

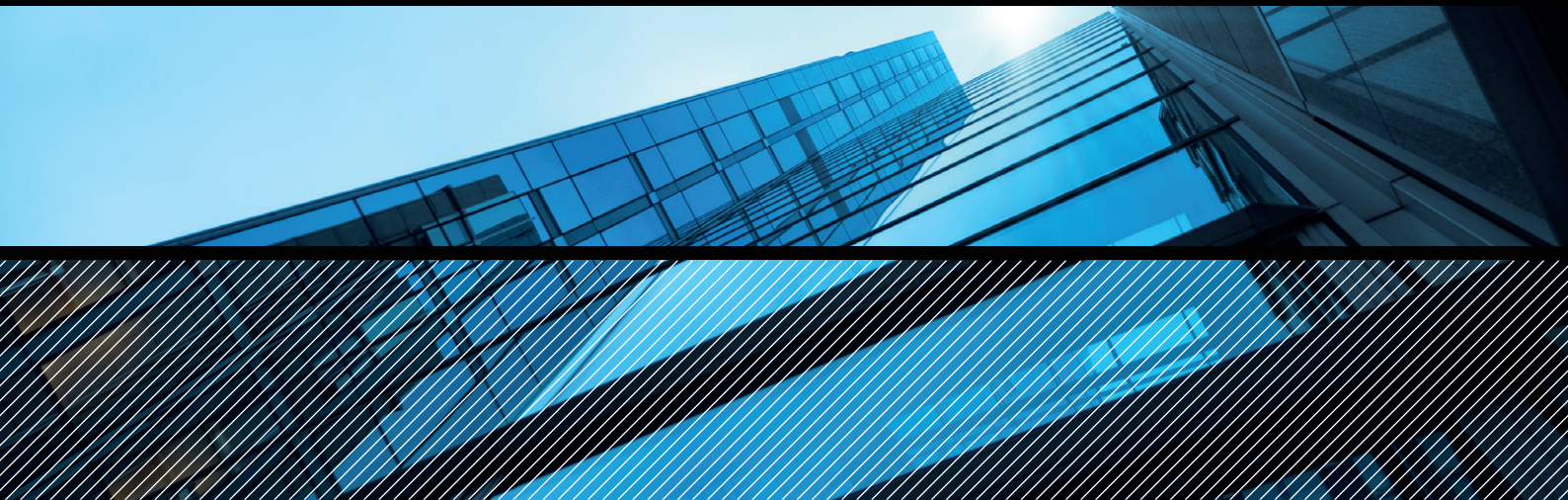


FINANSTILSYNET

THE FINANCIAL SUPERVISORY
AUTHORITY OF NORWAY

RISK OUTLOOK 2014

THE FINANCIAL MARKET IN NORWAY



The report gives an account of the situation in financial institutions in light of economic and market developments, and assesses trends that may give rise to stability problems in the Norwegian financial system.

RISK OUTLOOK 2014

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SUMMARY

The world economic outlook is marked by substantial uncertainty. Growth in the emerging economies has subsided in the past two years or so. Activity levels in the industrialised countries appear to be picking up, but growth is slow. Many countries are seeing high unemployment rates and large budget deficits. In a number of countries extraordinary monetary policy measures are holding interest rates down and economic activity levels up. Interest rates are expected to remain low ahead.

The risk of a collapse in the euro area appears to have receded. The European Central Bank's preparedness, if necessary, to purchase debt issued by debt-stricken states has helped to calm the markets. Risk premiums on government bonds in crisis states have fallen considerably. However, underlying imbalances in government finances persist, and the lending ability of many banks is restricted.

The oil price has remained high, fuelling a high level of activity in Norway. Growth in the mainland (non-oil) economy is expected to pick up, but the prospects are uncertain. Lower growth in the world economy could well lead to a lower oil price, and households' high leverage could intensify a fall in private consumption and housing investment in an economic downturn.

Household debt rose more rapidly than incomes in 2013 as in previous years, bringing the ratio of debt to income to an unprecedented level. Debt growth slowed somewhat at the start of 2014, but remains high. Household debt and house prices are closely linked. Norwegian house prices fell somewhat towards the end of 2013 after a long period of strong growth, but have picked up again thus far in 2014. House prices remain high relative to household incomes. Flattening house prices encourage a gradual deceleration of debt growth, and reduce the danger of a serious downturn. However, developments ahead are uncertain. Prudent credit assessments by banks are important in promoting a sustainable trend in household debt and house prices.

Norwegian banks are solid and profitable. Results recorded in the period since the international financial crisis have been good. High activity levels in the Norwegian economy have supported a good income trend and low loan losses. In 2013 Norwegian government authorities set new capital and buffer requirements for Norwegian banks with a basis in the new requirements established in the EU. The Norwegian buffer requirements are to be stepped up gradually in the period to 1 July 2016. The requirements are well suited to a balanced development of the Norwegian economy. Given continued sound earnings, moderate

lending growth and prudent dividend payout ratios, the requirements can largely be met by profit retention.

Should the Norwegian economy prove significantly weaker than expected, it is important to have solid and profitable banks that are in a position to make loans to creditworthy customers in bad times as in good. In Finanstilsynet's stress tests of the banks, involving a serious economic downturn driven by an international financial crisis and a steep oil price fall, the banks experience on average a sizeable fall in their common equity tier 1 (CET1) ratio. Credit growth comes to a halt, and house prices fall. Several of the banks recommended by Finanstilsynet as national systemically important banks emerge from the stress scenario in 2016 with a CET1 ratio below the minimum and buffer requirements of 13 per cent. About a third of the remaining banks fail to meet the CET1 requirement of 11 per cent. The likelihood of a stress scenario actually materialising is low, as it is for financial crises. The financial system must nonetheless be sufficiently robust to withstand a significantly weaker-than-expected trend. The results of the stress test substantiate the need to strengthen banks' financial soundness in the years ahead.

Society stands to make substantial savings by reducing the likelihood of future financial crises. Higher capital requirements make the banks more robust and countervail their incentives to assume excessive risk. Sound finances will contribute to more favourable funding terms for the banks. Once the banks achieve greater robustness, equity return requirements and risk premiums on their external funding will fall. New European rules for crisis management, permitting banks' creditors to have their claims written down or converted to equity without this resulting in bank closures, may encourage more correct risk pricing.

Much of banks' lending goes to non-financial firms, and a substantial portion of this lending is to commercial property and shipping segments. Both these industries carry high risk. Risk is also high in the case of bank lending to other industries. Historically banks have incurred substantially higher losses on loans to firms than on loans to households. A weaker international trend, reduced oil prices, higher interest rates and increased unemployment will feed through to higher loan losses in banks' corporate portfolios. Banks must be prepared for the possibility of rising loan losses in the next few years.

The capital adequacy framework CRD IV, which came into force in the EU on 1 January 2014, has thus far not been incorporated into the EEA Agreement. The overarching capital and buffer requirements have however been incorporated in Norwegian law. Finanstilsynet has drafted regulations that are aligned to CRD IV.

SUMMARY

Norwegian government authorities consider it important that all activity in Norway should be subject to capital adequacy requirements that are as uniform as possible, regardless whether lending is provided by Norwegian banks or branches of foreign entities. The capital requirements must at the same time be robust and geared to conditions specific to Norway. Finanstilsynet will therefore utilise the scope given by the EEA rules to strengthen banks' financial soundness, liquidity and funding. It should not be government authorities' intention to seek the most benign rules available in the EEA.

The largest Norwegian banks use risk models when measuring capital need. Such models have clear weaknesses, one being their likely understatement of the risk faced during crises. This is particularly true where model data derive from a long period of economic stability. Systemic risk that may build up in an upturn is not adequately reflected in loss and default data. The growing use of internal models makes it more difficult to assess risk in the banking sector, and more complicated to compare the capital adequacy of banks nationally and internationally. Finanstilsynet will maintain its close focus on models' weaknesses to avert their tendency to dilute capital requirements. Finanstilsynet has announced its intention to tighten the assumptions employed in mortgage lending models in light of an assessment of housing market developments and of the mortgage lending weights used in the IRB models. This is in addition to the tightening adopted by the Ministry of Finance with effect from 1 January 2014. The authorities in Sweden and Denmark have notified that the tightening action will also be applied to Swedish and Danish banks' operations in Norway.

In the years ahead the banks will see tighter requirements imposed on their liquidity position and long-term funding. Norwegian banks still obtain a significant portion of their funding in international capital markets. They enjoy ample access to international loan markets, and market funding has become more long term, thanks in particular to increased issuance of covered bonds. However, funding in international capital markets is vulnerable to international turbulence, as witnessed during the financial crisis. Heavy dependence on funding backed by banks' mortgage loans may also promote vulnerability, for example in the event of falling house prices. Banks must therefore continue their effort to ensure more robust funding and improved liquidity.

Norwegian pension providers (life insurers and pension funds) have substantial pension liabilities in the shape of guaranteed lifelong benefits to the insured. New mortality tables require a sizeable increase in pension providers' technical reserves.

The life insurance legislation's main rule is that pension providers shall hold sufficient premium reserves at all times. In Finanstilsynet's assessment, the insureds' pension claims are all in all best secured by allowing pension providers a period in which to adjust to new provisioning requirements. A large portion of the need for increased technical provisions must be met by policyholders' surplus, and pension providers themselves need to meet at least 20 per cent. Finanstilsynet will approve escalation plans with a duration of up to seven years from and including 2014.

Political agreement has been reached on new solvency requirements for insurance (Solvency II) in the EU, to apply from 1 January 2016 onwards. The new requirements entail a substantial need for capital among Norwegian life insurers. Allowance has been made for individual countries to permit insurance providers to apply long transitional arrangements. Finanstilsynet will draw up recommendations for implementing Solvency II in Norwegian legislation in 2014.

Regulation is not in itself sufficient to ensure a robust financial system. A sound supervisory regime is crucial to ensuring that important requirements are actually complied with, that financial institutions have good risk management and that important risk is not overlooked. On-site and off-site supervision has high priority at Finanstilsynet. Supervision is risk based. This entails that institutions of greatest significance for financial stability and well-functioning markets are monitored most closely and inspected most frequently. Oversight of smaller institutions is to a larger extent based on early warning indicators, particular events and analyses of the trend in their earnings, capital adequacy and liquidity.

The situation among banks cannot be assessed independently of developments in the wider economy or of the interaction between the banks and the economy. Macroprudential supervision therefore has high priority at Finanstilsynet. Finanstilsynet will further develop macroprudential supervision, monitor the risk of build-up of financial imbalances on an ongoing basis, and utilise the tools at its disposal to counteract such risk. Much emphasis is given to stress testing and to further developing these tools in analyses and supervision.

1 ECONOMIC TRENDS AND MARKETS

The world economy reflects the slower growth seen in the emerging economies in the past two years or so. Activity levels in the industrialised countries are concurrently picking up. However, growth is fragile. Many countries are experiencing high unemployment and sizeable budget deficits. Extraordinary monetary policy measures in several countries are holding interest rates down and economic activity up. Interest rates are expected to remain low ahead.

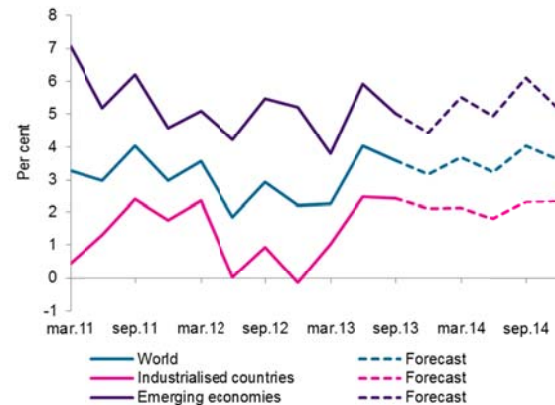
The Norwegian economy is solid, but falling exports and low growth in household consumption caused overall growth to recede in 2013. Credit expansion also declined in 2013. House price growth slowed sharply over the course of last year. The decline has halted, and prices are again rising from a very high level. Forecasts indicate moderate GDP growth ahead. Should the international economy see a new setback leading to a lastingly low oil price, the Norwegian economy could be significantly weakened.

INTERNATIONAL ECONOMY

The world economy was on a weak path in the first half of 2013. Higher economic growth in the major industrialised countries and continued relatively high growth in emerging economies caused growth in the world economy to pick up somewhat in the second half of 2013 (chart 1.1). The IMF puts global growth at about 3.0 per cent in 2013 compared with 3.1 per cent in 2012. Growth in the industrialised countries and the emerging economies is put at 1.3 and 4.7 per cent respectively. The industrialised countries continue to face substantial challenges with regard to debt levels in the private and public sectors and to higher unemployment. Inflation is low, and key policy interest rates may therefore remain historically low in 2014. The IMF expects growth in the industrialised countries to increase to more than 2 per cent in 2014 and 2015. Growth in the emerging economies has been high but falling in recent years. Increased demand from the industrialised countries may help to raise growth rates in the emerging economies in 2014 and 2015. For the world economy as a whole, the IMF puts growth at 3.7 and 3.9 per cent in 2014 and 2015 respectively.

US GDP rose by 1.9 per cent in 2013, down from 2.8 per cent in 2012. Growth was dampened by lower general government demand due to disagreements on fiscal policy. Increased private consumption caused activity in the economy to pick up towards the end of 2013, and GDP grew by 2.6 per cent on an annualised basis in the fourth quarter of 2013. Several indicators for the US economy are now on a positive trend. A new budget agreement was adopted by

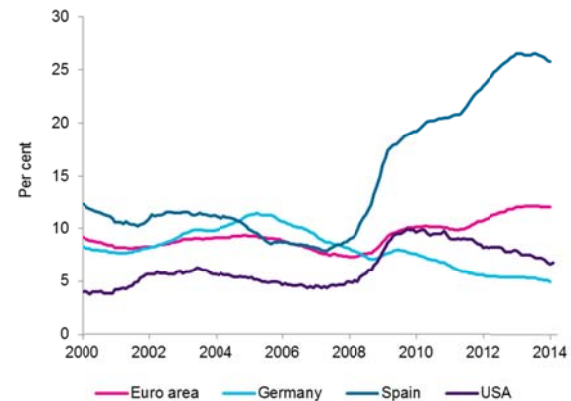
1.1 GDP growth* for the world, industrialised countries and emerging economies



* Quarterly annualised growth

Source: IMF World Economic Outlook, January 2014

1.2 Unemployment in selected countries



Source: Thomson Reuters Datastream

Congress in December 2013. Household finances have also improved. Both wage and capital incomes have risen. The housing market upturn continued through 2013, and house prices were close to their 2008 level at year-end. Unemployment declined, and stood at 6.7 per cent in February 2014 (chart 1.2). Much of the decline was however due to a reduction in the labour force. The IMF expects GDP growth to pick up in 2014, due both to the diminishing effect of government budget cuts and to a continued rise in private demand. According to Consensus Forecasts the US economy is expected to expand by 2.8 per cent in 2014 (table 1.1).

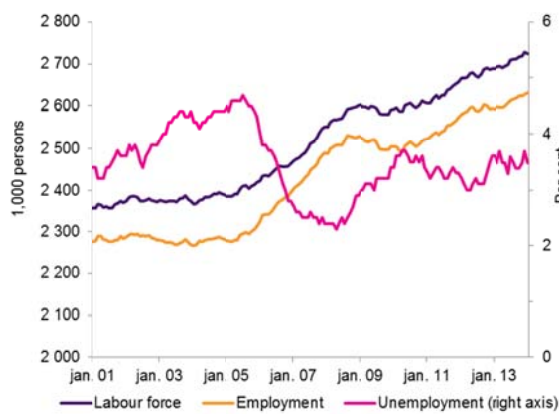
GDP in the euro area fell by 0.4 per cent in 2013 (table 1.1). The second half-year saw a positive development. After falling for six quarters running, activity in the euro area rose in the last three quarters of 2013. There are still substantial differences between countries, but the upturn is broader than previously. In both Germany and France growth was moderate in 2013. In Spain, Portugal and Italy a GDP decline in the first half-year was followed by growth in the second

Table 1.1 Key macroeconomic variables. Forecasts for 2014 and 2015

| | USA | | | Euro area | | | China* | | | Japan | | |
|--------------|------|------|------|-----------|------|------|--------|------|------|-------|------|------|
| | 2013 | 2014 | 2015 | 2013 | 2014 | 2015 | 2013 | 2014 | 2015 | 2013 | 2014 | 2015 |
| GDP | 1,9 | 2,8 | 3,1 | -0,4 | 1,1 | 1,4 | 7,7 | 7,5 | 7,3 | 1,6 | 1,4 | 1,3 |
| Inflation | 1,5 | 1,5 | 1,7 | 1,4 | 0,9 | 1,3 | 2,7 | 3,0 | .. | 0,4 | 2,6 | 1,7 |
| Unemployment | 6,7 | 6,4 | 6,0 | 11,4 | 12,1 | 11,7 | 4,1 | 4,1 | .. | 4,0 | 3,6 | 3,4 |

Sources: National sources, Consensus Forecasts March 2014, *IMF World Economic Outlook October 2013, and WEO update January 2014.

1.3 Labour force, employment and unemployment, seasonally adjusted



Source: Statistics Norway

1.4 Inflation and key policy rate. Seasonally adjusted inflation



Sources: Statistics Norway and Norges Bank

half. However, the labour market remains weak in much of the euro area. Overall unemployment was 11.9 per cent in February 2014, but there are wide differences between the countries (chart 1.2). Whereas unemployment in Greece and Spain was 27.5 and 25.6 per cent respectively, the figure for Germany was 5.1 per cent. Financial consolidation in the public and private sector suggests that growth in the debt-burdened countries will remain weak in 2014, whereas new export-led growth due to increased demand is expected to

strengthen the German economy in 2014. Several EU countries outside the euro zone showed a stronger development in 2013: UK GDP grew by 1.7 per cent, while Sweden's GDP rose by 1.5 per cent after strong growth in the second half of 2013.

Despite substantial government measures to spur inflation and economic growth in Japan, GDP rose only 1.6 per cent in 2013 (table 1.1). Inflation has risen. A depreciating Japanese yen has impacted positively on exports. According to Consensus Forecasts, GDP will rise by 1.4 per cent in 2014. In the longer term the government debt, which in 2013 amounted to more than 240 per cent of GDP, poses a challenge to the Japanese economy. Growth in China's GDP was 7.7 per cent in 2013, unchanged from 2012. Investments were the main driver. Private consumption weakened due to low wage growth, while exports were dampened by a strong yuan and lower international demand. The government has launched measures to put growth on a consumption-driven rather than investment-driven path. The IMF expects the growth rate in the Chinese economy to remain high, but to decline somewhat in 2014 and 2015 (table 1.1). Increased demand from industrialised countries may help to spur growth in other emerging economies in 2014 and 2015. GDP growth rates in Brazil, Russia and South Africa will, according to the IMF, be between 2.5 and 3.0 per cent, while for India growth of more than 6 per cent is expected in 2015. Forecasts for Russia are highly uncertain due to the crisis in Crimea.

NORWEGIAN ECONOMY

According to preliminary national accounts figures, mainland (non-oil) GDP rose by 2.0 per cent in 2013, which is 1.4 percentage points lower than in 2012. Declining exports and weak growth in private consumption contributed to the reduction in GDP growth. Household saving has risen considerably in the past five years. This may be because households are reducing consumption owing to increased uncertainty regarding personal and national finances in the wake of the financial crisis. Real investments rose in 2013, in particular in petroleum-related activity. Gross fixed investment in the mainland economy rose by 4.7 per cent. Imports rose from 2012 to 2013, and the trade balance weakened slightly. The decline in petro-

Table 1.2 Key macroeconomic variables for the Norwegian economy. Forecasts 2014-2017

| | 2013 | 2014 | | 2015 | | 2016 | | 2017 | |
|--|-----------|-------------------|-------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|
| | Accounts* | Statistics Norway | Norges Bank | Statistics Norway | Norges Bank | Statistics Norway | Norges Bank | Statistics Norway | Norges Bank |
| Private consumption | 2,1 | 2,1 | 1 ¼ | 3,4 | 3 ¼ | 3,6 | 3 ¼ | 3,3 | 2 ¼ |
| Gross fixed investment, Mainland Norway | 4,7 | 0,9 | 1 ¼ | 2,5 | 4 ¼ | 4,3 | – | 4,4 | – |
| Housing investments | 6,4 | -2,2 | – | -1,8 | – | 3,1 | – | 1,9 | – |
| Traditional exports** | 0,8 | 1,3 | 1 ½ | 3,0 | 2 ½ | 4,2 | – | 5,7 | – |
| GDP Mainland Norway | 2,0 | 1,9 | 1 ¼ | 2,4 | 2 ½ | 2,9 | 3 | 2,8 | 2 ¼ |
| Unemployment rate - Labour Force Survey*** | 3,5 | 3,7 | 3 ¼ | 3,9 | 4 | 3,9 | 4 | 3,8 | 4 |
| Annual pay | 3,9 | 3,8 | 3 ½ | 3,5 | 3 ¼ | 3,5 | 4 | 3,6 | 4 |
| Consumer price index (CPI) | 2,1 | 2,3 | 2 | 1,6 | 2 | 1,7 | 2 ¼ | 2,1 | 2 ¼ |
| House prices | 3,9 | -0,9 | – | 2,7 | – | 2,8 | – | 2,5 | – |
| Household saving rate*** | 9,0 | 9,6 | – | 9,7 | – | 9,8 | – | 10,0 | – |

Percentage change from previous year, except as otherwise stated. *Preliminary figures. **Norges Bank: exports from Mainland Norway. *** Level. Sources: Statistics Norway and Norges Bank

leum-related activity and shipping restricted overall GDP growth to a mere 0.6 per cent in 2013. According to Statistics Norway's forecasts, Mainland Norway GDP will rise by 1.9 and 2.4 per cent in 2014 and 2015 respectively (table 1.2). Norges Bank's forecasts point in the same direction.

2013 brought marked growth in both employment and the labour force (chart 1.3). The labour market nonetheless shows signs of weakening. Job vacancies are decreasing, and forecasts suggest some increase in unemployment, albeit from a low level (table 1.2). Measured as an annual average, unemployment (labour force survey) rose from 3.2 per cent in 2012 to 3.5 per cent in 2013. Registered unemployment also rose slightly in the past year.

Inflation rose from end-2012 to August 2013, since when it has subsided (chart 1.4). Twelve-month growth in the consumer price index (CPI) and consumer prices adjusted for taxes and energy (CPI-ATE) was, respectively, 2.1 and 2.4 per cent in February 2014. Norges Bank lowered its key policy rate to 1.5 per cent in March 2012 in light of the persistently sluggish international economic climate and strong Norwegian currency. At its interest rate meeting in March 2014 the central bank decided to maintain the key policy rate at its current level in the period to summer 2015, and thereafter to raise it gradually to a more normal level.

Statistics Norway's growth forecasts for Mainland Norway GDP growth in the years 2014 – 2016 were revised down from December 2013 to March this year by just under ¼ percentage point per year. In the same period Norges Bank revised down its forecasts for growth in Mainland Norway GDP in 2014 by the same margin. Norges Bank expects growth in private consumption to edge down in the current

year and thereafter to remain at a higher level in 2015 and 2016, whereas Statistics Norway assumes that growth in private consumption will rise up to 2016, but remain at a lower level than foreseen in December 2013. The household saving rate is expected to remain high in the forecasting period. Weak growth among the main trading partners and a high Norwegian cost level will hold down growth in many competitively exposed industries.

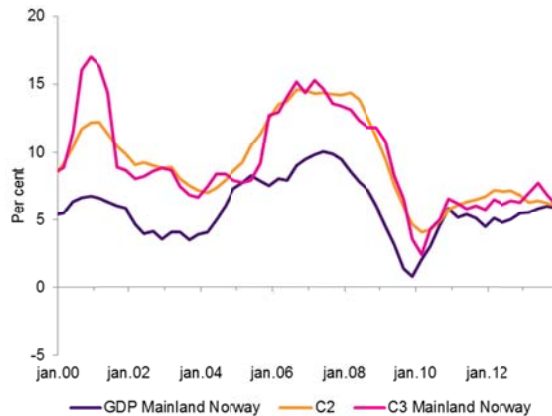
With growth rates between 11.3 and 18.0 per cent per year, petroleum investments provided important growth impulses to the Norwegian economy from 2011 to 2013. Petroleum investments accounted for as much as 8.9 per cent of Mainland Norway GDP in 2013. According to estimates by Statistics Norway, growth in Mainland Norway GDP without the petroleum investments would have been 1.3 per cent in 2013 instead of the actual figure of 2.0 per cent. Statistics Norway assumes that growth in petroleum investments will level off in the forecasting period. Oil and gas extraction, measured in oil equivalents, fell in 2013. Extraction of gas is however expected to increase, but at a lower growth rate than in the 2000s. Statistics Norway assumes that the development of new fields will halt the declining trend in oil extraction, and that production will hover around its current level over the next decade. Based on the assumption that oil and gas prices will exert downward pressure, Statistics Norway expects the petroleum sector through the forecasting period to contribute to a large, but somewhat reduced, surplus on Norway's trade balance.

CREDIT MARKET

Overall growth in credit (C3) to Mainland Norway slowed somewhat in 2013 to stand at 6.1 per cent at year-end (chart 1.5). Growth slowed from both domestic and foreign

1 ECONOMIC TRENDS AND MARKETS

1.5 Twelve-month growth in domestic credit (C2), overall credit (C3) for Mainland Norway and nominal GDP for Mainland Norway



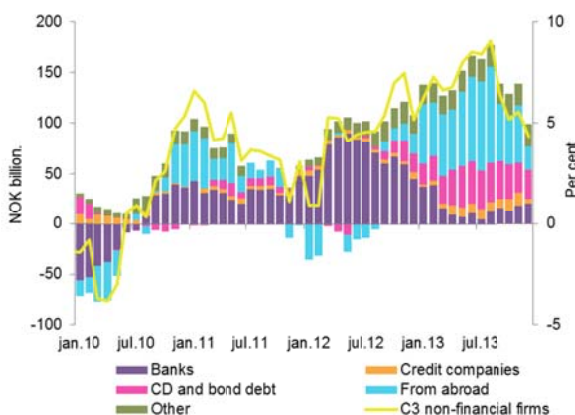
Source: Statistics Norway

1.6 Growth in domestic credit to firms, households and local authorities



Source: Statistics Norway

1.7 Twelve-month growth in overall credit (C3) to non-financial firms (right axis). Growth contribution from various sources (left axis)



Source: Statistics Norway

1.8 House prices, 12-month growth



Source: Thomson Reuters Datastream

sources. Credit growth is now on a par with nominal growth in Mainland Norway GDP.

Domestic credit growth (C2) edged down towards the end of 2013, and stood at 5.8 per cent in February this year. Growth in household debt declined to 6.7 per cent, due probably to the slowdown in the housing market in the second half of 2013. Local authorities' debt growth has been relatively high for several years (chart 1.6). Twelve-month growth was 8.0 per cent in February 2014.

Growth in corporate debt from foreign and domestic sources (C3) quickened somewhat in the first half of 2013. Towards year-end growth slowed to just over 3 per cent, possibly due to lower investment activity in construction, among other sectors. Firms have, more so than previously, turned to the bond markets for funding (chart 1.7). Whereas previously firms' debt growth was mainly funded by banks, 2013 saw a clear switch to Norwegian and foreign bond markets. Risk premiums in these markets have fallen, making it worthwhile for a number of firms to utilise these funding sources.

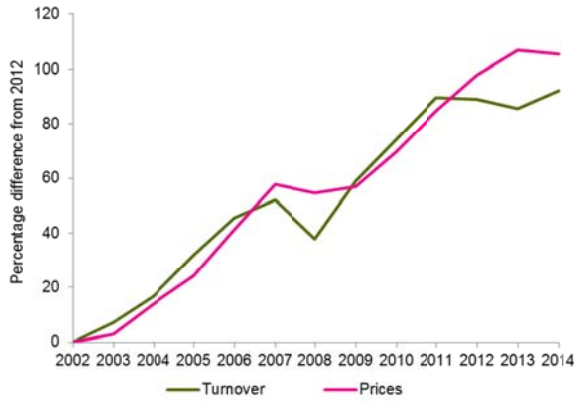
PROPERTY MARKETS

HOUSING MARKET

Growth in house prices declined steeply through 2013 (chart 1.8). From a 12-month growth rate of 8.2 per cent in February 2013 growth fell each month, turning negative in December. In March 2014 12-month growth resumed a positive trend, and prices were 0.3 per cent higher than one year previously. In the last three months of 2013 seasonally-adjusted house prices fell by 1.5 per cent, whereas they have risen by 0.9 per cent in the first three months of 2014. Seasonally-adjusted price growth was 0.7 per cent from February to March 2014.

The period 2002-2014 showed large co-variation between the number of dwellings sold and the development of house

1.9 Number of houses sold and house prices. Whole years



2014 is identical (January and February 2014 / January and February 2013) multiplied by the average for 2013. Sources: EFF, Finn.no, and Eiendomsverdi

prices (chart 1.9). After a fall in sales as from 2011, house price growth declined in 2013. Turnover has however risen recently and remains at a high level.

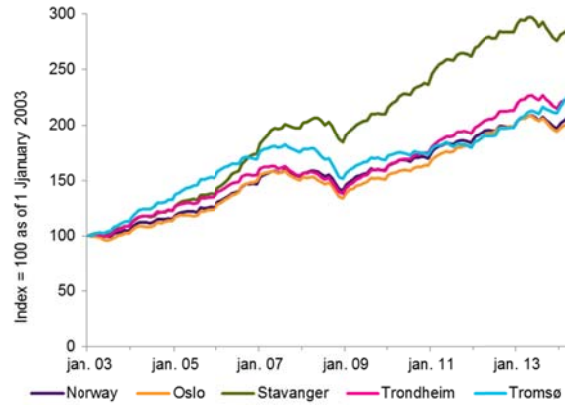
House prices in the largest towns have largely shown the same trend (chart 1.10). On a non-seasonally-adjusted basis, prices have risen somewhat in recent months.

After falling sharply in January 2014, housing starts rose somewhat in February. In recent years the trend in housing starts has largely coincided with the trend in house prices relative to construction costs excluding plot prices (chart 1.11). For given plot prices, higher house prices relative to construction costs make it relatively more profitable to construct new housing. In the case of housing starts, the decline started in 2012, whereas house prices relative to construction costs started to fall in 2013.

Over time, housing construction and population trend are of significance for house prices. Periods of stronger growth in population than in housing construction have coincided with higher growth in house prices, and conversely. However, the number of households is probably a better explanatory factor for the price trend. The number of households continues to grow slightly faster than house completions (chart 1.12).

The Norwegian housing market is substantially affected by net immigration (immigration less emigration). Population growth, which is now strongly driven by net immigration (chart 1.13), is affecting demand in the housing market for both rental and owner-occupier properties. Immigrants have previously proven to be cross-border mobile in economic fluctuations. Hence the demand side in the Norwegian housing market is more sensitive to cyclical swings than it was previously. The strong population increase in recent years is largely ascribable to the EU enlarg-

1.10 Regional house prices



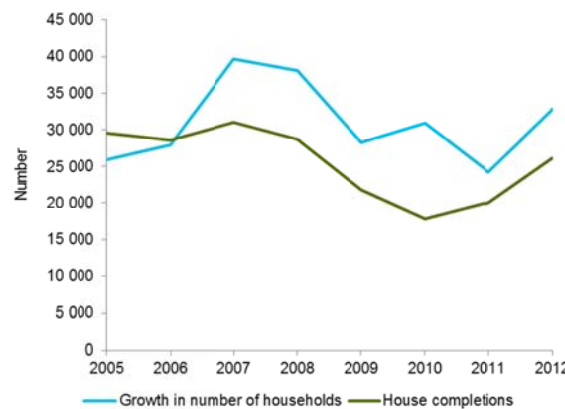
Sources: EFF, Finn.no, and Eiendomsverdi

1.11 House prices relative to construction costs. Number of housing starts



Source: Statistics Norway

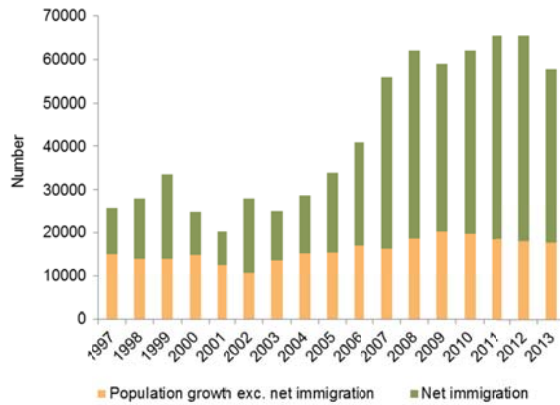
1.12 Households and house completions



Source: Statistics Norway

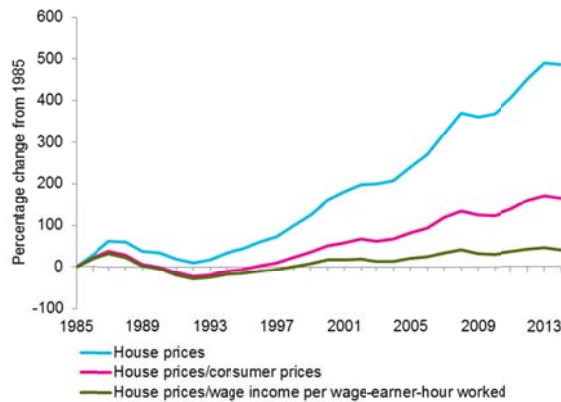
1 ECONOMIC TRENDS AND MARKETS

1.13 Population growth



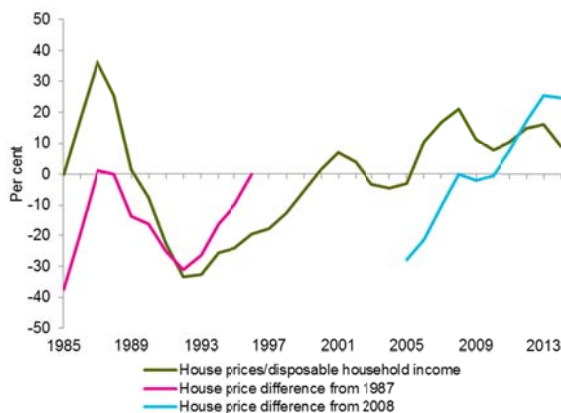
Source: Statistics Norway

1.14 House prices and other price and income variables



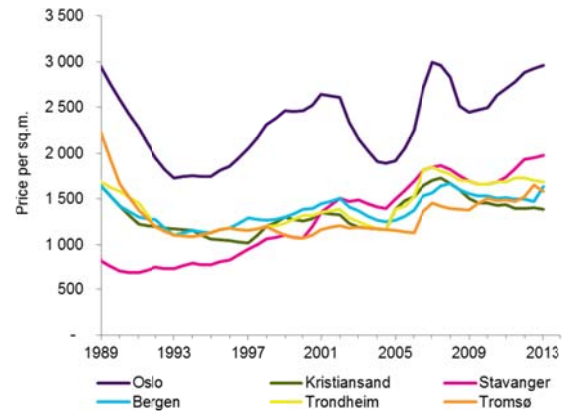
Sources: EFF, Finn.no, Eiendomsverdi and Statistics Norway

1.15 Ratio of house prices to disposable income, deviation from historical average 1985-2013. House prices, percentage difference from 1987 and 2008 respectively



Sources: Thomson Reuters Datastream and Statistics Norway

1.16 Rental prices of office premises in the six largest towns in Norway. Real prices



Sources: OPAK, Thomson Reuters Datastream and Finanstilsynet

gement in 2004. Net immigration in 2013 was at roughly the same high level as in the years following the international financial crisis.

Despite some decline of late, house prices remain historically high. House prices deflated by consumer prices rose by about 165 per cent from 1985 to 2013 (chart 1.14). In the same period house prices deflated by wage incomes per wage-earner-hour worked have risen by about 40 per cent.

Disposable income is important for households' demand for dwellings. In the long term there is a necessarily close correlation between the housing stock's market value and disposable income. House prices relative to disposable income have on only three occasions in the past 30 years exceeded the historical average by the current margin (chart 1.15). The first occasion was immediately prior to the banking crisis at the end of the 1980s, while the other cases were in the run-up to the international financial crisis in 2008, and in 2013. After these periods house prices fell or house price growth halted. There are important differences between the periods. Prior to the banking crisis, real after-tax interest rates were very high. Now the opposite is true. Households' overall debt is significantly higher now than it was then. Hence an interest rate hike will impact strongly on households' disposable income. The high debt ratio means that households' net wealth will fall by a large margin should house prices fall. This could lead to a substantial fall in consumption.

COMMERCIAL PROPERTY

Lower growth in household demand has begun to impact negatively on retail trade. The hotel industry has seen good demand growth, but capacity has risen correspondingly. Turnover of commercial property has fallen somewhat compared with 2012, but the price level is holding up.

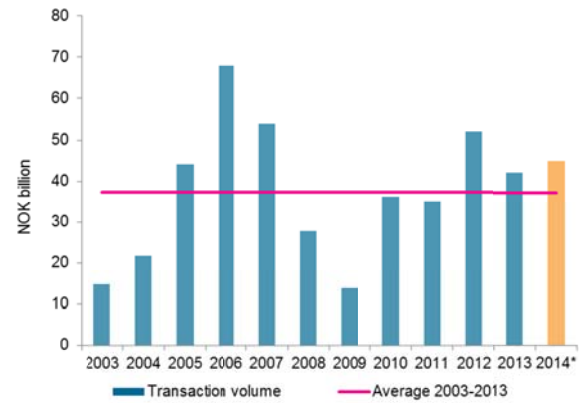
Rental prices of office premises in the largest towns have risen or remained stable. Market prospects for commercial property have however weakened. Business and industry will likely receive few impulses from oil activity and the housing market ahead. Forecasts for the Norwegian economy point towards a weak rise in unemployment, but from a low level. Growth in private consumption is also expected to be moderate ahead. This may affect the demand for commercial property and property companies' profits.

Office premise rentals are property companies' main revenue source. Office rental prices have risen in most of the larger towns in Norway in the past year. However, real rental prices in these towns, apart from Stavanger, remain lower than in 1987-1988 (chart 1.16). The office vacancy rate (premises currently vacant or to be completed within 12 months, and without a tenant) in Oslo, Asker and Bærum rose slightly from 8 per cent in the third quarter of 2013 to 8.6 per cent in February 2014, as a result of a large volume of completions. According to DNB Næringsmegling, the vacancy rate has not been higher than its current level since the first half of 2010. However, reduced construction starts are expected to dampen the vacancy rate in the longer term. The fact that rental prices are rising in spite of the increasing vacancy rate may be due to stricter requirements imposed by office tenants in terms of standard and location. This concurrently heightens owner risk on outmoded office premises in more outlying areas. In recent years many such properties have been converted to housing. Weaker growth in house prices and increased construction costs may however reduce both interest in residential conversion projects and properties' alternative utility value in the period ahead. The trend in other larger towns in Norway resembles that in Oslo.

Purchases and sales of commercial properties declined in the past year. According to preliminary figures from Statistics Norway 13 per cent fewer commercial property transactions were executed in 2013 than in the previous year. Moreover, fewer sizeable property transactions in excess of NOK 50m were recorded (chart 1.17). Demand is generally highest in office buildings and retail segments, and is directed at properties with a prime location and reliable long-term tenants.

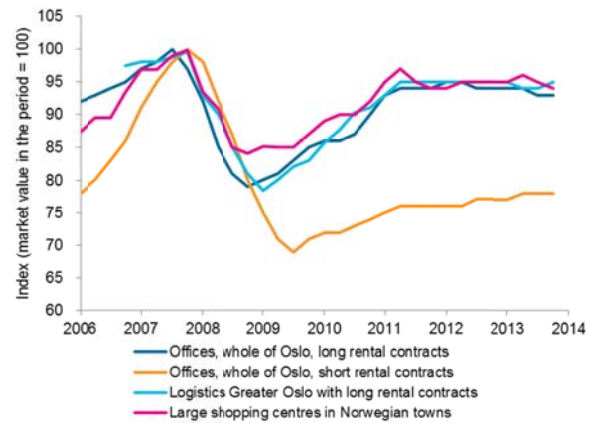
Low interest rates and high demand for commercial properties with a prime location and long rental contracts contributed to a rapid recovery of prices of upmarket properties after the steep price fall in the wake of the financial crisis. A similar price trend has not been observed in the case of commercial properties with shorter rental contracts. Valuations in this segment remain considerably lower than at the previous price peak in 2008 (chart 1.18). Upmarket properties showed a positive value trend through 2013, while normal properties with an average location and

1.17 Property transactions above NOK 50 million



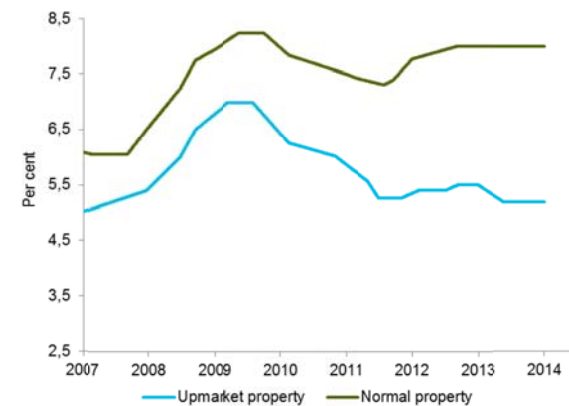
Source: DNB Næringsmegling

1.18 Akershus Eiendom's value index for commercial property. Real values*



*The basis for the indices is a rolling selection of properties which are valued annually or quarterly. Source: Akershus Eiendom

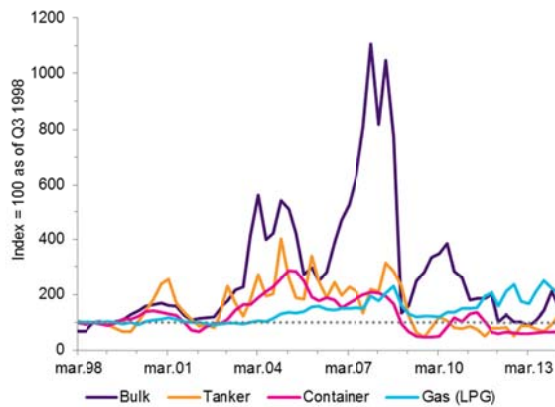
1.19 Yield on commercial properties



Source: DNB Næringsmegling

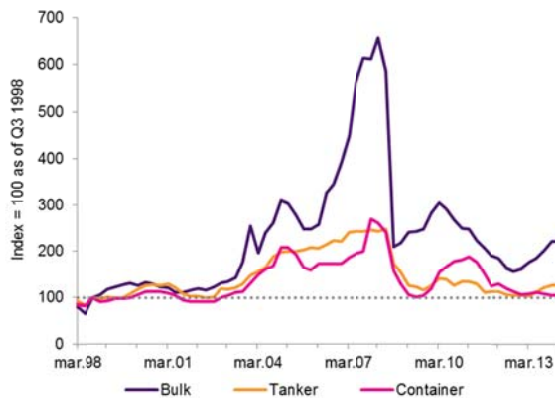
1 ECONOMIC TRENDS AND MARKETS

1.20 Freight rates in the tanker, dry bulk, container and gas market



Source: Clarkson Research Services Ltd., Clarksea Index

1.21 Sales values in the secondary market. Five-year-old ships



Source: Clarkson Research Services Ltd., Clarksea Index

shorter-term contracts were on a flat value trend in the same period. Yield, defined as annual net rental revenue divided by purchase price, reflects the same demand pattern. Yield on upmarket properties declined somewhat in 2013, to 5.2 per cent, while yield on normal properties remained stable at 8 per cent (chart 1.19).

