NORWEGIAN MINISTRY OF FINANCE

Meld. St. 30 (2012–2013) Report to the Storting (White Paper)

Financial Markets Report 2012

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Translation from the Norwegian. For information only.

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Recommendations of the Ministry of Finance of 26 April 2013, approved by the Council of State on the same day. (Government Stoltenberg II)

1 Introduction

Every year, the Ministry of Finance submits a report to the Storting on developments in Norwegian and international financial markets. This year, parts the report are made available in English. Chapter 2 addresses the financial stability outlook in Norway. It contains overviews and assessments of market conditions, risk developments for financial institutions, and the solvency and earnings of such institutions. The chapter also provides a brief overview of the efforts to ensure financial stability in Norway as well as further details of competition in the banking market.

Chapter 3 provides an overview of certain key legislative initiatives and financial markets regulation developments internationally and in Norway, in part brought about by the experiences from the international financial crisis. Processes that are highlighted include implementation of new EU rules on capital and liquidity requirements for banks (CRD IV), outline of different initiatives regarding requirements for systemically important institutions and new solvency regulations for insurance companies (Solvency II). Some sections of the chapter contain comments on the Ministry's position and work on particular regulatory initiatives.

The Norwegian version of the report contains in addition chapters on the organisation and activity in the Norwegian Financial Services Complaints Board, vulnerability in the financial infrastructure, implemented regulatory changes and important licensing cases, and on the activities of Norges Bank, Finanstilsynet (the Norwegian financial supervisory authority), Folketrygdfondet (which manages the Government Pension Fund Norway and the Government Bond Fund) and the Norwegian State Finance Fund in 2012.

2 Financial stability

2.1 Introduction

Financial stability requires the financial system to be sufficiently robust to accept deposits and other repayable funds from the public, arrange funding, make payments and reallocate risk in a satisfactory manner. An important prerequisite for this work is that banks and other financial institutions are solid and function as intended.

Previous crises have taught us that it is difficult to predict economic disruptions. The economy is changing, and these changes may increase the vulnerability of the Norwegian financial system. For example, the international financial crisis illustrated that deficiencies in the international capital markets can harm Norwegian banks. Low interest rates, high household debt and rising life expectancy are all factors currently influencing the vulnerability of the financial system.

Activity in international financial markets was strengthened somewhat in 2012. Share prices rose, and risk premiums on debt fell. In Norway, share prices on Oslo Stock Exchange rose by 15 per cent. Although this has improved life insurance company buffers, the companies still face major challenges linked to rising life expectancy and low interest rates. There is still uncertainty to the future development of international financial markets. Banks improved their solidity in 2012, and they have secured more robust funding.

2.2 The financial system and efforts to ensure financial stability

The financial system comprises financial institutions and other market participants, marketplaces and transaction infrastructure. The system effects payments and enables participants in the real economy to manage and reallocate financial risk and allocate resources over time. The key institutions in the Norwegian financial system are banks and other credit institutions (mortgage companies and finance companies), insurance companies, pension funds, investment firms and securities fund management companies. Major structural changes often result from mergers or demergers. In terms of total assets, credit institutions clearly constitute the largest group, followed by life insurance companies; see Box 2.1.

In the course of their operations, financial institutions assume liabilities and risks, and there are numerous examples illustrating that participants in the real economy are entirely dependent on the financial institutions being able to discharge their liabilities. Problems in these institutions will therefore readily affect the real economy. Further, due to the economic interaction between financial institutions, problems in one part of the financial system may damage the system as a whole. Problems may be exacerbated by negative interactions between the financial markets and the real economy. Preventing crises in the financial system is often less costly than countering the outcomes of financial crises. Promoting financial stability is therefore a vital task for the authorities.

The authorities work to prevent solvency and liquidity crises in the financial system through statutory and regulatory requirements, as well as through supervision of financial institutions and financial markets. In Norway, considerable emphasis has been given to comprehensive, consistent regulation, for example by regulating the same type of risk identically, irrespective of its location, thus preventing risk from accumulating where it is subject to the least regulation. This principle has underpinned Norwegian financial markets regulation for many years. It is also a prerequisite for financial stability – and an important objective in itself – to have good consumer protection in the financial markets.

Efforts to ensure financial stability in Norway are shared between the Ministry of Finance, Norges Bank and Finanstilsynet. The Ministry of Finance has overall responsibility for ensuring that the financial system functions well. Norges Bank and Finanstilsynet are tasked with helping to ensure that the financial system is robust and efficient, and therefore oversee financial institutions, securities markets and payment systems to identify threats to stability. Finanstilsynet also

supervises financial institutions and marketplaces. Norges Bank is the lender of last resort.

In 2006, so-called tripartite meetings were established between the Ministry of Finance, Norges Bank and Finanstilsynet. At these meetings, information is exchanged about things such as Norwegian and international economic developments and the state of the financial markets. Meetings are held every six months, and more frequently when needed. There were five tripartite meetings in 2012 as a result of the financial crisis and the volatile state of international financial markets. Thus far, one meeting has been held in 2013.

2.3 The macroeconomic picture

Provisional accounting figures indicate that global economic growth came to a stop in the fourth quarter of 2012, following relatively strong growth in the previous quarter. Growth was particularly weak in the UK and the euro area, while gross domestic product (GDP) remained almost unchanged in the USA. In China, the pace of growth picked up somewhat towards the end of last year.

Major uncertainty remains about future international developments. The unresolved fiscal policy situation in the USA is a source of uncertainty. In late 2012/early 2013, Congress decided to limit the scope of cutbacks that would otherwise have been implemented at the beginning of 2013. This prevented the US economy from falling off the "fiscal cliff". Nevertheless, the Members of Congress failed to agree adjustments of automatic expenditure cuts, which were therefore implemented on 1 March of this year. Looking forward, Congress will have to renew the budgetary authorisations of the federal authorities. Without new authorisations, the federal sector will eventually have to cut expenditure. The current authorisation to assume new federal debt will expire on 18 May. Accordingly, the stringency of fiscal tightening in the USA is highly uncertain. If the US Congress is able to agree limits on the size of spending cuts, positive US growth is expected to continue.

Although forecasters expect strong growth in China compared to traditional industrialised countries, they expect growth to be lower than in 2010 and 2011.

Many European countries have implemented stringent fiscal tightening to correct the imbalances that developed in the years preceding the financial crisis. This is reducing demand. Unemployment is high, and there are signs of increasing social unrest and falling confidence in politics and important social institutions in several countries. The application of strict credit policies by banks in dealings with the private sector is helping to restrict investment.

The situation in the Norwegian economy contrasts strongly with the situation among many of Norway's most important trading partners. Mainland Norway GDP rose by 3.5 per cent in 2012. Unemployment is low, and employment is higher than before the financial crisis.

The Norwegian economy appears to be becoming increasingly bifurcated. While petroleum industry suppliers are experiencing capacity problems, the rest of Norway's mainland industry and traditional export businesses are suffering. High oil prices have produced substantial revenue for the petroleum industry, and investment in oil and gas production rose by over 14 per cent in both 2011 and 2012. When demand for labour and goods and services for operations on the Norwegian continental shelf are included, total demand from the petroleum industry now equals almost 19 per cent of mainland Norway GDP. When demand from the petroleum industries of other countries also increases, the result is high activity levels among Norwegian supplier companies. This bifurcation is also apparent from regional differences. Unemployment is lowest in the counties with the highest density of suppliers to the petroleum industry.

A strong Norwegian krone has a particular effect on traditional export businesses, which are battling low demand from export markets. The profitability of these companies is also under pressure due to high wage costs. In the last 10 years, wage costs in Norwegian industry have increased by 1.6 per cent annually, on average, relative to Norway's trading partners (measured in a common currency). This development has been possible due to strong growth in the prices of Norwegian export products and sales to the petroleum industry. Nevertheless, since the summer of 2011, prices for some traditional export goods have fallen. This is due partly to the appreciation of the krone and partly to lower global market prices for certain products, including metal.

Consumer price inflation was low last year as a result of the strong krone, lower prices for imported consumer goods and a fall in electricity prices. According to the provisional national accounts, wage inflation totalled 4 per cent in 2012, down from a rate of 4.2 per cent in 2011.

Box 2.1 Overview of the Norwegian financial market

The total assets of Norwegian financial institutions and branches of foreign institutions amount to approximately 300 per cent of mainland Norway GDP; see Figure 2.1. With the exception of the period following the Norwegian banking crisis at the beginning of the 1990s, the total assets of the Norwegian financial services industry have generally grown more rapidly than GDP. In the last couple of years, the total assets of the financial services industry have grown approximately in line with GDP.

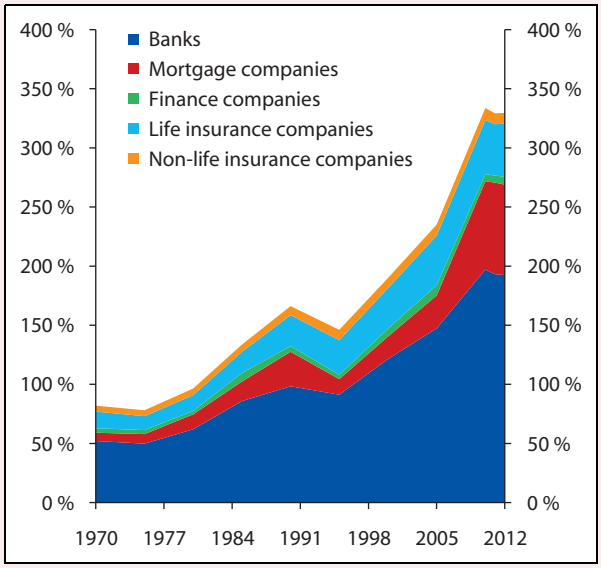


Figure 2.1 Total assets in the financial market as a proportion of mainland Norway GDP

Source: Statistics Norway and Finanstilsynet

Table 2.1 The structure of the Norwegian financial market (including foreign branches). Figures for institutions and total assets (NOK billion) in different sectors. Percentage of total assets in different sectors and in total (market share). As at 31 December 2012

Percentage of total assets	Credit institutions	Securities funds	Non-life insurance	Life insurance	Total groups
Total number of institutions	213	18	86	21	-
Total assets (NOK billion)	5,590	557	201	993	-
Market share, percentage					
DNB	36	18	1	27	32
SpareBank1/cooperating savings banks	14	4	7	3	12
Nordea	10	10	0	6	10
KLP	1	12	2	30	5
Storebrand	1	10	1	24	5
Eika group	5	1	2	0	4
Gjensidige	0.3	0	27	1	1
Total groups/alliances	*67*	*56*	*40*	*92*	*68*
Other companies	33	44	60	8	32
Market as a whole	100	100	100	100	100
of which foreign branches	*13*	-	*30*	*0*	*11*
of which foreign-owned subsidiaries	*12*	-	*0,5*	*7*	*10*

Source: Finanstilsynet

Box 2.1 (cont.)

Seven groups account for around 68 per cent of the total financial market; see Table 2.1. These are DNB, the Sparebank 1 group, Nordea, KLP, Storebrand, the Eika group and Gjensidige.

At the end of 2012, there were 213 credit institutions in the Norwegian credit market, down from 220 in 2011. Of these institutions, 138 were banks, 30 were mortgage companies and 45 were finance companies. Mortgage companies primarily provide mortgages to fund commercial activities and house purchases, while finance companies primarily engage in leasing, car purchase financing, short-term loans and consumer credit. The total assets of these financial institutions amounted to approximately NOK 5,590 billion.

In recent years, household borrowing has come to account for an increasing proportion of loans issued by banks and mortgage companies; see Figure 2.2. The distribution of commercial loans in the different sectors is reviewed in more detail in section 2.3.

There are 18 securities fund management companies in the Norwegian market, two less than in 2011. Their assets total around NOK 557 billion, approximately NOK 70 billion more than in 2011.

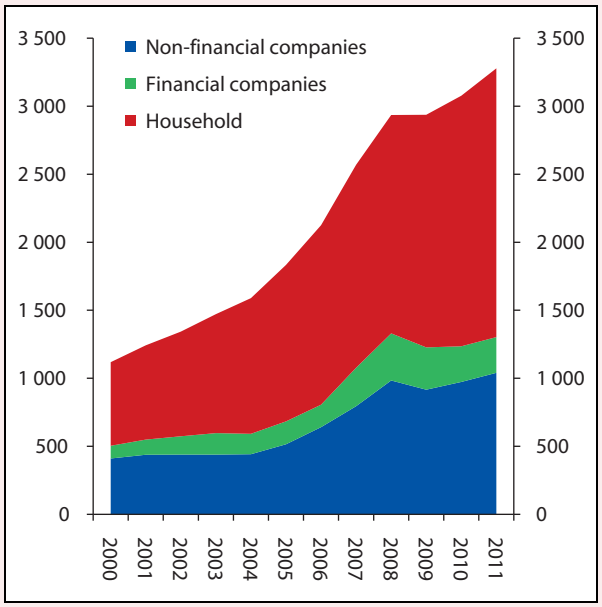


Figure 2.2 Loans repayable to banks and mortgage companies by sector. NOK billion

Source: Statistics Norway

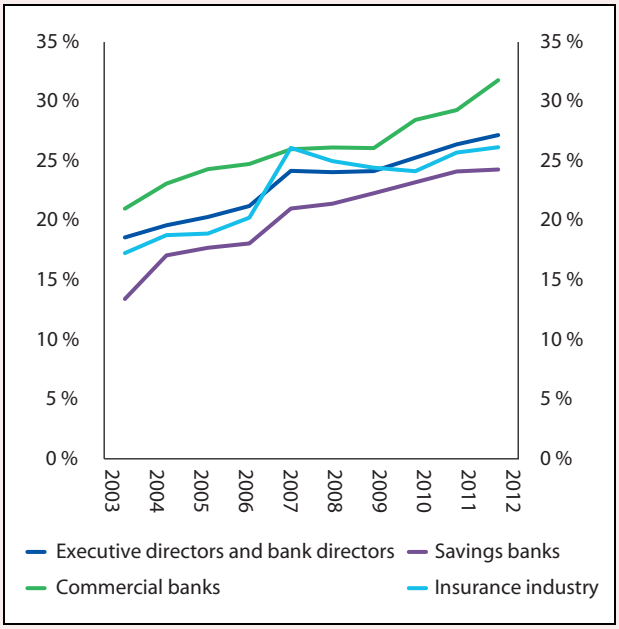


Figure 2.3 Share of female bank directors and executive directors in banks and insurance companies

Source: Finans Norge/Statistics Norway

Some 121 enterprises provide insurance products in the Norwegian market. Of these, 100 focus on non-life insurance products. The non-life insurance sector features a relatively large proportion of foreign branches. Measured by total assets, foreign branches accounted for around 30 per cent of total activity in the non-life insurance sector.

At the end of 2012, there were 21 life insurance companies in the Norwegian market, one less than in 2011. Of these 21 companies, 12 were Norwegian, while the rest were smaller branches of foreign institutions. The assets of the life insurance companies totalled approximately NOK 993 billion.

There are 88 pension funds in the Norwegian market, with total assets of about NOK 220 billion. Acording to a report from AFF (Administrativt forskningsfond ved Noregs Handelshøgskule), the share of female leaders in business increased from 21,5 pct. to 31.4 pct. in the period 2002 to 2011. The numbers for the financial sector followed the same trend. The share of females in leading positions at banks and insurance companies increased from 18.6 pct. to 27,2 pct. in 2012, see Figure 2.3. Among banks and insurance companies, retail banks have the highest share of female leaders at 31.8 pct. Retail banks have had the highest share of female leaders throughout the period.

One feature of Norway's economic development is strong growth in house prices and household debt. High income growth over many years, low interest rates, easy access to bank credit and high immigration have intensified pressure on the housing market in central parts of the country. House prices continue to grow rapidly. The rise in house prices has been accompanied by a rise in Norwegian household borrowing; see the discussion in section 2.4.2. Compared to income, debt is at a historically high level.

Monetary policy flexibility is limited by low key policy rates among Norway's trading partners. Norway's key policy rate has remained at 1.5 per cent since March last year, when the rate was cut by 0.25 percentage points. Along with high income growth, the low interest rate level is supporting high household demand. Growth in such demand slowed towards the end of last year. Although household income growth remains high, it appears that a larger proportion of income was invested in saving in the form of housing investment.

Higher activity levels in the mainland economy are reflected in the labour market. Employment has been rising since the first half of 2010. In the past 12 months, growth has largely occurred in the private sector, with a major contribution by labour immigration. In total, 3.2 per cent of the workforce was unemployed in 2012.

In the National Budget 2013, the Ministry of Finance expected mainland Norway GDP growth of 2.9 per cent this year. Due to lower activity levels in the mainland industry and among export-focused companies, growth has probably been lower. The Ministry of Finance will present a new forecast in the revised national budget in May.

2.4 Banks and other credit institutions

This section contains a review of different risk factors applicable to banks and other credit institutions, and of solvency and earnings development among the institutions.

2.4.1 Liquidity risk

The term liquidity risk denotes the risk that a participant in the economy is unable to meet liabilities upon maturity, despite being solvent. Participants are deemed to be solvent when the value of their assets is higher than the value of their liabilities, i.e. when they have positive net assets.

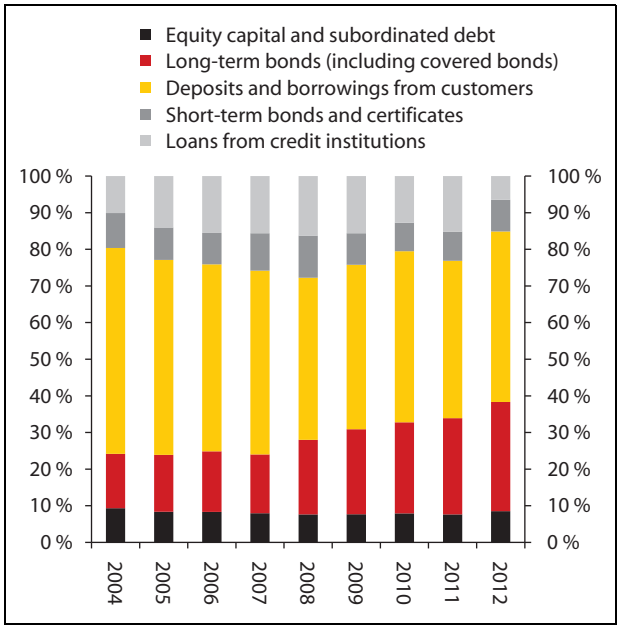


Figure 2.4 Composition of funding of banks and mortgage companies. Percent of total assets

Source: Finanstilsynet

Liquidity risk may arise when the maturity structures of assets and liabilities are mismatched.

Since banking largely involves funding long-term, illiquid loans or other illiquid assets through liquid deposits, banks are particularly exposed to liquidity risk. If banks are also funding long-term loans or other illiquid assets through short-term borrowing in the market, their liquidity risk may increase.

The funding structure of *banks and mortgage companies* is illustrated in Figure 2.4. Funding derived from customer deposits and borrowings from customers increased from 42 per cent of total funding in 2011 to 46 per cent in 2012. Increased household saving contributed to the rise in deposits, which are normally considered to constitute a stable funding source due to the Norwegian deposit guarantee scheme. Deposits from foreign funds also increased, although such deposits must be considered less stable.

Long-term bonds, including covered bonds, accounted for a higher proportion of total funding in 2012; see the figure. Such funding now represents approximately 30 per cent of the total funding of banks and mortgage companies. Loans from other credit institutions have fallen from 15 per cent in 2011 to 6 per cent in 2012.

Banks and mortgage companies have substantial funding in foreign currencies that will fall due for repayment in the next few years; see Figure 2.5. Accordingly, banks and mortgage companies

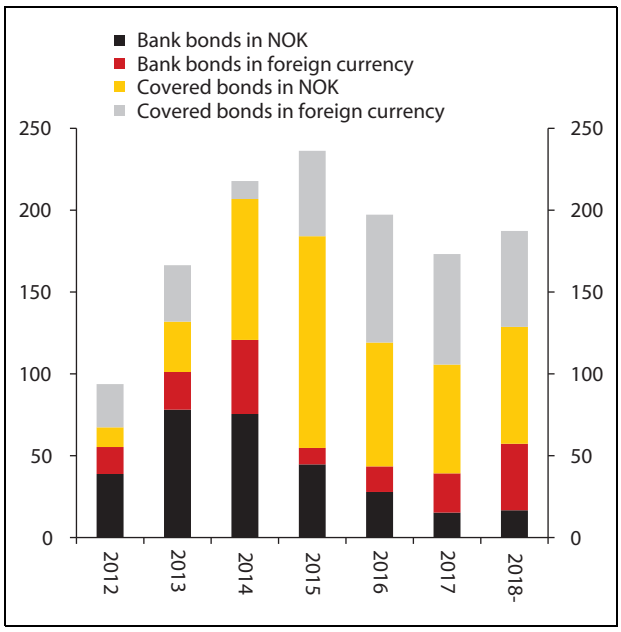


Figure 2.5 Senior bond debt apportioned by maturity and currency as at 16 April 2012. NOK billion

Source: Finanstilsynet

experiencing relatively rapid lending growth are vulnerable to disturbances in funding access.

