 2008. For SEB and Swedbank in particular, substantial loan losses impaired profits. The year nonetheless saw a levelling off of loan losses. Swedbank, Danske Bank and SEB recorded the highest loan losses in per cent of loans. Where Danske Bank's losses are concerned, a significant portion was related to the Danish and Irish banking operations.

Swedbank and SEB have the highest exposure in the Baltics; about 12 per cent of their total loanable funds are on loan in the region. According to the quarterly trend in loan losses in per cent of loans to the Baltics, loss levels for Danske Bank and DnB NOR fell slightly in the autumn from a high level.

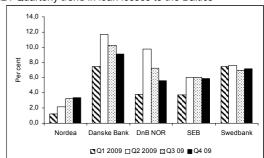
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Swedbank and SEB also incurred heavy losses in the fourth quarter. In DnB NOR's case loan losses in the Baltic business through DnB NORD accounted for about half of the group's total loan losses. For DnB NOR apart from DnB NORD, the write-down amounted to 0.33 per cent of the loan portfolio, whereas the corresponding figure for DnB NORD's business was 4.7 per cent. All in all, the DnB NOR Group's loan losses measured 0.67 per cent of loans in 2009.

4.23 Loans to the Baltics in per cent of total loans



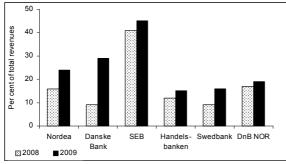
4.24 Quarterly trend in loan losses to the Baltics



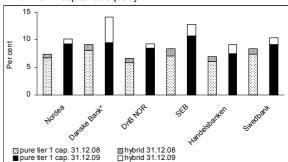
Sources: Quarterly reports

High volatility and increased bid/ask spreads in the market brought sizeable revenues from securities and currency trading at the largest conglomerates. In addition, customer activity related to currency and interest rate hedges was substantial due to uncertain market prospects. Decreased credit spreads on bonds and short-term paper also contributed to good results. Chart 4.25 shows revenues from securities trading in proportion to total revenues in 2008 and 2009 respectively.

4.25 Revenues from securities and currency trading



4.26 Tier 1 capital adequacy



\*Due to another interpretation of the transitional rules, Danske Bank's tier 1 capital adequacy must be viewed in light of a capital requirement of 10.1 per cent (10.7 per cent in 2008), not 8 per cent. Sources: Quarterly reports

Positive results at the largest Nordic financial conglomerates, with the exception of Swedbank, brought some strengthening of capital through operations. Concurrently several conglomerates raised capital in the markets. As a part of 'Bank Package II', Danske Bank received hybrid tier 1 capital from the Danish government. Financial conglomerates' improved financial soundness is also related to the fact that the risk-weighted assets floor was lowered to 80 per cent in 2009.

## 5. Risk factors

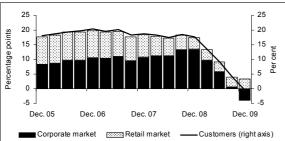
## Banks and credit risk

Credit risk is the risk faced by a bank or other credit institution that a claim or loan, or parts of such, will not be repaid. The total assets of banks, including residential mortgage companies, consist on average of close to 80 per cent loans. Credit risk is the chief risk facing Norwegian banks and other credit institutions.

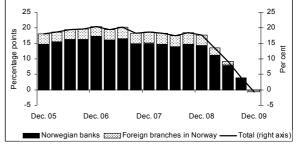
## Credit growth

Banks, including residential mortgage companies, account for the majority of lending in Norway and thus have a central position in the Norwegian financial system. Lending to the retail market accounts for the bulk of banks' loan portfolio – 53 per cent at the end of 2009. However, several years of vigorous lending growth to domestic and foreign firms have increased the corporate market's share of banks' overall lending to customers at the expense of the retail market. Almost 45 per cent of banks' gross lending to customers had gone to corporate customers at the end of 2009 compared with 38 per cent at the end of 2004. Norwegian banks have in particular increased their exposure to foreign firms, predominately shipping. Lending to foreign non-financial firms accounted for close to 9 per cent of banks' gross loans to customers at the end of 2009 compared with about 4 per cent in 2004.

5.1 Contribution to 12-month growth in lending to customers by sector and overall growth



5.2 Contrib. to 12-mth growth in lending to customers from Norw. banks and foreign banks' branches



Incl. residential mortgage companies

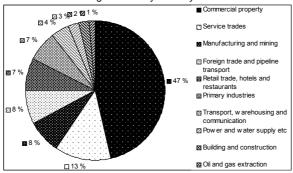
Incl. residential mortgage companies

Growth in bank lending (both from Norwegian and foreign branches) fell markedly in 2009, after several years of vigorous growth. Aggregate lending declined by 0.7 % from the end of 2008 to the end of 2009. As 5.1 shows, a negative growth contribution from the corporate market explains the overall fall in lending. Volume growth was weak because the economic downturn resulted in lower demand for credit from the corporate market and some tightening in banks' credit practice. In addition, a substantial appreciation of the Norwegian krone through 2009 caused the value of foreign currency loans to fall when translated to Norwegian kroner. However, loans to the retail market showed an increase.

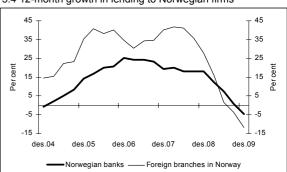
Foreign branches in particular have scaled back their activity in the Norwegian market after a very expansionary past few years. In the period 2005-2008 their lending rose by an average of 29 % annually before falling 4 % in 2009. Even so, despite growing strongly for a period, lending by foreign branches accounted for only 14 % of total lending at the end of 2009. Norwegian banks recorded annual growth of 18 per cent in the period 2005-2008, compared with close to zero growth in 2009.

Overall lending to domestic firms has fallen substantially, the loan volume falling by 6 per cent from Q4/2008 to Q4/2009. The decline over the four quarters was particularly marked in the third and fourth quarters of 2009, account being taken of exchange rate effects. Banks' credit practice was slightly less tight in this period. Towards year-end, credit growth was probably affected more by weaker demand than reduced provision. The slowdown in lending growth over the past year was particularly marked in relation to cyclically exposed industries, viz. commercial property, shipping, manufacturing and construction. As shown in chart 5.3, the bulk of bank lending is to commercial property (see chapter 7 for a closer look at banks' exposure to cyclically exposed industries).

5.3 Loans to Norwegian firms by industry

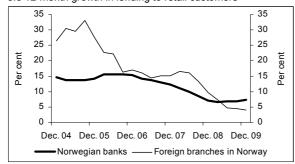


5.4 12-month growth in lending to Norwegian firms



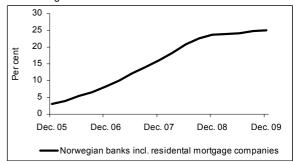
Banks' overall lending growth to retail customers has slowed significantly in recent years (see chart 5.5), but the growth rate stabilised through 2009 supported by a low interest rate level, increased consumer confidence and an upturn in the housing market. Overall bank lending to retail customers grew by 7 per cent from the fourth quarter of 2008 to the fourth quarter of 2009. The last three years in particular have seen strong growth in equity release loans secured by the borrower's dwelling (chart 5.6). The strong growth levelled off somewhat over the past year, and equity release loans accounted for 25 per cent of overall bank lending at the end of 2009.

5.5 12-month growth in lending to retail customers



Incl. residential mortgage companies

5.6 Equity release facilities' share of loans secured on dwellings

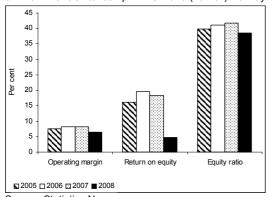


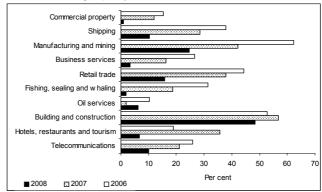
Incl. residential mortgage companies

## **Corporate sector**

The cyclical downturn, together with high cost growth, brought a reduction in corporate profits in 2008. Overcapacity and a weak trend in demand probably put firms' underlying earnings under further pressure in 2009. Increased lending margins maintained firms' interest expenses, despite lower key policy rates. In addition, many firms opted to retain labour pending a possibly rapid turnaround in the economy. Most industries recorded weak or falling turnover in the first half of 2009, but for some sectors the reversal came towards year-end. Whereas businesses in wholesale and retail trade and service trades reported increasing profits in the second half of 2009, manufacturing and construction reported continued low operating margins. Profits at listed mainland (non-oil) firms also improved during the second half of 2009. This is a reflection of Oslo Børs' domination by commodities and does not necessarily reflect unlisted Norwegian firms' profit trend.

5.7 Non-financial ltd. comp. in Mainland (non-oil) Norway 5.8 Debt-servicing capacity in selected industries





Source: Statistics Norway

Source: Norges Bank Result before tax and depreciation and write-downs in per

cent of bank and bond debt. Intra-group financing is not included. The industries are ranked by share of corporate sector debt. The industry with the highest share of debt is placed at the top

The negative trend in profitability combined with very rapid debt growth sharply reduced corporate debtservicing capacity in 2008. This was especially true in commercial property and shipping which together account for a large part of bank lending to the corporate sector. This sector's overall ability to service debt probably further declined in 2009 as a result of the weak profit trend.

Firms' financial soundness also weakened somewhat in 2008. Continued weak results in 2009 suggest that equity ratios were further reduced. Further, fresh equity capital has been in short supply for much of the corporate sector, despite high issue activity at Oslo Børs.

The weak trend in the Norwegian economy through 2008 and into 2009 brought a rapid increase in the bankruptcy rate, which edged back over the course of the second half of 2009. A total of some 3,300 bankruptcy orders were registered (excluding sole proprietorships and Norwegian-registered foreign firms), 43 per cent more than in 2008. Most firms in bankruptcy have been small with low turnover and few employees. The number of bankruptcies rose in all industries, with the largest increase in property management, construction and manufacturing. Low interest rates have eased the likelihood of firms going bankrupt in the short and medium term. According to Norges Bank's projections the bankruptcy rate will stabilise at a level lower than seen during the bank crisis in the early 1990s.

