FINANSTILSYNET
THE FINANCIAL SUPERVISORY
AUTHORITY OF NORWAY

RISK OUTLOOK
JUNE 2018

Risk Outlook

Finanstilsynet analyses and assesses stability in the Norwegian financial system. Its assessments are published in the report *Risk Outlook* twice yearly, in June and November.

RISK OUTLOOK JUNE 2018

Cut-off date: 5 June 2018

SUMMARY

The growth in the world economy continues, and is broad-based. However, much uncertainty attends the effects of increased protectionism, Brexit and tensions in international politics.

The cyclical trough in the Norwegian economy bottomed out just over a year ago. The subsequent upturn is largely attributable to international economic growth, low interest rates, improved competitiveness and expansionary fiscal policy. Norges Bank has given notice of an increase in its key policy rate in early autumn this year, followed by a gradual stepping up to about 2 per cent in 2021.

Global interest rates are on the way up. The international upturn has encouraged market actors to revise upwards their expectations of central banks' key policy rates. Long-term interest rates have also risen. After a prolonged period of very low rates there is a risk that financial imbalances have built up. High risk exposure in financial markets, high asset prices and a high debt burden render the economy vulnerable in the event of an unexpectedly strong interest rate hike and rising risk premiums in financial markets. The IMF and other international institutions cite these factors as the most important risk drivers at the present time.

Higher risk premiums and rising interest rates in international financial markets will affect Norwegian borrowers and financial institutions. Experience shows that contagion from international money and bond markets is also likely to affect the general interest rate level and risk premiums in a situation where the Norwegian economy and Norwegian banks at the outset are not impaired. It is imperative for borrowers and financial institutions to maintain sufficient buffers to withstand a stronger-than-expected interest rate hike in tandem with falling equity, bond and property prices.

Norwegian households' debt burden is high on average and, for a large proportion of households, very high. Inasmuch as almost all household debt carries floating interest, households are highly vulnerable to interest rate hikes. Younger borrowers generally have small financial buffers and are particularly vulnerable. As experienced on earlier occasions, hefty interest rate hikes and unemployment are likely to prompt financial consolidation among households and to impair the earnings and financial position of Norwegian firms and financial institutions. This is a particular vulnerability of the Norwegian economy.

House prices have risen steeply for a number of years. Regardless of how house price growth is measured, house price growth in Norway is high compared with other Nordic countries and the OECD area. The temperature of the housing market declined in 2017. The price fall was strongest in Oslo, where the price rise in 2016 had been most marked. However, price growth has picked up again in the current year. The further path of the housing market is uncertain. Improved growth prospects and continued low interest rates could contribute to continued house price growth for a time. That would heighten the potential fall in the housing market and add to the risk of financial instability.

In November 2017 the Ministry of Finance asked Finanstilsynet to consider whether the residential mortgage lending regulations should continue in their current form, or be revised or revoked. In Finanstilsynet's view the residential mortgage lending regulations have worked well. The tightening of the regulations as from 1 January 2017 contributed to tighter lending practices. Growth in household debt has nonetheless remained high due to continuing high demand for mortgages.

In its recommendation of 28 February to the Ministry of Finance, Finanstilsynet proposed continuing the residential mortgage lending regulations indefinitely after the expiry of the current regulations on 30 June 2018, but with some amendments made. It recommended dispensing with the requirement of a maximum loan to value ratio of 60 per cent for

mortgages for second homes in Oslo, and that the scope allowed for banks to grant residential mortgages that are not compliant with all requirements of the regulations should be set at 8 per cent nationwide. In the period since Finanstilsynet submitted its recommendation to the Ministry of Finance, house price growth has picked up, contributing to continued high borrowing by the household sector. In Finanstilsynet's assessment, this strengthens the rationale for continuing the regulation of residential mortgage lending as proposed.

The growth in consumer lending, i.e. financial institutions' unsecured loans to personal customers,

has slowed somewhat, but remains high. Such loans are actively marketed by banks and finance companies. There is a risk of financially vulnerable households taking out consumer loans at high interest that they are subsequently unable to service. This could result in a heavy personal burden for the individual borrower, and in loan losses and loss of reputation for banks. A number of steps have been taken in the past year to regulate consumer lending. In June 2017 Finanstilsynet adopted guidelines on consumer lending practices. A survey of institutions' implementation of the guidelines as of the fourth quarter of 2017 shows that many banks have yet to bring their lending activity into line with the guidelines. This is not a satisfactory situation, and Finanstilsynet will monitor banks' compliance with the guidelines in the period ahead. Supervisory activity vis-à-vis banks specialising in consumer has been stepped up, as have the capital charges set.

Prices in certain commercial property segments have risen markedly for several years. Foreign investors have shown increasing interest in recent years. This may have contributed to the rise in prices and the decline in direct return. Commercial property prices are more cyclically sensitive than house prices, and reduced rental income and/or higher interest rates could bring a marked fall in commercial property prices. Norwegian banks and insurers are heavily exposed to commercial property companies. Although banks have implemented risk-mitigating measures, including requirements on pre-leases and on equity capital when financing development projects, a steep price fall would impair commercial property company earnings and reduce the value of banks' collateral. Finanstilsynet attaches importance to prudent assessment of borrowers' debt-servicing capacity and collaterals and will conduct a thematic inspection of the financing of loans to the commercial property sector in the second half of 2018.

Norway's banking industry has seen creditable performances in the years since the international financial crisis, and profit retention has contributed to banks' increased capital adequacy ratios. Norwegian banks are therefore well positioned to provide credit in the event of an economic setback and increased losses.

Finanstilsynet's stress test for 2018 shows that many banks see a considerable reduction in CET1 capital adequacy in the event of a severe negative shock in the Norwegian economy. In the stress scenario world trade declines dramatically, oil prices fall and risk premiums rise concurrent with falling equity and property prices. The likelihood of this scenario materialising is low, but not unrealistic. Several banks are not compliant with the regulatory capital requirements at the end of the stressed period. The impairment of financial positions is due mainly to increased loan losses, in particular on loans to non-financial firms. The results of the stress test underscore how important it is for banks to ensure that their capital planning makes allowance for an unfavourable outturn in the Norwegian and international economies. Finanstilsynet will follow up on this as part of the Pillar 2 process.

The EU's capital requirements directive (CRD IV) and regulation (CRR) are expected to be incorporated into the EEA Agreement shortly. Adapting to CRR/CRD IV will in some areas involve the setting of less stringent capital charges under Pillar 1 than under the current Norwegian requirements. Full implementation of CRR/CRD IV will in isolation permit Norwegian banks to report higher capital adequacy ratios without this reflecting improved solvency.

In Finanstilsynet's assessment it is important to ensure that bringing Norwegian capital adequacy rules into line with CRR/CRD IV does not contribute to a general weakening of Norwegian banks' capital adequacy in real terms. When approving and following up on internal models, Finanstilsynet will attach importance to robust calibration with satisfactory security margins. When setting Pillar 2 add-ons, Finanstilsynet will also ensure that they cover risk that is not fully covered under Pillar 1.

Since the international financial crisis Norwegian banks have increased their capital ratios both in terms of the risk-weighted ratio and the leverage ratio. When assessing banks' capitalisation, Finanstilsynet places emphasis on the leverage ratio, and it will contribute to enabling the banking industry to avoid impairment its financial position on this measure ahead.

The banks have enjoyed ample access to funding in recent years, including funding from foreign sources. They meet the liquidity buffer requirements and have also raised their share of long-term funding. However, they continue to fund a substantial portion of their business in the money and capital markets both in Norway and elsewhere, rendering them vulnerable to increased global uncertainty. The fact that the banks obtain much of their funding through covered bonds (OMF), while at the same time cross holding substantial volumes of one another's covered bonds as part of their liquidity holding, renders the industry more vulnerable to a negative development in the housing market.

In the period since Solvency II entered into force in 2016, insurers' solvency has strengthened, although some insurers face challenges. The new solvency framework captures insurers' risk more effectively than the preceding framework, thus encouraging a better match between institutions' risk taking and their risk-bearing capacity. Adapting to the new requirements has proven particularly challenging for life insurers with a large proportion of guaranteed benefits. The transitional measure for technical provisions has been particularly significant for these institutions. Silver Pensjonsforsikring AS was not in a position to meet the new requirements under Solvency II and was placed into public administration in February 2017. The portfolio of Silver Pensjonsforsikring AS was transferred to Storebrand Livsforsikring AS in January 2018. The public administration does not appear to have affected public confidence in the life insurance industry.

The low interest rate level has posed a challenge to institutions' ability to achieve sufficient return on their investments. Solvency II has in isolation given insurers an incentive to place their funds in less risky investments as a step in adjusting their risk taking to their risk-bearing capacity. However, no significant changes have been noted in the institutions' investment pattern following the introduction of Solvency II.

Norwegian life insurers invest fairly heavily in property compared with insurers elsewhere in Europe. Some assets are treated relatively favourably under Solvency II, including residential mortgages with a low loan to value ratio. In the last two years the largest life insurers have taken over residential mortgage portfolios from banks within the same group. Norwegian authorities are concerned that solvency rules should not encourage arbitrage-motivated migration between banks and insurers. Upon the incorporation of the Solvency II into the EEA Agreement, the adaptation text permits Norwegian authorities to set capital requirements for life insurers' residential mortgages in line with the capital requirements applying to banks' residential mortgages.

The proportion of paid-up policies residing in pension funds is rising. Pension funds are however not subject to risk-sensitive capital requirements equivalent to Solvency II. Finanstilsynet's proposal for the introduction of such rules is under consideration by the Ministry of Finance.

Several non-life insurers are giving closer attention to developing digital processes, inter alia with a view to claims settlements and purchase of insurance. Increasing digitisation and simplification of processes

is expected to contribute to lower costs. However, automating and digitising more solutions may well heighten operational risk ahead.

PART 1: ECONOMIC BACKGROUND AND RISK AREAS

The upswing in the global economy continued through 2017. The cyclical trough in the Norwegian economy bottomed out just over a year ago. Improved growth prospects have contributed to the upward trend in interest rates. Market participants have revised upwards their expectations of central banks' base rates, and long-term interest rates have risen somewhat. Chapter 1 contains an overview of developments in the international and Norwegian real economies and financial markets.

Chapter 2 covers factors that may pose a threat to financial stability. The vulnerability of the Norwegian financial system is largely related to the heavy debt burden of Norwegian households and to high house prices. Since residential mortgages in Norway are largely variable rate, an interest rate hike will increase households' interest burden after a short period.

Norwegian banks and insurers are heavily exposed to commercial property companies. Prices of centrally located, prime commercial properties have risen strongly in recent years.

Commercial property companies are cyclically exposed, and banks and pension institutions are heavily exposed to such companies. In a downturn, losses on loans to commercial property companies, and value write-downs of stocks and bonds issued by them, are likely to be substantial.

Financial imbalances have accumulated after a long period of very low interest rates. High risk exposure in financial markets, high asset prices and a high debt burden render the economic system vulnerable in the event of a stronger-than-expected interest rate increase and higher risk premiums in financial markets.

CHAPTER 1: REAL ECONOMY AND FINANCIAL MARKETS

INTERNATIONAL ECONOMY

Quickening growth rates in the global economy

The upturn in the global economy strengthened over the course of 2017, and growth in global GDP was the highest since 2011. The growth was broad-based, but countries particularly in the euro area and Asia provided a positive surprise. Manufacturing output climbed and real investments rose vigorously, especially towards the end of 2017 (chart 1.1). This signals growing optimism and lays the basis for continuing improvement of the global economy. Substantial growth was concurrently seen in global trade. Unemployment has subsided in the OECD area, but continued idle production capacity in the industrialised countries is keeping inflation and wage growth at moderate levels.

In April 2018 the IMF estimated overall output in the global economy in 2017 to have risen by 3.8 per cent. This figure is expected to rise to close to 4 per cent in 2018 and 2019 (chart 1.2). Compared with the forecasts made in autumn 2017, growth was revised upwards for the industrialised countries, in particular for the USA and Germany. This should be viewed in light of the recently adopted tax reform in the USA and fiscal policy stimuli in Germany. The IMF kept its forecasts for the emerging markets and developing economies unchanged. Nevertheless, expected growth in these countries remains twice as high as in the industrialised countries combined. As the rate of growth rises, some increase in inflation and wage growth is expected. Uncertainty about developments ahead has been reduced in the short term, particularly as a result of the upturn in the euro area.

Structural changes in the labour market may be of significance for potential growth in the future. The OECD points out that the number of jobs requiring high or low competence levels is growing, whereas demand for labour in the mid-range is falling. Concurrently growth in incomes has been far stronger in the high income bracket than in the low income bracket in recent years. Both the IMF and the OECD point out that widening inequality could threaten future growth.

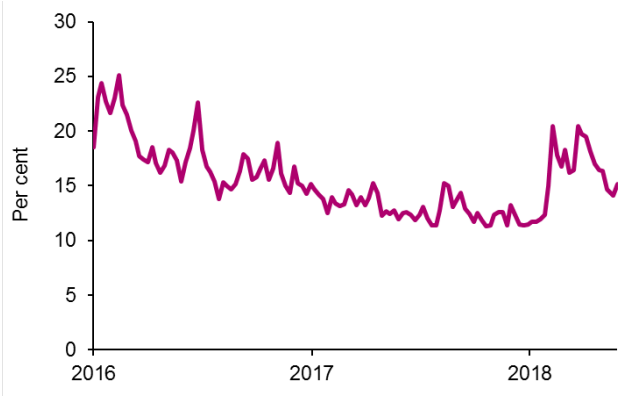
1.1 Growth in investment

* Emerging markets and developing economies apart from China and commodity exporting countries.
Source: IMF

1.2 GDP forecasts

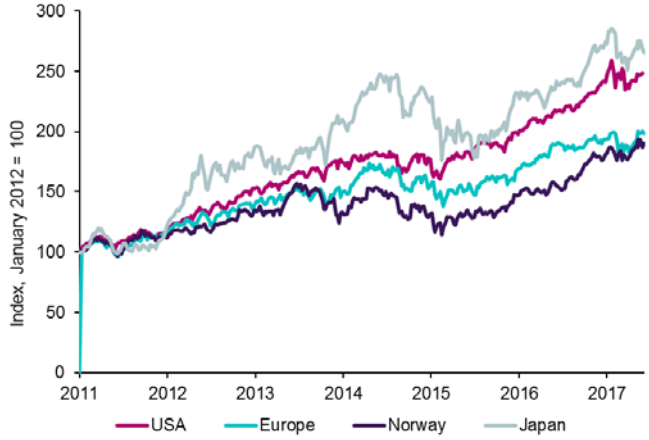
Source: IMF

1.3 VIX index



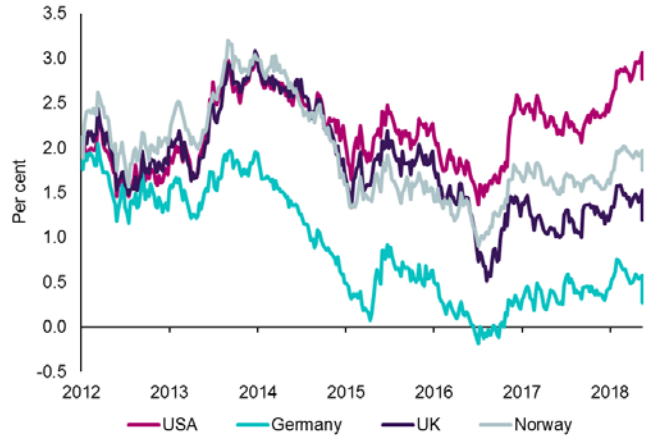
Source: Thomson Reuters

1.4 Share indices (MSCI, Total Return)



Source: Thomson Reuters

1.5 10-year government bond yields



Source: Thomson Reuters

Higher volatility in equity markets

After a long period of very low volatility in the equity markets, an abrupt increase was seen in February (chart 1.3). The turbulence was likely triggered by positive news from the US labour market which may have contributed to expectations of earlier and more frequent interest rate increases by the US Federal Reserve. The turbulence was intensified by the fact that a number of investors who had taken positions in financial products in the expectation of continued low volatility were forced to close their positions with heavy losses. After a long lasting upturn, equity prices fell in February. The decline continued into the second quarter, but reversed once again in May (chart 1.4). The price fall in February was stronger in the USA and Japan than in Europe and Norway. This may be because equity markets in the USA and Japan had shown a steeper upturn ahead of the turnabout. In addition, the trade conflict between the US and China in this period led to increased uncertainty as to future economic growth. The above illustrates that substantial risk has built up in the securities markets and that turbulence can be triggered by small events. See chapter 2 for a fuller account of risk in the securities markets.

Tentative increase in interest rates

Spillover of turbulence in equity markets to the fixed income markets was limited. After slight decline in government bond rates through the first half of 2017, rates rose somewhat during autumn and winter (chart 1.5). This was in keeping with expectations of quickening economic growth and inflation and higher base rates in several countries. Early in June the increase in bond rates seen thus far in 2018 reversed in Germany and the United Kingdom. In Italy, difficulties in forming a government at the end of May led to a sharp increase in government bond rates. Short interest rates have risen somewhat in recent months, particularly in the USA, UK and Norway. This is likely related to the central banks' normalisation of monetary policy. In the USA, which has led the way in the cyclical upturn, base rates have been raised and the quantitative easing that was implemented in the wake of the financial crisis has been scaled back. In the

UK too, the base rate has been raised and the European Central Bank has started to wind down its quantitative easing.

Higher prices for important Norwegian commodities

Higher growth in the global economy has contributed to a further increase in commodity prices. By the beginning of June the oil price had risen to about USD 78 per barrel, and forward prices point to a level of about USD 70 in the next couple of years. The international upturn contributed to a sharp increase in the price of aluminium over the course of 2017 (chart 1.6). After falling slightly in the first quarter of 2018, the price has picked up to a level above that in effect at the turn of the year.

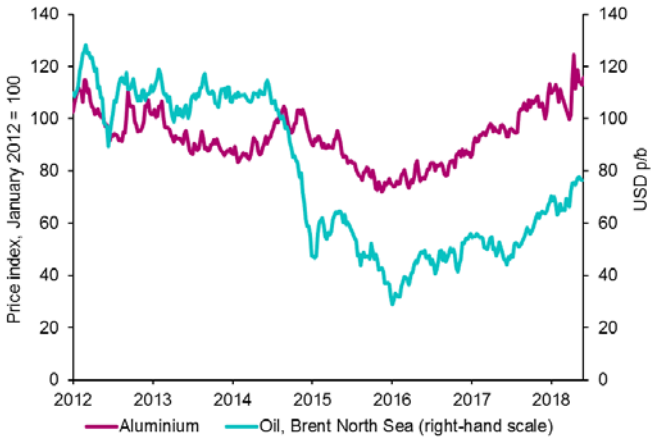
The recently introduced duty on imports of aluminium to the USA adds to the uncertainty of price developments ahead. The price of fresh and frozen salmon fell by a wide margin in 2017, but in December this trend reversed. Up to and including May 2018 there was a marked increase, in particular in the price of fresh salmon. At the start of June, however, the price of salmon fell substantially. (See theme chapter II for an account of developments in the fish farming industry.)

NORWEGIAN ECONOMY

Cyclical upturn in the Norwegian economy

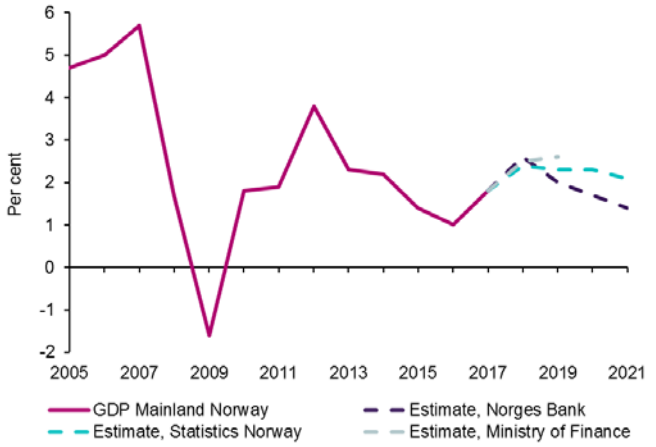
The cyclical trough in the Norwegian economy bottomed out just over a year ago, and growth in the mainland (non-oil) economy picked up in 2017 after the low level seen in 2016 (chart 1.7). The upturn is supported by the upswing in the international economy, low interest rates, improved competitiveness and expansionary fiscal policy. The sharp decline in oil investments following the oil price fall in 2014, has subsided. Oil investments are now expected to increase in the years ahead. Employment is rising and unemployment receding. The Ministry of Finance, Norges Bank and Statistics Norway all expect Mainland Norway's GDP to expand by about 2.5 per cent in 2018. Both Norges Bank and Statistics Norway expect growth to decline in succeeding years.