A large and growing proportion of bank and mortgage company debt is taking the form of covered bonds. One reason for the emergence of these securities is that banks have found it profitable to sell off residential mortgages with good security to mortgage companies that can issue covered bonds, while retaining riskier assets on their own balance sheets. One result of this is that, in a crisis, the mortgage companies will have reduced access to assets which they can collateralize to secure funding.

2.4.2 Credit risk

Loans comprise approximately 80 per cent of the total assets of banks and residential mortgage companies, and credit risk is normally the most important risk factor for these credit institutions. Credit risk is strongly linked to the ability and willingness of Norwegian households and businesses to pay interest and make repayments, and to developments in the value of housing and other mortgaged property.

The ability of *households* to service debt can be measured by the debt and interest burdens. The debt burden can be defined as debt as a percentage of disposable income,[1] while the interest burden is interest expenditure as a percentage of disposable income. Growth in household debt exceeded income growth for much of the 1990s and 2000s, thus increasing the debt burden. The debt burden has levelled off in the wake of the financial crisis, but has subsequently increased again. The debt burden is currently about 200 per cent; see Figure 2.6. In recent years, high household income growth has slowed debt burden growth somewhat.

The interest burden is relatively low, but vulnerable to changes in interest rates. There is a risk that many households will find it difficult to absorb a major interest rate rise. In a stress test, Finanstilsynet calculated that, given the current household debt burden, a borrowing rate of 6.7 per cent would impose an interest burden of more than 30 per cent on households who are representing a quarter of total household debt. Such an interest rate rise could therefore have a material effect on household demand; see Box 2.2.

Conditions in the housing market influence demand for, and the supply of, loans to households. House prices have risen substantially in the last 20 years; see Box 2.3. Over time, high house prices will contribute to increased demand for loans to households, as a large proportion of household debt is incurred to purchase residential property. Optimism may also contribute to high credit demand from Norwegian households. For example, solid income growth for Norwegian wage earners, expectations of continued low inter-

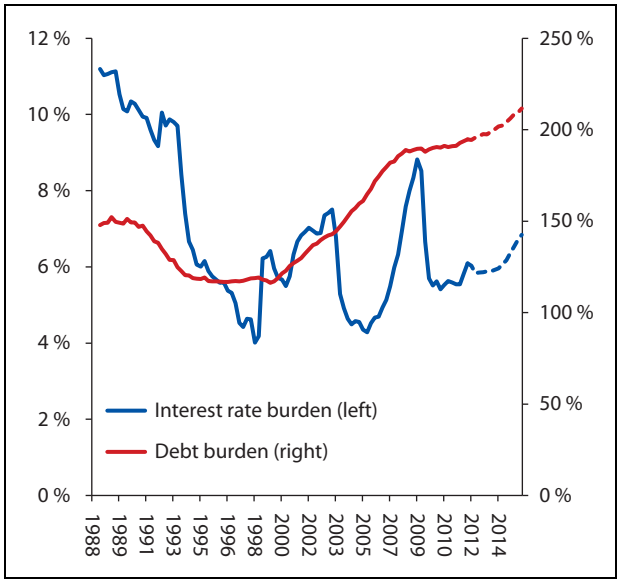


Figure 2.6 Household debt burden (right axis) and interest burden (left axis)

Source: Norges Bank

[1] Income after tax and transfers.

Box 2.2 Interest rate rises and demand for goods and services

A rise in interest rates influences overall demand in the economy through various channels. One of these channels is changes in household demand for goods and services. Households have assets and liabilities. The majority of Norwegian household debt takes the form of variable rate loans. Those who have such loans must pay more interest and reduce consumption of goods and services when interest rates rise. High debt growth in recent years means that a rise in the interest rates charged on household borrowings may have a greater effect on household demand.

At the end of 2012, total household debt amounted to approximately NOK 2,300 billion, while total disposable income totalled around NOK 1,200 billion. If interest rates rise by, for example, 3 percentage points, households will have to pay about NOK 69 billion per year in additional interest on their debts. Total demand for goods and services will not automatically drop by the same amount, but the figure does illustrate that high indebtedness can have a major effect on household demand, which in turn may affect business earnings.

est rates and favourable developments in the labour market may boost demand. Optimism may also contribute to expanded credit supply. In recent years, there has been intense competition for customers in the residential mortgage market, whilst banks have enjoyed good access to funding in the capital market. Those who are already established in the housing market may take advantage of the rise in house prices by taking up further loans. An increase in the value of housing may cause households to be offered expanded borrowing on their homes, as the value of the banks' security increases. In recent years, competition for customers has been strong in the residential mortgage market, and credit institutions have had reliable access to funding from the capital markets.

Since 1994, Finanstilsynet has conducted surveys of banks' lending practices relating to loans secured on residential property. The most recent survey was carried out in July and August 2012. It covered the 28 largest banks, which account for about 85 per cent of all residential mortgages issued by banks.

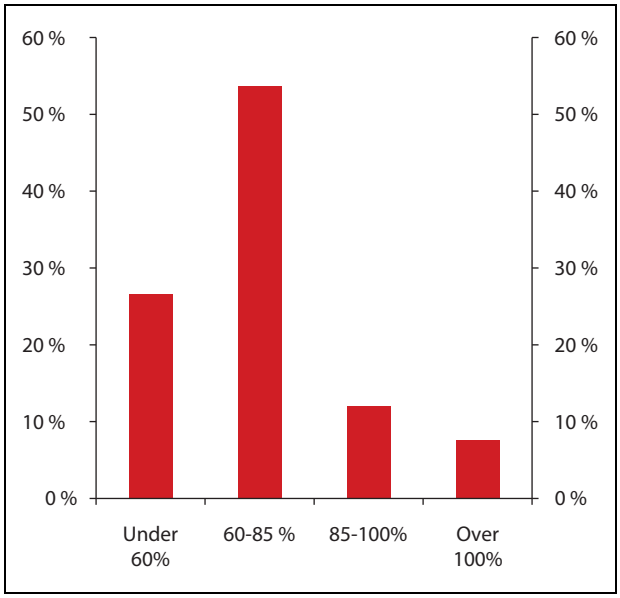


Figure 2.7 Distribution of new residential mortgages by loan-to-value

Source: Finanstilsynet

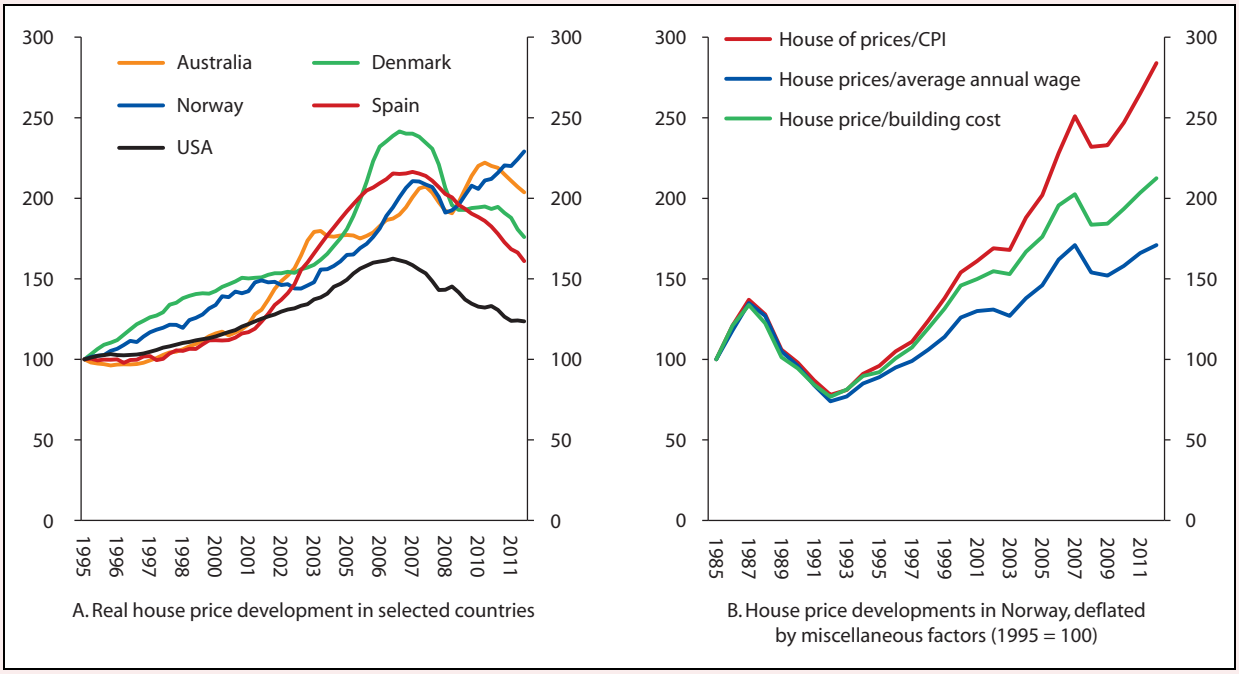
Some 40 per cent of all residential mortgages were issued for house purchases, while 60 per cent were issued for other purposes, including refinancing of residential mortgages.

The average loan-to-value (loan amount relative to property value), for new residential mortgages was 51 per cent, while 17 per cent of loans had a loan-to-value of more than 85 per cent of the property value; see Figure 2.7. In the 2011 survey, by contrast, 26 per cent of loans had a loan-to-value above 90 per cent. Particularly loans to borrowers under 35 years of age have a high loan-to-value. The 2012 survey showed that 43 per cent of loans to borrowers under 35 years of age had a loan-to-value above 85 per cent, while 19 per cent of loans to this group exceeded the property value.

When house prices fall, the value of banks' security for existing residential mortgages also falls. This may cause the banks to restrict the supply of new loans. However, demand for new loans may also drop because houses become cheaper and because turnover in the housing market may fall. A strong decline in house prices may reduce household demand for goods and services, as net wealth shrinks. Accordingly, a drop in house prices can affect the earnings of non-financial enterprises.

When household finances weaken, households often give priority to repaying their mortgage debt and restricting consumption and other expenditure. This occurred in Norway during the

Box 2.3 Housing market developments



A. Real house price development in selected countries

B. House price developments in Norway, deflated by miscellaneous factors (1995 = 100)

Figure 2.8 Real house price developments in selected countries and house price developments in Norway, deflated by miscellaneous factors (1995 = 100)

Sources: Federal Reserve Bank of Dallas, OECD, Statistics Norway and Ministry of Finance

Norwegian house prices rose by about 8 per cent in 2012, compared to 9 per cent in 2011. The growth rate has remained high thus far in 2013. In January alone, house prices rose by about 5.3 per cent. Adjusted for inflation – real house prices – house prices are now at an all-time high. In the years preceding the international financial crisis, house prices increased in very many countries, not least due to low interest rates and high optimism. Following the financial crisis, house prices have fallen in many countries; see Figure 2.8A.

The supply of residential properties in Norway is higher today than in 1995. The explanation for the increase in house prices in Norway since 1995 must therefore be that, overall, demand has increased by more than supply. High, increasing population growth, migration, low unemployment, solid wage inflation and low interest rates are all factors that may help to explain the rise in demand.

However, how much households are willing to pay for a home is not only determined by such fundamental factors, but also by households' belief about the future. A belief in future price inflation may prove self-fulfilling. Surveys[1] show that when house prices rise, people increasingly expect the price rise to continue.

Economic theory indicates that houses are constructed when the price of a newly built home exceeds the building cost and the alternative value of the plot of land. House prices in central parts of Norway are now high compared to building costs, and the difference is increasing; see Figure 2.8B. High house prices around large cities are triggering high levels of construction activity. Over time, this activity will bring about an increase in the supply of homes relative to demand, and thus dampen house price inflation. Residential property construction takes time, and capacity limitations both in the construction industry and on the part of the regulatory authorities may mean the lapse of many years from when a demand shock is felt until its effect on the supply side passes.

[1] Gelain, P. & K.J. Lansing (2013), «House prices, expectations, and time-varying fundamentals», *Norges Bank Working Paper 05*.

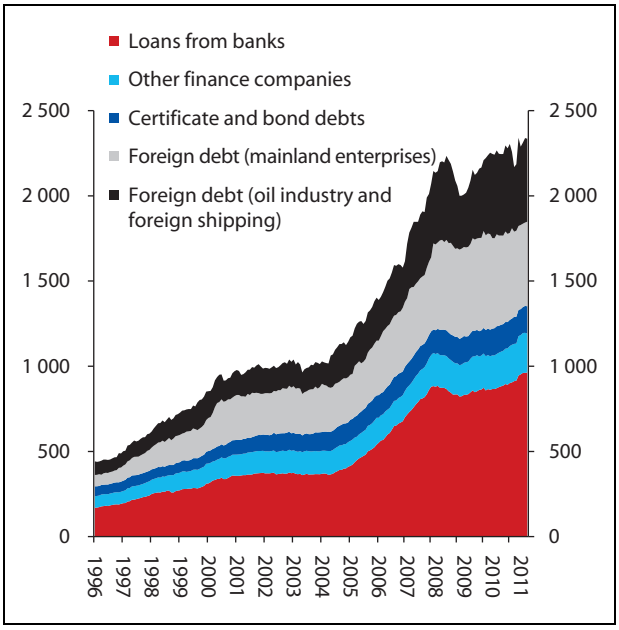


Figure 2.9 Commercial debt by source. Balance. NOK billion

Source: Norges Bank

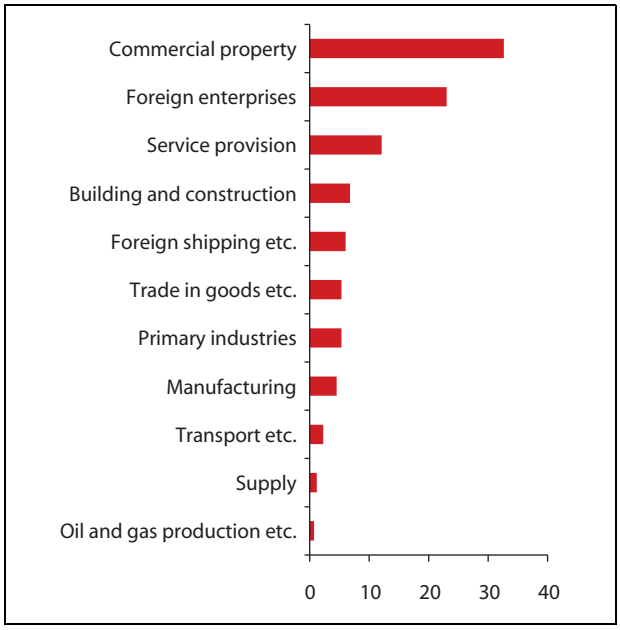


Figure 2.11 Bank lending to different industries. Percentage of total loans to enterprises

Source: Norges Bank

banking crisis of the early 1990s, and is currently happening in many European countries. During periods of financial distress, bank losses on residential mortgages may therefore be relatively small, even though many households carry large debt burdens. However, such an imbalance in the financial position of households may nevertheless affect banks because it increases bank losses on commercial loans.

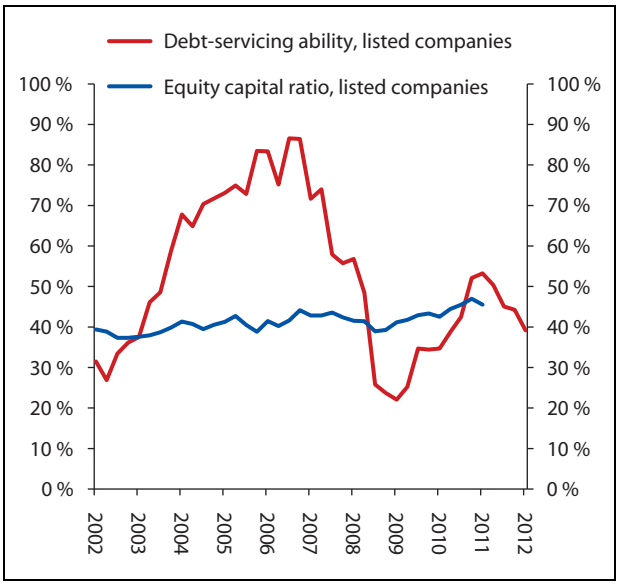


Figure 2.10 Debt-servicing ability and equity capital ratio of listed companies

Source: Norges Bank

The ability of *enterprises* to service debt is vulnerable to economic developments both in Norway and internationally. The debts owed to banks by enterprises have increased considerably in recent years; see Figure 2.9. Commercial loans account for approximately 40 per cent of total lending by banks and mortgage companies.

Norges Bank's lending survey shows that banks tightened credit supply to enterprises in 2012. Regarding loans to enterprises engaged in commercial property, which account for about 30 per cent of commercial loans, the credit supply has become relatively more tightened. Banks point to concerns about the equity capital ratio as the most important reason for the cut-back.

In most industries, the debt-servicing ability of enterprises (profits as a percentage of bank and bond debt), has fallen in recent years. Figure 2.10 illustrates the trend for listed companies as a whole. Debt-servicing ability provides an indication of the ability of enterprises to handle weaker earnings without affecting creditors. The equity capital ratios (net assets as a percentage of the balance sheet total), of enterprises have remained close to 40 per cent since 2002.

A large proportion of total bank lending to enterprises comprises loans to enterprises engaged in shipping or commercial property; see Figure 2.11. Commercial property and shipping are industries vulnerable to economic fluctuations.

Commercial property operations are sensitive to fluctuations in the domestic economy. The office segment is the largest in the context of commercial property lending, and the real prices of office premises and office rent in Oslo, for example, have correlated with the Norwegian employment rate for the last 30 years. If unemployment were to rise in Norway, there is good reason to believe that profitability in the commercial property sector would decline.

In the shipping industry, the risk profile varies for different sub-segments, although the earnings of shipping companies as a whole are sensitive to global economic developments. The industry has been affected by the current international unrest. Freight prices in several sub-segments have fallen since 2011, due to excess capacity. Lower freight prices mean lower profitability and poorer debt-servicing capacity in the shipping industry.

2.4.3 Solvency and earnings

The capacity of *banks* to absorb losses without depositors and other ordinary creditors incurring losses depends on the level and quality of banks' tier 1 capital and other capital. The capital adequacy rules provide that tier 1 capital shall constitute no less than 4 per cent of risk-weighted assets, and that total capital (capital as a percentage of risk-weighted assets), shall constitute no less than 8 per cent; see the discussion in Chapter 3. All Norwegian banks met the minimum requirements with a good margin at the end of 2012. Weighted by bank size, the average capital adequacy rate was 13.3 per cent at the end of 2012, up 1.1 percentage points on the previous year.

Since the international financial crisis, CET1 capital coverage – i.e. where subordinated loan capital and hybrid capital instruments (instruments with properties common to both debt and equity), are deducted – has been used more frequently as a measure of bank solvency. Finanstilsynet stipulated that all Norwegian banks should have CET1 capital coverage of at least 9 per cent by the end of the first half of 2012. The conclusion is that all except three banks achieved the target before the deadline, and that all banks did so by the end of 2012.