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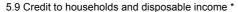
Activity levels in the Norwegian economy are expected to pick up, but growth will be moderate. Some upturn in production is also likely in the international economy, albeit from a low level. Borrowers' financial position will consequently improve. Although banks' credit risk on loans to corporates varies widely between individual industries, the improved growth prospects may suggest that overall credit risk is not increasing. The financial soundness of firms as a whole remains good and, with increasing growth in the Norwegian and international economies, firms' underlying earnings will improve. Concurrently mainland (non-oil) firms' investment activity is expected to show a further fall in 2010 which will hold down credit growth. This, together with a moderate wage growth, higher productivity growth and continued low interest rates, will improve firms' debt-servicing capacity in the period ahead.

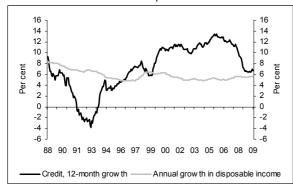
The trend varies widely across different industries, with construction and manufacturing in particular having experienced very hard times. About 60 per cent of Norwegian manufacturing is export-based, and the international cyclical setback has brought a substantial decline in production. While a brighter outlook for the world economy suggests better times for the export sector, a stronger Norwegian krone and quicker wage growth than among Norway's competitors pulls in the opposite direction. Finanstilsynet's survey of banks' risk assessment of loans to selected industries shows a significant increase in high-risk exposures in all segments between the third quarter of 2008 and the third quarter of 2009. Banks' highest exposure is to loans to commercial property and shipping, industries which still pose substantial risk. Debt-servicing capacity in commercial property and shipping fell in 2008 and remains low. These two industries were particularly hard hit by the financial crisis and market prospects are highly uncertain, especially in the case of shipping (see chapter 7). The two industries combined account for more than half of banks' total lending to the corporate market, and a substantial portion of banks' losses in the corporate sector will accordingly be seen in these industries.

## Household sector

Households' debt growth has outstripped their income growth for several years. This is rooted in the very low interest rates, and banks' comparatively liberal credit practice, in the period 2004 to 2007. The outcome was a sharp upturn in the debt burden (debt in proportion to disposable income). For the household sector as a whole, debt is about twice as large as disposable income, markedly higher than the level seen at the end of the 1980s. While the decline in credit growth over the past two years means that debt is not a rising as strongly as before, debt growth remains higher than income growth. After a substantial increase in the interest burden in the period 2005 to 2008, the sharp reduction in interest rates since October 2008 has again resulted in a significant reduction in the interest burden. This will however be reversed as the interest rate level normalises. On the other hand, households are far better able to handle the high debt burden than they were at the end of the 1980s and early 1990s since the interest burden is now lower.

The debt and interest burden is unevenly distributed across the household sector. Younger households have a high concentration of debt and wealth in the housing market while older households have lower aggregate debt and more diversified portfolios comprising both financial assets and substantial housing wealth. Moreover, occupational incomes are lowest in the case of young workers. Low income and wealth, combined with high loan-to-value ratios and floating mortgage rates, will make younger households in particular vulnerable to higher interest rates in the period ahead.

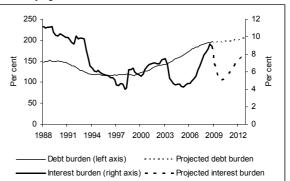




Sources: Statistics Norway and Norges Bank

\* Disposable income is adjusted for estimated reinvested share dividends 2000-2005 and redemption/decrease of

5.10 Households' debt burden and interest burden. Quarterly figures.



Sources: Statistics Norway and Norges Bank Projections for Q1 2009 to Q4 2012

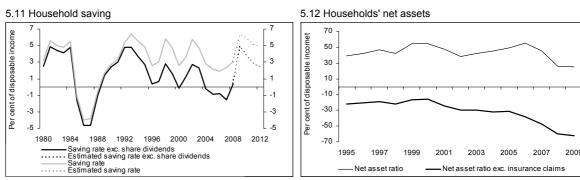
equity capital 2006-2009. Growth in disposable income is smoothed using a four-year moving average.

Household sector debt is largely for residential purposes. About 90 per cent of loans to households are mortgages secured by residential property and banks' risk is therefore substantially related to the trend in the housing market. House prices rose steeply throughout 2009 and, in terms of consumer prices, construction costs and disposable income, house prices are high historically speaking. Higher interest rates or a marked economic setback could trigger a fall in house prices. Loan-to-value ratios on new bank loans to residential property have been high for several years. Finanstilsynet's home loan survey of spring 2009 showed a decline in the proportion of loans with a loan-to-value ratio in excess of 80 per cent of property value. However, this was not confirmed in the survey conducted in autumn 2009 in which much of the decline had been reversed and almost 40 per cent of mortgages had a loan-to-value ratio in excess of 80 per cent of property value. (See chapter 7 for further details of the home loan survey). Floating-rate mortgages still clearly predominate. Almost 95 per cent of home loans carry floating interest, which heightens the vulnerability of the household sector. According to Statistics Norway's calculations, commissioned by Finanstilsynet, households' vulnerability to higher interest rates has risen in recent years due to the substantial debt build-up. Should interest rates normalise more rapidly than expected, reaching about 6.5 per cent by the end of 2011, 425,000 households will need to spend more than onefifth of their income to pay interest expenses. Principal is payable on top of that. (See chapter 7 for further details). In a possible situation where interest rates rise concurrently with rising unemployment and slowing income growth, banks' losses on loans to households will increase. Direct losses on loans to households have traditionally been minimal, while the indirect effects have been far larger. Households tighten consumption in order to service mortgages, producing knock-on effects to business and industry and increasing banks' losses, including losses on loans to commercial property.

The household sector saving rate picked up appreciably in the second half of 2008 and rose further in the course of 2009 to reach 7.5 per cent for the full year compared with 3.4 per cent in 2008. A higher level of debt and increased uncertainty about the future economic climate probably prompted households to lessen consumption in order to repay debt or build up financial cushions. Increased saving, combined with a marked decline in housing investments, has enable the sector to increase net financial investment, thereby strengthening its financial position. Households with a financial buffer will be better able to cope with any lapse of income or increase in expenses. However, since their technical reserves are illiquid and unable to function as a capital reserve in the short and long term, their net financial asset position is

negative. Illiquid assets render households vulnerable to negative shocks in the economy. All in all households are in a higher wealth position than at the end of the 1980s and the start of the 1990s, but much of this wealth is tied up in residential property (see chapter 6 for further details of the composition of household saving).

In autumn 2008 Norway saw, for first time in several years, the consequences of the household sector's considerable debt. When home mortgage rates in September-October passed 7 per cent and were still rising, at the same time as negative reports from the international financial crisis raised concerns about employment and jobs, expectations underwent a dramatic shift. House purchases dropped sharply and sales of cars and consumer durables also declined. Prices of properties that found a buyer fell markedly and the knock-on effects of reduced demand surfaced in commerce and construction alike. Financial stability is threatened when actors and financial institutions are exposed to serious external influences and are insufficiently robust to maintain normal business. Sudden changes in demand and activity levels can in the next instance expose other actors to potential losses and behavioural changes. Households' substantial indebtedness still gives cause for concern with regard to financial stability in the next few years.



Sources: Statistics Norway and Norges Bank

Sources: Statistics Norway

Adjusted for estimated reinvested share dividends 2000-2005 and redemption/decrease of equity capital 2006-2012.

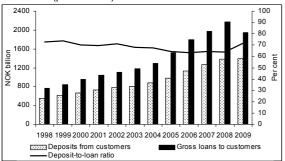
## Banks and liquidity risk

Current refinancing needs and liquidity risk relate primarily to banks' funding in the money and bond markets nationally and internationally. These markets function well in normal periods, but may lapse entirely in periods where confidence in financial institutions' earnings and solidity is impaired. This was clearly demonstrated in autumn 2008 when the price of liquidity shot up and the markets collapsed. As from the end of 2008 the supply of finance to Norwegian banks gradually improved after introduction of wide-ranging governmental measures (see chapter 1). During the second half of 2009 the money and bond markets stabilised, and the markets again functioned well as a source of finance for the banks. Short-term financing (one year or less) cheapened as early as the first half of 2009. In the course of autumn 2009 the price of long-term finance also declined. However, towards the end of 2009 long-term financing (3 to 10 years) was still costlier than before the onset of market turbulence. The largest Norwegian banks are dependent on funding in the international capital markets. During the worst phase of the liquidity crisis it became impossible for Norwegian banks to borrow in foreign currency. This market also improved in the course of autumn 2009. October 2009 saw the final auction under the covered bond 'swap' arrangement. As the market normalised, interest in participating in the swap

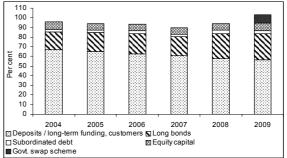
arrangement diminished, and far fewer banks participated in the final auctions. The two last ones, scheduled for November and December, were called off. The swap arrangement will be kept in readiness throughout 2010.

Customer deposits are an important funding source for Norwegian banks. Financial soundness and an effective deposit guarantee scheme probably contributed to the relative stability of deposits during the financial crisis. Compared with the end of 2008, customer deposits were down 1 per cent. Whereas deposits by households rose by 2 per cent over the year, deposits from domestic firms fell by 3 per cent and deposits from foreign firms by 9 per cent. The deposit-to-loan ratio for banks as a whole rose by 8 percentage points to 72 per cent. This was partly attributable to slow lending growth but also to banks' loan transfers to residential mortgage companies. Customer deposits measured 56 per cent of gross lending by banks and residential mortgage companies at the end of 2009 (less funding from the 'swap' arrangement which is recorded as loans/deposits from the state).

5.13 Customer deposits in per cent of gross loans to customers (parent bank)



5.14 Long-term funding in % of gross loans to customers, for banks and residential mortgage companies



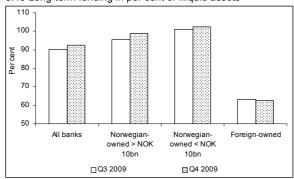
Banks' long-term financing (including deposits/borrowing from customers, bonds longer than one year, subordinated debt and equity capital) measured 94 per cent of lending at Norwegian banks (including residential mortgage companies) at the end of 2009. Funding via the swap arrangement alone came to 9 per cent of gross lending to customers. Long-term funding rose slightly in 2009.