1.6 Oil price (USD p/b) and aluminium price (index)



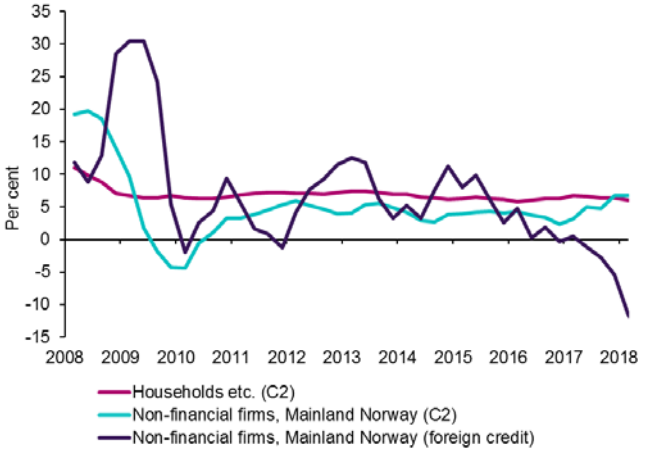
Source: Thomson Reuters

1.7 Growth in GDP Mainland Norway



Sources: Statistics Norway, Norges Bank and Ministry of Finance

1.8 Twelve-month growth in domestic and foreign credit*



* C2 and C3 were reconfigured at the turn of 2018 as a result of a new financial database (ORBOF). Transactions and growth rates are corrected for changes in the database, and are comparable over time. Source: Statistics Norway

Sharp fall in housing investment

Recent years' substantial growth in housing investment has boosted the mainland economy, but this now looks set to reverse. Forecasts point to a fall of between 6 and 7 per cent in housing investment in the current year and a further decline in 2019. This is offset by a substantial increase in oil investments. Business investment is also expected to expand in the next few years, due in particular to a number of sizeable individual projects. The upturn in mainland investment will however likely be moderate compared with previous cyclical upturns. Norges Bank and Statistics Norway point out that an expectedly stronger krone dampens growth prospects, while higher growth in the international economy pulls in the opposite direction.

Growth in private consumption is expected to pick up further. This should be viewed in light of income growth. After a decline of 1.8 per cent in households' real earnings in 2016, the weakest figure in 70 years, wage growth picked up through 2017. The upturn is expected to continue ahead. A positive trend in the labour market also appears to support higher growth in household incomes. Job vacancy numbers and employment are rising, and unemployment is expected to show a further fall. Expected strong income growth will stimulate household consumption in the next few years.

Fiscal and monetary policy less expansionary

Expansionary fiscal policy and low interest rates have helped Norway through the aftermath of the financial crisis and fall in the oil price. The stage is now set for somewhat lower fiscal policy stimulus. The revised national budget shows that fiscal policy has moved from a clearly expansionary stance to a broadly neutral cyclical stance in 2018. Room for manoeuvre in fiscal policy looks to be somewhat smaller in the next few years.

The Government adopted new regulations on monetary policy on 2 March 2018. The operative aim of monetary policy is now an annual growth in consumer prices close to 2 per cent over time. Norges Bank points out that the new regulations will not lead to significant changes in the conduct of monetary policy. The base rate has been kept unchanged at 0.5 per cent since March 2016. At its executive board meeting in March, Norges Bank signalled that the base rate will be increased somewhat earlier than was assumed at the turn of the year. It will likely be raised in autumn 2018, and thereafter step-by-step to about 2 per cent in 2021.

Rising corporate debt growth – slight decrease in household debt growth

Growth in overall credit to Mainland Norway (C3) rose in 2017 and at year-end was above the nominal rate of growth for the mainland economy. Growth in domestic credit in particular has picked up, whereas credit from foreign sources is falling significantly (chart 1.8). This development must be viewed in light of the large decline in oil investments. The oil sector has borrowed heavily from foreign sources. At the same time mainland investment is increasing. Two-thirds of overall credit to non-financial firms in Mainland Norway derives from the domestic loan market. Twelve-month growth in domestic credit to non-financial firms rose substantially through 2017 and stood in April 2018 at 7.4 per cent. Norges Bank's loan survey from the first quarter of 2018 showed that non-financial firms' demand for loans was unchanged. The banks expect no changes ahead.

Household debt, consisting mainly of residential mortgages, has risen markedly for several years. Since autumn 2017 debt growth has subsided by about half a percentage point to 6 per cent in April 2018. Norges Bank' loan survey showed that households' demand for loans was unchanged in the first quarter. The banks expect a slight increase in demand for loans ahead.

CHAPTER 2: RISK AREAS

HOUSEHOLD DEBT AND THE HOUSING MARKET

Households' debt burden is high. Increased interest expenditure or reduced incomes will compel many households to reduce consumption. A severe weakening of household consumption will result in weaker earnings and reduced profit for Norwegian business and industry, and – in keeping with experiences from the banking crisis at the start of the 1990s – heavy losses on bank loans to the enterprise sector. Many households own their own dwelling, and there is a strong link between households' debt incurrence and house price growth. Households' historically high, and rising, debt burden and the strong growth in house prices have heightened risk in recent years.

Rising debt burden increases households' vulnerability

Norwegian households' debt growth has outstripped their income growth almost continuously since the end of the 1990s, and households' financial vulnerability has risen substantially in this period. Norwegian households' overall debt in per cent of disposable income (debt burden) was 225 per cent at the end of 2017. This is high both in historical terms and compared with other OECD countries. Whereas households' debt burden in several OECD countries has fallen somewhat in recent years, it has continued to rise in Norway (chart 2.1).

Between 2011 and 2016, the average debt burden rose in all age groups (chart 2.2). Households whose main income earner is between 25 and 34 years of age had on average the highest debt burden in 2016, at 317 per cent. At the end of 2017 households' interest burden (interest expenses in per cent of disposable income before payment of interest expenses) was 6.1 per cent. This historically low figure is due to the very low interest rate level.

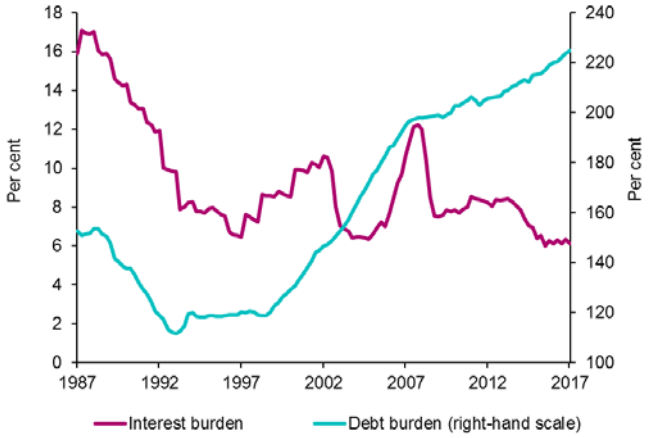
2.1 Household debt burden in selected countries

Source: OECD

2.2 Household debt burden* by age of main income earner

* Debt burden is defined here as debt in per cent of income after tax (i.e. disposable income plus interest expenses less estimated housing services). Source: Statistics Norway

2.3 Household debt burden and interest burden



Sources: Finanstilsynet and Statistics Norway

The interest burden may increase quickly, as for example in the period from the third quarter of 2006 to the third quarter of 2008 when it rose by 5.3 percentage points (chart 2.3). At the end of 2017 the share of household debt[1] carrying floating interest (mortgage rate lock-in below three months) was 93 per cent. The high proportion of variable rate mortgages and the high overall debt burden render Norwegian households' vulnerable in the event of future interest rate hikes.

Recent years have seen substantial growth in households' incurrence of consumer loans (unsecured loans from financial institutions). Consumer loans continue to account for a mere 3 per cent of households' overall debt, but their rapid growth gives cause for concern. The interest on consumer loans is on average very high. Heavily indebted households that take out a consumer loan run a substantial risk in the event of an interest rate hike, lapse of income or falling asset prices.

Several initiatives to regulate consumer lending have been adopted since spring 2017. In June 2017 Finanstilsynet issued guidelines for prudent consumer lending practices and have stepped up their supervisory activity towards banks specialising in consumer lending. Capital requirements for these banks have been tightened. Consumer lending receives further mention in chapters 3 and 5.

Connection between house prices and household debt growth

The majority of Norwegian households own their own home. At the end of 2016, 77 per cent of households were owner occupiers or part owners. Of households' gross debt (C2) at the end of 2016, 85 per cent was residential mortgage debt. Rising house prices enable house owners to take out larger residential mortgages. A prolonged fall in house prices will, on the other hand, reduce credit growth. However, it takes time to reduce the outstanding credit volume.

Strong house price growth over time increases the risk of price corrections

House prices in Norway have risen steeply in recent decades. In nominal terms, house prices increased almost sixfold from 1993 to 2017 while households' disposable income was 3.5 times higher in 2017 than in 1993. Regardless of whether house price growth is measured in nominal or in real terms, or relative to rental prices or households' disposable income per capita, Norwegian house prices are at very high levels compared with other Nordic countries and OECD countries (charts 2.4 a–d). Much of the growth in house prices is due to a long period of low unemployment, strong income growth, low interest rates and low property taxation. Even so there is much uncertainty as to what level of house prices is sustainable in the Norwegian housing market. The IMF has estimated the divergence between actual house prices and the equilibrium price in 20 OECD countries, concluding that the Norwegian housing market was moderately overpriced at the end of 2016.[2]

Regional differences in house prices and credit growth

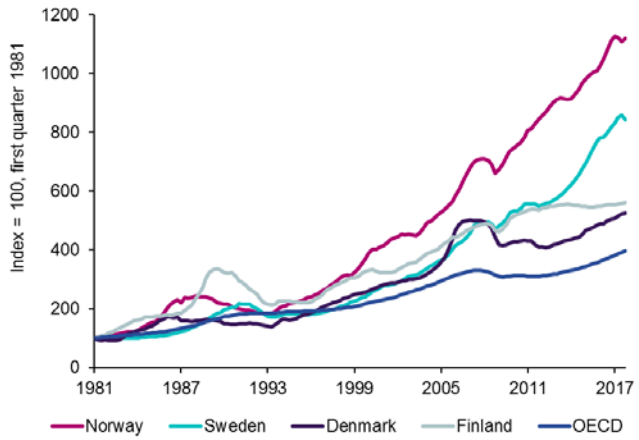
House prices in Norway fell by an average of 6.1 per cent from April to December 2017. The house price fall was particularly pronounced in Oslo (down 13 per cent from February to December), where the rise in prices in 2016 had been strongest (up 26 per cent). Concurrent with the house price fall in 2017, growth prospects for the Norwegian economy improved and unemployment declined. The balance between supply of and demand for dwellings changed over the course of 2017.

[1] Source: Statistics Norway. Debt to the Norwegian Public Service Pension Fund is not included in the statistics.

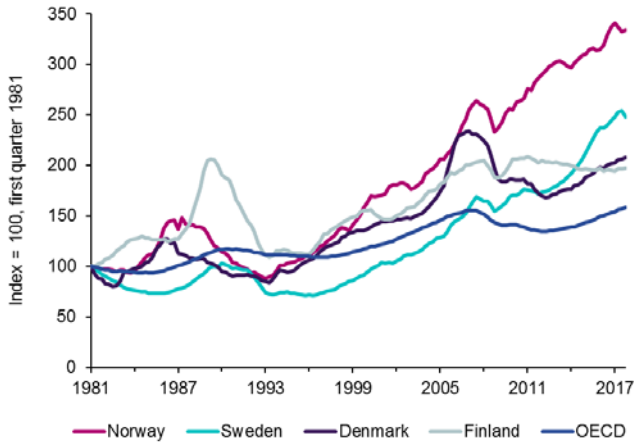
[2] See IMF Country Report No. 17/181, published in July 2017.

2.4 Norwegian and international house prices, seasonally adjusted

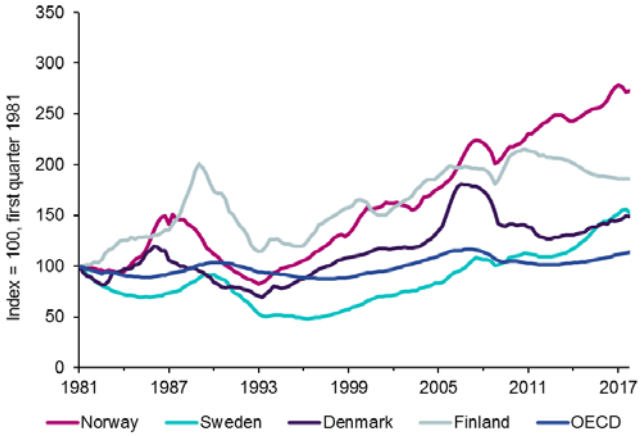
a. Nominal house prices



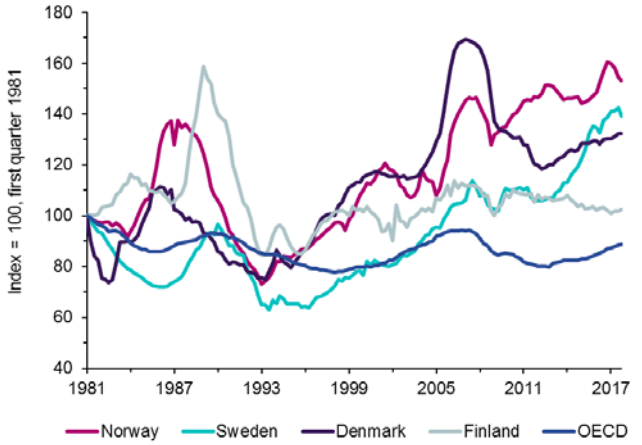
b. House prices divided by private consumption deflator



c. House prices divided by rental prices

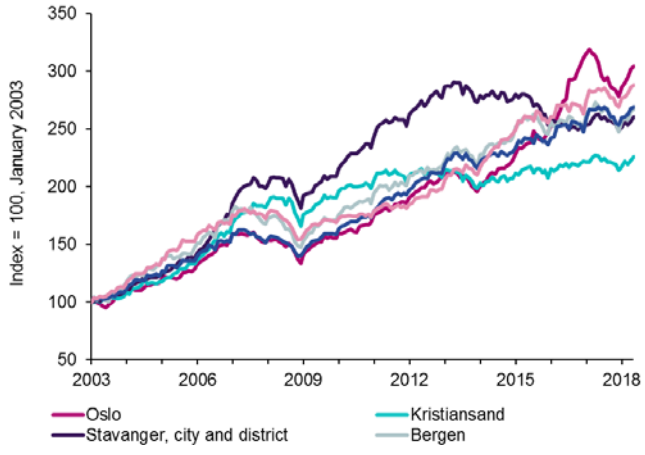


d. House prices divided by disposable income per capita



Source: OECD

2.5 Regional house prices, Norway



Source: Thomson Reuters

2.6 Lending growth* in selected counties and C2 households. Twelve-month growth

* Loans from banks and mortgage companies

Source: Statistics Norway

Both the number of houses put on the market – especially in Oslo, Bergen and Trondheim – and the selling period increased as from spring 2017. The number of houses sold in 2017 was approximately on a par with 2016, but the number of houses put on the market without being sold rose for much of the year. This may have contributed to the price fall. The house price fall in 2017 must be viewed in particular in light of the very marked growth in house prices the previous year. The tightening of the residential mortgage lending regulations as from January 2017 is also thought to have played some part in dampening the growth in house prices.

House prices have again risen thus far in the current year. Between the end of 2017 and May 2018 house prices in Norway rose by 6.5 per cent. There are wide regional differences (chart 2.5). In Oslo prices rose by 9.3 per cent in this period. In Rogaland, where house prices have risen weakly since 2013, growth in lending to households slowed to about 4 per cent in 2017 (chart 2.6). Credit growth in Oslo, which was very high in 2016 when house prices rose markedly, abated in 2017.

Falling house prices, rising interest rates and unemployment will create problems for vulnerable groups of households

Households' average gross debt was close to NOK 1.4 million at the end of 2016. At the same time, bank deposits and mutual fund units, which are households' most important liquidity buffers, averaged NOK 0.5 million. Debt and liquid assets are unevenly distributed across household categories. Heavily indebted households have little in the way of liquid buffers available to service their debt in bad times. This was discussed in theme chapter II of the November 2017 issue of Risk Outlook.

Risk of a further increase in the debt burden

If the Norwegian economy develops in keeping with forecasts from Statistics Norway and Norges Bank for the period to 2021, house prices will rise moderately and household debt will continue to increase at a faster rate than household incomes. In that event the imbalances will increase further, with a higher debt burden for households. Calculations done using Finanstilsynet's macro model NAM-FT indicate that the debt burden could increase to 247 per cent and the interest burden to 10 per cent given a relatively benign development in the Norwegian economy (baseline scenario) in 2022.[3] Increased debt will strengthen the need for financial consolidation among households in a downturn, thereby weakening the growth prospects for the Norwegian economy. Residential mortgage lending regulations

The current residential mortgage lending regulations entered into force on 1 January 2017 and apply up to 30 June 2018. They represented a tightening compared with previous regulations. From spring 2017 onwards there were signs of more stringent lending practices and house prices started to fall. In Oslo, households' debt growth fell from 11 per cent in 2016 to 7 per cent in 2017[4]. However, on a national basis debt growth was maintained.

Box 1: Consequences of an interest rate hike and income loss

The consequences of an interest rate hike and income loss can be illustrated by a numerical example based on age-distributed data taken from Statistics Norway's income and wealth statistics for households. The calculation refers to a notional household from each age group whose income, assets and debt were in line with the average for the age group concerned in 2016.

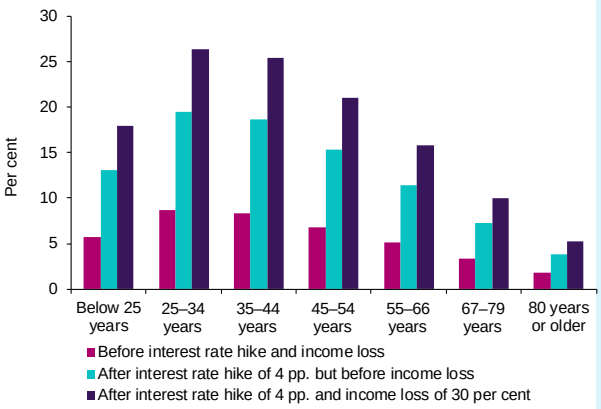
The effect on households' interest burden is calculated on the assumption of:

(i) a 4 percentage point increase in the general interest rate level, and
(ii) a 30 per cent loss in households' disposable income.

[3] See theme I for an account of the assumptions underlying, and the results of, Finanstilsynet's calculations in the basis and stress scenarios.