Figure 2.12A illustrates the fact that Norwegian banks have strengthened their solvency in recent years. For banks as a whole, CET1 capital coverage has risen evenly since 2008, and totalled 11.1 per cent at the end of 2012. This is 1.2 percentage points higher than at the same time in 2011. The figure also shows how much CET1 capital the banks have as part of their non-risk-weighted total assets. The difference between these two measures of solvency indicates that

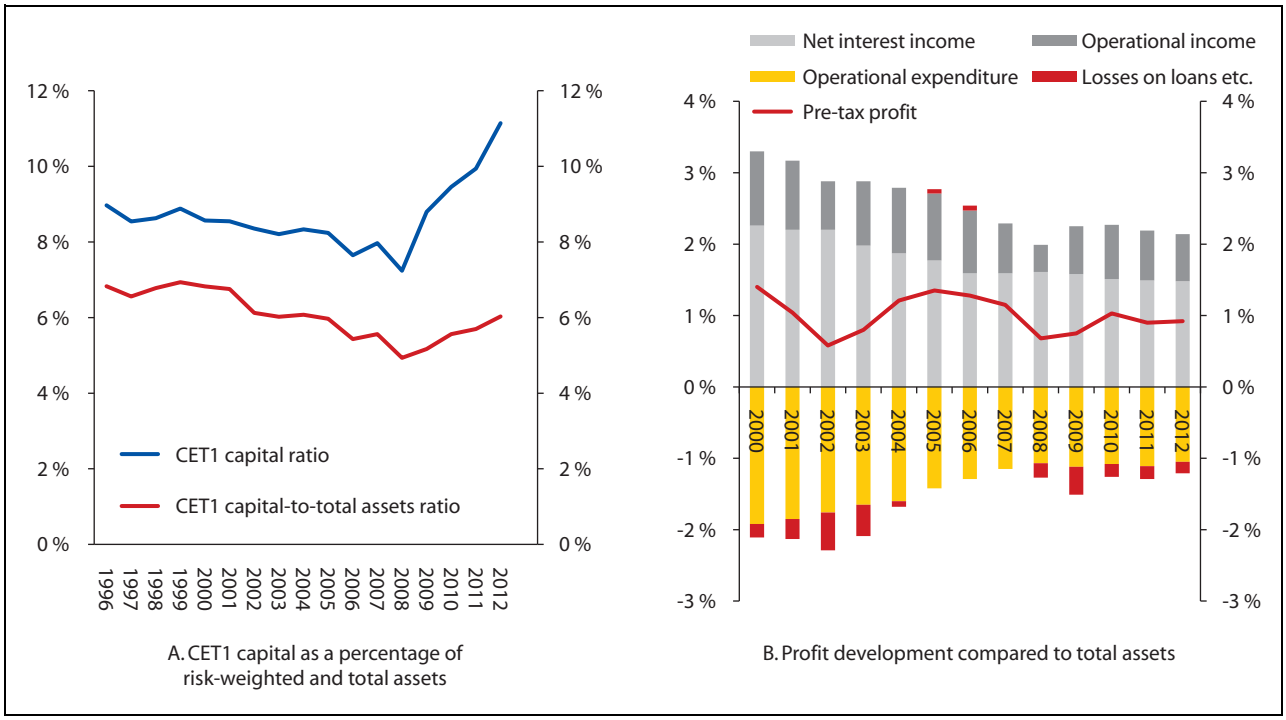


Figure 2.12 CET1 capital as a percentage of risk-weighted assets and total assets and Profit development compared to total assets

Source: Finanstilsynet

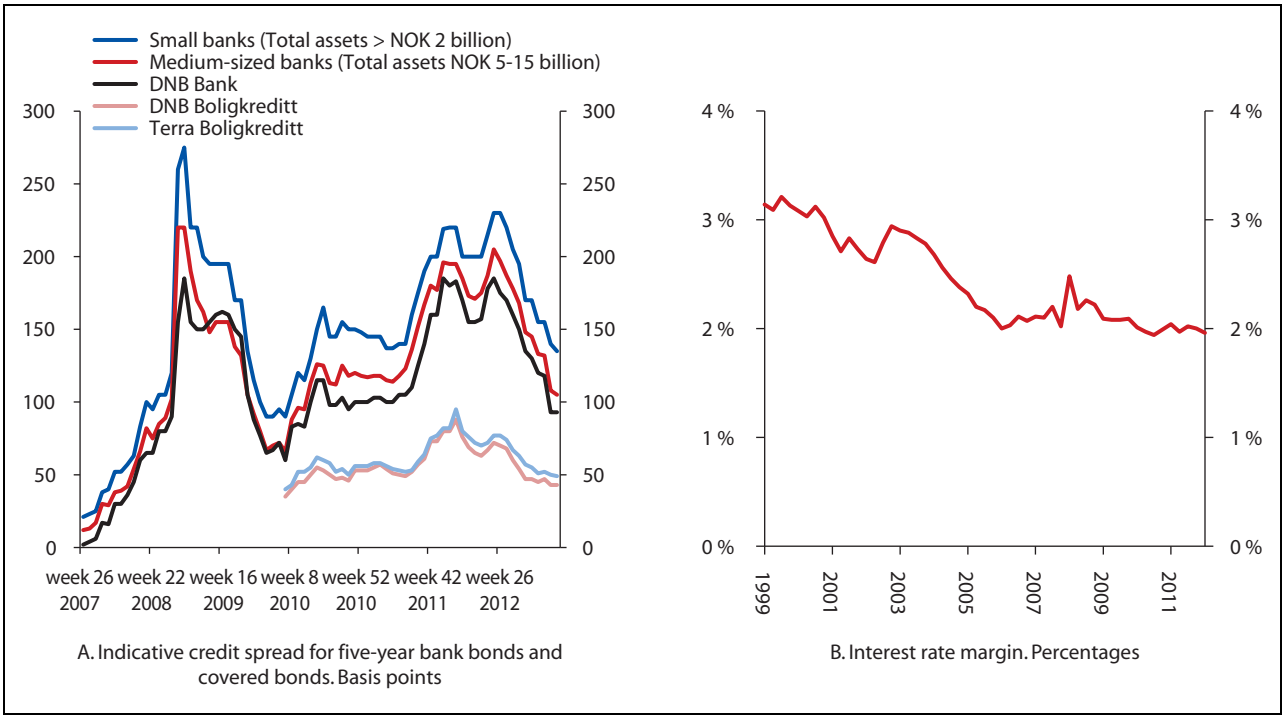


Figure 2.13 Indicative credit spread for five-year bank bonds and covered bonds and Interest rate margin

Sources: Finanstilsynet, DNB Markets

asset growth has outstripped increases in capital requirements. The difference has increased over time, and has never been greater than at the end of 2012. The increase in the difference may indicate that banks are reorienting the industry towards loans that are given a lower weighting in the calculation basis for capital requirements, for example by lending more for residential purposes and less to enterprises.

Banks improved their solvency in 2012 by obtaining capital from the market and retaining a proportion of earnings. Banks achieved total pre-tax profits of some NOK 37 billion, approximately NOK 4 billion more than in the previous year.[2] Compared to total assets, the 2012 results were on a par with the average for the last 10 years; see Figure 2.12B. The improvement in profits was primarily linked to an increase in net interest income, banks' most importance source of income.

Credit premiums on bank debt have fallen; see Figure 2.13A. As a result, banks have access to cheaper funding. Despite the fact that prices have fallen considerably, Norwegian banks still face higher funding costs in securities markets than before the financial crisis. The interest rate margin, i.e. the difference between the average lending and deposit rates, also dropped in 2012; see Figure 2.13B.

The implementation of the Basel III standards in EEA law and in Norway will introduce higher minimum capital adequacy requirements than the currently applicable requirements; see discussion in Chapter 3. Even though Norwegian banks are well on the way to meeting these future minimum requirements, it is important that they continue to improve their solvency.

Because banks largely transfer their loan portfolios to mortgage companies, there has been a large increase in the number of loans held by mortgage companies. Around 60 per cent of all Norwegian residential mortgages are now accumulated in residential mortgage companies that issue covered bonds.

Mortgage companies (excluding Eksportfinans ASA), experienced lower profits in 2012 than in 2011, primarily due to a drop in net interest income. As share of total assets, pre-tax profits declined from 0.47 per cent in 2011 to 0.27 per cent in 2012. Mortgage companies obtain most of their funding through the issue of covered bonds. Although the costs of covered bond-based funding fell in 2012, the drop in interest income was larger.

Mortgage companies improved their solvency in 2012. Mortgage companies that issue

[2] Two smaller banks made losses in 2012.

covered bonds and are wholly owned by a bank increased their CET1 capital coverage from 10.2 per cent to 12.2 per cent in 2012. Mortgage companies that issue covered bonds and are part-owned by several banks increased their CET1 capital coverage from 9.9 per cent to 10.6 per cent during 2012. Mortgage companies that do not issue covered bonds also increased their CET1 capital coverage by a couple of percentage points in 2012.

Finance companies achieved pre-tax profits of approximately NOK 2 billion in 2012, a slight improvement 2011. This profit growth is linked to an increase in net interest income. At the end of 2012, finance companies had CET1 coverage of 15.7 per cent, down 0.6 percentage points on the previous year.

2.5 Insurance and pensions

This sub-section contains a review of different risk factors particular to the insurance and pension industries, and of solvency and profit developments among institutions in this part of the financial market.

2.5.1 Insurance risk

Life insurance companies and pension funds promise insured persons a payment when a defined event occurs, for example that the insured person becomes incapable of work or reaches the required age for entitlement to a retirement pension. The monetary values of these promises constitute the most important liabilities of life insurance companies and pension funds.

At the individual level, it may be highly uncertain whether a certain event will occur or not. Insurance companies reduce the uncertainty associated with individual persons by having many customers. Their residual liability risk is largely linked to whether more people become incapable of work or whether the insured persons, on average, live longer than assumed. This risk is also linked to the type of insurance the insured person has. In the case of defined benefit schemes, unlike defined contribution schemes, the companies have often promised to provide a lifelong retirement pension. If the insured persons live longer than assumed when the premiums were paid in, the insurance companies must cover the shortfall.

Life expectancy is rising in Norway. The assumptions regarding life expectancy (the death basis, referred to as the K2005 basis), that have been applied to collective pensions in recent years have not been adapted to changes in the life expectancy of the insured persons. Finanstilsynet therefore proposed in March 2013 that life insurance companies and pension funds be required to comply with a new minimum death basis requirement from 2014. The new minimum requirement is intended to ensure that life insurance companies and pension funds allocate sufficient capital to deal with increased life expectancy; see Chapter 3 for further discussion. In practice, the new minimum requirement will mean that companies have to increase premiums for retirement pensions in collection pension schemes. The financial allocations to previously accrued retirement pension entitlements in collective schemes will also have to be increased. Companies may use any profits on the management of customer funds (returns on the collective portfolio in excess of the interest rate guaranteed to customers), to fund up to 80 per cent of the increase in allocations (reserve-building). The remaining 20 per cent have to be covered from the companies' own funds.

The power of companies to use customers' excess profits to fund reserve-building is limited in time, and applies to profits in the period 2014–2019. Figure 2.14 illustrates the size of the returns on customer funds the companies require during this period to make full use of the power to use customer profits (the upper dashed line), compared to the average guaranteed interest rate, historical book returns achieved by life insurance companies and the interest rate on 10-year Norwegian and European government bonds.[3]

This return that companies must achieve does not include the return they must achieve on customer funds in order to meet their interest rate guarantee (without reducing their net assets).

[3] In Figure 2.13, it has been assumed that life insurance companies have not built up reserves before 2013. In reality, this is incorrect, meaning that the returns they have to achieve are lower than shown in the figure. Further, it has also been assumed that life insurance companies will utilise the maximum amount permitted of customer funds to build up reserves (80 per cent of total reserves). If they contribute a larger proportion, the short-term return will also shrink.

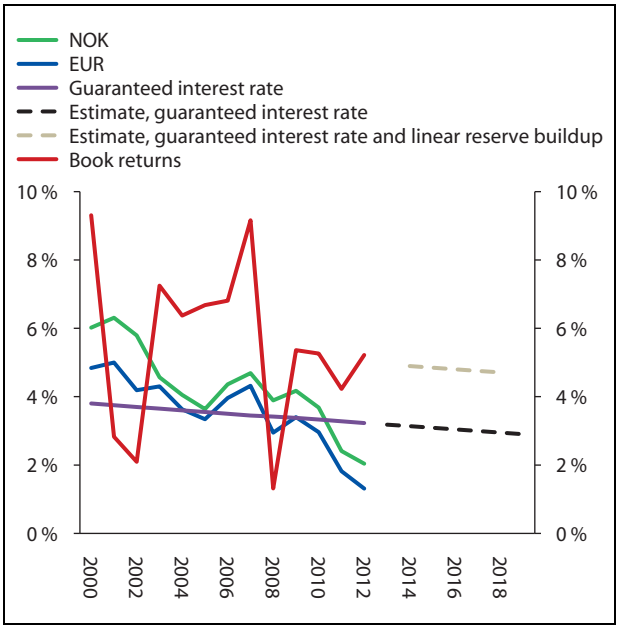


Figure 2.14 Development in average interest rate guarantees among Norwegian life insurance companies and interest rates on 10-year government bonds in Norway (NOK) and the Eurozone (EUR)[1], book returns on assets and estimates of guaranteed returns and reserve-building needs.

[1] Bonds with a AAA rating.

Sources: Finanstilsynet, Ministry of Finance

2.5.2 Market risk

Under the operating rules in the Insurance Activities Act, which has been in force since 2008, customers that have purchased collective pension products entitling them to contractual payments are required to make annual pre-payments for the management of the funds linked to the insurance contract. Insurance companies bear market risk, as they have guaranteed customers a return on their funds (an interest rate guarantee), and this must also be compensated for through customer premiums. It is therefore important that companies charge a sufficiently high price for this interest rate guarantee, and that they use their income to build up adequate net asset buffers for the years in which customer portfolio returns are lower than the interest rate guarantee.

The interest rate guarantee is different in the case of paid-up policies and individual insurance contracts concluded before 2008. Companies cannot collect interest rate guarantee premiums for these products, and instead receive their income by sharing profits on capital with customers.

The returns on customer funds guaranteed in contracts for which premiums cannot be amended mean that life insurance companies and pension funds are particularly exposed to market risk, i.e. the risk of gains or losses due to changes in the market prices of assets.

Market interest rates have fallen in recent years, particularly for low-risk securities. On average, market interest rates on government bonds are now lower than the average interest rate guarantee; see Figure 2.14. Important reference rates such as the money market rate and key policy rate are low, and are expected to stay low for some time; see Figure 2.15. With a prolonged low interest rate level, companies will find it difficult to achieve sufficient returns in accordance with the interest rate guarantee.

The market risk faced by life insurance companies has been linked more to the development of bonds and certificates. While the proportion of shares in asset portfolios has fallen, it has risen in portfolios of interest-bearing securities; see Figure 2.16.

The returns received by insurance companies and pension funds on the funds in their customer portfolios vary from year to year; see Figure 2.14. To even out profit and loss fluctuations, companies may, for example, record fixed-income securities at cost price (amortised cost). This requires companies to plan to keep the securities until maturity. One consequence of this valuation method is that if interest rates drop and the market price of interest receivables rises, companies may receive a higher annual return on their

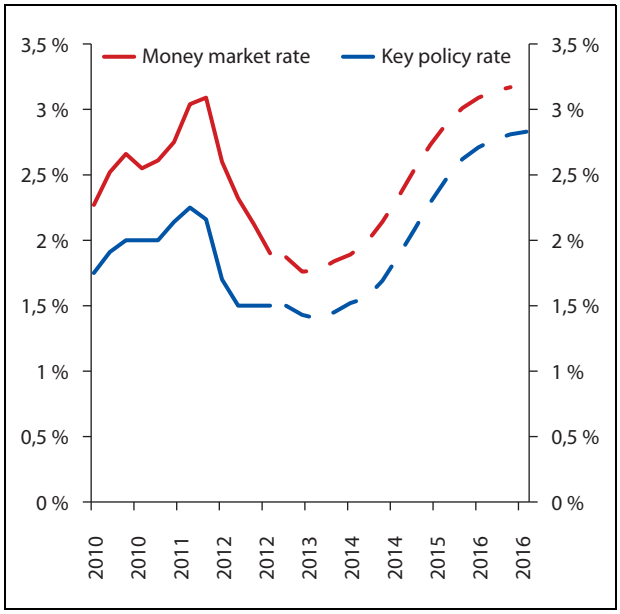


Figure 2.15 Money market rate and key policy rate. Estimates for both. From Monetary Policy Report 1/13

Source: Norges Bank

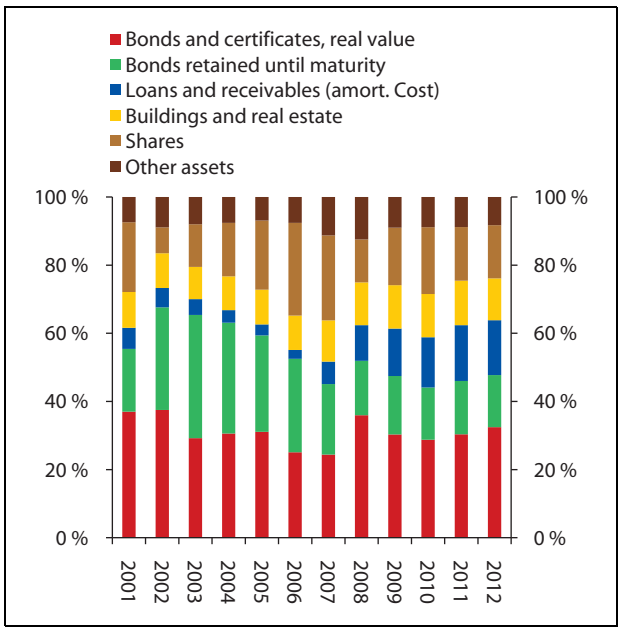


Figure 2.16 Life insurance company assets. Proportion of total funding

Source: Finanstilsynet

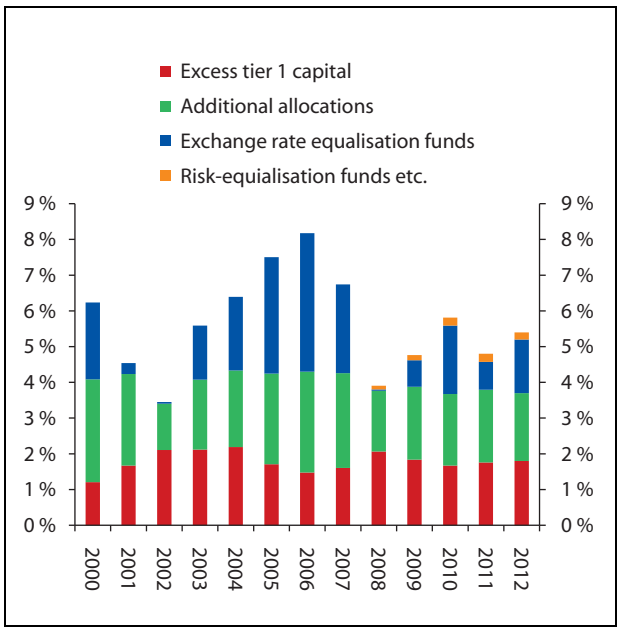


Figure 2.17 Buffer capital developments. Percentage of total assets

Source: Finanstilsynet

receivables in some years than the market interest rate would suggest. As older interest receivables mature and new ones are bought, however, it will become difficult for companies to achieve a higher interest rate than the ordinary market rate.

2.5.3 Solvency and earnings

In 2012, *life insurance companies* achieved pre-tax profits of NOK 5.1 billion, up from NOK 3.5 billion in 2011. The adjusted pre-tax 2012 profit (taking account of unrealised share gains), was NOK 13.4 billion.

Buffer capital expresses the ability of life insurance companies to absorb losses without breaching stipulated minimum capital requirements. Buffer capital – the capital buffer exceeding the stipulated minimum requirements – is composed of net assets and customer funds. The buffer capital of life insurance companies amounted to 5.5 per cent of total assets at the end of 2012, around 0.7 percentage points higher than in 2011; see Figure 2.17. This rise is primarily due to an increase in exchange rate equalisation funds, reflecting unrealised changes in the market value of assets included in collective portfolios.

The capital adequacy rate of the companies as a whole was 16.2 per cent at the end of 2012, representing a small increase on 2011. The capital adequacy requirement applicable to life insurance companies, like that applicable to credit institutions, is 8 per cent. All companies meet the requirement.

Finanstilsynet conducts regular stress tests to measure buffer capital utilisation, i.e. how much buffer capital has to be used to cover losses in a given stress scenario. At the end of 2012, the buffer capital utilisation of life insurance companies as a whole totalled 79 per cent, 24 percentage points lower than in 2011.

In 2012, *pension funds*[4] achieved pre-tax profits of NOK 5 billion, equivalent to about 2.5 per cent of their average total assets. Most of the increase in profits is due to an increase in net financial income. Growth in the securities markets led to an improvement in adjusted and booked returns on pension funds' collective portfolios; see Figure 2.18.

The buffer capital of pension funds totalled NOK 22.8 billion at the end of 2012, corresponding to 11.1 per cent of total pension fund assets. This increase of approximately 2 percentage points is mostly due to positive developments in financial income in excess of guaranteed interest rates, and resulted in an increase in exchange rate equalisation funds.

At the end of 2012, pension funds had a total capital adequacy rate of 16.5 per cent, around 0.7

[4] These figures for pension funds are based on a selection representing around 93 per cent of total pension fund assets.

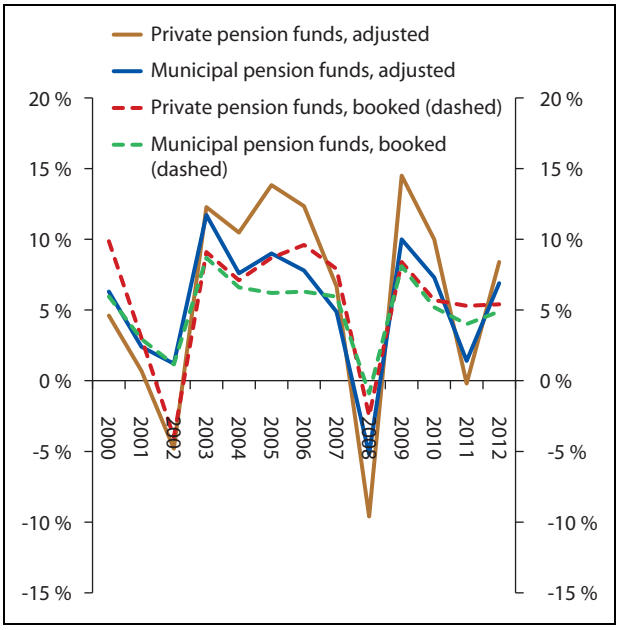


Figure 2.18 Adjusted and booked (dashed) returns on collective portfolios, private and municipal pension funds. Percentages

Source: Finanstilsynet

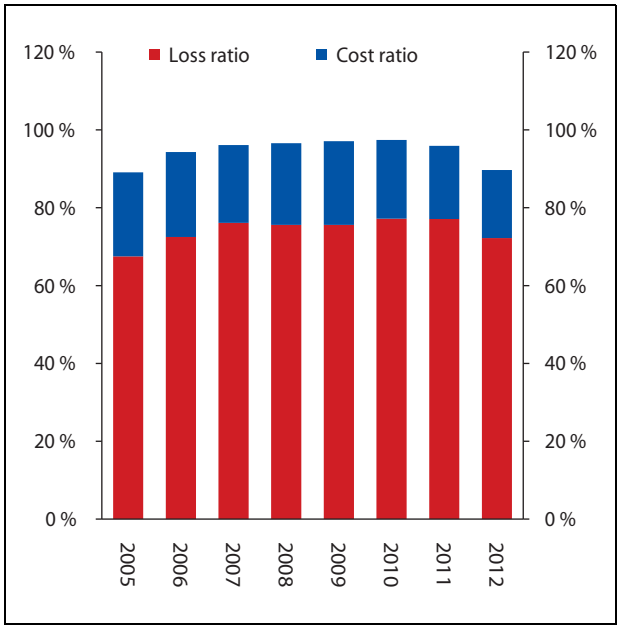


Figure 2.19 Development of the cost and loss ratios of non-life insurance companies

Source: Finanstilsynet

percentage points lower than in 2011. All pension funds met the capital adequacy requirement of 8 per cent at the end of 2012. Total buffer capital utilisation by pension funds fell from 82 per cent at the end of 2011 to 71 per cent at the end of 2012.