Finanstilsynet is developing a liquidity indicator showing the proportion of long-term funding (customer deposits, bonds, debt to credit institutions, subordinated debt and equity capital) to illiquid assets. In calculating the liquidity indicator, allowance is made for banks' assets in residential mortgage companies, in other banks and in other mortgage companies. Account is also taken of the governmental funding measures, both the arrangement for pledging securities as collateral for loans from Norges Bank (fixed-rate loans and the covered bonds swap arrangement). At the end of the fourth quarter 2009 long-term funding for the banks as a whole accounted for 93 per cent of illiquid assets. Foreign subsidiaries have a considerably lower share of long-term financing than Norwegian-owned banks due to their larger share of short-term group financing.

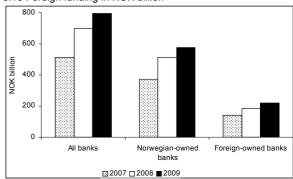
At the end of 2009 banks' net foreign debt totalled close to NOK 800 billion, an increase of about NOK 100 billion over the year. Foreign debt is primarily incurred by the largest banks. Earnings and financial position, along with rating and size, are crucial to both access to and the price of foreign funding. DnB NOR is an important source of credit for smaller Norwegian banks, and this bank's foreign funding is an indirect source of finance for them.

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5.15 Long-term funding in per cent of illiquid assets

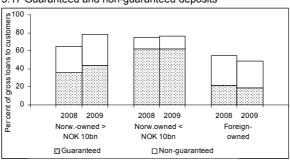


5.16 Foreign funding in NOK billion

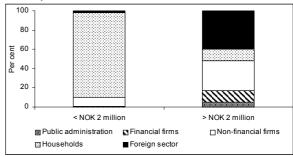


Although most deposits do not carry a lock-in period, they are nonetheless a stable funding source for banks, albeit less stable in the case of deposits not covered by the deposit guarantee scheme of the Norwegian Banks' Guarantee Fund. For banks as a whole, guaranteed deposits measured 43 % of aggregate deposits at the end of 2009. Foreign banks' branches in Norway are eligible for branch membership of the Banks' Guarantee Fund which covers any gap between home country cover and the cover in Norway. Nordnet Bank, Fokus Bank, Swedbank and Skandiabanken are members of the Fund.

5.17 Guaranteed and non-guaranteed deposits



5.18 Deposits in all banks, over/under NOK 2 million



Small and medium-size banks have a substantially higher ratio of guaranteed deposits than large banks where a high proportion of large deposits are from the public administration. Guaranteed deposits at these banks accounted for 56 per cent of aggregate deposits at the end of 2009. Deposits from households and firms made up the bulk of customer deposits, at 52 and 38 per cent respectively. Households account for the bulk of deposits at the smallest banks. Of deposits below NOK 2 million, households accounted for 88 per cent, while most deposits above NOK 2 million are from firms. The proportion of deposits above NOK 20 million is highest at the larger banks.

#### Follow-up of Norwegian banks' liquidity situation

Norwegian banks' liquidity situation posed major challenges in 2008. Finanstilsynet intensified its monitoring of liquidity in 2008 and 2009 through contacts with liquidity managers at the larger banks, inspections and the introduction of extraordinary reporting. A survey carried out at the start of 2009 showed that most banks still viewed their liquidity situation as demanding. Government stimulus packages were seen as an important contribution to stabilising liquidity risk. In its monitoring of liquidity risk, Finanstilsynet kept a close eye on banks' liquidity reporting.

Since there was a risk of banks redistributing deposits to secure better deposit guarantee cover, Finanstilsynet maintained from October 2008 to mid-2009 a particular focus on customer deposits. Banks' reporting showed that customer deposits were relatively stable throughout this period.

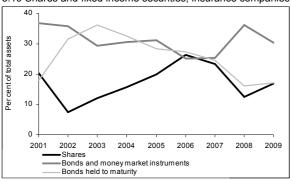
Finanstilsynet's monitoring of the liquidity indicators has given indications of high liquidity risk at some banks. The banks concerned have been advised of what measures Finanstilsynet expects them to take to reduce risk and improve control in the liquidity area.

## Market risk at life insurance companies and pension funds

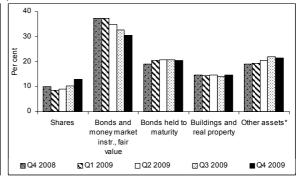
Life insurers and pension funds are particularly exposed to market risk through their holdings of shares and fixed income securities. The level of risk depends on the size and composition of the securities portfolio, price fluctuation and market liquidity.

Life insurers increased their shareholdings from 2002 to mid- 2007. Shareholdings were again reduced in the second half of 2007, and were very low at the end of 2008. Shares made up a mere 10 per cent of the collective portfolio at end-2008, and were even lower when life insurers' hedging instruments are taken into account, the figure was even lower. In 2009 the trend again reversed and share exposure increased as a result of share purchases and generally higher portfolio values. Shares made up 13 per cent of the collective portfolio at the end of 2009, roughly identical to their real share exposure (account being taken of hedging). There appears to be a clear correlation at Norwegian life insurers between the equity component in the balance sheet and share prices, with divestment being opted for when markets have fallen and investment when markets recover. Life insurers' procyclical behaviour reduces opportunities to accumulate buffer capital and limits opportunities to secure long-term return on managed assets. This behaviour may also intensify downturns and upturns in the securities markets.

5.19 Shares and fixed income securities, insurance companies



5.20 Quarterly trend in investment in the collective portfolio of life insurers



Funds freed up as a result of divestment in 2008 were used to purchase bonds. Bonds recognised at fair value made up 31 per cent of investments in the collective portfolio at end-2009 while bonds held to maturity made up 21 per cent. A high proportion of fixed-income securities secures stable interest revenues but at the same time increases vulnerability to interest rate movements. During the crisis period in 2008 interest rates plummeted, raising bond values. Concurrently credit spreads widened so that some companies with a high proportion of credit bonds saw a negative trend on their bond portfolio. In 2009 spreads were reduced, but accompanied by some increase in interest rates. The risk associated with the interest rate trend is dual. On the one hand, lower rates entail a positive trend in the value of interest-

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bearing securities. On the other, they pose a challenge in relation to the guaranteed annual return to policyholders.

In addition to shares and bonds, life insurers invest in commercial property. At the end of 2009 commercial property accounted for 13 per cent of their total assets. The trend in commercial property values is an important risk factor with a potentially large bearing on life insurers' results.

Pension funds were to a lesser extent than life insurers compelled to reduce their equity component in 2008, and this component therefore remained high in 2009: 37 per cent at private pension funds and 22 per cent at municipal pension funds. Bonds and other securities also figured prominently in the balance sheet: 46 per cent at private pension funds and 36 per cent at municipal pension funds

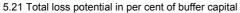
Under the new solvency regime for insurance companies (Solvency II), assessment of market risk is an important element, and the correlation between various asset classes is central to the assessment of companies' overall risk. Experience gained from the last financial crisis shows a higher degree of correlation between asset classes in extreme situations than in normal situations. Increased credit spreads in 2007 and 2008 brought heavy losses on corporate bonds and other credit instruments, while stock markets went into reverse in autumn 2007 and fell during much of 2008. Diversification gains in this period were lower than previously expected. Based on this experience, the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS), in its advice to the EU Commission, recommended that higher correlation should be posited between more asset classes than previously proposed, which in turn will produce higher capital requirements for life insurers under Solvency II.

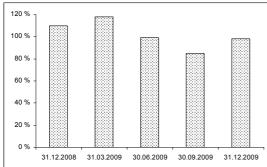
## Stress testing at life insurers

Life insurers report stress tests quarterly to Finanstilsynet, which aims to throw light on their ability to meet the capital adequacy requirements in force. The companies' overall risk is assessed against their overall buffer capital to evaluate their utilisation of buffer capital. The assumptions employed in the stress test are a 1.5 percentage point parallel shift in the interest rate curve, a 20 per cent fall in share prices, a 12 per cent fall in real estate markets and a 12 per cent change in the exchange rate. Increased risk exposure increases the risk potential, and the stress tests measure the level of risk companies can withstand with their available buffer capital. If risk is excessive in relation to available capital, either buffer capital must be increased or the risk reduced.

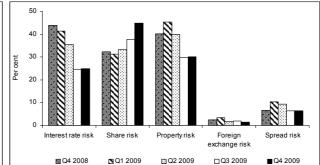
Life insurers' buffer capital rose substantially in 2009 thanks to sound profits (see chapter 4). This enabled the companies to increase their supplementary provisions and fluctuation reserves. They were also prompted to expand their securities holdings, which increased their share exposure (and by the same token their share risk) substantially in 2009.

Persistent low interest rates pose a challenge to insurance companies and pension funds ahead. There is still the possibility of a setback in the real economy with increased credit spreads on corporate bonds, falling stock markets and falling commercial property prices. Low economic activity levels and increased risk aversion pose a danger of falling demand for insurance products, particularly in countries with a significant element of defined contribution pension schemes, where the client bears the risk. Although defined benefit schemes still predominate in Norway, the increasing prevalence of defined contribution schemes may affect the economy and markets differently in the next crisis.





5.22 Loss potential due to market risk distributed on risk areas, proportion of buffer capital



## **Operational risk**

Operational risk can be defined as the risk of loss resulting from inadequate or failed internal processes or systems, human error or external events. Loss resulting from operational risk may have their origin in either internal or external events. Operational failure is often a contributory factor to losses that would otherwise be classified under credit risk or market risk. This is one of the reasons why operational losses are often difficult both to delimit and quantify. Finanstilsynet is aware that a number of banks are now seeking to identify which elements of operational risk are involved in credit loss. This knowledge will be used to improve risk management and internal control at banks.