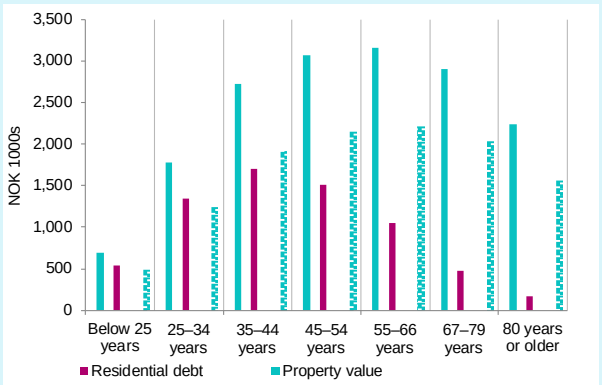
[4] Source: Regional lending statistics, Statistics Norway

2.A Estimated effect of an interest rate hike and income loss on households' interest burden, by age



Sources: Statistics Norway and Finanstilsynet

2.B Property value and residential debt before (left) and after (right) a house price fall of 30 per cent, by age



Sources: Statistics Norway and Finanstilsynet

Before the interest rate increase or income loss, the interest burden for households in the age groups 25–44 is above 8 per cent,* (chart 2.A). In other words more than 8 per cent of after-tax income goes to paying debt interest. For the average household in this group, an interest rate increase of 4 percentage points will increase the debt burden to 19 per cent. If the household in addition loses 30 per cent of its disposable income, the interest burden rises above 25 per cent. In 2016 households in the age groups 25–44 numbered about 840,000, i.e. 36 per cent of all Norwegian households. Their share of households' overall debt in 2016 was close to 48 per cent.

Lower collateral values as a result of the house price fall increase the risk of loan losses among banks. In the event of a 30 per cent fall in house prices,** the value of the housing stock in all will be lower than the residential mortgage debt of household groups whose main income earner is below age 35 (chart 2.B). In these age groups, there were 502,000 households with overall debt of NOK 703 billion at the end of 2016, i.e. about 22 per cent of households' aggregate debt.

The average figures conceal wide differences between subgroups of households in terms of income distribution, assets and debt. Many households have far higher debt than the average, and will see overall collateral values fall below overall debt at house price falls far less than 30 per cent and a steeper increase in the interest burden than the average of all households.

* The calculations assume that households at the outset have a bank deposit rate of 0.8 per cent and a debt interest rate of 3.0 per cent. **This corresponds to the house price decline in Norway from 1987 to 1992. Other examples of a 30 per cent fall in house prices are Denmark (2005–2008), the USA (2006–2009) and Spain (2007–2013). In Ireland house prices fell by 54 per cent from 2007 to 2013.

In November 2017 the Ministry of Finance asked Finanstilsynet to consider whether the mortgage regulations should be retained in their current form, revised or rescinded. Finanstilsynet recommended by letter of 28 February 2018 that the regulation of mortgage lending should continue indefinitely once the current regulations expire, but with some amendments made. Geographical differentiation based on the borrower's or collateral object's address, or differentiation based on whether the collateral object is the borrower's primary or secondary dwelling, does not capture a borrower's vulnerability appropriately. Such differentiation is not in keeping with Finanstilsynet's fundamental view of the object of the regulations. Finanstilsynet accordingly recommended dispensing with the requirement of a maximum loan-to-value ratio of 60 per cent for mortgages for secondary dwellings in Oslo, and that the banks' scope for granting mortgages that do not comply with all requirements of the regulations (the banks' "flexibility quota") should be set at 8 per cent throughout the country. Finanstilsynet's proposal has been circulated for public consultation and is under consideration by the Ministry of Finance.

Finanstilsynet has instructed 23 finance companies to report on their compliance with the residential mortgage lending regulations on a quarterly basis. Finanstilsynet also obtains, on a random basis in connection with inspections, reports to the board of directors of a selection of smaller banks. Financial institutions' scope for lending to borrowers that are not in compliance with the regulations' main precept is limited to 10 per cent of overall residential mortgage lending per quarter (8 per cent in the case of mortgaged properties located in Oslo). From the fourth quarter of 2017 to the first quarter of 2018 the proportion of loans granted that breach one or more of the regulations' main provisions declined by 0.1 percentage point for mortgaged properties outside Oslo, but rose by 0.2 percentage points for mortgaged properties in Oslo. In the first quarter three banks exceeded the "flexibility quota" in respect of mortgaged properties in Oslo by amounts above the permitted limit of NOK 10 million.

After the requirement that a borrower's debt should not exceed five times his/her gross annual income (a debt-income ratio not exceeding five) was introduced with the entry into force of the current regulations on 1 January 2017, the proportion of loans going to borrowers with a debt-income ratio above five with respect to mortgaged properties in Oslo has fallen quarter by quarter. Even so, a debt-income ratio above five has been the chief cause of deviation from the regulations' main provisions throughout the period both in the case of mortgaged properties in, and outside, Oslo. The breaches of the flexibility quota in the first quarter of 2017 resulting from the new debt-income requirement and the observed reduction in the proportion of loans in breach of this requirement in Oslo, suggest that the debt-income ratio requirement has contributed to tighter lending practices.

According to Norges Bank's residential mortgage lending survey for the first quarter of 2018, households' overall demand for residential mortgages remained unchanged in the first quarter, and the banks expected a slight increase in overall demand for mortgages. The banks reported that credit practices towards households remained unchanged in the first quarter, and that they were not expecting changes in credit practices ahead.

COMMERCIAL PROPERTY

Banks and insurers are heavily exposed to commercial property. At the end of 2017 banks' loans to property companies accounted for about 47 per cent of overall lending to non-financial firms. Life insurers and pension funds are heavily exposed to commercial property, both through direct investments and in their capacity as bondholders. Experience from previous crises shows that property prices, like other asset prices, are cyclically sensitive. A number of Norwegian banks were compelled to take major losses on loans to commercial property companies during the banking crisis at the start of the 1990s. During the financial crisis in 2008–2009 losses on loans to commercial property were high in many European countries. Risks faced by property companies relate to rental income and funding costs, both of which affect property prices. Some segments have seen a strong increase in

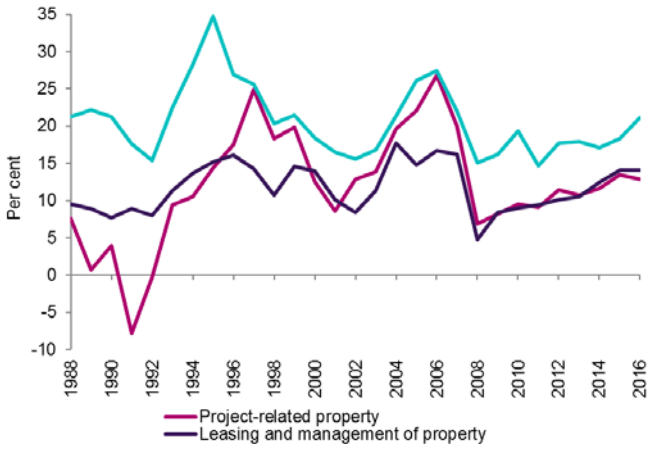
commercial property prices in recent years. History shows that long, continuous periods of price growth are frequently succeeded by a fall in prices. The general interest rate level has been low for a prolonged period and is expected to rise. The risk premium in the market has been low for a long time and may increase. Both factors could trigger a correction in commercial property prices, and weaken earnings and financial positions among commercial property companies. A negative trend among commercial property companies could lead to increased loan losses on the part of banks, and to impaired profits at life insurers.

Corporate earnings improve, but companies are vulnerable to strong price fluctuations

Property companies' profitability and financial positions are affected inter alia by developments in rental earnings, operating expenses and funding costs, which form the basis for value and return on property investments. Commercial property prices have proven to be far more cyclically sensitive than house prices. Both in Norway and internationally, steep price falls have been noted in connection with downturns in the economy. Commercial property is more in the nature of an investment medium than dwellings. In an economic downturn, demand for commercial property is reduced, office vacancy rates rise, and rental prices and property values will most likely fall. This is rapidly reflected in companies' financial performance. During the banking crisis at the start of the 1990s, the dotcom crisis at the start of the 2000s and the financial crisis in 2008, property companies' debt servicing capacity (earnings relative to debt) weakened sharply (chart 2.7). Norwegian banks' losses on loans to property companies increased during the financial crisis, but a combination of property companies' generally high equity capital buffers at the start of the financial crisis and the relatively rapid rise in property values in the aftermath of the crisis was instrumental in loan losses not reaching high levels.

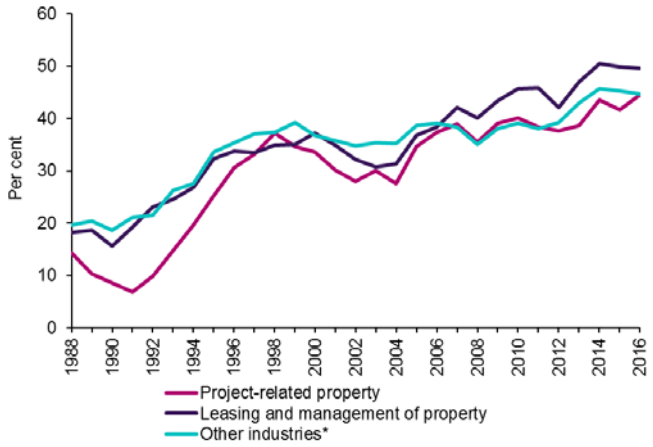
A high rise in values in some commercial property segments and a moderate, but positive, trend in rental earnings has led to improved profitability among

2.7 Debt servicing capacity of Norwegian property companies and in other industries



*Exc. oil and gas. Source: Finanstilsynet

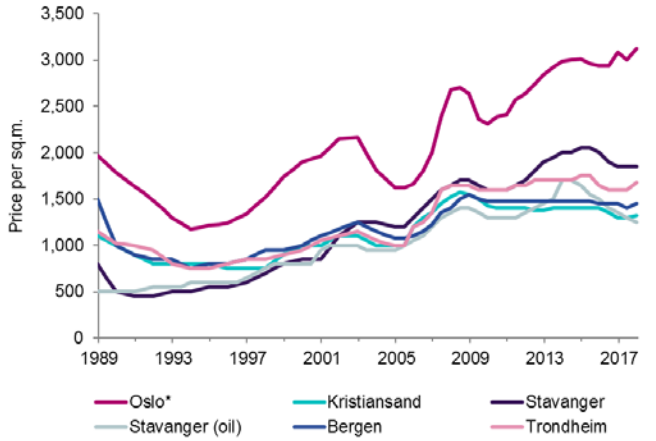
2.8 Equity ratio of Norwegian property companies and in other industries



*Exc. oil and gas. Source: Finanstilsynet

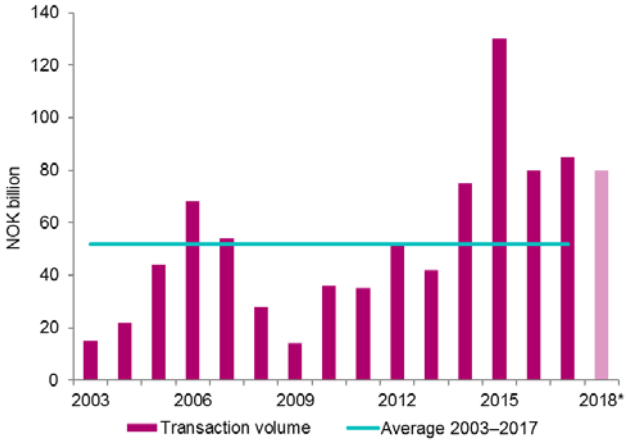
property companies. Equity-asset ratios at the start of 2016 averaged just below 50 per cent among property companies engaged in management and letting, and about 45 per cent for other segments and for companies engaged in property project planning (chart 2.8).

2.9 Rental price for office premises in Norwegian towns**



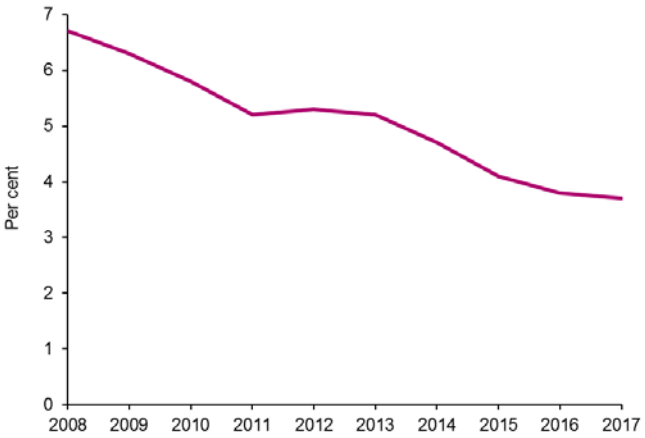
* Break in index for Oslo June 2017. Before June 2017: average of prime property, high standard and downtown location. After June 2017: average of prime property, east and west, and office property, outer city centre and inner city centre. ** Good standard: Trondheim, Bergen, Kristiansand and Tromsø. High standard: Stavanger.
Source: Dagens Næringsliv

2.10 Transaction volume



Source: DNB Næringsmegling

2.11 Yield on office property in Oslo, high standard



Source: Entra's consensus report, April 2018

Rental prices on the way up and office vacancy rate down

Rental prices and expectations of future levels are of major significance for the value of commercial properties. Rental prices are influenced by property supply and demand, which is in turn a function of developments in the real economy. Vacancy rates in the office market have fallen in Oslo and in most other major towns in recent years. According to DNB Næringsmegling, conversion of office premises to housing has contributed to the decline. Given the weaker trend in the housing market, conversion to housing is expected to subside. DNB Næringsmegling expect office vacancy rates to fall further in the period to 2019. A reduced office vacancy rate and improved prospects for the Norwegian economy have contributed to higher rental prices in some Norwegian towns in the past half year (chart 2.9). Several market actors also expect rising rental prices in most major towns in the years ahead.

High market activity and low, but increasing, direct return

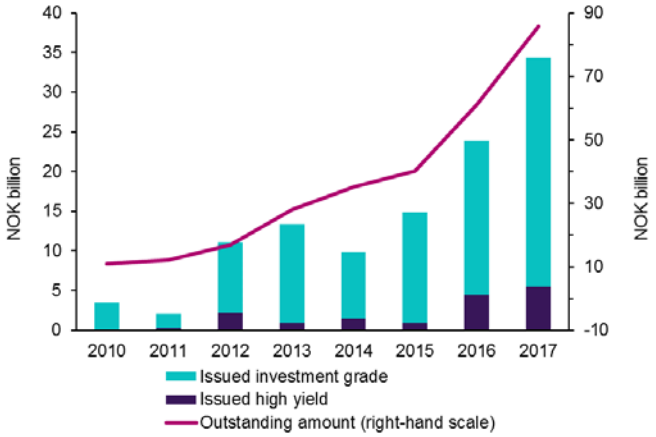
Commercial property turnover in 2017 was high. According to DNB Næringsmegling, the number of transactions was the highest ever recorded. Facilitators (funds and syndicate investors), developers and foreign investors were the largest factors. Turnover was broadly distributed across a number of segments. The office segment accounted for the largest proportion, i.e. close to 50 per cent of the overall transaction volume. According to DNB Næringsmegling, commercial property transactions in Norway totalled about NOK 90 billion in 2017. A transaction volume of about NOK 80 billion is expected in 2018* (chart 2.10).

Recent years' growing demand for prime property in Oslo has pushed prices markedly upwards and direct return down. According to Entra (April 2018), several leading market analysis units in the Oslo market put direct return on prime property in Oslo at 3.7 per cent at the start of 2018 (chart 2.11). Eight out of ten

2.12 Share of bond and short-term paper debt* at property companies and in other industries**

* Bond and short-term paper debt in per cent of external interest-bearing debt. ** Exc. oil and gas.
Source: Finanstilsynet

2.13 Outstanding and issued volume of property bonds



Source: Stamdata

participants/analysts included in Entra's consensus report expect direct return to increase over the course of 2018. All actors expect an increase in 2019. According to the report, a slight adjustment to 3.8 per cent is expected at the start of 2018, and to 4 per cent at the end of 2019. This, in isolation, suggests dampened price growth ahead. At the start of 2018 the direct return for prime property was somewhat below the typical five-year fixed rate cost of borrowing for property companies. Low direct return relative to the borrowing cost for prime property has turned lower quality properties into more interesting investment mediums. This has resulted in higher prices and lower direct return on this type of property, and the gap between direct return on prime property and normal property in Oslo has narrowed in the past year. For most office segments, yield is about 1 percentage point lower in Oslo than in other large Norwegian towns.

Foreign investors in a small, Norwegian market

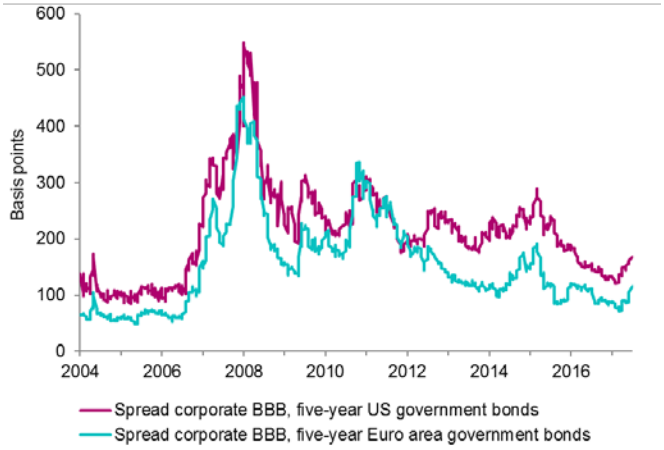
Low interest rates, low risk premiums and search for yield have contributed to rising prices with ensuing reductions in yield on commercial properties throughout Europe. Rental price levels have been more stable. Interest from foreign investors in Norwegian commercial property has been strong in recent years. According to DNB Næringsmegling, foreign actors accounted for about a quarter of overall purchases on the Norwegian property market in the period 2014–2016. In 2017 foreign investors were the second largest net purchasers.

Expectations of higher interest rates and risk premiums in the short to medium term may contribute to falling prices both in Norway and other countries. Foreign investors in the Norwegian market help to spread risk across a wider range of actors. At the same time, foreign investors may be more transitory than Norwegian investors in bad times. Further, there is cause to believe that changes in the risk premium in a small market such as Norway are likely to be relatively large. The combination of an illiquid market and a substantial element of foreign investors, which is the situation for the Norwegian stock market, increases the risk of substantial price falls in turbulent times.

Property companies' funding structure

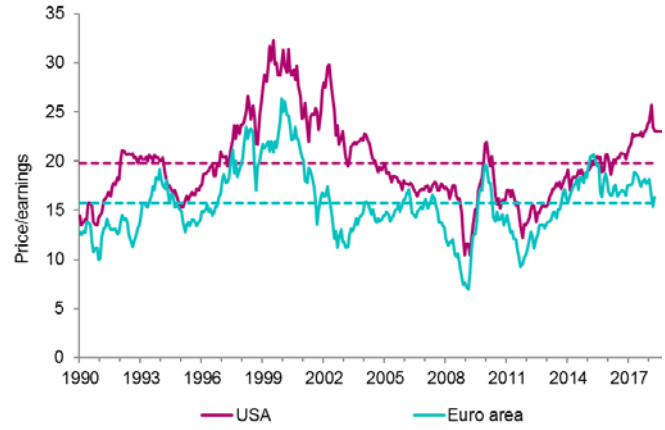
Property companies' funding structure is dominated, to a larger degree than in many other industries, by bank financing. However, new bond issues by companies operating in commercial property have increased both in number and loan volume in the past five years (charts 2.12 and 2.13). At the end of the first quarter of 2018, the outstanding volume of property bonds approached NOK 100 billion. Overall issues rose from NOK 23 billion in 2016 to about NOK 35 billion in 2017. The average for the years 2011–2016 was NOK 12 billion. Most issues were in the investment grade segment, but there were also a number of issues in the

2.14 Credit markets. Risk premiums



Source: Thomson Reuters

2.15 US and European equities



Stippled lines denote average for the period since 1990.
Source: Thomson Reuters

2.16 Issues of low credit quality bonds

Source: IMF

high yield segment. This contributes in isolation to a broader funding structure among property companies.

One reason for the change in property companies' funding structure is the substantial increase in the cost of bank financing in recent years (see the Union Market Report for spring 2018[5]). For many property companies it is now cheaper to issue bonds than to raise new bank loans.