Life insurance companies and pension funds face substantial challenges connected to rising life expectancy and low interest rates. As the Ministry of Finance has emphasised in its financial markets reports for several years, it is very important than life insurance companies and pension funds ensure that risk and solvency are balanced with a good margin of safety.

Non-life insurance companies achieved pre-tax profits of NOK 7.1 billion in 2012, about NOK 4 billion more than in the previous year. The profits shown in the technical accounts (profits on insurance activities), rose by 38 per cent. This is because premium income increased by approximately 7 per cent at the same time as compensation costs fell slightly. Simultaneously, net financial income rose from around NOK 2 billion in 2011 to NOK 4.5 billion in 2012.

The "combined ratio" specifies total compensation and other insurance-related operating costs as a percentage of premium income. It expresses the profitability of insurance operations, i.e. how much of their expenses non-life insurance companies can recover through their premiums. If the combined ratio is greater than 100 per cent, a company must have other income to break even, such as financial income. In 2012, the combined ratio for non-life insurance companies totalled almost 90 per cent, a drop from around 96 per cent the previous year; see Figure 2.19. Both the loss ratio (compensation payments as a percentage of premium income), and the cost ratio (operating costs as a percentage of premium income), fell. The drop in the cost ratio accounted for most of the decline in the combined ratio.

Overall, the solvency of Norwegian non-life insurance companies was relatively good in 2012. Buffer capital utilisation totalled 41.8 per cent, compared to 55.4 per cent at the end of 2011.

2.6 Investment firms

Investment firms that are not banks achieved operating income of NOK 5.5 billion in 2012, approximately NOK 0.8 billion less than in the previous year. In 2012, the most important income sources for investment firms that are not integrated into banks were corporate finance (issue and advisory services), active portfolio management on behalf of investors, and investment advice. Investment firms that are not integrated into banks achieved total operating profits of NOK 590 million in 2012. This is NOK 135 million more than in the previous year.

2.7 Further details of competition in the banking market

This sub-section takes a closer look at competition in the banking market.

Strong competition between suppliers may enhance the efficiency of the economy. It may also spur innovation and thus contribute to increased economic growth. The economy as a whole may benefit from stronger competition between banks, but the relationship between banking competition and economic growth is complex. If the economy is to reap the benefits of increased bank competition fully, it is important to keep an eye on the relationship between financial stability and bank competition, and whether there are possibilities of ensuring financial stability while keeping a high degree of bank competition.

International research indicates that there may be a link between competition in the banking market and financial stability.[5]

Some authors claims that a high degree of competition may harm financial stability when profit margins of banks' are squeezed, which in turn may spur bank risk-taking.[6] *Ceteris paribus,* reduced margins imply reduced interest rates on loans, which may induce higher household and enterprise debt. There is also claimed that a more decentralized market, makes it more difficult for regulators to assess the financial condition of the system as a whole, for instance because of uncertainty with regards to cascading effects between banks.

Other authors claim that the credit risk associated with bank loan portfolios is related to what profit margins the banks are operating with.[7] Increased competition between banks, which may imply lower interest rates on loans, can reduce the credit risk. Furthermore, more competition can make the regulators' jobs easier, as it constrain the growth of systemically important banks.

One potential characteristic of a highly competitive market is a high turnover of companies. Companies that are unable to handle the competition go bankrupt, and new companies can enter the market. This can also happen in the banking industry, although the effect may be less clear there than in other industries. Banks are subject to special rules that mean that the dynamism associated with competition and the flow of new companies in and out of the market is not as strong as in other markets. As a result, the market structure may, over time, differ from how it would have been in a different industry.

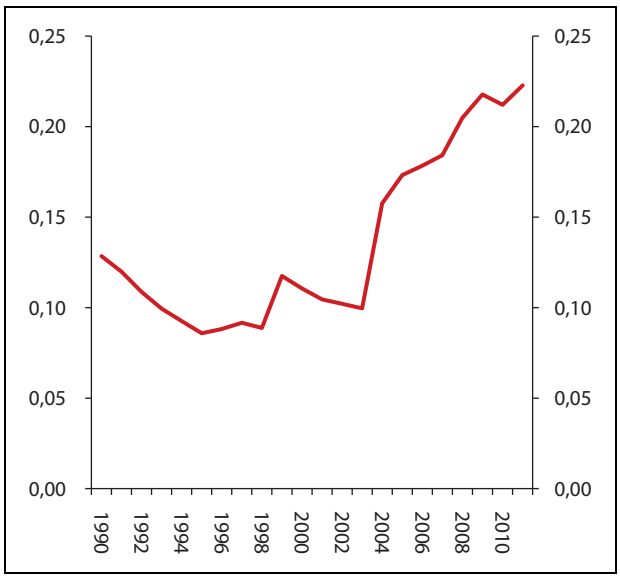


Figure 2.20 HHI trend based on market shares in total assets. Certain mortgage companies focused on specialised credit products, such as Eksportfinans and Kommunalbanken, are not included.

Source: Finanstilsynet

Assessing the degree of competition in the banking market is a difficult exercise. One helpful approach can be to combine different indicators. A frequently used measure of market concentration is the Herfindahl–Hirschmann Index (HHI), which equals the sum of the squared market shares of the suppliers in a market. A high HHI value shows that the market is relatively concentrated, a possible sign of lack of competition. An HHI value equal to 1 indicates a monopoly. An HHI value higher than 0.25 indicates that there is some degree of market concentration.[8] Even though the HHI does not indicate competition directly, economic research suggests a clear connection between the two variables.[9]

Figure 2.20 illustrates the HHI trend based on market shares in the total assets of the Norwegian

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5 *Canoy, M., M. van Dijk, J. Lemmen, R. de Mooij and J. Weigand. (2001). "Competition and Stability in Banking". The Hague, Netherlands: CPB Netherlands Bureau for Economic Policy Analysis.*

6 Keeley, M.C. «Depsoit insurance, risk and market power in banking» (1990). *American Economic Review, 80, 1183 - 1200*

7 De Nicolo, G and Lucchatta, M. «Bank Competition and Financial Stability. A General Equilibrium Exposition» (2013). *CESifo Working Paper Series No. 4123*

8 See, for example, the US Department of Justice and the Federal Trade Commission (2010), "Horizontal Merger Guidelines".

9 J.A. Bikker & K. Haaf (2002), "Competition, concentration and their relationship: An empirical analysis of the banking industry", *Journal of Banking & Finance, Vol 26, Issue 11.*

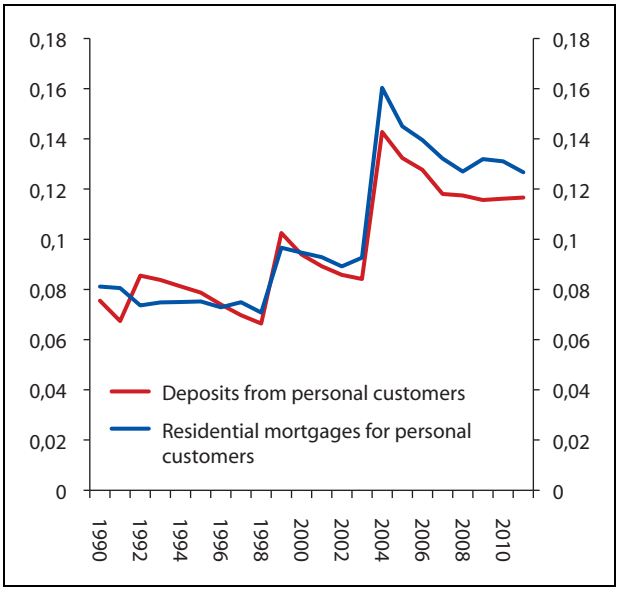


Figure 2.21 HHI for market shares for deposits from personal customers and residential mortgages for personal customers

Source: Finanstilsynet

banking market in the period 1990–2011. The figure shows that the market has become increasingly concentrated in the last 10 years, with the exception of a short period around 2009 when market concentration fell.

When constructing a measure like the HHI, it is very important to consider what types of market are being examined. In fact, Norwegian banks compete in many sub-markets. The differences between the various sub-markets may, for example, relate to products and geography, and it can be difficult to distinguish the markets from one another. Different measures of concentration are most useful when analysing homogenous products in a delimited area. Accordingly, measures of concentration that include total market shares in respect of customer groups as diverse as personal customers and large undertakings have deficiencies as measures of competition.

Figure 2.21 shows the HHI trend for two sub-markets in the personal customer segment, in which products must be considered relatively homogenous.[10] The graphs show that market concentration in the two markets peaked around 2004, and has subsequently fallen. Measured in this way, concentration in the markets for deposits from personal customers and residential mortgages for personal customers is relatively low. It can be noted that Figure 2.21 shows a different development trend than Figure 2.20. This may indicate that concentration in other parts of the banking market has increased quite substantially.

A further indicator of the degree of competition in the banking market is banks' average interest rate margins (interest income minus interest costs). All other conditions being equal, there is reason to believe that higher competition results in lower interest rate margins.

Figure 2.22 shows that the interest rate margin relative to average total assets has been declining for several years. One explanation may be that competition has increased. However, the trend must also be considered in the light of other factors. For example, the Norwegian economy has experienced a long-lasting boom. A low rate of loan defaults, rising mortgage security and a generally strong real economy may have caused credit risk to be viewed as falling for many years. If this view is taken, falling credit risk will affect what risk premium banks should demand on their loans. An argument in support of this view is the trend of the difference between the average bank lending rate and the interest rate on a 10-year government bond, which may indicate the risk premium on bank loans. This difference has declined from 3.6 per cent in 1990 to around 1.6 per-

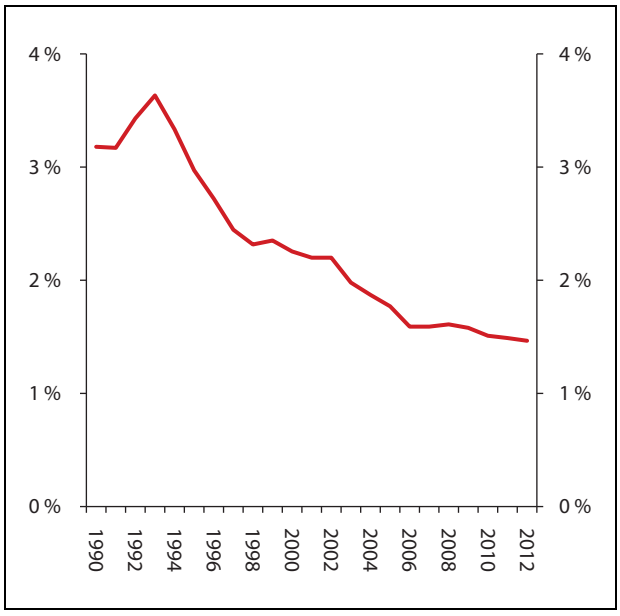


Figure 2.22 Trend of the interest rate margin (interest income minus interest costs). Percentage of average total assets

Source: Finanstilsynet

[10] There may nevertheless be grounds for believing that there is some degree of heterogeneity in the market for residential mortgages for personal customers. For example, local banks have greater knowledge about local conditions than national banks.

centage points in 2011, indicating that the risk premium has shrunk during this period.

However, falling lending rates relative to the interest rates paid on government securities are probably also linked to structural conditions in the banking market, such as the use of cost-cutting technology. This can be seen in figures for sectoral productivity growth in the national accounts. Productivity growth in the financial sector averaged about 4.6 per cent annually in the period 1990–2011, while general productivity growth in the economy during the same period totalled around 1.9 per cent annually, on average.

Figure 2.23 shows that branches of foreign banks have entered the Norwegian banking market in the years since 1993. Their market share rose evenly and quickly until the financial crisis, when it fell back somewhat.

The increase in the participation of foreign entities in the Norwegian banking market suggests increased internationalisation, which is opening the door to additional suppliers and increased competition.

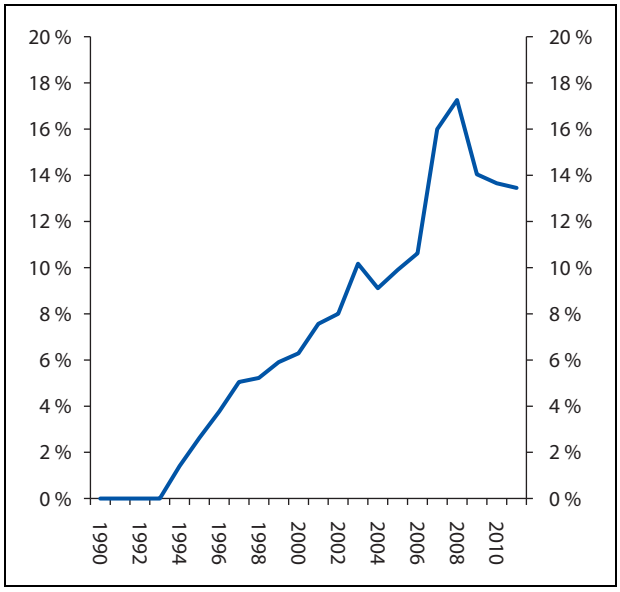


Figure 2.23 Market share trend for foreign branches in the Norwegian banking market, including both new establishments and former subsidiaries

Source: Finanstilsynet

3 Developments in financial markets regulation

3.1 Introduction

The cause of financial crises is often that financial imbalances are allowed to develop. The financial system is closely interconnected across national borders, increasing the risk that imbalances and crises can spread quickly from one country to another.

The collapse in international financial markets in the autumn of 2008 has generated broad agreement that authorities must give greater emphasis to regulation and supervision to ensure financial stability, and that this work must be coordinated across national borders. Comprehensive processes have been launched to develop measures, including in the G20, the International Monetary Fund (IMF), the Basel Committee on Banking Supervision, the Financial Stability Board (FSB), the OECD and the EU. These international processes will influence Norwegian law when changes to current EU regulations in the financial markets area are incorporated into the EEA Agreement. Norway is involved in the work being done in this area, including by participating in various European Commission committees and by submitting consultation replies.

In recent years, the Ministry of Finance has reported regularly on the most important processes which have been initiated to improve international and Norwegian financial markets regulation following the financial crisis, including in the annual financial markets reports and the national budget reports. The processes and the development of new rules may continue for several years. This chapter is based on earlier accounts presented by the Ministry to the Storting, and on subsequent developments. Among other things, the Council and European Parliament have put forward proposals for the implementation of the Basel III standards in the EU (the CRR/CRD IV rules). The EU has once again postponed the adoption of the Solvency II rules for insurance companies. National rules on Solvency II will likely not enter into force before 1 January 2015, at the earliest.

The regulatory developments in Norway largely reflect the work being done on new rules in the EU. In Norway, efforts are being focused, among other things, on how best to implement the expected EU/EEA rules corresponding to the Basel III standards (the CRR/CRD IV rules); see the proposal in Proposition to the Storting (Bill) 96 (2012–2013). The Norwegian authorities emphasise promoting solidity, liquidity and good conduct through public regulation and supervision of the financial sector. Primary responsibility for rules that promote financial stability lies with national authorities, and the costs associated with financial imbalances are to a large extent born by the economy of the country in question. It is therefore important that each country has access to the measures necessary to ensure stability in its financial markets. The Ministry will continue to emphasise the need to utilise national flexibility in the international regulatory framework so that the Norwegian rules support financially sound financial institutions. This will also contribute to the competitiveness of the Norwegian economy and Norwegian financial institutions.

3.2 Credit institutions

3.2.1 Capital requirements

3.2.1.1 In general

The capital adequacy rules are based on three pillars. Pillar I concerns minimum capital requirements, while pillars II and III concern self-assessment of capital needs and the publication of information, respectively. The capital requirements in pillar I are expressed as minimum requirements in the form of a ratio, where the denominator comprises the risk-weighted assets and some off-balance sheet items. The higher the calculated risk of an asset, the higher the risk-weight, and thus the higher the capital requirement. The risk weights therefore influence how much tier 1 capital and total capital banks must have behind each asset.

For most institutions, the value of risk-weighted assets is much lower than the total assets, i.e. the balance sheet. Banks employ either

risk weights set by the authorities (the standardised approach), or risk weights calculated using internal risk models (often called the the internal ratings based approach or the IRB approach) when setting the denominator in the regulatory capital ratios. The risk weights are different for different assets, but different banks may also calculate different risk weights for the same asset. The lower the risk weight, the higher the capital ratio for a given amount of total capital. The IRB approach often produces lower weights than the standardised approach, for the same asset. A transitional arrangement, referred to as the "Basel I floor", requires banks which employ internal models to have total capital corresponding to no less than 80 per cent of the minimum capital requirement under the Basel I rules. This floor prevents use of internal models from excessively reducing risk-weighted assets. In practical terms, this is ensured by requiring that banks' risk-weighted assets are not set below 80 per cent of the value of their risk-weighted assets calculated in accordance with the Basel I rules. This transitional arrangement originally applied until 31 December 2011, but was extended indefinitely in December 2011. All Nordic countries have applied similar transitional arrangements.

The numerator in the capital requirement ratio is total capital, which equals the sum of tier 1 capital (common equity tier 1 (CET1) capital and additional tier 1 capital), and tier 2 capital. The minimum requirement applicable to the tier 1 capital ratio is currently 4 per cent of risk-weighted assets, while total capital must amount to at least 8 per cent of risk-weighted assets.

Total capital, and particularly tier 1 capital, absorbs losses incurred during institutions' ongoing operations, and thus serves to prevent losses in banks and other credit institutions from affecting their creditors and depositors. The financial crisis revealed that many banks, in various countries, had insufficient capital to protect depositors and other creditors. In light of the experiences from the financial crisis, the Basel Committee for Banking Supervision put forward new recommendations on stricter capital and liquidity requirements for banks, referred to as the Basel III standards, in December 2010. On 20 July 2011, the European Commission proposed new legislation to implement the Basel III standards in the EU. At the beginning of March 2013, the Council and European Parliament reached political agreement on the CRR/CRD IV regulatory framework. Under the agreed regulatory framework, the member states will have substantially greater freedom to adopt stricter rules than permitted under the Commission's original proposal. The agreement also includes rules providing that annual bonuses paid to employees of banks, investment firms etc. should generally not exceed their fixed annual salary. The planned deadline for implementing the rules in national law is 1 January 2014. The new rules may be introduced gradually in the member states, taking full effect on 1 January 2019.

The regulatory framework is referred to as CRR/CRD IV because it is the third revision (and thus the fourth version), of the EU's current capital requirements directives. The current EU directive governing among other thing capital requirements for credit institutions and investment firms will be replaced by a regulation containing prudential capital and liquidity requirements for credit institutions and investment firms and a new directive governing national rules of the conditions for operating as a credit institution or investment firm.

Under the Basel III standards and the expected EU rules, the minimum capital requirement (total capital as a percentage of risk-weighted assets), will still be 8 per cent, but a larger proportion of this must be tier 1 capital and CET1 capital. CET1 capital is largely the same as own funds or equity capital, and is the part of the tier 1 capital which is used first to absorb losses. The CET1 capital must amount to at least 4.5 per cent of risk-weighted assets, while the tier 1 capital (which includes certain types of hybrid capital), must amount to at least 6 per cent. The aim of increasing the risk-weighted capital requirements is to bring financial institutions' loss-bearing capacity more in line with their actual risk.

The stricter requirements on quality of capital will have a relatively small effect on Norwegian banks, as Norwegian authorities have used the flexibility in the current international rules and standards to require that 85 per cent of the minimum tier 1 capital requirement (4 per cent), must be covered by CET1 capital. In practice, therefore, the current CET1 capital requirement in Norway is 3.4 per cent; see Figure 3.1.

CRR/CRD IV also includes a capital conservation buffer requirement composed of CET1 capital, which must amount to at least 2.5 per cent of risk-weighted assets. A lower capital conservation buffer than this target will imply constraints on distribution of dividends and repurchase of own shares.

While the Basel III standards take the form of minimum requirements, leaving countries free to

introduce stricter rules at their own discretion, a large part of CRR/CRD IV is worded in a manner that leaves national authorities with little flexibility to introduce stricter rules. This is expressed by the fact that a number of rules will be laid down in the form of a regulation, and the fact that important parts of the directive prescribe harmonisation. Nevertheless, some national flexibility has been granted, including to introduce the new rules earlier than envisaged in the EU's phase-in plan, to set higher risk weights for residential and commercial real estate loans, and to set stricter CET1 capital requirements for such loans.