SHIPPING AND OFFSHORE MARKETS

International shipping has been marked by low capacity utilisation and low freight rates for several years. Weak growth in many economies affected demand for tonnage at the same time as fleet growth was high. Construction of new ships slowed through 2013. The fleet grew by an estimated 5 per cent in 2013, the lowest growth figure since 2004. Demand for tonnage picked up in the second half-year, and average capacity utilisation rose marginally towards year-end. Capacity utilisation remains low compared with the years prior to the financial crisis. Freight rates, which have

remained at historically low levels in the last two years, rose slightly towards the end of 2013 (chart 1.20). This led to a rise in the prices of second-hand ships. The sharp drop in values from the peak level in 2008 thus looks to have come to a halt (chart 1.21).

Profitability in traditional shipping segments such as dry bulk, tanker and container remains weak. The IMF expects increased economic growth internationally and an upturn in world trade in the next few years. Such a trend could in time improve profitability in these segments. However, much uncertainty attends the estimates. The trend in, above all, the Chinese economy will be important for tonnage demand and profitability.

Freight rates for vessels transporting liquid gas (LNG and LPG), has held up for several years. However, a large increase in new ships reduced capacity utilisation towards year-end, and freight rates declined slightly.

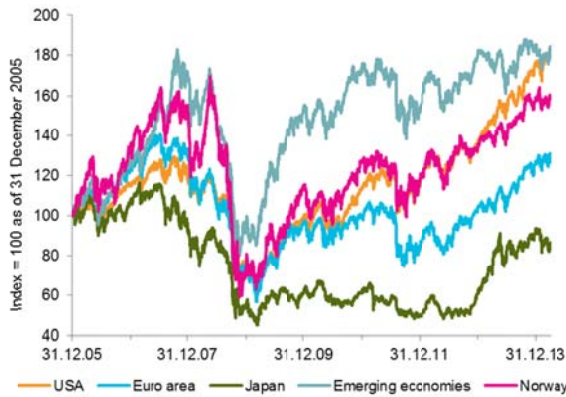
High offshore activity in the North Sea and other areas brought increased capacity utilisation in oil-related shipping services in 2013. Profitability in the segments was relatively good.

SECURITIES AND FOREIGN EXCHANGE MARKETS

In recent months securities and foreign exchange markets have been driven by the cautious improvement in macroeconomic indicators for the US and the euro area, the US Federal Reserve's scaling back of its monthly purchases of fixed income securities (quantitative easing), and the weak trend in several emerging economies. Some unease has also been noted among investors with regard to the risk of credit bubbles in China. The debt crisis in the euro area now appears to be a lesser concern for market actors than previously. Thus far the markets have not been greatly affected by the political turbulence in and around Ukraine, but this conflict is a potential source of market turmoil ahead.

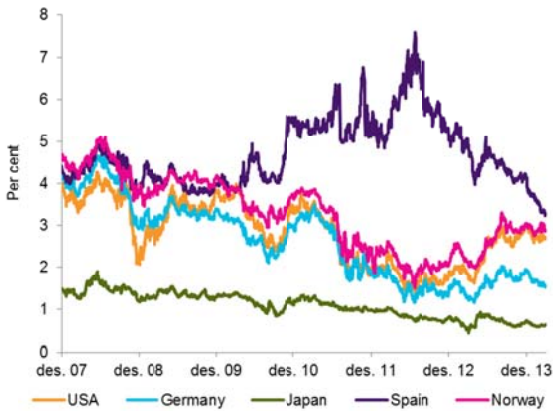
A consequence of the US Federal Reserve's tapering of its quantitative easing policy has been a return of capital from emerging economies to US and other western capital markets. This is largely capital that was invested in emerging economies by international investors searching for yield. The return of capital has weakened the exchange rates of the emerging economies, giving rise to inflation hikes in these countries. In an attempt to counteract the capital movement and dampen domestic price pressures, central banks in several emerging economies have raised their key policy rates. This weakens economic growth and could bring higher interest rates and a weaker trend in stock markets in the countries concerned.

1.22 Return on shares, MSCI indices



Source: Thomson Reuters Datastream

1.23 Ten-year government bond rates

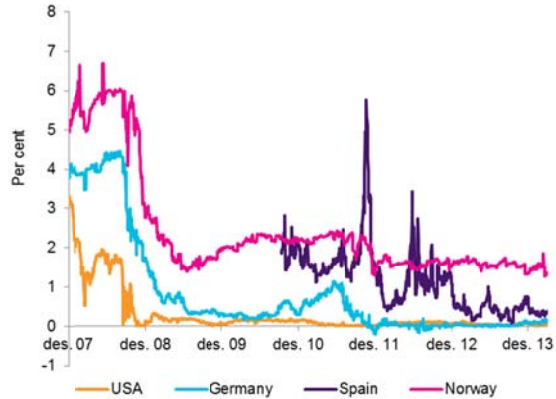


Source: Thomson Reuters Datastream

After rising through 2013, international share prices fell in January of the current year (chart 1.22). Uncertainty regarding the Federal Reserve's tapering of its quantitative easing policy was a contributory factor. The moderate improvement in key figures for the US and European economies alike was not sufficient to spark a share price recovery. The markets turned around in February, and largely recouped the decline seen since year-end. Thus far in 2014 Oslo Børs has seen a slightly weaker trend than stock exchanges in the US and the euro area, which is probably explained by expectations of lower economic growth in Norway.

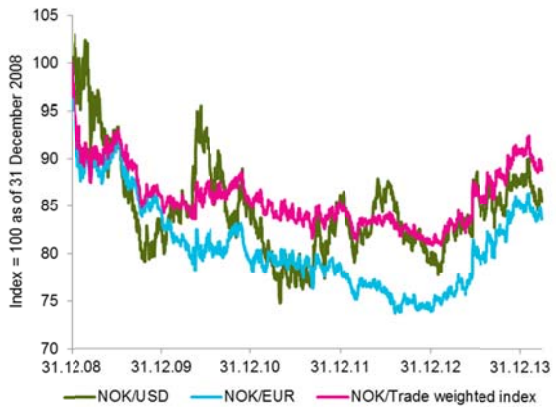
Long-term government bond rates in the US, Germany and Norway rose in 2013 (chart 1.23). The upturn is related to expectations of stronger economic growth in the major industrialised countries and market actors' expectation of a tapering of the Fed's quantitative easing policy. Thus far this year, international long government bond rates have fallen. This is related to the return of capital from emerging econo-

1.24 Three-month treasury bill yields



Source: Thomson Reuters Datastream

1.25 Norwegian krone exchange rate



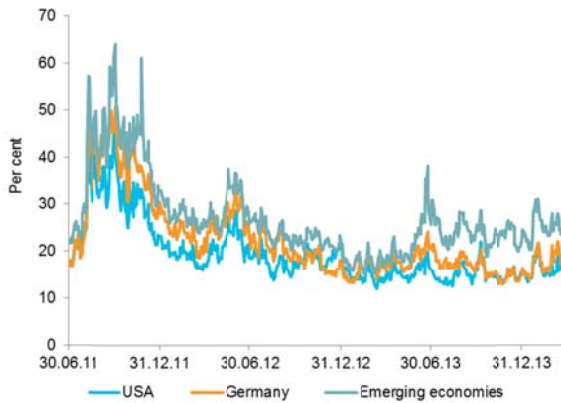
Sources: Thomson Reuters Datastream and Norges Bank

mies, including Brazil, India, South Africa, Turkey and Indonesia. A reduction in the interest rate differential between government bonds issued by debt-stricken euro countries and government bonds issued by Germany suggest that market actors expect an improvement in the weakest euro countries. Rates on short government securities remain at historically low levels (chart 1.24). The spread between interbank rates and short-term government bond rates has been relatively stable in the US and the euro area alike.

The US dollar weakened through 2013 against both the euro and the Swiss franc, but strengthened against the Japanese yen. Expectations of a scaling back of the Fed's supply of liquidity to the markets may have contributed to reducing net demand for US securities and to the weakening of the dollar. The weakening of the Japanese yen is related to the central bank's expansionary monetary policy. The US dollar strengthened slightly in January, probably on the back of strong macro figures and the migration of capital from

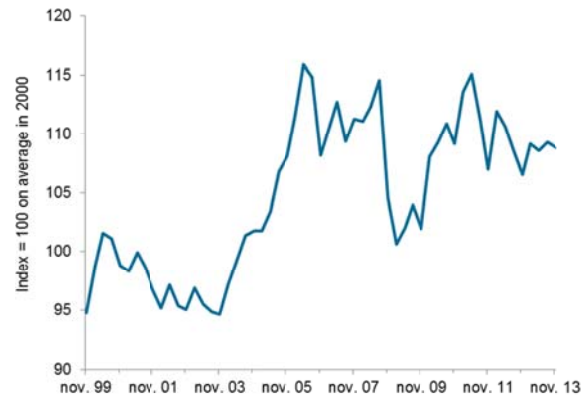
1 ECONOMIC TRENDS AND MARKETS

1.26 Implicit volatility, selected equities markets



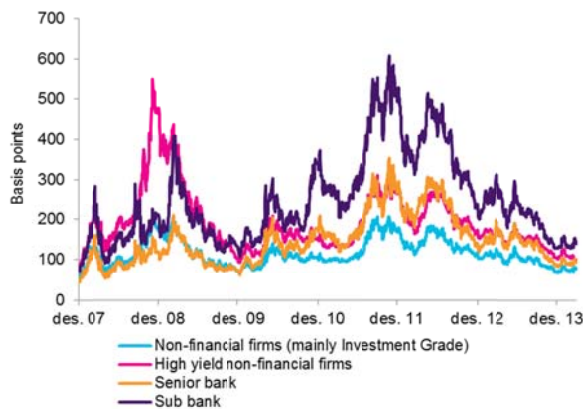
Source: Thomson Reuters Datastream

1.29 Norway's terms of trade



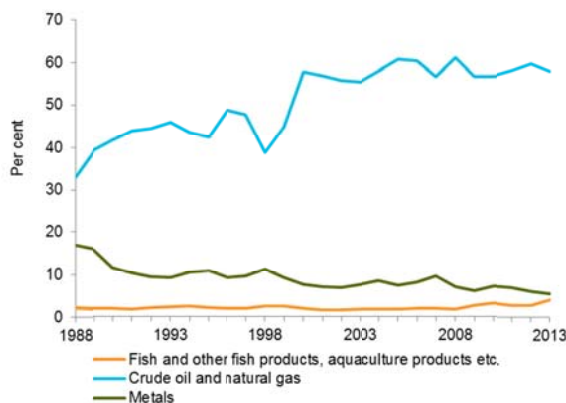
Source: Thomson Reuters Datastream

1.27 CDS prices, selected European 5-year bonds



Source: Thomson Reuters Datastream

1.28 Selected commodity groups' share of Norwegian goods exports



Source: Statistics Norway

emerging economies. The Norwegian krone depreciated against most key currencies through 2013 and into 2014 (chart 1.25). However, the krone has strengthened since the end of January.

Increased uncertainty with regard to the trend on equity markets and in emerging economies is reflected in implicit volatility which increased markedly in the first half of 2013 and has since remained at a higher level (chart 1.26). Prices of CDS contracts on five-year bonds issued by banks in the euro area declined through 2013 (chart 1.27). In January this year prices for all categories rose somewhat, but fell back in February. While the pricing of CDS contracts suggests that market actors still consider European senior bank bonds to be more risky than European bonds issued by non-financial firms with high creditworthiness, the price differential has narrowed considerably in the past two years.

COMMODITY MARKETS

Some commodities – such as oil, aluminium and fish – make up a significant proportion of Norwegian exports (chart 1.28), and the price of these commodities is of much significance for the Norwegian economy. A favourable trend in the price of Norwegian goods exports relative to the price of imported goods has contributed to a positive trend in real disposable income for Norway. The terms of trade remain at a historically high level (chart 1.29), even though import prices have risen and prices of some important exports have levelled off or declined somewhat in recent years (charts 1.30 and 1.31).

The oil price was about USD 110 per barrel towards the end of 2013, which is close to the level at the start of last year. The oil price trend was determined by factors which partially cancelled each other out. Political uncertainty in North Africa and the Middle East, including the Civil War in

Syria and the tense relationship between Iran and in the first instance Israel and the US concerning Iran's nuclear research programme pulled in the direction of a high oil price. This was offset by lower demand from emerging economies and increased oil production in the US and Canada. At the end of March this year the oil price was USD 106 per barrel. The turbulence in and around Ukraine could lead to a rise in the price of oil and other energy commodities. According to IMF forecasts, the oil price will remain roughly unchanged in 2014 and fall about 5 per cent in 2015. Broadly the same factors that drove market developments in 2013 are expected to remain in effect into 2014.

Aluminium prices fell by 6 per cent in 2013. The decline is probably explained by a subdued demand increase and increased supply. The World Bank expects a decline in the price of aluminium in 2014, and points to developments in the Chinese economy as an important factor for the price trend. According to the World Bank, China accounts for about 45 per cent of global metals consumption.

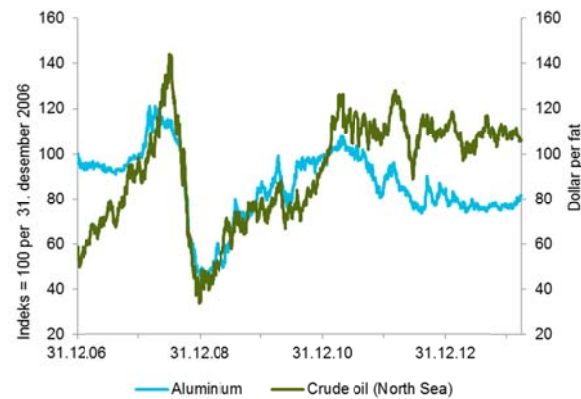
The market for farmed salmon is volatile (chart 1.31). The price of farmed salmon rose in the first of 2013, probably as a result of reduced supply to the market. From July onwards the price of farmed salmon again plunged, but recovered in the fourth quarter due to a strong increase in demand. From year-end, however, the price of salmon declined somewhat but was still high in March.

Compared with the price of crude oil and aluminium, the price of farmed salmon has varied widely over recent years. Around the time of the financial crisis, volatility of price changes of crude oil rose markedly, but rapidly subsided, falling to a historically low level (chart 1.32).

RISK FACTORS

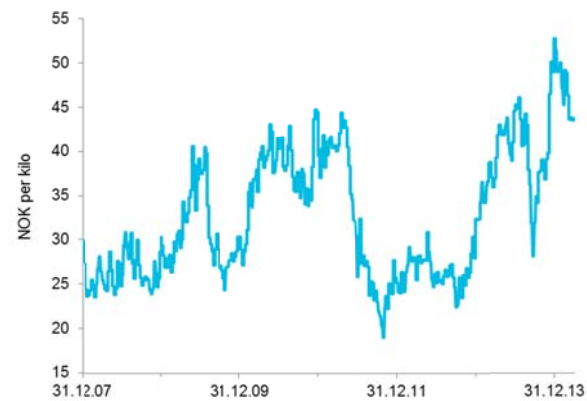
Uncertainty with regard to the future path of the world economy remains substantial. Several industrialised countries face major challenges with regard to debt reduction and structural reform. In the US the financial crisis laid the basis for, and compounded, imbalances in the economy which have yet to be corrected. Risk associated with fiscal policy is somewhat reduced, but turbulence may reappear when new budget agreements are to be negotiated. The labour market also gives cause for concern. Household consumption is the largest demand components in the US economy. In addition to wage incomes, increased wealth due to a steep rise in share prices in recent years has fuelled consumption growth. Share prices may have risen more than warranted by economic fundamentals, and a substantial setback in the share market could lead to a reversal of the positive trend in the US economy.

1.30 Price of crude oil and aluminium



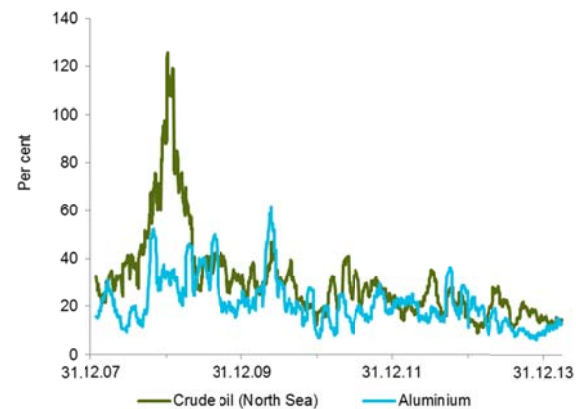
Source: Thomson Reuters Datastream

1.31 Fish Pool Index spot price of salmon



Source: Thomson Reuters Datastream

1.32 Volatility of price changes for crude oil and aluminium



Rolling 22-day standard deviation. Source: Thomson Reuters Datastream

1 ECONOMIC TRENDS AND MARKETS

Public and private debt in many euro countries is very high and a need for debt reduction remains. This will curb domestic demand, making it difficult to reduce unemployment. Despite expansionary monetary policy, inflation in the euro area is low. Lasting lower-than-expected inflation increases the likelihood of deflation, thereby heightening the debt burden in real terms. Low or no growth in the euro area for a long period cannot be ruled out.

Emerging economies have driven most of the growth in the world economy in the wake of the financial crisis, but growth has slowed considerably in the past two years, especially in China. The future development of the Chinese economy is a matter of much uncertainty. Growth has for many years largely been investment driven. Low interest rates and easier access to credit through a wide ranging shadow banking system have fuelled rapid credit growth and risk of overinvestment, especially in the property market. The authorities wish to put the economy on a more consumption-driven footing. This is being done by, among other things, increasing the cost of capital, curbing shadow banking and stimulating higher private consumption by increasing households' wage share. The stage is set for lower GDP growth in the Chinese economy ahead, and a substantial slowdown cannot be ruled out.

Capital is flowing out of several emerging economies. In order to dampen domestic inflationary pressures and hold back the flight of capital, central banks in such countries have raised interest rates, thereby reducing investment and consumption. The reversal of capital flows is largely due to signs that the industrialised countries are getting back on their feet after the financial crisis. Several extraordinary monetary policy measures are being scaled back, bringing higher return on investments and presumptively lower risk. Should the capital outflow from emerging economies increase, growth will be further curbed. This could contribute to a significantly lower growth in the world economy.

The Norwegian economy has to a large degree benefited from the emerging economies' high growth, partly thanks to a marked improvement in terms of trade. The vigorous increase in the oil price has been particularly significant. Recent years' trend has brought very high profits in the petroleum sector and among sub-suppliers to this sector. High and rising costs have fed through to business and industry in general, and parts of the export industry in particular have struggled. Viewed this way, the Norwegian economy has grown more and more dependent on the petroleum industry. A lasting fall in the oil price as result of lower growth internationally would adversely affect large sections of Norwegian business and industry.

Using its macroeconometric model, Statistics Norway has

determined that about one-fifth of the increase in Mainland Norway GDP from 2002 to 2012 is ascribable to demand from the petroleum sector and increased use of the oil wealth. Research conducted by the Centre for Applied Macro- and Petroleum Economics (CAMP) at BI Norwegian Business School suggests that the secondary effects may be considerably larger. By employing a structural dynamic model which looks at several industries simultaneously and includes employment and earnings in these industries, between 30 and 40 per cent of the variations in the mainland (non-oil) economy are shown to be ascribable to petroleum. Both approaches show that the negative effect is significantly larger when the oil price falls due to declining demand for oil rather than as a result of an increase in supply. China has accounted for most of the increase in demand in recent years, and a setback in the Chinese economy could lead to a marked decline in demand for oil. Lower growth in the international economy has direct negative impacts on Norwegian exports, bringing impaired corporate earnings and higher unemployment. Calculations by Statistics Norway and BI Norwegian Business School show that the secondary effects in the mainland economy of a fall in the oil price could be very substantial.

A lastingly low oil price will in isolation hit the Norwegian economy hard. Vulnerability is intensified by the household sector's record high debt burden and the high house prices. After a brief period of decline, house prices are now rising anew. Forecasts suggest that household debt will continue to grow more than incomes. This heightens households' vulnerability in the event of an interest rate hike. The backcloth to this development is lastingly low interest rates, high employment and good income growth. Calculations show that for large groups of households only a very small interest rate hike will substantially increase the interest burden. This could reduce household demand.

Lower household consumption will have adverse secondary effects for business and industry, in particular the property sector. Norwegian banks' largest loan exposures are to commercial property. Market prospects for commercial property have weakened, and business and industry will be less able to draw benefit from impulses from the petroleum sector and the housing market ahead.

The largest banks' funding is substantially market based, and insurance companies have invested much of their total assets in shares and bonds. Equity prices may have risen more than warranted by economic fundamentals in recent years. The uncertainties regarding the world economy are spurring nervousness among investors, prompting higher risk premiums in money and bond markets and declining stock markets. Such market conditions may impair access to – and raise the cost of – banks' funding, and adversely affect insurers' portfolios.

2 BANKS

The financial turmoil from 2008 onwards demonstrated the substantial vulnerability of the international banking system, after a long period of deregulation and increased risk taking in the industry. Both nationally and internationally the banking industry is now in a capital building phase designed to increase banks' robustness to future economic setbacks. In 2013 the authorities established new capital and buffer requirements for Norwegian banks with a basis in the requirements in force in the EU as from 1 January 2014. The Norwegian minimum requirements will be stepped up gradually in the period to 1 July 2016. Given continued good earnings, prudent dividend payouts and moderate lending growth, the requirements can in the main be met through profit retention.

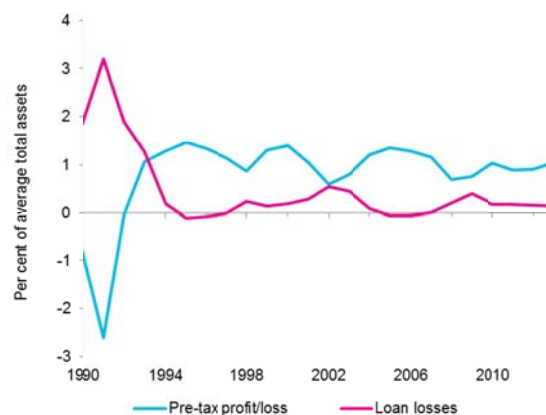
Norwegian banks posted good results in 2013. Lower market funding costs for banks made a particularly positive contribution. At the same time a continued favourable trend in the domestic economy brought a low level of non-performing loans and continued low losses. The high growth in lending to retail borrowers continued in 2013, causing the household debt ratio to rise, whereas growth in lending to corporates was low. Norwegian banks' equity capital rose considerably in 2013, mainly as a result of profit retention. Banks enjoy good access to international lending markets, and their market funding is now on a more long-term footing. Funding via international capital markets may however render banks vulnerable to international turbulence, as witnessed during the financial crisis.

PROFITABILITY

Norwegian banks have recorded good results in the years following the international financial turbulence in 2008. High activity levels in the Norwegian economy have contributed to a good income trend for the banks and to low loan losses. In 2013 reduced funding costs in particular enabled banks to achieve a pre-tax profit 21 per cent higher than the previous year. Profit as a share of average total assets (ATA) rose from 0.9 to 1.1 per cent (chart 2.1). Banks have considerably increased their equity capital in recent years, mainly by way of profit retention, but also through stock issues.

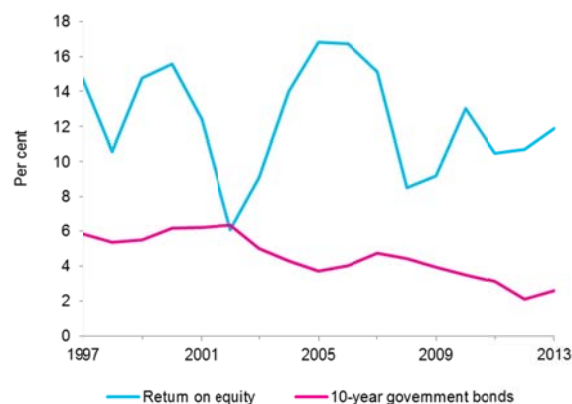
Despite the increase in equity capital, banks' increased earnings mean that return on equity has remained at a high level in recent years. In 2013 return on equity rose by 1 percentage point from the previous year, to 12 per cent (chart 2.2). This was substantially lower than in the years immediately prior to the financial turbulence, but on a par with the average return since 1997. In this period the government bond rate has, with some brief exceptions,

2.1 Loan losses and pre-tax profit/loss



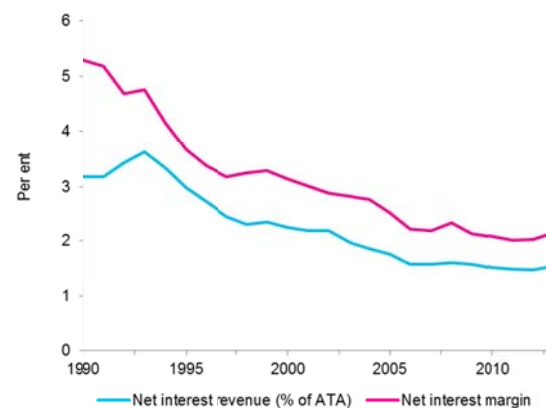
Source: Finanstilsynet

2.2 Return on equity



Source: Finanstilsynet

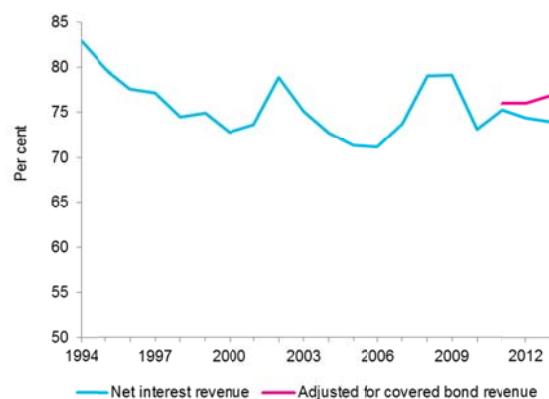
2.3 Net interest revenue in relation to average total assets



Source: Finanstilsynet

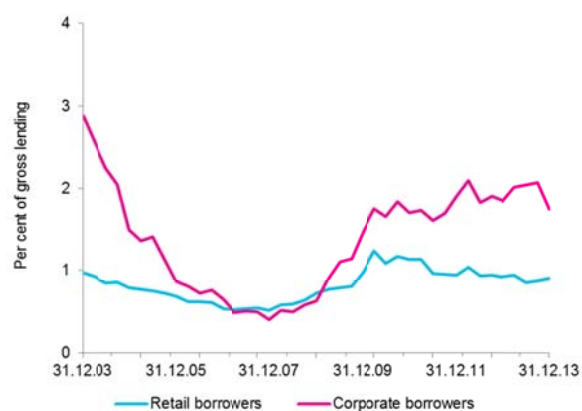
2 BANKS

2.4 Net interest revenue's share of operating revenue



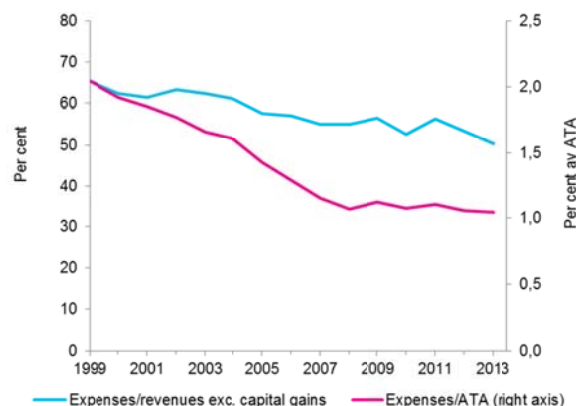
Source: Finanstilsynet

2.5 Non-performing loans*



* The definition of non-performance was revised as from 31.12.2009 from 90 days or more past due to 30 days or more past due. This change caused a shift in the volume of non-performing loans. Source: Finanstilsynet

2.6 Operating expenses



Source: Finanstilsynet

declined. Banks' return on equity in 2013 was 9 percentage points higher than the average difference between banks' return on equity and the rate on long-term government securities for the period since 1997.

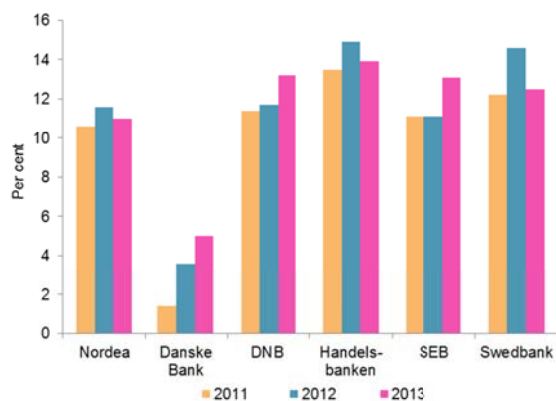
Norwegian banks' most important revenue source is net interest revenues, i.e. the difference between interest revenues and interest expenses. Net interest revenues have been on a downward trend for several decades (chart 2.3) but have levelled off relative to average total assets in the past three years. Despite a slight increase in lending rates in the second quarter of 2013, the average rate charged to retail borrowers was, for the year as a whole, approximately unchanged compared with 2012. In 2013 banks' funding costs in securities markets fell, both for covered bonds and senior bonds. This was in particular due to reduced risk premiums, along with falling money market rates. Lending growth in 2013 was 4.7 per cent (including loans in covered bond issuing entities). Hence the key explanation for the increase of 11 per cent in net interest revenues in 2013 was reduced funding costs. Banks' total interest earnings were 1 per cent lower than in 2012, while total interest expenses fell by 9 per cent.

As from 2013 banks pay a levy to the Banks' Guarantee Fund irrespective of the level of capital in the fund. The guarantee fund levy is recognised as an interest expense in the banks' accounts. Banks' profit was debited with a guarantee fund levy of NOK 1.5bn in 2013, whereas in 2012 they were exempt from levy payment. When this is adjusted for, the increase in net interest revenue from 2012 to 2013 was 13 per cent.

Net interest revenues accounted for 74 per cent of the banks' overall operating revenues (exc. value changes on financial instruments). If adjustment is made for revenue from loans transferred by the banks to co-owned bond-issuing entities, which are accounted for as commission earnings at these banks, the figure was 77 per cent (chart 2.4). Net interest as a share of banks' overall operating revenue showed a falling tendency up to the financial turbulence in 2008. In 2008 and 2009 the share was abnormally high due to a marked reduction in banks' other earnings – ascribable in particular to reduced activity in capital-market-related services in these two years.

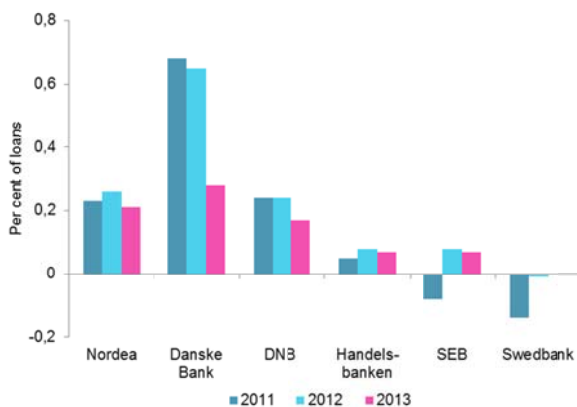
A key explanation for Norwegian banks' good profits in recent years is low loan losses (chart 2.1). Some smaller banks have incurred heavy losses, but for the banking industry as a whole loan losses have been low for several years. In 2013 loan losses measured 0.2 per cent of overall outstanding loans in 2013, showing approximately no change compared with the three preceding years. The low loan losses are related to the level of non-performing loans (chart 2.5), which has been kept down by low interest rates and sound growth in the domestic economy. Of banks' loans

2.7 Return on equity, largest Nordic financial groups



Sources: Annual reports

2.8 Loan losses, largest Nordic financial groups

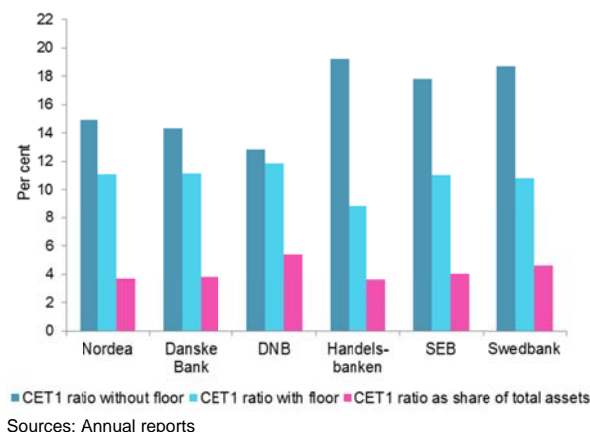


Sources: Annual reports

to corporates, 1.8 per cent were non-performing at the end of 2013. As regards loans to retail borrowers, essentially residential mortgages, 0.9 per cent were non-performing. The non-performing share was marginally lower than one year previously for both borrower groups.

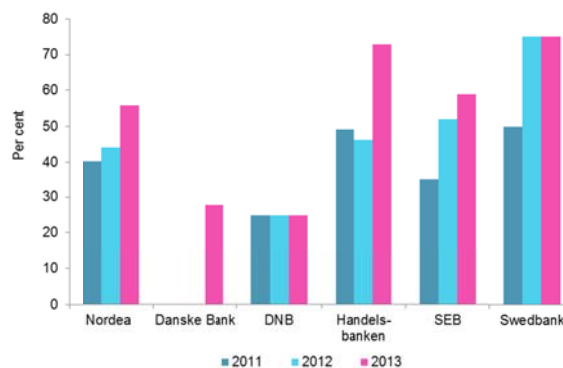
The decline in net interest revenues relative to total assets in the period from 1990 onwards has largely been offset by a similar reduction in banks' cost level. Technological progress has changed banking operations, reducing manual processes and increasing self-service. As chart 2.6 shows, costs relative to average total assets have levelled off in recent years, after a substantial fall up to 2008. The ratio of operating expenses to operating revenues is considerably reduced, in 2013 to 50 per cent – an unprecedentedly low level.

2.9 CET1 ratios at the largest Nordic financial groups, at 31.12.2013



Sources: Annual reports

2.10 Dividend payout ratio, largest Nordic financial groups



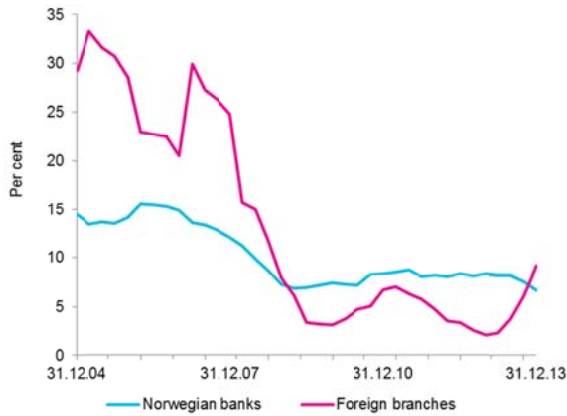
Sources: Annual reports

Nordic financial groups

Profitability has been good in most large Nordic financial groups in recent years (chart 2.7). Loan losses were at a low level in 2013, in particular among Swedish banks. Danske Bank recorded an appreciable decline in impairment write-downs in 2013, after relatively heavy loan losses in preceding years (chart 2.8). DNB ASA reported the highest CET1 ratio (with Basel 1 floor) among the largest Nordic financial groups, at 11.8 per cent, at the end of 2013. Chart 2.9 shows that the Basel I floor has the largest effect for the Swedish conglomerates. The difference between CET1 ratios with and without the floor varied from 1.0 to 10.4 percentage points among the Nordic conglomerates. DNB had the lowest core capital adequacy without the floor, at 12.8 per cent, but had at the same point the highest CET1 capital as a share of total assets, at 5.4 per cent. DNB had the lowest dividend rate of the largest Nordic financial conglomerates in 2013 (chart 2.10). The Swedish banks were consistently highest.

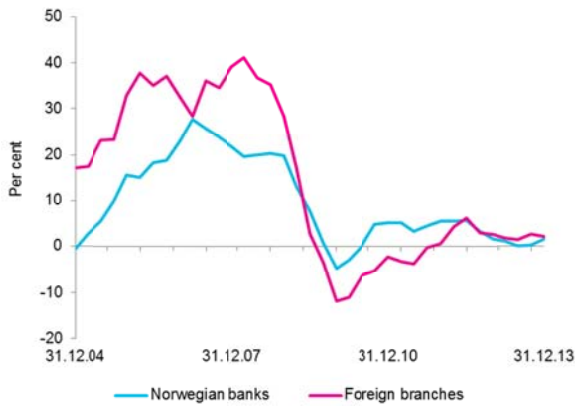
2 BANKS

2.11 Growth in lending to retail borrowers



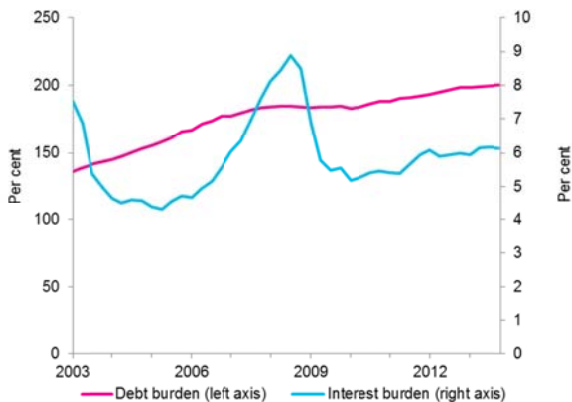
Source: Finanstilsynet

2.12 Growth in lending to domestic enterprises



Source: Finanstilsynet

2.13 Households' debt burden¹ and interest burden²



¹ Loan debt in per cent of disposable income corrected for estimated reinvested share dividend 2003 – 2005 and redemption/reduction of equity capital 2006 – Q3 2012 ² Interest expenses in per cent of disposable income corrected for estimated reinvested share dividend 2003 – 2005 and redemption/reduction of equity capital 2006 – Q3 2012 plus interest expenses. Sources: Statistics Norway and Norges Bank.

CREDIT RISK

Norwegian banks are particularly exposed to credit risk. Loans to customers accounted for 72 per cent of total assets in the banking sector at the end of 2013. Loans to retail borrowers accounted for 57 per cent of total loans, loans to corporates for 40 per cent. Overall growth in lending was 4.7 per cent in 2013. The growth rate has been fairly stable in the past four years, but there is considerable difference in growth rates between lending to retail borrowers and lending to corporate borrowers.

Growth in lending to retail borrowers has for a long period been substantially higher than income growth. Despite somewhat lower growth in the past year, loans to retail borrowers nonetheless increased by 6.7 per cent in 2013. After recording lower growth than Norwegian banks for five years, foreign banks' branches' lending growth of 9.2 per cent for 2013 topped that of Norwegian banks (chart 2.11). Loans from the Government Pension Fund have risen substantially in recent years, but still account for a very small portion of the total loan volume to retail borrowers. The Government Pension Fund's lending rate was increased as from March 2014 as a result of the upward adjustment of the standard interest rate. Banks' lending to corporate borrowers fell by 2 per cent in the past year, mainly due to a substantial reduction in lending to borrowers abroad. Loans to domestic corporates also showed reduced growth through 2013, probably influenced by signs of slower economic growth and by increased activity in the bond market. Foreign banks' branches had somewhat higher growth to domestic corporates than Norwegian banks in 2013 (chart 2.12).

HOUSEHOLD SECTOR

Low unemployment, high wage growth and low interest rates have contributed to substantial growth in household debt and incomes in recent years. Debt has however risen significantly more than incomes (chart 2.13). The debt burden is at the highest level ever recorded, and households are vulnerable to interest rate hikes and income lapse resulting from unemployment.

A steep increase in the interest burden resulting from higher interest rates and growing indebtedness brought a deterioration in households' financial position in the years preceding the international financial crisis, and dampened household demand for dwellings. However, a reduction in Norges Bank's key policy rate in autumn 2008 brought a significant easing of households' interest burden, their financial position improved, and housing demand and house price growth rapidly picked up again.

The Norwegian economy is highly sensitive to deteriorations in household sector finances. Given the sector's high debt level, households are more exposed than previously to interest rate hikes. The interest rate level now

Table 2.1 No. of households distributed on interest burden groups, rounded off to nearest whole thousand, 2012-2013

| Interest burden* | 2012, interest 4,2 % | 2013, interest 4,3 % | 2013, interest 6,3 % | 2013, interest 9,3 % |
|------------------|----------------------|----------------------|----------------------|----------------------|
| Below 20% | 1 684 000 | 1 694 000 | 1 435 000 | 1 129 000 |
| 20-30% | 119 000 | 133 000 | 286 000 | 349 000 |
| Over 30% | 52 000 | 59 000 | 165 000 | 408 000 |

* Interest expenses / income after tax. Sources: Statistics Norway and Finanstilsynet

needed to produce the same interest burden as in 2007, when house prices fell, is lower than it was in that year.

Sensitivity analysis of households' interest burden

The high level of debt in the household sector poses a risk to financial stability. The distribution of household debt and wealth is also of material significance. Large groups in Norway are in a significantly weaker financial position than the household sector overall. Statistics Norway, in conjunction with Finanstilsynet, has calculated the interest burden (interest expenses / income after tax) in the household sector for 2013. In addition, stress tests have been performed to see what the situation for households would have been had the interest rate at end-2013 been, respectively, 2 and 5 percentage points higher than today's level. See the account of the model and underlying assumptions below.