REPRICING OF RISK

Since the financial crisis the financial markets have featured low interest rates and an ample supply of liquidity. Central banks have kept money market rates very low and have supplied liquidity through quantitative measures, i.e. bond purchases, to stimulate demand for goods and services and to encourage risk-taking. Investors' search for yield is reflected in financial markets and in asset prices. Risk premiums in the bond markets are low, equity prices have risen substantially and market volatility has generally been low. The search for yield has also encouraged higher debt incurrence and increased sales of complex, often debt-financed, financial products. Financial imbalances may have built up, as previously witnessed in periods of low interest rates, calm market conditions and economic growth.

The combination of high risk exposure in financial markets, high asset prices and a heavy debt burden renders the economic system vulnerable to negative shocks. Such shocks could lead to increased uncertainty among market actors as regards the economy, and to higher risk aversion and to repricing of risk, thereby possibly triggering steep falls in equity, property and bond prices. Increased inflation and expectations of tighter monetary policy, combined with much uncertainty, could bring substantially higher interest rates and risk premiums and now pose a significant risk to financial stability. Risk repricing may also be triggered by other factors, such as increased geopolitical uncertainty or the introduction of trade barriers.

[5] http://m2.union.no/finansiering#bank

Search for yield has pushed down risk premiums, ...

Risk premiums in the credit market fell substantially through 2016 and 2017 to levels close to those in effect prior to the financial crisis (chart 2.14). During the financial crisis and in conjunction with the sovereign debt crisis in Europe in the aftermath of the financial crisis, risk add-ons rose substantially in the bond markets, both for government and corporate bonds. Increased uncertainty and reduced risk willingness on the part of investors may once again impact heavily on the bond markets. High debt levels mean that borrowers are now more exposed to increased risk premiums than previously.

... and stimulated equity and property prices ...

Prices have risen steeply in most equity markets in recent years. The price of shares relative to companies' earnings is particularly high in the US equities market, both in historical terms and compared with other equity markets (chart 2.15). This may suggest that the rise in market value of US companies has been larger than justified by their growth in earnings.

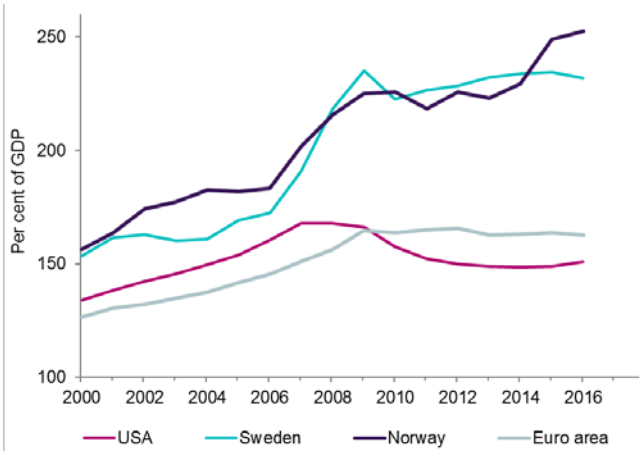
Investors' search for yield has also led to substantial investment in housing and commercial properties; see previous account.

... and increased risk exposure in financial markets

Investors' search for yield has prompted increased position taking in advanced investment products, which potentially provide higher return than more traditional products. An example pointed up by the IMF is low quality credit (to borrowers with a credit rating below investment grade or heavily indebted at the outset), typically large corporate loans.

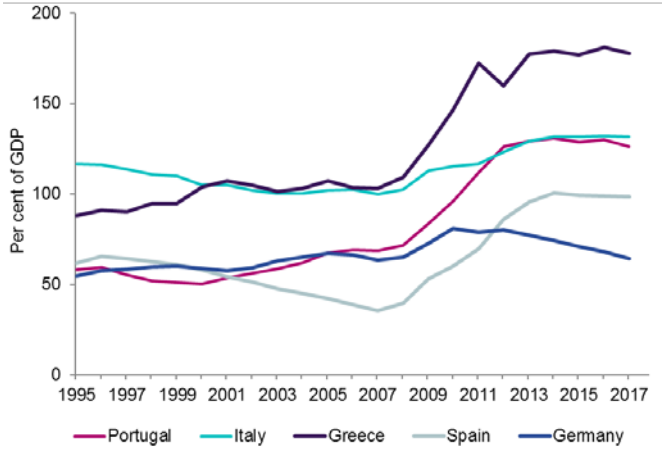
Globally, the outstanding volume of such loans is now higher than prior to the financial crisis (chart 2.16). The steep growth indicates high risk willingness among investors. US and European authorities have taken steps to dampen the growth and the risk present in this market. For example, US and European supervisory authorities recommend banks to put in place more stringent risk monitoring where a borrower's debt exceeds six times their earnings before interest, taxes, depreciation and amortisation.

2.17 Debt of households and non-financial firms



Source: Thomson Reuters

2.18 Public debt



Source: Thomson Reuters

This may have contributed to the rising proportion of low quality credit included in recent years in structured products, i.e. collateralised loan obligations (CLOs). Such products have been in demand by institutional investors. Banks' share of such loans on their own balance sheet has concurrently diminished.

The market for structured credit products grew strongly up to the time of the financial crisis. Complexity and lack of transparency are often cited as a reason why losses on American residential mortgages were able to spread to large sections of the international financial markets and develop into a systemic crisis. There is now an added risk that the strong growth in advanced financial products will fuel systemic risk in financial markets.

Investors in such products may well be compelled to reduce their exposure in turbulent periods, thereby intensifying a price fall and market volatility. Such investments are illiquid, particularly in a turbulent market. Moreover, in turbulent periods pressure may arise from unit holders wishing to redeem units in money and mutual funds that have invested in illiquid, complex securities such as CLOs. If funds are compelled to sell such securities, the price fall may be intensified causing the turbulence to spread further across the financial system.

Heavy debt burden

Overall global debt as a share of GDP has risen for a number of years. The debt burden is historically high in many countries and sectors. The growth in household and corporate debt has been particularly strong in some economies (chart 2.17), especially so in China where corporate debt has risen from 110 per cent of GDP in 2008 to 210 per cent at the end of 2017. Growth has also been strong in Norway and Sweden, and the debt burden, notably of households, is at historically high levels. The household sector's debt burden is further described in the foregoing section on households and the housing market.

Several countries in Europe are more heavily indebted now than during the turbulence over sovereign debt in the aftermath of the financial crisis (chart 2.18). During the sovereign debt crisis risk premiums rose sharply on bonds issued by countries with a high sovereign debt and weak general government finances. In recent years CDS premiums and interest rates on European sovereign debt have fallen, even though the debt situation in those countries has not improved. However, uncertainty connected to the formation of a new government in Italy led to considerably higher interest rate add-ons for Italy's sovereign debt as from May this year.

Sovereign debt markets are also important since they affect other parts of the financial market. Fixed-income instruments are often priced relative to government bonds so that higher government bond rates will increase the rates on bonds issued by financial and non-financial private institutions. Credit rating agencies normally take a basis in national credit ratings when assessing financial institutions and firms. Impaired general government finances and a downgraded national credit rating will therefore normally also affect borrowing terms and conditions for other sectors.

A change of sentiment in financial markets brings with it a risk of higher government bond rates for particularly debt-burdened countries. This will impair government finances which will in turn impair creditworthiness and further increase countries' interest burden. This type of negative spiral manifested itself during the sovereign debt crisis in Europe.

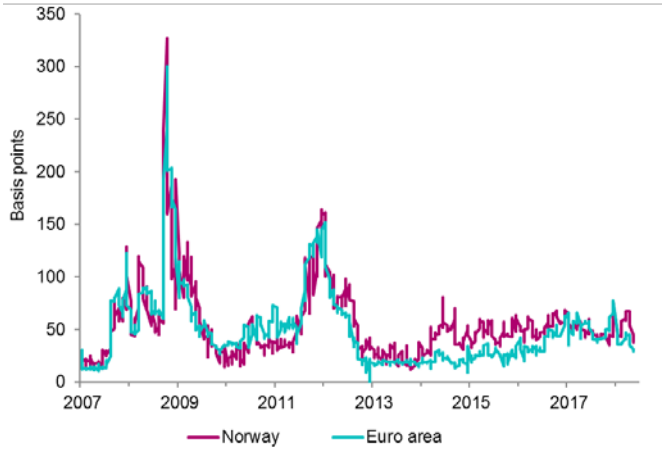
An increase in government bond rates hits financial institutions since the market value of their bond portfolios is reduced. In some of the most debt-burdened countries the banks are heavily invested in their respective country's government bonds. This is partly because sovereign debt is not subject to capital charges in the EEA area[6]. Insurers also have substantial holdings of sovereign debt, but are not subject to capital charges for credit risk associated with such investments. In cases where financial institutions hold substantial positions in their own country's sovereign debt there is a greater risk of negative spillover effects between higher sovereign debt rates and weakened government finances on the one hand and weakened financial institutions on the other.

Norwegian economy and Norwegian borrowers are exposed to higher risk premiums

The Norwegian economy and Norwegian financial institutions will be affected through various channels in the event of risk repricing in international financial markets. Risk add-ons in the Norwegian market are largely determined by risk add-ons in the European market. As is seen from chart 2.19, covariation between risk premiums in the money market was high during the financial crisis and during the European sovereign debt crisis some years later. We must

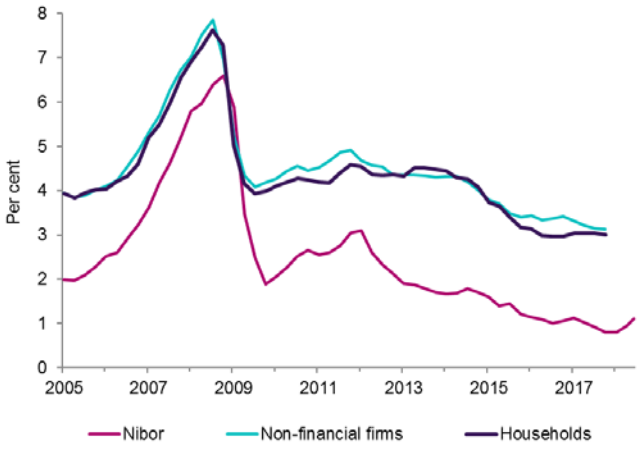
[6] Government bonds issued in the debtor's currency have a zero risk weighting.

2.19 Interest rate differential – interbank against 3 month govt. bond



Source: Thomson Reuters

2.20 Bank lending rates and Nibor



Sources: Thomson Reuters and Statistics Norway

recognise that contagion from international money markets could again substantially increase risk add-ons in the Norwegian money market, also in a situation in which the Norwegian economy and Norwegian banks are not impaired at the outset.

Money market rates are used as reference rates when pricing loans and financial instruments. Corporate loans are often priced at a given margin to the Norwegian money market rate Nibor, the interest rate being set on a quarterly or semi-annual basis. Hence a rise in Nibor will rapidly produce higher funding costs for firms. In the case of residential mortgages and other loans to personal borrowers, a contractual coupling of the interest rate to Nibor is not common. Even so, Norwegian banks also price this type of loan with a basis in Nibor (chart 2.20). In Norway money market rates rapidly feed through to lending rates since such a large proportion of loans carry floating rates. The money market rate has risen somewhat of late, due to higher add-ons in the US money market.

Risk add-ons in the Norwegian bond market are also highly correlated with the European bond markets. Higher risk premiums internationally will accordingly increase the interest rates on the bond funding of Norwegian financial institutions, non-financial firms and local authorities.

Risk repricing and turbulence in financial markets may prompt increased demand for secure government bonds. This will reduce risk-free interest rates and could impair the solvency position of insurers with guaranteed benefits on their balance sheets; see chapter 4 for further details.

The trend in the Norwegian stock market's capitalisation correlates closely with that of international markets, in particular the European and US stock markets. There is also empirical evidence of higher correlation in times of crisis than in periods of normal fluctuation in equity prices. In a situation of substantial risk premium repricing, growing uncertainty and high interest rates, global equity prices may plunge. This is likely to produce substantial price falls in the Norwegian stock market.

Higher interest rates will rapidly weaken the finances of firms and households whose mortgage rates are not fixed. Higher interest rates and financial market turbulence may also produce a change of sentiment among households and firms causing them to postpone investment and reduce consumption further. That will weaken economic growth, and may impair the credit quality of banks' loans. Impaired economic growth internationally will over time reduce demand for Norwegian-produced goods and services. Lower international demand will in addition dampen the price of oil and other commodities, which is also negative for the Norwegian economy.

BOX 2:
Effects of risk repricing

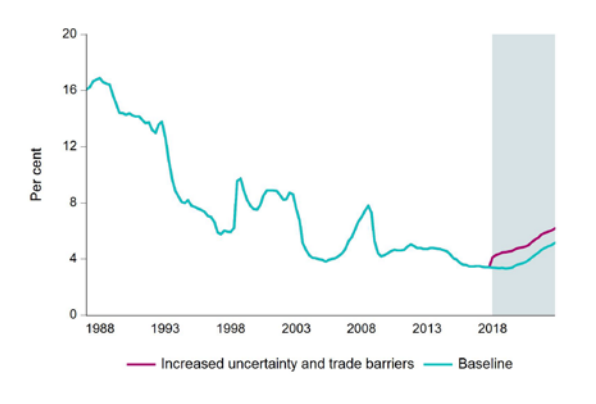
The effects of risk repricing in financial and property markets are illuminated here by the macro model NAM-FT.* The analysis assumes an increase in risk premiums in credit markets, growing uncertainties in stock markets and slower growth in Norwegian exports compared with the baseline scenario in Finanstilsynet's stress test, which is described in theme chapter I. These changes compared with the baseline scenario are however far less serious than the stress scenario. The baseline scenario is an example of a possible path of development for the Norwegian economy, which is largely in keeping with Statistics Norway's and Norges Bank's forecasts.** The changes compared with a baseline scenario are assumed to persist throughout the projection period in the alternative scenario, i.e. they materialise in the first quarter of 2018 and are effective up to the fourth quarter of 2022. As always in the case of such analyses, substantial uncertainty attends the point estimates.

Increased turbulence in financial markets and higher risk premiums are represented in the analysis by an increase of 1 percentage point in the international money market rate (three-month EURIBOR) and of 7 percentage points in the stock market's implicit volatility.*** This feeds through to the Norwegian economy through a rise in interest rates and a fall in equity prices and house and commercial property prices. In the analysis Norwegian interest rates are required to follow a moderately higher path in the first half of the projection period in order to better reflect the fact that risk premiums on Norwegian fixed income securities may be higher than risk premiums internationally in periods of financial turbulence. The Norwegian money market rate (three-month Nibor) is almost 1.3 percentage points higher in the alternative scenario than in the baseline scenario in 2018. The difference diminishes to 1 percentage point in 2022. Norwegian bond rates follow the same pattern. The baseline scenario incorporates a gradual increase of 1.5 percentage points in the interest rate level in the period to 2022, so that the money market rate in the alternative scenario in 2022 is 2.5 percentage points higher than in 2018.

The increase in money market rates and bond rates rapidly leads to an upturn in banks' lending rates. This increase remains almost unchanged at just over 1 percentage point through the projection period (chart 2.C). The increased uncertainty in financial markets and higher interest rates produce a marked fall in asset prices. Equity prices in Norway at the end of the projection period are 30 per cent lower in the alternative scenario than in the baseline scenario, and 10 per cent lower than at the end of 2017 (chart 2.D). The divergence between equity prices in the baseline scenario and the alternative scenario increases throughout the projection period, despite the fact that equity prices in the alternative scenario rise from and including 2020. A higher interest rate level and lower equity prices render funding of investment projects more problematic and more costly for non-financial firms in the alternative scenario compared with the baseline scenario. This leads to lower credit growth and investment demand compared with a baseline scenario.

Establishment of trade barriers and weaker economic growth internationally lead to a decline in Norwegian exports. Growth in the Norwegian export markets for traditional goods and services is assumed to fall from an average of 4.8 per cent per year in the baseline scenario to 2 per cent in the alternative scenario. The decline in exports and in non-financial firms' investment contributes to a weaker trend in corporate earnings and household incomes. The weaker trend in household incomes and a higher interest

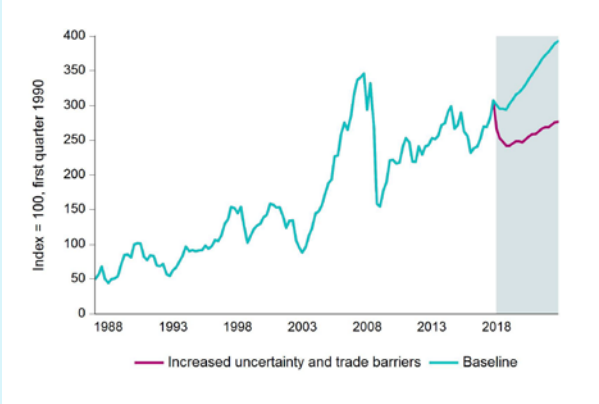
2.C Bank lending rates



Sources: Statistics Norway and Finanstilsynet

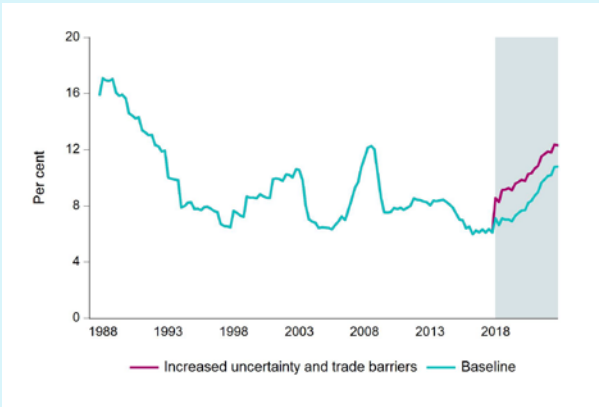
rate level lead to lower private consumption. The overall effect on Mainland Norway's GDP is put at an average of 0.6 percentage point lower growth per year in the projection period in the alternative scenario than in the baseline scenario, and an average of 0.2 percentage points higher registered unemployment. Households' interest burden is estimated to average 1.9 percentage points higher in the alternative scenario than in the baseline scenario (chart 2.E). Higher unemployment and a higher interest rate level in the alternative scenario contribute to a weaker trend in house prices and dampened growth in credit to households compared with the baseline scenario. Credit growth averages about 1 percentage point lower in the alternative scenario than in the baseline scenario. The weaker credit growth in the alternative scenario has a dampening effect on households' debt burden, which rises to 240 per cent at the end of 2022. This is 8 percentage points lower than in the baseline scenario. The weaker trend in house prices also contributes to a reduction in credit growth. House prices rise through the projection period by just under 4 per cent, which is significantly lower than in the baseline scenario (chart 2.F).