CRR/CRD IV includes a counter-cyclical capital buffer requirement, which is to vary between 0 and 2.5 per cent CET1 capital of risk-weighted assets. This counter-cyclical buffer requirement is to be applied during periods of excessive credit growth or other developments which increase cyclical systemic risk. As described in the Financial Markets Report 2011, the Ministry envisages giving Norges Bank primary responsibility for preparing the basis for deciding the level of the counter-cyclical buffer. The Ministry expects Norges Bank and Finanstilsynet (the Norwegian financial supervisory authority) to cooperate and exchange information in this regard. The actual decision on the level of the buffer will be made by the Ministry until some experience with the requirement is gained. As in the case of the capital conservation buffer requirement, a lower counter-cyclical buffer than the target in force will imply constraints on the distribution of dividends and the repurchase of own shares.

The agreement between the Council and the European Parliament on the CRR/CRD IV regulatory framework also allows for the introduction of separate capital buffer requirements for "non-cyclical systemic risk" (systemic risk buffer). Moreover, it has been introduced slightly greater flexibility at the national level to implement measures to deal with systemic risk in general. The systemic risk buffer has a similar design as the capital conservation buffer and the counter-cyclical buffer, e.g. in limiting the distribution of dividends and repurchase of own shares if the credit institution fails to meet the requirement. "Voluntary reciprocity" is envisaged. In other words, the authorities of member state A may decide whether a requirement set by member state B is to apply to the activities in country B of credit institutions domiciled in country A. The systemic risk buffer requirement must be met with CET1 capital and be set as a percentage of risk-weighted assets. If the requirement is set at 3 per cent or lower, it may apply to all exposures of domestic banks. If the requirement is set between 3 and 5 per cent, it may only apply to the domestic and third country exposures of domestic banks. Member states may also set higher systemic risk buffer requirements with the approval of the Commission. In addition, national authorities may set capital buffer requirements for systemically important institutions. This requirement must be met with CET1 capital and be set as a percentage of risk-weighted assets. Member states may set a requirement of up to 2 per cent for non-globally systemically important institutions. Specific rules apply for globally systemically important institutions.

CRR/CRD IV also allows for the introduction of a new, non-weighted minimum requirement for tier 1 capital requirement for non-risk-weighted assets (a "leverage ratio" requirement), in addition to the new, risk-weighted capital requirements. This non-weighted tier 1 capital requirement is intended to limit how much debt an institution can have relative to its total balance sheet assets. A binding leverage ratio requirement may be introduced from 1 January 2018 if the Council and European Parliament agree to do so based on a report that the Commission is to present by the end of 2016. Institutions will nevertheless be required to report their leverage ratios from 1 January 2015.

It has been agreed in the EU that major European banks should have a CET1 capital ratio of at least 9 per cent by 30 June 2012. Finanstilsynet has stated that all Norwegian banks should be at this level by 30 June 2012. The relationship between this provisional requirement and the new EU (CRR/CRD IV) capital requirements has not been finally clarified.

3.2.1.2 Developments in Norway

As described in previous reports, the Ministry is of the opinion that stricter capital requirements for banks, and particularly stricter CET1 capital requirements, benefit society as a whole. The required rates of return in capital market reflect risk. To meet market demands, banks therefore have to provide shareholders with a higher expected return than creditors. At first glance, more equity and less debt may thus appear to lower banks' profits. However, risk is reduced when the equity capital ratio increases. More equity therefore implies lower required returns on both equity and debt. This link is described in

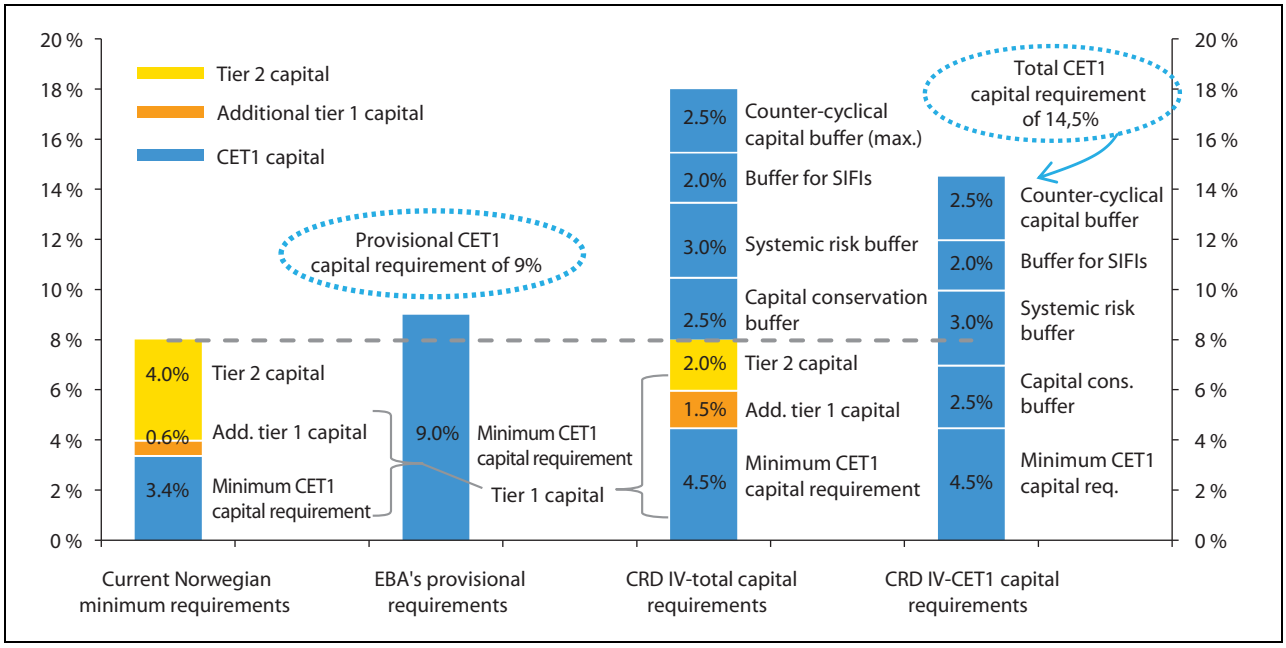


Figure 3.1 Illustration of the current and the proposed Norwegian capital requirements

more detail in Box 2.9 in the Financial Markets Report 2011.

It will be advantageous if higher capital adequacy requirements for banks can be introduced now, while the Norwegian economy is doing quite well, so that the capital can function as a buffer when economic conditions worsen. That is why, on 22 March 2012, the Ministry of Finance proposed legislative amendments to incorporate the expected CRR/CRD IV rules into Norwegian law; see Proposition to the Storting (Bill) 96 (2012–2013). The Ministry intends to propose incorporation of the other parts of the CRR/CRD IV framework in connection with the proposal for a new Financial Undertakings Act, based on the report from the Banking Act Commission. The Ministry's proposal in Proposition to the Storting (Bill) 96 (2012–2013) corresponds to the proposals subject for negotiation in the EU, and includes some important adjustments. Among other things, the Ministry envisages that all banks must meet a systemic risk buffer requirement of 2 per cent of CET1 capital from 1 July 2013 and of 3 per cent from 1 July 2014, in addition to the other CET1 capital requirements. The Ministry also wrote that systemically important banks gradually will become subject to additional buffer requirements in 2015 and 2016. For further details on the criteria for determining which banks will be deemed systemically important, see section 3.2.1.3 below.

Figure 3.1 illustrates the transition from the current capital requirements to the proposed requirements. The figure shows that with a systemic risk buffer of 3 per cent, a buffer for systemically important institutions of 2 per cent and the maximum counter-cyclical capital buffer applied, the total capital requirement amounts to 18 per cent of risk-weighted assets. Of this percentage, the minimum total capital requirement accounts for 8 percentage points, while the sum of the buffer requirements to be met with CET1 capital amounts to 10 percentage points. Any capital requirements imposed on individual institutions by supervisory bodies through the pillar II process will apply in addition to these requirements.

As stated above, banks may employ either the standardised approach or the IRB approach for calculating risk weights. For the same loans, use of the IRB approach may result in considerably lower risk weights than use of the standardised approach, and the risk associated with comparable portfolios is often assessed differently by different banks. The internal models are based, among other things, on losses the individual bank has suffered on similar assets. The models can provide much useful information, but one disadvantage is that they only reflect structural changes after they have arisen. Given that the purpose of the capital requirements is to enable banks to absorb future losses, this constitutes a clear deficiency. Model estimates must therefor be assessed critically. For example, in the last 20

Box 3.1 Systemic importance and structural measures

Alongside the processes aimed at improving the regulation of the finance sector, the question of structural reforms of the finance sector, and the banking sector in particular, has also been discussed in various international forums. Typical questions are whether the size or activity areas of banks should be limited in order to promote financial stability.

In a report dated September 2011, an independent commission in the United Kingdom, the Vickers Commission, has advocated clearer separation between retail banking services, such as the receipt of deposits and the issuing of loans to personal customers and SMEs, and wholesale and investment banking. The Vickers Commission emphasised that a clear separation between activity areas can ease crisis resolution in financial institutions, for example if a group is divided into subsidiaries which can be handled in different ways in the event of a crisis. On 4 February 2013, the UK Government proposed legislative amendments to implement the recommendations of the Vickers Commission. Among other things, the proposal contained rules on separating traditional banking activities from other, riskier activities, rules on priority to protect deposits in the event of insolvency, and rules granting the authorities power to ensure that banks can absorb larger losses than at present. The UK Government wishes to amend the legislation so that banks can be split up if they fail to comply with the applicable regulations.

In February 2012, a group of experts chaired by Erkki Liikanen (Governor of the Bank of Finland), was appointed to examine whether structural reforms in the financial sector can promote financial stability, efficient markets and consumer protection. The group was also asked to make concrete proposals for measures. On 2 October 2012, the group submitted a report to the European Commission. Among other things, it recommended that proprietary trading and other trading activities should be assigned to a separate legal entity if such activities amount to a significant share of a bank's business. The group took the view that such separation would shield the socially most important parts of the bank (deposits, loans, etc.) from the riskier trading activities. The group also recommended that the European Commission and others should consider amendments to the capital requirements regulatory framework (more uniform measurement of risk and stricter capital requirements for banks employing internal models), primarily in the case of property loans. Further, the group was of the opinion that consideration should be given to tightening the limits on total investment between institutions and internally within corporate groups. The European Commission invited comments on the recommendations. In its submission, the Norwegian Ministry of Finance wrote the following, among other things:

> "The Norwegian Ministry of Finance finds that host country regulation is important for securing the best possible effect on financial stability when e.g. capital requirements for real estate lending are strengthened. Host country regulation may also secure a level playing field for all banks operating in a country."

The Ministry also stated:

> "We generally support the objectives of the Group's recommendation on separation, and it is possible that such separation is the right way to move forward, cf. the recent proposals in the United States (the Dodd Frank Act) and in United Kingdom (the Vickers report)."

years, banks have only suffered very small losses on residential mortgages. This period is to a large extent characterised by economic growth, rising house prices and strong growth in household debt.

Norwegian house prices and Norwegian household debt relative to income are higher than ever, and interest rates are very low. There are therefore good reasons for tightening requirements on banks' internal models for residential mortgages. A mark-up on risk weights for the systemic risk associated with residential mortgages can be implemented in various ways: by introducing a floor for one or more parameters, by using a

multiplier on the risk weights, or by introducing a floor on risk weights. Such rules may constitute an alternative to the Basel I floor. On 14 December 2012, the Ministry asked Finanstilsynet to draft a proposal for rules on stricter risk weights for residential mortgages under the IRB approach. As one alternative, Finanstilsynet was asked to propose a model in which the risk weights for residential mortgages are to be set to at least 35 per cent, as under the standardised approach. On 4 March 2013 The Ministry received Finanstilsynet's assessment. Based on Finanstilsynet's assessment, the Ministry released for consultation a proposal for four sets of rules, all of which feasible alternatives to continuing to apply the Basel I floor.

Because the Norwegian economy continues to perform relatively well, Norwegian banks have had ample opportunity to prepare for higher capital requirements. Banks have used this opportunity to a certain extent, and are thus well on the way to meeting the new requirements. Figure 3.2A illustrates the CET1 capital ratio of Norwegian banks at the end of 2012, compared to the CET1 capital ratio requirement that the Ministry has proposed entered into force on 1 July 2013. The figure shows that all Norwegian banks would have met the CET1 capital requirement, including the capital conservation buffer and maximum counter-cyclical buffer, if the requirement had been in place at year-end 2012. The figure also shows that the smallest banks have the highest CET1 capital ratios.

3.2.1.3 Further on additional capital requirements for systemically important banks

Some financial institutions may be so large, or perform tasks which are so important, that they have an especially large impact on the financial system. Such institutions are important to the functioning of the financial system and the economy as a whole. In the international regulatory debate following the financial crisis, some have argued that systemically important institutions should be especially robust in the face of economic problems. The Basel Committee on Banking Supervision has developed frameworks for assessing the systemic importance of banks in a global and national context. The Basel Committee has also provided recommendations on how to introduce additional capital requirements for such banks. These requirements should reflect the systemic importance of each bank. As stated above, the European Parliament's proposed CRR/CRD IV regulatory framework also contains a requirement for a systemic risk buffer that increases with the systemic importance of the bank in question.

The proposal of the Basel Committee states that globally systemically important banks shall be grouped according to their systemic importance, and be subject to a progressive, additional tier 1 capital ratio requirement ranging from 1 to 2.5 per cent. According to the Basel Committee, this additional capital requirement should be introduced in tandem with the other new buffer requirements in the Basel III standards (the capital conservation buffer and the counter-cyclical buffer), i.e. from 2016 at the latest and with full effect from 1 January 2019 at the latest.

The committee's framework for domestic systemically important banks was presented in October 2012, and contains a set of principles for assessing how systematically important a bank is, and for setting additional capital requirements. Unlike under the system for globally systemically important banks, the Basel Committee envisages a high degree of national flexibility, not least so that additional capital requirements are to be set based on country-specific factors.

The frameworks for globally and domestic systemically important banks are intended to complement one another, and the Basel Committee has therefore recommended that national authorities should phase in additional requirements for their domestic systemically important banks concurrently with additional requirements for globally systemically important banks and the Basel III buffer requirements, i.e. from 2016 at the latest.

The 12 principles in the Basel Committee's framework for domestic systemically important banks can be divided into two groups. The first seven principles concern the methodology for assessing how systemically important a bank is:

1. National authorities should establish a methodology for assessing the degree to which banks are systemically important in a domestic context.
2. The assessment methodology for a D-SIB (domestic systemically important bank) should reflect the potential impact of, or externality imposed by, a bank's failure.
3. The reference system for assessing the impact of failure of a D-SIB should be the domestic economy.
4. Home authorities should assess banks for their degree of systemic importance at the consolidated group level, while host authorities

should assess subsidiaries in their jurisdictions, consolidated to include any of their own downstream subsidiaries, for their degree of systemic importance.

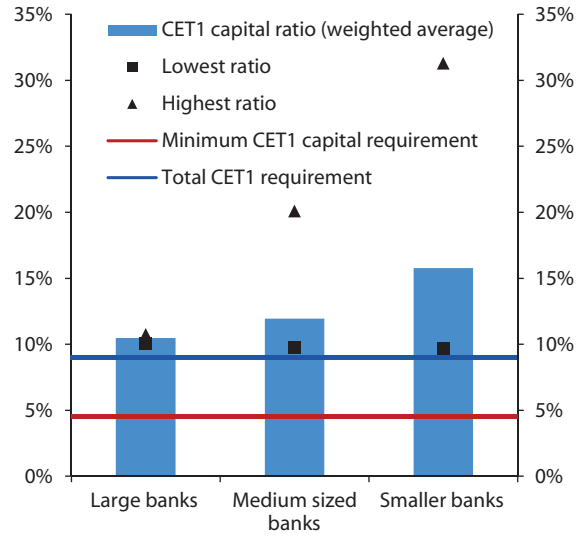
5. The impact of a D-SIB's failure on the domestic economy should, in principle, be assessed having regard to bank-specific factors:
   a. size;
   b. interconnectedness;
   c. substitutability/financial institution infrastructure (including considerations related to the concentrated nature of the banking sector); and
   d. complexity (including the additional complexities from cross-border activity).

   In addition, national authorities can consider other measures/data that would inform these bank-specific indicators within each of the above factors, such as size of the domestic economy.
6. National authorities should undertake regular assessments of the systemic importance of the banks in their jurisdictions to ensure that their assessment reflects the current state of the relevant financial systems and that the interval between D-SIB assessments not be significantly longer than the G-SIB (globally systemically important bank) assessment frequency.
7. National authorities should publicly disclose information that provides an outline of the methodology employed to assess the systemic importance of banks in their domestic economy.

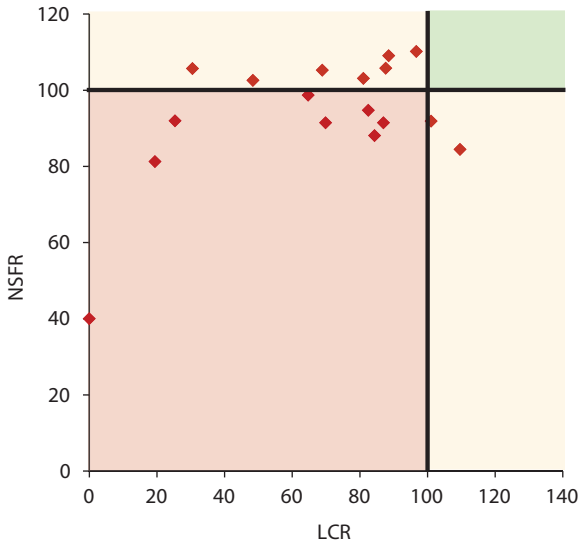
The next five principles (8–12) concern the setting of additional capital requirements above and beyond the minimum requirements under Basel III or national regulations:

8. National authorities should document the methodologies and considerations used to calibrate the level of HLA (higher loss absorbency) that the framework would require for D-SIBs in their jurisdiction. The level of HLA calibrated for D-SIBs should be informed by quantitative methodologies (where available) and country-specific factors without prejudice to the use of supervisory judgement.
9. The HLA requirement imposed on a bank should be commensurate with the degree of systemic importance, as identified under Principle 5. In the case where there are multiple D-SIB buckets in a jurisdiction, this could imply differentiated levels of HLA between D-SIB buckets.
10. National authorities should ensure that the application of the G-SIB and D-SIB frameworks is compatible within their jurisdictions. Home authorities should impose HLA requirements that they calibrate at the sub-consolidated/subsidiary level. The home authority should test that the parent bank is adequately capitalised on a standalone basis, including cases in which a D-SIB HLA requirement is applied at the subsidiary level. Home authorities should impose the higher of either the D-SIB or G-SIB HLA requirements in the case where the banking group has been identified as a D-SIB in the home jurisdiction as well as a G-SIB.
11. In cases where the subsidiary of a bank is considered to be a D-SIB by a host authority, home and host authorities should make arrangements to coordinate and cooperate on the appropriate HLA requirement, within the constraints imposed by relevant laws in the host jurisdiction.
12. The HLA requirement should be met fully by CET1 capital. In addition, national authorities should put in place any additional requirements and other policy measures they consider to be appropriate to address the risks posed by a D-SIB.

In some countries, including the UK, Sweden and Denmark, authorities have already announced additional capital requirements for systemically important banks. In November 2011, Swedish authorities announced new minimum capital requirements for the four largest banks in Sweden from 2013, involving the full phasing-in of, and somewhat stricter capital requirements than, the Basel III standards. Under the Swedish system, the CET1 capital ratio requirement applicable to these four banks is 10 per cent from 1 January 2013, and 12 per cent from 1 January 2015. These requirements include the capital conservation buffer requirement of 2.5 per cent, but not the counter-cyclical buffer. Implementation of the new requirements has however been suspended pending the final CRR/CRD IV regulatory framework. Danish authorities have stated that certain banks in Denmark are so important to the Danish economy that special rules should apply to them, and a committee has been appointed to make recommendations as to which criteria should be applied when identifying which banks are systemically important, how international rules relating to such banks should be implemented in Denmark, etc.



A. CET1 capital ratio of Norwegian banks by size, and The Ministry's proposal for CET1 capital requirements from 1 Juli 2013



B. The 17 largest Norwegian banks' LCR and NSFR requirements in CRR/CRD IV. Percentage of future requirements

Figure 3.2 Norwegian banks' compliance with future capital and liquidity requirements. Year-end 2012

Source: Finanstilsynet

As stated in the Financial Markets Report 2011, the Norwegian Ministry of Finance is of the view that there may be grounds for considering whether Norway should also introduce special requirements for domestic systemically important financial institutions, not least because the Norwegian financial market is characterised by a small number of banks with large market shares, and because the largest banks are a source of financing for the smaller banks. As stated, the Ministry also envisages that all banks, regardless of their degree of systemic importance, will have to have a systemic risk buffer of 3 per cent of CET1 capital from 1 July 2014, and that a special buffer requirement for systemically important institutions will be introduced in 2015 and 2016.

Depending on the wording of the EU rules in this area, the Ministry envisages to adopt a set of criteria to be used in determining whether a bank is systemically important in Norway, and a methodology for setting additional capital requirements for such banks. The Ministry envisages laying down a regulation on these matters. In the Ministry's view, the Basel Committee's framework for nationally systemically important banks should form the basis for this. Account should also be taken of solutions used in other countries, particularly the other Nordic countries. A Norwegian system for systemically important banks should take into account the role of particularly systemically important banks in the Norwegian banking sector. The rules must be robust in the face of sectoral changes over time, and must otherwise function well along side the capital requirement rules.