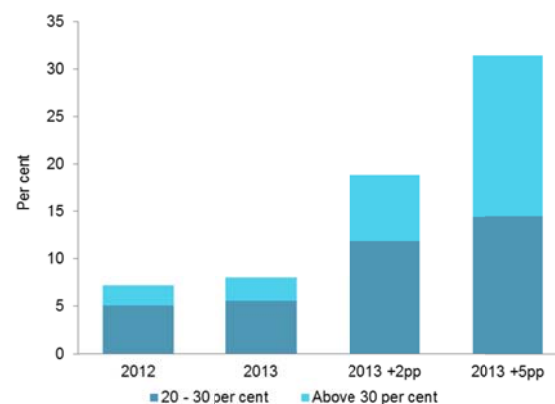


Assumptions in the calculations

Since autumn 2003 Statistics Norway, on commission from Finanstilsynet, has used the microsimulation model LOTTE to project households' debt and interest burden. The debt burden is households' debt as a share of income, while the interest burden is interest expenses as a share of income. Households' income is defined as income after tax, from which interest expenses are not deducted. The model data are a selection of about 10 per cent of households (about 240,000) from Statistics Norway's "Income statistics for households" for 2012. The income statistics provide information on the composition of household debt, interest payments and wealth, and the calculations throw light on households' vulnerability to interest rate increases. The model does not take into account changes in household behaviour that may result from an interest rate increase.

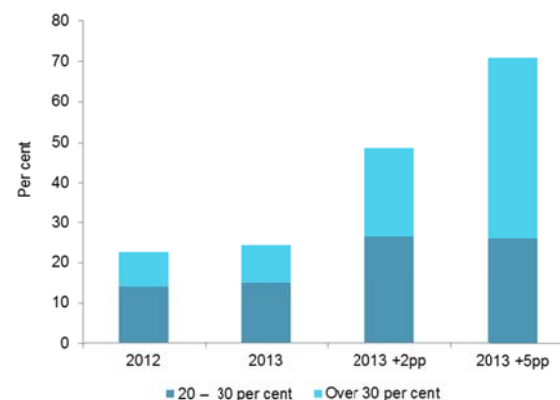
The projection for 2013 is based on historical year-end figures. Borrowing and deposit rates are average interest rates for households for 2013, taken from Statistics Norway's statistics for interest rates at banks and other financial institutions. Growth in household debt is set equal to the average of the monthly 12-month growth rates in domestic credit to households (C2) in 2013, i.e. 7.2 per cent. Deposit growth is calculated based on the increase in house-

2.14 Share of total no. of households by interest burden group



Sources: Statistics Norway and Finanstilsynet

2.15 Share of overall debt by interest rate burden group



Sources: Statistics Norway and Finanstilsynet

holds' bank deposits from 2012 to 2013 taken from Statistics Norway's financial sector accounts. Other estimates included in the model are taken from Statistics Norway's Economic Survey of the year 2013 from March 2014. The tax programme in the model comprises tax rules for 2013.



Table 2.2 Consumer loans at a number of companies*

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|--|--------|--------|--------|--------|--------|--------|--------|
| Consumer loans (NOKm) | 36 925 | 43 352 | 43 936 | 48 913 | 58 118 | 62 693 | 67 723 |
| Annual growth % | 18,9 | 17,4 | 1,4 | 3,0 | 5,1 | 7,8 | 8,0 |
| Losses in % of consumer loans | 0,9 | 2,2 | 3,1 | 2,7 | 1,5 | 1,3 | 1,3 |
| Net interest revenue in % of ATA | 9,8 | 8,8 | 11,8 | 12,0 | 11,3 | 11,6 | 11,9 |
| Pre-tax profits in % of ATA | 5,5 | 3,3 | 5,4 | 5,7 | 6,5 | 6,9 | 7,1 |
| Gross non-performance, 30 days, in % of consumer loans | | | | 10,0 | 8,4 | 7,6 | 7,6 |

* The sample was enlarged in 2012. Annual growth is calculated on the basis of a comparable sample. Source Finanstilsynet

According to the calculations the share of households with an interest burden above 20 per cent rose slightly from 2012 to 2013 (chart 2.14). The number of households with an interest burden above 20 per cent rose by 22,000 (table 2.1). The changes must be viewed in light of a weak rise in the interest rate, and to the fact that debt growth continued to exceed income growth.

The calculations show that household debt is at a level that renders their financial situation highly sensitive to interest rate changes. A lending rate of 6.3 per cent, which is 2 percentage points higher than the actual average annual interest rate, would have caused the proportion of households with an interest burden between 20 and 30 per cent to rise from 5.5 to 12 per cent. The proportion of households with an interest burden above 30 per cent would have risen from 2.5 to 7 per cent, corresponding to 165,000 households. In other words, a historically speaking moderate interest rate level will compel almost one in five households to devote 20 per cent or more of their after-tax income to mortgage interest payments. Instalment payments are in addition. A lending rate of 6.3 per cent is low by historical standards, and is below the level of, for example, 2008 (6.7 per cent).

A lending rate of 6.3 per cent will bring a sharp increase in the number of households with an interest burden above 20 per cent, and thus also to a large increase in this group's debt share, i.e. its share of households' overall debt (chart 2.15). The debt share of the group with an interest burden between 20 and 30 per cent would have risen from 15 to 27 per cent after the interest rate increase. The rate increase concurrently causes that portion of overall household debt held by households with interest expenses above 30 per cent of after-tax income to rise sharply, from 9 to 22 per cent.

A 5 percentage point rise in the interest rate would have caused as much as 17 per cent of households to incur an interest burden above 30 per cent (chart 2.15). In this scenario almost half of all household debt would be held by the group with an interest burden above 30 per cent. The

calculations also show that households with the highest interest burden have the least liquid financial assets. The household group with an interest burden above 20 per cent held just 3.6 per cent of total bank deposits in 2013.

CONSUMER LOANS

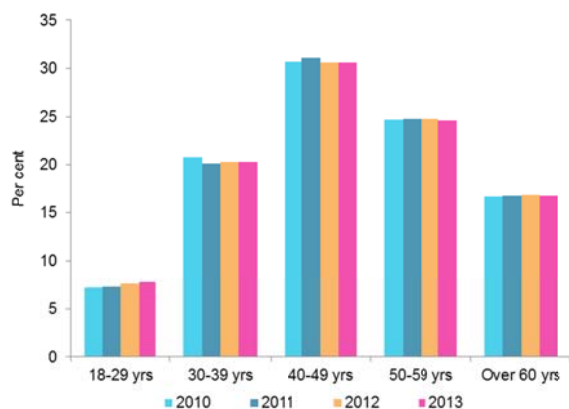
Norwegian banks' loans to households are predominantly home mortgage loans, and the volume of uncollateralised consumer loans is relatively small. Consumer loans are offered in the form of various products and include both card-based loans and other uncollateralised consumer loans. The effective interest rate on these loans varies widely depending on the amount involved and the repayment period, but is consistently high. The lenders apply stringent creditworthiness assessments to consumer loans, and reject a large proportion of the applications.

Finanstilsynet regularly surveys the activity of a selection of companies engaged in consumer finance. The selection comprised 22 companies (13 banks and nine finance companies) at the end of 2013, and both Norwegian companies and foreign branches are included. Consumer loans provided by these entities accounted for just under 3 per cent of households' aggregate borrowing.

Growth in consumer lending was high in the years preceding the financial crisis of 2008, but fell substantially the following year. The last few years have again seen quickening growth, and by the end of 2013 12-month growth was 8 per cent. Lending growth was somewhat lower than in the case of finance companies in general, but higher than the growth in Norwegian banks' lending to retail borrowers.

Net interest revenue on consumer loans has since 2009 been stable at a level above 11 per cent of average total assets (ATA), showing that these companies price in higher risk in relation to consumer loans than to mortgage loans. Book loss levels have been stable in the last two years. As a share of ATA the profit for 2013 was somewhat better than the previous year. Non-performing loans in per cent of consumer loans are approximately unchanged, but the level

2.16 Consumer loans by age group



Source: Finanstilsynet

of losses and non-performance is higher than for banks and finance companies in general.

Finanstilsynet has obtained additional data on borrower age from the 13 largest companies in the selection, which together hold a market share of more than 90 per cent. The data show that little in the way of consumer loans has gone to younger borrowers. At the end of 2013 the share of consumer loans to this group was 7.8 per cent (chart 2.16). Borrowers in the age group 40-49 accounted for the largest share of consumer loans at just over 30 per cent. Altogether 55 per cent of loans have gone to borrowers between the age of 40 and 60.

Measured in relation to aggregate consumer loans in each age group, non-performing loans were highest among the under-30s. The non-performance rate declines with increasing age. A slight decrease is seen in non-performing loans for the age group 18-29 from 2012 to 2013, and a slight increase among other age groups (chart 2.17).

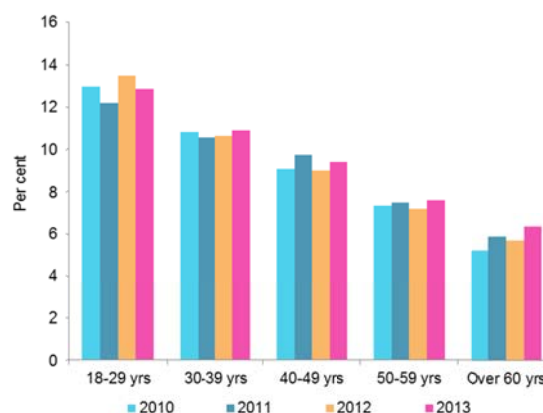


Debt collection

In January 2014 Finanstilsynet conducted a survey among six of the largest debt collection firms to gain a better overview of debt recovery cases broken down by type of claim and age group. At the end of 2013 the firms participating in the survey held an aggregate market share of 55 per cent overall debt recovery cases in process, whereas the overall market share for the firms measured by principal (original debt) for recovery was 70 per cent.

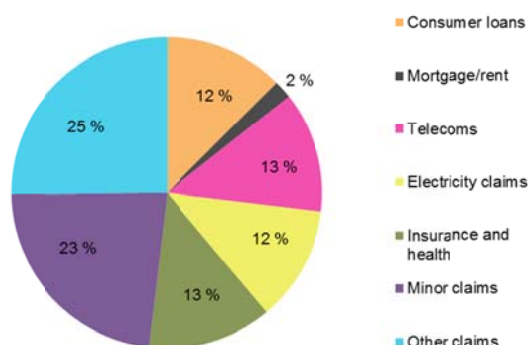
At the end of 2013 12.5 per cent of debt collection cases in process related to consumer loans, a slight decline from 13.2 per cent the previous year (chart 2.18). Mortgage debt recovery accounted for a mere 2 per cent. As in previous

2.17 Non-performing loans (30 days) by age group



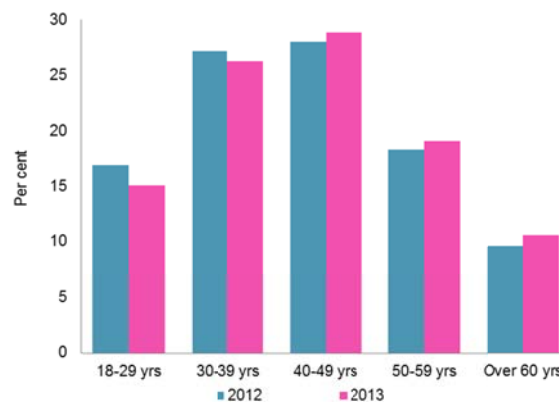
Source: Finanstilsynet

2.18 Debt collection by claim type* as at 31.12.2013



*Telecoms: Mobile and landline, broadband and TV subscriptions. Small claims: road tolls, parking fines, postal order and internet sales. Source: Finanstilsynet

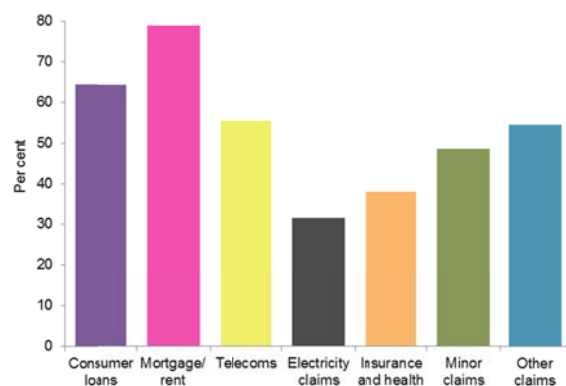
2.19 Debt collection, consumer loans as at 31.12.2013 by age group



Source: Finanstilsynet

2 BANKS

2.20 Debt collections in process for more than 18 months as of 31.12.2013, by claim type



Source: Finanstilsynet

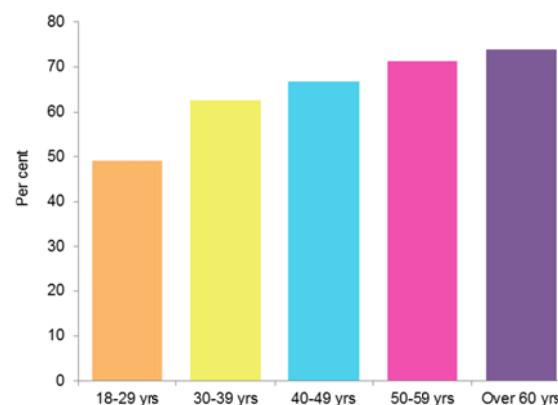
years, the bulk of debt collection business in process comprised minor claims such as postal order sales, parking fines et al.

The age distribution of consumer debt recovery cases showed a reduction in the proportion of cases related to debtors in the age groups 18-29 and 30-39, whereas an increase was seen for the other groups compared with the end of 2012 (chart 2.19).

Full recovery of mortgage debt and unpaid rent, and thus closure of such claims, may appear more difficult to achieve than full recovery of other debt. Chart 2.20 shows that almost 80 per cent of all mortgage/rent claims referred for recovery have been in process for more than 18 months. In the case of consumer loans just over 60 per cent have been in process for more than 18 months, and the proportion is highest in the highest age groups (chart 2.21).

There has in general been a strong increase in the number of debt collection cases in recent years, among other reasons because firms are sending unpaid claims for recovery at an earlier stage. Moreover, firms are outsourcing the recovery effort to a larger degree than previously to debt collection agencies that report to Finanstilsynet. Hence the increase in the number of debt recovery cases and the size of defaulted obligations does not necessarily reflect a genuine increase in the default volume. Although debt collection agencies are receiving more claims for recovery, the reports to Finanstilsynet also show a strong increase in the number of completed cases. Moreover, in many debt recovery cases, payment is forthcoming at an early stage in the recovery process. Thirty-three per cent of cases completed in 2013 were closed before dispatch of a demand for payment. The fact that payment is remitted after dispatch of a reminder/debt collection notice indicates that in very many cases the borrower does not have a serious payment problem.

2.21 Consumer debt collections in process for more than 18 months as of 31.12.2013, by age group



Source: Finanstilsynet

CORPORATE SECTOR

Growth in the Norwegian (non-oil) mainland economy was moderate in 2013. A high oil price and new oil finds have spurred optimism in the petroleum sector, and investments were very high for the year as a whole. Statistics Norway's investment census gives a very high estimate for petroleum investments again in 2014. In the wake of the financial crisis, prospects for mainland industries have weakened slightly, and business investments in Mainland Norway have shown modest underlying growth since 2010. The investment census suggests continued moderate growth in investments in both service and manufacturing industries ahead.

Norwegian firms have enjoyed a good development in profitability. Figures from Statistics Norway show that listed companies' operating margin rose from 5.7 per cent in 2012 to 9.7 per cent in 2013. Concurrently return on equity rose from 7.2 to 11.1 per cent¹. This is above the average for the last six years. According to Norges Bank's regional network, growth in profitability in the participating enterprises receded towards the end of 2013, but a turnaround appears to have taken place at the start of 2014 (chart 2.22). There are substantial differences between industries, with weakened margins reported in domestically-oriented manufacturing, retail trade and services. The export industry, suppliers to the petroleum industry and construction reported increased margins. Figures for non-financial firms' annual accounts (covering all limited companies) show that profitability in 2012 (the last available year) was lower than in the preceding year. Profitability for all corporates as a whole fell, and was particularly low among entities not linked to the petroleum sector.

¹ Statoil is not included in the sample.

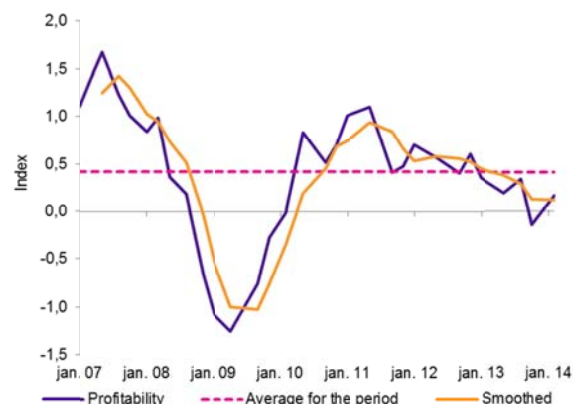
In recent years the market situation has been favourable for several industries that deliver goods and services to the domestic market and to the petroleum sector. There are now signs that a number of these industries view the market situation as weaker (chart 2.23). Private consumption, which accounts for about one-half of demand in the mainland economy, is still growing slowly and the saving rate is high. Housing investments increased little in the second half of 2013. This has given rise to more pessimistic market assessments among firms in the retail trade sector, and in particular in construction. At the same time the depreciation of the Norwegian currency and a production upturn among important trading partners caused firms in export-intensive segments to expect an improvement in market prospects. The same pattern is found in corporate expectations of market prospects in 2014.

Banks' holding of non-performing corporate loans grew through the first half of 2013 but receded anew towards year-end. All in all, non-performing loans were somewhat lower than the previous year. At the same time there was an increase in bankruptcy proceedings opened. This must be viewed in light of the far slower growth in the Norwegian economy in 2013 compared with the previous year. Forecasts from Norges Bank and Statistics Norway suggest that growth will pick up slightly ahead, but is expected to remain moderate. This indicates that the corporate sector cannot expect a significant increase in profitability.

Firms' total debt has risen according to various indicators of value creation and consumption. Indicator levels are now higher than they were at the start of the banking crisis. Analyses based on information from non-financial firms' annual accounts indicate that limited companies' debt servicing capacity improved somewhat in 2012. Even so, debt servicing capacity is not particularly good in historical terms. Calculations done using the SEBRA Model show that for firms as a whole there was a slight decline in probability of default, whereas risk increased in the case of the presumptively riskiest loans.

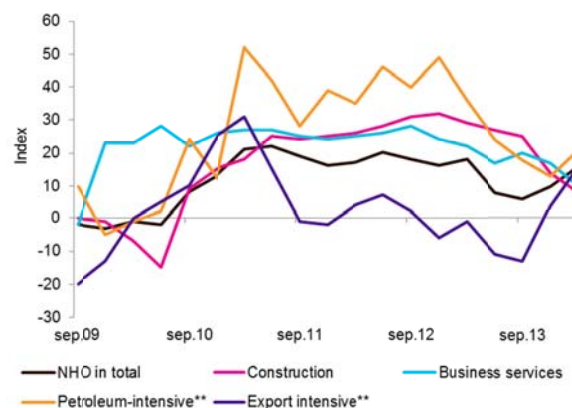
It is difficult to estimate future earnings in the corporate sector both because of considerable uncertainty regarding international developments and the trend in the Norwegian housing market and household consumption. Lower-than-expected growth will reduce earnings. After the financial crisis a larger portion of competitively exposed industries is directly and indirectly linked to the fishery and petroleum industries, and a less diversified business sector increases vulnerability overall. In Finanstilsynet's assessment, the risk of loss in the corporate sector as a whole has not changed in the past half-year. However, uncertainty remains high in the international economy, and banks must accordingly be prepared for the possibility that loan losses will increase in the years immediately ahead.

2.22 Growth in corporate profitability. Change in operating margin in last three months compared with same period last year*



*The index runs from -5 to +5, where -5 indicates a large fall while +5 indicates strong growth. Source: Norges Bank's Regional Network, March 2014

2.23 NHO's (Confederation of Norwegian Enterprise) market index. Assessment of the general market situation at the time*



*The difference between the proportion of businesses that are positive and negative.

**Businesses with least 25 per cent of turnover going to petroleum industry or export. Source: NHO, Næringslivets konjunkturbarometer, March 2014

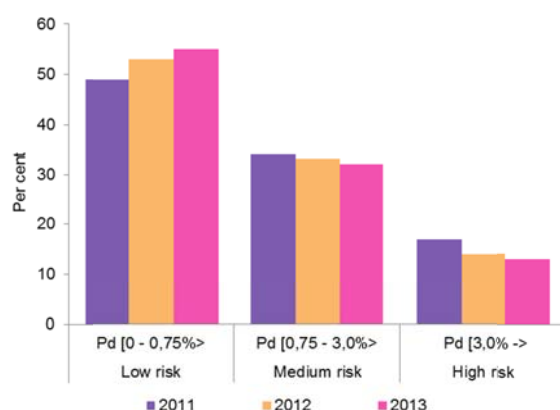
BANKS' EXPOSURES TO COMMERCIAL PROPERTY AND SHIPPING

Commercial property and shipping account for more than a half of Norwegian banks' loans to corporates, and have a major bearing on banks' exposure to credit risk. Finanstilsynet asked the 17 largest banks in Norway to report their credit exposures to commercial property and shipping, broken down on sub-segments and risk categories, at the end of 2012 and 2013. The banks were also asked to report write-downs on their exposures. The breakdown into the categories low, medium and high risk is based on the banks' internal risk classification systems and assessments. Exposures with a probability of default (PD) between 0 and 0.75 per cent are regarded as low risk, a PD between 0.75

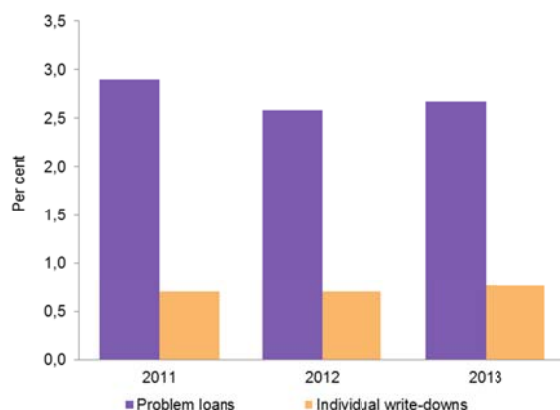
Table 2.3 The 17 largest Norwegian banks' exposures to commercial property at the end of 2013

| | Loans granted | | Volume drawn down | | Loans granted in % of CET1 capital |
|----------------|---------------|-----------------|-------------------|-----------------|------------------------------------|
| | Volume (bn) | 12-month growth | Volume (bn) | 12-month growth | |
| 17 largest | 523 | 1,4 % | 437 | 0,8 % | 228 % |
| - Large | 460 | 2,1 % | 378 | 1,4 % | 233 % |
| - Medium-sized | 63 | -3,7 % | 59 | -3,3 % | 200 % |

Source: Finanstilsynet

2.24 Commercial property. Granted loans by risk category

Source: Finanstilsynet

2.25 Commercial property. Problem loans and individual write-downs in per cent of drawn down volume

Source: Finanstilsynet

and 3 per cent as medium risk, while a PD above 3 per cent is regarded as high risk.

COMMERCIAL PROPERTY

Bank loans granted to commercial property totalled NOK 523bn at the end of 2013, of which NOK 437bn was drawn down volume (table 2.3). Loans granted measured 228 per cent of banks' common equity tier 1 capital. The large banks are, in aggregate, somewhat more exposed to commercial property than medium-sized banks. Banks are particularly

exposed to the commercial and office segment which accounted for around 45 per cent of the commercial property portfolio. Exposures to housing-related property (housing co-operatives, co-operative housing associations and development projects in the housing field) are also substantial, accounting for about 25 per cent of the portfolio.

Twelve-month growth in lending to commercial property (loans granted) was 1.4 per cent at the end of 2013, while growth in loans drawn down was 0.8 per cent. The large banks pushed up the growth rate, whereas the medium-sized banks' contribution was negative. Lending growth varied widely from one bank to the next. Eight banks reported negative lending growth (loans granted), while four banks had lending growth in excess of 10 per cent.

Banks' reporting shows that risk in the overall property portfolio has, according to the banks, diminished in recent years (chart 2.24). Exposures regarded as low risk have increased somewhat, whereas exposures regarded as high risk have declined. The proportion of medium-risk exposures has remained relatively stable. The reduction in portfolio risk should be viewed in light of the trend in the Norwegian economy, along with more stringent credit practices applied to new borrowers. Lending margins and own funds requirements have risen, and new loans are offered with shorter terms than previously. This means that fewer high-risk property projects obtain bank funding. At the same time the volume of problem loans and non-performing loans declined by 6 per cent, while individual impairment write-downs rose by 14 per cent (chart 2.25). However, problem loans have risen as a share of drawn down exposures. See chapter 1 for further details of developments in the commercial property market.

SHIPPING

DNB Bank and Nordea Bank Norway in particular have large loans to the shipping industry, although some large regional banks also have substantial exposures. Altogether loans granted by banks totalled NOK 312bn at the end of 2013, of which NOK 203bn was drawn down volume. Loans granted measured 136 per cent of common equity tier 1 capital. Banks have reduced their exposure to the shipping industry since the international financial crisis in 2008.

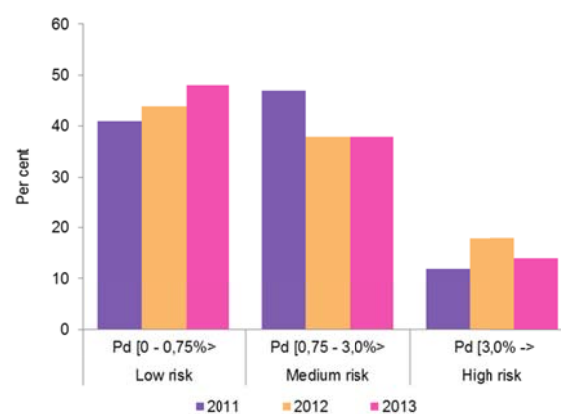
Table 2.4 17 largest Norwegian banks' exposures to shipping incl. offshore at the end of 2013

| | Loans granted | | Volume drawn down | | Loans granted in % of CET1 capital I |
|----------------|---------------|-----------------|-------------------|-----------------|--------------------------------------|
| | Volume (bn) | 12-month growth | Volume (bn) | 12-month growth | |
| 17 largest | 312 | -0,7 % | 203 | -0,3 % | 136 % |
| - Large | 309 | -0,8 % | 201 | -0,3 % | 157 % |
| - Medium-sized | 3 | 10,9 % | 2 | 0,1 % | 10 % |

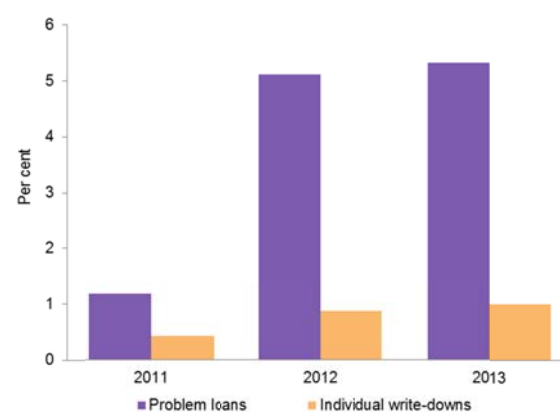
Source: Finanstilsynet

The banks are particularly exposed to the offshore segment, which accounted for 40 per cent of aggregate loans granted to the shipping industry. The offshore segment includes rigs and supply vessels. Exposures to more traditional shipping segments such as dry bulk, crude oil carrier, container, chemical and product tanker and gas stood at around 8 per cent to each segment. Lending to shipping fell by 0.7 per cent from 2012 to 2013. The growth rate is affected by the depreciation of the Norwegian krone in the period, and the actual fall in lending growth is therefore larger since shipping loans are mainly granted in the US dollar. In recent years the major shipping banks have signalled a desire to reduce exposure to shipping in general, and to switch their portfolio from traditional shipping to the rig and supply segment in particular. Reporting to Finanstilsynet confirms this development.

Banks' reporting shows that risk in the shipping portfolio as a whole has risen in the last few years, but that the negative trend is in the process of stabilising (chart 2.26). The share of high risk exposures rose from 2011 to 2012, but much of the increase was reversed in 2013. This must however be interpreted in light of the fact that exposures on which losses are confirmed are taken out of the banks' balance sheets, and confirmed losses on loans to the shipping industry have risen in recent years. The share of exposures regarded as medium risk remained relatively stable after a considerable decline from 2011 to 2012. The share of low-risk exposures has risen. The volume of problem loans and non-performing loans rose sharply in 2012, and also rose slightly in 2013. Individual impairment write-downs amounted to just under 20 per cent of problem exposures at the end of 2013, compared with 40 per cent at the end of the third quarter of 2011. See chapter 1 for a further account of developments in the shipping markets.

2.26 Shipping, incl. offshore. Granted loans by risk category

Source: Finanstilsynet

2.27 Shipping, incl. offshore. Problem loans and individual write-downs in per cent of drawn down volume

Source: Finanstilsynet



Stress test of banks' loans to commercial property

Selection and assumptions

Loans to commercial property make up the bulk of Norwegian banks' aggregate lending to corporate borrowers. Hence this industry has a heavy bearing on banks' loan losses. As part of its monitoring of credit risk, Finanstilsynet has conducted a thematic round of on-site inspections dealing with stress tests of the lease component of the commercial property market. This includes office lease, hotels and shopping centres.

The review is based on reporting from 12 of the largest Norwegian banks. The stress tests are based on the borrower's exposure status at the end of December 2013 and the annual accounts for 2012. The sample covers the largest borrowers, together representing at least 25 per cent of the individual bank's aggregate exposure to the industry. The stress tested portfolio comprises a total of 171 borrowers with an overall drawn down volume of NOK 60bn. The stress factors are lease income, interest rate level and collateral values. The stress period is the years 2013 to 2015. The measurement parameters are the borrowers' debt servicing capacity and collateral cover. Borrowers are taken out of the sample in the year in the stress period in which the borrower has both a liquidity deficit and insufficient collateral cover. In such cases a write-down is calculated on the borrower.

The stress scenario is based on the actual development of lease and property prices in the years 1989-1991 (the banking crisis). A further assumption is a rise in banks' risk premiums – pushing up the borrowing rate by one percentage point in 2013, two percentage points in 2014 and five percentage points in 2015 over and above the borrowers' calculated average interest cost ratio for the financial year 2012.

Instalment structure and residual term

The banks state that instalments are not paid on about one-quarter of the loans of NOK 60bn in the period 2013 to 2015. Total instalments come to just under NOK 5bn for the entire three-year period. The remaining term (unweighted) for the portfolio is put at around 16 years. For the largest banks, however, the remaining term is significantly shorter. The shortest average remaining term is about five years.

The relatively high proportion of interest-only loans, and the moderate reduction of debt in general, indicates that a fairly large portion of the risk related to the commercial property market rests with the banks. The relatively short residual term for the largest banks' portfolios indicates that

a large proportion of loans to commercial property will be subject to subsequent refinancing. However, there is wide variation between the banks. Some banks apply a fairly stringent policy on instalment payments, while others lend on a largely interest-only basis. The stress test results must be viewed in this light. For example, a bank that has granted a large proportion of interest-only loans will, all else equal, do better in the stress test than a bank applying stricter instalment terms. In actual fact the first-mentioned bank may be the one most exposed to risk.

Main results of the stress test

- About one-third of the banks' loan volume related to the lease component of the property market is fully serviced throughout the stress period.
- The overall calculated write-down need for borrowers that are unable to fully service their debt through the stress period represents about 6 per cent of the stressed loan portfolio. The need for write-downs arises mainly in the last two years of the stress period.
- There are to some extent large differences between the banks. The differences must be viewed inter alia in light of instalment structure and residual term.
- The size of the write-down need is primarily a function of falling lease income and diminishing collateral value, only to a small extent of rising interest costs.
- For some banks the need for write-downs in a particular year is almost as large as the bank's pre-tax operating profit in 2012.

The lease component of the banks' commercial property portfolio is probably less sensitive to changes in lease and selling prices than the project component of the portfolio. The project component was not analysed as part of this thematic round of inspections.



FINANCIAL SOUNDNESS

The good results in 2013 strengthened financial positions of Norwegian banks through profit retention. Common equity tier 1 (CET1) capital rose by NOK 31.8bn (13.2 per cent) in 2013, of which the six largest banking groups accounted for NOK 22.7bn. In the same period the banks' aggregate risk weighted assets increased by 3.7 per cent. This brought Norwegian banks' CET1 ratio from 11.1 per cent at end-2012 to 12.2 per cent at end-2013.

CET1 ratios are central to the assessment of banks' financial soundness. CET1 capital corresponds largely to a bank's equity capital minus regulatory deductions, and the CET1 capital ratio is defined as CET1 capital as a share of risk weighted assets. In line with the new European framework for credit institutions and investment firms (CRD IV), the required CET1 ratio will increase gradually in the period to

1 July 2016. The systemic risk buffer will increase by one percentage point, bringing the minimum requirement on CET1 capital and the buffer requirement combined to 10 per cent of risk weighted assets as from 1 July 2014. Only one Norwegian bank had a CET1 ratio below 10 per cent at the end of 2013.

In December 2013 the Ministry of Finance set the countercyclical capital buffer at 1 per cent of risk weighted assets with effect from 30 June 2015. The countercyclical capital buffer must be filled with CET1 capital such that the minimum requirement on CET1 capital and the buffer requirement combined come to 11 per cent for Norwegian banks from the above date onwards. Further, buffer requirements for systemically important banks (SFIs) will be gradually raised in the period to 1 July 2016. This means that the minimum CET1 requirement and buffer requirement combined will be 13² and 11 per cent for, respectively, systemically important and other banks as from 1 July 2016, on the assumption that the countercyclical buffer is not revised in the course of the period. The requirement on core capital and own funds is retained, such that core capital adequacy and total capital adequacy must stand at 1.5 and 3.5 percentage points respectively over the CET1 ratio requirement. In aggregate, Norwegian banks' capital adequacy was 14.8 per cent per the end of 2013. Two banks had a capital ratio below 13.5 per cent.

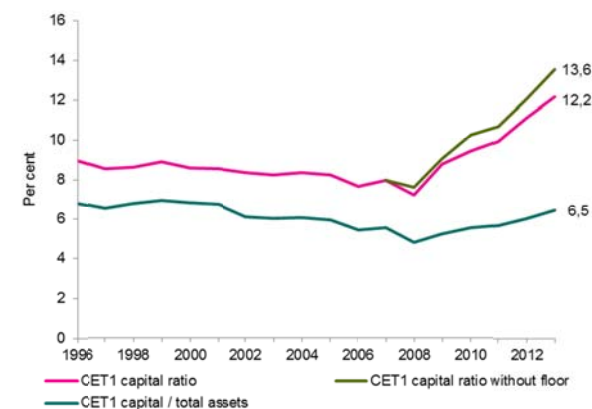
Earnings were the principal contributor to higher CET1 ratios at the largest banks in 2013 (chart 2.30). Of the six largest Norwegian banks, only Sparebank 1 Nord-Norge issued stock in the course of 2013. The average dividend rate for the largest banks was just under 21 per cent. All the large banks reported growth in risk weighted assets in 2013. This is illustrated in chart 2.30 by a negative effect on CET1 ratios. For some of the largest banks, changes in regulatory deductions had a positive effect on CET1 ratios. This was mainly due to changes in deductions for intangible assets and changes in the difference between expected losses and write-downs. Over the course of the last five years, only two years (2011 and 2013) have showed positive growth in risk weighted assets, and consequently a negative effect on CET1 ratios for all Norwegian banks combined (chart 2.31).

After gradually falling from the mid-1990s until 2008, Norwegian banks' CET1 ratios have subsequently increased each year (chart 2.28). The increase in the overall CET1 ratio at Norwegian banks from the low level in 2008 must however be viewed in light of the introduction of Basel II.

The introduction of internal models (IRB) and low risk weights for the standardised approach banks has reduced

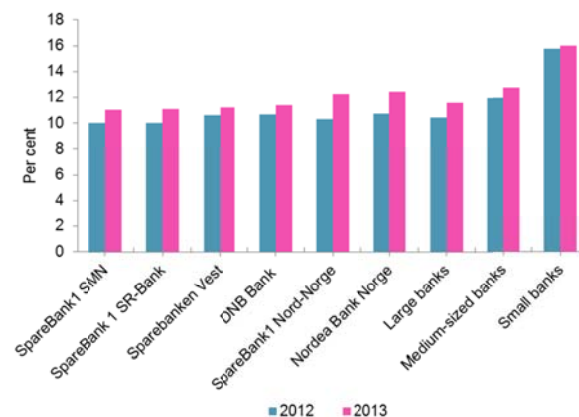
²This presupposes non-differentiation of the SIFI requirement. The requirement has yet to be established.

2.28 CET1 ratio and leverage ratio at Norwegian banks/bank groups



Source: Finanstilsynet

2.29 CET1 ratio at Norwegian banks/bank groups

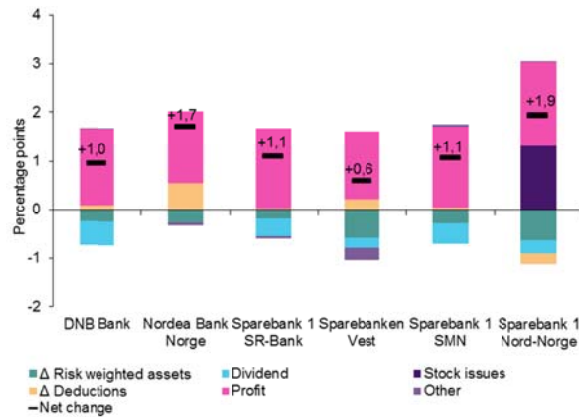


Source: Finanstilsynet

risk weighted assets and thereby increased the overall CET1 ratio. The trend in the relationship between banks' aggregate risk weighted assets and total assets is illustrated in chart 2.33. Norwegian authorities employ a number of instruments to ensure that credit institutions' IRB models do not result in excessive reductions in the capital requirement. In connection with Basel II, transitional rules in the form of floor requirements were introduced in Norway and other European countries. The floor requirement entails that risk weighted assets under Basel II cannot be less than 80 per cent of risk weighted assets under Basel I. At the end of 2013 the floor requirement constituted 11 per cent of the total capital requirement for Norwegian IRB banks (2.34). Finanstilsynet has recommended retaining the Basel 1 floor after the introduction of CRD IV. The Ministry of Finance raised the lower threshold for the IRB parameter "loss given default" (LGD) for home mortgages from 10 to 20 per cent as from 1 January 2014. The authorities are also considering imposing a minimum requirement on average probability of default

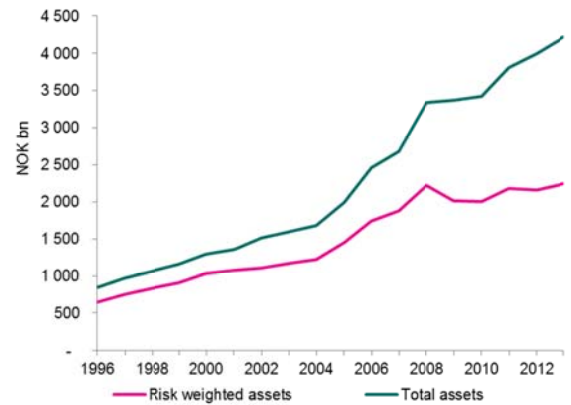
2 BANKS

2.30 Changes in CET1 ratio 2013, (decomposed)



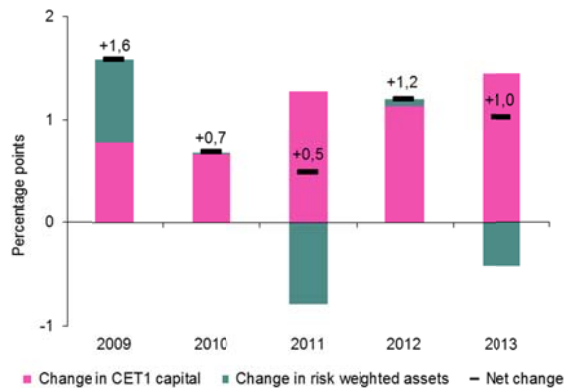
Source: Finanstilsynet

2.33 Risk weighted assets and total assets at Norwegian banks / bank groups



Source: Finanstilsynet

2.31 Changes in CET1 ratio at all Norwegian banks 2009-2013, (decomposed)

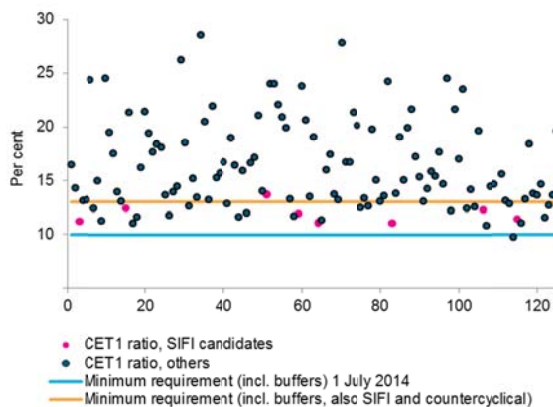


Source: Finanstilsynet

(PD); see the account in the section on IRB models, and tightened home mortgage weights.

The Financial Institutions Act permits the establishment of provisions requiring CET1 capital or core capital of financial institutions to constitute a minimum percentage of assets and off-balance sheet liabilities, calculated without risk weighting (leverage ratio). The leverage ratio aims to prevent entities from setting risk weighted assets at too low a level in their capital adequacy calculations, and to ensure that banks retain a minimum of capital, also in the event of a portfolio shift towards segments with low risk weighting (see below for further details). Norwegian banks' CET1 capital measured 6.5 per cent of their total assets at the end of 2013, up from 6.0 per cent at the end of 2012.

2.32 CET1 ratio at Norwegian banks* as of 31.12.2013



* *Banks with CET1 ratio > 30 per cent are not included.
Source: Finanstilsynet



Quantitative impact study for CRD IV

The European Banking Authority (EBA) published on 6 March 2014 a report³ on the findings of the study "Basel III monitoring" as of 30 June 2013. The main purpose of the study is to investigate the effects of new requirements on capital, capital adequacy, leverage ratio and liquidity under CRD IV (based on Basel III), and to obtain the data needed to formulate the final requirements. There are variations, in part wide, in the results for European financial institutions. 174 institutions participated in the study, and the results are shown by size of core capital (over/under EUR 3bn, in two groups, 1 and 2). Eight of the participants were Norwegian: DNB Bank ASA (group 1), Sparebanken Vest, Totens Sparebank, Kommunalbanken AS, Sparebanken Hedmark, SpareBank 1 SMN, SpareBank 1 SR-bank ASA and SpareBank 1 Nord-Norge (group 2).