As in 2008, individual events occurring in 2009 as a result of operational failures inflicted losses of an operational nature, some of them sizeable. In May 2009 it turned out that several banks in southeast Norway had been victims of fraudulent property appraisal and higher-than-warranted sale values used in securing home mortgage loans. More than 70 such cases were brought light involving total borrowings of about NOK 150 million. Both present and previous bank employees had been involved. While it is not clear how coordinated and closely organised the cases were, they appear to be a classic example of operational risk due to criminal offences committed by persons outside the banks in collusion with institutions' staff.

In 2009 cases of attempted fraud were noted in the payment services area. Payment terminals where cardholders key in their PIN number were modified to enable illegal capture of the content of the cardholder's magnetic stripe. The attacks were well prepared and organised and many shops have fallen victim, particularly in southeast Norway. This was an unprecedented threat situation for Norway in 2009.

2008 and 2009 saw the inception of major projects that will change the securities market infrastructure. Verdipapirsentralen ASA (VPS, Norway's central securities depository) set in train, together with Cap Gemini, a project to develop a new mutual funds system. The project was not completed with the result that the agreement between the parties was terminated. The project put a lot of pressure on VPS' organisation. Oslo Børs ASA (Oslo Stock Exchange) signed in 2009 an agreement with London Stock Exchange plc for the purchase of trading and information systems for derivatives and securities. The trading system for derivatives went live in December 2009, while the trading system for shares and fixed income instruments is scheduled to go live in April 2010. The changes being made in the securities area are substantial and far-reaching, and the risks entailed by the projects have been and are considerable.

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Norway's financial industry has largely outsourced its ICT activities. Traditionally, ICT service providers to the industry have operated from offices in Norway or in other Nordic countries. They are now in the process of turning to resources in low cost countries. Some institutions find it rational, with acceptable risk, to outsource all or parts of their ICT operations. If a large portion of the financial sector's ICT business is outsourced, there could be societal consequences. Hence the issue needs to be thoroughly reviewed by Finanstilsynet. The reader is also directed to Finanstilsynet's annual Risk and Vulnerability analysis of the financial industry's use of ICT.

Finanstilsynet is participating together with larger Norwegian banks and the University of Stavanger in a three-year project aimed at developing advanced models (AMA) for banks' calculation of capital requirements for operational risk under the Basel II framework. In the project the banks and the research community are also collaborating on developing methods, tools and processes for identifying and reporting events. Although the project's core group comprises the largest banks, it will provide derived knowledge of use to other financial institutions. This knowledge will be published in the course of the project and presented at seminars etc.

# 6. Structure of financial and securities markets

## Financing and saving

Banks hold a very strong position in Norway's financial system. Norwegian banks accounted for close to 60 per cent of total loans to the non-financial private sector (households and firms, but also including municipal administrations) in 2009. When transfers of loans to residential mortgage companies in connection with the covered-bonds swap arrangement are included, the figure was closer to 70 per cent. Whereas households and small and mid-size firms lend mainly to banks or other credit institutions, large municipalities and firms raise part of their debt directly in the securities markets or from banks abroad.

There are wide differences in how firms finance their business from country to country. CDs and bonds play a larger role for American firms than they do for firms in Europe where debt is to a greater degree dominated by bank loans and trade credit. For Norwegian firms, debt raised directly in the bond market makes up a small part of total debt. Norway's industry structure comprises mainly small and mid-size firms whose borrowing needs are not sufficient to create a liquid bond market in Norway. Since smaller firms are rarely rated by international credit rating agencies, foreign actors have little awareness of such firms' credit risk. This, together with the fact that Norwegian borrowings would be small, limits interest from foreign bond investors. Smaller firms' credit demand is therefore directed largely at Norwegian financial institutions. Corporate financing via the stock market has increased somewhat in Norway in recent years, although it is still the case that only a minority of firms are stock exchanged listed. For the great majority of firms retained profit is the main source of funding alongside bank debt.

Table 6.1: Households' and non-financial firms' debt to banks and securities market'

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	1995	2000	2005	2009		
Domestic credit from banks	65	84	106	108		
Domestic bond and short-term paper debt		7	8	9		
Foreign debt of (mainland) firms in % of total corporate debt	12	19	26	23		

<sup>\*</sup> In per cent of GDP Mainland Norway. Sources: Statistics Norway and Finanstilsynet

Non-financial private sector debt consists mainly of loans from domestic sources. Foreign debt makes up only just over 20 per cent of total debt. Mostly larger firms borrow abroad, both from financial institutions and directly in the securities markets.

There have been small changes in the composition of household saving. A feature of Norwegian households is their preference for bank saving. The proportion of insurance claims is stable and high. A substantial share of households' financial wealth is tied up in illiquid insurance claims, and is therefore unable to function as a buffer in an economic downturn. Norwegian households invest directly in securities to a lesser extent than households in many other countries.

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Table 6.2 Percentage distribution of households' and non-financial firms' assets by financial object

<u> </u>	House	holds	Non-financial firms		
	Q3 1999	Q3 2009	Q3 1999	Q3 2009	
Banknotes and coin	3	2			
Bank deposits	33	32	12	14	
Securities	17	15	29	34	
Insurance claims	38	37	1	1	
Other assets	11	15	59	52	

Source: Statistics Norway

Given the favourable trend in house prices over time and favourable tax treatment of mortgages, investing in residential property has been an attractive form of saving for households. Characteristic for Norway is the very high proportion of owner occupiers. This is reflected in banks' loan portfolios in which about 90 per cent of loans to retail customers are secured by a dwelling. At the same time new loan products such as equity release schemes and retirement income backed by a dwelling have made it simpler to free up housing wealth for consumption. At the end of 2009 equity release schemes accounted for 25 per cent of overall home mortgage loans. Such loan products are largely directed at borrowers who have borrowed little against the value of their home.

Changes in the economy and the pension system will play a major role for the development and composition of households' saving ahead. The Norwegian pension system comprises three main parts: retirement pensions under the national insurance scheme, occupational pension schemes and individual pension arrangements. The savings market is a focal area for the financial institutions, and both the design of the pension systems and demographic trends are of great significance. The pension reform could influence the level and composition of private and public saving.

Non-financial firms have invested about a third of their financial wealth in the securities markets, a somewhat higher proportion than households. Insurance technical reserves make up a smaller share of non-financial firms' financial wealth, while other assets, including loans, make up more than half.

## **Financial market structure**

The financial crisis has brought major structural changes in financial markets, in particular in the bank sector. An important cause of structural changes since autumn 2008 is large write-downs on financial assets in American and European banks. The upshot was poor results and a need for central government capital or merger partners.

The financial crisis has brought substantial structural change in the US in particular. After about 25 US banks failed in 2008, as many as 140 failed in 2009 followed by more banks thus far in 2010. A number of large financial institutions have been taken over by government authorities or by other institutions. A number of European financial institutions were also hit hard by the financial crisis, and several were supplied with government capital. For some the solution was to transfer parts of or the entire business to other financial institutions. Several major European financial conglomerates in receipt of government capital have presented restructuring plans involving balance sheet reduction and a focus on core business in banking or insurance. Politicians and supervisory and regulatory authorities in several countries have been concerned with reducing the size of the largest banks, for example by separating ordinary banking operations from investment banking business such as share trading, business acquisitions and advisory services. In the UK the government, with the support of the EU competition authority, has demanded that the country's two largest banks, Royal Bank of Scotland and Lloyds, both in receipt of state support,

should sell off parts of their business. Royal Bank of Scotland is required to shrink its balance sheet by 40 per cent in the course of the next five years. The Dutch financial conglomerate ING, in receipt of capital from the Dutch government, presented a restructuring plan under which the banking business will be wound down to make way for a focus on insurance ahead.

In the Nordic region, Denmark is the main arena for structural change in the wake of the financial crisis. Twelve banks were taken over by other financial institutions or placed into administration in 2008, and a further nine in 2009. The structure of the financial sector in Sweden, Finland and Norway has changed little. In Iceland the three largest banks were taken over by the authorities in 2008.

Despite much capital being brought in by the US and European bank sectors in 2008, both from the market and through central government transfers, there remains a substantial need for write-downs on loans and securities in the global banking system. According to the IMF, total write-downs from the Q2/2007 to Q4/2010 will amount to about USD 2,500 billion. This puts global losses at just over 5 per cent of loans. The IMF (Global Financial Stability Report, October 2009) estimates the potential residual need for write-downs, both on loans and securities, at more than USD 1,150 billion.

Table 6.3 IMF's estimates for write-downs, earnings and capital needs in the international bank sector

Table 0.5 livil 3 estimates for write-downs, earnings and capital needs in the international bank sector					
USD billion	USA	Euro area	United Kingdom	Other European countries*	
As of 2nd half 2009					
Write-downs	640	350	260	80	
Increased capital	500	22	160	50	
Expected earnings and write-downs up to end-2010					
Write-downs	420	470	140	120	
Earnings	310	360	110	60	
Net capital need	110	110	30	60	

Sources: IMF \* Denmark, Iceland, Norway, Sweden and Switzerland.

Write-downs are assumed to be largest in the US and the euro area. For US banks this is down to continued great uncertainty with regard to the commercial property market, where US banks are heavily exposed. For European banks large exposures to the emerging markets in Europe, including the Baltics, could bring a further need for write-downs. Since the onset of the crisis banks have brought in fresh equity capital worth just over USD 700bn, and the IMF puts further capital needs at about USD 300bn.

Much residual risk remains in the financial system, and there may be financial institutions that are unable to meet capital adequacy requirements and need to be bailed out by the authorities or taken over by others in 2010, as previously. The European bank sector's financial position improved in the second half of 2009. Profits have risen as a result of improved revenues, particularly from securities and currency trading. Although some stabilisation was noted in new loan write-downs in the second half of 2009, there is still a large possibility of further losses. The start of the crisis saw substantial write-downs of debt instruments, whereas write-downs over the past year referred mainly to loans. Increased earnings together with supply of external capital, from both government and market, meant that capital adequacy was higher at the end of 2009 than one year back. The European bank sector still faces challenges, and the financial crisis has slowed the pace of integration between financial markets in Europe. Changes in legislation are also assumed to affect market structure (see chapter 2). Increased equity capital requirements may prompt institutions to focus on less capital-demanding activities. Tighter capital adequacy requirements and costlier capital may make lending on the balance sheet less attractive. Should

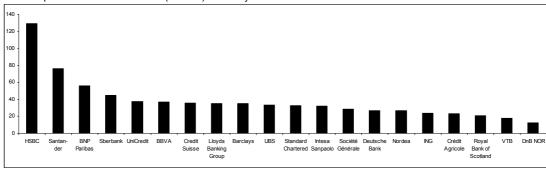
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a larger portion of loans be channelled via the bond markets, demand for services associated with setting up various types of external financing will probably rise.