3.2.2 Liquidity requirements and funding structure

Banks convert liquid, short-term deposits into long-term loans. Interest rates on secure, liquid deposits are lower than lending rates, and maturity transformation allows banks to make money and simultaneously provide an important service to savers and borrowers. The maturity transformation means that banks assume liquidity risk. In this context, there may be a difference between the amount of risk a bank may consider beneficial from a purely commercial perspective and the liquidity risk burden on the bank that is beneficial to society. Banks and mortgage companies fund their activities through both retail deposits and borrowings in wholesale funding markets. In recent years, a large proportion of funding has taken the form of wholesale funding. As institutions also lend large sums to one another, liquidity failure in one institution can quickly cause liquidity problems for other institutions, and spread to the entire financial system.

Current Norwegian regulations set qualitative requirements for liquidity management, which

Box 3.2 The shadow banking system

The shadow banking system is a system for credit procurement that involves entities and activities falling more or less outside the regulated banking system. Although there is no clear definition of what operations are included in the shadow banking system, the following characteristics are commonly agreed upon:

a. In the shadow banking system, credit procurement is funded by short-term market funding, not deposits.
b. The shadow banking system is not covered by public guarantee schemes. For example, short-term funding for the shadow banking system is not covered by deposit guarantee schemes.
c. The shadow banking system does not have access to central bank liquidity during a crisis.

Internationally, the shadow banking system is large. The Financial Stability Board (FSB) has estimated that the global shadow banking system totalled approximately EUR 46 trillion in 2010. This equals about half of total bank assets. The shadow banking system grew large prior to the financial crisis, but shrank subsequently. It is now assumed to have regained its pre-crisis scale.

In its Green Paper on Shadow Banking, published in March 2012, the European Commission pointed out several reasons why the shadow banking system increases systemic risk in financial markets. A large proportion of credit provision in the shadow banking system is funded by deposit-like instruments, such as money market funds, which are not guaranteed. During a crisis, a "run" on these sources of funding may develop. In addition, shadow banking activities often involve build-up of high leverage, and are funded through channels that make normal regulation and supervision difficult. Further, the shadow banking system is not regulated in the same way as traditional banking activities. The fact that banks and shadow banks are closely linked, and often part of the same group, also causes the problem that the shadow banking system may infect the banking system through various channels. For example, the traditional bank's operations may have to cover losses incurred by the shadow bank. There is fairly widespread international agreement that regulation of the shadow banking system must be improved, although specific proposals for regulatory changes lie some way in the future.

International regulation of shadow banks is at an early stage. The scope of the shadow banking system remains uncertain, and it is unclear where the defects in the current regulatory framework lie. The European Commission's green paper therefore recommended, among other things, further investigation and assessment of the current regulations.

Shadow banking is not particularly widespread in Norway. Following the Norwegian banking crisis in the 1980s and 1990s, the grey market for credit has disappeared. Nevertheless, the development of an international regulatory framework is important for Norway. An international framework, which may also have to be incorporated into Norwegian law, may promote greater international financial stability. This will also improve the financial stability outlook for Norway.

reduces the liquidity risk of banks and other financial institutions. The CRR/CRD IV rules will impose stricter requirements on banks' liquidity management and funding structures. A liquidity coverage requirement, or LCR, specifies the minimum volume of liquid assets a bank must hold in order to tackle periods with impaired funding markets. A net stable funding requirement, or NSFR, specifies a minimum requirement for the composition of funding sources, i.e. how stable the banks funding must be. The LCR is intended to reduce short-term liquidity risk, while the NSFR is intended to reduce liquidity risk in the longer term. The new requirements are also intended to make it more difficult for banks to grow quickly based on short-term market funding. Under CRR/CRD IV, the LCR will be phased in, from mandatory 60 per cent compliance in 2015 to 100 per cent compliance in 2018. Following an evaluation in 2016, the European Commission may postpone the introduction of the 100 per cent LCR if international developments so indicate. Further, the Commission is required to publish draft regulations on the NSFR by the end of 2016. In Proposition to the Storting (Bill) 96 (2012–2013), the Norwegian Ministry of Finance

proposed the inclusion of provisions to facilitate implementation of the expected liquidity and funding requirements in Norwegian law.

Norwegian banks report quarterly to Finanstilsynet on the extent to which they meet the expected LCR and NSFR; see Figure 3.2B. All banks report on the extent to which they meet a version of LCR, while only the 17 largest Norwegian banks report on the NSFR. Figures from reports to Finanstilsynet show that less than half of the 17 largest Norwegian banks met the NSFR at the end of 2012. At the same time, only two banks met the LCR. Figure 3.2B shows that none of the 17 largest banks satisfied both requirements at the end of 2012.

3.2.3 Nordic cooperation

In recent years, the supply side of the Nordic financial market has seen a trend towards the largest groups establishing operations in several Nordic countries. Norwegian authorities are therefore cooperating closely with the other Nordic countries on a common approach for the introduction of the CRR/CRD IV framework. In 2012, a Nordic working group comprising representatives from the Nordic finance ministries was appointed to look into such an approach. The working group presented its report on 13 June 2012. Among other things, the report expressed the working group's view that the Nordic authorities both can and should cooperate on new capital and liquidity requirements, and that they should give particular emphasis to a greater degree of host country regulation. Based on the working group's report, the meeting of the Nordic finance ministers in Oslo on 2 July 2012 decided to invite the Nordic financial supervisory authorities to look into the possibility of:

1. a common understanding of the forthcoming EU/EEA rules on liquidity requirements
2. establishing a system of mutual recognition of capital requirements in the Nordic countries (reciprocity and host country regulation)
3. a cooperation on common criteria and similar practices when supervisory authorities approve banks' internal models.

Further, on 11 September 2012, the Nordic finance ministers invited the Nordic financial supervisory authorities to assess the prospects for implementing the group's recommendations. On 24 October 2012, the supervisory authorities issued a status report on their cooperation, detailing what had been done to implement the working group's main conclusions, including work on facilitating competition and host country regulation. The Ministry will follow up on this initiative and will seek agreement on, among other things, that mortgage loan exposures in a Nordic country by a bank domiciled in an other Nordic county, should be subject to the rules on risk-weighing applied by authorities of the former country. The conditions governing such an agreement must also be assessed in light of the final wording of the CRR/CRD IV framework.

3.2.4 The Norwegian State Finance Fund

The Norwegian State Finance Fund was established as a provisional measure on 6 March 2009, cf. legislative enactment of the Storting (the Norwegian parliament) 26 February 2009 and 2 March 2009, following proposals in Proposition to the Odelsting no. 35 (2008-2009). The purpose of the establishment of the Norwegian State Finance Fund was to provide tier 1 capital to sound Norwegian banks, in order to strengthen the banks and improve their lending capacity. The Storting allocated 50 billion Kroner to the Norwegian State Finance Fund for tier 1 capital injections, cf. Bill 1 S (2009-2010). The deadline for applying for capital injections was set to 30 September 2009. In 2009, the Fund injected 4.1 billion Kroner in hybrid capital to 28 banks. In addition, one bank received around 27 million Kroner in preference capital; cf. also the discussion of the Funds activities in the financial Markets reports for 2009, 2010 and 2011 (Norwegian only).

As of 14 January 2013 the Fund had outstanding capital injections of 484 million Kroner. These are divided amongst 14 banks. The Norwegian State Finance Fund expects that several banks will redeem their capital injections by the end of 2013. The Ministry envisages a winding-up of the Norwegian State Finance Fund during the first quarter of 2014. If there are still capital injections in banks that are not redeemed by the end of 2013, the Ministry envisages that these will be managed by the Government Pension Fund as of year-end 2013. The Norwegian State Finance Fund will then have time to prepare final accounts etc. that are due to the Ministry by March 2014.

Box 3.3 Experimental economics[1]

Following the financial crisis, attention has been focused on how to explain, prevent and handle economic and financial crises. Such insights often require some form of counterfactual analysis. For example, what would have happened if no residential mortgages had been granted to customers incapable of payment in the USA? What if banks had not been selling and re-selling securities with underlying risky residential mortgages? What if banks had been required to maintain higher capital ratios to absorb losses?

A weakness of counterfactual analysis is that it cannot be tested, although a little of the same insight may perhaps be gained by conducting controlled experiments in a laboratory. Experimental economics involve using controlled experiments as a method for explaining and investigating economic phenomena and developing and testing economic theory.

Experiments may involve, for example, setting up a laboratory with computers and assigning a group of participants various roles and tasks to perform. To analyse the effect of different variables in the experiments, the experiments can be repeated under different conditions. This allows the same story to be replayed over and over to see how the results change when certain conditions change.

One branch of experimental economics investigates how financial market participants make *individual choices*. The objective may be to test the fundamental assumption in economic theory, namely that market participants act rationally and always make choices to maximise their own utility, based on the information available to them. Such experiments often incorporate insights from psychology about how people behave in different situations. For example, participants may be asked to choose between different more or less risky financial gambles to examine their attitudes towards risk and how much weight they give to securing gains and avoiding losses. This reveals whether choices accord with the standard assumption that market participants seek to maximise expected utility. Kahneman and Tversky (1979)[2] claimed, among other things, that common human cognitive abilities mean that investors are often strongly influenced by their reference point and by how investment prospects are presented. In traditional economic theory, studies have frequently focused on how persons and undertakings react to new information, but less frequently on whether the *way* in which information is presented influences choices. Kahneman and Tversky also claimed that people have a tendency to add more weight to losses, compared to gains (referred to as loss aversion). Traditional economic theory often assumes that people do not have such an aversion to losses.

A different branch of studies investigates how financial market participants act in *game scenarios*, i.e. situations in which the effects and results of different choices are influenced by the choices of the other participants. One example, described in greater detail in Box 3.4, is an experiment in which the participants play depositors in a bank, having been told that the choices of the other depositors influences their chances of getting back their savings and receiving a return on them. A third branch of studies focuses on *market* experiments, for example where participants buy and sell financial assets. Box 3.4 discusses experiments that illustrate that bubbles can develop in the most basic financial markets.

Systematic experiments can be utilised in several ways. Three different forms of knowledge can be derived, each derived from such experiments. First, established economic theories can be tested. Second, experiments can be used to produce interesting data that can be analysed to identify patterns and, perhaps, to develop new hypotheses. Third, different political options can be tested in the laboratory before policies are implemented. Nevertheless, care should be taken in giving precise policy recommendations based on laboratory results. For the time being, experimental economics is primarily «food for thought»; see also Dufwenberg (2012).

[1] The content of boxes 3.2–3.4 is among other things based on the presentation found in the following articles: Hens, T. & A. Brune (2012), "Experimental Economics and Financial Market Regulation" and Dufwenberg, M. (2012), "Banking on Experiments?" Both articles were written on assignment for the Ministry of Finance, and have been submitted to the Storting as unpublished annexes.

[2] Kahneman, D. & A. Tversky (1979), "Prospect Theory: An Analysis of Decision Under Risk", *Econometrica 47* (2), 263–291.

3.2.5 Deposit guarantee schemes, dealing with institutions in financial difficulties, etc.

3.2.5.1 Deposit guarantee schemes

The Norwegian deposit guarantee scheme contributes, to consumer protection, and helps to ensure that retail deposits provide a good and stable funding source for banks. The scheme thus boosts confidence in the Norwegian banking system and promotes financial stability in Norway. The Norwegian scheme functioned well during the financial crisis. Norway was the only EU/EEA country in the OECD area which did not introduce extraordinary government guarantee measures during the crisis of 2008.

The Ministry has reported to the Storting regularly on the development of the EU regulatory framework for deposit guarantee schemes, and on the extensive efforts of the Norwegian Government and the Ministry to maintain the current coverage level (since 1996, NOK 2 million per depositor per bank).

In 2009, the EU adopted changes to the Deposit Guarantee Schemes Directive (Directive 94/19/EC), which among other things introduced full harmonisation of the coverage level (at EUR 100,000), for national deposit guarantee schemes from 1 January 2011. When the European Commission in July 2010 put forward a proposal for a new, comprehensive directive on deposit guarantee schemes to replace the current directive, the Commission retained this full harmonisation, and also proposed, among other things, that schemes should be prefunded, that banks should make risk-based contributions (fees) to schemes, and that bank account holders should be reimbursed within seven days. The Council and the European Parliament are currently discussing the Commission's proposal.

While full harmonisation of the coverage level at EUR 100,000 constitutes a major improvement of most EU/EEA countries' schemes, implementing full harmonisation in Norway would reduce the current coverage level by some 60 per cent.

The "Soria Moria II Declaration", i.e. the political platform of the current Norwegian Government, states (on page 18) that, "The Government shall defend the Deposit Guarantee Scheme for bank deposits in Norwegian banks". In its Recommendation to the Storting on the Financial Markets Report 2011, a unanimous Standing Committee on Finance and Economic Affairs stated the following:

> "In the Committee's view, the Norwegian deposit guarantee scheme has played an important role in protecting the rights of depositors and stabilising deposit coverage in banks. In this way, the scheme probably helped to ensure that retail deposits, to a greater extent than otherwise, provided a stable funding source for Norwegian banks during the financial crisis. In this context, the Committee notes the decision of the European Parliament, through a plenary vote on 16 February 2012 (by 506 votes to 44), in response to a proposal by the ECON committee, to support Norway's desire to maintain the current coverage level of NOK 2 million per depositor per bank for depositors resident in Norway. The Committee considers this a pleasing development, and stands by its full support for the Government's efforts vis-à-vis the EU to ensure the continuation of the Norwegian deposit guarantee."

In the National Budget 2013, the Ministry of Finance stated the following:

> "Negotiations are currently underway between the European Parliament, the Council and the Commission with the aim of agreeing a directive text. Recently, the Council has proposed dealing with the Deposit Guarantee Schemes Directive in conjunction with the Commission's proposal of 6 June 2012 for a new directive on crisis management in the context of transnational banks […] The Government and the Ministry of Finance will continue to work actively on this matter."

Progress in the EU is now largely dependent on the progress of proposals for a new crisis management directive and of work on a banking union; see sections 3.2.4.2 and 3.2.4.3 below. The Government and the Ministry are monitoring this process closely.

3.2.5.2 Managing financial institutions in distress

The European Commission has announced a new pan-European framework for dealing with financial institutions in financial distress. In an October 2010 communication, see COM (2010) 579, the Commission presented the guiding principles of the framework, in addition to a number of concrete proposals. The Commission distinguished between three types of instruments: (1) preventive measures, such as reinforced supervision and a requirement that all institutions establish recov-

ery and resolution plans (referred to as a "will"), (2) regulations granting authorities power to intervene early on, while a problem is developing, and (3) powers and tools for reorganising, splitting up or winding up institutions once a crisis has arisen. The aim is that all types of financial institutions, big and small, can be wound up without risk to financial stability and cost to taxpayers. In the Commission's view, the protection of public budgets requires the establishment of national funds in all EU member states that are pre-funded by institutions.

In 2011, the European Commission conducted a public consultation on the outlined framework, but it has not yet put forward a legislative proposal. It was expected that the European Commission would propose a directive on a new crisis management framework for financial institutions in distress by the summer of 2012. It is uncertain what the European Commission will propose in this area, and even more uncertain what will finally be adopted by the EU. It appears that work on the framework has been suspended, due to pending work on a banking union; see section 3.2.5.3 below. However, it does appear that the changes to the directive will introduce, amongst other things, new rules on risk-based fees to deposit guarantee funds.

The Norwegian system for managing financial institutions in distress, is laid down in the Guarantee Schemes Act. According to the Act, a range of different measures can be implemented, depending on how advanced the financial institution's difficulties are and what can be done to overcome them. If necessary, the Norwegian Banks' Guarantee Fund may, for example, issue loans, provide guarantees and inject equity capital to ensure an appropriate, orderly continuation or alternatively a winding-up of the institutions. These statutory provisions apply in addition to Finanstilsynet's powers to intervene early on when financial institutions experience difficulties. By letter of 26 June 2009, the Ministry mandated the Banking Law Commission to consider a revision of the current Guarantee Schemes Act and related regulations. This work is to be adapted to changes to relevant EU directives.

Until 2012, banks' duty to contribute to the Norwegian Banks' Guarantee Fund seized when the Fund reached a certain size. Because the Fund's capital has exceeded the "ceiling" in some years, in several instances member banks have not been required to pay the ordinary contribution. To improve the capacity of the Norwegian Banks' Guarantee Fund to handle problems in large banks and problems affecting several banks simultaneously, the Ministry submitted a Proposition to the Storting (Bill) 11 (2012-2013) on 26 October 2012, proposing the revocation of the ceiling. The Storting adopted the Ministry's proposal on 10 December 2012, and the amendment took effect on 1 January 2013. The amendment means that contributions now have to be made to the Norwegian Banks' Guarantee Fund annually, to enable the Fund to grow over time. This will back up the valuable deposit guarantee scheme and make the duty to contribute to the fund more regular and predictable.

3.2.5.3 Proposals for an EU banking union

On 12 September 2012, the European Commission proposed a regulation creating a single supervisory authority for banks in the Eurozone ("single supervisory mechanism", or SSM).

Under the European Commission's proposal, the European Central Bank (ECB) will be assigned overall supervisory authority for all banks ("credit institutions") in the Eurozone. On 13 December 2012, the EU finance ministers (ECOFIN) agreed on the framework for coordinated supervision of banks in the Eurozone. Under the compromise agreed by ECOFIN, the ECB will supervise the 150 most important banks in the Eurozone (i.e. banks with total assets of more than EUR 30 billion, more than 20 per cent of home country GDP, or banks that the ECB considers important for other reasons). The remaining (approximately) 6,000 banks in the Eurozone will remain subject to national supervisory authorities, although the ECB will have powers to intervene in these supervisory activities if it considers it necessary. EU member states outside the Eurozone may adopt the regulation if they wish.

The council regulation on a single supervisory mechanism is linked to the European Commission's proposal for changes to the Regulation of the European Parliament and of the Council on the European Banking Authority (EBA), which are currently being considered by the European Parliament. The SSM proposal and the changes affecting the EBA are now being dealt with as a whole by the EU. The timetable envisages that the ECB will take up its supervisory role 12 months after the rules on the SSM enter into force, i.e. as of 1 March 2014 according to the current timetable.

The EBA will continue to play a role in ensuring uniform supervisory practice and uniform regulations across the EU. As the supervisory

Box 3.4 Bank runs in the laboratory

In a widely referenced 1983 article on game theory and finance, Diamond and Dybvig modelled how bank runs can arise.[1] In the article, the authors examined in detail the risk assumed by banks in converting short-term, liquid deposits into long-term, illiquid loans. In the article, customers deposited money in a bank and had different saving horizons. The bank lent the funds in the form of illiquid, but profitable, loans. The model was in equilibrium when only those who needed to withdraw money at any given time did so. In those circumstances, the bank did well.

If a sufficient number of depositors believed that the other depositors would withdraw their money, a different equilibrium occured – a bank run that resulted in the bankruptcy of the bank. The bankruptcy occurred because the bank was unable to realise its loans at an acceptable price in the short term. This illustrated one consequence of the bank's liquidity risk. The article showed that a bank may suffer serious financial problems due to a bank run even though it does not have a fundamental solvency problem.

Diamond and Dybvig claimed that a deposit guarantee would, among other things, prevent bank runs. Depositors who know that they will be repaid their money, also in the event of a bank run, will have no incentive to withdraw their money. Confidence in the guarantee leads to no bank run developing.

Diamond and Dybvig's results have been tested experimentally. In the experiments, participants were allocated a deposit in a bank and given the choice of withdrawing the money in period 1 or waiting until period 2, when they would receive the money plus a return, provided that the bank had not gone bankrupt in period 1. The bank would go bankrupt in period 1 if too many depositors chose to withdraw their money. Before making their decision, the depositors were told the current utility of their money. For some, it was worth withdrawing the money at once, while others could take the risk of waiting until period 2 in order to receive, potentially, a return on the money. According to Dufwenberg (2012), neither of the equilibriums described by Diamond and Dybvig frequently arose in the experiments – some individuals withdrew the money in period 1, while others did not, without any clear cut correlation with the depositors' period 1 utility of money.

Madiès (2006)[2] concluded that a deposit guarantee can prevent a bank run only if all deposits are guaranteed in full; partial coverage is insufficient. Garratt and Keister (2009)[3] tested, among other things, assumptions that some depositors would be forced to withdraw their money in period 1 (as a proxy of shifting macroeconomic conditions). They found, for example, that when more individuals *have to* withdraw their money, unaffected individuals also increase their withdrawals. Schotter and Yorulmazer (2009)[4] examined the dynamics of bank runs by introducing additional periods and more information during the experiment. Contrary to Madiès' findings, they found that partial deposit guarantees reduced the seriousness of bank runs. Other results (Kiss, Rodriguez-Lara and Rosa-Garcia, 2011)[5] indicate that giving depositors more information about what other depositors are doing, can reduce the risk of a bank run.

Deposit guarantee schemes are an important part of modern financial regulation. Several of the articles mentioned above examined the consequences of introducing such schemes through experiments. Experimental economics can thus provide greater insight into the consequences of how deposit guarantee schemes are designed.

An interesting extension of the experiments could, for example, be to include additional banks and to examine whether bank runs are contagious. One such study was presented in an article by Chakravarty et al. (2012).[6] In this study, it appeared that the number of withdrawals from bank 2 increased as the number of withdrawals from bank 1 increased, possibly indicating that bank runs may spread from bank to bank. However, the authors did not find that a good equilibrium in bank 1 increased the likelihood of a good equilibrium in bank 2.