2.D Stock market in Norway (MSCI price index)



Sources: Statistics Norway and Finanstilsynet

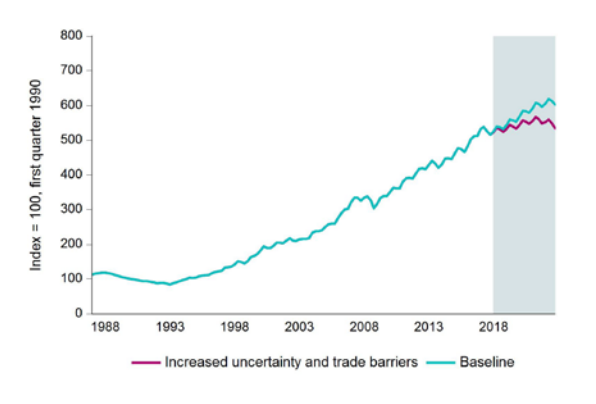
2.E Household interest burden



Sources: Statistics Norway and Finanstilsynet

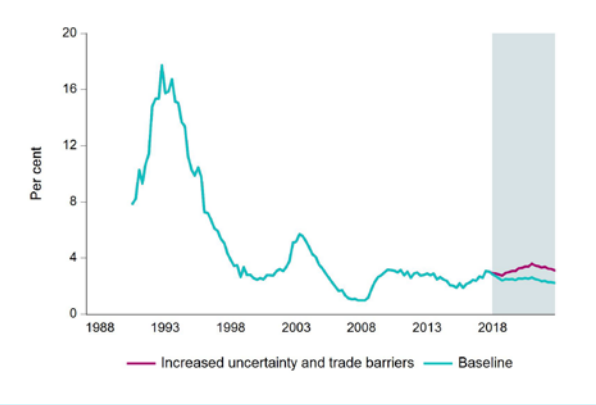
A higher interest rate level, interest burden and unemployment contribute to the markedly higher share of problem loans**** to households at the end of 2022 in the alternative scenario than in the baseline scenario. The difference between the share of problem loans in the baseline scenario and the alternative scenario is even greater in the case of loans to non-financial firms (chart 2.G). At the end of 2022, commercial property prices in the alternative scenario are 21 per cent lower than in the baseline scenario, and only 1 per cent higher than at the end of 2017 (chart 2.H). The difference between the two scenarios is ascribable to a weak trend in equity prices, higher unemployment and higher interest rates in the

2.F House prices



Sources: Statistics Norway and Finanstilsynet

2.G Problem loans as a share of bank lending to firms

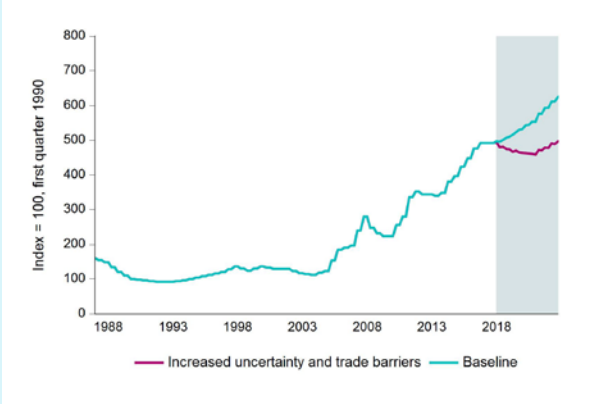


Sources: Statistics Norway and Finanstilsynet

alternative scenario compared with a baseline scenario.

The Norwegian economy and Norwegian banks are negatively affected by higher risk premiums and lower share prices internationally. However, the calculations indicate that moderate repricing of risk premiums internationally and weakened global trade will most likely not lead to a production downturn or appreciable increase in unemployment in Norway. Equally, banks' earnings and capitalisation are not dramatically impaired.

2.H Commercial property prices



Sources: Dagens Næringsliv, OPAK and Finanstilsynet

* See inter alia Risk Outlook from 2014, 2015 and 2016 for descriptions of NAM-FT documentation of NAM can be found at normetrics.no and at Professor Ragnar Nymoen's homepage, http://folk.uio.no/rnymoen.

** Finanstilsynet does not draw up forecasts for the Norwegian economy.

*** With the exception of the export market indicator, all other variables that are determined outside the model in the alternative scenario are kept unchanged from the baseline scenario. The development of the export market indicator in the alternative scenario is described below.

**** Problem loans are defined as the sum of non-performing loans and performing loans that have been written down.

PART II: FINANCIAL INSTITUTIONS

Norwegian banks and insurers have enhanced their financial soundness in the years following the financial crisis, mainly through profit retention.

Chapters 3 and 4 cover financial soundness, profitability and risk in Norwegian banks, life insurers, pension funds, and non-life insurers respectively. Important challenges and risk areas receive mention.

Chapter 5 gives an overview of Norwegian and EU legislation of importance for Norwegian financial institutions and financial markets.

CHAPTER 3: BANKS

The Norwegian banking industry has recorded good results in the years since the international financial crisis. A favourable trend in the domestic economy has kept loan losses at a low level for the industry as a whole. The oil price fall in 2014 brought increased losses at several of the largest banks in 2016. Aggregate losses were still at a moderate level for the banks as a whole, and losses were lower in 2017 and thus far in 2018. In addition, increased net interest income and a lower cost ratio have contributed to good profits. Recent years' creditable performances have enabled the banks to meet increased capital requirements by way of profit retention. Norwegian banks are thus well prepared to withstand possible setbacks. They have ample access to funding, including funding from foreign sources. The banks meet the liquidity buffer requirements and have increased the long-term component of their overall funding. A high degree of funding through covered bonds (OMF), combined with banks' substantial cross-ownership of each other's covered bonds as part of their liquidity holding, renders the industry's funding more vulnerable to a negative trend in the housing market.

PROFITABILITY AND FINANCIAL SOUNDNESS

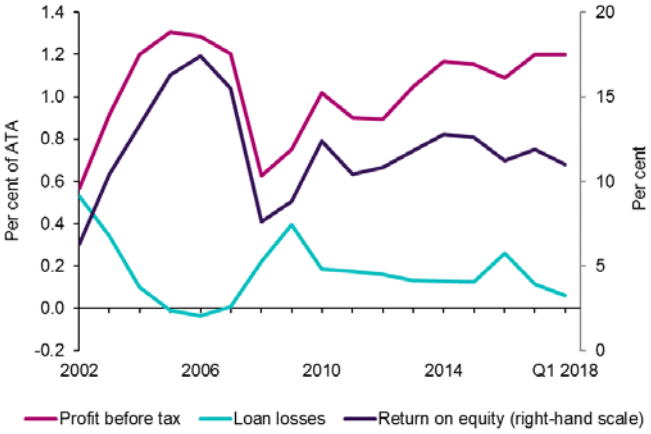
Good earnings due to increased net interest income and low losses

Norwegian banks overall have been profitable in recent years, with income growth, cost efficiency gains and low loan losses. Concurrent with an improved equity capital position, earnings have been sufficient to maintain a high return on equity. In the first quarter of 2018 the banks achieved an overall return on equity of 11 per cent – on a par with preceding years (chart 3.1).

The challenges facing petroleum-related industry following the oil price fall in 2014 brought sizeable write-downs on exposures to businesses in the this industry at some of the largest banks in 2016. The oil price fall did not lead to substantial contagion effects

[7] See description of the rules in chapter 5.

3.1 Loan losses, profit and return on equity



Source: Finanstilsynet

to other industries, and the overall loss level in 2017 was back to the level in effect prior to the oil price fall. Losses remain low thus far in 2018.

Banks that prepare financial statements under international accounting standards must comply with new loss assessment rules (IFRS 9) from 2018 onwards; see chapter 5. New loss rules require loan losses to be accounted for at an earlier stage than under the previous rules. For the 30 largest banks, the change entailed that overall loss write-downs at the turn of the year were 7 per cent higher than overall write-downs as at 31 December 2017 (made under previous rules). The most important explanation of the increase was write-downs under step 1 of IFRS 9[7], which accounted in all for 12 per cent of aggregate write-downs at the start of the year. Step 2 write-downs were 34 per cent lower than collectively assessed write-downs at the end of 2017, and accounted for 24 per cent of aggregate write-downs. Step 3 write-downs, which can be compared with individually assessed write-downs under previous rules, were 12 per cent higher than individually assessed write-downs at the end of 2017 and accounted for 64 per cent of aggregate write-downs.

Operational efficiency gains promote profit growth

In addition to low loss levels, the banks have achieved good results in recent years, particularly as a result of

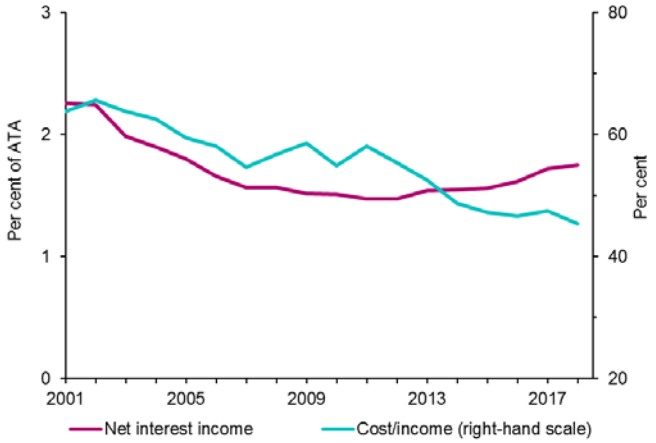
Box 3:
Exposure to offshore companies

In the second quarter of 2016 Finanstilsynet conducted a survey of the largest banks' exposures to the offshore sector; see Risk Outlook 2016 and 2017. In this context the offshore sector includes portfolios in the rig and supply segments. Finanstilsynet monitors this exposure on an ongoing basis.

At the end of 2017 overall exposure totalled NOK 74 billion (before write-downs), a reduction of about 17 per cent since the end of 2016. Overall write-downs and accumulated, confirmed losses rose by NOK 2.0 billion in 2017, to NOK 8.4 billion, or 11.4 per cent of the portfolio. Of this, individually assessed write-downs and accumulated, confirmed losses account for NOK 6.6 billion, and collectively assessed write-downs for NOK 1.8 billion (write-downs at the end of 2017 were made under the previous loss rules, IAS 39). About 70 per cent of the portfolio has been subject to restructuring. Restructuring generally entails conversion or forgiveness of debt, as well as the granting of new repayment terms, including longer maturity and postponement or reduction of instalment payments for a given period. By the end of 2017 forbearance had been granted on about two-thirds of overall exposure of portfolios in the rig and supply segments. The proportion of forborne exposures was therefore somewhat higher than one year previously.

Given their continued substantial exposure to the offshore sector, the banks will likely incur new losses should the sector's financial position deteriorate bringing a need for further restructuring.

3.2 Net interest income and cost income ratio



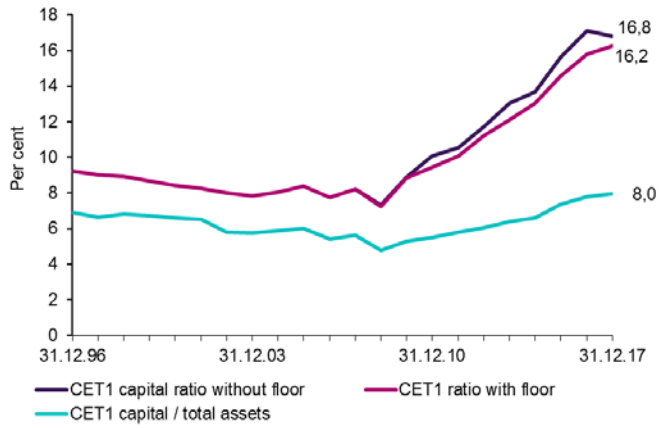
Source: Finanstilsynet

improved net interest income and improved cost efficiency. Net interest revenues have risen in recent years (chart 3.2). Lower funding costs as a result of falling market interest rates up to the end of 2017, and declining risk premiums on bond funding, have contributed to high net interest income. The strong growth in consumer lending, much of it at very high interest rates, has also contributed. Banks have long been engaged in putting their operations on a more efficient footing, driven in part by technological progress which has brought declining cost levels in the industry. The introduction of a new tax on financial institutions in 2017 was instrumental in bringing the decline in the cost level to a halt (chart 3.2), but by the end of the first quarter of the current year operating expenses as a share of income were once again lower than one year previously. Norwegian banks' cost level is low compared with most other European countries.

Improved financial position

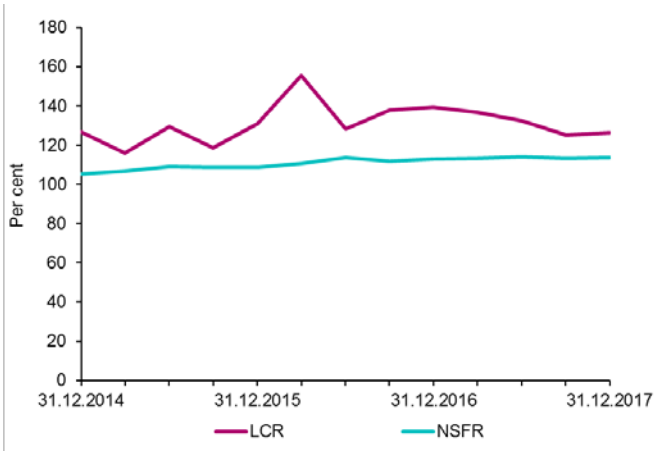
Banks' capitalisation has strengthened in recent years, both in terms of CET1 ratios and CET1 capital as a share of total assets (chart 3.3). The strengthening is due to profit retention and a lower average risk weighting in their portfolios. The banks are compliant with the increased requirements on capital, including buffers, by some margin. CET1 capital as a share of total assets is not much higher than in the mid-1990s. The decline in CET1 capital adequacy without the Basel I floor, from 2016 to 2017, is explained by the

3.3 Norwegian banks' and banking groups' financial soundness



Source: Finanstilsynet

3.4 LCR and NSFR, weighted average



Source: Finanstilsynet

recalibration of IRB models which entailed an increase in risk weighted assets.

Work is in progress on incorporating CRD IV and the CRR into the EEA Agreement. The rules are already largely in place in Norwegian law, but Norway diverges from the EU in some respects. The most important of these are the absence in the Norwegian rules of a reduction factor (discount) for capital requirements for exposures to SMBs, and the fact that IRB banks' risk weighted assets have been subject to a floor. Full adaptation to EU rules will in some areas entail less stringent calculation of capital requirements under Pillar 1 than under current Norwegian requirements. The introduction of the SMB discount and the lapse of the Basel I floor will increase banks' reported capital adequacy without actual capitalisation being strengthened in real terms. Finanstilsynet has performed calculations showing that more than half of Norwegian banks will see their CET1 capital adequacy rise by 1 percentage point or more with the SMB discount. In Finanstilsynet's assessment, it is important to ensure that bringing Norwegian capital adequacy rules into line with the CRR / CRD IV does not contribute to a general weakening of Norwegian banks' capitalisation in real terms. When approving and monitoring internal models, Finanstilsynet will attach importance to robust calibration with satisfactory safety margins. Further, when setting Pillar 2 requirements, Finanstilsynet will seek to ensure that these requirements cover risk that is not fully covered under the Pillar 1 requirements. When assessing banks' capitalisation, Finanstilsynet gives emphasis to the leverage ratio, and will contribute to enabling the banking industry to avoid impairment of its financial position on this measure ahead. At the end of 2017 the banks had an overall leverage ratio of 7.8 per cent, almost unchanged from one year previously.

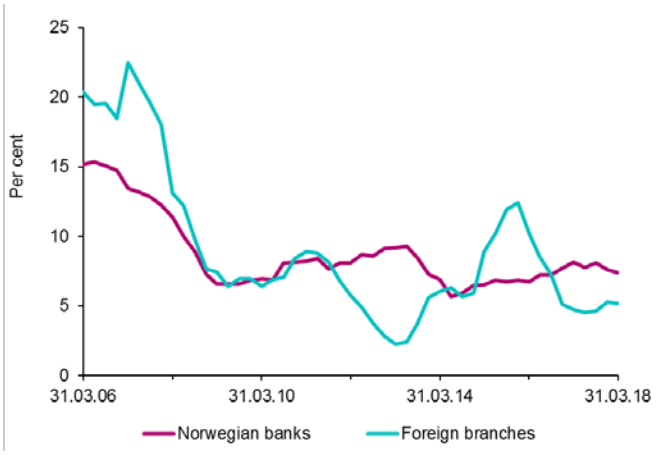
Liquidity risk reduced due to liquidity reserves and increased long-term funding

Norwegian banks are compliant with the minimum requirement on liquidity reserves, the liquidity coverage ratio (LCR), and have increased their share of long-term funding measured by the NSFR (net stable funding ratio) in recent years (chart 3.4). Liquidity reserves assure banks' ability to honour their commitments during a short period of limited access to new funding while long-term, stable funding helps to reduce funding risk in the longer term.

High growth in lending to retail borrowers

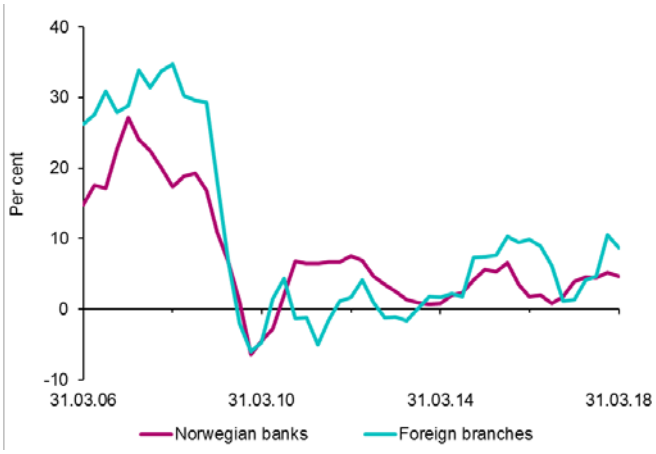
At the end of the first quarter of 2018 Norwegian banks reported an overall growth of 5.0 per cent in lending over the preceding 12 months. The growth in lending to retail borrowers is closely related to house prices, and has been high for many years. At the end of the first quarter Norwegian banks' lending growth was 7.4 per cent, while foreign banks' branches expanded their lending by 5.2 per cent (chart 3.5).

3.5 Growth in lending to domestic personal borrowers



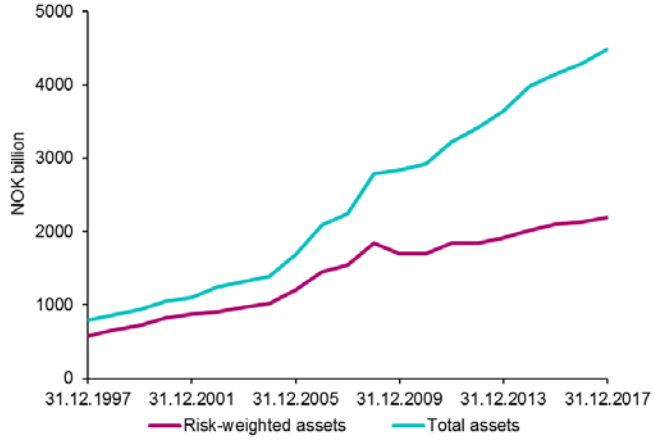
Source: Finanstilsynet

3.6 Growth in lending to domestic firms



Source: Finanstilsynet

3.7 Total assets and risk-weighted assets of Norwegian banks and banking groups



Source: Finanstilsynet

Lending to domestic firms picked up somewhat over the course of 2017, from a low level in the preceding year. In the first quarter of 2018 the rate of growth subsided somewhat, to 4.7 per cent over the past 12 months (chart 3.6). Foreign banks' branches increased their lending by a far larger margin in the past year, i.e. by 8.7 per cent. Foreign banks have a high share, about one-third, of this market segment.

RISK AREAS

HOUSEHOLD DEBT AND THE HOUSING MARKET

Increased share of retail market loans

Growth in lending to retail borrowers has exceeded overall lending growth in recent years, and banks' overall exposure to households has risen. Between the fourth quarter of 2012 and the fourth quarter of 2017, lending to retail borrowers as a share of overall lending rose by about 4 percentage points to 60 per cent.

Of banks' loans to customers (retail borrowers, non-financial firms, the public sector, insurers etc.) totalling NOK 3,615 billion, loans to retail borrowers in Norway account for NOK 2,152 billion. Banks' portfolio of residential mortgages to retail borrowers stands at NOK 1,980 billion.

Residential mortgages have by and large brought limited losses for the banks. However, experience from Norway and many other countries shows that strong growth in house prices and household debt heightens the vulnerability of the economy; see chapter 2. In a situation of increased interest rates and increased unemployment, households curb purchases of goods and services, thereby weakening earnings in the corporate sector and increasing the risk of loss on corporate loans.

The theme chapter on Finanstilsynet's stress test shows how banks' losses might increase in a scenario of negative growth in the Norwegian economy. Banks with the highest share of corporate loans will be most vulnerable. Vulnerability is, however, also largely a result of increased lending to the household sector by

other banks. Lending activity may entail low risk for the individual bank in isolation, but will contribute to substantial systemic risk.

Lending to retail customers requires less capital than lending to corporates

The risk weighting of exposures secured on residential property is lower than the risk weighting of corporate exposures, with the result that exposures to the retail market are less capital intensive than those to the corporate market. The shift towards the retail market has contributed to the fall in the average risk weighting of banks' portfolios since the banking crisis. The introduction of IRB models has also brought a fall in the average risk weight since risk weights calculated using IRB models are generally lower than risk weights calculated under the standardised approach. These two effects are the main explanation for the substantial widening of the gap between banks' total assets and their risk-weighted assets recent years (chart 3.7).