The results of the quantitative impact study show that under the new framework the CET1 ratio is reduced from 12 to 9.1 per cent overall for financial institutions in group 1. The corresponding figures for group 2 show a reduction from 12.4 to 8.8 per cent. The reduction is ascribable both to changes in own funds and in risk weighted assets. The large banks as a whole need to increase their CET1 capital by EUR 36.3bn, while the small banks need to increase their CET1 capital by EUR 29.1bn in order to attain the minimum requirement and the capital conservation buffer requirement totalling 7 per cent, and possible additional requirements for global systemically important institutions. The CET1 requirements under Basel III are not significantly more stringent than the requirements under current rules for Norwegian institutions. For the Norwegian institutions participating in the study, the CET1 ratio was in the range 10.7 to 14 per cent under current rules, compared with 11 to 14.1 per cent under Basel III.

CRD IV introduces the leverage ratio as a new financial soundness indicator and supplement to the risk weighted minimum requirements. The leverage ratio requirement has yet to be given its final form, but it is proposed that core capital should make up a given percentage of an exposure measure covering asset items and off-balance sheet items. According to the preamble to the EU Regulation (CRR), the leverage ratio is to be reported and form part of the assessment of the overall capital need under pillar 2 prior to the introduction of a minimum requirement under Pillar 1 in 2018. Leverage ratios for group 1 and group 2 in the impact study are calculated at 3 and 3.6 per cent respectively. Norwegian institutions have in general

reported higher leverage ratios than institutions elsewhere in Europe.

As regards the new quantitative liquidity requirement – liquidity coverage ratio (LCR) – the impact study shows levels of 104 and 132 per cent overall for group 1 and group 2 banks respectively at the end of June 2013. Banks not meeting the future requirement of an LCR of 100 per cent have an aggregate liquid asset deficit of EUR 262bn. Several Norwegian banks have an LCR lower than the average for other EEA countries.

EBA report on differences between the definition of leverage ratio under Basel III and CRD IV/CRR

Based on figures from "Basel III monitoring" as of 30 June 2013, the EBA recently published a report analysing the differences between the definition of leveraged ratio in CRR and the revised definition in Basel III. The report explains several differences between CRR and Basel III in the definition of exposure measure (the denominator in the calculation of leverage ratio). The effects of differing treatment of conversion factors for off-balance sheet items, recognition of collateral in derivative agreements and differing treatment of repurchase agreements etc are highlighted in the report. As regards treatment of repurchase agreements etc, uncertainty attaches to the Regulation text, and the effect of two different interpretations is therefore calculated in the report. The difference between the interpretations is based on whether or not the exposure amount for calculating the denominator in the leverage ratio should also include the balance sheet value of the repurchase agreements etc.

For the group of institutions with core capital above EUR 3bn, the exposure measure averaged 0.5 per cent less under the definition in CRR. However, if the alternative interpretation of the treatment of repurchase agreements etc in CRR is taken as a basis, the exposure measure is 7.5 per cent larger. Corresponding figures for the group of institutions with core capital below EUR 3bn were, respectively, 0.9 and 4.3 per cent larger. The overall effect is mainly explained by differences in the treatment of repurchase agreements etc and off-balance sheet items. The report concludes that it would be an advantage to adapt CRR to the final definition in Basel III to ensure consistency between the two definitions. However, it is made clear that the leverage ratio under CRR is in all essentials in line with Basel III but that the first-mentioned may produce a marginally lower ratio.

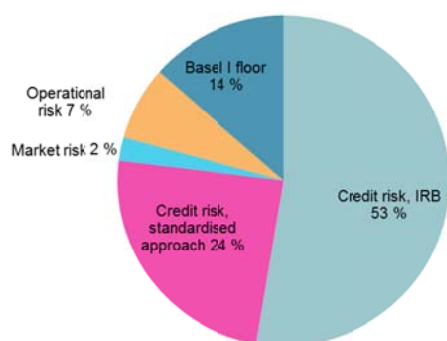


³ <http://www.eba.europa.eu/-/eba-%20publishes-results-of-the-basel-iii-monitoring-exercise-as-of-30-june-2013>

Table 2.5 Estimated capital need (NOKbn) for Norwegian banks/bank groups up to 1 July 2016, as of 31.12.2013

| | Estimated capital need (NOKbn) | | |
|------------------------|---|--|--|
| | 0 % annual growth in risk weighted assets | 2.5% annual growth in risk weighted assets | 5% annual growth in risk weighted assets |
| Total, Norwegian banks | 42 | 65 | 90 |
| CET1 capital | 24 | 39 | 55 |
| Tier 1 | 12 | 16 | 21 |
| Tier 2 | 7 | 10 | 14 |

Source: Finanstilsynet

2.34 Risk factors behind the capital requirement, IRB banks (per cent of total capital requirement)

Source: Finanstilsynet

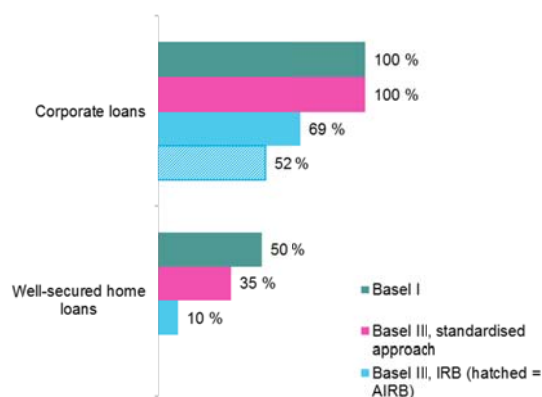
Although good results have contributed to increasing Norwegian banks' CET1 ratios in recent years, several banks will need to build up capital further in the period to 1 July 2016 (2.32). Banks can strengthen their core capital adequacy by increasing their earnings, paying smaller dividends, issuing shares or other equity instruments and curbing the growth of risk weighted assets. It is not possible to estimate precisely the overall capital needed by Norwegian banks upon the introduction of the new capital requirements. This is because estimates of banks' future capital need are sensitive to assumptions regarding the trend in risk weighted assets, as well as the decision as to which banks are to be defined as systemically important. Based on the existing definition of CET1 capital and continuation of the Basel I floor, Finanstilsynet prepared estimates of banks' overall capital need given annual growth of 0, 2.5 and 5 per cent respectively in risk weighted assets (table 2.5). The calculations assume a countercyclical buffer of 1 per cent, and adoption of Finanstilsynet's recommended definition of systemically important institutions and size of the SIFI buffer.

2.35 Risk factors behind the capital requirement, standardised-approach banks (per cent of total capital requirement)

Source: Finanstilsynet

Norwegian banks combined held CET1 capital worth NOK 273bn at the end of 2013. The need for fresh CET1 capital in the period to 1 July 2016 could amount to between NOK 24 and 55bn, depending on growth in risk weighted assets. At 2.5 per cent annual growth in risk weighted assets, the overall need for CET1 capital will change by about NOK 10bn for each 0.5 percentage point change in the countercyclical buffer. Finanstilsynet expects the banks to fulfil the minimum requirements and buffer requirements by a reasonable margin. Hence the actual capital need may be somewhat higher than that emerging from table 2.5, since the calculations are based exclusively on the minimum requirements. Norwegian banks' need for CET1 capital in the period to 1 July 2016 can in the main be met through operations, given continued good earnings in the years immediately ahead. The requirements on core capital adequacy and total capital adequacy of, respectively, 1.5 and 3.5 percentage points above the requirement on CET1 capital mean that some banks will need to raise hybrid capital and/or issue subordinated debt. The capital needs are estimated as the sum of the capital needs for those banks which at the end of 2013 did not meet the requirements that will apply as from 1 July 2016.

2.36 Average risk weights at Norwegian banks at end-2013



Source: Finanstilsynet

IRB MODELS AND TIGHTENED HOME MORTGAGE LOAN WEIGHTS

Credit risk is the largest risk factor facing banks, and thus also the largest portion of the total capital requirement. Banks' total capital requirement also comprises capital requirements for market risk and operational risk (charts 2.34 and 2.35). In the IRB models risk weights are calculated using a formula whose most important parameters are the bank's own estimates for the probability of a borrower's default (PD) and expected loss ratio should the exposure fall into default (LGD). IRB models used to calculate capital charges require the supervisory authorities' approval. At the end of 2013 eight Norwegian banks had permission to use such models.

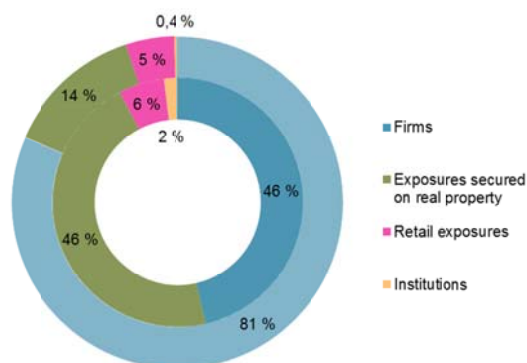
The European Banking Authority (EBA) recently published a report⁴ containing assessments of risk weights for both home mortgage loans and loans to SMBs by a sample of European IRB banks. The report forms part of a wider EBA study of differences in risk weights between banks, and drivers behind these differences⁵. Quantitative and qualitative information was gathered from 43 banks in 14 countries. No Norwegian bank took part. However, data from participating banks cover portfolios in 20 countries, among them Norway.

Localisation is an important driver of variation in mortgage models. Exposures in countries that have recently seen economic downturn generally have higher risk weights. Conversely, home loan exposures in Nordic countries consistently have relatively low values for PD and LGD, and

⁴ Link to the EBA report: <http://www.eba.europa.eu/-/eba-publishes-reports-on-comparability-of-risk-weighted-assets-and-pro-cyclicality>

⁵ The EBA has previously published a report on risk weights for exposures with traditionally low probability of default. This was described in Financial Trends 2013. At a later point the trading book, Pillar III, along with banking and supervisory practices will also be reviewed.

2.37 Credit exposure (inner circle) and capital requirement (outer circle) for IRB portfolios in Norway



Source: Finanstilsynet

low risk weights. The EBA also points out that other domestic conditions may be of significance.

It is more difficult to see a country pattern in surveys of drivers behind differences in PD and LGD estimates in the mortgage models. The EBA concludes that differences in banks' business operations and modelling appear to explain differences in the PD and LGD models. Under such conditions it is difficult to isolate the effect of individual components. However attention is drawn to several elements which may give rise to differences in risk weights. Among other things, mention is made of differing definitions of default, differing cost elements and haircuts applied in the estimation of LGD, in the use of safety margins, and in the application of LGD floors. Internationally active banks' use of global IRB models for exposures in different countries may also contribute to variation in estimates within countries, but dampen differences between countries.

The EBA will in the period ahead finalise a project involving benchmarking of loan-to-value ratio, income ratio and collateral values with regard to home mortgage loan models. Further, additional work areas are recommended in order to strengthen convergence and harmonisation of supervisory practices: i) increased publication of information on risk weights, ii) various forms of support to supervisory authorities and highlighting of "best practice," iii) preparation of new guidelines and possibly new technical standards, and iv) benchmarking of estimates for IRB parameters.

In Norway the authorities are concerned about the lowering of risk weights produced by the banks' IRB models, at the same time as the Norwegian economy has seen a good trend for several years, household debt has risen and house prices have reached record levels. The EBA report's observation that risk weights are consistently higher in countries recently subject to economic downturn illustrates the dan-

Table 2.6 Banks' large exposures (risk weighted) by sector

| Sector | 2011 | | 2012 | | 2013 | |
|-----------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| | Volume (NOKbn) | Share of own funds | Volume (NOKbn) | Share of own funds | Volume (NOKbn) | Share of own funds |
| Public administration | 2987 | 1 % | 1845 | 1 % | 1 609 | 0 % |
| Financial firms | 27 890 | 10 % | 29 468 | 10 % | 31 478 | 9 % |
| Corporate borrowers | 86 193 | 31 % | 52 950 | 18 % | 42 779 | 13 % |
| Retail borrowers | 801 | 0 % | 532 | 0 % | 388 | 0 % |
| Foreign | 20 450 | 7 % | 11 080 | 4 % | 14 045 | 4 % |
| Total | 138 320 | 51 % | 95 876 | 33 % | 90 300 | 27 % |

Source: Finanstilsynet

2.38 Trend in banks' volume of large exposures



Source: Finanstilsynet

ger that data from good times inadequately capture long-term risk. The Basel I floor, which was introduced in parallel with the IRB models, has curbed the fall in banks' risk weighted assets, but the trend calls for a critical review of the IRB system.

The average risk weight for home loans among Norwegian IRB banks at the end of 2013 was 10 per cent. For banks using the standardised approach the risk weight for well secured home loans is 35 per cent (chart 2.36). Chart 2.37 shows that home loans and exposures to firms account for equal proportions of total credit exposures in Norwegian IRB portfolios, but that exposures to firms make up the clearly largest portion of the capital charge. Finanstilsynet has now announced a tightening of IRB models for home mortgages, and asked the banks for their comments in a letter to Finance Norway dated 21 February 2014⁶. The tightening applies to requirements on PD estimations, risk classification and estimation of LGD in banks' home loan models.

⁶Link to Finanstilsynet's letter: <http://www.finanstilsynet.no/no/Artikkelarkiv/>

In order to ensure that the PD estimates reflect the risk faced through a business cycle, Finanstilsynet is considering the imposition of a minimum level of average PD. The minimum level should contain an estimated PD level of 4 per cent in crisis years, combined with a supposition that crisis years arise on average every fifth year. Banks can themselves estimate PD for periods other than crisis years. Several banks report a strong concentration of exposures in risk classes with very low PD values. In Finanstilsynet's assessment this does not reflect the long-term risk in banks' portfolios. That is why consideration is being given to imposing a safety margin of 0.2-0.3 percentage points for the lowest PD estimates.

Banks' estimates for LGD in economic downturns rest on poor data. In order to ensure proper estimates and levels that depend on provision of collateral, Finanstilsynet has developed a reference model in which LGD is calculated based on a loan-to-value ratio, incorporating assumptions of recovery values, expected future recovery and realisation costs in downturns. Deviations from the assumptions in the reference models are accepted, but the level in the portfolio should not be lower than that which the reference model would have produced. Whereas the regulatory LGD floor of 20 per cent can be fulfilled by means of a scaling factor in reporting, the tightenings mentioned must be incorporated in banks' models. The tightenings will work in parallel with, and dampen the significance of, the LGD floor.

The measures are viewed as necessary in order to secure robust home loan models in keeping with EU rules governing banks' models, and supervisors' assessments of the latter. The EBA report recommends guidelines for calculating PD and LGD. For PD the EBA recommends drawing up guidelines for defining the business cycle, identifying crisis years as well as approaches to remedy a lack of relevant data. For LGD it recommends guidelines to ensure that allowance is made for economic downturns in estimations.

CONCENTRATION RISK

The borrower may encounter economic difficulties, inflicting loss on the lender. If large customers are unable to service their loans, there may be particularly negative consequences for the lender's financial position. Hence it is important for banks to curb the risk posed by individual counterparties. The rules governing large exposures are designed to limit credit institutions' concentration risk, and state maximum limits for counterparty exposures. A large exposure is defined as an exposure which prior to weighting accounts for 10 per cent or more of net own funds (own funds after regulatory deductions). An institution may not have a single exposure that exceeds an amount corresponding to 25 per cent of the institution's net own funds.⁷

Banks' concentration risk, measured by the volume of large exposures, has receded sharply in the past two years. Banks' net own funds have strengthened following new capital requirements and contributed to a lower proportion of large exposures in banks' loan portfolios. A reduction of large loans from banks may also have contributed. Large exposures accounted for 27 per cent of net own funds at the end of 2013, i.e. almost half the level seen in 2011. The largest decline was in 2012 (2.39).

Table 2.6 shows banks' large exposures by volume and relative to net own funds by sector in the period 2011-2013. The largest share comprises loans to corporates, which accounted for just under one-half of all large exposures at the end of 2013. The decline in large exposures was greatest for corporate borrowers in the past two years, both in terms of level and percentage. This has accordingly contributed to a reduction in concentration risk among banks at sectoral level too.

BANKS' FUNDING

Liquidity risk is the risk that a bank will be unable to honour its obligations when they fall due. The maturity of banks' lending is normally far longer than of its funding, making banks vulnerable if deposits and funding cannot be renewed.

In the first instance liquidity risk is related to the ongoing refinancing need in national and international money and capital markets. Banks with long-term funding and a high proportion of liquid assets are less vulnerable to market turbulence.

Norwegian banks had ample access to both long-term and short-term funding throughout 2013. Mark-ups on Norwe-

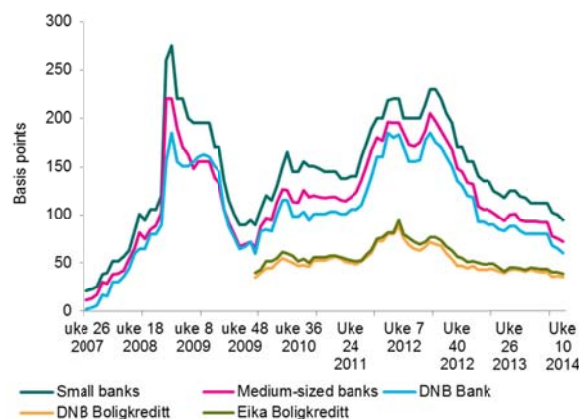
⁷ Where the counterparty is another institution, the bank may not have an overall exposure that exceeds the higher of an amount corresponding to EUR 150m or an amount corresponding to 25 per cent of the institution's net own funds. The exposure amount may under no circumstance exceed 100 per cent of the institution's net own funds.

2.39 Key policy rate, Nibor and covered bond rate



Sources: Oslo Børs and DNB Markets

2.40 DNB Markets' indicative spread levels for senior bonds and covered bonds against three-month NIBOR, 5-year



Source: DNB Markets

2.41 Bond issues per year



Source: Statistics Norway

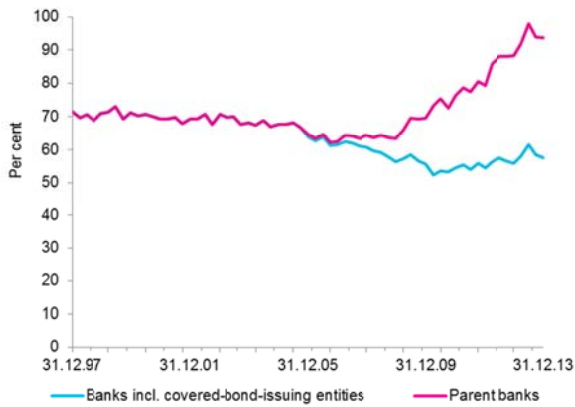
2 BANKS

2.42 Bond maturities



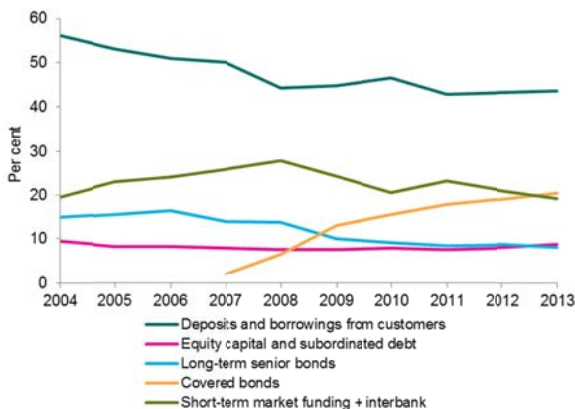
Source: Finanstilsynet

2.43 Deposit-to-loan ratio



Source: Finanstilsynet

2.44 Funding sources, banks and covered-bond-issuing entities



Source: Finanstilsynet

gian senior bonds and covered bonds fell through 2013 and into 2014. Investors' preference for safe securities has made it advantageous in price terms, in particular for small banks, to use covered bonds for long-term funding purposes. In addition, price fluctuations are smaller for covered bonds than for senior bonds. Risk premiums have fallen by a relatively large margin in the past year, and now stand at a lower level than prior to the turbulence in autumn 2011. The mark-ups on five-year senior bonds and covered bonds fell, respectively, by about 40 and 8 basis points in 2013. Thus far in 2014 risk premiums on senior bonds and covered bonds have fallen further by, respectively, about 20 and 5 basis points (chart 2.40).

In 2013 Norwegian banks and mortgage companies issued bonds worth about NOK 440bn. This is an increase of close to NOK 30bn compared with 2012. A considerably larger volume of covered bonds than senior bonds was issued, and the bulk of the covered bond issues took place in the international capital market (chart 2.41). Bond debt in an amount of about NOK 140bn falls due in 2014. The bulk of outstanding senior bonds and covered bonds fall due between 2015 and 2020 (chart 2.42).

Banks' funding consists mainly of customer deposits and borrowings on money and securities markets. Customer deposits have proven to be a stable funding source for the banks, also in periods of market turbulence. A large portion of deposits at Norwegian banks are covered by the deposit guarantee; see separate account.

The deposit to loan ratio at parent banks has risen markedly in recent years as a result of transfers of loans from the banks to residential mortgage companies, and stood at 93.6 per cent at the end of 2013. When loans residing in covered bond issuing entities are taken into account, including the co-owned entities, the deposit to loan ratio was 57.7 per cent (chart 2.43).

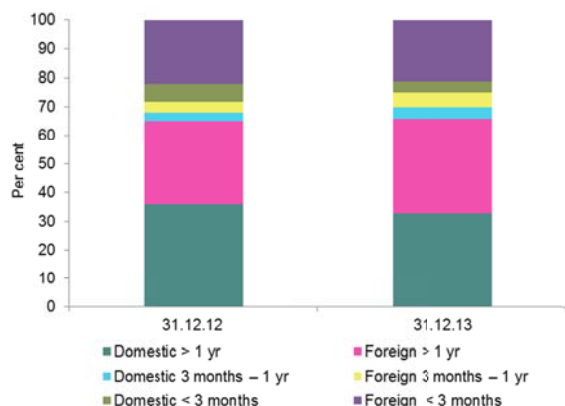
Customer deposits accounted for 44 per cent of overall funding at the end of 2013, 1 percentage point higher than at the end of 2012 (chart 2.44).

Deposit guarantee

In Norway deposits of up to NOK 2m are protected under the deposit guarantee scheme. The guarantee applies per bank, i.e. where a customer has deposits with several banks the limit of NOK 2m applies to each bank. In principle all types of deposits where the depositor is named are covered, regardless of whether a private individual or a self-employed person is involved, but certain restrictions apply⁸.

⁸ Restrictions: Deposits from securities funds etc, deposits where a depositor has negotiated an unusually high interest rate or financial

2.45 Market funding – banks and mortgage companies



Source: Finanstilsynet

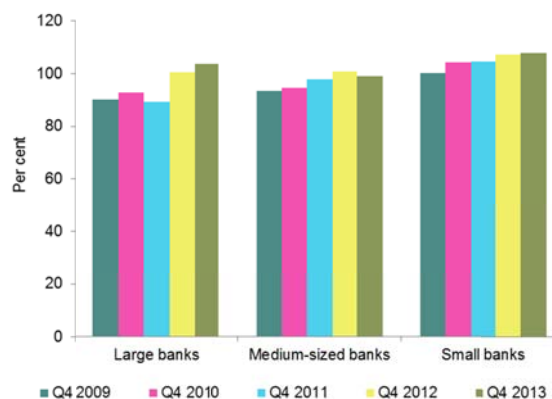
The Banks' Guarantee Fund manages the Norwegian deposit guarantee scheme. The Fund's most important task is to handle situations where one or more banks encounter problems in honouring their commitments. Any loss on deposit must be covered as soon as possible and not later than one week after the bank is placed in public administration.

All Norwegian savings and commercial banks are members of the Banks' Guarantee Fund. Branches of foreign credit institutions can apply for membership of the Fund and will be eligible for cover additional to that available in the home country. Currently seven such branches are members of the Banks' Guarantee Fund.

In the EU the deposit guarantee cover amounts to EUR 100,000. A political consensus has been achieved in the EU regarding changes to the deposit guarantee directive which are expected to be finally adopted by the EU Parliament in April. The guarantee cover will stand firm, but there are changes inter alia related to the payout period and funding of the schemes (see further details in chapter 4). Norway has sought adjustments to the text of the directive to enable it to retain a level of cover of NOK 2m per depositor per bank. As the directive text now stands Norway will be unable to maintain a level of cover higher than the EU limit on a permanent basis. The directive permits a transitional period of five years for guarantee schemes with a guarantee amount above EUR 100,000.

advantages, where such advantages have exacerbated the institution's situation; deposits from companies within the same group as the bank; deposits consisting of proceeds of a criminal act; investments in other bank products such as shares or other securities which are not regarded as bank deposits.

2.46 Funding with maturity above one year as a share of illiquid assets



Source: Finanstilsynet

Effects of a change in the cover limit

Calculations have been to quantify the portion of deposits that would be covered had the limit been NOK 1m. This amount limit is chosen because it is the closest interval reported by the banks at present. The majority of deposits in this range are thought to be below NOK 830,000, enabling a good estimate of the effects of a change in the Norwegian cover limit.

Under the present cover limit of NOK 2m, 55 per cent of total deposits from sectors encompassed by the guarantee scheme are covered. Looking at deposits up to NOK 1m, the proportion is reduced to 46 per cent. This means that an estimated NOK 200bn will lose guarantee cover if the deposit guarantee is reduced from NOK 2m per depositor per bank to EUR 100,000.

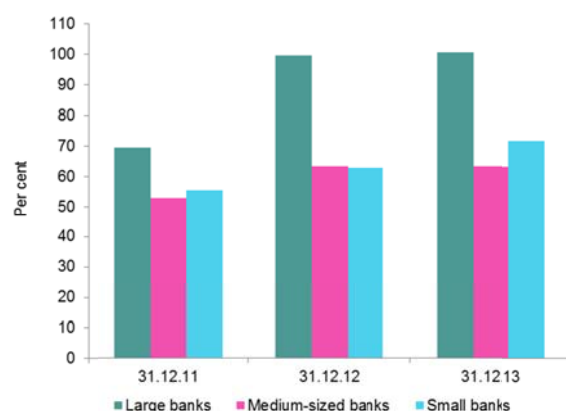
As regards the number of accounts that are fully covered by the deposit guarantee scheme, an estimated 200,000 accounts will lose full guarantee cover in the event of a reduction in the deposit guarantee. In addition, about

100,000 accounts that are not fully covered by the deposit guarantee scheme at present will see a reduction in cover. The proportion of accounts that are fully covered by the deposit guarantee scheme is reduced, but remains at a high level of 97 per cent.



2 BANKS

2.47 LCR, weighted average



Source: Finanstilsynet

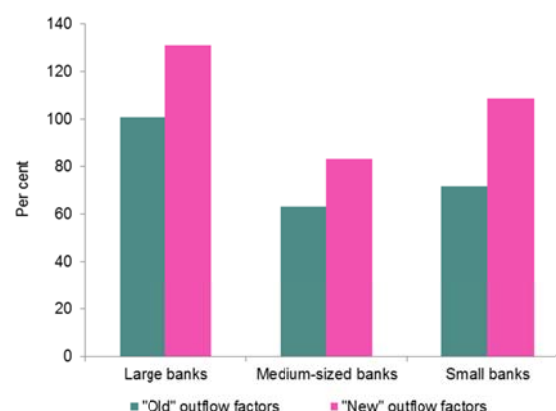
Banks' market funding has risen markedly since banks were permitted to issue covered bonds through mortgage companies in 2007. Market funding accounted for 48 per cent of total funding at the end of 2013, 1 percentage point lower than at the end of 2012. The decline is mainly due to a fall in the proportion of short-term market funding. The covered bond share rose by 1 percentage point compared to the end of 2012 (chart 2.44).

Large banks have a considerably larger share of market funding than smaller banks which base their operations to a larger degree on deposit funding. While banks have grown more dependent on market funding, the maturity of such funding has increased. The proportion with a maturity above one year rose from 65 to 66 per cent of total market funding from end-2012 to end-2013 (chart 2.45). The bulk of long-term funding comprises covered bonds. By the end of 2013 covered bonds worth almost NOK 900bn had been issued, and for the first time bonds issued in foreign currency accounted for a larger proportion than bonds issued in Norwegian kroner.

A substantial share of Norwegian banks' market funding consists of borrowings from abroad. It is mainly the largest banks that utilise this option since size and credit rating are important for access to funding from foreign sources. Foreign sources accounted for almost 60 per cent of total market funding (incl. all interbank debt) at the end of 2013 (chart 2.45). More than 50 per cent of foreign funding has a maturity above one year.

A substantial proportion (25 per cent) of Norwegian banks' overall funding is short term (below three months) in the money and capital markets, mostly from foreign sources. A large proportion of short-term market finance renders banks more vulnerable to turbulence in international money and capital markets.

2.48 LCR at 31.12. by old and new outflow factors



Source: Finanstilsynet

Finanstilsynet's long-term liquidity indicator shows the relationship between banks' funding with a maturity above one year (including customer deposits, bonds inclusive of covered bonds, debt to credit institutions, subordinated debt and equity capital) and their illiquid assets. The indicator has risen in recent years (chart 2.46), and at end-2013 stood at 103 per cent for Norwegian banks as a whole. This indicator has features in common with the net stable funding ratio (NSFR), which CRD IV recommends should be introduced with a minimum requirement of 100 per cent as from 2018; for further details see Theme III, Liquidity Regulation.

LIQUIDITY BUFFER

It is important for banks to have sufficient liquidity buffers to withstand a period of limited access to liquid funds. The new liquidity buffer requirement in CRD IV, the Liquidity Coverage Ratio (LCR), measures the size of a financial institution's liquid assets as a ratio of net liquidity outflow 30 days ahead in time, given a stress situation.

The LCR for Norwegian banks (banking groups) overall was 96 per cent at the end of 2013, which is 1 percentage point higher than at the end of 2012. Large banks as a whole were above the future requirement of 100 per cent, with an LCR of 101 per cent. For the medium-sized and smaller banks, the LCR was 63 and 72 per cent respectively (chart 2.47). Compared with one year earlier the large banks have increased their LCR by 1 percentage point, the medium-sized banks showed an approximately unchanged indicator, while the small banks had increased their LCR by 10 percentage points.

Norwegian LCR reporting, which started in 2011, is based on the Basel Committee's recommendations from 2010. In January 2013 the Basel Committee recommended changes in the definition of the LCR. The key changes from the original recommendation from 2010 were for additional

assets to be eligible for inclusion in the denominator, and the relaxation of some cash outflow factors (reduced run-off factors for deposits) in the denominator.

The widening of eligible liquid assets in the LCR to include inter alia Residential Mortgage Backed Securities (RMBS), corporate bonds with a lower rating and certain shares, is presumed to be of minor significance for Norwegian banks. Norwegian banks have invested little in RMBS, and shares cannot account for more than 4 per cent of a bank's total balance sheet assets. Moreover, large haircuts apply to the securities. The changes in cash outflow factors are expected to have a greater impact on Norwegian banks. Outflow factors for deposits covered by the deposit guarantee, non-operational deposits and certain credit and liquidity facilities were reduced in the Basel Committee's new LCR recommendation. The final definition of the LCR, to be adopted by the EU Commission by June this year, will build inter alia on the Basel Committee's recommendations from 2013; for further details of the work on the final definition of the LCR, see Theme III.

Calculations of the LCR according to the 2013 definition (only taking account of the new cash outflow factors in the denominator), show that Norwegian banks as a whole are assigned an LCR of 125 per cent as of 31 December 2013, an increase of close to 30 percentage points compared with the calculation under the 2010 definition (chart 2.48). Small banks see the greatest improvement in the LCR, with an increase from 72 to 109 per cent. For large and medium-sized banks the LCR increases from, respectively, 101 and 63 per cent to 131 and 83 per cent. This shows that Norwegian banks are considerably closer to the future requirement under the 2013 definition, but that 52 banks are still short of the LCR requirement of 100 per cent. Of these, three are large banks, 11 are medium-sized banks and 38 are small banks.

3 INSURANCE AND PENSIONS

Life insurers and pension funds (together termed pension providers) face major challenges in the next few years. Solvency II will apply to life insurers as from 2016, and the new solvency framework will entail significantly higher capital requirements. The bulk of life insurers' commitments carry guaranteed interest, and the new solvency framework is accordingly particularly demanding when interest rates are low. Rising longevity in the population compels pension providers to increase their provisioning to safeguard future pension obligations, and large portions of the surplus return on private occupational pension schemes will need to be devoted to increasing technical provisions in the next few years. Due to the high costs of defined benefit pensions with guaranteed interest, the share of unit-linked defined contribution schemes without guaranteed interest has risen considerably in recent years. The latter schemes now account for the bulk of all new pension contracts in the private sphere. These schemes transfer the rate-of-return risk to the policyholder, placing heavy demands on life insurers' information and advisory services.

Life insurers and pension funds both posted good results in 2013. For pension providers as a whole, return on capital exceeded the average guaranteed interest rate. A considerable portion of the surplus return was devoted to provisioning for rising longevity. The stock market recovery enabled an increase in fluctuation reserves, and total buffer capital was substantially strengthened at life insurers and pension funds alike.

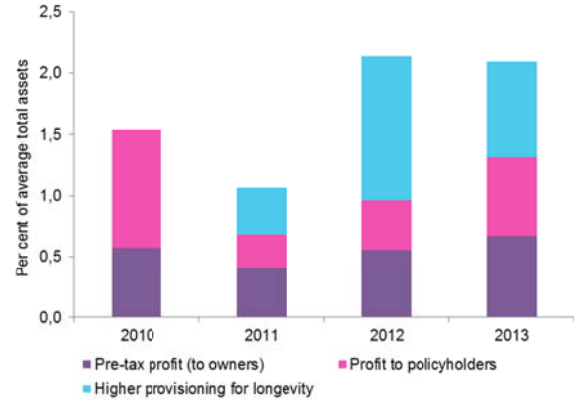
Non-life insurers performed somewhat less well in 2013 than in 2012, mainly due to a reduction in financial revenues. The result of insurance operations was somewhat better compared with the previous year.

RESULTS

Life insurers posted a pre-tax profit close to NOK 7bn in 2013, after provisioning for increasing longevity and other allocations to policyholders. This was 0.7 per cent of average total assets, i.e. somewhat better than in 2012 (chart 3.1). Pension funds recorded a slight decline in pre-tax profit, to just over NOK 2bn in 2013, i.e. 1.1 per cent of average total assets (chart 3.2). The upturn in the stock markets in 2013 brought a rise in investment values and increased fluctuation reserves.

Life insurers' adjusted profit, which includes the unrealised value increase, was NOK 16bn, compared with NOK 13bn

3.1 Life insurers' profit distributed on policyholders, owners and higher provisioning for longevity



Source: Finanstilsynet

3.2 Pension funds' profit distributed on policyholders and owners



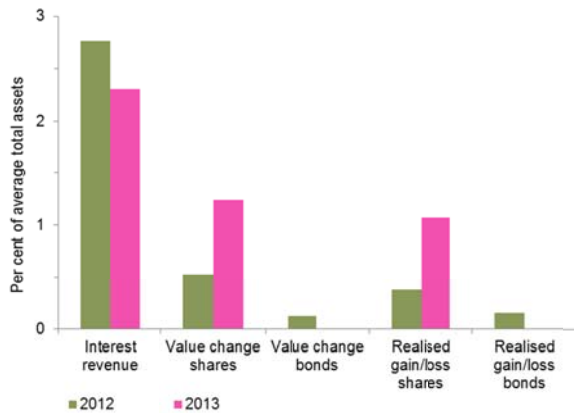
* Higher provisioning of about NOK 4bn (provisional figure) for longevity in 2013 is in addition. Source: Finanstilsynet

the previous year. For pension funds, whose equity component is far higher than that of life insurers, the adjusted profit improved from NOK 8bn to NOK 14bn.

Life insurers set aside NOK 8bn to increasing technical reserves for rising longevity in 2013, and have now set aside a total of NOK 22bn. This is slightly more than half of the overall increased need for technical provisions at life insurers (see further details later in this chapter). Public pension schemes had completed the process of increasing their technical provisions by the closing of the books for 2013.

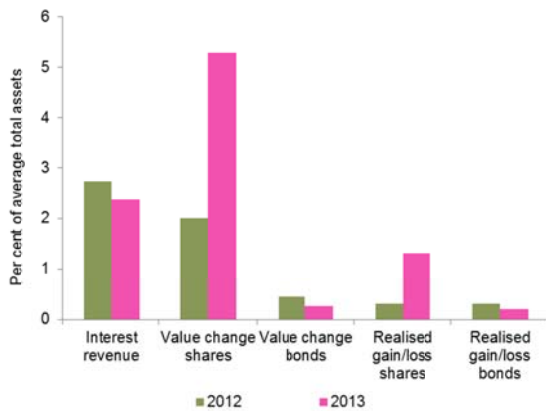
Interest revenues declined somewhat in the past year, but still constitute the largest portion of life insurers' financial revenues. The stock market recovery brought an increase in realised and unrealised gains in life insurers' share portfolios. There was also reduction in pension funds' interest revenues, whereas the unrealised increase in share

3.3 Financial revenue – life insurers



Source: Finanstilsynet

3.4 Financial revenue – pension funds



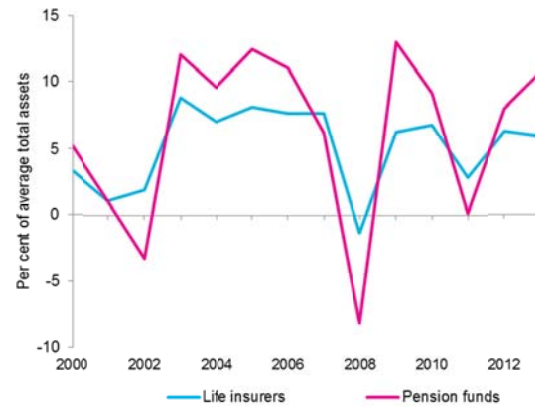
Source: Finanstilsynet

portfolio values rose considerably, and by a far larger margin than at life insurers (charts 3.3 and 3.4).

The transfer market in 2013 was coloured by the decisions of DNB Life Insurance and Storebrand Life Insurance to wind down their public occupational pension plans. Forty-one local authorities and one county authority transferred to KLP in 2013, in addition to 48 firms with public occupational pension plans. With the closure of the public plans at DNB and Storebrand, KLP is the sole life insurer providing public occupational pensions. Hence local authorities' only alternative to KLP is to set up their own pension funds.

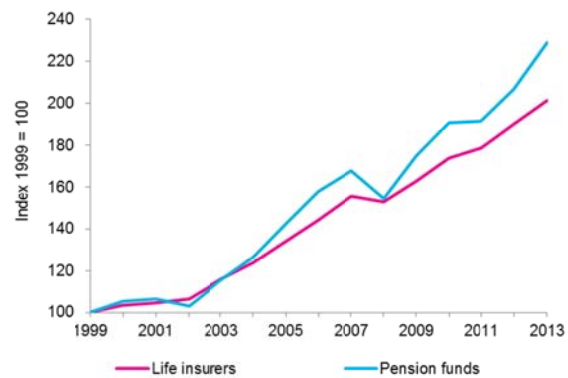
Almost 90 per cent of life insurers' insurance liabilities, and an even larger proportion at pension funds, carry a guaranteed annual minimum rate of return, and are managed in the collective portfolio. This applies mainly to private and public defined benefit pensions and paid-up policies. Pension providers are dependent on sufficient

3.5 Adjusted return on capital, life insurers and pension funds



Source: Finanstilsynet

3.6 Accumulated adjusted return on capital, life insurers and pension funds

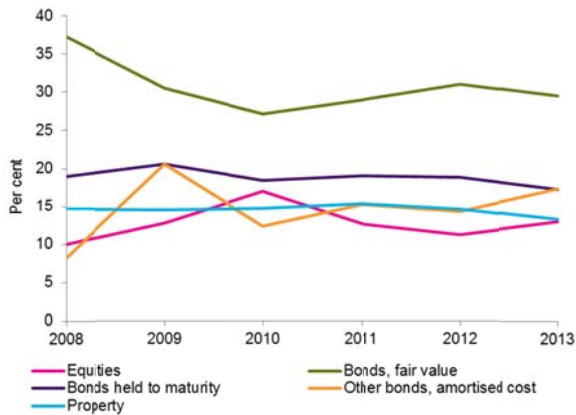


Source: Finanstilsynet

return on policyholder assets to fulfil the annual interest guarantee. At the end of 2013 the guaranteed interest rate averaged about 3.2 per cent. The book return is intended to cover the annual guaranteed commitments, and in 2013 life insurers' book return was 4.9 per cent. While slightly below the previous year's figure, this was nonetheless above the average guaranteed interest rate. Adjusted return, which includes unrealised value changes, was also somewhat reduced for life insurers compared with 2012, at 5.9 per cent in 2013 (chart 3.5). Since pension funds have a significantly higher equity component than life insurers, the equity market development had a larger effect, contributing to an adjusted return of 10.7 per cent in 2013. However, a high equity component entails higher investment risk: a setback in the equity market will in isolation have greater negative consequences for pension funds than for life insurers. This is illustrated in chart 3.5 which shows that pension funds rate of return fluctuates more than that of life insurers. Even so the accumulated return shows that a

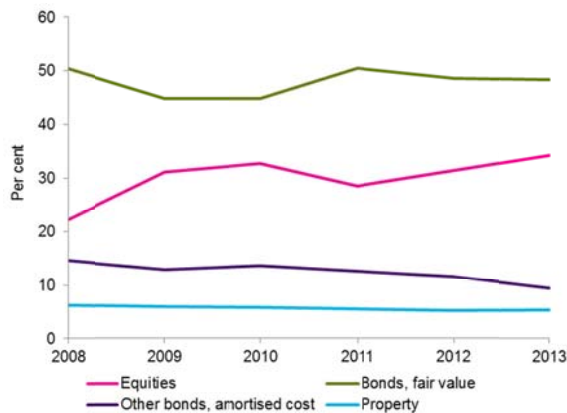
3 INSURANCE AND PENSIONS

3.7 Investments in the collective portfolio, life insurers



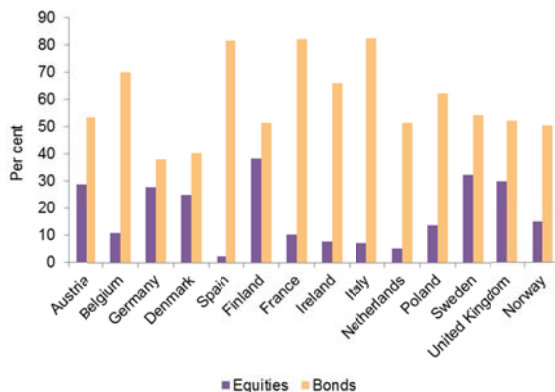
Source: Finanstilsynet

3.8 Investments in the collective portfolio, pension funds (NB: differing scale in chart 3.7 and 3.8)



Source: Finanstilsynet

3.9 Equities and bonds as a share of total investment, exc. unit-linked, in selected European countries



Source: EIOPA

higher equity component has produced better return over time (chart 3.6).