1 Diamond, D. & P. Dybvig (1983), "Bank Runs, Deposit Insurance and Liquidity", *Journal of Political Economy 91*, 401–419.

2 Madiès, P. (2006), "An Experimental Exploration of Self-Fulfilling Banking Panics: Their Occurrence, Persistence, and Prevention", *Journal of Business 79*, 1831–1866.

3 Garratt, R. & T. Keister (2009), "Bank Runs as Coordination Failures: An Experimental Study", *Journal of Economic Behavior & Organization 71*, 300–317.

4 Schotter, A. & T. Yorulmazer (2009), "On the Dynamics and Severity of Bank Runs: An Experimental Study", *Journal of Financial Intermediation 18*, 217–241.

5 Kiss, H.J., I. Rodriguez-Lara & A. Rosa-Garcia (2011), "On the Effects of Deposit Insurance and Observability on Bank Runs: An Experimental Study", *Discussion Paper in Economic Behavior 02/11*, ERI-CES, University of Valencia.

6 Chakravarty, S., M A. Fonseca & T.R. Kaplan (2012), "An Experiment on the Causes of Bank Run Contagions", *Economics Department Discussion Papers Series 12/06*, University of Exeter.

authority for banks in all Euro countries, the ECB will be subject to the decisions of the EBA, just like national supervisory authorities. It has also been proposed that the EBA's voting rules should be adapted so that the EBA's decision-making structure reflects the positions of the authorities in both member states that have joined the SSM, and other states.

The European Commission's proposal is a part of the overall effort to create an EU banking union. The Commission has stated that the next step towards a banking union is the establishment of a common crisis management mechanism, although it appears unlikely that proposals for a common guarantee fund are imminent. The plan to introduce a common supervisory authority and a banking union involves considerable work and raises many important questions, including on the relationship between national and supranational authority. The Ministry of Finance is monitoring developments in this area closely, and will assess potential consequences for Norway.

3.3 Insurance and pensions

3.3.1 New solvency requirements (Solvency II)

In April 2009, the European Parliament adopted new solvency rules for insurance companies. Among other things, the Solvency II Directive (Directive 2009/138/EC) incorporated the Consolidated Life Assurance Directive and the three "generations" of non-life insurance directives. See the Financial Markets Report 2011 (Meld. St. 24 (2011-2012) Report to the Storting) chapter 3.5 for an overview of the main features of the directive.

On 1 March 2012, the Storting approved the incorporation of the Solvency II Directive into the EEA Agreement; see Recommendation 192 S (2011–2012) and Proposition 54 S (2011–2012).

On 19 January 2011, the European Commission proposed a new directive, referred to as the Omnibus II directive, regarding changes to, *inter alia*, the Solvency II directive. The Omnibus II directive will probably be adopted by the Council and the Parliament in 2013. Discussions to this date indicate that the Commission's proposal will be moderated in the final directive, and that the entry into force of key parts of the regulatory framework will be postponed until at least 1 January 2015. Under the Omnibus II Directive, the deadline for implementing the Solvency II directive in national legislation is 30 June 2013, although further delays cannot be excluded. The most important provisions will probably take effect no earlier than 1 January 2015, although the European Insurance and Occupational Pensions Authority (EIOPA) plans to introduce provisional measures to enable minor parts of the Solvency II regulatory framework to be utilised as of 2014. These may include requirements relating to risk management and internal company controls, including self-assessment of risk and solvency, requirements regarding supervisory authority follow-up, and approval processes for internal models used to calculate the solvency capital requirement. On 27 March 2013 EIOPA issued a public consultation on recommendations for such provisional measures for. The consultation's deadline was set at 19 June 2013.

The final form of the Solvency II framework as a whole will depend on the content of the level 2 implementing measures. The European Commission is expected to adopt the implementing measures in the form of a regulation. The regulation will apply directly as law in EU member states, and it is planned that the regulation will enter into force simultaneously with the Solvency II directive itself. Transitional rules will also apply.

Official Norwegian Report NOU 2011:8 by the Banking Law Commission contains among other things draft rules to implement EEA rules corresponding to the Solvency II framework. As mentioned, the Solvency II framework is not finalized and adopted in the EU. The Ministry is currently working on proposal for new solvency rules for insurance companies, based on the draft proposed by the Banking Law Commission in the NOU 2011: 8 report.

The Banking Law Commission has prepared draft rules on new pension products, which are likely to be less burdensome for companies under Solvency II than the traditional defined benfit pension schemes; see the discussion of the Banking Law Commission's proposal in section 3.3.2 below.

3.3.2 Changes to private sector pension schemes

3.3.2.1 Proposals for new occupational pension schemes

Steadily rising life expectancy is a challenge for all parts of the pension system. The level of annual pension benefits can only be maintained by saving more each work year or by participating in the labour market for longer, i.e. retiring later. The alternative is lower annual pension benefits.

The national insurance scheme was reformed extensively with effect from 1 January 2011, not least to address the states finance-related aspects of rising life expectancy. One priority of the reform was to ensure that the annual pension accrual ("all-years accrual") gives individuals an incentive to participate longer in the labour market. Following the national insurance reform, it is now possible to accrue retirement pension entitlement in the scheme until the age of 75. Expenditure growth due to rising life expectancy is counteracted by making an actuarial life expectancy adjustment to the annual pension. These changes will contribute to make the national insurance scheme sustainable, although at the individual level the life expectancy adjustment means that the same accrued pension entitlement will produce a lower annual pension if people live longer than before.

Changes to private pension schemes are work in progress. The key questions are how to deal with biometric risk and financial risk, and how to stimulate labour market participation. When designing new private pension schemes, account must also be taken of the need for schemes to function well in conjunction with the new national insurance scheme, public-sector occupational pension schemes and the tripartite relationship between workers, employers and insurance companies.

The first phase of private pension scheme reform took effect on 1 January 2011. Among other things, pension legislation now permits flexible receipt of pension payments. Individuals may now:

1. choose to receive retirement pension payments from the age of 62
2. choose what proportion of their pension they wish to receive, although the annual retirement pension must amount to at least 20 per cent of the national insurance base amount (G).

Individuals may receive retirement pension payments from the age of 62, even if they remain in work. Participation in work confers entitlement to further pension right accrual, regardless of pension receipts.

Changing the start date for the receipt of pension payments also means a change in the expected pension payment period. Accordingly, the pension vehicle must recalculate pensions such that annual pensions become lower in the event of early receipt and higher in the event of later receipt.

In Official Norwegian Report NOU 2012: 13, the Banking Law Commission proposed new schemes for private occupational pensions. The new pension product is based on the saving of defined contributions as a percentage of annual salary, not on a defined benefit level.

The Banking Law Commission emphasised that the product should be in line with the new national insurance scheme so that it applies the principle of all-years accrual (abandoning the current final salary principle), and actuarial life expectancy adjustment (cf. the division factor applied in the national insurance scheme). Further, the product should be better in line with a labour market in which most workers shift jobs several times in the course of their working career. The Banking Law Commission envisaged two models, the "standard model" and the "basic model", within the new product. In the standard model, the employer is responsible for ensuring that pension holdings are adjusted annually in line with wage inflation. In schemes complying with the basic model, the financial returns determine the development of the pension holdings. In both schemes, the pension vehicle shall guarantee that the value of the accrued pension holding does not fall in nominal terms ("zero guarantee"). Several choices are envisaged within the two models, meaning that several variants will be possible in practice. Among other things, companies will be free to determine the structure of guarantees in excess of the zero guarantee, and funds can either be managed as part of the collective portfolio, or with investment choices for companies or for individuals.

The report of the Banking Law Commission on new pension products proposed both gender-neutral premiums and a system for converting accrued pension holdings into annual payments that should in principle be gender neutral. Under the Commission's original proposal, the conversion should be based on the division factor applied in the national insurance scheme, adjusted to take account for different life expectancies in collective pension and the population as a whole. Later, the Commission proposed a system for conversion of pension holdings into annual payments that do not use the national insurance scheme's division factor as a starting point. The consultation on the Commission's proposals revealed a need to consider alternative means of dealing with biometric risk. Accordingly, the Ministry of Finance instructed Finanstilsynet to design alternative ways of converting accrued pension holdings into annual payments. Finanstilsynet has proposed conversion

based on expected remaining life expectancy, which is different for women and men of the same age, and retention of the current system under which higher annual premiums are paid for women than for men. The objective is to give women and men equal expected annual retirement pensions despite their different life expectancies. Consultation on Finanstilsynet's report is ongoing. Finanstilsynet's recommendations accord with current legislation and practice, and with the conclusions of the Kvidal committee. In 2001, this committee considered the issue of gender-neutral premiums and benefits in the context of life insurance. The government of the time presented a draft bill based on the Kvidal committee's report (Proposition to the Odelsting No. 100 (2001–2002)). The bill received the support of all parties in the Storting except the Centre Party, which wished to enshrine gender-neutral premiums in law.

In Official Norwegian Report NOU 2013: 3, the Banking Law Commission proposed arrangements for the transition from the current defined benefit pension schemes under the Corporate Pensions Act to the new product proposed by the Banking Law Commission. A primary objective of these transitional arrangements is to protect previously accrued pension rights in a proper manner. In the same report, the Commission also proposed higher maximum permitted annual contributions to defined contribution pension schemes.

Consultation has been conducted on the Banking Law Commission's proposal. The Ministry intends to present a bill based on the Commission reports NOU 2012: 13 and NOU 2013: 3, Finanstilsynet's recommendations concerning the handling of biometric risk, and the consultations conducted on these topics, to enable the Storting to consider the bill in the autumn session of 2013.

3.3.2.2 New life expectancy assumptions

When life expectancy rises, life insurance companies and pension funds face higher expenses on retirement pensions, and therefore have to increase premiums and provisions for retirement pensions. Finanstilsynet has developed new minimum requirements for the calculation of life expectancy developments (death rates) which are intended to better reflect changes in life expectancy, and which are to apply from 2014. The new rates are intended to be dynamic, i.e. incorporate further developments in life expectancy in the years ahead. The new rates are based on a mid-range alternative for life expectancy trends calculated by Statistics Norway, but are adjusted to take account for higher life expectancy among those who are insured in private pension schemes than among the population as a whole. Moreover, the rates includes safety margins.

The new death rates will emphasise the fact that life insurance companies and pension providers have collected insufficient premiums for many years, and made insufficient provision for the funding of the liabilities they have assumed. Companies have up to five years to build up provisions to meet the new requirements. Funding will be split between owners and customers according to the fraction used in paid-up policies, i.e. in each of the five years (at most), 80 per cent of the increase in reserves may be taken from profits that would otherwise have benefited customers, while the company itself must fund at least 20 per cent of the annual reserve increase. Employers who have defined benfit pension schemes for their employees, persons with paid-up policies from collective schemes and persons who receive pension payments from defined benefit pension schemes during the step-up period may have a poorer outlook for excess returns in the period until reserves are built up. However, the workers' guaranteed pension benefits, the contractual entitlements, will not be reduced.

3.4 Securities markets

3.4.1 Structural changes in investment firms

3.4.1.1 Securities markets

Ownership and debts in form of securities are normally tradeable. The key participants in securities markets are buyers, sellers, marketplaces and various registers, intermediaries, advisers and facilitators. Securities markets help to procure credit and equity, and to reallocate risk. If securities markets function well, capital can be channelled to where it yields highest expected returns. Higher expected returns reduce the need to save, but also make saving more profitable. This is one reason why efficient securities markets do not have a clear effect on total saving.

On the other hand, well-functioning securities markets do have a clear effect on the economy. Efficient trade in debts and debt claims allows, among other things, profitable long-term projects to be funded, rather than less profitable short-term projects, even though those who invest in such projects have a short-term investment horizon. Well-functioning securities markets therefore help to improve the intertemporal efficiency of the

economy. There are several sources of economic gains from securities markets, including that securities markets facilitate larger and riskier projects.

An important prerequisite for well-functioning securities markets is that laws and regulations are adapted to ensure that:

- access to the marketplace is as easy as possible
- knowledge about financial products, product development and regulations meets a high international standard
- transaction costs are competitive
- the entire transaction chain meets a high standard with regard to safety and efficiency.

The business sector changes and develops when businesses change owners, acquire and merge with other businesses, or demerge parts of their operations into new companies. Many parts of the Norwegian business sector are capital-intensive. Well-functioning securities markets can ease restructuring and innovation. These processes demand specialist expertise.

3.4.1.2 Investment firms

Firms must be licensed as investment firms in order to provide investment services in Norway. Licences may be granted to private limited companies or public limited companies. At the end of 2012, 139 investment firms were registered in Norway, licensed to provide investment services. There were also 24 branches of foreign investment firms. The primary objective of regulation and supervision of investment firms is to ensure safe, organized and efficient trade in financial instruments, so that the securities markets can function as a source of capital for the business sector and as a basis for investment activity and saving. Supervision encompasses the financial position and operations of market participants, and monitors that the rules governing activities and general rules of conduct are followed.

Recent years have seen an increase in internationalisation and extent of large foreign investment banks and large global networks in Norway. The number of persons employed by branches of foreign investment firms has approximately doubled since 2008. This is also evidenced by the entry of Nordic banks into Norway, which have internationalised the investment firm industry by acquiring Norwegian investment firms. Of the 139 investment firms registered at the end of 2012, 109 were independent, while 30 were an integrated part of the banking operation. By comparison, there were 93 Norwegian investment firms in 2001. Of these, 79 were independent and 14 were integrated into a banking operation.

Investment firms function as intermediaries in the securities markets. Investment firms facilitate the issue of, and sell, securities (facilitation in the first-hand market), assist companies in connection with takeovers and major restructurings, and act as intermediaries for different types of securities (as advisers to both professional and non-professional investors). A report on challenges in the financial industry by the Independent Commission on Banking (ICB 2011, also called the Vickers report), divided the tasks of investment firms into four main areas:

- provision of wholesale lending to large corporations (wholesale banking) and assistance (including underwriting) to institutions such as governments and corporations in raising equity and debt finance, as well as stock exchange listing
- acting as counterparty to client trades and market-making (investment banking)
- providing advice in relation to mergers/acquisitions and corporate restructuring
- undertake trading on its own account (proprietary trading)

Proprietary trading is most common among investment firms that are part of a bank, and involves proprietary trading in the foreign exchange and interest rate markets. In the first quarter of 2012, some 75 per cent of the income of investment firms that were part of a bank derived from proprietary trading. Investment firms that are not part of a bank may also engage in proprietary trading to meet the needs of their customers. Some investment firms make their own resources available for a short period to create liquidity in the market, for example by engaging in market-making. Market-making is when an investment firm concludes a binding agreement, for example with an issuer or a marketplace, to provide certain prices in return for a minimum sum or minimum volume of the relevant financial instrument per transaction.

Securities may take the form of equity instruments, debt instruments, currency derivatives or raw material derivatives. Companies can use currency and raw material derivatives to reduce their operational risk and to procure new capital in the form of debt or equity by issuing new securities. The securities they have issued and sold on the first-hand market may subsequently be traded many times on the second-hand market.

Table 3.1 Investment firm income distributed by activity, over time (in NOK)

	1997	2000	2003	2007	2011
Commission trading of equity instruments[1]	38%	28%	17%	16%	9%
Advisory services[2]	31%	27%	17%	40%	30%
Trade in currencies, raw materials, derivatives, etc.	18%	12%	9%	12%	21%
Trade in debt instruments	2%	2%	3%	1%	2%
Market-making (net)	4.5%	1%	14.5%	-3%	5%
Capital management	2%	10%	14.5%	7%	10%
Other operating income	4.5%	20%	25%	27%	23%
Total income in NOK billion	4.5	8.2	6.9	20.2	14.6

[1] Share trading on the second-hand market. Net trade in equity instruments is also included.
[2] Issue and advisory activities, investment advice and order broking.
Source: Finanstilsynet

Issuing companies are not normally involved in the trade of their own securities on the second-hand market, and prices in purchases and sales on the second-hand market have no direct consequences for the companies. However, price developments in the second-hand market may nevertheless be important for a company because prices express how the market assesses the company's issuing and trading choices in concrete, quantitative terms. Stock market prices convey information that is important for shareholders, creditors and company management. For example, a relatively high share price on the second-hand market may indicate that there is room for further capital investment in the business. A relatively low price, on the other hand, may indicate that investors have little interest in investing further in the business.

Major technological developments in the past 15–20 years have altered securities-trading marketplaces. Today, property rights are stored electronically in accounts maintained by central securities depositories (CSDs). Digital trading solutions have largely replaced the traditional investment firm tasks of procurement and broking with computers. The earnings of traditional brokerage companies are declining. At the same time, during the past 10 years investment firms have experienced a strong surge in demand for more expert, specialised services linked to procuring capital, changes of ownership and corporate restructuring. The industry has also experienced higher demand for services that help customers to manage their risk exposure.

The change in income illustrates the gradual shift in services away from procurement services towards problem-solving services, where advice-giving plays an increasingly important role for investment firm income. The Financial Supervisory Authority has examined investment firm income; see Table 1. The figures evidence a structural change in the composition of investment firm income in recent years. In 1997, commission trading of equity instruments accounted for around 40 per cent of income, while the figure had fallen to 9 per cent by 2011. The income components linked to what are often called procurement services, i.e. broking, trading and market-making, are increasingly influenced by technological developments, digitalisation, cost efficiency and consequently lower prices. Services that were previously performed by investment firm employees are now largely performed by computers. The drop in the proportion of income derived from procurement services has been made up for by strong growth in other sources of income.

Investment firm activities are sensitive to general economic changes. Economic upturns generally stimulate high activity levels in the advisory services and, typically, financial problem-solving sectors. In 1997, income from advisory services (issue-related and advisory services and investment advice), accounted for around 30 per cent of income, rising to 40 per cent in 2007 (years char-

acterised by strong economic growth), but dropping to 30 per cent in 2011. In the first quarter of 2012, advisory services and financial problem-solving constituted the most important income sources for investment firms that are not part of a bank.

3.4.2 Regulatory changes affecting the securities markets

3.4.2.1 Securities regulations

New securities markets regulations

On 20 October 2011, the European Commission proposed a revision of the current EU legislation governing securities markets. Under the proposal, the current Markets in Financial Instruments Directive (MiFID), will be replaced by a new directive and a new regulation, the "Markets in Financial Instruments Directive" (MiFID II) and the "Markets in Financial Instruments Regulation" (MiFIR). The proposal is still being discussed by the Council and the Parliament.

The European Commission has proposed a requirement that all organised trade must take place on regulated trading platforms, and a range of other amendments intended to strengthen investor protection, including stricter requirements relating to independent advice-giving and a disclosure duty. The Commission also intends to strengthen the requirements of good business practice when providing investment services to qualified counterparties; see section 10-14, second paragraph, of the Securities Trading Act.

MiFIR contains a proposal for the introduction of a transparency requirement for other types of financial instrument than shares, including bonds and derivatives. The proposed measures include a duty for trading systems to make trading data available free of charge, with a 15-minute delay. The rules are to be identical across the different trading systems.

The proposal in MiFIR envisages that ESMA (the European Securities and Markets Authority) will be authorised to impose provisional bans on certain products or activities. National supervisory authorities may impose permanent bans on products and activities. In line with the MiFID proposal, it has been proposed that legal authority be granted for supervisory authorities to intervene and deal with or ring-fence market participants' investments in various derivatives.

On 3 July 2012, the European Commission published a proposal for the regulation of Key Information Documents (KIDs) for non-professional investors in connection with the purchase of several types of investment product. The European Commission is working on good business practice requirements in connection with the sale of savings products in the banking, insurance and securities sectors. The aim is to ensure uniform regulation of products of the same type across different sectors. The term "structured savings product" is used to describe a savings product that is composed of two or more financial instruments. This proposal is aimed at what are referred to as packaged retail investment products (often abbreviated to PRIPs). The European Commission is seeking unambiguous confirmation that the relevant regulatory provisions will apply to the distribution of proprietary products sold by investment firms. No complete proposal on PRIPs has been presented, not least because certain aspects are also affected by the ongoing revision of MiFID.

New rules to combat market abuse

On 20 October 2011, the European Commission published a proposal for a new directive and a new regulation on market abuse. The regulation is to replace Directive 2003/6/EC, the Market Abuse Directive (MAD). The market abuse proposals are currently being considered by the Council and the European Parliament. The objective of the new proposal for rules against market abuse is to ensure more uniform regulation of different types of marketplaces, and more uniform practice in different countries. The Commission's proposal envisages changes beyond what is regulated by MAD. The changes include an expansion of the directive's scope to additional marketplaces, so that the rules also encompass instruments traded through multilateral trading facilities (MTFs) and other organised trading facilities (OTFs), stricter enforcement and penalty requirements, and regulatory changes to increase harmonisation between member states. The Commission will also expand MAD's scope to cover derivatives based on financial instruments that are traded in regulated marketplaces or through MTFs or OTFs.

Following the LIBOR scandal, serious unease has arisen about false reporting of banks' interbank lending rates. Actual or attempted manipulation of such important reference rates may have a serious effect on the integrity of the market, and may cause consumers and investors large losses, and/or upset the real economy. On 25 July 2012, the European Commission proposed measures to prevent this type of market manipulation by adopting changes to the proposed regulation and direc-

tive on insider dealing and market manipulation first put forward on 20 October 2011 (MAD). The changes will clearly prohibit manipulation of reference rates, including LIBOR and EURIBOR, and criminalise such manipulation by introducing criminal penalties. The proposal is of EEA relevance.