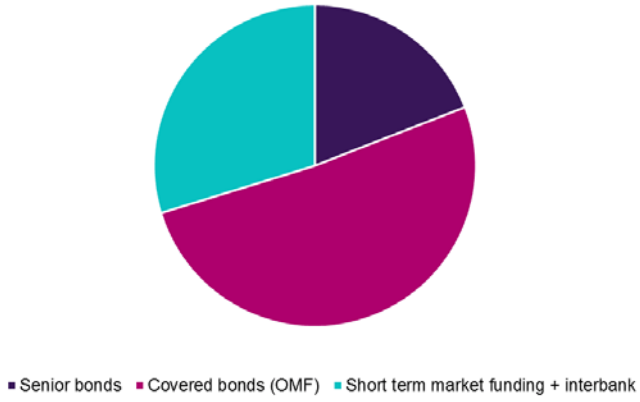
Finanstilsynet has set a requirement that banks' IRB models for residential mortgages should reflect loss figures in a serious downturn.

Systemic risk not captured by the individual bank's risk weights

The object of the capital requirements is to induce banks to hold sufficient capital to cope with unforeseen loss events. However, the risk weights fail to adequately reflect systemic risk resulting from interconnectedness and exposure to the same risk factor. Systemic risk may therefore be taken insufficiently into account, even where the risk weights reflect the actual risk associated with the exposure concerned.

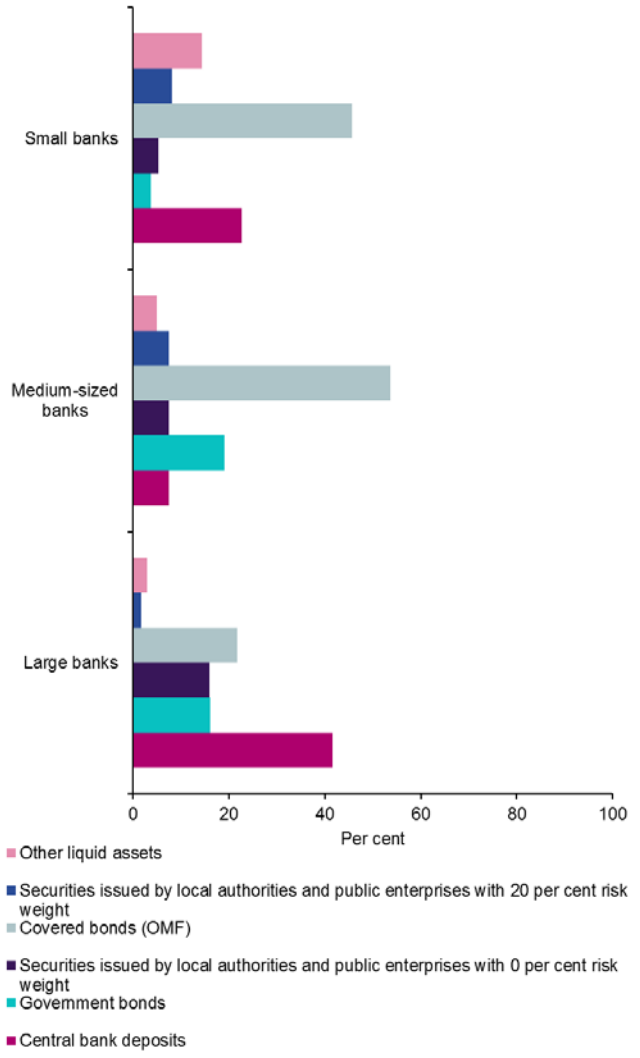
After the financial crisis, EU rules were amended to permit national authorities to set special capital requirements covering systemic risk and cyclical risk in the interest of financial stability in the country in question. See Risk Outlook November 2017 for a further account of macro prudential instruments.

3.8 Composition of market funding



Source: Finanstilsynet

3.9 Composition of the liquidity reserve



Source: Finanstilsynet

A systemic-risk buffer requirement of 3 per cent has been introduced in Norwegian rules. An additional further systemic-risk buffer requirement of 2 per cent applies to systemically important institutions. The law entitles the Ministry of Finance to increase or reduce the systemic risk buffer. Norwegian firms are also subject to a countercyclical buffer requirement of 2 per cent, reviewable each quarter. At the March 2018 review of the countercyclical buffer, Finanstilsynet's letter to the Ministry of Finance pointed out that high property prices and a historically high household debt burden render the Norwegian economy vulnerable in the event of a setback and that banks' capitalisation may need to be strengthened if the financial system's vulnerability deepened. Finanstilsynet assesses the risk that institutions pose to the financial system. Systemic risk can also be taken into account in Finanstilsynet's determination of Pillar 2 requirements.

Liquidity risk increasingly linked to housing market developments

Covered bonds (OMF) account for the largest proportion of Norwegian banks' market financing at 51 per cent (chart 3.8). Covered bonds also account for a large portion of banks' liquidity buffer. For most banks, covered bonds make up between 45 and 55 per cent of their liquidity reserve (chart 3.9). Covered bonds are regarded as a secure, stable source of finance, and the emergence of this product has benefited Norwegian banks by lengthening the maturity of their market funding. However, the high proportion of covered bonds, both as a source of financing and liquidity reserve, brings increased systemic risk through cross-ownership and links banks' liquidity risk to a greater degree than previously to the housing market.

In the event of a house price fall, the value of the cover pool of covered bonds will be reduced and the banks may, depending on the degree of overcollateralisation and the size of the house price fall, need to replenish the cover pool. Mortgage companies are obligated by law to maintain an overcollateralisation of at least 2 per cent, and residential mortgages transferred to the cover pool cannot have a loan to value ratio above 75 per cent.

The degree of overcollateralisation varies from one institution to the next and must be viewed in relation to the proportion of the residential mortgage portfolio left in the parent bank. Wholly-owned mortgage companies have a higher level of overcollateralisation than part-owned mortgage companies, but the parent banks of part-owned institutions generally have a higher proportion of residential mortgages on their own balance sheet than do the parent banks of wholly-owned mortgage companies. Banks with wholly-owned mortgage companies have an average of 53 per cent of residential mortgages on their own balance sheet, compared with an average of 76 per cent in the case of part-owned mortgage companies.

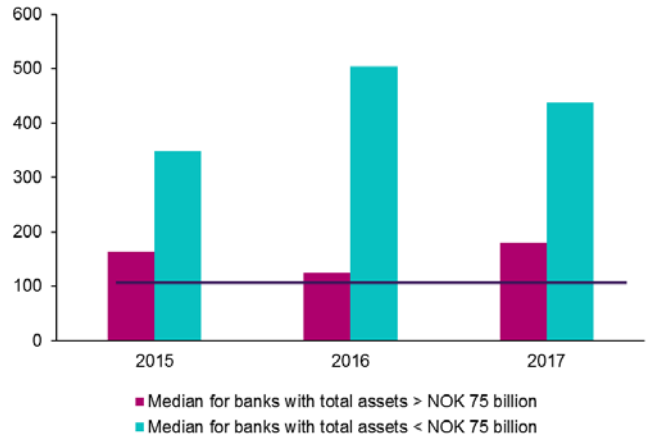
For most institutions, the average loan to value ratio in the cover pool is between 45 and 55 per cent, and has been stable over time. Mortgage companies' overcollateralisation and low loan to value ratios mean that investors in covered bonds are relatively well protected in the event of a fall in house prices. On the other hand, this leaves the bank and investors in senior bonds more exposed.

Refinancing capacity in the event of a house price fall

Finanstilsynet has developed an indicator termed "refinancing under stress"[8] to illuminate the banks' refinancing risk associated with a house price fall. Calculation of the indicator assumes a spontaneous fall of 30 per cent in house prices and that banks will be unable to issue senior debt, short-term money market paper or subordinated debt for a period of one year. In this scenario senior debt, short-term money market paper and subordinated debt are assumed to be refinanced by issuing new covered bonds. The opportunity to issue covered bonds will depend on the volume of the bank's residential mortgages qualifying for transfer to the covered bond issuing undertaking and the value of unencumbered cover pool assets (given a 30 per cent price fall). The indicator is defined as residential mortgages qualifying for issuance of

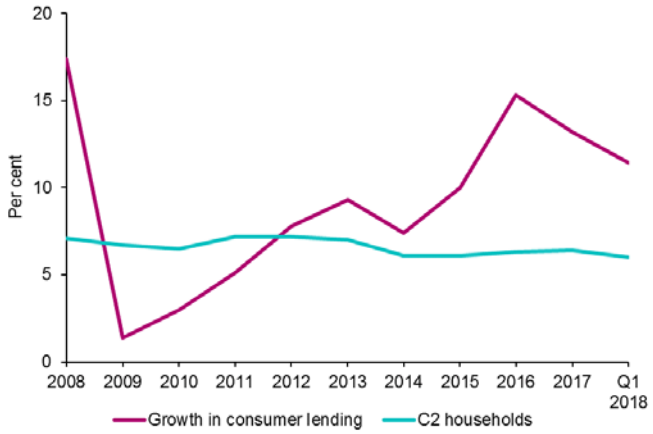
[8] For a further account, see Finanstilsynet's module for liquidity risk.

3.10 Refinancing under stress, indicator value



Source: Finanstilsynet

3.11 Growth in consumer lending



Source: Finanstilsynet

covered bonds after a house price fall of 30 per cent, divided by the overall refinancing need in the years immediately ahead. Indicator values equal to or below zero signify that the institution has no residential mortgages that qualify for issuance of new covered bonds and that are available to meet the need to issue covered bonds to refinance senior debt falling due within one year in the stressed situation. Indicator values between zero and 100 signify that the institution lacks sufficient reserves, adjusted for stress, to cover all senior debt maturing within a period of one year. Values above 100 indicate that the institution has refinanced all senior debt, including in the defined stressed situation.

Chart 3.10 shows the median value of some of the largest banks in 2015, 2016 and 2017. The banks are divided into two groups: banks with total assets above NOK 75 billion and their wholly- or part-owned covered bond issuing undertakings, and a number of banks with total assets between NOK 25 billion and NOK 75 billion and their wholly- or part-owned covered bond issuing undertakings. Small banks generally have a lower proportion of market funding and wider variation in maturities, and are therefore excluded from the calculations.

Eight of a total of 12 banks in the selection improved their refinancing capacity by the end of 2017 compared with the end of 2015. The median has also risen in aggregate for the banks in the selection, and for both groupings in the three-year period. Both the volume of senior debt falling due and the potential to issue covered bonds have risen at the majority of the banks. The positive effect of banks' increased covered bond potential dominates the negative effect of senior debt falling due, leaving a positive net effect on the median. Only two of the banks had an indicator value below 100 in 2017. These two banks will accordingly be unable to fully refinance their senior and subordinated debt by issuing covered bonds in the defined stressed situation.

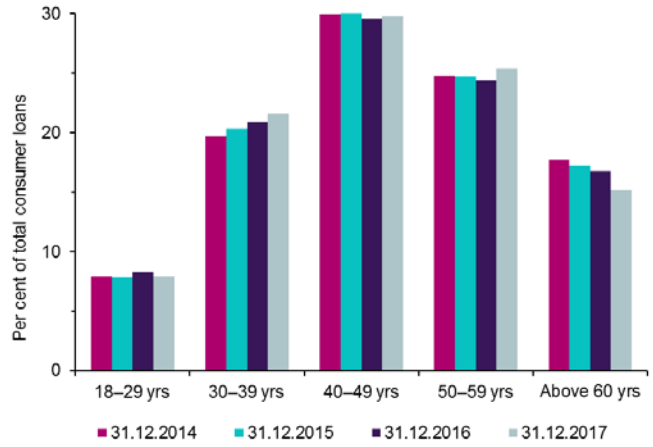
CONSUMER LENDING

Recent years have seen strong growth in the volume of unsecured loans (consumer loans). Consumer loans now account for about 3 per cent of households' overall debt. Although consumer loans make up a small portion of overall debt, their growth is substantially higher than the general growth in credit to households. In addition, interest expenses on consumer loans account for a significantly higher proportion of households' overall interest expenses than consumer loans' proportion of overall debt.

Continued high growth in consumer lending

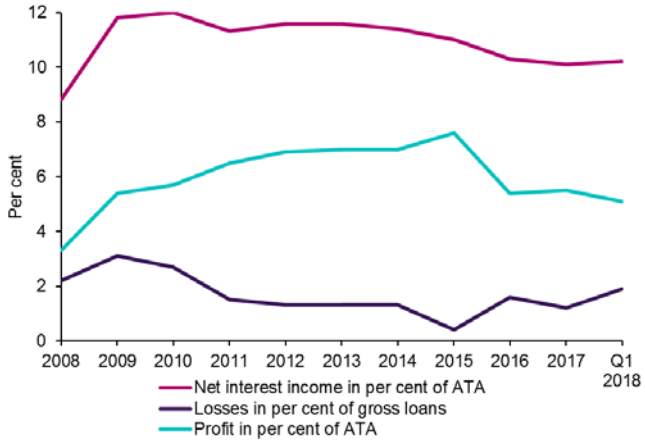
Finanstilsynet has surveyed the business of a selection of 28 banks and finance companies engaged in consumer finance. Both Norwegian entities and foreign branches in Norway are included, and the selection covers the bulk of the Norwegian market. Consumer loans to Norwegian borrowers totalled NOK 106

3.12 Consumer loans distributed on age groups



Source: Finanstilsynet

3.13 Profit trend, consumer loan banks



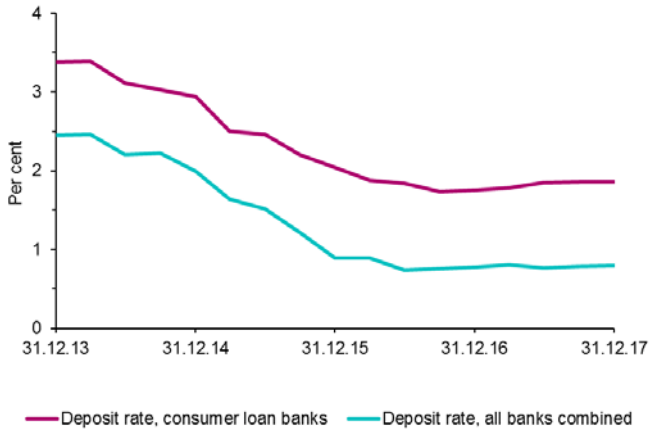
Source: Finanstilsynet

billion at the end of the first quarter of 2018. The twelve-month rate of growth in the Norwegian market was 11.4 per cent, while households' overall debt rose by 6.0 per cent in the same period (chart 3.11). The growth in consumer lending was somewhat lower than at the end of 2017. Credit card loans accounted for about 47 per cent of aggregate consumer loans at the end of the first quarter of 2018, compared with just over 50 per cent one year previously. Just under 70 per cent of the credit card debt was interest-bearing. Relatively new market participants show clearly higher growth in lending than traditional banks, and credit card loans make up a limited part of the business of these entities.

The bulk of consumer loans goes to borrowers aged over 40. At the end of 2017, 55 per cent of aggregate loans had gone to borrowers aged between 40 and 60 (chart 3.12). Borrowers in the age group 40–49 held the largest portion of these loans at close to 30 per cent. The proportion of loans going to the age group 18–29 was just under 8 per cent, having remained stable at this level in recent years. The level of non-performing consumer loans is generally higher than in the case of other types of loan and rose to 6.4 per cent by the end of the first quarter.

The interest margin on consumer loans is high compared with secured loans. The entities concerned can therefore withstand relatively high losses on consumer loans and nonetheless achieve good profits

3.14 Average deposit rate



Source: Finanstilsynet

(chart 3.13). The high level of profitability over a long period has made consumer lending an attractive segment for both new and established providers. Losses on consumer loans measured 1.9 per cent of loans in the first quarter.

Banks specialising in consumer lending generally offer higher interest rates on customer deposits than traditional banks (chart 3.14). Membership of the Norwegian deposit guarantee scheme is obligatory for banks. In March 2018 the Storting (parliament) adopted law amendments rendering fee payments to the Norwegian Banks' Guarantee Fund more risk sensitive. Hence banks with a one-sided or narrow business model are required to pay a proportionally larger fee to the fund. Banks having consumer lending

as their core business may accordingly be charged a higher guarantee fund levy ahead. The law amendments enter into force on 1 January 2019.

Tighter capital requirements for consumer lending banks

Finanstilsynet can impose higher capital charges on the bank if risk is not adequately met by the general prudential requirements. In 2017 new consumer lending banks were are assigned a CET1 requirement of 6 percentage points above the minimum requirements. Several of the established consumer lending banks are subject to Pillar 2 requirements significantly higher than those applying to full-range banks.

Survey of compliance with the guidelines on prudent consumer lending practices

In June 2017 Finanstilsynet published guidelines on prudent consumer lending practices. The guidelines state what Finanstilsynet considers to be prudent credit practices and credit assessments, i.e. what the authority considers to be good business practices in this area. In conjunction with the above, Finanstilsynet announced its expectation that institutions would immediately start work on complying with the guidelines, and that it would check institutions' compliance as from the fourth quarter of 2017. Compliance with the guidelines will form part of the basis for risk assessment and determination of capital requirements under Pillar 2.

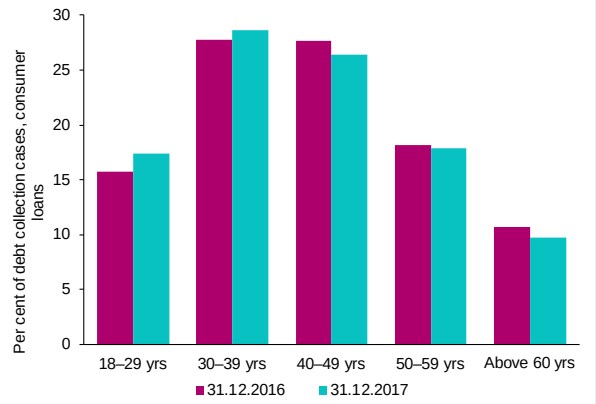
Finanstilsynet surveyed in the first quarter of 2018 institutions' compliance with the guidelines at the end of 2017. The review shows that many were not compliant with the guidelines at the time of the survey. Several banks have announced their intention to come into line with the guidelines in the course of the first half of 2018, while some state that they will only do so in 2019. Finanstilsynet does not regard this as satisfactory and will monitor compliance through on-site inspections and special follow-up of individual entities.

Box 4:
Consumer loans referred to debt collection

Finanstilsynet has conducted a survey of 13 of the largest debt collection agencies to gain a better overview of the distribution of debt collection cases on claim types and age categories. The entities in the survey held an overall market share of just over 80 per cent. Of debt collection cases in process at the end of 2017, 9.1 per cent were related to consumer loans compared with 13.3 per cent at the end of 2016. The number of cases connected to consumer loans has declined, whereas overall non-performing commitments connected to such cases have risen from NOK 16.2 billion at the end of 2016 to NOK 18.0 billion at the end of 2017. At the end of 2017, debt collection cases connected to consumer loans accounted for 36 per cent of the overall non-performing volume at debt collection agencies, almost unchanged from the end of 2016. An increase is noted in the proportion of debt collection cases connected to consumer loans among the youngest age groups, whereas there was a reduction for borrowers aged over 40 compared with the previous year (chart 3.A).