## Nordic financial market

The large Nordic financial groups define the Nordic region as their home market and have set up operations in all Nordic countries, either in the form of branches or subsidiaries. Over time Nordic financial conglomerates have grown as a result of mergers and acquisitions. Although they have grown in size, they remain small by European standards in terms of market value (see chart 6.1) and total assets.

6.1 European banks' market value (EURbn) February 2010



Source: JP Morgan

In recent years the largest Nordic financial conglomerates have started operations in Eastern Europe and the Baltic region, and have acquired substantial market shares in several of these countries. The large Swedish banks groups in particular, Swedbank and SEB, have expanded significantly in the Baltics. DnB NOR has exposure in Eastern Europe through DnB NORD with operations in both the Baltics and Poland. The DnB NOR Group also has some activity in Northwest Russia through DnB NOR Monchebank. Danske Bank, Nordea and Handelsbanken have more limited exposure in the Baltics. The Nordic financial conglomerates view markets in the emerging economies of Central and Eastern Europe as substantial growth areas, at the same time as they provide opportunities for risk diversification. Of late, establishing operations in these areas has turned out to entail larger-than-expected risk. These countries have been hit hard by the financial crisis, with substantial real economic consequences. Several are in the throes of a deep depression with very uncertain prospects for the future. Business activity in these countries entails larger operative, legal and political risks than in the Nordic market. The sharp decline in the real economy has led to heavy losses on lending, impairing the conglomerates' overall profitability. Considerable uncertainty still attends developments ahead, and the risk of further losses is substantial. The largest non-life and life insurers have also set up cross-border operations. Sampo, which owns If, is a major actor in the Nordic region and operates in the Baltics and Russia. Sampo increased its stake in the largest Nordic financial services conglomerate, Nordea, to 20.1 per cent in 2009. In Norway both Nordea and Danske Bank have established life insurance businesses - respectively Nordea Liv and Danica Pensjonsforsikring. Gjensidige, the Norwegian insurer, has established operations in other Nordic countries and in the Baltics. Storebrand started operations in Sweden through its acquisition of SPP in 2007.

#### Norwegian financial market structure in brief

At the end of 2009 seven financial conglomerates were operating in the Norwegian financial market. DnB NOR is the decidedly largest with total assets making up 35 per cent of total managed capital in the Norwegian financial market.

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Table 6.4 Structure of the Norwegian financial market at end-2009

	Credit	Securities	Non-life	Life	
Per cent of total assets	institutions	funds	insurance	insurance	Total group
DnB NOR	38	22	1	29	35
SpareBank 1/collaborating savings banks	12	7	6	3	10
Nordea	11	8	0	6	10
KLP	1	9	2	28	5
Storebrand	1	8	1	26	5
Terra Group	4	2	1	0	4
Gjensidige	0	0	29	1	1
Total financial groups / alliances	68	56	40	93	69
Other companies	32	44	60	7	31

'Total group' comprises total assets in the various segments and will diverge from the conglomerates' own accounts. Credit institutions comprise banks, mortgage companies and finance companies. DnB NOR includes Nordlandsbanken. For the SpareBank 1 Alliance and Terra Group, the owner banks are included in the market shares. Foreign branches in Norway are included in the total market.

The Swedish financial conglomerate Nordea is represented in Norway through its subsidiary Nordea Bank Norway, in addition to Nordea Liv. KLP became a financial conglomerate in 2009 when the group started banking and acquired the mortgage company Kommunalkreditt (KLP Kreditt). Gjensidige is also now a financial conglomerate after establishing Gjensidige Bank in 2007 and the mortgage company Gjensidige Bank Boligkreditt in 2009. Altogether financial conglomerates hold the largest market shares in life insurance and lending.

Table 6.5 Foreign-owned subsidiaries' and branches' market shares in the Norwegian financial market at end-2009

Per cent of total assets	Credit institutions	Non-life insurance	Life insurance
Foreign subsidiaries	13	1	6
Foreign branches	13	30	0
Total foreign institutions	26	32	7
Total Norwegian-owned institutions	74	68	93

Cross-border activities are not included. In terms of their share of gross premium revenues, foreign branches have a 42 per cent share of the non-life insurance market.

Foreign actors hold substantial market shares in the Norwegian financial market, both through branches and subsidiaries. Non-life insurance in particular is dominated by foreign companies, of which the Swedish non-life insurer If and the Danish Tryg-Vesta have large market shares. In the Norwegian credit market the Nordic banks have been highly expansive for some time, achieving strong lending growth and higher market shares. However, in 2009 foreign branches showed a larger decline in lending growth than their Norwegian counterparts.

#### New body of rules for savings banks

The savings banks play an important role in Norway's banking market. Numbering more than 120, they range from large banks by Norwegian standards to small actors. Savings banks are important in maintaining competition in the Norwegian banking market and in retaining a national banking system. The rules governing savings banks structure were recently amended and modernised, and the new rules became effective on 1 July 2009. The stage is now set for more flexible choice of structural solutions for the savings bank sector, enabling structural and corporate changes in the savings bank industry based on different models, viz. the Terra model, Hallingdal model and the Møre-Tingvoll model. As part of the modernisation the term "grunnfondsbevis" (primary capital certificate) was changed to "egenkapital-

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bevis" (equity capital certificate). Here the aim was make the equity capital certificate a more attractive security able to a greater degree to compete with shares and thereby better suited to bringing in fresh equity capital to savings banks. Thus far 7 savings banks have devised new structural solutions. Sauda Sparebank has merged with Sparebanken Vest and Sparebanken Møre with Tingvoll Sparebank. In addition, Finanstilsynet has recommended the Ministry of Finance to authorise the merger of Sparebank 1 Ringerike Hadeland, Sparebank Jevnaker Lunner and Gran Sparebanken. Further changes in the structure of the savings bank sector can be expected ahead in light of new rules. A possible motive for mergers between savings banks may be a desire to create large entities better able to meet common challenges posed by the need for greater efficiency, by tougher competition and a more complex body of rules.

### Securities market structure

The securities market infrastructure includes marketplaces, clearing houses and the central securities depository (VPS). The marketplaces in Norway are broadly divided into three categories: regulated markets, regulated markets that are also a stock exchange and multilateral trading facilities (MTFs). An MTF is a multilateral system that facilitates trading in financial instruments. Under the Securities Trading Act the operation of an MTF is defined as an investment service, and investment firms and regulated markets are eligible for a licence to engage in such business. Regulated markets are governed by the provisions of the Stock Exchange Act.

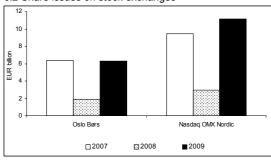
The introduction of the Markets in Financial Instruments Directive (MiFID) has led to the emergence of new marketplaces that establish business in direct competition with existing marketplaces. The number of marketplaces in Europe has almost doubled in consequence. Existing marketplaces have concurrently to some extent undergone, and will undergo, major reorganisations to adapt to a new competitive situation. Investment firms are expected to a greater degree to run a joint order book for liquid shares, and to be less concerned with what marketplace is involved. MTFs will thus be more on a par with regulated markets as regards trading per se in quoted financial instruments. IT is gradually playing a larger role in trading now that stock exchange members are switching to automated algorithm trading and participants expect trades to be executed very rapidly. Stock exchange members purchase for example server positions physically close to the trading system of the marketplace concerned to enable speedier execution of trades. In order to reduce the potential price effects of large share purchases and sales, arrangements are in place whereby orders are partially or fully concealed from other market participants and only become visible once the transactions are completed.

Bonds and CDs are traded in the ordinary market at Oslo Børs and in the Alternative Bond Market (ABM), also operated by Oslo Børs. The ABM, an unregulated market, has lower admission requirements than the ordinary market. Rights attached to bonds, CDs and equity instruments are registered in the rights register which is operated by the central securities depository, Verdipapirsentralen ASA (VPS). Settlement takes place through the central securities settlement.

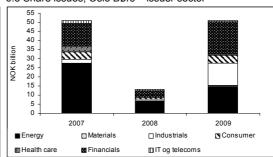
Organised trading in commodity derivatives in Norway takes place in three regulated markets: Nord Pool, the International Maritime Exchange (Imarex) and Fish Pool. Power derivatives remain the largest derivatives product, although new products with other types of commodity as the underlying are also traded. The number of derivatives with new types of underlying is expected to increase ahead. There are a large number of foreign participants in the derivatives market.

Oslo Børs is in the process of establishing compulsory use of a central counterparty for settlement of equity instruments. The intention is reduce risk to stock exchange members, maintain high confidence in the settlement systems and reduce transaction costs. Oslo Clearing, which now acts as central counterparty for settlement of derivatives traded on Oslo Børs, has applied for authorisation as central counterparty for settlement of equity instruments. NOS Clearing attends to settlements in commodity derivatives traded at Imarex and Fish Pool, while Nasdaq OMX Stockholmsbørsen AB Norway Branch sees to corresponding settlements for Nord Pool.

#### 6.2 Share issues on stock exchanges



6.3 Share issues, Oslo Børs - issuer sector

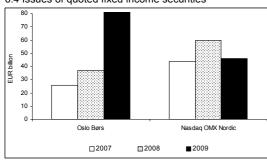


Source: FESE

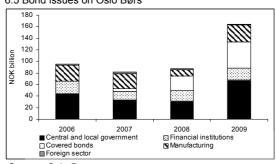
Source: Oslo Børs

Recent years have seen a trend in the direction of greater cooperation between stock exchanges and consolidation of ownership. Issue activity at the Nordic exchanges in 2009 was at the same high level as in 2007. Equity capital brought in by companies listed on Oslo Børs has increased, and the finance, energy and industry sectors accounted for the bulk of issues. At the end of 2009 the public sector held a sizeable stake of just under 40 per cent at Oslo Børs. This is high compared with other Nordic bourses. Non-residents owned 34 per cent of the shares at Oslo Børs at the same point in time. Compared with the other Nordic bourses, private investors at Oslo Børs hold small equity interests.