3.4.2.2 Securities infrastructure: new derivatives regulations

Traditionally, derivatives were considered a form of financial instrument that was only used by professionals, and have until now been the subject of "light-touch regulation" in the EU. However, the use of derivatives has been identified as a contributory cause of the seriousness of the international financial crisis, through increased debt ratios and closer financial integration of market participants. Lehman Brothers bank, for example, was extensively involved in the derivatives market, although the identities of the counterparties under its derivatives contracts were unclear. This lack of transparency was an important cause of the acute crisis of confidence in the financial markets following the collapse of Lehman Brothers. Internationally, and particularly in the USA, it has been pointed out that the derivatives market was too opaque, making it difficult to identify the real risk associated with derivatives trading.

At a summit in Pittsburgh on 26 September 2009, the G20 leaders agreed that all standardised over-the-counter (OTC) derivatives contracts should become subject to mandatory clearing through a central counterparty from the end of 2012 at the latest, and that OTC derivatives contracts should be reported to a trade repository. OTC derivatives are derivatives that are not traded on an exchange or in a regulated market, and are instead traded privately between two parties. When a contractual trade occurs OTC, different practices are followed with regard to margin payments and related agreements. In cases where a central counterparty is used, margins are paid on a continuous basis. Reporting is intended to make it easier for authorities to monitor who is concluding derivatives agreements, and the net and gross exposure. To reduce the risk of non-performance of derivatives contracts, and the knock-on effects this can have, the G20 leaders agreed that standardised OTC derivatives contracts should be subject to mandatory clearing through a central counterparty. At a meeting in Toronto on 1 June 2010, the G20 leaders affirmed this agreement and committed themselves to accelerating the implementation of stricter measures to improve insight into and supervision of OTC derivatives contracts internationally in a consistent manner and without differential treatment. EU regulations to ensure this have been included in Regulation (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories (EMIR). EMIR formally entered into effect in the EU on 16 August 2012, but will only take full effect once all of the technical standards required by the regulations are implemented.

EMIR's purpose is to make the derivatives market more transparent in order to identify and counteract its counterparty risk, thus contribute to safeguarding financial stability. EMIR requires clearing of certain types of OTC derivatives contracts. In the case of OTC derivatives that are not cleared by a central counterparty, the parties to the transaction are required to exchange risk-reducing measures. Further requirements govern the types of financial instrument that may be used for guarantee purposes. Further, efficient processes are required for approving completed trades. EMIR also regulates the organisational structures and activities of central counterparties established in the EU, and ESMA's approval of central counterparties established in third countries.

To improve transparency, a requirement has been introduced to report completed transactions involving derivatives to a trade repository. Trade repositories must publish aggregated information and make available information required by, among others, supervisory authorities and central banks. The regulations lay down requirements regarding reporting to trade repositories, as well as rules on ESMA's registration and supervision of trade repositories and approval of trade repositories from third countries. Approval of trade repositories from third countries and the registration and supervision of trade repositories are the responsibility of ESMA, the European Securities and Markets Authority. The regulations are EEA relevant.

3.4.2.3 New rules on alternative investment fund managers

Directive 2011/61/EU of the European Parliament and of the Council on Alternative Investment Fund Managers (the AIFM Directive or AIFMD), was adopted by the EU on 8 July 2011, and contains rules applicable to managers who manage or market collective investment structures defined as alternative investment funds.

Simply put, alternative investment funds are all forms of collective investment that are not UCITS funds. Alternative investment funds thus encompass a diverse group of market participants that manage many types of collective investment, including private equity funds, property funds, infrastructure funds, national funds pursuant to the Securities Funds Act and hedge funds that are not deemed special funds pursuant to the Securities Funds Act. The directive facilitates an internal market in the EEA Area for alternative investment funds, and introduces harmonised requirements applicable to managers and the supervision of such funds.

One important objective of the AIFM Directive is to address the risk associated with alternative investment funds and its impact on European investors and markets in a coordinated manner. The expectation is that uniform rules on registration, reporting and controls will improve markets and make them more transparent. The directive is also intended to strengthen investor protection and secure better market access and better competitive conditions internationally for European market participants.

The financial markets are international, and it is difficult to manage the risk associated with alternative investment funds without coordinated national measures. This was one reason why the G20 leaders agreed to implement the same measures aimed at alternative investment funds and alternative investment fund managers. The directive regulates the activities of managers, rather than the funds themselves (i.e. not the collective investments). AIFMD introduced a licensing duty for managers who manage funds with total assets exceeding a certain threshold value, as well as various registration and reporting duties for other managers of alternative investment funds.

Today, all kinds of alternative investment funds are marketed to non-professional customers, with the exception of special funds that may not be marketed or sold to this customer category. As a result, most products falling into the alternative investment fund category may be offered to consumers and other non-professional customers. In Proposition to the Odelsting No. 36 (2007–2008), the Ministry took the view that a potential investor in a special fund should receive qualified help to conduct an assessment of whether the special fund is a suitable investment for the investor in question. In the proposition, the Ministry proposed that both professional and non-professional investors should be able to invest in special funds, but that non-professional investors should only be able to invest after being advised by an investment firm or other management company. Nevertheless, the 2010 regulations, which introduced the new rules, stated that special funds could only be offered to professional customers until further notice. The interests of consumers have been given higher regulatory priority in recent years, not least through more detailed rules on customer service in the Securities Trading Act and the introduction of an adapted information document in the Securities Funds Act (key information). Nonetheless, there are examples of non-professional customers being advised to invest in, for example, alternative investment funds associated with high risk and complexity that have not been appropriate products for the customer. Bad investments of this kind have had very serious consequences for the customers' private finances.

The marketing of special funds to non-professional investors is an issue to be considered in connection with the implementation of the AIFM Directive in Norwegian law. On assignment for the Ministry of Finance, The Financial Supervisory Authority appointed a working group mandated to review and prepare proposals for the implementation of the directive in Norwegian law. The Ministry received the working group's report on 1 March of this year, and published it for consultation on 20 March.

3.4.3 Reference rates

Many contracts in financial markets are based on indicative reference rates, for example the Norwegian Nibor rates; see Box 3.5. Many corporate lending contracts specify that the interest rate shall be a Nibor rate plus a margin agreed in advance. It is therefore important that the reference rates used in financial markets are well constructed in accordance with the intended purpose of the reference rate. It is also important that interest rates are set in a thorough, reliable manner.

The structure and setting of indicative reference rates is currently being discussed in many countries and in the EU, and alternatives to the current models are being considered. In Denmark, authorities recently announced their intention to subject reference rates to new rules and supervision, and that a new reference rate based on actual trades will be established as a supplement to Cibor (the Copenhagen Interbank Offered Rate). In the UK, authorities are considering proposals for extensive reform of Libor (the London Interbank Offered Rate). In Sweden, pro-

Box 3.5 What is Nibor?

Nibor stands for "Norwegian Interbank Offered Rate", and is a set of Norwegian money market rates for different maturities. The Nibor rates are fixed daily for different maturities based on quotes reported to Thomson Reuters by a panel of six banks.[1] Thomson Reuters deletes the highest and lowest reported quotes, and announces the average of the four remaining quotes as the Nibor rate for the relevant maturity. Finance Norway (FNO) sets rules for the calculation and publication of Nibor.

Nibor is intended to reflect the interest rates each bank would charge for loans in Norwegian kroner (NOK) to a leading bank that is active in the Norwegian money and currency markets. As there is little or no trade in this interbank market for maturities exceeding a few days, the Nibor quotes are largely hypothetical estimates of market rates. Panel banks are not obliged to trade at the rates they quote to Thomson Reuters, or to trade at the Nibor rates announced by Thomson Reuters.

Nibor differs from some other types of indicative reference rate in that Nibor is based on dollar rates and the future price of NOK (the forward price). Banks base their quotes on Euribor dollar rates (the Euro Interbank Offered Rate), which they adjust according to the Nibor definition, and convert to NOK. Euribor rates are meant to reflect conditions under which a broad range of European banks can borrow from other banks. Nibor also differs from some other reference rates in that Nibor is, as stated, meant to reflect the rates that banks charge on loans to other banks. Libor (the London Interbank Offered Rate), on the other hand, is meant to reflect rates banks expect to be able to borrow at. This may provide an incentive to quote artificially low rates.

[1] The six banks are DNB Bank, Danske Bank, Handelsbanken, Nordea Bank Norge, SEB and Swedbank.

cesses have been initiated to improve the framework for setting Stibor (the Stockholm Interbank Offered Rate).

In Official Norwegian Report NOU 2011: 1, the Financial Crisis Commission identified a need for more transparency and clearer rules for the setting of Nibor. Further, Norges Bank has repeatedly pointed out weaknesses in the Nibor structure. Norwegian banks have followed up on these issues by amending the Nibor self-regulation model, while the Ministry of Finance has commissioned further assessments and advice from Norges Bank and the Financial Supervisory Authority of Norway (Finanstilsynet).

The Ministry of Finance intends to conduct a thorough review of the need for measures to strengthen the framework for reference-rate setting in Norway. In December 2012, the Ministry sent a letter to Finanstilsynet in which it asked Finanstilsynet to implement measures to strengthen the current system for setting Nibor as soon as possible. Finanstilsynet is also planning supervisory inspections, with particular emphasis on banks' handling of information and conflicts of interest. In addition, Finanstilsynet, as tasked by the Ministry and in collaboration with Norges Bank, has assessed the need for changes in the Nibor framework. In a letter of 8 April 2013, Finanstilsynet recommends *inter alia* three measures:

1. The responsibilities of Finance Norway and the banks should be specified. The individual bank is responsible for its own Nibor quoting. This should be clarified and systematised.
2. There should be established minimum requirements concerning Nibor banks' publishing, documentation, recording and control of their own Nibor quoting and the assessments that underlie the quoting. Documentation and recording will enable verification and control of the Nibor quoting.
3. Finance Norway should establish a body responsible for monitoring and examination, which has a broader representation than the current steering committee. The monitoring body should have a responsibility for overseeing the processes and the individual contributions from participating banks. There should be established clear guidelines on the monitoring body's role and responsibilities, including guidelines for notifications to Finanstilsynet and the steering committee. The monitoring body should have a responsibility for receiving and assessing reports on possible irregulari-

ties in the Nibor quoting. The monitoring body should have a different composition than, and be independent of, the steering committee.

Finanstilsynet said in the 8 April 2013 letter that it at a later stage will submit an assessment to the Ministry on the need for new rules for the Nibor framework. The assessment will be based on international experiences, on-site inspections of Nibor banks, and any sector-initiated measures for strengthening the system.

Norges Bank has assessed the Nibor framework in a letter of 20 March 2013, enclosed with Finanstilsynet's 8 April 2013 letter. There, Norges Bank advocates *inter alia* that banks should set Nibor in a way that makes the reference rate less volatile, by basing the Nibor qouting on a spectrum of price information as broad as possible. Norges Bank also calls on financial market participants to develop a domestic market for overnight indexed swaps (OIS) for various maturities, as an OIS market could provide proxies for risk-free interest rates, which would contribute to make visible the underlying factors of changes in the Nibor rates.

The Ministry of Finance will examine and assess the material provided by Finanstilsynet by letter of 8 April 2013, including the material prepared by Norges Bank. The Ministry envisages a speedy follow-up of the matter, *inter alia* with a reply to Finanstilsynet by summer 2013.

3.5 Financial reporting

3.5.1 New accounting directive

On 25 October 2011, the European Commission proposed a consolidated accounting directive to replace the Annual Accounts Directive (the fourth company directive), and the Consolidated Accounts Directive (the seventh company directive). The proposal contained new rules on annual accounts, consolidation of accounts and "related reports" for certain companies, including "country-by-country reporting".

The proposal concerning country-by-country reporting involves requiring large companies and all listed companies that engage in operations in the extractive and forestry industries to report annually, in a separate report, on payments to the authorities in countries in which such operations are conducted. The report shall specify whether payments are linked to individual projects. In this context, "payments" comprise among other things tax payments, royalties licensing fees etc. The draft directive is currently being considered by the European Parliament and the Council. In December 2012, the Ministry of Finance appointed a working group to consider the introduction of country-by-country reporting requirements in Norwegian law. The working group is to report by 1 May 2013.

The proposal for a new accounting directive supplements a proposal for simpler accounting rules for micro-enterprises which was adopted by the European Council and the European Parliament in March 2012.

Among other things, the European Commission has proposed simplifications of the note requirements applicable to small enterprises, and an increase in the small-enterprise threshold values. The European Commission's proposal also involves full harmonisation of the threshold values for small, medium-sized and large enterprises. Under the proposal, a small enterprise is defined as an entity that does not meet at least two of the following three conditions:

1. balance sheet total of more than EUR 5 million (an increase from EUR 4.4 million)
2. turnover of more than EUR 10 million (an increase from EUR 8.8 million)
3. average of 50 employees throughout the financial year (the same as before).

Under the directive, a medium-sized enterprise is an enterprise that is deemed not to be a small enterprise, but that does not meet at least two of the following three conditions:

1. balance sheet total of EUR 20 million
2. turnover of EUR 40 million
3. average of 250 employees throughout the financial year.

Enterprises which meet two of the three criteria above are defined as large enterprises under the directive.

The threshold values for small enterprises are higher in the proposal than in current Norwegian legislation. The Norwegian Accounting Act does not distinguish between medium-sized and large enterprises, except that public limited companies and companies listed on stock exchanges are distinguished; see section 1-5 of the Accounting Act. The distinction between medium-sized and large enterprises will probably have to be included in the Norwegian Accounting Act if the proposed directive is adopted by the EU and included in the EEA Agreement.

Under the current Accounting Directive, national authorities *may* simplify the accounting

rules for small enterprises. Under the new proposal, national authorities *shall* simplify national legislation. The proposal may mean that some of the note requirements currently applicable to small Norwegian enterprises will be discontinued.

Further, the proposal envisages that small enterprises will not have a duty to produce group accounts, something which is already enshrined in Norwegian law. The proposal upholds the exemption for small enterprises from the requirement to prepare a cash flow statement. It will still be up to each member state to decide whether small enterprises have to prepare annual reports, as is currently required in Norway.

Another proposed change is that the member states must follow the "substance over form" principle, which has been voluntary until now. The principle states that accounts must show the financial realities within the enterprise, not the legal form of, for example, transactions. Norway has already incorporated this principle into its accounting legislation. It has also been proposed that an "essentiality principle" be included as a fundamental accounting principle. This states that only essential information should be included in the accounts, as overly detailed accounts can be just as misleading as accounts containing insufficient information.

3.5.2 Auditing

On 30 November 2011, the European Commission proposed changes to the Audit Directive, and a new regulation on audits of public-interest entities (banks, insurance companies, listed companies, etc.) The European Parliament and the Council have not yet completed their deliberations. The proposed changes are wide-reaching, and controversial in certain respects, particularly as regards audits of public-interest entities. A more detailed account of the contents of the directive was provided in the Financial Markets Report 2011. The proposal is EEA relevant.

In Norway, small private limited companies have been permitted to choose not to have their annual accounts audited since 1 May 2011. Proposition to the Storting, Prop. 51 L (2010–2011), which concerned the statutory amendments that introduced the audit exemption, stated that the Government would evaluate the effects of the change after some time. Work on this evaluation has now begun. Following a preliminary investigation of methodology etc. by Statistics Norway, the Ministry invited interested parties to tender for the task of conducting the evaluation. The task has been awarded to BI Norwegian Business School, which is expected to submit its report by the end of 2014.

3.6 The new EU supervisory system

On 1 January 2011, the EU established a new European supervisory system intended to strengthen supervision of the entire European financial sector and to improve the basis for financial stability. The new supervisory system adopts a two-track approach. While the European Systemic Risk Board (ESRB) is responsible for monitoring systemic risk in the European financial market as a whole, three supervisory authorities conduct supervision at the micro level, in the banking (EBA), insurance and pension (EIOPA) and securities (ESMA) sectors.

The EU has decided that the EEA/EFTA countries may join the new supervisory bodies through the EEA Agreement. Pending formal membership through the EEA Agreement, Finanstilsynet is involved in the micro-level supervisory authorities as an informal observer. In addition, Norges Bank and Finanstilsynet were recently invited to become informal observers on the ESRB's Advisory Committee, a sub-committee of the ESRB.

The legislative act on which the micro-level supervisory authorities are founded, also grant the micro-level supervisory authorities formal jurisdiction. They are to advise the Commission and national supervisory authorities, draft proposals for supplementary regulations in their sectoral areas, help to harmonise supervisory practice within the EU/EEA area, and supervise individual institutions to some degree. The micro-level supervisory authorities have decision-making authority in certain situations: 1) in the event of a breach of relevant EU rules, 2) during crises, and 3) in the event of disputes between national supervisory bodies. Such decisions may bind national supervisory authorities or apply directly to private parties in the EU member states.

Both the Norwegian Constitution and the two-pillar structure of the EEA Agreement limits the inclusion in the EEA Agreement of legislative acts granting decision-making authority to an EU body. Along with Iceland and Liechtenstein, Norwegian authorities are now negotiating with the EU regarding a possible inclusion of the supervision regulations in the EEA Agreement, where it is sought to adapt to these limits.

Box 3.6 Experimental bubbles

The efficient market hypothesis, or EMH, has a strong position in traditional finance theory. The hypothesis states that the market prices of financial assets reflect all available information such that no systematic above-average risk-adjusted return can be achieved through purchases or sales of assets. The hypothesis may not hold, not least because investors do not always act rationally.

Long periods of sharply rising asset prices are sometimes followed by corrections and falling prices. Such a development was seen, for example, in IT shares at the millennium, and in the residential real-estate markets of several countries in the years preceding the financial crisis in the autumn of 2008. Following such events, or when there are observable rises in asset prices, discussions frequently arise about the potential existence of a price bubble, often meaning that prices far exceed fundamental value.

Experimental economics can be used to test price formation in various markets in practice or in a laboratory. In the laboratory, a market similar to an exchange can be constructed, but where the financial asset produces a fixed return known in advance, so that a fundamental value can be calculated. The fundamental value can then be compared to the prices that arise in the experimental market when participants are instructed to buy and sell the asset; see for example Smith, Suchanek and Williams (1988).[1]

Experiments show that the standard theory of price formation, under which supply and demand meet without leeway for additional profit from the trade, fits well for trade in consumer non-durables. Smith (1962)[2], among others, found that such markets are "efficient" under more general conditions than indicated by economic theory. Several subsequent experiments have produced similar results.

In many instances, experiments in which participants buy and sell financial assets have demonstrated the development of price bubbles, where prices cannot be explained by fundamental factors. One possible explanation may of course be that it is difficult for the participants to perceive the fundamental value, but this explanation is undermined by the fact that bubbles also appear when the asset has a clearly defined fundamental value.

A set-up used by Dufwenberg (2012) comprises 10 periods of buying and selling an asset that produces a return of 0 or 20 at the end of each period. These two outcomes are equally likely. At the start of period 1, each asset therefore has an expected value of 100 (0,5×20×10), whereas prior to the last period each asset only has an expected value of 10 (0,5×20×1). In the experiment, the asset was nevertheless bought and sold at close to 100 throughout all periods. When the experiment was repeated several times with the same participants, however, the asset was gradually traded at the right price. This may indicate that bubbles develop less frequently in markets with experienced participants.

Kirchler, Huber and Stöckl (2012)[3] have pointed out that the fundamental value of assets that the participants are familiar with, does not decrease over time, unlike the asset in the example above. In the authors' view, participants may be unable to price the asset because they do not recognise its properties from everyday life. Kirchler, Huber and Stöckl utilised an asset with the same properties as in the example above, but described it as a share in a mine that was depleted over time. The result was a much lower incidence of incorrect pricing. This may indicate that market participants do not price assets that they recognise from everyday life incorrectly.

Hussam, Porter and Smith (2008)[4] tested what happens when the same experiment is repeated several times to give participants experience, but the market conditions are then changed, for example by increasing liquidity and uncertainty about the payments generated by the financial asset. They observed bubbles when important characteristics of the underlying market were altered.

One objective of financial markets regulation is to counteract the development of bubbles. Experimental economics can provide insight into how and why bubbles develop, and can thus help to improve insight into and regulation of financial markets.

[1] Smith, V., G. Suchanek & A. Williams (1988), «Bubbles, Crashes and Endogenous Expectations in Experimental Spot Asset Markets», *Econometrica 56*, 1119–1151.

[2] Smith, V. (1962), «An Experimental Study of Competitive Market Behavior», *Journal of Political Economy 70*, 111–137.

[3] Kirchler, M., J. Huber & T. Stöckl (2012), "Thar She Bursts: Reducing Confusion Reduces Bubbles", *American Economic Review 102*, 865–883.

[4] Hussam, R., D. Porter & V. Smith (2008), "Thar She Blows: Can Bubbles Be Rekindled with Experienced Subjects?", *American Economic Review 98*, 924–937.

Unlike the micro-level supervisory authorities, the ESRB cannot make binding decisions, although it can give advice to member states. Accordingly, the inclusion of the regulations establishing the ESRB in the EEA Agreement without the same kind of adaptations is possible.

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