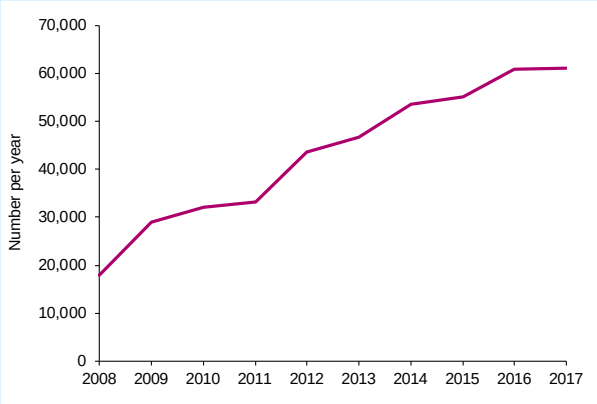
Sales of loan portfolios connected to consumer loans have risen in recent years. A desire for improved liquidity and reduced risk on the part of the original lenders has contributed to this development. As a rule loan portfolios are transferred on the due date or after non-performance and in that case largely to other financial institutions or similar entities. Such transfers do not require the consent of the credit customer. However, transfers of loans to other entities do require special consent from the credit customer. The rights assigned to the customer and the Financial Contracts Act apply correspondingly to the relationship between the customer and the entity to which the claim is transferred. The original lender is required to inform the customer of the transfer unless

3.A Share of debt collection cases related to consumer loans



Source: Finanstilsynet

3.B Number of attachment proceedings



Source: Statistics Norway

the original lender continues to act as lender to the customer.

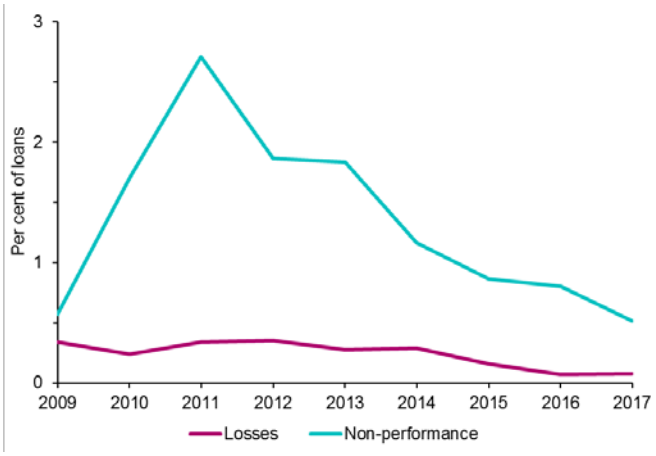
The Financial Contracts Act's provisions on credit agreements will apply correspondingly in the relationship between the credit customer and the party to which the claim is transferred. The lender is required to inform the credit customer of the transfer, unless the lender, by agreement with or on behalf of the party to which the claim is transferred, acts as lender to the credit customer. Transfers of loan portfolios of a significant size require approval from the Ministry of Finance (delegated to Finanstilsynet). Although the number of sales of claims portfolios has risen, a price increase has generally speaking been noted. This is due to increased competition both from established and newly established entities that purchase portfolios. Such entities purchase claims portfolios at values significantly below the actual nominal amounts. They take on a risk that claims will prove unrecoverable, or that recovered amounts will be lower and paid later than calculated. Recovery of acquired claims is in the main left to debt collection agencies.

When a debt collection agency demands attachment of a debtors' assets on the principal's

Where no item is available for attachment, the outcome of the proceeding will be "no item available for attachment". A record of non-payment will normally be registered in such case. Figures from Statistics Norway show a marked increase in the number of attachment proceedings in the last 10 years (chapter 3.B).

Possible reasons for the increase in the number of attachment proceedings are the general increase in debt collection cases referred to debt collection agencies and the introduction of simplified electronic transfer of petitions for attachment direct to the claims enforcement officer's systems (ELSA). In addition, debt collectors now have improved analysis tools that are more capable than previously of predicting which debtors have assets available for attachment, and principals are setting greater requirements as regards resolution ratios both in terms of number of cases and speed of settlement. Effective recovery mechanisms also mean that lenders have less incentive to make a prudent assessment of a customer's debt servicing capacity, which underscores the need for credit assessments to safeguard the interests of vulnerable loan applicants.

3.15 Losses on loans, and non-performing loans, to property companies



Source: Finanstilsynet

Initiatives addressing the consumer loan market

A number of measures have been taken in the course of the past year to regulate the market for consumer loans. The Ministry of Finance issued on 4 April 2017 regulations on the invoicing of credit card debt. The Ministry of Justice and Public Security issued on 5 April 2017 regulations on the marketing of credit. The Storting (parliament) passed in June 2017 the Act on debt information in connection with creditworthiness assessments of private individuals. Recording of unsecured credits will be an important instrument in providing entities with better information on prospective borrowers' actual debt situation, and could prevent entities from offering consumer loans to individuals with debt problems. Finance Norway and Evry AS have both applied for a licence to establish debt information entities. The Ministry of Children and Equality aims to reach a decision on the two applications by summer 2018. Finanstilsynet adopted in June 2017 guidelines on prudent consumer lending practices. The guidelines set requirements for entities' credit assessments and processing of loan applications, including requirements as to prospective borrowers' debt servicing capacity. Finanstilsynet has on commission from the Ministry of Finance considered whether an interest rate ceiling should be set for consumer loans. Finanstilsynet's conclusion was that it is important to give time for measures already taken to have an effect before, in the event, applying an interest rate ceiling. The various governmental measures are further described in chapter 5.

COMMERCIAL PROPERTY

Growth in lending to households has substantially outstripped growth in lending to firms ever since 2009, although banks' corporate portfolio continues to make up one-third of the banks' overall lending to customers. Historically speaking, the banks' largest loan losses are on loans to firms. For most Norwegian banks, exposures to property companies account for the largest single-industry share of the corporate portfolio, which could make the banking industry vulnerable to a negative trend in property markets.

Moderate losses on loans to property companies in recent years

The property industry[9] is the largest industry in Norway. At the end of 2017 Norwegian banks' loans to property companies accounted for 47 per cent of total loans to non-financial firms. This proportion has remained stable for several years. Norwegian branches of foreign banks also have substantial loans to commercial property companies in Norway, corresponding to 53 per cent of the branches' loans to firms. At the end of 2017, branches accounted for 40 per cent of overall loans from banks to the property industry, after substantial growth in the second half of 2017.

The portfolios to which the banks are exposed are very varied. In recent years, property companies' equity ratio has risen to a level above that in other sectors. Debt-servicing capacity has also increased, and is in reasonable proportion to the industry's financing structure; see the account of commercial property in chapter 2. In Norway the level of losses on loans to commercial property has been low and stable over a long period (chart 3.15). The share of non-performing loans has shown greater variation, but has in general been at a moderate level. As described in chapter 2, experience shows that prices of commercial property are cyclically exposed, and several banks suffered

[9] *Development of construction projects* and *Turnover and operation of real property*

heavy losses on loans to property companies during the banking crisis at the start of the 1990s. During the international financial crisis property companies were again seen to be vulnerable to an economic slump, and banks in several European countries incurred heavy losses on such loans.

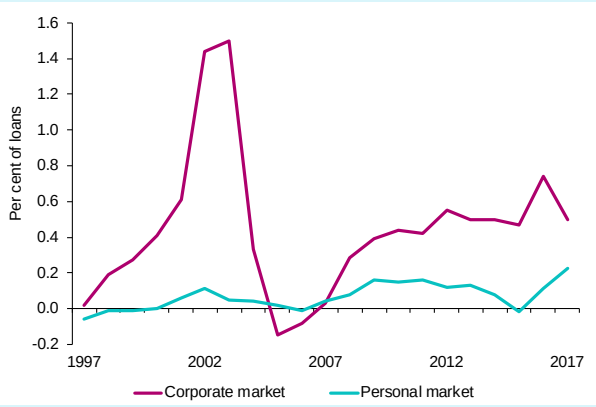
Commercial property is not marketed on a regular basis, and uncertainty attends the valuation of properties that are not put on the market. Their values are estimated based on analyses, including price indices based on valuations, rental prices and yields on commercial property. Commercial property prices have risen steeply in recent years. Experience shows that losses on property exposures are likely to be substantial in economic downturns. Banks' exposure to the industry is substantial, and a setback in the economy could entail financial problems for property companies.

Box 5:
Losses on loans to other industries

Norwegian banks' aggregate losses on loans in 2017 measured 0.3 per cent of total loans, approximately the same level as in 2016. Losses on loans to the corporate market declined compared with 2016, while losses on loans to the retail market increased and in 2017 reached their highest level in many years (chart 3.C). Consumer lending banks accounted for a large portion of increased losses on loans to the retail market. Moreover, increased losses were noted at some banks along with a smaller volume of loss reversals than in 2016. Apart from banks exclusively engaged in consumer lending, losses on loans to retail borrowers were below 0.1 per cent.

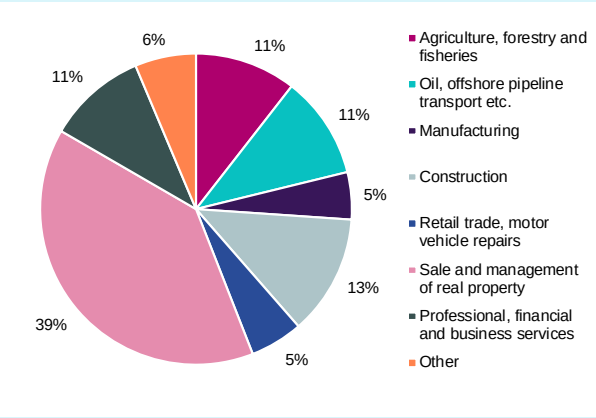
The sale and operation of real property continues to account for about 40 per cent of loans to firms (chart 3.D). This proportion has remained relatively stable in recent years. Most industries, including construction and oil-related industries, recorded smaller losses in 2017 than in the previous year (chart 3.E).

3.C Losses on loans to corporate and personal borrowers



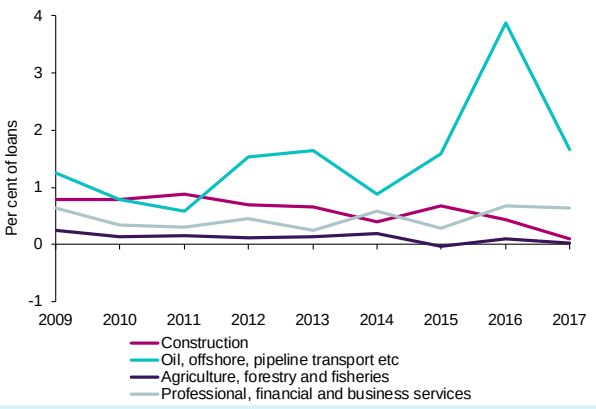
Source: Finanstilsynet

3.D Share of corporate loans



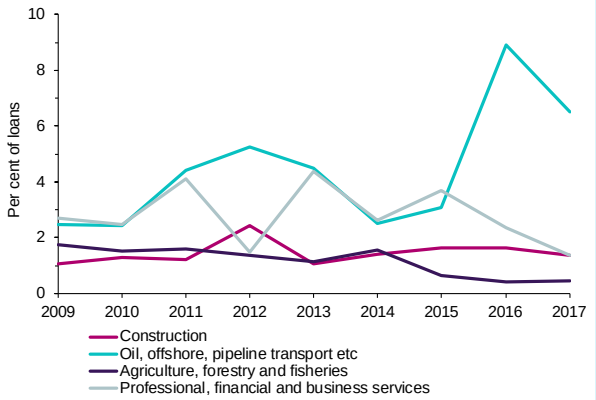
Source: Finanstilsynet

3.E Losses on loans to individual industries



Source: Finanstilsynet

3.F Non-performing loans to individual industries



Source: Finanstilsynet

The industry that made the biggest contribution to overall losses was retail trade. Losses on loans to oil-related industries declined after substantial write-downs in 2016. The proportion of non-performing loans fell in 2017 for most industries (chart 3.F). Partly due to a high proportion of non-performing exposures in services associated with extraction of crude oil and natural gas, overall non-performance was only marginally reduced.

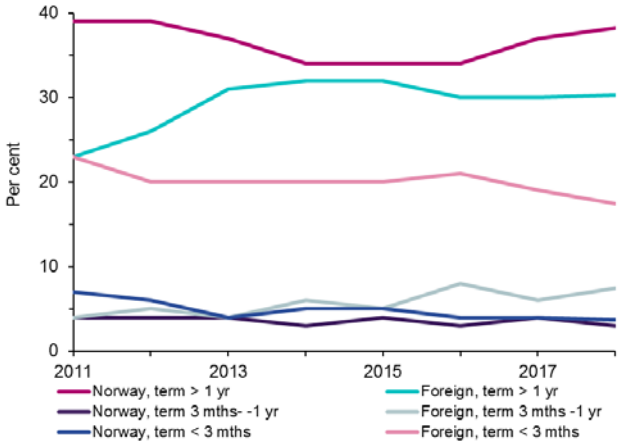
REPRICING IN FINANCIAL MARKETS

Risk premiums and volatility in financial markets have been very low for a long time. Expectations of higher interest rates could bring increased volatility and trigger sudden, hefty repricing of risk premiums which will affect banks' access to, and the cost of, funding. Norwegian banks generally have low direct exposure to equity and property markets. Sizeable market fluctuations in these markets, together with fluctuations in currency and fixed income markets could nevertheless have substantial repercussions for banks' financial results.

Norwegian banks are vulnerable to international turbulence

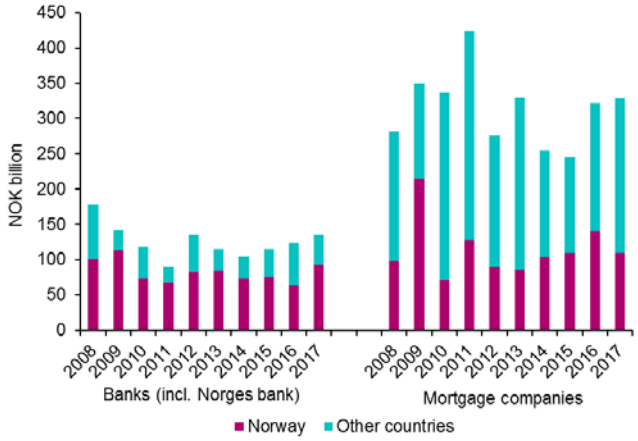
One of the banks' main tasks is to convert short-term borrowings into long-term loans to customers. The mismatch in maturity between borrowing and lending means that banks assume a risk related to their need for ongoing refinancing in the money and capital markets. In periods of turbulence in these markets it may be difficult for banks to obtain market funding, even at an interest rate level entailing a substantial liquidity and credit risk premium.

3.16 Trend in market funding of banks and covered-bond-issuing entities, by term and domestic/foreign



Source: Finanstilsynet

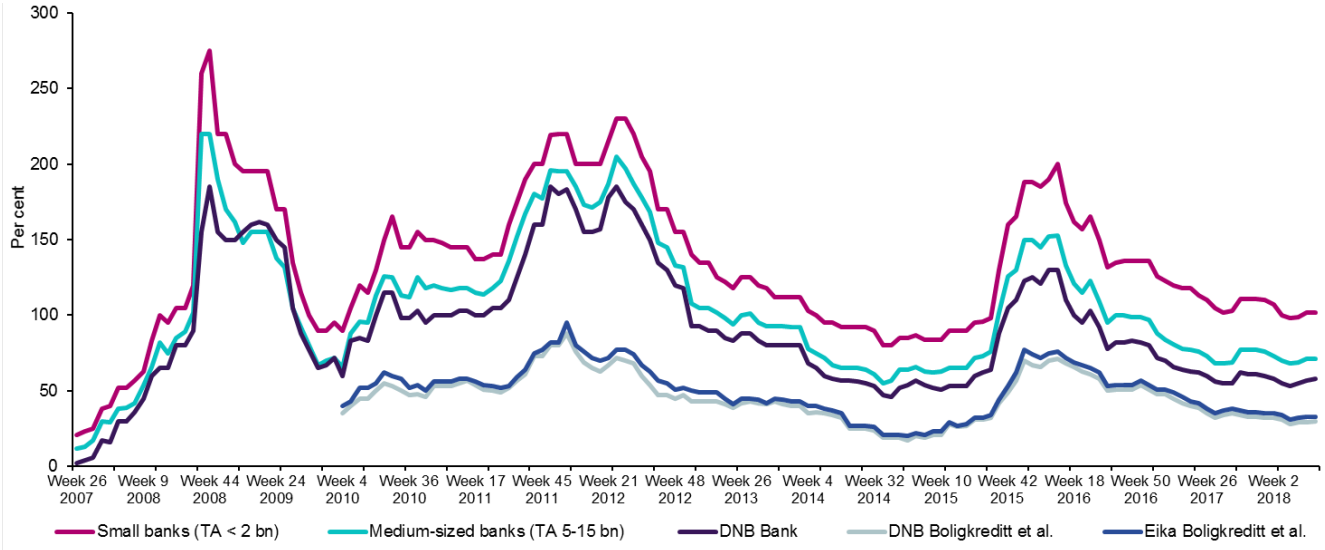
3.17 Issues



Source: Statistics Norway

Norwegian banks overall obtain a large portion of their funding in the market. More than 50 per cent of market funding is debt to foreign sources (chart 3.16). Much of this is short-term, albeit less so in recent years. Norwegian banks' assets are denominated mainly in Norwegian kroner. Norwegian banks are accordingly dependent on a well-functioning currency swap market and thus vulnerable to international

3.18 Indicative premiums for senior bonds and covered bonds (OMF), 5 year against 3 month Nibor. Up to and including week 22/2018



Source: DNB Markets

turbulence. In turbulent times banks also need to post extra collateral to fund ongoing currency swaps.

Norwegian banks' funding costs comprise a basis interest rate, usually three-month Nibor, plus a risk premium that mainly reflects the credit and liquidity risk associated with the issuance. Norwegian banks have enjoyed ample access to both short and long-term funding in recent years (chart 3.17). Thus far in 2018 Norwegian banks have continued to enjoy good access to funding, but at somewhat higher costs. Both Nibor and the risk premiums have risen, due in part to expectations of high interest rates, implementation of a money market reform in the US and signals of downscaling of the European Central Bank's (ECB's) bond purchase programme; see chart 3.18 and the account in chapter 1.

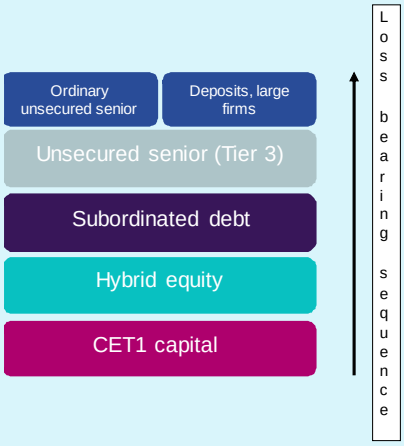
Higher interest rates and risk premiums will increase funding costs, but experience shows that banks will compensate for higher funding costs by raising their lending rates. Increased volatility and uncertainty in the market may however make access to new funding difficult, as under the financial crisis in 2008 when the markets virtually dried up. Increased regulatory requirements as to long-term, stable funding and liquidity reserves that were introduced after the financial crisis have helped to reduce refinancing risk.

Box 6:
MREL requirements could affect banks' funding structure

In March 2018 the Storting (parliament) adopted new rules for crisis management in keeping with the EU's Bank Recovery and Resolution Directive (BRRD). The rules enter into force on 1 January 2019. In accordance with Norwegian legislation Finanstilsynet will set a minimum requirement on own funds and eligible debt corresponding to MREL (Minimum Requirement for Own Funds and Eligible Liabilities) under the BRRD. Chart 3.G shows the ranking and priority of equity and debt able to cover losses in a crisis. Guaranteed deposits will be fully protected. Shareholders bear losses first, followed by hybrid equity and subordinated loan capital. MREL requirements for individual banks have yet to be adopted in Norway. See chapter 5 for more information on MREL and crisis management rules.