#### 6.4 Issues of quoted fixed income securities



6.5 Bond issues on Oslo Børs



Source: FESE

Source: Oslo Børs

While issues of fixed interest securities at Oslo Børs increased from 2008 to 2009, the overall issue volume declined at the other Nordic bourses. The increase in bond issues is related to a marked increase in issues of treasury bills, covered bonds, and bonds issued by the public sector and industrial undertakings (see charts 6.4 and 6.5).

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# 7. Special surveys and analyses

Finanstilsynet has for several years charted risk developments in the financial sector by means of special surveys which provide a valuable supplement to the analyses of regularly reported data. This chapter reviews the most important surveys and analyses carried out in 2009.

## Banks' exposure to selected industries

Finanstilsynet has since 1998 investigated banks' exposure to selected industries, which are in the main cyclically sensitive. The 12 largest banks in Norway are surveyed, and the analysis is based on the banks' own risk assessments and classifications. Classification is based partly on accounting data and is thus to some extent retrospective.

Table 7.1 Banks' exposure to selected industries as of the third quarter of 2009. Amounts committed and drawn. Volume in billions of NOK

	Loai	n commitme	ents	A	Amount drav	Exposure in %		
Industry	Volume	12-month growth		Volume	12-mon	th growth	of capital base	
	Q3 2009	Q3 2008	Q3 2009	Q3 2009	Q3 2008	Q3 2009	Q3 2009	
Shipping	268	24 %	-4 %	251	46 %	-8 %	158 %	
Shipbuilding	26	-9 %	20 %	19	-3 %	36 %	16 %	
Offshore	31	42 %	-10 %	27	38 %	14 %	18 %	
Fishing, sealing and whaling	24	-9 %	23 %	21	4 %	15 %	14 %	
Fish farming	19	18 %	13 %	13	16 %	3 %	11 %	
Property management	345	10 %	10 %	290	16 %	6 %	203 %	
Building and construction	44	-6 %	17 %	27	1 %	9 %	26 %	
Total	757	14 %	4 %	649	27 %	2 %	446 %	

The survey showed a sharp decline in overall growth in credit to the selected industries, but with differences between sectors. Total loans granted by the surveyed banks to the seven selected industries rose by 4 per cent compared with the 2008 survey. The volume drawn rose by 2 per cent, which is a substantial decline compared with the period from the third quarter of 2007 to the third quarter of 2008, as shown in table 7.1. For most of the banks the largest industry was property management. Only the largest banks had exposures to shipping.

The survey showed an increase in the proportion of exposures classified as high risk compared with 2008, with the exception of shipbuilding. Banks' loans to shippards are often construction loans secured on the ship being built, which in isolation mitigates risk. Write-downs on exposures related to construction, shipping and property management in particular rose, although write-downs were still fairly low in relation to the high-risk portion and the economic situation. Historically, banks' loan losses have somewhat lagged the economic cycle, and despite the improved economic prospects for both the

Norwegian and the international economy, the industries still face considerable challenges. This will probably bring higher impairment write-downs for banks ahead.

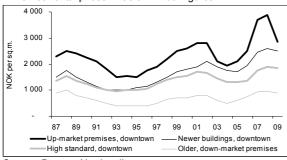
Table 7.2 Banks' exposure to selected industries as of the third quarter of 2009

	High-risk loans	in per cent	Write-downs in per cent of amount drawn			
Industry	of amount	drawn				
	Q3 2008	Q3 2009	Q3 2008	Q3 2009		
Shipping	1 %	8 %	-	0,4 %		
Shipbuilding	7 %	7 %	0,6 %	0,5 %		
Offshore	7 %	18 %	-	0,1 %		
Fishing, sealing and whaling	8 %	10 %	0,5 %	0,6 %		
Fish farming	3 %	12 %	0,4 %	0,6 %		
Property management	5 %	13 %	0,3 %	0,6 %		
Building and construction	8 %	11 %	0,7 %	1,5 %		
Total	3 %	11 %	0,2 %	0,5 %		

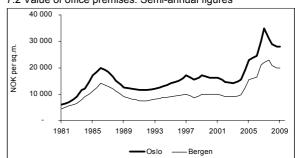
### Commercial property

Commercial property accounts for the bulk of lending to non-financial firms. A fall in sale and rental prices reduces property companies' profitability, and higher interest rates can substantially weaken property companies' debt-servicing ability. The value of the collateral held by banks will also fall. Hence the trend in the market for commercial property has an important bearing on banks' loan losses and financial strength.

7.1 Office rental prices in Oslo. Annual figures



7.2 Value of office premises. Semi-annual figures



Source: Dagens Næringsliv

Source: OPAK

Sentiment in the property market turned downwards in 2008. The financial crisis and the negative cyclical trend kindled much uncertainty in the industry and pushed down rental prices and values of office premises in large towns. The negative property market trend continued in 2009. Since the peak reached in June 2008, rental prices of up-market premises in Oslo have fallen by 33 per cent, while rental prices in other segments in Oslo have fallen by 6 per cent. In step with a rapidly rising office vacancy rate, falling rental prices and higher hurdle rates, property valuations declined. In Oslo the value of office premises fell by 20 to 35 per cent from the peak in December 2007, depending on standard and location. According to OPAK, the market hurdle rate rose to around 6.5 – 6.75 per cent for up-market properties and to about 7.75 per cent for more ordinary properties. Increased market uncertainty, together with tighter lending practice, put a heavy damper on commercial property sales in 2009, particularly in the first half year. Moreover, falling interest rates and hesitant banks resulted in few forced sales, which dampened the fall in commercial property values.

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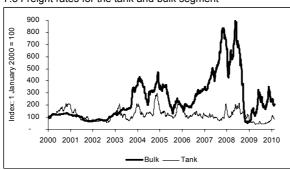
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Later in the second half of 2009, however, there were signs of improvement as prospects for the Norwegian economy perked up. Cautious optimism and willingness to invest brought some improvement in sales towards the end of the year, and the fall in rental prices slowed in light of an improved labour market and fewer-than-expected bankruptcies. While the fall in commercial property values appears to have bottomed out and the hurdle rate is subsiding, market participants expect rental prices to decline by a further margin as a result of rising office vacancies. Uncertainties in the market for commercial property ahead refer mainly to the volume of new construction, the international economy and the impact of rising interest rates.

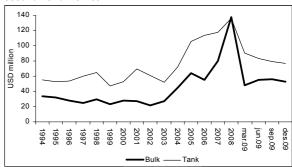
### Shipping

The two largest banks in Norway have large outstanding loans to Norwegian and foreign shipping companies. Some coastal banks also have fairly substantial exposures. Impaired debt-servicing capacity and falling collateral values in shipping may inflict increased losses on banks in the future.

7.3 Freight rates for the tank and bulk segment



7.4 Value of tank and bulk ships in the second-hand market



Source: Reuters EcoWin Source: RS Platou

The turnaround in the world economy in autumn 2008 coincided with a strong increase in tonnage in the market. This made for a sharp fall in freight rates and ship values towards the end of 2008 in all shipping segments. Over the course of 2009 freight rates and ship values stabilised as world trade picked up somewhat and fleet growth was smaller than previously expected. However, spot prices in a number of segments are still hovering around the rate needed for shipping companies to break even. Companies are none the less maintaining profitability at an acceptable level due to the proportion of tonnage on long contracts, although many of these contracts expire in the course of 2010 and 2011. World trade is expected to pick up further ahead, increasing demand for sea freight services. However, with a large surplus of ships and new ships still coming onto the market, freight rates are likely to remain low in the years ahead. Persistent low freight rates will reduce future earnings in the industry, which will in turn bring further decline in ship values. This will negatively impact companies' debt-servicing ability and the value of collateral held by banks.

## **Concentration risk**

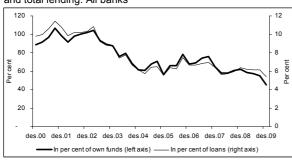
## Large exposures

The rules governing large exposures are designed to reduce concentration risk in terms of single exposures. A large exposure is defined as representing 10 per cent or more of own funds prior to risk

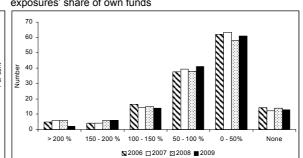
weighting. An institution may not have a single exposure constituting more than 25 per cent of its own funds or large exposures constituting more than 800 per cent of overall capital.

Banks' large exposures have decreased considerably over the past 10 years as a share of overall capital and loans. Most banks have a relatively small volume of large exposures (chart 7.6). At the end of 2009, only 32 of 139 banks had large exposures which after weighting constituted more than 100 per cent of the bank's own funds. Mortgage companies had an appreciably higher share of large exposures than banks; seven of 25 mortgage companies had large exposures which, combined, came to twice the company's own funds. Finance companies have a smaller volume of large exposures.

7.5 Trend in large exposures as a share of own funds and total lending. All banks



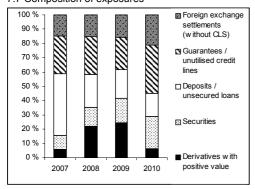
7.6 Number of banks distributed on large exposures' share of own funds



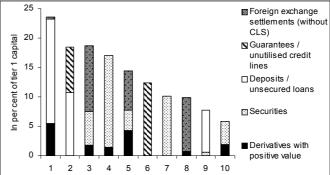
## Banks' counterparty exposures

Ten of the largest banks reported their largest counterparty exposures as of 15 January 2010. Finanstilsynet has previously conducted similar surveys each year as of 31 March, most recently in March 2009. The aim is to ascertain the size of the banks' unprotected exposure to their largest counterparties at a given point in time, both on- and off-balance sheet. The composition of exposure and the level of concentration on certain counterparties are of particular interest. A large proportion of the banks' largest counterparty exposures are assumed to be of a short-term nature, but while an exposure's short maturity reduces the risk of non-payment, there will always be a risk of a counterparty running into sudden payment problems.