In the unit-linked portfolio, making up 12 per cent of total assets, and where the policyholder bears the rate-of-return risk, average return was to some extent considerably higher than in the collective portfolio. Most life insurers report a return well above 10 per cent, mainly due to a high equity component.

MARKET RISK – PENSION PROVIDERS' INVESTMENTS

Pension providers' liabilities consist of contracts which in the main carry a guaranteed interest rate. A considerable portion of the guarantees were granted in a situation of far higher interest rates than today. Pension providers face a challenge in safeguarding policyholders' guaranteed rate of return while at the same time maintaining a portfolio composition containing an acceptable level of risk relative to current and future solvency requirements.

Although equity investments are assumed to provide over time a higher rate of return than bonds, the short-term risk posed by the annual interest guarantee means that insurers need to reduce the equity component when interest rates are low, in spite of the fact that the need for alternative investments with higher return increases. Equity investments have been reduced somewhat at life insurers in recent years. At end-2013 equities accounted for about 12 per cent of the collective portfolio (chart 3.7). At pension funds the equity component is, as mentioned, significantly higher than at life insurers, making up 34 per cent of the collective portfolio (chart 3.8). However, pension funds have substantially higher buffer capital and hence greater risk-bearing capacity than life insurers.

Compared with other European countries, Norwegian life insurers' equity component is somewhat lower than the average. In Finland the equity component is close to 40 per cent, while Spanish life insurers have an equity component of just 2 per cent (chart 3.9). European life insurers' investment strategy is influenced inter alia by the composition of insurance liabilities and by the proportion of contracts with guaranteed interest, which varies widely from one country to the next. Capital management is also influenced by quantitative constraints in national legislation.

Life insurers' equity portfolio consists of both shares and equity funds, along with other funds (except bond and money market funds). More than half of the equity portfolio consists of equity funds etc (chart 3.10). Almost 80 per cent of the equity portfolio is invested in foreign paper, of which a significant proportion is American. Hence developments in

international stock markets are of greater significance for equity values than developments at Oslo Børs. However, Oslo Børs co-varies with international stock exchanges, albeit not consistently over time. About 30 per cent of life insurers' equity portfolio consisted of unlisted shares at the end of 2013, including private equity funds and hedge funds (chart 3.11). At pension funds, the proportion of unlisted shares was about 10 per cent.

Capital requirements related to equity investments under Solvency II are high, and higher for unlisted shares than for listed shares. A number of life insurers may find it necessary to reduce risk in their investment portfolios, and this could call for low equity components. At the same time the proportion of unlisted shares may be reduced in the period to Solvency II. However, such shares are relatively illiquid, and in periods of declining prices may prove more difficult to dispose of than ordinary shares. During the financial crisis in 2008/2009 the equity component was substantially reduced, but the companies were left with a relatively high proportion of unlisted shares. This may be because listed shares were more easily disposed of in the period.

Life insurers have sizeable investments in property. At the end of 2013 property investments accounted for 13 per cent of the collective portfolio, a decline of 2 percentage points since 2012. This share remained stable at 14-15 per cent for several years prior to the decline in 2013. The figure for pension funds is significantly smaller.

Investments in derivatives have in periods had a substantial effect on life insurers' overall financial revenue. The bulk of life insurers' investments in derivatives are in foreign exchange and interest rate derivatives, and changes in interest rates and exchange rates may be of major significance for the value of investment portfolios. Hedging instruments have as a rule little impact on the result viewed together with the underlying object, since part of the purpose of hedging transactions is to smooth fluctuations in the value of the underlying object. Other derivatives not designated as hedging instruments may, however, have a larger effect. More companies are making active use of derivatives in their asset management, since exposure can be managed more speedily and effectively in the desired direction by this means than through trading in the underlying instruments.

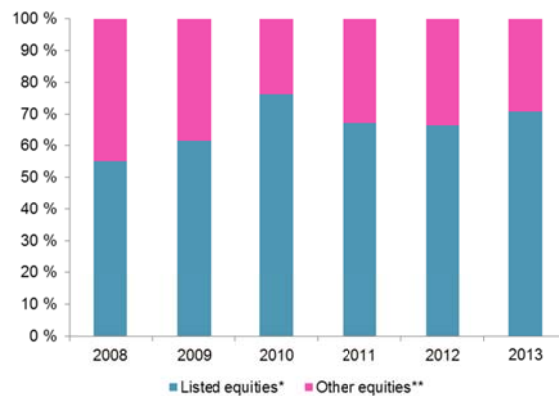
Close to 70 per cent of life insurers' investments in the collective portfolio are in fixed income securities, of which a little over one-half are bonds held to maturity and other fixed income securities measured at amortised cost (chart 3.13). Bonds generate all in all relatively predictable interest revenues. Whereas the value of bonds held at fair value is affected by interest rate changes, the accounting value of bonds and other fixed income securities measured

3.10 Equities and equity funds at life insurers



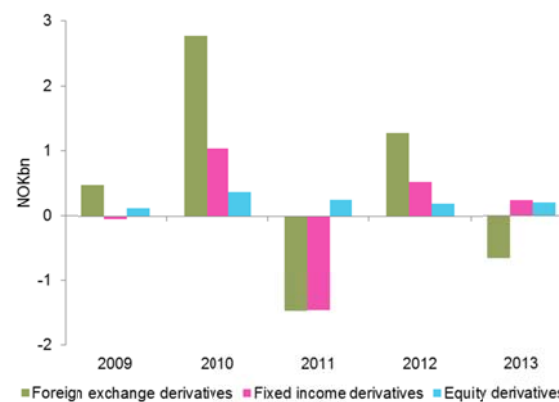
Source: Finanstilsynet

3.11 Listed and unlisted equities, life insurers



*Listed equities in countries that are EEA or OECD members. **Unlisted equities, listed equities outside the EEA/OECD, alt. investments such as private equity and hedge funds. Source: Finanstilsynet

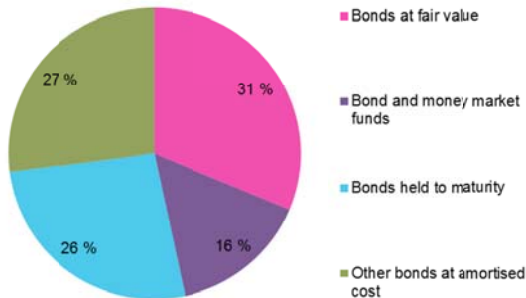
3.12 Net exposure to derivatives, life insurers



Source: Finanstilsynet

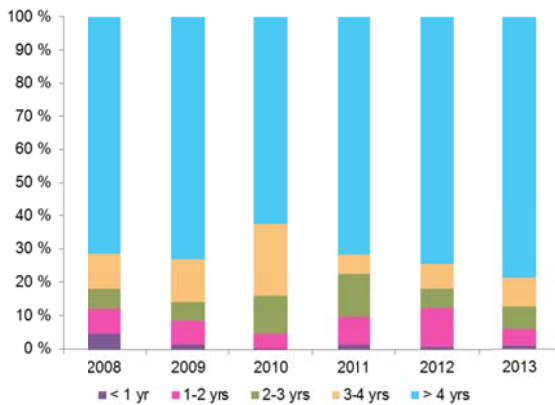
3 INSURANCE AND PENSIONS

3.13 Specification of bond portfolio at 31.12.2013



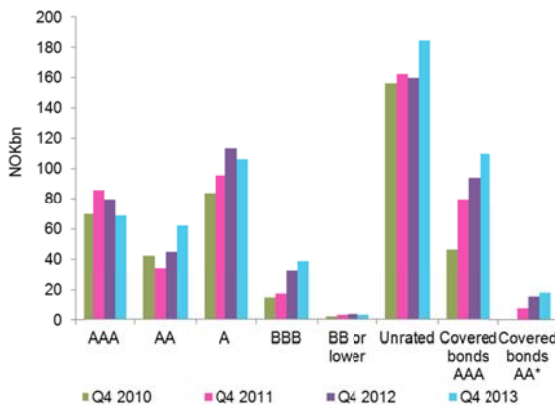
Source: Finanstilsynet

3.14 Specification of bond portfolio at 31.12.2013



Source: Finanstilsynet

3.15 Market value of bonds held by life insurers (total bond portfolio) by rating*



*Standard & Poor's rating classes. The lowest rating classes are merged in the chart. Source: Finanstilsynet

at amortised cost, including held-to-maturity bonds, remains stable throughout the security's lifetime. An important rationale for holding a portfolio of fixed income securities classified at amortised cost is precisely to avoid accounting fluctuations that may have negative consequences for capital adequacy. Almost 80 per cent of bonds at amortised cost had a maturity above four years (chart 3.14), and the average interest rate on this portfolio exceeds 4 per cent for life insurers as a whole. In periods of high interest rates, reinvestment risk is high since the likelihood of an interest rate fall is higher than in periods of low interest rates. In as much as large portions of the bond portfolio held to maturity were invested at a higher interest rate level than at present, the bonds will need to be reinvested at a lower interest rate upon maturity. There are however wide differences between insurers. At some life insurers the interest rate on the bond portfolio with longest maturity is below 4 per cent.

Pension funds' bond holding made up 59 per cent of the collective portfolio. More than 80 per cent of pension funds' bond portfolio is measured at fair value.

Life insurers' investment profile is affected inter alia by future capital requirements. The holding of bonds issued by mortgage companies, mainly covered bonds, has risen considerably in recent years (chart 3.15). This is related to the fact that covered bonds will receive favourable treatment under Solvency II, and will thus be an attractive investment object. Norwegian bank bonds make up a large proportion of life insurers' bond portfolio. A significant proportion of them are not rated. Under Solvency II unrated bonds will be subject to a capital requirement somewhat higher than BBB-rated securities. This could make such bonds less attractive in the future.

The proportion of unit-linked contracts is rising rapidly among life insurers. At the end of 2013 this portfolio accounted for 12 per cent of life insurers' aggregate total assets. This proportion is expected to rise since the bulk of all new pension plan contracts are unit-linked defined contribution contracts. This is a trend common to many European countries, in part due to the risk and costs involved in contracts with long-term rate-of-return guarantees. The unit-linked portfolio's equity component was 54 per cent at the end of 2013, but the proportion of bonds was 42 per cent. Investments in equities and bonds are mainly through mutual funds.

FINANCIAL SOUNDNESS AND STRESS TESTS

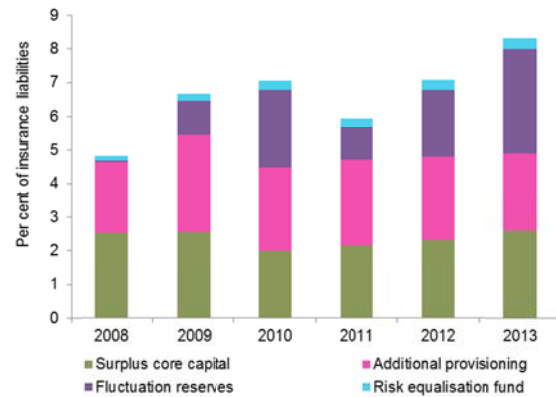
Both life insurers and pension funds manage their pension liabilities largely through investments in securities markets. Portfolio compositions are designed to ensure sound return on the funds invested, at minimum corresponding to policyholders' guaranteed interest rate, without risk

becoming excessive. High-risk assets may potentially provide higher return, but also increase the risk of loss. Pension providers' loss-bearing capacity, i.e. the size and quality of their buffer capital, is therefore of great importance when choosing an investment profile. Life insurers' buffer capital totalled NOK 67bn at the end of 2013. This corresponds to 8 per cent of insurance liabilities (chart 3.16). Buffer capital is defined here as available capital over and above statutory minimum requirements, i.e. surplus tier 1 capital, supplementary provisions, fluctuation reserves, risk equalisation funds and unrealised gains reserve in the company portfolio. Life insurers' buffer capital rose by NOK 12bn in 2013, partly as a result of the stock market recovery which contributed to higher fluctuation reserves. Pension funds' buffer capital amounted to NOK 42bn, corresponding to 22 per cent of their liabilities (chart 3.17). Pension funds' buffer capital also rose considerably in 2013.

Life insurers and larger pension funds report stress tests on a quarterly basis to Finanstilsynet. Smaller pension funds (the majority) report twice yearly. The stress tests measure both the companies' ability to meet current solvency requirements (stress test II) and the impact of the Solvency II framework (stress test I) under differing stress scenarios. The stress tests calculate the loss potential in the case of all relevant risks relative to buffer capital, and show overall buffer capital utilisation. However, buffer capital composition, valuation of assets and liabilities, along with stress scenarios differ in the two stress tests. Buffer capital utilisation above 100 per cent indicates that the company's overall loss potential exceeds the buffer capital. For life insurers overall, buffer capital utilisation in stress test II was 69 per cent, indicating that the companies are largely financially sound under the current framework. For pension funds, buffer capital utilisation was 56 per cent.

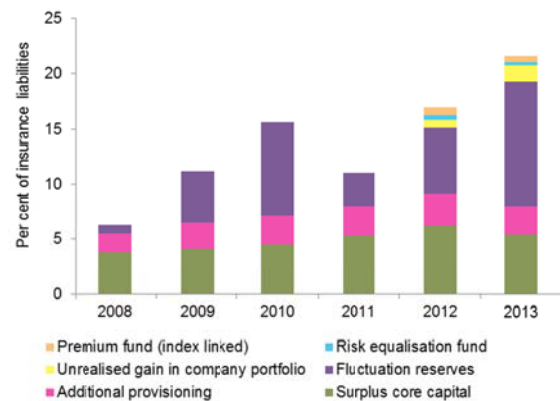
A significant difference between the current and future solvency framework is that liabilities will be measured at fair value under Solvency II. This entails that the interest rate level in effect at any time influences the calculated value of future liabilities. Given today's low interest rate level, it is difficult for companies to meet the capital requirements under Solvency II. This is reflected in buffer capital utilisation in stress test I which is significantly higher than in stress test II. The size of the impacts of Solvency II is affected by a series of factors, among them the interest rate curve to be employed by the companies to discount insurance liabilities, and possible transitional rules. See also the description of EIOPA's impact analysis of proposals for long-term guarantees in Financial Trends 2013, chapter 3 (Norwegian version only).

3.16 Life insurers' buffer capital



Source: Finanstilsynet

3.17 Pension funds' buffer capital



Source: Finanstilsynet

LIFE INSURERS' INCREASED PROVISIONING FOR RISING LONGEVITY

Insureds' life expectancy affects pension providers' premiums and technical provisions for products providing lifelong benefits. Owing to the increase in the Norwegian population's longevity, life insurers and pension funds took into use, as from 1 January 2014, a new mortality table that takes into account the trend in the mortality rate over time (see a closer account of the new mortality tariff in Financial Outlook 2013). This brings a considerable increase in pension providers' premiums for new accumulation in collective occupational pension plans, but also a considerable need to strengthen pension providers' technical provisions. In order to satisfy forthcoming solvency requirements, a number of life insurers must either be supplied with fresh capital and/or reduce risk. In the current situation featuring high long-term guarantees and low interest rates, large portions of the surplus return must be devoted to increasing technical provisions for rising longevity in the years immediately ahead.

3 INSURANCE AND PENSIONS

Life insurers' overall need for higher technical provisioning as a result of the switch to a new mortality base comes to about 10 per cent of the premium reserve for collective contracts in the private sector, about 9 per cent of the premium reserve for paid-up policies and 4.5 per cent in the public sector. In the period 2011 to 2013 most insurers have already met part of the expected provisioning need by setting aside policyholder surplus. After the closing of the books for 2013 public pension schemes have no need for further provisioning, whereas a large need for further provisioning remains in the private sector. For premium-paying pension contracts the remaining provisioning need measures about 6 per cent of the premium reserve, and close to 7 per cent for paid-up policies.

In March 2013 Finanstilsynet announced that pension providers, subject to certain limits, could be allowed a period in which to meet the new provisioning requirements, which should not exceed five years. On capital adequacy grounds it was also planned that a significant portion of provisioning could be funded through policyholder surplus. Finanstilsynet's further presumption was that pension providers, in their plans for stepping up their provisioning, should aim to meet a minimum of 20 per cent of the need for provisioning through own funds. After a close assessment of pension providers' financial position and return on insurance assets, Finanstilsynet has concluded that approval could be given to step-up plans of up to seven years' duration as from 2014. Including the years 2011-2013, when pension providers were given the opportunity to set aside customer surplus pending introduction of a new mortality table, the overall escalation period has a duration of up to ten years.

On 2 April 2014 Finanstilsynet sent identically worded letters to all pension providers containing guidelines for increased technical provisioning and application of surplus to fund the increased provisioning called for by the new mortality base (K2013). The letter makes it clear that only the individual contract's surplus may be used to strengthen that contract's premium reserve so long as it is under-provisioned. Hence approval will not be given for surplus return on a particular contract to be used to strengthen provisioning on another contract, and pension providers' contribution of at least 20 per cent of the overall need for additional provisioning must be supplied at contract level. Upon transfer of a contract, the technical cash value of the contract must⁹ at minimum correspond to the level in the escalation plan which the ceding pension provider should have fulfilled as of the transfer date, while the remainder of

the increased provisioning must be done by the receiving pension provider.

The need to strengthen premium reserves as a result of new mortality tables varies between life insurers and between individual contracts. The need for additional provisioning is generally highest in the case of young paid-up policyholders¹⁰. This means that some contracts will be fully provisioned at an early stage of the escalation period, while other contracts will only be fully provisioned after the escalation period. The requirement of an own funds contribution of at least a 20 per cent applies to all contracts, including contracts fully provisioned by customer surplus at the end of 2013. The distribution of the overall costs of increased provisioning between companies and policyholders will depend on the return on insurance assets that the individual company manages to achieve in the period stipulated for the increase in provisioning.

EXPECTED GROWTH IN UNIT-LINKED PRODUCTS

In light of future capital requirements and a demanding situation of low market interest rates, most life insurers have raised premiums and lowered costs, while at the same time focusing to a greater extent on non-guaranteed products requiring considerably less capital.

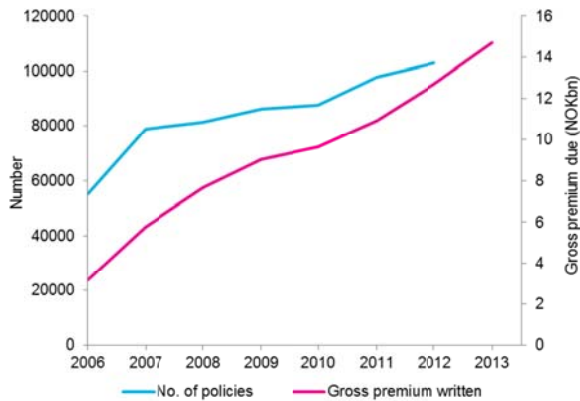
In 2013 a tendency for a growing number of firms to switch from defined benefit pensions to defined contribution pensions was still in evidence. As from 1 January 2014 the stage was set for a new occupational pension product (see chapter 4, Regulation) offering a choice of unit-linked funds. The Defined Benefit Pensions Act sections 4-7a and 4-7b concerning unit-linked paid-up policies, adopted on 14 December 2012 but yet to enter into force, will enable a further reduction in the proportion of guaranteed products, thereby improving insurers' financial position.

Common to all unit-linked insurance products is the fact that the associated insurance liabilities are at all times linked to the value of the investment portfolio accompanying the individual contract. The life insurer owns the investment portfolio, while the policyholder has a claim against the insurer. Unit-linked policyholders may however choose, and subsequently change, the composition of the investment portfolio. Depending on the product's design, the policyholder will, in addition to an annual risk premium, pay an establishment fee (purchase charge) and an administration fee to the life insurer.

⁹ If the contract has been supplied with reserves over and above the amount required by the escalation plan, the actual reserve on the transfer date must accompany the transfer.

¹⁰ As a result of brief accrual period and the fact that wage levels for young members are normally lower than for older members, the premium reserve for young members will normally be considerably lower than the premium reserve for members with few years left to retirement.

3.18 No. of policies and gross premium written, defined contribution pensions at life insurers



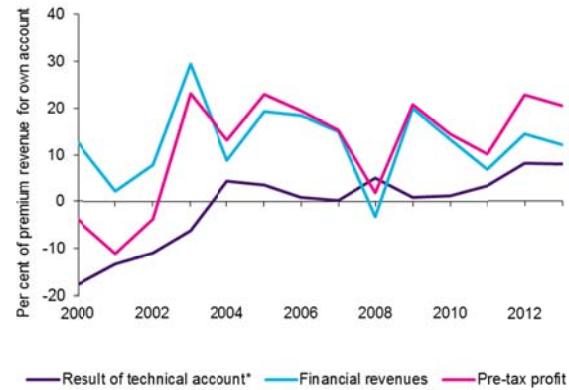
Source: Finance Norway (2013 figures are provisional)

It is up to the individual life insurer to decide which management companies it wishes to collaborate with and which securities funds/individual equities and other instruments its policyholders will be invited to choose among. For Norwegian life insurers a business conduct requirement applies under the Insurance Act to the choice of portfolio assets. A company must have in place policies with regard to asset choice and change of portfolios in order to avoid conflicts of interest arising between policyholders and policyholders groups, or between policyholders and the company. It is in policyholders' interests for companies' offerings to focus greater attention on the link between the rate of return and costs associated with various investment choices.

It is normal business practice internationally for providers of unit-linked insurance products to receive return commission (a share of the fixed annual management fee) from management companies whose securities funds are included in the products' range of funds. Return commission does not accrue to the investing customers, and in some cases is a not insignificant portion of a life insurer's income. Finanstilsynet has initiated a survey of return commissions and/or other payments that life insurers receive from companies managing securities funds, information on return commissions and selection made of securities funds in the unit-linked portfolio.

Life insurers have a wide-ranging information and advisory obligation, and requirements on information and advice will increase for companies offering complex products, illiquid products, built-in gearing etc. This was highlighted by Finanstilsynet in a report of September 2012.

3.19 Results of non-life insurers



Source: Finanstilsynet

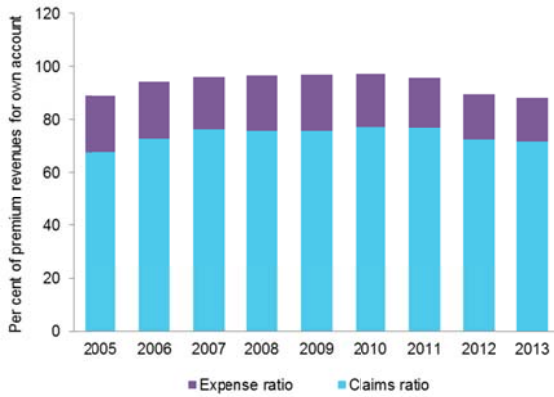
Where paid-up policies are converted to unit-linked policies under the provisions of the Defined Benefit Pension Act, the paid-up policyholder must relinquish the guarantee regarding previously accrued rights. Switching to unit-linked is in principle assumed to be best suited to young members with many years left to retirement.

In a letter of November 2013 to the Ministry of Finance, Finanstilsynet recommended a supplementary requirement to provide information on the consequences that conversion will have for the paid-up policyholder. Finanstilsynet's recommendation was circulated for comment with the deadline set at 17 January 2014. According to Finanstilsynet's recommendation, the paid-up policyholder must inter alia be given written examples showing what size the annual return on a given investment portfolio for a given age group must have in order to achieve particular pension benefits. Finanstilsynet also recommended in the same letter that paid-up policies should be fully provisioned in keeping with the new mortality base prior to possible conversion to unit-linked. This will make the pension provider's information and advisory requirements easier to handle, but will at the same time be a challenge for life insurers following a fixed escalation plan. The result could be that companies refrain from offering unit-linked until the paid-up policies are fully provisioned.

On 24 March 2014 the Ministry of Finance circulated Finanstilsynet's consultation document for comment which proposed further rules for calculation of retirement pension payments designed to ensure an appropriate payment profile. These rules are relevant to pension products with no or low guaranteed return, including unit-linked paid-up policies, and will ensure that payment profiles do not entail a marked rise in pension benefits through the pension payment period. The deadline for comment is 21 May 2014.

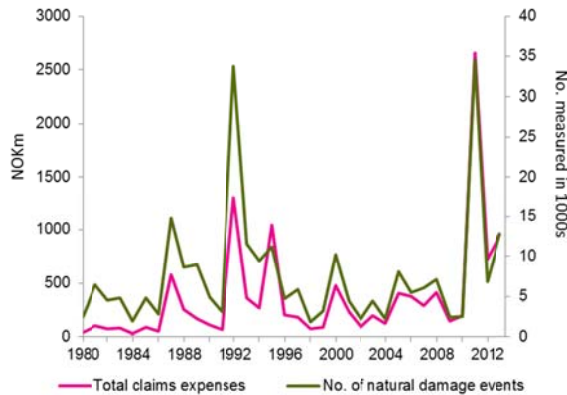
3 INSURANCE AND PENSIONS

3.20 Claims ratio and expense ratio (combined ratio)



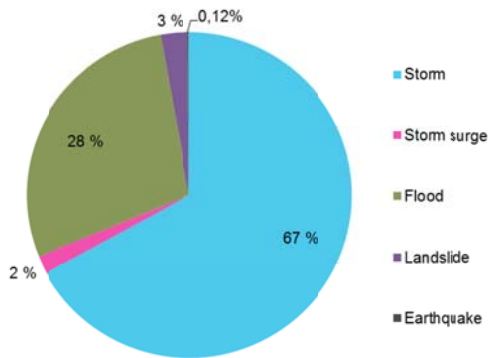
Source: Finanstilsynet

3.21 No. of natural damage events and total claims expenses due to natural damage



Source: FNO

3.22 Distribution of natural damage in 2013



Source: FNO

NON-LIFE INSURANCE

In 2013 Norwegian non-life insurers (without captives) posted an overall pre-tax profit close to NOK 7bn, a slight decline on 2012 (chart 3.19). The decline is due to a reduction in financial revenues. Non-life insurers have a relatively low equity component and have not benefited to the same extent as life insurers, and in particular pension funds, from the stock market recovery. Profit from insurance operations was NOK 3.7bn in 2013, up 9 per cent from 2012. Premium revenue rose by 6 per cent in 2013, and premium growth exceeded the growth in claims expenses. This tendency has been in evidence for several years.

The combined ratio, showing the sum total of claims and operating expenses relative to premium revenues, is an indicator of the profitability of insurance business. If the combined ratio is above 100 per cent, overall claims and expenses exceed premium revenues, indicating that insurance operations are not profitable. The combined ratio in 2013 was 88 per cent, i.e. an improvement of 1.5 percentage points compared with the previous year (chart 3.20). Both the claims ratio and the cost ratio have shown improvement in the past few years.

In general Norwegian non-life insurers have a sound financial position, and there is little to indicate that Solvency II will pose major problems for non-life insurers in terms of financial soundness.

NATURAL DAMAGE

Climatic changes have brought an increased volume of natural damage with major economic consequences. By natural damage is meant damage directly due to landslide, storm, flooding, storm surge, earthquake or volcanic eruption. In 2013 storms and floods accounted for the bulk of natural damage that occurred in Norway. Of single events over the past 30 years, the New Year storm in 1992 and the storm Dagmar in 2011 have given rise to the highest claims payment expenses (chart 3.21).

Despite heavy costs inflicted by natural damage, consequences for Norwegian non-life insurers that write natural damage insurance have been limited since direct natural damage is covered through the Norwegian Pool for Natural Perils. All insurers that write fire insurance in Norway must also write natural damage insurance, and are required to be members of the Pool for Natural Perils. In addition to direct natural damage, a considerable increase has been seen in indirect damage resulting from extreme weather, for example surface flooding of land due to extreme precipitation or backup through sewer pipes. The volume of indirect natural damage is now about twice that of direct natural damage events. According to Finance Norway, claims payment expenses following water damage to dwellings and commercial buildings rose by 15 per cent in 2013.

4 REGULATION

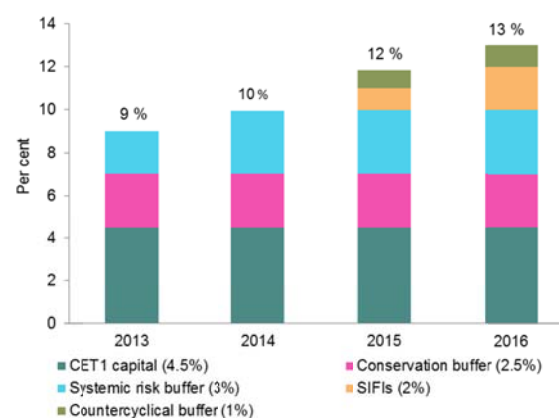
The EU's new capital adequacy framework, CRD IV, entered into force in the EU on 1 January 2014. It has not for the time being been incorporated in the EEA Agreement. CRD IV's overarching capital and buffer requirements were however included in Norwegian legislation through amendments to the Financial Institutions Act and the Securities Trading Act. Finanstilsynet has forwarded to the Ministry of Finance draft regulations which are as far as possible aligned to CRD IV. An EU-wide supervisory arrangement for banks will soon be in place. A crisis resolution mechanism, including a crisis fund for the banking union, is still being negotiated. Agreement has been reached on a body of rules for deposit guarantee schemes in the EU, and on a five-year transitional arrangement for countries with a deposit guarantee above EUR 100,000. There is also agreement on a crisis management directive, which *inter alia* imposes requirements on unsecured creditors and for write down of own funds of crisis-stricken banks. Towards the end of 2013, after protracted negotiations, agreement was reached on changes to the Solvency II Directive for insurance companies, allowing the directive to enter into force on 1 January 2016.

CRD IV – A NEW CAPITAL ADEQUACY FRAMEWORK

The EU's new capital adequacy framework, CRD IV, for credit institutions and investment firms builds on Basel III. In addition to implementing Basel III, CRD IV brings regulatory harmonisation (a single rule book). National authorities can impose stricter requirements in certain areas. These include risk weighting of exposures secured on residential and commercial property, setting the countercyclical buffer rate, supplementary requirements for systemic risk and requirements on corporate governance and internal control (Pillar 2). CRD IV represents a restructuring of the rules in that the capital adequacy directives for credit institutions and investment firms are replaced by a regulation and a directive. The directive sets general business rules for institutions, including provisions on internal risk and capital assessment (ICAAP in Pillar 2) and corporate governance. The directive also regulates the authorities' supervisory practices and sanction powers when reviewing institutions' ICAAP process under Pillar 2, and the relationship between supervisory authorities in the home country and host country. The directive also contains provisions on capital buffers, including buffers for systemic risk and systemic importance in addition to the capital conservation buffer and countercyclical capital buffer.

Compared with previous Directives, CRD IV brings stricter requirements on capital instruments, new buffer requirements, stricter capital requirements for counter-

4.1 Escalation of CET1 requirement



Source: Finanstilsynet

party risk, stricter requirements on management and control and extended requirements on the supervisory authorities' Pillar 2 assessments. CRD IV also introduces new limits on variable remuneration. Requirements on liquidity and calculation of leverage ratio, yet to be adopted, will also be introduced.

NEW REQUIREMENTS ON CET1 CAPITAL ADEQUACY LEVEL, AND BUFFER REQUIREMENTS BEYOND THE MINIMUM REQUIREMENTS

Statutory provisions on capital and buffer requirements in CRD IV were included in the Financial Institutions Act and the Securities Trading Act as from 1 July 2013, along with powers to issue more detailed provisions in the form of regulations. The law prescribes a minimum common equity tier 1 (CET1) capital ratio of 4.5 per cent a minimum Tier 1 capital ratio of 6 per cent. The total capital adequacy requirement of 8 per cent remains in place. In addition to the minimum requirements, institutions must have capital buffers consisting of CET1 capital. The Financial Institutions Act requires banks to maintain a capital conservation buffer of 2.5 per cent and a systemic risk buffer of 2 per cent. The systemic risk buffer rises to 3 per cent on 1 July 2014. The Ministry of Finance has also resolved to introduce a countercyclical buffer requirement of 1 per cent as from 30 June 2015. The level of the countercyclical buffer is to be set by the Ministry of Finance each quarter. In addition there are buffer requirements for systemically important financial institutions: 1 per cent as from 1 July 2015 and 2 per cent as from 1 July 2016 (chart 4.1). Investment firms are for the time being exempt from requirements with regard to capital conservation, countercyclical capital and systemic risk buffers.

Finanstilsynet's proposed criteria for identifying systemically important financial institutions (SIFIs) and investment firms have been circulated for comment and are

currently being assessed by the Ministry of Finance¹¹. According to Finanstilsynet, the following institutions should be deemed to be of national systemic importance, and subject to special requirements: DNB Bank, Nordea Bank Norway, SpareBank 1 Nord-Norge, SpareBank 1 SR-Bank, SpareBank 1 SMN, Sparebanken Vest and Sparebanken Sør¹². In Finanstilsynet's assessment no investment firms are systemically important in the Norwegian financial system, and accordingly no identification criteria have been proposed.

FINANSTILSYNET'S PROPOSED AMENDMENTS TO REGULATIONS

Finanstilsynet's draft version of regulations designed to align Norwegian rules to CRD IV until the latter is incorporated into the EEA Agreement were forwarded to the Ministry of Finance on 23 January 2014. The ministry circulated the proposal for comment with the deadline for responses set at 15 May 2014.

The consultation document recommends new regulations on **requirements for own funds** which match the requirements set out in CRD IV. The regulations contain transitional rules for capital instruments that exploit the regulation's limits to the full, and permit a gradual phase-out of hybrid capital and subordinated debt raised prior to 31 December 2011. The qualitative and quantitative minimum requirements on CET1 capital will not be significantly stricter than under current Norwegian rules and supervisory practices. However, some hybrid and subordinated debt issued by Norwegian institutions with incentives for redemption not commensurate with the new rules will need to be replaced with higher quality capital. Where other changes to the rules on own funds are concerned, changes to the rules governing deductions for investments in other financial institutions, and the opportunity to include in own funds deferred tax assets due to temporary differences, will in isolation soften the rules. On a consolidated basis a recommendation is to introduce stricter rules on the inclusion of own funds raised by a subsidiary from an external party.

The proposed provisions concerning **calculation of capital charges** for credit risk using the standardised approach largely continue current rules with some exceptions. The EU regulation sets the stage for the capital charge for loans to small and medium businesses (SMEs) to be reduced to improve access to credit for this segment. The rationale is a fear that this segment, whose activity is important for

economic growth in Europe, will lack sufficient access to credit under prevailing conditions. The arrangement will be evaluated after three years. In its consultation document Finanstilsynet points out that the provision concerned will bring substantial reductions in the capital charge that lack justification from the vantage point of financial soundness. Moreover, the rationale for the initiative is not regarded as relevant to Norwegian conditions. Hence Finanstilsynet's recommendation is not to include such a reduction of the capital requirement in Norwegian legislation.

According to the EU regulation, exposures to a member state in an EEA currency other than that of the state concerned will receive a zero risk weight up to 2017. After 2017 there will be a gradual phase-in of rating based weights. Today such exposures are weighted by rating. If there is no rating available, the risk weighting is 100 per cent. A transitional provision is recommended for inclusion in the Norwegian capital requirements regulations. It is further recommended that the Norwegian regulations should be amended in line with CRD IV, so that rated institutions are risk weighted based on their own rating and not, as is the case today, based on the central government's rating.

Finanstilsynet recommends that the provisions on calculation of capital charges using internal ratings based (IRB) models to calculate credit risk be continued with minor adjustments. With a view to strengthening the banks' models in the interest of financial stability, the capital requirements regulations were amended in 2013 such that the lower threshold for **average loss given default (LGD)** rose from 10 to 20 per cent as from 1 January 2014. This is within the bounds of CRD IV. Under CRD IV the minimum requirement on LGD established in one country will also apply to branches of foreign institutions operating in the country concerned. CRD IV permits national authorities to impose stricter requirements in further areas in the interest of financial stability. In addition to raising the lower threshold for average LGD for home mortgage loans, already adopted by the Ministry of Finance, Finanstilsynet recommends retaining a risk weight of 100 per cent for loans secured on commercial property under the standardised approach.

The EU regulation introduces an additional requirement for counterparty risk to cover loss risk arising from changes in the value of unlisted derivative contracts (OTC derivatives) due to a change in the creditworthiness of the counterparty. This additional requirement is recommended for inclusion in Norwegian rules.

The EU regulation entails that the transitional provision limiting the reduction in the capital charge when using IRB models or operational risk (AMA) will apply up to the end of 2017. The provision on the **Basel I floor** is retained in

¹¹ On 12 May 2014 the Norwegian Ministry of Finance adopted regulations on the identification of systemically important institutions in Norway. The ministry designated DNB Bank ASA, Nordea Bank Norge ASA and Kommunalbanken AS as systemically important institutions with a separate capital buffer requirement from 1 July 2015 onwards.

¹² Merged with Sparebanken Pluss on 1 January 2014

Norway. Finanstilsynet recommends making it clear in regulations that the floor is calculated on the basis of risk weighted assets, and such that risk weighted assets are adjusted to take account of the fact that expected losses in excess of write-downs under current accounting rules are deducted from own funds.

The EU has expressed an intention to introduce minimum requirements on liquidity coverage, the liquidity coverage ratio (LCR) as from 2015¹³ and requirements on stable funding, the net stable funding ratio (NSFR), from 2018 onwards. Finanstilsynet has provisionally assumed that CRD IV will be incorporated into the EEA Agreement before these requirements are given effect in the EU. The Ministry of Finance has announced its intention to consider during spring 2014 rules corresponding to the **EU's new liquidity requirements**, such that the liquidity buffer requirement can enter into force as from 2015, in line with the EU's schedule¹⁴. Finanstilsynet recommends that systemically important institutions should be subject to a 100 per cent LCR requirement as from 1 July 2015, but this requirement must be assessed in light of the final configuration of the LCR.

CRD IV introduces limits on the size of variable **remuneration**. Such a limit is already a part of Norwegian rules. Finanstilsynet recommends continuing the current bonus ceiling of 50 per cent of fixed pay for the CEO and management team members. For other senior employees, significant risk takers, persons with control functions and elected officers an upper limit of 100 per cent of fixed pay is recommended – in accordance with CRD IV – with the opportunity for the general meeting to raise the ceiling to 200 per cent. It is also recommended permitting up to 25 per cent of variable remuneration to be paid in instruments with a term of at least five years, and that Finanstilsynet be empowered to stipulate a discount rate for calculation of the value of these instruments.

PUBLIC REGULATION OF REFERENCE INTEREST RATES

In March 2014, on commission from the Ministry of Finance, Finanstilsynet drafted a proposal for public regulation and supervision of the fixing of reference interest rates in the Norwegian financial market. Finanstilsynet recommends the establishment of an overarching framework providing the authorities with a clear basis in law for supervision of, and a basis in regulations for public regulation of, commonly used reference interest rates, including Nibor. The proposal sets the stage for the transposition into regulations of

¹³ Gradual phase-in from 60 per cent in 2015 to 100 per cent in 2018

¹⁴ The Ministry of Finance has thus far not introduced separate liquidity requirements for systemically important institutions. In their press release of 12 May 2014 they stated that they would return to the issue at a later stage.

requirements expected to feature in a forthcoming EU regulation, the Benchmark Regulation¹⁵, and guidelines drawn up by the European Banking Authority (EBA) and the European Securities and Markets Authority (ESMA) in this field.

EUROPEAN BANKING UNION

In September 2012 the EU Commission produced a proposal to establish a European banking union. The purpose of the banking union is to preserve the integrity of the single market by strengthening supervision of the banking industry in the economic and monetary union (EMU). The banking union will at minimum contain:

- a Single Supervisory Mechanism (SSM) - a joint banking supervisor (supervisory mechanism)
- a Single Resolution Mechanism (SRM) - a joint mechanism to handle crisis banks
- a joint body of rules for deposit guarantee schemes

Membership of the banking union is obligatory for the euro countries, with an option for other EU countries to participate.

JOINT BANKING SUPERVISION

In autumn 2013 the EU Council and EU Parliament passed a regulation on a single supervisory mechanism (SSM). In the first instance a joint banking supervisor is to be established for the 18 countries in the euro area. The European Central Bank (ECB) will maintain direct supervision of credit institutions of "special significance" and monitor smaller banks indirectly through national supervisory authorities. A credit institution will be considered to be of special significance if one of the following conditions is met:

- total assets in excess of NOK 30bn
- total assets account for more than 20 per cent of the home country's GDP
- the national supervisory authority considers the institution to be of large significance for the domestic economy

The ECB will regardless directly supervise the three most significant banks in each member country, and can at all times take over supervision of any credit institution regardless of size. About 130 banks will be encompassed by the ECB's direct supervision.

In February 2014 a consultation document was published containing a proposal for a framework regulation giving practical guidelines for operational cooperation between the ECB and national supervisory authorities. The deadline

¹⁵ Commission proposal for a Regulation on indices used as benchmarks in financial instruments and financial contracts – 18.09.2013

4 REGULATION

for submissions expired in March, and a final version is planned to be published on 4 May 2014. The framework regulation deals inter alia with:

- the monitoring of a bank's significance in order to decide whether it falls under the ECB's direct or indirect supervision
- the ECB's monitoring of the entire banking system
- collaboration between the ECB and the supervisory authorities in order to ensure a well-functioning SSM
- overarching principles for the ECB's conduct of supervisory processes
- processes related to the SSM's micro and macro supervisory tasks

The ECB will take over supervisory tasks in full on 4 November 2014.

A new body – the Supervisory Board – has been established within the ECB to plan and carry out the ECB's supervisory tasks. The Supervisory Board will consist of representatives from the ECB plus one member from each euro country's supervisory authority. The first head of the Supervisory Board was appointed by the EU Council in December 2013. At the Board's inaugural meeting in January 2014 the first formal decisions were taken in connection with the operational implementation of the SSM Regulation. Development of the SSM's supervisory model is largely complete, and a supervisory manual has been drafted covering all the SSM's tasks and supervisory processes.