7.7 Composition of exposures



7.8 Largest counterparty risk per bank



The ten banks to which the request had been addressed were asked to report their 15 largest counterparties with exposures to derivatives with a positive market value, securities, uncollateralised deposits/loans, guarantees and unutilised credit lines and uncollateralised foreign exchange settlements. The largest overall counterparty exposure was 24 per cent of an individual bank's tier 1 capital, while

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two other banks had exposures of 19 per cent of their tier 1 capital. Some of the large Nordic banks were a counterparty to almost all the banks. Despite some large exposures, concentration risk related to common counterparties must be regarded as relatively low. In the sample of 150 reported counterparties 83 were different, of which 39 were different banks.

## Incentive systems in Norwegian financial institutions

Excessive and incautious risk taking in the bank sector has in some cases led to the collapse of financial institutions and systemic problems in some countries within the EU and globally. Although there are many causes for such risk taking, supervisory and legislative authorities, including the G20 and CEBS, are agreed that an untoward compensation structure has been a contributor. Bonus systems that lead firms and institutions to take excessive risk and/or risk that is inconsistent with business plans or strategy may result in heavy loss as well as increased system risk.

Against the background of the work done internationally on incentive systems, Finanstilsynet in 2009 carried out a survey of a random sample of financial institutions. The survey focused on agreements in force on January 2008, and thus did not capture changes resulting from the financial crisis. The survey was confined to incentive pay schemes that can increase salary by more than 20 per cent. In addition to quantitative questions, the institutions were asked to describe procedures for approval, renewal and any other routines and requirements associated with incentive arrangements. The survey was designed to provide a picture of incentive pay practices, what categories of staff have agreements, the basis for assessing target achievement and short-termness versus long-termness in the agreements.

The survey showed the agreement structures to be fairly simple, and that in only a small number of instances were employee bonuses dependent on several years' performance. A recurrent feature was that incentive pay is disbursed annually, although in about 13 per cent of the agreements bonuses were disbursed over a longer period. Agreements involving payment over several years had no terms stipulating payment reduction in the event of an unfavourable profit outturn in ensuing years, even if this happens in the course of the period. Almost all managers, i.e. top management and the level below, had an incentive scheme as of 1 January 2008. Shares, or deferred shares, were employed at two institutions. For the top management, the share component made up an average of about 12 per cent of the incentive pay, showing that cash-based incentives are a more common type of incentive than shares. Only a small proportion of the agreements used risk-adjusted profit as a basis for evaluating target achievement; the bulk of agreements used profit elements and qualitative factors as criteria. Bonus levels etc tally with results of previous surveys conducted by Finanstilsynet in 2004 and 2008 where Finanstilsynet concluded that the schemes' maximum possible payments and actual payments appeared to be at a sober level. The EU has adopted a directive requiring institutions to have in place a remuneration policy that adheres to principles of good risk management (see chapter 2).

## Home mortgage loans

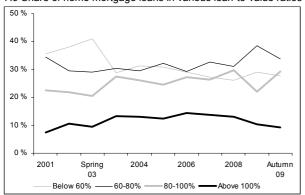
#### Repayment loans

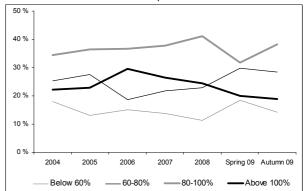
Each autumn since 1994 Finanstilsynet has examined banks' practice in regard to loans secured on dwellings, most recently in September 2009. The 30 banks included in the latest survey accounted for 85

per cent of total home mortgage loans. The survey covered a sample of new home loans granted after 15 September 2009. The respondent banks reported qualitative and quantitative information about the loans, and a distinction is drawn between loans intended for purchase and loans for other purposes, including refinancing. It is not certain whether a probable tightening in banks' credit practice as a result of the turbulence in the financial markets was captured in the survey of autumn 2008, and for that reason an extra survey was carried out in spring 2009.

Thirty-eight per cent of the loans entailed a loan-to-value ratio higher than 80 per cent of prudent valuation. This was higher than in the extra survey in spring 2009, in which 32 per cent of loans had a loan-to-value ratio above 80 per cent. Hence any tendency for a more sober and tighter lending practice did not appear to be confirmed. Compared with the survey in autumn 2008, on the other hand, there was a decline of 4 percentage points. The proportion of loans in excess of property value was just over 9 per cent. About half of the loans in excess of property value lacked (sufficient) additional collateral to bring overall security into line with the loan amount, on a par with the previous year's figure. Of loans intended for purchase, the proportion in excess of property value has fallen over the last three years, to 19 per cent, 5 percentage points lower than in autumn 2008. The proportion of loans between 80 and 100 per cent also declined. A total of 57 per cent of loans intended for house purchase had a loan-to-value ratio in excess of 80 per cent of property value compared with 66 per cent last year.

7.9 Share of home mortgage loans in various loan-to-value ratios 7.10 Loan-to-value ratio - house purchase



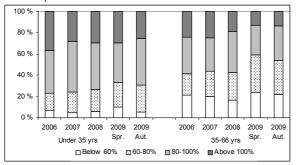


Primarily younger borrowers have a high loan-to-value ratio on their dwellings; 25 per cent of their loans were in excess of property value. The figure has fallen considerably in recent years, and was 4 percentage points down on the previous year. The proportion of loans between 80 and 100 per cent remained unchanged at 44 per cent.

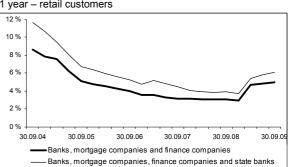
Insurance against high interest rates does not appear to motivate the demand for fixed-rate loans. Historically there has been very little demand for such loans except in periods where fixed-interest offerings have been below the floating interest rate. The survey showed that only 4 per cent of new loans carried fixed interest, roughly on a par with the two preceding surveys. About half of the fixed-interest loans had an agreed lock-in period of 3 - 5 years. Of total loans from all banks, finance companies, mortgage companies and state lending institutions, loans with a lock-in period above one year accounted for 6 per cent. The low proportion of fixed-interest loans means that Norwegian borrowers' private finances are rapidly affected by changes in the market interest rate.

The average duration of home mortgage loans increased up to autumn 2008. Longer durations enable borrowers to take out larger loans, at the same time as longer loan duration reduces flexibility should the borrower's private finances deteriorate. Average duration has edged down slightly, possibly because low interest rates have eased debt servicing for borrowers. About one in six loans in the survey was interest-only, roughly on a par with the previous year. The average interest-only period was 4.2 years, somewhat higher than autumn 2008. Primarily the youngest and the oldest borrowers had a large proportion of interest-only loans. The oldest borrowers have a significantly longer average interest-only period.

7.11 Loan-to-value ratio by borrower age group – house purchase



7.12 Share of loans with fixed interest above 1 year – retail customers



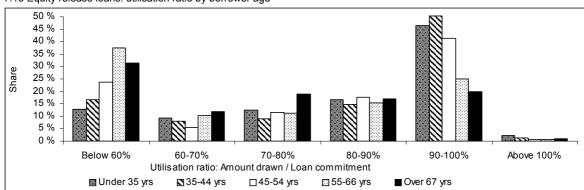
When processing loan applications, banks generally regard collateralisation as a second line of defence, their main focus being on the borrower's debt-servicing ability. Most banks use models to calculate borrowers' liquidity position after fixed expenses, the models being largely based on rates applied by the National Institute for Consumer Research in respect of households. Banks' guidelines also require loan officers to assess the impact of higher interest rates on borrowers' finances. Most banks add a mark-up of 3-4 percentage points to the current lending rate when assessing a borrower's debt-servicing ability. Some add a mark-up of a mere 2-3 percentage points. Several banks reported that interest rate mark-ups were to a larger extent than previously tailored to the individual customer.

## Home mortgage loans - equity release facilities

In recent years equity release loans secured on a dwelling have become an alternative to ordinary repayment loans. Strong growth in such loans has prompted Finanstilsynet to conduct surveys of banks' practice in regard to this product. Equity release facilities are best suited to somewhat older borrowers; 83 per cent of such facilities in the survey were granted to persons aged between 35 and 66.

A total of 46 per cent of loans (ceiling granted) were within a 60 per cent loan-to-value ratio, while 47 per cent were between a 60 and 80 per cent loan-to-value ratio. The proportion of loans with a loan-to-value ratio above 80 per cent was 7 per cent, on a par with the previous year. By far most banks allowed a higher loan-to-value ratio for repayment loans than for equity release loans. Loan-to-value ratios approaching 75 per cent of property valuation are most common in equity release.

Chart 7.13 shows that the utilisation ratio (amount drawn in per cent of ceiling granted) in the case of equity release loans established in autumn 2008 varied widely depending on borrower age. Younger borrowers single themselves out in that a high proportion had drawn more than 90 per cent of the ceiling granted. A mere 1 per cent of equity release loans granted in autumn 2008 were overdrawn.



7.13 Equity release loans: utilisation ratio by borrower age

Internal guidelines for equity release facilities are much the same as for repayment loans at most banks, except in regard to lower maximum loan-to-value ratios. Some banks had incorporated a higher safety margin against interest rate increases. Most banks reported that specific requirements were not imposed on the borrower's expected income situation on expiry of the facility, although almost half carefully assessed customers' future transition from employment income to retirement pension. A large majority of the banks stated that when calculating a borrower's debt-servicing ability they assume repayments will accrue just as if an ordinary repayment loan were involved. Most of the banks allow accrued interest to be added to the loan instead of being paid on a continual basis, but only so long as the sum of the amount drawn and accrued interest was within the ceiling granted.

#### Banks' information to borrowers

Since 2004 TNS Gallup has, on Finanstilsynet's behalf, conducted a survey among banks' home-loan borrowers. The respondents are the same as those included in the home loan survey. The intention is to gain an impression of the assessments made by borrowers in the process of selecting a mortgage bank and of the key factor on which the selection is based.