ASSESSMENT OF THE BANKING SECTOR

In preparation for the operational start-up of the new supervisory regime, the ECB has launched a comprehensive assessment of risk at banks subject to the ECB's direct supervision. The object is to increase the transparency of and confidence placed in the banking sector, and comprises mainly three complementary pillars:

- qualitative and quantitative risk assessment of banks' balance sheets (supervisory risk assessment)
- review of banks' assets and their quality (asset quality review)
- stress test of the banks in close cooperation with the European Banking Authority

Asset quality review (AQR)

AQR primarily addresses assets considered to be most risky. Both the loan and trading books will be reviewed, including exposures to central governments, credit institutions, firms and households. All financial assets will be reviewed in accordance with a conservative interpretation of IFRS. For banks with large trading portfolios the pricing models for

derivatives will also play a part. In order to ensure comparability across countries, uniform definitions of inter alia non-performing exposures will be employed. The ECB and national supervisors are now at the final stage of determining the final method for evaluation and selection of portfolios for review. It is the national supervisors that will be responsible for the evaluation, and several have hired independent consultants to that end. A uniform, transparent overview of the quality of European banks' assets, based on common methodology and definitions, could reduce concerns among market actors about hidden problems in European banks. An assessment will also be carried out of assets of banks not under the ECB's direct supervision. In October 2013 the EBA published guidelines for AQR. Finanstilsynet will undertake a special assessment of risk exposure in the credit portfolios of DNB Bank ASA and Nordea Bank Norway ASA (in collaboration with the Swedish FSA) in 2014.

Stress test

An EU stress test will be conducted in 2014. The stress test will be coordinated by the EBA in conjunction with national supervisors, the ECB, the European Systemic Risk Board (ESRB) and the EU Commission. The stress test will be conducted on a selection of banks that cover at least 50 per cent of the banking market in the respective EU countries, and will be based on methodology and parameters published by the EBA at the end of January 2014. The object is to test and clarify the resilience of the banks' balance sheets to stress scenarios in the period 2014 to 2016, and both a baseline and a stress scenario are included. It is the ECB that draws up the macro scenarios. The stress tests will focus primarily on drivers of risk to banks' financial soundness such as credit risk, market risk, sovereign risk, securitisation and funding costs. Capital adequacy thresholds are set at CET1 ratios of 8 per cent and 5.5 per cent respectively in the baseline scenario and the stress scenario. The stress test will require close cooperation between the supervisory authorities, the ECB (banks figuring in SSM) and the EBA. DNB Bank ASA is the only Norwegian bank included in the EBA-coordinated portion of the stress test. The ECB aims to present the results of both AQR and the stress test by November 2014.

MECHANISM FOR HANDLING BANKS IN CRISIS

In December 2013 general agreement was reached in the EU Council on the EU Commission's proposal for a single resolution mechanism (SRM) for handling banks in crisis, which is an important element in the banking union. The proposal is designed to promote effective handling of banking crises in the banking union, and to sever the connection between banks in crisis and sovereign debt financing in the respective countries. The proposal establishes a single resolution fund (SRF) of NOK 55bn, financed by the banks. The fund will be built up gradually

over an eight-year period. According to the proposal the ECB, as supervisory authority, will decide when a bank has serious problems and how crisis resolution is to be managed. A "resolution board" will be established comprising members from each of the participating countries, representatives from the EU Commission and the ECB. The resolution board will plan the bank's crisis resolution and the role of the SRF. The national crisis resolution authorities, under the supervision of the resolution board, will attend to the actual resolution of crises at their respective banks. The understanding reached by the EU Council obliged the euro countries to negotiate an intergovernmental agreement on the function of the SRF by 1 March 2014. Talks have been under way since January, and disagreement persists on important elements of the SRM including decision procedures, establishment of the fund, burden sharing of costs where a bank is in crisis etc. The goal is for the EU Parliament to reach a final decision ahead of the EU elections in May 2014. The SRM can then be set in train from January 2015 onwards.

RULES FOR DEPOSIT GUARANTEE SCHEMES

The third element in the establishment of the banking union is an EU-wide body of rules for deposit guarantee schemes. The aim is to harmonise the national deposit guarantee schemes (applies to all EU countries), a process that started as early as 1994. The EU Commission tabled a proposal to revise the legislation in 2010. Deposits up to EUR 100,000 are now covered by the guarantee scheme, and all banks must be a member of such a scheme. Rules are proposed to reduce the payout period from 20 to five working days. It is also proposed that the fund should be financed in advance. It will be built up over a period of ten years, and shall amount to at least 0.8 per cent of aggregate guaranteed deposits. Stricter requirements are imposed on banks in terms of providing customers with information on the content of the deposit guarantee. The directive is expected to enter into force in 2014. Member states are to transpose the directive into domestic legislation within one year of its entry into force. Several elements in the draft directive have already been incorporated into Norwegian legislation. For example, the Guarantee Schemes Act was amended with effect from 1 January 2013 to reduce the payout period from three months to five working days. The proposal permits countries with a guarantee above EUR 100,000 to retain that guarantee for a transitional period of five years. No changes are being made to the Norwegian deposit guarantee rules until the directive has been incorporated in the EEA Agreement.

EU COMMISSION'S PROPOSAL FOR A CRISIS MANAGEMENT DIRECTIVE

The EU Parliament, EU Commission and EU Council have reached agreement on the Commission's draft Crisis Management Directive. Final consideration by the

Parliament is expected on 16 April 2014, and entry into force on 1 January 2015. The directive sets the stage for banks to be closed down without threatening financial stability, by ensuring that critical functions can be maintained during crises, and for losses to be borne by owners and creditors even though the bank is in operation. The framework consists of three parts: prevention, early intervention and crisis resolution. According to the draft directive, each country shall appoint a crisis management authority, and the banks shall prepare recovery plans to be approved by the authorities. If it is likely that the capital requirements will not be complied with, the banks will initiate measures from the recovery plans, and the supervisory authorities can opt to appoint an administrator. The crisis management authorities will draw up plans to ensure that crisis resolution can proceed in an orderly manner. The Directive requires the establishment of national crisis funds which after ten years must amount to 1 per cent of guaranteed deposits. The key tools are:

- Sale of the entire business or parts of it to another bank
- Establishment of a bridge bank whereby "healthy" exposures or important functions in the bank are identified and transferred to the bridge bank which is then sold to another institution. The rest of the bank is wound down in accordance with standard procedures.
- Establishment of a "bad bank" which takes over problem exposures, and continued operation of the remaining bank with healthy exposures. The bad bank must be combined with the bridge bank, sale or write-down.
- "Bail-in" denotes recapitalisation of the bank by writing down its shares or setting their value at zero, and by creditors having their claims written down or converted to shares, so that the bank can continue to operate. A requirement is that banks hold a certain portion of debt available for bail-in. Shares or other equity instruments will be attacked prior to other core capital and other types of capital based on the sequence given in CRD IV/CRR. A number of liabilities are exempt from the bail-in rules. Deposits below EUR 100,000 are protected, along with certain other types of claim. These include client assets in certain mutual funds, covered bonds and associated derivatives used to hedge the latter, salary obligations to employees and trade creditors incurred in the ordinary course of business. The authorities will also be able to exempt other liabilities in defined situations where doing so is considered necessary and proportionate. Shareholders and creditors must be bailed in until at least 8 per cent of the bank's total assets are written down (including conversion of

loans to equity capital). Thereafter the crisis resolution authority can open the way for use of the crisis fund, but not for more than 5 per cent of the bank's assets. The rules permit use of public funds to finance the bank if there is a danger of a systemic crisis developing. The bail-in provisions will apply from 1 January 2016 onwards.

SOLVENS II – A NEW SOLVENCY REGIME

The EU Commission's draft new directive laying out risk-based solvency rules for insurers, the Solvency II Directive, was adopted in 2009. After protracted talks, agreement was reached towards the end of 2013 on changes to the Solvency II Directive by way of the Omnibus II Directive. The Solvency II framework will thus enter into force on 1 January 2016. The Solvency II Directive will be supplemented by implementing measures as well as technical standards and guidelines. Draft implementing measures will according to the plan be published by the EU Commission in the third quarter of 2014, while various proposals for technical standards and guidelines will be submitted for public hearing by the European Insurance and Occupational Pensions Authority (EIOPA) in the second and fourth quarters of 2014. The Solvency II rules must be transposed into domestic legislation by 31 March 2015.

EIOPA has published interim guidelines for Solvency II that set the stage for parts of the framework to become effective in 2014. These include requirements on insurers' system of governance, including their own risk and solvency assessment (ORSA), requirements on the pre-consultation on internal models and supervisory reporting requirements. Finanstilsynet will follow EIOPA's guidelines.

In the first half of 2013 EIOPA conducted an assessment of a number of key change proposals related to insurance liabilities with long-term guarantees. The proposals covered various adjustments of the interest rate curve used for discounting liabilities with a view to reducing the fluctuations in insurers' calculated solvency. In June 2013 EIOPA published a report on results of the calculations and recommendations regarding the elements tested. The report has been a key basis for the concluding negotiations on the Omnibus II Directive. The Omnibus II decision covers permanent and transitional measures directed primarily at life insurers offering long-term guarantees. Where the most important measures are concerned, conditions and requirements will apply to the insurers and the supervisory authorities if the measures are to be made use of. Moreover, some latitude is available regarding the application of the most important measures, which must be approved by the supervisory authority of the individual country. Finanstilsynet will make a close assessment of what permanent measures and transitional rules could be relevant for Norwegian insurers. The aim is to complete the

assessment by mid-2014, after the Omnibus II Directive has been formally adopted by the EU Parliament and after the EU Commission has drafted the Solvency II implementing measures.

The Solvency II Directive does not cover pension funds. Work is under way at EU level with a view to arriving at harmonised solvency rules for pension funds. A quantitative impact study has been carried out for a sample of pension funds, including the seven largest Norwegian pension funds, to assess the effect of the proposed rules. The results are summarised in a report published by EIOPA in July 2013. The impact study started out from the Solvency II framework, but with a number of adjustments. The EU Commission has signalled a need for further reports on issues brought to light in the impact study and will accordingly defer its presentation of draft quantitative solvency rules (Pillar 1). The Commission aims to present a draft Directive covering requirements on pension funds' system of governance (Pillar 2) and information disclosure (Pillar 3) in the course of the first half of 2014.

STRESS TEST OF THE INSURANCE SECTOR

In spring 2014 EIOPA will conduct a stress test of the insurance sector in Europe. The stress test will be based on the latest updated Solvency II principles, including assessments of long-term guarantees (LTG). The three largest life insurers and the two largest non-life insurers in Norway will participate in the stress test. Insurers offering long-term guarantees will in addition perform a test based on a low interest rate scenario. This will only involve the three largest life insurers. The results of the stress test will be published in the course of autumn 2014.

NEW OCCUPATIONAL PENSION PRODUCT

The pension benefit set in the pension plans of defined benefit schemes under the provisions of the Defined Benefit Pension Act has been linked to the member's current salary level and predicted national insurance payment. New rules for the accumulation and calculation of retirement pension under the National Insurance¹⁶, which became effective as from January 2011, required wide-ranging adjustments in the legislation on defined benefit occupational pension schemes. The first part of the adjustment process was effected through changes to the Defined Benefit Pension Act and the Defined Contribution Pension Act, effective from January 2011, which enabled flexible drawdown of occupational pension. The next step in the adjustment was a

¹⁶ Central elements of the national insurance reform are a new accumulation model (all-years principle entailing pensionable income for all years in employment from age 13 to age 75 inclusive), longevity adjustment (use of the life expectancy adjustment ratio in the calculation of pension for persons born after 1962, with transitional rules for those born in 1952-1962) and new rules for pension adjustment.

new Occupational Pension Act which entered into force on 1 January 2014.

The Bank Law Commission¹⁷ proposed new occupational pension products written in accordance with one of the proposed models – the standard model or basic model – which were well adapted to the new National Insurance, and which at the same time were to entail greater predictability than the traditional defined benefit schemes both as regards firms' balance sheet pension liabilities and pension providers' solvency capital requirements. Both models were described as hybrids of defined contribution and defined benefit pension schemes. They would be defined-contribution in the accumulation period, but concurrently transfer part of the members' rate of return risk and longevity risk to the pension provider. In addition, the employer could opt to assume a responsibility for ensuring adjustment of pension assets in line with wage growth. Contribution premiums would, according to the Bank Law Commission's recommendation, be gender-neutral, while in the calculation of pension benefits upon drawdown a longevity adjustment would be made based on the national insurance life-expectancy-adjustment ratio. The adoption by the Storting of the new occupational pension product in the Occupational Pension Act of 5 December 2013 follows recommendations from Finanstilsynet that gender-dependent premium tariffs should be employed to achieve the same pension benefits for women and men upon drawdown, and that a dynamic mortality base (K2013) should be used for longevity adjustment purposes both in the period of accumulation and drawdown.

The new Occupational Pension Act paves the way for a product which broadly covers characteristics of the standard model and the basic model proposed by the Bank Law Commission. The pension plan for the new product sets a gender-differentiated premium which the firm must each year pay into the member's pension assets in the pension scheme. The pension scheme's assets may thereafter be managed either in the pension provider's collective portfolio with a guarantee against value decline of the pension assets (zero guarantee) or in separate investment portfolio that is either individually or collectively unit linked. In the collective unit-linked option (entitling the employer company to choose the unit linked), the pension provider guarantees the individual member a worst case return of zero. Expenses on annual administration and management of the pension scheme are to be met within the maximum contribution rates which the Act sets at 7 per cent of salary between 0 and 12 G¹⁸, plus 18.1 per cent of salary between 7.1 and 12G. The annual benefit payable upon pension drawdown will be determined by premium

payments and rate of return in the accumulating period, to which is added actual mortality inheritance, as well as expected residual lifetime at the time of drawdown. The new pension product is currently unavailable in the market.

Prior to the implementation of the new occupational pension legislation consideration has been given to whether the act should have consequences for pension already accumulated and new pension accumulation in existing defined benefit pension schemes. The Bank Law Commission recommended phasing out defined benefit occupational pension schemes so that further pension accumulation for members would be based on a new pension plan under the occupational pension act, whereas already accumulated annual pension should be carried over within the pension scheme without issuance of paid-up policies. However, the Bank Law Commission's proposal for transitional rules met heavy opposition during the consultation process, and the Ministry of Finance has chosen not to take the proposal further.

MIFID II – NEW RULES FOR THE MARKET FOR FINANCIAL INSTRUMENTS

The adoption of a new directive (MiFID) and a new regulation (MiFID) on the market for financial instruments is expected in April 2014. The proposal aims to promote a more level playing field between marketplaces and market participants, to make financial markets more efficient, flexible and transparent and to strengthen investor protection.

The MiFID reform requires trading in financial instruments to take place on organised marketplaces. The changes require investment firms with internal matching systems for order execution on behalf of customers in shares, depositary receipts, ETFs, CDs and similar instruments to be authorised multilateral trading facilities (MTFs). A new type of organised marketplace is introduced – organised trading facility (OTF) – for trading in instruments other than equity instruments, such as bonds and derivatives. When offering their services, entities authorised as organised marketplaces or central counterparties must ensure that all members have equal access to, and equal terms and conditions for, trading in quoted instruments.

The existing Directive requires equal investor access to information (transparency) on shares. MiFID II introduces common transparency requirements for all types of financial instruments traded on an organised marketplace. Publication of information is required both prior to and after the execution of trades, and information must be published through independent, licensable entities. This is designed to ensure that information on executed transactions is made publicly available, regardless of where or how the trades were concluded. MiFID II introduces new

¹⁷ NOU 2013:12: "The pension laws and national insurance reform II.

¹⁸ G = the basic amount available under national insurance

requirements for control of machine-based trading (for example algorithm trading). Such trading has increased in volume in recent years, and may entail increased systemic risk. A move is also made to heighten requirements for control of investment firms offering investors direct market access to organised marketplaces. As part of the G20 obligations, MiFID II is introducing the power to impose limits on the size of positions that can be taken in commodity derivatives. This is designed to prevent market abuse and counteract speculation that may give rise to undesired fluctuations in commodity prices. At the same time an obligation is introduced to report positions to the authorities.

MiFID II also strengthens investor protection rules. Requirements on entities' information to the customer before providing investment services are increased. Particular requirements are imposed on independent advice. Requirements on appropriateness testing and suitability testing are tightened, and stricter requirements are introduced on receipt of remuneration from third parties. Further, the requirements on giving the customer the best terms and current price in the market are tightened in some respects. MiFID II also gives national supervisory authorities and ESMA the power to prohibit or limit the distribution of certain financial instruments, either temporarily or on a permanent basis. Banks' sales of structured products are covered by the business conduct requirement under MiFID II.

CHANGES TO THE RULES ON MARKET ABUSE

A new Market Abuse Directive (MAD) and a new Market Abuse Regulation are expected to be adopted at the same time as MiFID/MiFIR. The surrounding process is closely tied to the process surrounding MiFID/MiFIR. MAR is a continuation of the existing market abuse directive which prohibits insider trading and market manipulation. Further, rules are laid down regarding the ongoing information requirement, investment firms' obligation to report suspicious transactions, and a reporting obligation for primary insiders. MAR is structured in the same way as today's Directive, but entails some material changes. Among other things, the regulation's scope is broadened to include new trading facilities and new financial instruments. Moreover, the fact that the rules are laid down in the form of a regulation entails an increased degree of harmonisation. The regulation confers on supervisory authorities the formal competence to impose administrative sanctions for rule breaches, and criminal penalties for market abuse.

CHANGES TO THE RULES ON FINANCIAL REPORTING

In October 2013 the EU adopted changes to the rules governing financial reporting which become effective in November 2015. The Directive requires information to be

published on entities listed on a regulated market, in order to enhance market transparency. The changes relate to periodical reporting and notification of large positions in a company. The quarterly reporting requirements for listed entities no longer apply. A notification obligation is introduced for financial derivatives alongside the notification obligation in respect of physical derivatives and other trades that are notifiable under current law. A central database is to be established for storage of stock exchange notices within the EU, designed to ensure that all actors across the single European market have access to all stock exchange notices. The Directive gives supervisory authorities the formal competence to impose administrative sanctions for rule breaches.

NEW RULES FOR SECURITIES REGISTERS AND SECURITIES SETTLEMENT

The EU is in the process of introducing Europe-wide regulation of securities registers and securities settlement, the CSD Regulation. The regulation sets common requirements for authorisation, organisation of business, as well as of the supervision of securities registers. Securities registers will be entitled to provide services in all member countries based on home country authorisation. The regulation lays down harmonised settlement periods for European securities markets by establishing an obligation to settle trades in transferable securities no later than two working days after the trading date (T+2) if the trades are entered into on a regulated market. Further, a sanctions regime is introduced for delayed settlement, and mandatory completion of securities contracts entered into.

The regulation is expected to be adopted ahead of summer 2014. Entry into force will probably be on a step-by-step basis. It is likely that securities registers offering services to issuers within the EU, including the Norwegian Central Securities Depository, will need to apply for authorisation/recognition under the new regulation by the end of 2015. The EU Commission has announced that the CSD Regulation will be supplemented by a securities regulation which will inter alia regulate the keeping of accounts at securities registers and trustee banks. However, it is not clear when the EU Commission will, in the event, present a proposal for such a regulation.

ACCOUNTING RULES

The International Accounting Standards Board (IASB) published in March 2013 proposal for new loss rules for financial instruments, including a new model for writing down financial assets. Under existing rules, write-downs on financial instruments must be based on an actual loss event. In the wake of the financial crisis the model has drawn criticism due to late write-downs that show too high incomes. The proposal accordingly contains a model designed to assure more timely write-downs. According to

the model, 12-month expected losses must be calculated for "healthy" financial assets. For financial assets where credit risk has risen substantially, expected losses must be calculated over the asset's expected lifetime. The IASB expects new rules to be adopted in the first half of 2014 with entry into force in 2018. An ongoing IASB project regarding insurance contracts aims to facilitate the formulation of a uniform, principles-based accounting standard for all types of insurance contracts. A calculation model is inter alia proposed for measurement of insurance liabilities. The IASB expects new rules to be adopted in 2015.

THEME I STRUCTURE OF FINANCIAL MARKETS

Financial market structure nationally and internationally is influenced by a number of factors. Developments in the economy and markets are of significance for risk and profitability in the financial sector. A negative economic trend can give rise to substantial structural changes. The international financial crisis caused several major European financial conglomerates to reduce balance sheet assets and restructure operations. Tighter regulation impacts on the industry's business strategy. The scope and composition of saving and funding will in addition to technological developments also be of significance for actors' strategic adjustments.

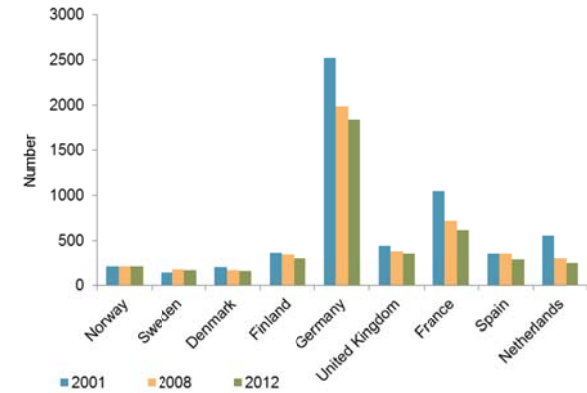
THE EUROPEAN CREDIT MARKET

In the aftermath of the international financial crisis many credit institutions needed to reduce costs, increase equity capital and restructure their business. A number of institutions were supplied with central government capital or had to turn their business over to other financial institutions. According to the European Central Bank (ECB), total assets in the euro zone banking sector declined by close to 12 per cent from 2008 to 2012. In the same period the number of credit institutions in the EU countries fell by almost 800, of which about 500 were banks. In comparison, the number of banks in the US fell by about 1000 in the same period.

In the Nordic region, the banking sector, above all in Denmark, was hit by the financial crisis. A number of banks were taken over by other financial institutions or placed under administration. Finland, Sweden and Norway saw smaller structural changes. Nonetheless some mergers between savings banks have taken place in the Norwegian credit market in recent years. The rationale has been to create larger entities with a view to meeting challenges such as a more complex body of rules, the need to improve efficiency and to gain greater competitiveness. In the period 2008-2012 eleven savings banks merged, while seven new commercial banks were established.

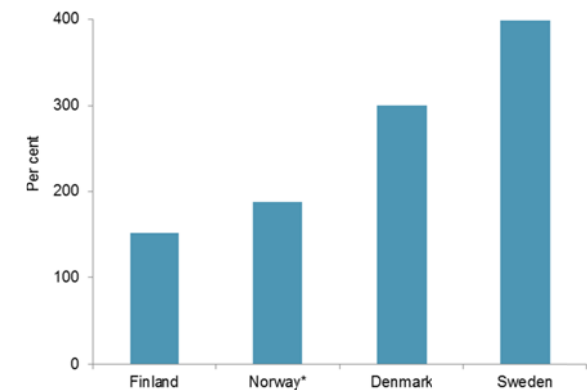
By the end of 2012, banks numbered about 6000 both in the euro countries combined and in the US. The banking sector's total assets in euro countries accounted for a substantially larger portion of total GDP, 270 per cent, compared with 72 per cent in the US. An important explanation is that the banking sector in the EU provides more than 85 per cent of households' financing and about one-half of financing for businesses. In the US, banks are far less important source of credit, accounting for 30 per cent of households' financing and 20 per cent of businesses' financing.

I.1 No. of credit institutions in selected countries



Sources: ECB and Finanstilsynet

I.2 Bank sector's size relative to GDP, 2012

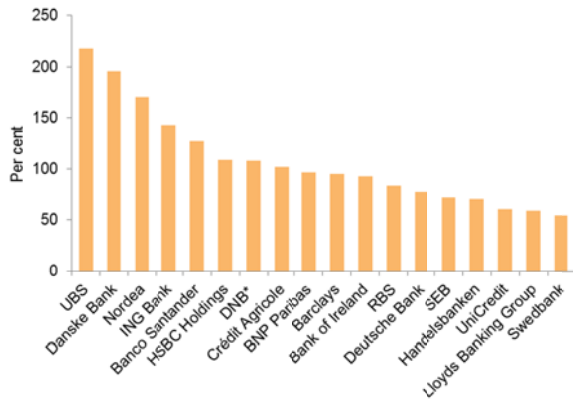


* GDP Mainland Norway. Sources: Nordic bankers associations, supervisory authorities and central banks

Part of the reason for this is that a larger portion of overall credit to businesses is obtained in the bond markets. Another factor that may explain the difference in banking sector size is shadow banks' significance as a source of credit in the US market. Shadow banks operate activities akin to banking, including loan securitisation, but are not regulated in line with the ordinary banking system.

Some European countries have a banking sector approaching five times GDP, for example Switzerland. In the Nordic region, the Swedish banking sector is the largest relative to GDP when this sector's foreign operations are included (chart I.2). One reason for this is that 75 per cent of Nordea's business is located abroad, much of this figure in other Nordic countries. A large banking sector relative to GDP may heighten systemic risk. The Norwegian banking sector is relatively small in GDP terms, partly because Norwegian banks do less lending through branches and subsidiaries abroad or to the public sector.

I.3 Total assets of largest European banks in per cent of home country's GDP in 2012



Financial conglomerates' aggregate total assets. *GDP Mainland Norway
Sources: The Banker, Thomson Reuters and Statistics Norway

Although many of the largest European banks have scaled back their balance sheet assets, they were still large in terms of home country GDP at the end of 2012. The total assets of several major European banks exceed home country GDP (chart I.3). This is also true of the large Nordic banks. In DNB's case total assets measure just over 100 per cent of Norway's GDP, while in the case of Nordea and Danske Bank the percentage is almost double. In terms of market value the large Nordic banks, with the exception of Nordea, are nonetheless relatively small by European standards (I.4).

Chart I.5 shows market concentration measured by the five largest credit institutions' share of total assets in a selection of European countries. In some countries concentration has increased in recent years, probably due to the decline in the number of institutions due to restructuring in the banking sector.

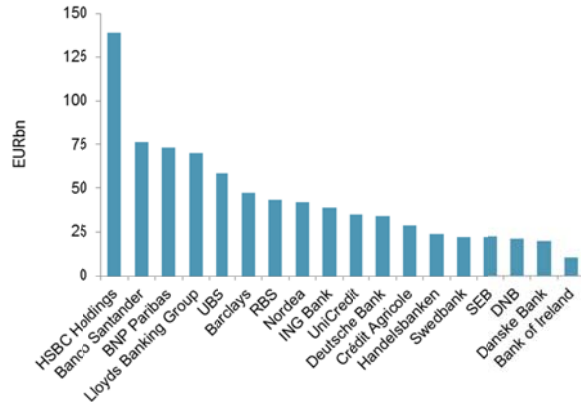
Chart I.6 shows market concentration measured as a share of overall loans to customers. The four largest banks in Sweden, Denmark and Finland have a higher combined market share than the four largest banks in Norway.

The number of banks in Norway exceeds that in very many other countries, both in terms of GDP and population. This is due to the large number of medium-sized and small local banks in the Norwegian market.

PROFITABILITY IN THE EUROPEAN BANKING SECTOR

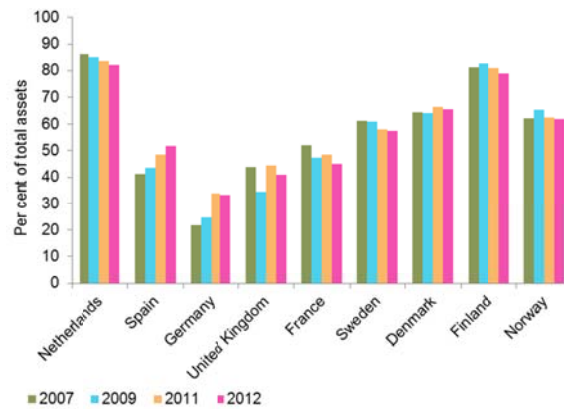
In Europe the trend in profitability and non-performing loans shows wide variation between countries (charts I.7 and I.8). The banking sector in countries that were hit hard by the international financial crisis such as Italy, Spain and Ireland has shown a negative or weak trend in return on

I.4 Largest European banks by market value, 10 March 2014



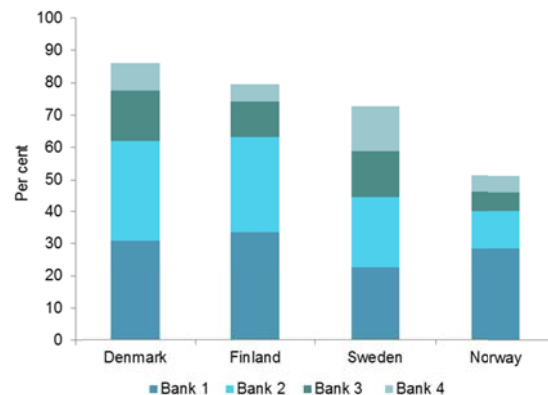
Source: JP Morgan

I.5 Market share, five largest credit institutions



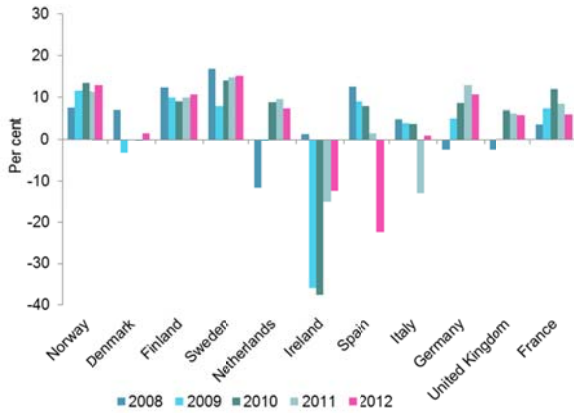
Sources: ECB/EBF and Finanstilsynet

I.6 Market share for the four largest banking groups in Nordic countries in per cent of private banks' loans to customers



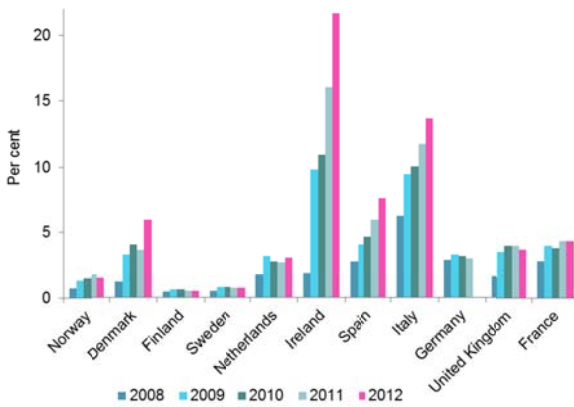
Sources: Nordic supervisory authorities and bankers associations

1.7 Return on equity in the banking sector



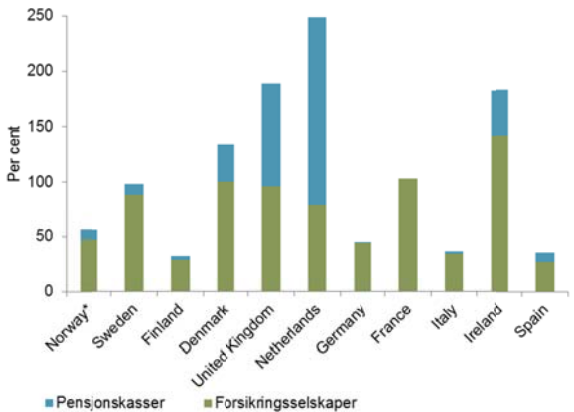
Source: IMF

1.8 Non-performing loans in per cent of loans in the banking sector



Source: IMF

1.9 Total assets of life and non-life insurers and pension funds as a share GDP in selected countries in 2012



* GDP Mainland Norway. Sources: ECB and Finanstilsynet

equity and a high proportion of non-performing loans relative to gross outstanding loans. The banking sector in Germany, France, the UK and the Netherlands, on the other hand, shows relatively good profitability in the period since 2009. According to the ECB, overall return on equity for the banking sector in the euro countries was nonetheless below 1 per cent in the first half of 2013. Apart from in Denmark, which was hard hit by the financial crisis, return on equity in the Nordic countries has largely been above 10 per cent, and the level of non-performing loans below 2 per cent. The banking sector in Denmark returned to positive return on equity in 2012. After a long period in which non-performing loans rose relative to overall lending, the level declined among Danish banks in 2013.

THE EUROPEAN INSURANCE MARKET

The insurance sector's (including pension funds) total assets as a share of GDP varies widely between countries. In terms of GDP, Norwegian life and non-life insurers' and pension funds' total assets are considerably smaller than in a number of other countries in the Nordic region and Europe as a whole (chart 1.9). The proportion is low in part because a large portion of pension liabilities reside in the National Insurance Scheme and the Norwegian Public Service Pension Fund. In the Netherlands the public health system was privatised in 2006, leading to a large increase in private health insurance and hence to an increase in the non-life sector's total assets.

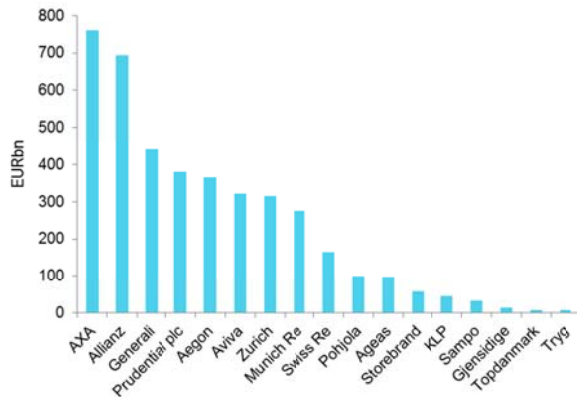
In some countries, such as the Netherlands and the UK, pension funds are an important actor in the insurance market, whereas they play a small or no part in the market in countries such as Germany, Finland and France. In Norway pension funds hold just under 20 per cent of aggregate total assets in life insurers and pension funds. This proportion has been stable for a long time.

In terms of market value, the German Allianz and French AXA are the largest European insurance groups. Finnish Sampo, which owns Swedish If Skadeförsäkring, is the largest Nordic insurance group by market value. Sampo is also the largest owner in the Nordea Group, with a stake of 21 per cent. Gjensidige, the second largest Nordic insurance group measured by market value, is also relatively large in the European context.

INSURANCE COMPANIES' AND PENSION FUNDS' INVESTMENTS

Life insurers, non-life insurers and pension funds all invest the bulk of their insurance assets in the securities markets. They are accordingly substantial investors in these markets. All in all, European insurers' investments increased by 8 per cent to about EUR 8,400bn in 2012 of which life insurers' investments accounted for just over EUR 6,800bn. The latter figure comprised bonds, short-term paper and loans (about

I.10 Large European insurance groups by total assets 31.12.2012



Sources: Annual reports

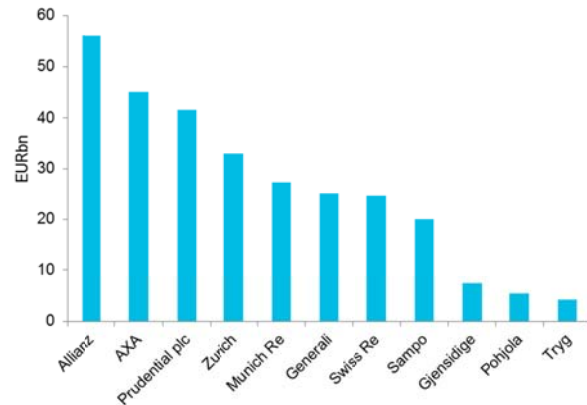
55 per cent) and shares (20 per cent). For pension funds bonds, short-term paper and loans accounted for 45 per cent of the investments and shares for 25 per cent at the same point in time.

In Norway too, insurance funds and pension funds are important actors in the capital markets. Life insurers' investments totalled NOK 1,075bn at the end of 2013. For pension funds and non-life insurers (including captives), investments totalled about NOK 250bn and 120bn respectively.

Insurers and pension funds held 1.8 per cent of all equity securities on Oslo Børs at the end of 2013, while banks held 0.6 per cent (chart I.12). Indirect exposures via equity funds are in addition. Insurers' low share of equities on Oslo Børs is related to the fact that only 20 per cent of life insurers' holding of shares comprise Norwegian shares, more than half of which are in equity funds. For pension funds the proportion of Norwegian shares is somewhat higher at about 35 per cent.

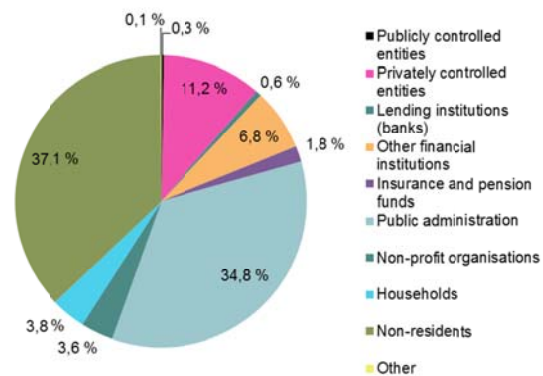
Insurers and private pension funds held 23 per cent of bonds issued on Oslo Børs, whereas for banks the figure was 20 per cent (chart I.13). In the case of short-term paper, insurers and private pension funds held 22 per cent, whereas banks' share was 37 per cent. In the Norwegian alternative bond market (ABM), the portion held by insurers and private pension funds was 37 per cent, while banks held 20 per cent.

I.11 Largest European and Nordic insurance groups by market value, 10 March 2014



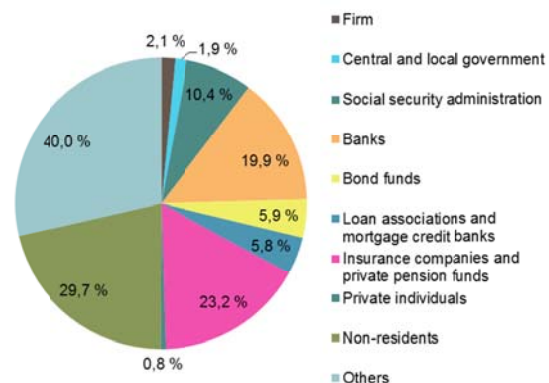
Source: J.P. Morgan

I.12 Holdings of shares and equity certificates at Oslo Børs



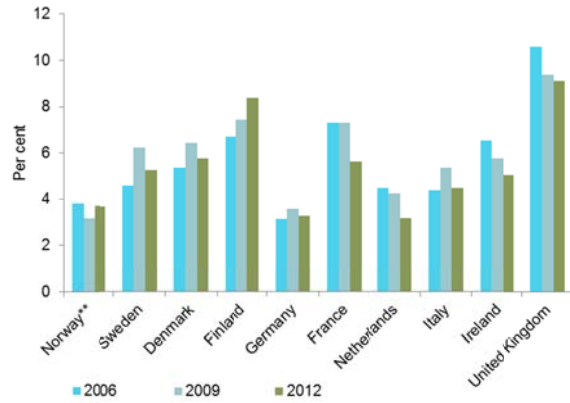
Source: VPS

I.13 Holdings of bonds at Oslo Børs



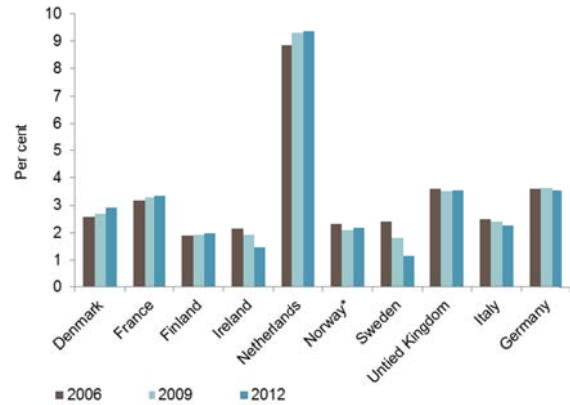
Source: VPS

I.14 Premium revenue in life insurance* as a share of GDP



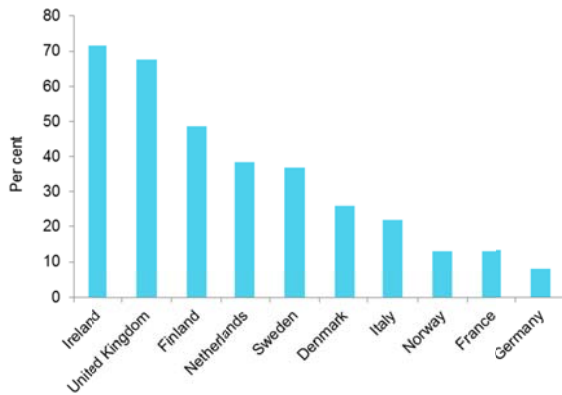
*For Germany, pension funds are included. For Denmark, multi-employer pension funds are included. **GDP Mainland Norway
Sources: Insurance Europe and Finanstilsynet

I.17 Premium revenues in non-life insurance as a share of GDP in selected European countries



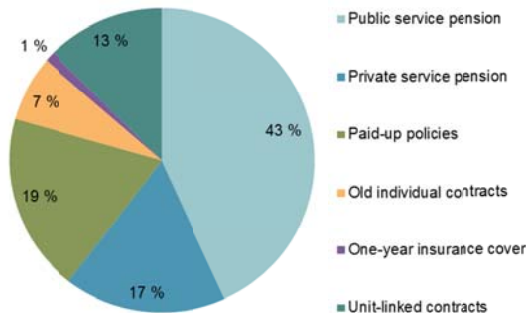
*GDP Mainland Norway. Sources: Insurance Europe and Finanstilsynet

I.15 Unit-linked insurance liabilities as a share of total insurance liabilities



Sources: EIOPA and Finanstilsynet

I.16 Norwegian life insurers' insurance liabilities by type of contract



Source: Finanstilsynet

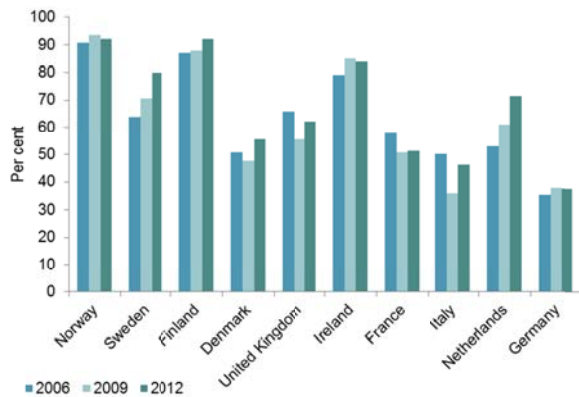
PREMIUM REVENUES RELATIVE TO GDP

Premium revenues in life insurance as a share of GDP are lower in Norway than in other Nordic countries and on a par with Germany (chart I.14). The level should be viewed in light of pension funds' significance as pension providers in some countries. The scope of public schemes, such as the National Insurance Scheme and the Norwegian Public Service Pension Fund in Norway, also varies between countries. Sweden has seen a decline in life insurers' premium revenues as a result of the switch to investment savings accounts in banks.

The proportion of unit-linked contracts, where the customer bears the investment risk, is highest in Ireland, the UK and Finland (chart I.15). In Norway unit-linked contracts account for 13 per cent of life insurers' total insurance liabilities (chart I.16). The proportion of unit-linked contracts is rising in Norway as in Europe as a whole (see chapter 3).

Chart I.17 shows the trend in gross premium written in non-life insurance as a share of GDP in selected countries in Europe. Norway is among the countries with the lowest gross premium in proportion to GDP, a situation that has been relatively stable since 2006. As mentioned earlier, a substantial increase in premium revenues in non-life insurance was seen in the Netherlands as from 2006 when the public health system was privatised, leading to a steep increase in health insurances. At the end of 2012, premiums in health insurance accounted for 71 per cent of premium revenues in Dutch non-life insurance.

I.18 Life-insurance, 5 largest companies' market share*



*Foreign branches are not included. Source: EIOPA

MARKET CONCENTRATION

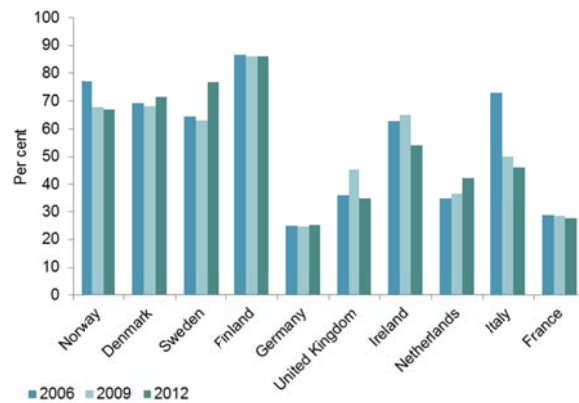
The Norwegian and Finnish life insurance markets (not including pension funds) are among the most concentrated in Europe (chart I.18). In both countries the five largest life insurance companies held a market share of 92 per cent in 2012.

Chart I.19 shows concentration in the non-life insurance market in selected European countries. In Finland, where concentration was highest, the five largest life insurers had 86 per cent of the market in 2012. In Germany, on the other hand, the five largest non-life companies made up just 25 per cent of the market. In Norway concentration has declined in recent years. In 2006 the five largest companies in Norway accounted for 77 per cent of the Norwegian non-life insurance market compared with 67 per cent in 2012. The decline may be viewed in light of a number of new entrants in the field of general non-life insurance. Several of them are part of larger conglomerates or groups with established business in other parts of the financial sector. Foreign-owned branches have a market share of about 40 per cent of premium revenue in the Norwegian non-life insurance market.

THE NORDIC FINANCIAL MARKET

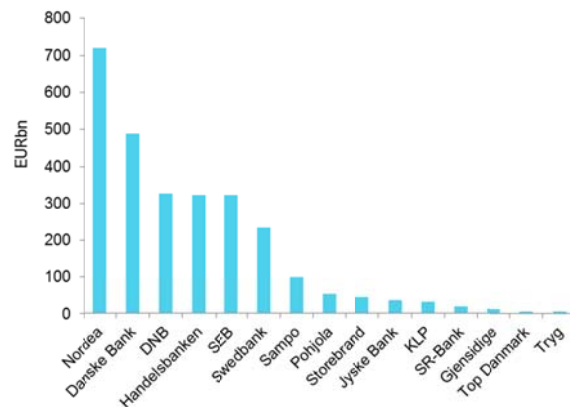
The major Nordic financial conglomerates operate in all Nordic countries, either through subsidiaries or branches. Several of the large Nordic conglomerates also have a substantial presence in the Baltics and other Eastern European countries. DNB also operates outside Norway, with branches in all Nordic countries and subsidiaries in Poland and the Baltics, among other countries.

I.19 Non-life insurance, 5 largest companies' market share*



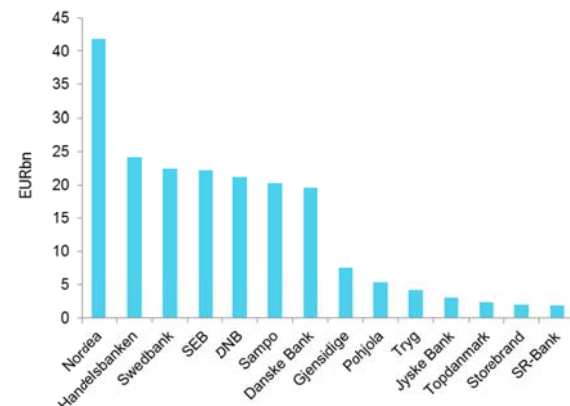
*Foreign branches are not included. Source: EIOPA

I.20 Total assets, large Nordic financial conglomerates, 31.12.2013



Sources: Quarterly and annual reports

I.21 Market value, largest Nordic financial conglomerates, 10 March 2014



Source: JP Morgan

Table I.1 Share of total assets - largest financial groups in Norway as of 31.12.2013*

| Per cent of total assets | Credit institutions | Securities funds | Non-life-insurance | Life-insurance | Total conglomerates |
|--|---------------------|------------------|--------------------|----------------|---------------------|
| DNB | 40 | 17 | 1 | 27 | 35 |
| SpareBank1 / collaborating savings banks | 15 | 5 | 7 | 3 | 12 |
| Nordea | 11 | 10 | 0 | 7 | 10 |
| KLP | 0,5 | 15 | 2 | 31 | 6 |
| Storebrand | 1 | 12 | 1 | 23 | 5 |
| Eika-Gruppen | 5 | 1 | 2 | 0 | 4 |
| Gjensidige | 0,5 | 0 | 27 | 1 | 1 |
| Total financial conglomerates/alliances | 73 | 60 | 40 | 92 | 74 |
| Other companies | 27 | 40 | 60 | 8 | 26 |
| Total market | 100 | 100 | 100 | 100 | 100 |

*Credit institutions comprise banks, mortgage companies and finance companies. Eksportfinans and Kommunalbanken are not included in the figures. The total for financial groups comprises aggregate total assets in the various segments and may diverge from the conglomerates/groups' own financial statements. The total market comprises Norwegian credit institutions' business abroad and foreign financial institutions' subsidiaries and branches in Norway. For SpareBank 1 Gruppen and Eika-Gruppen, the owner banks are included in the market shares. Sources: Finanstilsynet and the Norwegian Mutual Fund Association.

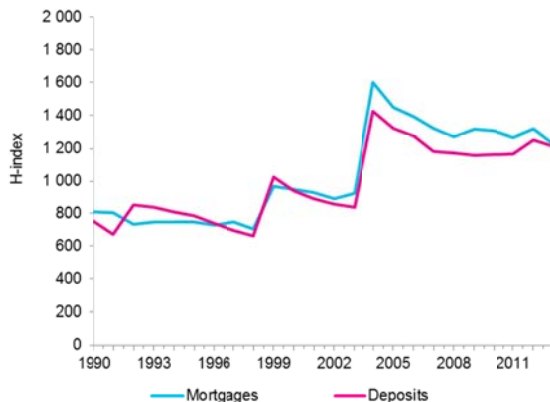
Table I.2 Foreign-owned subsidiaries' and branches' market shares in the Norwegian financial market measured in total assets as of 31.12.2013

| Per cent of total assets | Credit institutions | Non-life insurance** | Life insurance |
|-------------------------------------|---------------------|----------------------|----------------|
| And foreign-owned subsidiaries | 13,5 | 0,4 | 0,9 |
| Foreign branches | 13,9 | 29,5 | 0,3 |
| Total foreign-owned | 27,4 | 29,9 | 1,3 |
| Norwegian-owned institutions | 72,6 | 70,1 | 98,7 |

*Cross-border activity is not included. **In terms of gross premium revenue, foreign branches had a market share of 41 per cent and foreign-owned subsidiaries a market share of 1 per cent of the non-life insurance market. Source: Finanstilsynet

The Nordic financial and insurance conglomerates have grown as a result of mergers and acquisitions, but remain small in the European context (charts I.4, I.10 and I.11). Recent years have seen few large acquisitions and mergers between Nordic banks. Tryg acquired the Swedish Moderna Skadeförsäkring and has formalised a strategic collaboration with Danske Bank as from 2014. In 2007 Storebrand acquired the Swedish insurance group SPP. Gjensidige has established operations in other Nordic countries and the Baltics, and acquired the Danish company Nykredit Forsikring in 2010. Sampo owns If Skadeförsäkring, and was the largest owner in Nordea and the insurer Topdanmark at the end of 2013.

I.22 Herfindahl index for retail customers*



*Loans through residential mortgage companies are included. Source: Finanstilsynet

Nordea was the largest financial conglomerate in the Nordic region at the end of 2013 both in terms of total assets and market value. DNB was the third largest financial conglomerate (chart I.20). In terms of market value DNB was the fifth largest financial conglomerate (chart I.21).

About the Herfindahl index:

The Herfindahl index is a measure of market concentration. The index is calculated by squaring each bank's market share and summing the results.

STRUCTURE OF THE NORWEGIAN FINANCIAL MARKET

In the Norwegian financial market, the aggregate total assets of the seven largest financial conglomerates and groups accounted for 74 per cent of total managed capital in the financial sector at the end of 2013 (table I.1). DNB is the largest financial conglomerate, with total assets accounting for 35 per cent of aggregate total assets. This conglomerate, which operates across all areas of financial services provision, is the largest credit institution in Norway, and the second largest life insurer and management company. The Sparebank 1 Alliance is the second largest grouping in the Norwegian financial market, followed by the Swedish financial conglomerate Nordea.

A number of financial groups and alliances have been formed over the past 20 years. In 1995 the total assets of the three large financial conglomerates made up 25 per cent of aggregate total assets in the financial sector. At the end of 2013 these groups held 74 per cent of aggregate total assets. This is attributable both to growth of existing groups and to establishment of new financial groups in recent years.

The total assets of foreign actors represent a considerable share of aggregate total assets in the financial sector (table I.2). The proportion is highest in the non-life insurance market in which Swedish If and Danish Tryg are major actors. Branches of foreign banks and foreign subsidiaries also account for a large proportion of total assets in the banking market. At the end of 2013 three of the four largest banks in the Norwegian market (Nordea, Danske Bank and Handelsbanken) were foreign-owned.

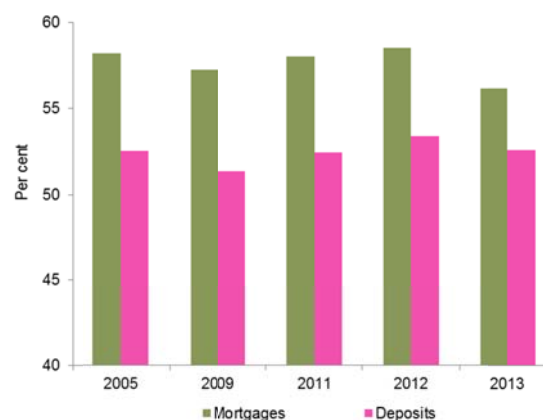
MORE ON CONCENTRATION IN THE RETAIL MARKET

A large number of banks service the retail market for banking services. Despite a downward trend in the number of providers, resulting in particular from mergers between small savings banks over many years, home mortgage loans were still being offered by 130 banks at the end of 2013.

The market consists of a small number of large national and regional banks along with numerous small savings banks with a local footing. Foreign banks and branches had a market share of 21 per cent of total home mortgage loans to retail borrowers from banks (including covered bond issuing entities) at the end of 2013, a decline of 2 percentage points over the last eight years. Market concentration has fallen somewhat in the same period. The overall market share of the five largest banks was 56 per cent compared with 58 per cent at the end of 2005.

In chart I.22 market concentration measured by the Herfindahl index shows the same downward tendency over

I.23 Market shares, five largest banks, retail customers



Source: Finanstilsynet

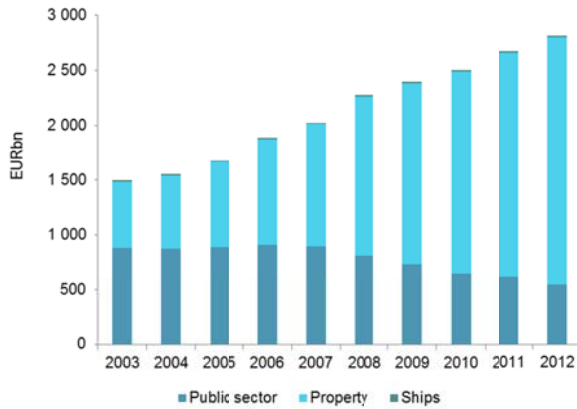
the last eight years. In general, concentration in the market is viewed as low if the Herfindahl index is below 1000. High concentration is deemed to be a situation in which the index value exceeds 1800. The large rise in the index from 2003 to 2004 is due to the merger between Den norske Bank and Gjensidige NOR Sparebank. Market concentration for deposits from retail customers has been relatively stable in recent years (chart I.23). The Herfindahl index shows concentration on a par with home mortgages, with an index value just above 1200. Market share for the five largest banks' retail deposits has been relatively stable over the past eight years, and was somewhat lower than for home mortgages, at about 53 per cent at the end of 2013.

MORE ON THE MARKET FOR COVERED BONDS

Covered bonds provide the investor with collateral in the form of a defined selection of the issuer's assets. Whereas the market for covered bonds is a relatively new market in Norway, it has existed for a long time in many other European countries such as Germany and Denmark. Most European countries have established legislation specifically regulating the issuance of covered bonds, and there are differences in the design of the respective legislations. Covered bonds in different countries also have differing characteristics. The European Covered Bonds Council (ECBS) has prepared minimum standards stating that a covered bond must have been issued by a credit institution that is subject to supervision. Further, the bondholder must have a claim on a cover pool that ranks ahead of claims of unsecured creditors. The credit institution is obliged at all times to ensure that the cover pool is sufficient to meet the bondholders' claims.

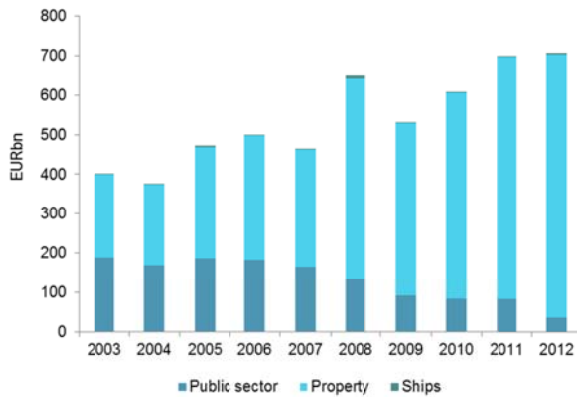
Norway is the only country that requires covered bonds to be issued through a separate entity. There are also differences with regard to what assets qualify for use in the cover pool. The term cover pool denotes assets that can serve as collateral for the bond issue. Home mortgages,

I.24 Outstanding volume of covered bonds by mortgage type



Source: European Covered Bond Council

I.25 Issued covered bonds by mortgage type



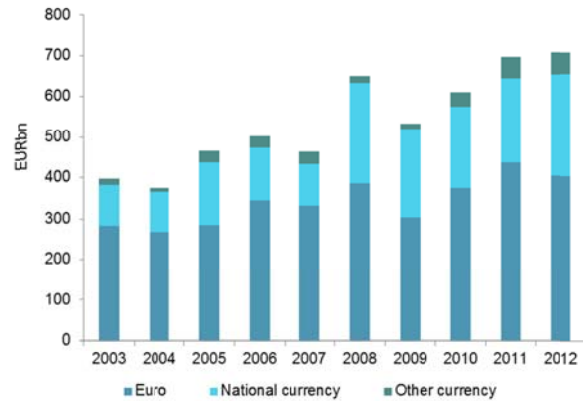
Source: European Covered Bond Council

commercial property and public sector debt can be used in all Nordic countries. Rules setting a maximum loan to value ratio of the underlying collateral exist in all countries. Whereas the limit in Norway and Sweden is 75 per cent for mortgages, it is 70 per cent in Finland and 60 per cent in Denmark. For commercial property the limit is 60 per cent in all Nordic countries. Substitute assets may be used as part of the cover pool. Substitute assets can be readily disposable assets carrying low risk such as cash deposits and particularly liquid and secure securities.

Norwegian regulation allows the use of substitute assets for up to 20 per cent of the cover pool, which can, with Finanstilsynet's approval, be raised to 30 per cent in special cases. This also applies in other Nordic countries apart from Denmark which permits substitute assets up to a level of 15 per cent.

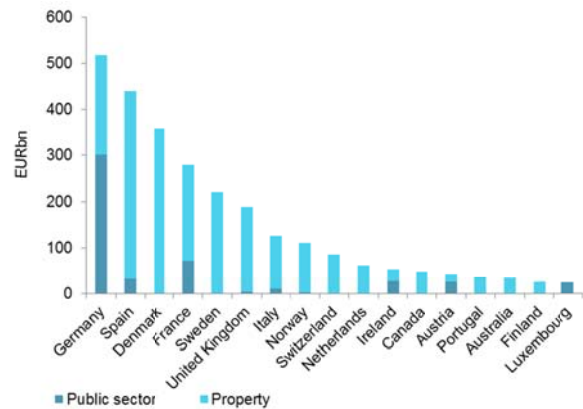
The market for covered bonds has grown strongly. As shown in chart I.24, the outstanding volume of covered

I.26 Issued covered bonds by currency



Source: European Covered Bond Council

I.27 Outstanding covered bonds, 2012



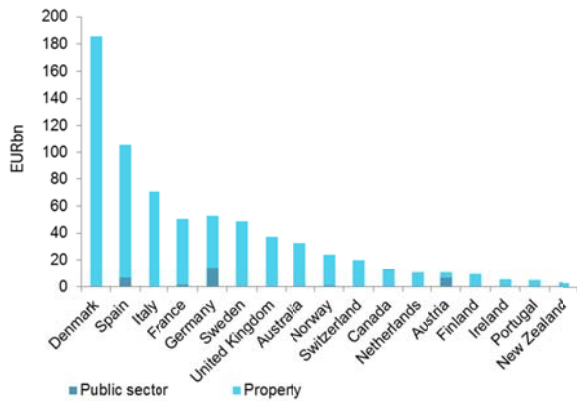
Source: European Covered Bond Council

bonds internationally approached EUR 3,000bn at the end of 2012, a twofold increase since 2003. Loans secured on property made up the largest share, 80 per cent (chart I.25). In 2012, 57 per cent were issued in euro, 35 per cent in national currency and only 7 per cent in other currencies (chart I.26).

In the international context the Norwegian market for covered bonds is eighth largest in terms of outstanding volume (chart I.27). The markets in Sweden and Denmark remain larger. The Danish market accounts for 13 per cent of total outstanding volume internationally, while the corresponding share for Norway is 4 per cent. Some of the largest markets for covered bonds such as Denmark, Germany, and Sweden have existed for many years, and differ structurally from the Norwegian market.

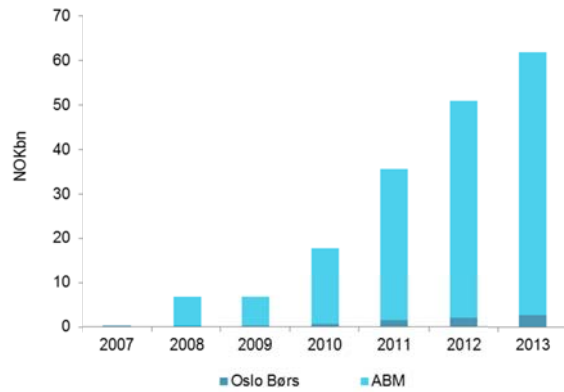
Internationally covered bonds worth EUR 707bn were issued in 2012. The largest volume, EUR 187bn, corresponding to 26 per cent of the total, was issued in

I.28 Covered bond issues in 2012



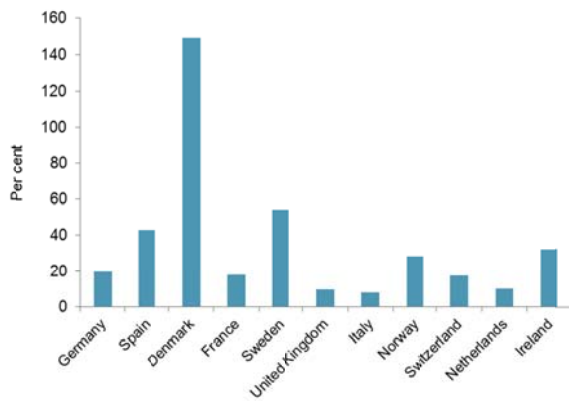
Source: European Covered Bond Council

I.31 Outstanding covered bonds, stock exchanges



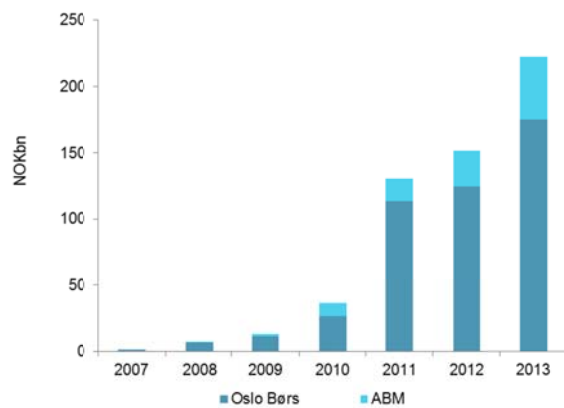
Source: Oslo Børs

I.29 Outstanding covered bonds in terms of GDP, 2012



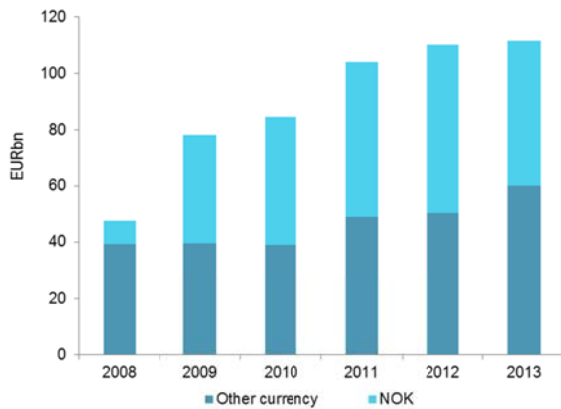
Sources: European Covered Bond Council and Finanstilsynet

I.32 Covered bond turnover, exc. repos



Source: Oslo Børs

I.30 Trend in outstanding covered bonds from Norwegian mortgage companies



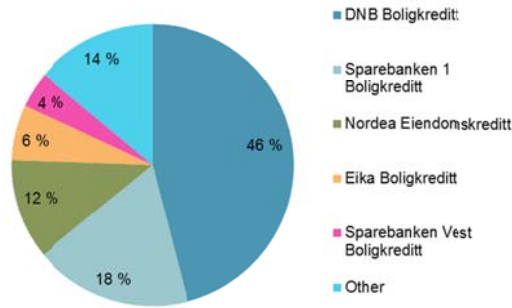
Sources: ECBC and FNO

Denmark. However, in Norway too covered bonds were issued for a considerable amount, EUR 24bn, corresponding to 3 per cent of total issues (chart I.28).

In terms of country size, Denmark has clearly the largest market for covered bonds. At the end of 2012 the outstanding volume measured almost 150 per cent of the country's GDP. For Norway the market represented close to 30 per cent of GDP at the same point in time (chart I.29).

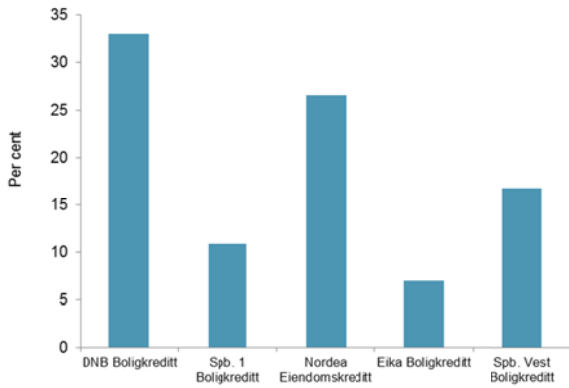
Twenty-three entities issue covered bonds in Norway. Eighteen of these are wholly owned by banks, while five are owned jointly by several banks. The bulk of them are residential mortgage companies, while two are commercial mortgage companies. Chart I.30 shows a considerable increase in outstanding volume of covered bonds at Norwegian entities, from EUR 22bn in 2008 to just over EUR 110bn at the end of 2013. All entities issue covered bonds in the Norwegian market, whereas the largest entities also

I.33 Distribution of outstanding covered bonds at the end of 2013



Source: FNO

I.34 Degree of over mortgaging the largest covered bond entities



Source: DNB Markets

turn to international markets to issue covered bonds denominated in other currencies. In recent years the proportion of covered bonds issued in a currency other than NOK has risen substantially, accounting for the largest share of outstanding covered bonds at the end of 2013. All covered bonds issued in Norway are quoted on Oslo Børs or on the Oslo Børs Alternative Bond Market.

Outstanding volume issued by the five largest entities accounted for 85 per cent of the total outstanding volume at the end of 2013. DNB Boligkreditt is the clearly largest residential mortgage company (chart I.33).

Covered bonds differ from other bonds by giving the holder an exclusive, equal and proportional preferential right to satisfaction of their claims on a cover pool if the mortgage company were to default on its obligations. The value of the cover pool is required at all times to exceed the value of bonds with a preferential claim over the cover pool. Hence a covered bond issuing entity's loan volume must exceed its volume of outstanding bonds, and overcollateralisation normally stands at a minimum of 10-15 per cent. This is not regulated by law: it is rating agencies that set requirements on the size of overcollateralisation. In addition, cash deposits and particularly liquid and safe securities may, as already mentioned, be included in a cover pool as substitute assets. Among the largest Norwegian entities, overcollateralisation varies from 33 per cent at DNB Boligkreditt to 7 per cent at Eika Boligkreditt in 2013 (chart I.34). Mortgaging of assets to finance operations is a growing tendency, also internationally. The larger the proportion of assets mortgaged, the lower the proportion of assets that is available for future funding.

THEME II STRESS TEST OF BANKS AND MORTGAGE COMPANIES

This theme analyses Norwegian banks' vulnerability in a serious stress scenario in the period 2014-2016. It presents two new models in Finanstilsynet's stress test apparatus. The analysis show that banks' common equity tier 1 (CET1) ratio falls on average by a considerable margin in the scenario. However, there is wide variation between the banks. Among the proposed national systemically important banks, six out of eight will have a CET1 ratio below the sum of the minimum and buffer requirements at the end of 2016. The lowest CET1 ratio among the systemically important banks is 6.4 per cent. Among the non-systemically important banks, almost one-third will have a CET1 ratio below the sum of the minimum and buffer requirements.

INTRODUCTION

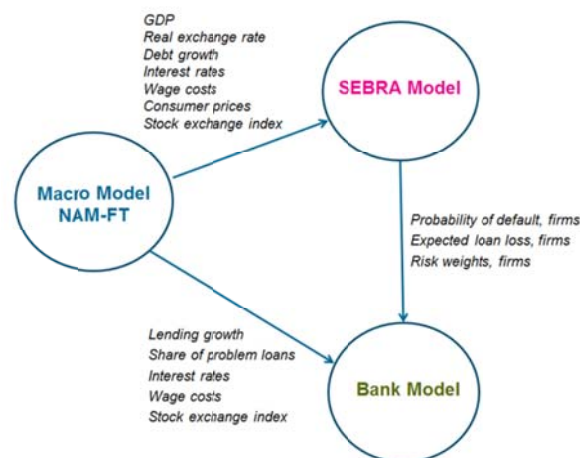
Finanstilsynet has developed a new model for financial projection and stress testing of banks and mortgage companies. The model, hereafter termed the Bank Model, enables banks' and mortgage companies' CET1 ratios to be projected in various macro scenarios. The macro scenarios are generated in Finanstilsynet's newly developed Macro Model, NAM-FT, which was specially developed to stress test financial institutions and to analyse financial stability. The Bank Model also uses relevant variables from the default prediction model SEBRA.¹⁹

Stress tests shed light on financial institutions' vulnerability to serious economic shocks and changes in various risk factors. This is important both in Finanstilsynet's individual follow-up and assessment of financial institutions, and in its assessments of systemic risk and financial stability. As in all modelling, uncertainty attends methodology, macro scenarios and assumptions.

The projection of financial institutions' capital adequacy in chapter 2 has no relationship to scenarios from the Macro Model, but is based on independent projections of relevant figures for the institutions. Further, the assessments in chapter 2 are based on figures for banking groups, while the stress tests in this theme analysis based on parent bank income statements, balance sheets and capital adequacy. The results in chapter 2 and in this theme analysis are mutually complementary.

¹⁹ See page 75 and 77 for more details of the Bank Model and the Macro Model NAM-FT. See pages 66 and 67 of Risk Outlook 2013 for a description of the SEBRA Model.

II.1 Illustration of Finanstilsynet's stress test tool



Source: Finanstilsynet

DESCRIPTION OF THE STRESS SCENARIO

Using the Macro Model NAM-FT, Finanstilsynet generated various macro scenarios which were then incorporated in the Bank Model. This theme article presents the results from one of these macro scenarios, hereafter termed the stress scenario. The stress scenario illustrates a serious, but not improbable development in the Norwegian economy. To prevent financial instability, financial institutions' capital adequacy needs to be large enough for the industry to survive rare, but serious, shocks.

The projection period covers the years 2014-2016. The stress scenario features a new financial crisis starting in the same way as the international financial crisis in 2008. Since the scope for fiscal and monetary policy action internationally is significantly smaller in the current economic situation than it was after the financial crisis, the consequences for the economy will be significantly larger than after the financial crisis in 2008. International government finances are now considerably weaker than prior to and during the international financial crisis, and the unprecedentedly low key interest rates limit monetary policy scope for action internationally.

In the stress scenario international demand and prices are assumed to fall by about the same margin as during the international financial crisis. In contrast to that occasion, however, these items do not recover after the opening fall. In view of the weaker basis for expansionary policy, the stress scenario assumes that international demand and prices follow a flat path from the initial fall to the end of the projection period. The oil price is assumed to fall to about USD 37 in the first year and to remain at this level to the end of the period. This is slightly higher than the historical average for the oil price in the period 1972-2014. The permanently lower oil price causes oil investments in the

period to 2016 to fall to levels last observed early in the 2000s when the oil price was equally low.

Higher risk premiums are assumed to bring a sharp rise in international money market rates at the start of the scenario which remain at a high level throughout the period (chart II.2). Key policy rates are now extraordinarily low. Limited scope for action in international economic policy adds greater uncertainty about the future in our scenario than during the international financial crisis. Banks' position in many countries remains weak, making it likely that a new shock would bring a strong increase in banks' funding costs and also make it difficult for banks to refinance their operations.

As during the international financial crisis, turbulence in international money markets feed through to the Norwegian money market. Norwegian financial institutions are tightly linked to the international capital market. Money market rates in Norway are assumed to rise to 4 per cent. However, the money market rate increase in Norway is assumed to be smaller than that abroad. Norway has at the outset greater monetary policy scope for action in the form of a higher key policy rate than that available to other countries.

Norwegian banks' lending rates rise to just over 7 per cent in the course of 2014 and remain at this level to the end of the period. Lending rates shadow Norwegian money market rates with a time lag since banks have to give customers advance notice of interest rate changes. This time lag is however a relatively brief. After a while the difference between lending rates and money market rates is assumed to show no change from the initial level. The level of lending rates is slightly lower than observed prior to the international financial crisis. However, it is not unlikely that lending rates could have risen even higher in the scenario. Increased uncertainty among Norwegian firms and households normally entails higher risk premiums payable by banks, and the difference between lending rates and the money market rate would probably have widened. Such an increase would bring a further decline in the Norwegian economy.

The weak international demand for Norwegian goods reduces Norwegian exports. Lower oil investments, reduced exports and higher lending rates result in lower output in the Norwegian economy and higher unemployment. Lower price growth internationally results in lower consumer price growth in Norway.

It is assumed that Norwegian fiscal policy becomes more expansionary, as during the international financial crisis, and that this stance is retained throughout the projection

period.²⁰ The expansionary fiscal policy dampens the negative effects of higher lending rates and lower output.

Household consumption, debt and house prices are negatively impacted by higher lending rates. The reciprocal relationship between house prices and household debt intensifies the decline in these items. A weaker trend in house prices contributes to an even weaker trend in household consumption. The interest burden rises to levels to which housing demand is sensitive, causing house prices to subside too (chart II.3). Because house prices decline somewhat through the period, production in the Norwegian economy also weakens due to lower housing investments. The high interest burden and unemployment brings a marked rise in the proportion of problem loans in banks' mortgage portfolios, reaching a level in excess of 6 per cent (chart II.4). Such a level was last observed in the banking crisis early in the 1990s.

Production in the Norwegian economy is further reduced by the negative impact of higher lending rates on private investment demand. Lower activity reduces firms' earnings, which in turn reduces credit to firms. This also dampens investment, since a large portion of investment projects are debt financed. Lower international demand and lower oil prices brings down Norwegian share prices. Reduced share prices result in lower credit to the business sector. High lending rates and high unemployment, which diminish household demand, cause a marked rise, to 10 per cent, in the proportion of problem loans in the corporate sector. This is almost as high as during the banking crisis.

The weak trend in international prices and high money market rates abroad relative to Norway cause the Norwegian currency to depreciate. This helps to stabilise the Norwegian economy somewhat by improving competitiveness. In the case of major shocks, however, modelling exchange rate fluctuations is particularly difficult. If the nominal exchange rate is kept unchanged throughout the period, the decline in the Norwegian economy is more pronounced.

DATABASE, SELECTION AND OTHER ASSUMPTIONS IN THE BANK MODEL

The basis for the stress test is all Norwegian banks' and residential mortgage companies' preliminary profit/loss, balance sheet and capital adequacy figures as of 31.12.2013. While the final annual accounts' and capital adequacy figures may diverge somewhat from the preliminary ones,

²⁰ In contrast to during the international financial crisis, the expansionary stance of fiscal policy is not phased out in the projection. This is because the economy in the projection is on a weaker trend than during the international financial crisis. With a phase-out of the expansionary fiscal policy, as during the financial crisis, the economic downturn would have become even sharper. Beyond the expansionary fiscal policy and the reduction of the key policy rate to a level approaching zero, no further measures are assumed to be taken by the authorities.

this will probably be of little significance for the stress test results. Since a relatively high level of detail is required in the projections, parent company figures are utilised. This means, inter alia, that banks with captive residential mortgage companies are not consolidated in the stress tests. Residential mortgage companies are covered in separate section.

In the analysis a distinction is drawn between systemically important institutions (SIFIs) and other financial institutions. Finanstilsynet's consultation document of 4 November 2013 on systemically important financial institutions recommends that seven Norwegian financial institutions be classified as national systemically important institutions and that all seven be subject to a "SIFI capital buffer" of 2 per cent.²¹ The institutions proposed for SIFI status account for about 70 per cent of aggregate total assets at, and about 65 per cent of aggregate outstanding loans from, Norwegian financial institutions.²²

In the stress test it is assumed that institutions' loss given default (LGD) is 45 per cent for all loans to firms and 20 per cent for all other types of loans, including home mortgage loans and other personal loans²³. A further assumption is that dividend is not taken out and fresh equity capital is not supplied to the banks through the stress period, to illustrate the maximum contribution that the institution's own profit/loss would make to the institution's core capital. Moreover, it is assumed that the individual institution's risk weighted assets for, respectively, the retail market, corporate market and other types of loan only change with lending growth for these loans segments (i.e. risk weights are retained unchanged).²⁴

As mentioned by way of introduction, no detailed stress tests have been carried out of the institutions' market risk. Changes in institutions' market risk are therefore based on the following simplified assumptions: (i) The value of the equity portfolio is projected using the change in the Oslo Børs index as modelled in the Macro Model, and (ii) 50 per cent of the holding of the individual institution's interest

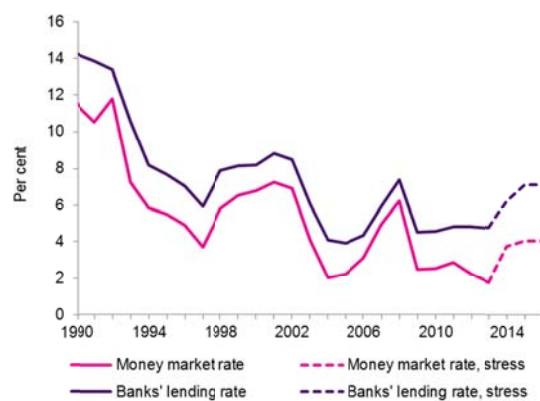
²¹ See Finanstilsynet's press release 22/2013. The Ministry of Finance ultimately decided to assign SIFI status to two of the recommended banks plus one bank that was not initially recommended for such status.

²² The merged Sparebanken Sør and Sparebanken Pluss are among the institutions recommended as systemically important. Accounts figures for these two institutions were, however, only consolidated on 1.1.2014. Since the stress test starts out from institutions' accounts figures as of 31.12.2013, these institutions feature in the SIFI selection as separate institutions throughout the stress period. Hence there are eight SIFI banks in the selection.

²³ Estimates based on historical figures indicate that debt weighted LGD for corporate borrowings in Norway was around 45 per cent on average for the years 1989-1993 (banking crisis). See E. Bernhardsen and Syvertsen, B.D. (2009); Stress Testing the Enterprise Sector's Bank Debt: A Micro Approach, International Journal of Central Banking, September 2009.

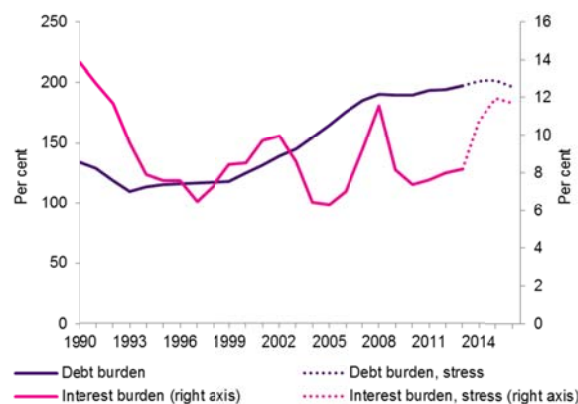
²⁴ By risk weight is meant the weight assigned to the individual exposure after the institution has entered its own estimates for PD and LGD in the relevant Basel formula. Risk weights are used to compute the capital charge.

II.2 Norwegian interest rates



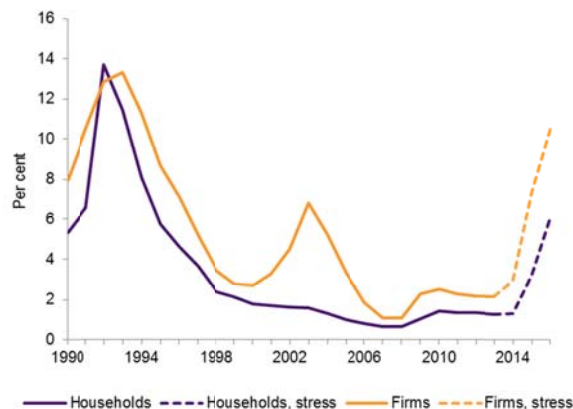
Debt = households' domestic debt measured by C2. Disposable income is corrected for received share dividend including reinvested earnings. Interest burden = interest expenses / (disposable income + interest expenses) x 100. Sources: Statistics Norway and Finanstilsynet

II.3 Households' debt and interest burden



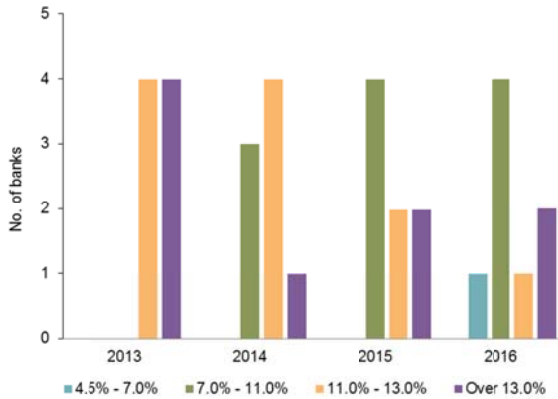
Sources: Statistics Norway and Finanstilsynet

II.4 Banks' share of problem loans



Source: Finanstilsynet

II.5 CET1 capital adequacy in various intervals. No. of SIFI banks in each interval. Unchanged risk weights



Source: Finanstilsynet

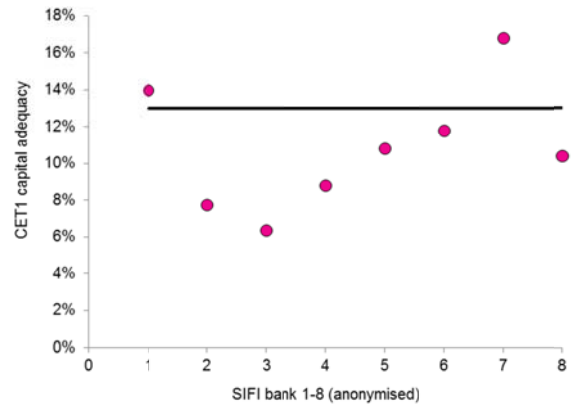
bearing securities with a fixed rate of return are measured at fair value and the average duration for this part of the bond portfolio is 2. The value of this portion of the portfolio is sensitive to changes in Nibor (as generated in the Macro Model), while the held to maturity portfolio is not affected by interest rate changes in the stress scenario.

At the outset banks should be sufficiently well-financed and liquid to emerge from a pronounced downturn without needing a supply of capital and liquidity from the government. Hence, in the stress test it is assumed that the authorities do *not* contribute liquidity or capital.

**MAIN RESULTS FROM THE STRESS TEST
MAIN RESULTS FOR THE NATIONAL SYSTEMICALLY IMPORTANT BANKS (SIFI BANKS)**

In the stress scenario six of the eight banks recommended for national systemically important status will have a CET1 capital adequacy below the sum of overall minimum and buffer requirements of 13 per cent for SIFI institutions at the end of 2016 (chart II.5). Banks with the lowest CET1 capital ratio at the end of 2016 are not necessarily those with the lowest CET1 ratios at the start of the stress period and vice versa. The capital supply needed to bring CET1 ratios back to 13 per cent varies at these banks from 0.5 to 6 times the annual profit for 2013. The lowest CET1 ratio amongst the SIFI banks at the end of the stress period is 6.4 per cent (chart II.6). Five of the SIFI banks will, according to the stress test, see a reduction of CET1 capital adequacy through the period caused by a combination of reduced core capital and somewhat higher risk weighted assets. Three of the SIFI banks will increase their CET1 capital adequacy in the course of the stress period, primarily because they manage to increase their net interest revenue through the stress period, and because the credit quality of their loan portfolios is apparently high at the start of the stress period. All banks are assumed to be able to raise their average lending rate to retail and corporate borrowers alike by 1.5

II.6 CET1 capital adequacy of SIFI banks at the end of 2016. Unchanged risk weights



Source: Finanstilsynet

percentage points in 2014 and by a further 0.9 percentage point in 2015 in the stress period. There is no certainty that banks would manage to raise the price of their loans, above all loans to corporates, by such a margin in a serious downturn. This assumption may therefore appear insufficiently conservative. On the other hand, it is assumed that the interest rate on all types of the banks' funding (deposits, money market, bonds etc) rises in step with the increase in Nibor. Since a portion of many banks' funding is based on a fixed interest rate, this assumption may appear overly conservative.