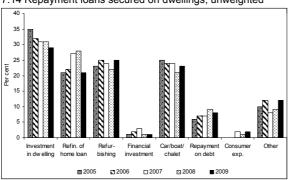
Of borrowers who took out a repayment loan, 33 per cent had looked into offerings from a number of banks, and the proportion has edged up since 2007. The proportion taking out a loan from their main bank concurrently fell from 78 per cent in 2008 to 73 per cent in 2009. Fewer borrowers cite an existing customer relationship as the most important reason for choice of bank, 44 per cent in 2009 compared with 53 per cent in 2008. The proportion citing price (interest/charges etc) as the main factor when taking out a mortgage shows an increase from 19 to 25 per cent in the past year, possibly indicating that competition for residential borrowers has tightened. Of borrowers who looked at offerings from several banks, existing customer relationships appeared less important. For those who took out an equity release loan the proportion looking into offerings from other banks prior to taking out a loan declined, and was 27 per cent in 2009. For 80 per cent of these borrowers the bank from which they raised their mortgage is their main bank. An existing customer relationship was the main reason for choice of bank for half of the borrowers.

In both surveys 60 per cent of borrowers have had a customer relationship of ten or more years' duration with the bank from which they are borrowing. A majority of customers also utilised other services in the bank, mainly deposit accounts, although insurance services and mutual fund saving were also common.

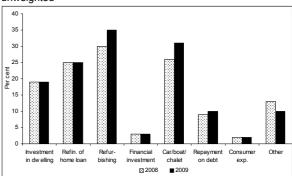
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About 65 per cent in both surveys reported having been informed of the consequences that an interest rate increase would have for their finances. For borrowers with equity release loans this proportion was rising. About 70 per cent of borrowers made allowance for an interest rate increase of 3 to 4 percentage points.

7.14 Repayment loans secured on dwellings, unweighted



7.15 Equity release facilities secured on dwellings, unweighted



A majority of borrowers who participated in the survey of repayment loans used the loan to buy or build a house or for home refurbishment. Whereas the proportion refinancing a home mortgage loan fell, the proportion buying a car, boat or recreational property rose.

## **Consumer loans**

A substantial share of loans for consumption is probably secured on dwellings. In addition, banks and finance companies both offer pure consumer loans which are generally unsecured. As in previous years, Finanstilsynet conducted in 2009 a survey of a sample of companies offering consumer finance. Consumer loans include card-based loans and other consumer loans without collateral. These companies offer a variety of products, for example credit cards and unsecured loans ranging from NOK 10,000 to NOK 350,000, although larger loan amounts do occur. The effective interest rate on these loans depends heavily on loan size and repayment period.

Table 7.3 Trend in consumer loans in selected companies

	2003	2004	2005	2006	2007	2008	2009
Consumer loans (NOKm)	20 816	22 823	26 276	31 057	36 925	43 352	44 500
Growth in % (12-month)	7,4	9,6	15,1	18,2	18,9	17,4	2,6
Book losses (NOKm)	574	398	382	253	339	953	1 326
Losses in % of consumer loans	2,8	1,7	1,5	0,8	0,9	2,2	3,0
Net interest in % of ATA	10,1	12,0	11,6	11,2	9,8	8,8	11,9
Ordinary operating profit in % of ATA	4,9	7,7	7,6	7,6	5,5	3,3	5,5
Loan defaults, gross (NOKm)	1 758	1 552	1 471	1 532	1 823	2 809	3 538
Gross defaults in % of consumer loans	8,4	6,8	5,5	4,9	5,0	6,5	8,0

The sample comprises 15 companies, six of them finance companies and nine banks. The volume of pure consumer loans in Norway is small, and the increase in such lending came to a halt in 2009. Several companies reduced their lending in the course of the year. A clear increase has been noted in losses and

defaults, particularly towards the end of 2008 and the start of 2009. The level of book losses and loan defaults related to consumer loans was higher than for banks and finance companies in general. Net interest revenues have concurrently risen. Since the companies charge for the increased risk inherent in the loan portfolio, interest margins are higher than for ordinary loans.

### Households' interest burden

Since autumn 2003, on commission from Finanstilsynet, Statistics Norway has provided model projections of households' debt and interest burden. The model starts out from volume figures for 2007 taken from the tax assessment statistics. The assumptions underlying the projections are based on historical data as of the third quarter 2009, where available, while the forecasts for wage growth and bank lending rates are taken from Economic Survey (Statistics Norway, December 2009). The tax programme in the model comprises 2010 rules and, as a purely technical assumption, this is continued for 2011 such that the parameters in 2010 are wage- or price-adjusted for 2011. The rise in house prices through 2009 is assumed to affect credit growth with a lag. Hence in the calculations credit growth is expected to rise somewhat from the current level to 9 per cent in 2011. An interest rate of 4.4 per cent is envisaged in 2011. Whereas households are in a relatively favourable financial position overall, some groups are significantly more vulnerable to interest rate changes than others. For this reason households are classified in three main groups on the basis of interest burden (defined as interest rate expenses divided by disposable after-tax income). Based on the distribution of debt, income and wealth in 2007, the model projects the number of households falling within each of the three groups in 2009 and 2011, as well as each group's share of total household debt.

Table 7.4 Number of households and share of total debt by interest burden

	200	7	200	9	2011, interest rate 4.4%		2011, interest rate up 2 percentage points	
Interest burden:	Number (thousands)	% of total debt	Number (thousands)	% of total debt	Number (thousands)	% of total debt	Number (thousands)	% of total debt
0,1 – 19,9 %	1 475	66	1 577	74	1 561	72	1322	48
20 – 30 %	160	20	111	15	129	16	269	27
Over 30 %	71	13	50	10	57	11	156	23

Source: Statistics Norway and Finanstilsynet

The steep interest rate fall as from 2002 brought a substantial fall in the household interest burden. The interest rate increase starting in 2005, combined with rapid credit growth, reversed this trend, and the number of households with an interest burden in excess of 20 % rose significantly. In the wake of the financial crisis the key policy rate was lowered by 4.5 percentage points, ultimately producing extremely low interest rates. This is reflected in projections showing that in 2009 more than 160,000 households had an interest burden above 20 %. Although Norges Bank has started to raise its key policy rate once again, lending rates are expected to remain relatively low in the calculation period. The model accordingly projects a relatively weak increase in the number of persons with an interest burden in excess of 20 % in 2011.

However, should interest rates rise more rapidly, the most vulnerable groups will be heavily impacted. In the stress test the interest rate is posited to rise by 2 percentage points by the end of 2011, to 6.4 per cent. This entails a normalisation of the lending rate, which is within Norges Bank's uncertainty fan as

presented in Monetary Policy Report 3/2009. The calculations show that with this interest rate, 425,000 households will have an interest burden above 20 per cent and just over a third will exceed 30 per cent. These groups will account for 50 per cent of total household debt. According to the calculations, groups with the highest debt burden have the smallest cushion in the form of financial wealth.

## Loans backed by securities

Since 1997 Finanstilsynet has conducted annual surveys of the volume of, and banks' treatment of, loans backed by financial instruments. In 2009 18 banks participated in the survey which distinguishes between commercial credits, with a term up to one year, and other loans, with a term above one year. Loans secured on index-linked deposits and equity and index bonds are referred to as loans secured on structured products and are distributed on commercial credits and other loans based on the residual maturity of the loan exposure.

Table 7.5 Credits backed by financial instruments, 3rd gtr 2009

1000 7.0 010	Table 7.5 Credits backed by illiancial institutions, 5rd qui 2009											
			edits back Istrument	,	Other loans backed by financial instruments				Total loans backed by financial instruments			
Actors	Volume NOKbn		Share of gross loans		Volume NOKbn		Share of gross loans		Volume NOKbn		Share of gross loans	
	Q3 08	Q3 09	Q3 08	Q3 09	Q3 08	Q3 09	Q3 08	Q3 09	Q3 08	Q3 09	Q3 08	Q3 09
3 most exposed	8,5	9,7	5,4 %	23,8 %	16,5	3,8	9,2 %	9,3 %	22,3	13,6	12,4 %	33 %
Total	26,5	22,6	1,3 %	1,1 %	35,2	19,4	1,8 %	1,2 %	61,7	42,0	3,1 %	2,3 %

The volume of loans backed by financial instruments, traditionally low in Norway, rose substantially in the period 2004 - 2008 from a relatively low level. As shown in table 7.5, banks saw a decline in such loans as of the third quarter 2009. The reduction was substantial both for commercial credits and other loans secured on securities. In terms of loan volume, the reduction was most marked in the category 'other loans'. This is because the large volume of loans backed by structured products falls due within one year of the end of the third quarter of 2009, requiring reclassification from other loans to commercial credits. Bank lending for investment in structured products fell from NOK 20 to 15.5 billion in the period, and most of the surveyed banks no longer offer such loans.

Banks' reporting period was marked by fluctuating market values of the underlying securities, and a strong increase was reported in the number of cases of forced sale of collateral. There is reason to believe that the volume of sales resulting from loans in excess of loan-to-value guidelines is larger than the reported figure since investors often sell on their own initiative, or on a creditor's recommendation if additional collateral is unobtainable. Banks' losses on loans backed by securities rose compared with the previous round of reporting, although losses remain relatively small. Seven of the banks have reported losses totalling NOK 477 million, compared with total losses of NOK 34 million at the preceding survey.

Table 7.6 Credits backed by financial instruments - structured products, 3rd qtr 2009

	milanional motific									
Actors	Structured products									
	NOI	Kbn		s backed by struments	Share of gross loans					
	Q3 08	Q3 09	Q3 08	Q3 09	Q3 08	Q3 09				
3 most exposed	11,1	9,8	49,6 %	73 %	6,2 %	24 %				
Total	20,2	15,5	32,8 %	36,9%	1,7 %	0,8 %				

# THE REPORT ENTITLED THE FINANCIAL MARKET IN NORWAY 2009: RISK OUTLOOK IS A SUPPLEMENT TO FINANSTILSYNET'S ANNUAL REPORT FOR 2009.

The annual report covers Finanstilsynet's operations in the preceding year. It includes the agency's activities in the sectors under supervision, i.e. banking and finance, insurance, securities market, financial reporting supervision – listed companies, auditing, external accounting services, estate agency and debt collection. It also covers supervision of ICT systems in the financial sector, consumer issues and Finanstilsynet's international activity.