The annual profit of all SIFI banks weakens considerably through the stress period. In 2016 the annual profit is negative in five of the banks. Three of these show a negative annual profit throughout the stress period. Despite weaker performances, three of the banks managed to maintain a positive annual profit throughout the period.

The profit deterioration at the SIFI banks is due mainly to increased loan losses. At the end of 2016 loan losses measure between 1.1 and 2.4 per cent of total outstanding loans at the respective banks. Losses are considerably higher for the corporate market portfolio than for the retail market portfolio. Hence SIFI banks with a high proportion of corporate loans will, all else equal, be negatively impacted to a greater degree in the stress test. For some of the SIFI banks, lower net interest revenue contributes to weaker annual profit. However, two of the banks increase their net interest revenue through the stress period.

Changes in risk weights on loans to corporates

In charts II.5 and II.6 risk weights assigned to individual exposures are assumed to remain unchanged through the period. Risk weighted assets for capital adequacy calculation thus change only with changes in lending growth. Since lending growth is low in the stress scenario, institutions' risk weighted assets will change relatively little through the

stress period. It is not unrealistic to expect that risk weights at banks that use IRB models to quantify risk weighted assets will increase more than this in a severe stress scenario.

In order to provide some indication of the extent to which risk weights can rise, the SEBRA Model is used as a "proxy" IRB model for banks' corporate loans.²⁵ The basis for these projections is the banks' actual risk weighted assets for corporate loans as of 31.12.2013. In other words, only the percentage changes in the risk weights from the SEBRA Model are used in the projections.

Use of PD-sensitive risk weights means that seven of the eight SIFI banks have a CET1 ratio below 13 per cent at the end of 2016 (chart II.7). Here too there are wide variations between the banks. Some banks are relatively little impacted by the changes in risk weights, while others are relatively heavily impacted (chart II.8). The degree of impact is determined inter alia by the initial level of the individual bank's average PDs with regard to corporate loans and the degree to which the PDs are affected in the stress scenario. The lowest CET1 ratio at the end of 2016 is 5.7 per cent.

MAIN RESULTS FOR OTHER BANKS

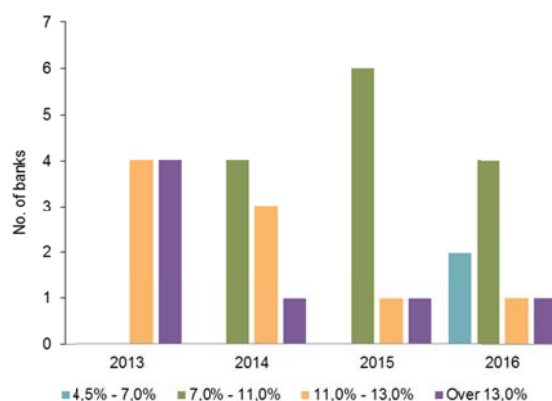
The stress test shows that 35 of the remaining 114 Norwegian banks (31 per cent) in the selection that fails to meet the sum of overall minimum and buffer requirement of 11 per cent CET1 capital adequacy by the end of 2016 (chart II.9). Most of these banks are fairly small, but three are among the 17 largest Norwegian banks.

According to the stress test, five of the banks will have a CET1 ratio below 4.5 per cent at the end of 2016. Three of these banks will have a negative CET1 ratio. These five banks single themselves out with either a relatively large holding of shares in the trading portfolio or a high proportion of non-performing loans to retail customers (see next section). There is wide variation in the banks' CET1 capital adequacy at the end of 2016 (chart II.10). This is due both to differences in the initial level of CET1 capital adequacy and a differing degree of impact from the stress scenario. The average CET1 ratio for the remaining banks in the stress scenario falls from 14.4 per cent at the end of 2013 to 10.9 per cent at the end of 2016.

Characteristics of institutions that perform poorly in the stress test

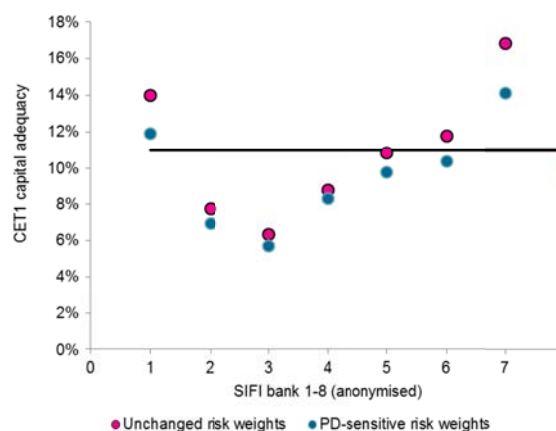
Most institutions with low core capital ratios at the end of 2016 have a high level of non-performing loans to the retail market at the end of 2013. The high initial level is retained

II.7 CET1 capital adequacy in various intervals. No. of SIFI banks in each interval. PD-sensitive risk weights



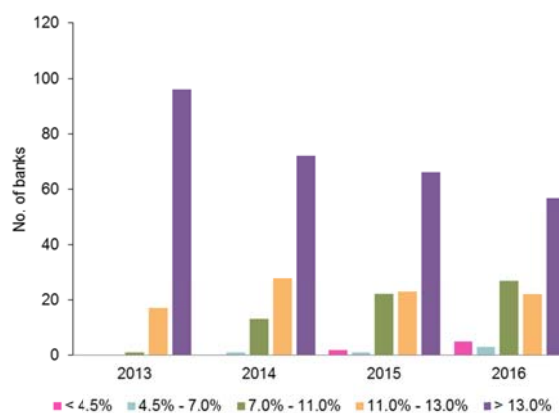
Source: Finanstilsynet

II.8 CET1 capital adequacy of SIFI banks at the end of 2016. PD-sensitive and unchanged risk weights



Source: Finanstilsynet

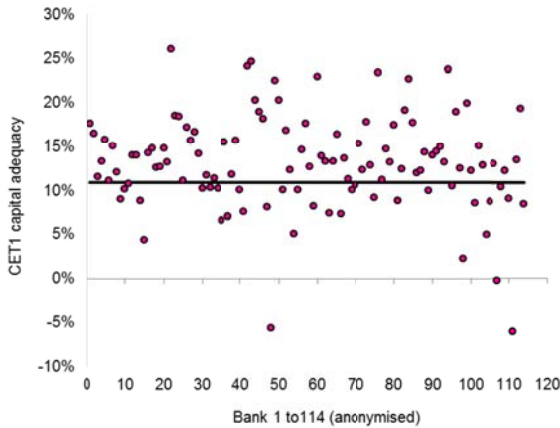
II.9 CET1 capital adequacy in various intervals. No. of SIFI banks in each interval. Unchanged risk weights



Source: Finanstilsynet

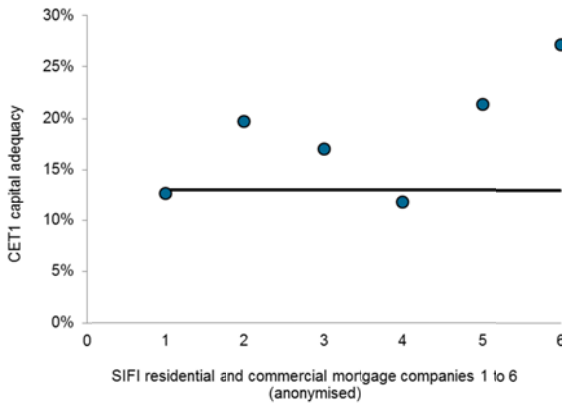
²⁵ See page 76 for further details of the methodology.

II.10 CET1 capital adequacy at non-SIFI banks at the end of 2016. Unchanged risk weights



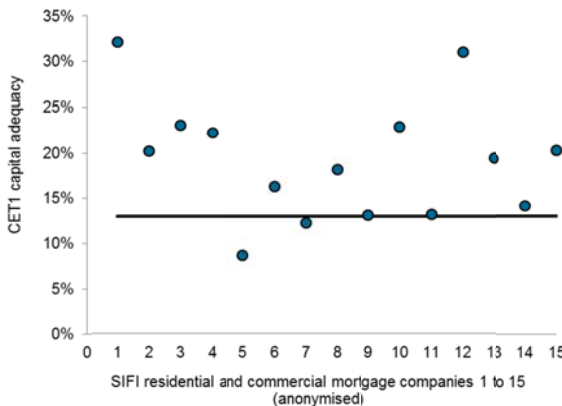
Source: Finanstilsynet

II.11 CET1 capital adequacy at SIFI residential and commercial mortgage companies at the end of 2016. Unchanged risk weights



Source: Finanstilsynet

II.12 CET1 capital adequacy at non-SIFI residential and commercial mortgage companies at the end of 2016. Unchanged risk weights



Source: Finanstilsynet

throughout the stress period, contributing to losses on loans to the retail segment.²⁶

If the high initial level of non-performing loans reflects the credit quality in the remainder of the retail portfolio, it is not unrealistic to suppose that loan losses related to the retail segment will increase relatively strongly for these banks through the stress period. However, it is not always the case that a high proportion of non-performing loans means that the remainder of the loan portfolio is weak and vice versa. Since the current version of the Bank Model does not contain information on the credit quality of institutions' home loan portfolio beyond the proportion of non-performing loans, such factors cannot be taken into account in the calculations. This problem does not arise to the same extent for loans to corporates. This is because in the latter case loan losses are calculated by multiplying the individual exposure's projected probability of default (PD) by the appurtenant LGD and loan exposure. In other words the initial level of the individual institution's proportion of non-performing loans to corporates is not used as a basis for calculating expected losses on loans to corporates.

The calculated expected loan loss is an important variable in the stress test. However, how large the loan losses would turn out to be in reality is a matter of much uncertainty, particularly in a serious downturn. It is not unlikely that losses will be considerably larger than expected. This would entail a lower CET1 ratio in the stress scenario for many of the banks.

MAIN RESULTS FOR RESIDENTIAL MORTGAGE COMPANIES

Residential mortgage companies will in general be less affected than the banks in the stress scenario, mainly because residential mortgage companies consist of the most creditworthy home mortgages. Loan losses are therefore in general far lower than for the banks, which have a large proportion of corporate loans plus the presumptively weakest mortgages on their loan books.

All five residential mortgage companies owned by SIFI banks manage to increase their CET1 capital adequacy through the stress period. However, by the end of 2016 two of the residential mortgage companies have a CET1 ratio below 13 per cent (chart II.11). The chart also includes one commercial credit company.

All non-SIFI residential mortgage companies bar one will also increase their CET1 ratios through the stress period (chart II.12). The chart includes two commercial credit companies.

²⁶ Losses on loans to the retail segment are calculated by multiplying the individual bank's projected non-performing portion by an LGD of 20 per cent and multiplying the result by the bank's overall loans to the retail segment.

If the captive residential mortgage companies are consolidated into their respective parent banks, the banking groups' CET1 ratios will be higher than shown in charts II.5-II.10. The capital and buffer requirements apply, however, to each company in the group, to each sub-group and to the overall group.

SUMMARY

The stress test shows that the banks' CET1 ratios will on average fall by a large margin in the stress scenario. There is however wide variation between the banks. Among the proposed national systemically important banks, six out of the eight will have a CET1 ratio below the sum of the minimum and buffer requirement of 13 per cent at the end of 2016. The lowest CET1 ratio among the systemically important banks is 6.4 per cent. The remaining banks will according to the rules have a minimum and buffer requirement of 11 per cent. About one-third of the remaining banks will have a CET1 ratio below the buffer requirement at the end of 2016.

In the stress test five banks will have a CET1 ratio below the absolute minimum requirement under Pillar 1 of 4.5 per cent at the end of 2016. None of these are national systemically important banks.

The stress test illustrates just one of many possible scenarios, and potentially relevant risks may have been omitted. For example, the stress test does not take account of the effects of a stop in interbank markets (as during the financial crisis). Further, uncertainty attends the assumptions and the models utilised as a basis. Finanstilsynet nevertheless considers that the stress test throws light on Norwegian banks' vulnerability when faced with serious shocks in the economy.



Description of the Bank Model

The Bank Model starts out from all Norwegian banks' and mortgage companies' profit/loss, balance sheet and capital adequacy figures for the latest financial year. The figures are at parent company level, but it is planned to further develop the model to include group figures. The historical, institution-specific figures refer to the development in a macro scenario generated in the Macro Model (see below) and to relevant projections in the SEBRA Model. In the SEBRA Model firms' probabilities of default are projected using the same macro scenario as that used in the Bank Model. Based on the probabilities of default, loan losses and risk weights are calculated. The projection period in all models is one to five years.

In the first version of the Bank Model it is mainly the institutions' earnings risk and credit risk that are projected. This means that detailed stress tests of the institutions' market risk or stress tests of liquidity risk, operational risk and other relevant risk types cannot be performed in this version of the model. Steps are being taken to further develop the Bank Model to enable more detailed stress tests to be performed for the latter risk types.

All institutions are subject to the same development path for the various macro variables. For example, an aggregated debt growth in the retail market of 5 per cent will entail lending growth of 5 per cent to the retail segment at all institutions. However, this does not mean that the institutions will be equally affected by the macro scenario. For example, an institution with a low average interest rate on loans to its retail customers will see a smaller contribution to the bottom line of the profit and loss account from a given percentage growth in lending than an institution that has a high average lending rate. In the same way, an institution which at the outset has a weak loan portfolio will be more impacted by a negative trend in the macro scenario than a bank with a strong loan portfolio. In general, institutions with a weak annual profit will be more impacted by the stress scenario than institutions with a strong annual profit. This is because the first-mentioned institutions have less leeway available before profit for the year becomes negative and core capital starts to be depleted. The individual institution's starting point is in other words important for the institution's path in the macro scenario.

All main items in the institutions' profit/loss, balance sheet and capital reports are projected. In cases where the Macro Model does not generate a path for a relevant projection variable in the Bank Model, the path is assumed to follow another relevant model-generated path. For example, deposit growth is assumed to follow the model-generated

debt growth of households. Such assumptions are based on a certain historical correlation between the variables, but not necessarily a statistically significant correlation.

Other important assumptions in the Bank Model are that there is no supply of fresh equity capital or subordinated debt to institutions in the projection period. The dividend payout ratio, rate of taxation and loss given default (LGD) are determined manually.

Any underfunding of the individual institution's balance sheet growth through the projection period is assumed to be funded in the interbank market at a rate equal to Nibor, while overfunding is assumed to be invested in the interbank market at the same Nibor rate. "Underfunding" signifies that the macro scenario and the underlying assumptions cause the asset side of the balance sheet to grow more than the liability side. Underfunding must in one way or another be funded. In as much as an assumption is that fresh equity capital or subordinated debt cannot be supplied, underfunding can only be financed by way of customer deposits, borrowings on the interbank market (or possibly from Norges Bank in a crisis) or by issuing securities. In the event of overfunding the opposite is the case, i.e. the liability side grows more than the asset side. It is assumed that the profit is invested in the interbank market. Neither underfunding nor overfunding is of material significance in most macro scenarios, including the stress scenario in this theme analysis.

All variables in the Bank Model are projected at institution level. Variables projected include:

- loan volume and average lending rate to retail and corporate borrowers
- deposit volume and average deposit rates
- net interest revenue
- other operating revenues and expenses
- the value of the holding of shares and interest-bearing securities measured at fair value
- losses on loans to retail and corporate borrowers
- risk-weighted assets for capital adequacy purposes
- risk weights for corporate loans
- common equity tier 1 capital ratio and leverage ratio
- any necessary supply of capital to meet the minimum and buffer requirements
- the size to which the total loan loss can rise in the stress scenario before the institution's CET1 ratio falls below the sum of the minimum and buffer requirements

The 17 largest Norwegian banks submit each year detailed data of their corporate portfolios to Finanstilsynet, which matches the relevant, customer-specific data against the SEBRA Model. The SEBRA Model computes the probability

of default (PD) of all non-financial limited companies in Norway, both for the latest historical financial year and the next five years. Using the projected PDs, expected loan losses and risk weights are calculated for the individual institution's corporate portfolio. The projections by the SEBRA Model are also based on the macro scenarios from the Macro Model. For that part of the banks' corporate portfolio which is not included in the SEBRA Model, the development of firms' PDs is assumed to follow the average PD in the relevant industry. The same assumption is applied to the small and medium Norwegian banks. Further, as from 2014 all small and medium Norwegian banks report their corporate portfolios to Finanstilsynet. This will be reflected in subsequent stress tests.

Institutions may also incur write-downs and losses on loans that are not in default. To take account of this, loss estimates are scaled from the SEBRA Model by a factor that reflects Norwegian banks' share of "written-down, not-defaulted loans to corporate borrowers" relative to the sum of "written-down, not-defaulted loans and defaults on loans to corporate borrowers".²⁷

An alternative in the Bank Model is to use the SEBRA Model as a proxy IRB model to calculate risk weights assigned to institutions' loans to corporates. Here it is assumed that the individual institution's actual risk weighted assets for corporate loans are projected with the change in risk weighted assets estimated in the stress scenario in the SEBRA Model.²⁸ It is important to point out that the SEBRA Model is not an approved IRB model. It is not, for example, estimated on bank-specific loan data, and the same model is used for all types of loan.

Finanstilsynet does not have detailed data on banks' loans to retail borrowers. However, the Macro Model provides estimates of changes in the proportion of problem loans referring to the retail market. The individual institution's share of non-performing loans to retail borrowers is multiplied by the model-generated change factor for problem loans in the selected macro scenario. In order to calculate expected loan loss related to the retail market, the new default share is multiplied by the new volume of lending to the retail market and thereafter by the LGD rate. Because individual PDs are not available for retail borrowers, the Bank Model cannot compute new risk weights for retail loans.

²⁷ In Theme II a scaling factor of 1.45 is used.

²⁸ The following example illustrates the procedure: Bank A has as of 31.12.2013 actual risk weighted assets of NOK 90m for its corporate portfolio. The same portfolio has risk weighted assets of NOK 100m if the SEBRA Model is used as an IRB model. According to the projection of the SEBRA PDs in 2014, risk weighted assets rise to NOK 110m, i.e. an increase of 10 per cent. For bank A the risk weighted assets for 2014 will accordingly be NOK 99m (i.e. 90×1.10).

The Bank Model computes an average interest rate on each individual institution's loans to, respectively, households, non-financial firms and other types of borrowers. In the same way, average interest rates are calculated on institutions' funding, including customer deposits. The average interest rate at the individual institution is projected with the change in the respective rates in the macro scenario.



Macro Model NAM-FT

NAM-FT is a further development of the macro econometric model NAM (Norwegian Aggregate Model) developed by Gunnar Bårdsen and Ragnar Nymo. The new model is specially developed for stress testing of banks and analyses of financial stability. NAM is an equilibrium correction model, i.e. the path of several of the variables included in the model follows estimated equilibriums in the longer term. A weakness of many macroeconomic models is that real economic or financial shocks are of short duration in the models because the equilibriums can have a strong stabilising effect. Weak equilibrium correction, which NAM permits, may be a source of real economic and financial instability. Equilibrium correlations can also change as result of crises abroad, or where domestic firms, households or financial institutions find themselves in a difficult economic situation. In financial crises, typically established structures will collapse. The model takes account of change in behaviour during previous crises where this is supported by data. This is particularly important in connection with stress testing, which is the key rationale for introducing a separate macro model at Finanstilsynet.

The fixed income and foreign exchange markets, and wage and price formation in the labour market, are central sub-blocks in the NAM. The money market rate and lending rate are determined by the key policy interest rate and risk premiums, which may vary with changes in market actors' view of uncertainties in the economy, and risk aversion. The key policy rate is determined by a reaction function, of which inflation targets, inflation, output growth, unemployment and real exchange rates are part²⁹. In the longer term the nominal exchange rate is determined such that the relationship between Norwegian and foreign prices measured in common currency stabilises, and with a basis in differences between Norwegian and international interest rates. Estimation of unemployment, wages and prices is based on an assumption of imperfect competition in the

²⁹ "Real exchange rate" denotes the price relationship between foreign and Norwegian consumer goods measured in Norwegian currency. Increased international prices, a weaker krone and reduced Norwegian prices strengthen the real exchange rate. A strengthened nominal exchange rate is the same as a depreciated krone (more kroner must be paid for a unit of foreign currency).

product market and a system of negotiation between trade unions and employers. The unemployment level influences the parties' negotiating power which is in turn determinative for the wage path. In the long term, wages are determined by unemployment, prices and productivity. The trend in consumer prices is driven by the trend in production costs and import prices.

NAM-FT includes in addition the credit market for non-financial firms and a block covering the housing and credit markets for households. This part of the model is of central importance to Finanstilsynet. The modelled reciprocal effect between credit price growth and house price growth may help to ensure that the model captures financial imbalances. The model also includes a consumption function in which inter alia households' housing wealth influences consumption since increased housing wealth produces increased consumption.

Output in the model is steered by demand. Exogenous³⁰ demand components are public consumption and oil investments. Private consumption and a residual, which includes net exports by Mainland Norway and real investments excluding oil investments, are endogenous³¹. The sum of exogenous and endogenous demand components equals GDP for Mainland Norway.

Households' disposable income is determined by GDP for Mainland Norway. Disposable income and lending rates to households influence household consumption directly. Lower lending rates to households and higher disposable income lead in the model to increased housing demand and higher house prices. The model includes a wealth effect through private consumption's positive dependence on house prices. Increased housing starts, due to higher house prices, contributes, with a time lag, positively to housing investments which after a time increase the supply of housing. An increased supply of housing reduces housing pressures. The demand components in residual GDP for Mainland Norway, i.e. mainly real investments excluding oil investments, increase with housing investments.

Household debt is positively influenced by disposable income, house prices and lower lending rates. Debt-servicing capacity rises with income. Banks' collateral rises with house prices, whereas low interest rates increase loan demand. The model contains an accelerator mechanism whereby higher house prices contribute to even higher household debt, which then leads to a further increase in prices and an ensuing increase in debt. This accelerator contributes to larger fluctuations in the model projections.

³⁰ Determined outside the model.

³¹ Determined by the model.

Lending rates and household debt determine households' interest burden³². Housing demand is sensitive to high interest burden levels. With a high interest burden, the liquidity of a number of households will be tight, thereby reducing housing demand. The share of problem loans³³ in the household sector depends on the interest burden and unemployment.

Firms are represented in the model by residual GDP for Mainland Norway, which comprises net exports and private investments excluding investments in the oil sector. Investment demand rises with lower lending rates and higher share prices.

Net exports are positively dependent on the real exchange rate and international demand for Norwegian goods. A higher real exchange rate, which will result from a currency deterioration, entails stronger competitiveness. Domestic credit (C2) to non-financial firms affects investments positively. More credit provides a basis for increased investments.

Credit to firms is determined by Mainland GDP, wage costs, the real exchange rate and Norwegian share prices. Mainland GDP affects firms' credit through the trend in firms' incomes. Higher income provides a basis for higher debt incurrence by improving debt servicing capacity. Firms' debt falls with higher wage costs since lower profits adversely affect debt servicing capacity. A higher real exchange rate produces higher corporate debt because improved competitiveness improves debt servicing capacity. Higher Norwegian share prices affect firms' credit positively through expectations of stronger future debt servicing capacity.

Higher share prices influence firms' investments since expectations of increased future earnings increase both the willingness to invest and the basis for debt incurrence.

The model contains an accelerator mechanism on the corporate side through reciprocal influence between corporate debt and share prices. Higher share prices signal increased earnings, which provide a basis for increased debt. More funding provides in turn a basis for increased investment, which in its turn leads to higher share prices and so forth. The accelerator produces more fluctuations in the economy.

Norway is a small, open economy and share prices in Norway are heavily affected by international share prices. Share prices depend on the oil price through the oil industry

and the industry supplying the oil industry. A large portion of companies on Oslo Børs are exposed to the oil industry. Since profitability in this industry depends on the oil price, Norwegian share prices are also dependent on the oil price. Ultimately low Norwegian interest rates relative to foreign rates will increase Norwegian share prices by making Norwegian firms' funding relatively cheaper.

Firms' share of problem loans is determined by lending rates, unemployment and the real exchange rate. Firms' profits are reduced by higher interest rates and poorer competitiveness resulting from a lower real exchange rate. In addition, firms' share of problem loans is sensitive to the level of unemployment. Households' income shortfalls resulting from higher unemployment reduces profitability and, by the same token, firms' debt servicing capacity.

³² Interest expenses / (disposable income + interest expenses).

³³ Problem loans are non-performing loans and written-down, performing loans.

THEME III LIQUIDITY REGULATION

The financial crisis highlighted the importance of robust funding and sound liquidity for financial stability. In the wake of the crisis the Basel Committee recommended stricter requirements on liquidity regulation, including quantitative minimum requirements for a liquidity buffer (Liquidity Coverage Ratio - LCR) and long-term funding (Net Stable Funding Ratio - NSFR). These requirements are designed to make it easier for supervisory authorities to identify and analyse both the level of liquidity risk in the individual bank and in the banking system as a whole. The LCR and NSFR are being introduced in the EU through CRD IV.

FINAL DEFINITION OF THE LCR

CRD IV requires all credit institutions to maintain adequate liquidity buffers able to withstand periods of limited access to liquidity. The new minimum required liquidity buffer, the LCR, measures the size of an institution's high quality liquid assets (HQLA) and extremely high quality liquid assets as a share of net cash outflow over a 30-day horizon given a stress situation in the money and capital markets. The requirement is proposed for introduction on a gradual basis from 60 per cent in 2015 to 100 per cent in 2018, but reporting of this indicator to the supervisory authorities starts in 2014. By the end of June 2014 the EU Commission will adopt the final definition of the LCR in a delegated act (supplementary provision to CRD IV). The definition will be based on the Basel Committee's proposal from 2013, and recommendations from the European Banking Authority, EBA.

The EBA has delivered two reports to the EU Commission giving specific recommendations for the definition of the LCR. One report proposes a definition of assets with extremely high and high liquidity and credit quality (level 1 and level 2 assets). The other report is an impact analysis that takes a closer look at how the introduction of LCR requirements could affect institutions' activity and risk profile, the stability and functions of financial markets, the wider economy, and banks' lending activity. This report also makes specific recommendations regarding the actual design of the LCR requirement. Both reports were published on the EBA's website on 20 December 2013. The reports show that the EBA largely follows the Basel Committee's recommendations.

DEFINITION OF LIQUID ASSETS

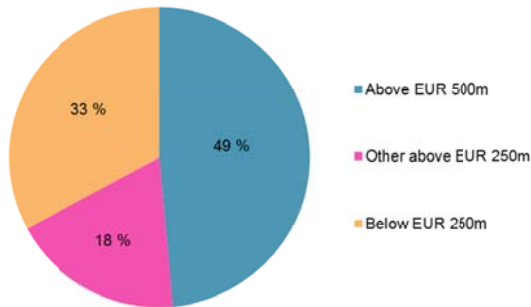
Assets eligible for inclusion in the LCR are divided into two levels based on their degree of liquidity and credit quality. To qualify for level 1 an asset must have extremely high

liquidity and credit quality, while level 2 assets must have high liquidity and credit quality. Level 1 assets count in full, while level 2 assets receive a haircut of at least 15 per cent in the calculation of the liquidity buffer.

The EBA has conducted an empirical analysis to define which asset classes may be eligible as level 1 and level 2 assets in the LCR. The analysis is based on quantitative liquidity measures such as trading volume, price effect and price volatility, as well as credit quality. The report's recommendations are, in addition to the results of the empirical analysis, based on qualitative assessments. Hence, for some asset classes, the EBA recommendations mentioned above diverged from the results of the empirical studies. This applies in the main to government bonds and covered bonds.

The empirical analysis indicates that government bonds with an outstanding volume above EUR 250m qualify as level 1 assets, while government bonds with an outstanding volume above EUR 100m only qualify as level 2 assets. In both cases rating requirements apply. Although the analysis shows that there are some differences between the liquidity and credit quality of the EEA countries' government bonds, the EBA considers there are strong arguments against discriminating between countries. The argument is that doing so could adversely affect the European market. The EBA therefore recommends that all government bonds issued or guaranteed by EEA states, central banks in the EEA countries and multinational organisations should be defined as level 1 assets, regardless of rating and volume. This differs from the Basel Committee recommendations which set a rating requirement in order for government bonds to be defined as level 1 assets.

The empirical analysis concludes that covered bonds with an outstanding volume above EUR 500m qualify as level 1 assets, while covered bonds with an outstanding volume above EUR 250m qualify as level 2 assets. There are in addition requirements on credit assessment and requirements on the rules governing covered bonds. Although the results of the analysis show that covered bonds with a high rating and an outstanding volume above EUR 500m are highly liquid, and score identically to or better than government bonds on several liquidity measures, the EBA doubts whether these analyses are sufficient to support a recommendation that diverges from the Basel Committee recommendations. The EBA therefore recommends that covered bonds should only be defined as level 2 assets, and should be subject to a requirement of a minimum outstanding volume of EUR 250m.

III.1 Outstanding covered bonds in NOK as of 30.06.2013

Source: DNB Markets Credit Research Covered Bond report 2013

EFFECT FOR THE NORWEGIAN COVERED BOND MARKET

The volume of covered bonds issued by Norwegian institutions has risen considerably in recent years, and was close to NOK 900bn at the end of 2013. About one half of this volume is issued in Norwegian kroner. Norwegian banks have a sizeable holding of covered bonds on the asset side. At the end of 2013 covered bonds accounted for about 50 per cent of Norwegian banks' total liquid assets in the LCR, and more than 90 per cent of level 2 assets. The criteria for inclusion of covered bonds in the final definition of the LCR are therefore important for Norwegian banks.

The introduction of a limit of EUR 250m on covered bonds eligible for inclusion in the LCR does not appear to be of crucial significance for Norwegian banks. 70 per cent of the total outstanding volume of covered bonds in Norwegian kroner are above EUR 250m (chart III.1), and are eligible for inclusion as level 2 assets. Only nine of the 22 Norwegian covered bond issuing companies, broadly the largest, account for these issues. Covered bond issues above EUR 500m account for about 50 per cent of the outstanding volume of covered bonds in Norwegian kroner (chart III.1). These are eligible as level 1 assets if the empirical results from the EBA are used as a basis for the final definition of the LCR. The five largest Norwegian covered bond issuing companies account for these issues.

IMPACT ANALYSIS OF THE LCR

The impact analysis takes a closer look at how the introduction of the LCR affects institutions' activity and risk profile, financial markets' stability and functions, the wider economy, and banks' lending activity, with particular focus on loans to small and medium enterprises (SMEs) and trade finance. The analysis is largely based on the Basel Committee's recommendations from 2013. Figures from the impact study conducted by the EBA at the end of 2012 are used.

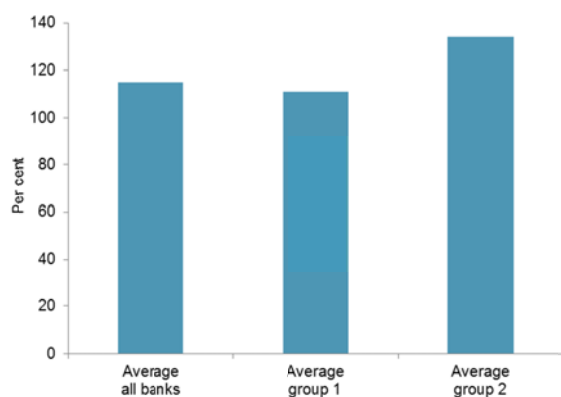
The result of the analysis shows that the LCR is not likely to have a material detrimental impact on financial markets' stability and functions, nor on banks' lending activity. The main reason for this is that banks in Europe have an LCR averaging 115 per cent (chart III.2). There are, however, wide variations in LCR values between countries, with four countries having an average LCR below 100 per cent at the end of 2012. The deficit of liquid assets relative to an LCR of 100 per cent is small for European banks as a whole. It measures only 0.8 per cent of their aggregate total assets, and between 1 and 2 per cent of available liquid assets in Europe. The analysis shows that European banks have improved their LCR level from the end of 2011 to the end of 2012 without reducing their lending to small and medium corporates.

Chart III.3 is based on Norwegian banks' LCR reporting with adjusted outflow factors (percentage rate indicating what payout the bank is expected to have to make from the asset concerned in a stress situation) under Basel III from 2013. As the chart shows, Norwegian banks as a whole are relatively well placed to meet the forthcoming LCR requirement of 100 per cent. Both larger and smaller banks have in aggregate an LCR above 100 per cent, and have increased their LCR from 2012 to 2013. The medium-sized banks on the other hand have an unchanged LCR from 2012 to 2013, and are still short of the future requirement. As in the case of European banks, Norwegian banks' liquid asset deficit is very small compared with their total assets. Although Norwegian banks as a whole seem relatively well placed to meet the future LCR requirement, there are wide variations between the banks.

A number of specific alternatives for calibration of the LCR are also analysed in the report. It considers, for example, whether the cap on inflows and on high quality liquid assets (level 2 assets), recommended by the Basel Committee, should be included in the final definition of the LCR. The report also considers whether the introduction of the LCR will be affected by other regulatory requirements, including capital requirements, the leverage ratio and the NSFR. The results of the analysis indicate that other regulatory requirements have no impact on banks' fulfilment of the LCR.

The EBA recommends retaining the cap on inflows, as also recommended by the Basel Committee. The cap limits stressed inflows to 75 per cent of stressed outflows in the LCR. The main rationale is to ensure that banks retain a minimum of liquid assets and that they do not rely solely on future inflows to meet the LCR requirement. The cap on inflows is of little consequence for most institutions in Europe, and few Norwegian banks will be affected by the cap (table III.1). Institutions that are affected will face a larger cost by being required to hold liquid assets they would otherwise not have held.

III.2 LCR of European banks as of 31.12.2012



Source: Impact assessment report EBA

The introduction of a 40 per cent cap on level 2 assets as a share of total liquid assets is also recommended by the EBA, as by the Basel Committee. The cap ensures that banks hold not only high quality liquid assets (level 2 assets), but also extremely high quality liquid assets (level 1 assets) to cover their net outflows. There is no cap on what proportion level 1 assets may constitute of total assets in the LCR. This could lead to concentration risk in, for example, government bonds. For most European banks the cap on level 2 assets is not a constraint in terms of meeting the LCR requirement. For many Norwegian banks, on the other hand, this is a constraint (table III.1), largely due to Norwegian banks' relatively substantial holding of covered bonds.

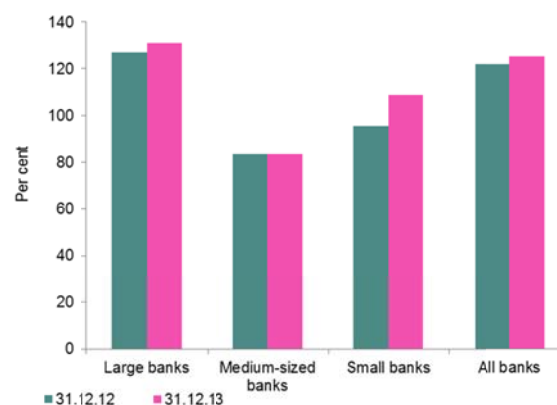
If the EU Commission opts to follow the EBA's recommendation as regards the cap of 40 per cent, the EBA recommends, for currencies with a shortage of liquid assets, that financial institutions should be permitted to hold a larger share of high quality liquid assets (level 2) than the above-mentioned 40 per cent. This could be relevant for Norwegian banks if the Norwegian krone is defined as a currency with a shortage of extremely high quality liquid assets.

CURRENCIES WITH A SHORTAGE OF LIQUID ASSETS

According to CRD IV, the EBA is required to identify currencies with an insufficient volume of liquid assets to meet the LCR requirement. For these currencies, the demand for liquid assets exceeds the supply in the currency concerned, and it will be possible to utilise alternative solutions in order to meet the LCR requirement.

Two alternative solutions are defined in the CRR:

III.3 LCR of Norwegian banks



Source: Finanstilsynet

Table III.1 No. of Norwegian banks that will be affected by the cap on level 2 assets (40%) and on inflows (75%)

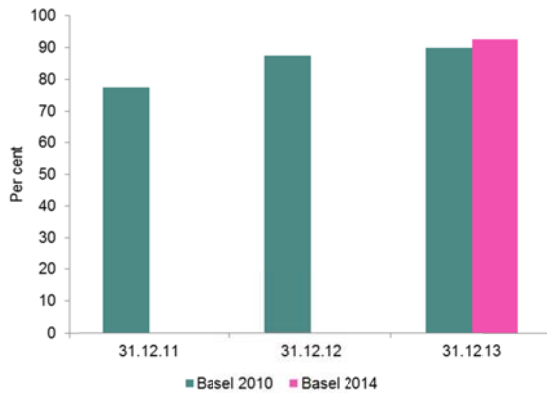
| | Number | |
|--------------------|---------|---------|
| | 75% cap | 40% cap |
| All banks | 19 | 88 |
| Large banks | 0 | 5 |
| Medium-sized banks | 2 | 16 |
| Small banks | 17 | 67 |

Source: Finanstilsynet

1. To permit institutions to include liquid and credit-worthy securities denominated in another currency in order to meet the LCR requirement in the national currency. Alternatively, to permit investment in qualified collective investment undertakings (CIUs), which in turn buy securities in foreign currency. In this case a larger haircut applies.
2. To permit institutions to replace liquid assets with a credit facility in the central bank. This should be separate from the ordinary credit facility, not possible to withdraw within 30 days and "fairly" priced. It would be up to the respective central banks to offer, or not to offer, such a facility. The Basel Committee is also considering whether such a facility should be offered in all countries, not only in countries with a shortage of liquid assets.

As mentioned, the EBA recommends, for currencies defined as currencies with a shortage of liquid assets, that financial institutions should be permitted to hold a larger proportion of high quality liquid assets, i.e. above 40 per cent of their total liquid assets. This could also figure as a third alternative in addition to the two already defined in CRD IV. The Basel Committee also recommends this alternative in its proposal for solutions for currencies with a shortage of liquid assets.

III.4 NSFR of Norwegian banks under the Basel 2010 and Basel 2014 definition



Source: Finanstilsynet

Preliminary analyses show that the Danish and Norwegian currencies qualify as currencies with a limited volume of extremely high quality liquid assets, but it is made clear that a new assessment will be made after the EU Commission's final definition of the LCR becomes available. It will at that point emerge whether or not Norwegian banks will have the opportunity to avail themselves of alternate solutions in order to meet the LCR requirement in Norwegian kroner.

NET STABLE FUNDING RATIO

The Net Stable Funding Ratio (NSFR) shows the degree of long-term funding by measuring the amount of available stable funding relative to the amount of required stable funding over a one-year horizon. The ratio should be equal to at least 100 per cent on an ongoing basis. The NSFR is designed to prevent banks from excessive reliance on short-term finance to fund illiquid assets.

"Available stable funding" is defined as the portion of liabilities and capital expected to be reliable over a one-year horizon. The stability of the various debt and equity capital items is a function of inter alia residual maturity, type of funding and counterparty. Longer term funding is regarded as more stable than short-term funding. Deposits from households and small non-financial firms are regarded as more stable than deposits from other counterparties.

"Required stable funding" is a function of a number of factors, including degree of encumbrance, liquidity and credit quality. Unencumbered assets with good liquidity and credit quality that can be posted as security or sold directly in the market do not require full funding from stable funding sources. Assets encumbered for one year or more require, on the other hand, fully coverage from stable funding sources.

The EBA will by the end of 2015 prepare an impact analysis for the NSFR matching the one conducted for the LCR. By the same date the EBA will also present its recommendations for the final definition of the NSFR. The EU Commission will by 31 December 2016 produce a law proposal with a view to ensuring stable long-term funding for financial institutions. The introduction of a possible minimum requirement on stable funding is proposed as from 2018.

CHANGES PROPOSED BY THE BASEL COMMITTEE

In January 2014 the Basel Committee recommended changes in the level of stable funding required for various assets, and in the haircut applied to available stable funding in the calculation of the NSFR. The changes entail inter alia that certain deposits will be regarded as more stable than previously, and that new types of deposits (including operational deposits) count as stable funding. The recommendation also reduces the requirement on stable financing for certain loans to households and small non-financial firms.

The proposed changes are largely reliefs in relation to the previously proposed definition of the NSFR that will make it easier for institutions to meet the future 100 per cent requirement. The original date for the introduction of a possible quantitative minimum requirement, 1 January 2018, is retained. The recommendations are being circulated for comment until 11 April 2014.

EFFECT FOR NORWEGIAN BANKS

The 17 largest banks in Norway have reported their NSFR since September 2011. The Norwegian reporting regime is based on the definitions of 2010 from the Basel Committee. At the end of 2013 the NSFR was 90 per cent for these 17 banks overall (chart III.4).

The effect of the changes proposed by the Basel Committee for Norwegian banks' NSFR for 2013 is shown in chart III.4. Not all the proposed changes can be taken into account in the calculations, partly because Norway's reporting regime does not support the increased level of detail required by the change proposal. Broadly speaking, the following two changes are taken into account: (a) some deposits are regarded as more stable than previously, and (b) the requirement on stable funding of unencumbered loans to households and small non-financial firms is reduced.

The results show that Norwegian banks as a whole will improve their NSFR by 3 percentage points to 93 per cent. Available stable funding rises by NOK 51bn, while required stable funding is reduced by NOK 26bn. For two banks, the NSFR increases by 10 and 11 percentage points respectively, while the remaining banks see an increase of between 2 and 4 percentage points.

Risk Outlook 2014: The Financial Market in Norway

Since 1994 Finanstilsynet has systematically analysed and assessed potential stability problems in the Norwegian financial market against the background of developments in the Norwegian and international economy. This is a necessary supplement to Finanstilsynet's ongoing supervision of individual institutions. Much of the assessment of individual institutions' profitability, financial strength and risk needs to be carried out in light of the general state of the financial market. As from 2003 Finanstilsynet has given its view of the state of the financial market in a separate report. The report summarises financial institutions' results for the previous year, and assesses risks facing banks and other institutions in the Norwegian financial market and potential sources of future stability problems in the Norwegian financial system. Finanstilsynet publishes the report **Risk Outlook** in the spring and **Financial Trends** in the autumn.



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