According to the BRRD, MREL instruments may be required to rank below ordinary senior debt,

3.G Priority ranking of debt and equity

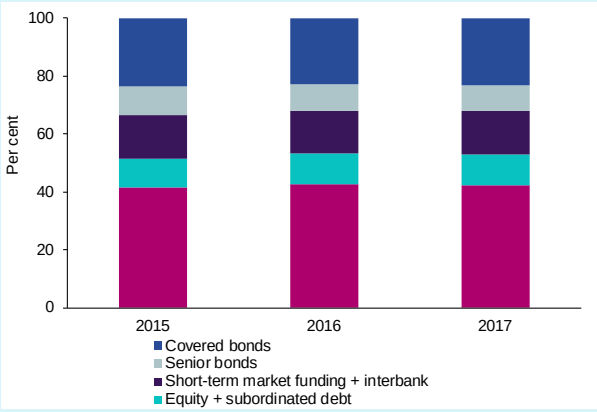


Source: Finanstilsynet

But above subordinated debt. Sweden has introduced a requirement of lower priority ranking and established a new type of debt instrument ranking below senior debt. MREL was introduced in Sweden on 1 January 2018, and systemically important banks will need to build up capital and eligible debt by 2022. These banks are expected to issue large volumes of new MREL instruments in coming years. The instruments will to some extent replace existing senior debt. According to calculations by Sweden's National Debt Office, the four largest Swedish banks will need to issue new lower ranking senior debt to a value of about SEK 500 billion over the next five years in order to meet the minimum requirement.

At the end of 2017 long senior bonds and covered bonds (OMF) accounted for 32 per cent of Norwegian banks' total funding. The bulk of this was covered bonds, which accounted for 72 per cent of long-term market funding (chart 3.H). Any build-up of lower ranking MREL instruments will likely prompt the banks concerned to prioritise issuance of lower ranking senior debt in a transitional period as opposed to ordinary senior bonds and covered bonds. Over time the choice of debt composition will also depend on credit rating, relative pricing and demand.

3.H Funding shares, banks and covered-bond-issuing entities



Source: Finanstilsynet

Uncertainty as to the effect of MREL requirements on institutions' funding costs

Like the Bank Recovery and Resolution Directive, the Financial Institutions Act opens the way for MREL instruments to rank below ordinary senior debt but above subordinated loan capital. MREL instruments will in that case carry higher risk than ordinary senior debt and are thus expected to be costlier for institutions than the debt it replaces. The risk premium on the new category of debt will depend inter alia on the market's assessment of the institution's risk as well as the relative demand for bank debt. The Swedish National Debt Office puts Swedish institutions' overall additional costs due to lower ranking senior debt based on risk spreads between ordinary senior debt and new lower ranking debt at 10, 30 and 50 basis points. Possible outcomes are based on an overall issue need of SEK 500 billion. The most conservative estimate as regards additional cost (50 basis points) entails a cost increase of a maximum of SEK 2.5 billion per year for the major Swedish banks. The Swedish estimates have not taken account of the fact that ordinary senior debt is assumed to become cheaper.

The increased cost of replacing existing senior debt with new lower ranking debt may be offset to some extent by the fact that ordinary senior bonds will in isolation be less likely to incur loss as a result of the MREL requirement. This could bring a reduction in credit spreads for ordinary senior debt.

If the spread between covered bonds and ordinary senior debt is reduced, it may help to increase senior bonds' attractiveness as a funding source for lending. The banks also have regulatory incentives to finance lending by way of ordinary senior debt. Since ordinary senior debt is issued without mortgaging assets, in contrast to covered bonds, this source of finance is more advantageous under for example the NSFR regulations. This could lead to a lower volume of covered bonds in the market. At the same time financial institutions' demand for covered bonds as an investment medium might, inter alia due to their need for covered bonds in the LCR buffer, curb the price effect somewhat. Should the covered bond supply weaken substantially, it could lead to a reduction in credit spreads to meet the demand.

Experience in the European market has shown heavy demand from investors for lower ranking senior debt. This has caused the credit spread for lower ranking senior debt to fall to a level approaching ordinary senior debt*. The heavy demand may be due to investors assessing loss likelihood as low. The low interest rate level also adds to the attractiveness of potential improved returns on bank debt.

* https://www.bloomberg.com/news/articles/2017-10-10/europe-s-hot-new-bonds-obscure-junior-risks-with-senior-label

CHAPTER 4: INSURANCE AND PENSIONS

Low interest rates and increasing longevity have posed a challenge to Norwegian pension institutions[10] in recent years. For life insurers the transition to a new solvency regime has made additional demands. However, equity prices rose substantially through 2017, making room for an increase in buffer funds, which helped to strengthen solvency coverage ratios. Non-life insurers' overall solvency position is satisfactory although some undertakings face challenges in terms of financial solidity.

Despite recent years' low interest rates, substantial challenges have not been noted in insurers' investment pattern following the introduction of Solvency II. However, over time there has been a slight increase in demand for certain investment products. Changes in pension institutions' investments may affect the price of financial assets and thereby the situation for other actors in the market. In a scenario of falling equity prices or reduced bond prices resulting from higher risk premiums, companies may act in a procyclical manner, particularly if buffer capital is low. Pension institutions' substantial role as investors means that they can potentially intensify a negative market trend.

PENSION INSTITUTIONS' PROFITABILITY AND FINANCIAL SOUNDNESS

Adjusted return influenced by interest rate level and equity price fluctuations

Interest rates at the end of 2017 were at the same level as at the start of the year, whereas the upturn in equity markets made a positive contribution to the financial results of pension institutions in 2017. Life insurers recorded a pre-tax profit of NOK 8.5 billion (0.6 per cent of average total assets (ATA)), which is a slight improvement on 2016. Pension funds posted a pre-tax profit of NOK 4.4 billion (1.4 per cent of ATA), up from NOK 3.3 billion (1.1 per cent of ATA) in 2016.

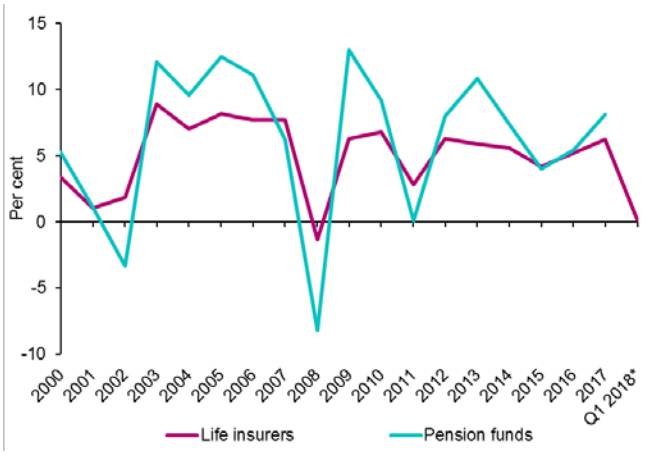
Pension institutions must organise their asset management with a view to meeting their obligations, including the annual guaranteed return in defined-benefit schemes. Given the low interest rate level, achieving sufficient return on investments has posed a challenge to pension institutions. At the end of 2017 the average guaranteed rate of return in the collective portfolio, which includes defined benefit pensions, paid-up policies and other contracts, was 2.73 per cent for life insurers and 2.61 per cent for pension funds. Book return on assets, which notionally covers the annual interest guarantee, was 4.6 and 5.4 per cent respectively for life insurers and pension funds in 2017, approximately unchanged from 2016.

Life insurers' adjusted rate of return has shadowed the upturn in the equity market and has risen from 2015 up to the end of 2017. In the first quarter of 2018, however, the downturn in equity markets and higher interest rates contributed to weaker adjusted results for life insurers (chart 4.1).[11] Since pension funds, in particular the private ones, have had a higher equity component in their balance sheet than life insurers over time, pension funds' financial results have been more volatile. In the years following the international financial crisis, developments in equity markets have enabled pension funds to achieve higher return than life insurers with the exception of the years 2011 and 2015.

Pension institutions with a high proportion of paid-up policies are particularly sensitive to low interest rates since an increase in the value of liabilities cannot be compensated for by raising the guaranteed interest premium. At the end of 2017 liabilities in respect of paid-up policies at life insurers accounted for 51 per cent of insurance liabilities in private collective pension insurance, up from 44 per cent at the end of 2014. Of aggregate insurance liabilities with respect to paid-up policies, 2 per cent were unit linked at the end of 2017. At the end of the first quarter of 2018 this

[10] Pension funds and life insurers.
[11] See Finanstilsynet's Report on financial institutions' results (Norwegian only).

4.1 Pension institutions' adjusted return



* Annualised. Source: Finanstilsynet

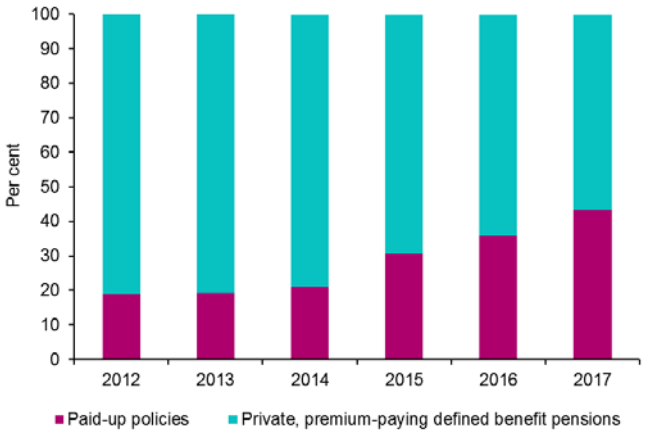
proportion had risen to 5 per cent – mainly due to the conversion of paid-up policies with guaranteed return to unit-linked paid-up policies in connection with the life insurer Storebrand Livsforsikring AS' takeover of Silver Pensjonsforsikring AS' portfolio. Paid-up policies as a share of private pension funds' insurance liabilities have risen from 21 per cent at the end of 2014 to 43 per cent at the end of 2017 (chart 4.2). In the Norwegian pension fund market there were three pure paid-up policy entities at the end of 2017, unchanged from 2016, while paid-up policies account for about 90 per cent of the portfolio of a further three pension funds. A number of private pension funds that are now closed to new members have issued paid-up policies to parts of their membership.

Financial solidity strengthened

Life insurers' financial position has strengthened since the entry into force of Solvency II in 2016. Their overall solvency coverage ratio, i.e. the ratio of eligible own funds to the solvency capital requirement (SCR), was 227 per cent at the end of 2017 (chart 4.3). With the exception of Silver Pensjonsforsikring AS, which had been placed into public administration up to the end of January 2018, all life insurers met the solvency capital requirement in 2017. However, the coverage ratio varied widely from one company to the next.

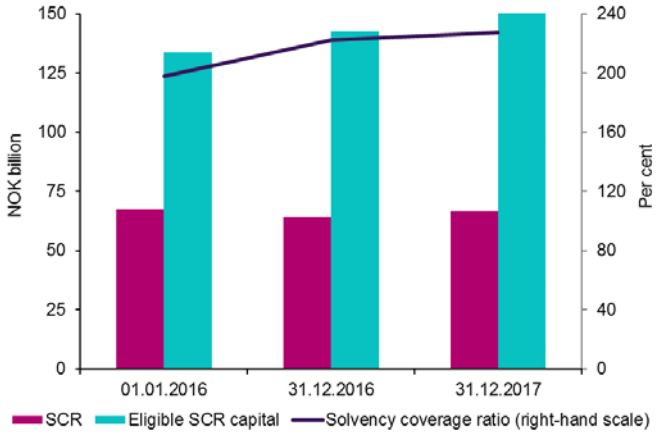
The Solvency II framework has not been given effect for pension funds. However, pension funds report their stress tests with a basis in Solvency II principles even

4.2 Paid-up policies as a share of private pension funds' insurance liabilities*



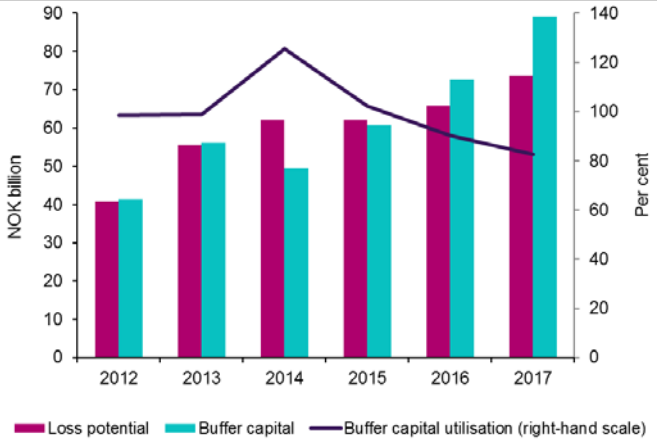
* Without supplementary provisions and fluctuation reserves.
Source: Finanstilsynet

4.3 Life insurers' solvency coverage ratio (incl. transitional measures)



Source: Finanstilsynet

4.4 Pension funds' buffer capital utilisation



Source: Finanstilsynet

though there is no binding solvency requirement in the stress test. In Finanstilsynet's view there is a need for a new permanent risk-based solvency requirement for pension funds. A proposal from Finanstilsynet is being considered by the Ministry of Finance. Pension funds' overall buffer capital utilisation, defined as the ratio of loss potential to buffer capital, was 83 per cent at the end of 2017. This is a slight improvement on the previous year (chart 4.4). Buffer capital utilisation declined somewhat as a result of an increase in fluctuation reserves and retained profit. For life insurers a higher solvency coverage ratio is positive, whereas for pension funds increased buffer capital utilisation is negative, given the reverse fraction.

Of twelve Norwegian life insurers, 50 per cent use the transitional measure on technical provisions in solvency calculations. The measure permits undertakings to reduce their technical provisions by a margin corresponding to a proportion of the difference between provisions calculated under Solvency II and the previous solvency margin framework (Solvency I). The effect of the transitional measure varies among life insurers and is of particular significance for entities with a high proportion of paid-up policies. The six life insurers that make use of the transitional measure reported an overall solvency coverage ratio of 236 per cent at the end of 2017. Without the use of the transitional measure the overall solvency coverage ratio would have been 195 per cent.

RISK AREAS

At the end of 2017, Norwegian life insurers' aggregate assets under management totalled NOK 1,487 billion while pension funds' managed assets totalled NOK 346 billion. Pension institutions are an important source of finance for many actors, including banks, and they play an active role in the capital markets. An increasing degree of interconnectedness in the financial market could result in shocks spreading more easily from one sector to another. In Norway as elsewhere, the authorities are concerned with the risk of a double-hit scenario featuring low risk-free interest rates and abruptly falling equity prices or bond prices due to higher risk premiums. In such a situation financial solidity will be impaired, and pension institutions may be forced into procyclical adjustment, for example by selling shares in a falling equity market. In markets where pension institutions are major investors, the effects could be considerable. A double hit situation could ultimately lead to individual institutions becoming insolvent.

The European Insurance and Occupational Pensions Authority (EIOPA) conducted in 2016 a stress test showing life insurers to be particularly vulnerable to a double hit scenario. In 2018 EIOPA is conducting a new stress test of 42 European insurance groups, including Storebrand ASA and Gjensidige Forsikring ASA. The stress test covers three differing scenarios, including a steep interest rate hike that affects all financial markets and prompts a large proportion of policyholders to terminate their insurance contracts (increased lapse risk). The second scenario assumes a long period of interest rates close to zero combined with higher average longevity (increased longevity risk). The third scenario in the stress test includes a set of different natural disaster events. The results of the stress test will be published at the start of 2019.

In October 2017 and February 2018 EIOPA forwarded two sets of proposals for changes to the Solvency II framework to the European Commission. The second set recommends a higher stress factor in the calculation of interest rate risk which is expected to substantially reduce the solvency coverage ratio of life insurers, including Norwegian ones. The change is prompted by the current method's failure to make sufficient allowance for the actual interest rate risk when interest rates are low, since the interest rate stress is calculated relative to the prevailing interest rate level. The European Commission has however signalled its intention to postpone consideration of possible changes to the capital requirement for interest rate risk until 2020. See further account in chapter 5.

In the period following the financial crisis, EIOPA and the European Systemic Risk Board (ESRB) have worked on recommendations regarding macroprudential instruments for the insurance sector. EIOPA has thus far published two articles dealing with

potential sources of systemic risk and possible instruments under the Solvency II framework that may reduce this risk. The instruments under the Solvency II framework include the symmetrical adjustment mechanism used in calculating the capital requirement for equity risk, volatility adjustment of the risk-free interest rate curve and the transitional measure on technical provisions.

Low interest rates still a challenge

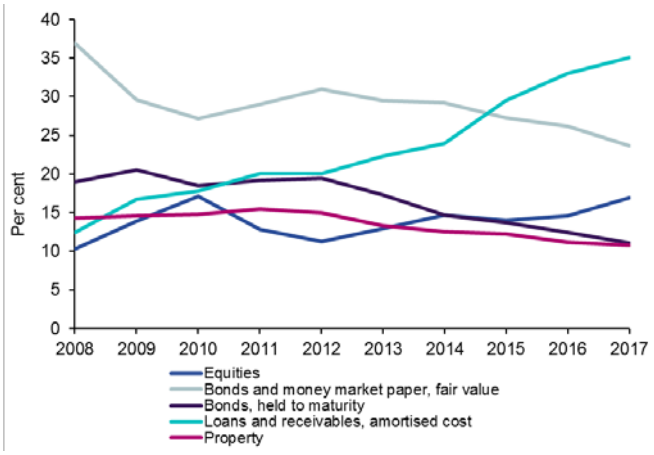
Global interest rates have risen somewhat of late. In the short term an interest rate increase entails falling bond rates and hence losses on bonds that are accounted for at fair value, but in the longer term, once the bonds expire and the funds are to be reinvested at higher interest, the current interest revenues increase. At the same time an interest rate hike reduces the value of insurance liabilities and, all else equal, provides room for greater risk taking. Because of the duration gap between assets and liabilities, the value of liabilities will fall more than the value of assets.

Despite a slight interest rate rise at the start of 2018 and expectations of a further rate increase, interest rates remain at a low level. Insurers with a high proportion of guaranteed products in private company pension schemes, and a particularly high proportion of paid-up policies, are particularly vulnerable in a situation of prolonged low interest rates. Low interest rates may prompt undertakings to increase their risk willingness and to search for yield, which may contribute to mispricing in the markets. For life insurers subject to Solvency II, investing in high-risk products will normally require more capital than investments carrying low risk, entailing that the size of their own funds will affect their opportunity to undertake investments with higher expected return.

Commercial property may appear to be a more attractive investment object

The ESRB warned in 2016 against the vulnerability of the property sector in several European countries, among them Sweden. Insurers in some of these countries also have relatively high property exposures compared with insurers in other European countries. A negative market trend is likely to result in lower

4.5 Investments in the collective portfolio – life insurers overall



Source: Finanstilsynet

market value of property investments and hence a reduction in the exposed companies' own funds. The solvency capital requirement for property risk corresponds to the effect on own funds of a 25 per cent reduction in property values. By way of comparison, the solvency capital requirement for stock exchange quoted shares is 39 per cent plus/minus 10 percentage points due to the symmetrical adjustment mechanism used to calculate the capital requirement for equity risk. A lower stress factor could contribute to property appearing to be a more attractive investment medium. Norwegian life insurers are substantial investors in commercial property; see further details below.

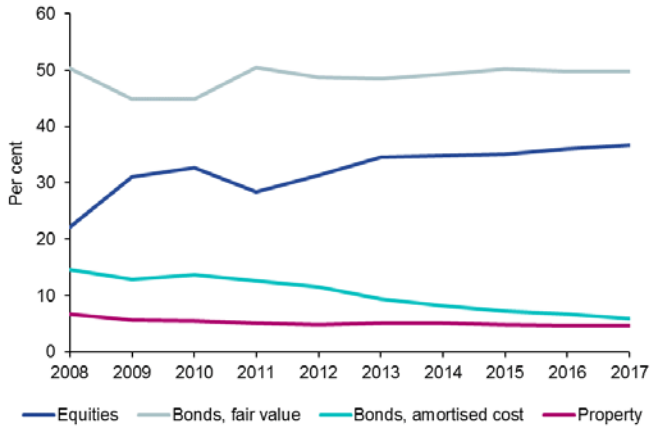
PENSION INSTITUTIONS' INVESTMENTS

The composition of pension institutions' investments is crucial to how market developments, described in chapter 1, influence institutions' financial position and profitability. For Norwegian pension institutions, especially those who have a substantial portion of liabilities that provide a guaranteed annual return, it is highly important to invest in assets with sufficient return at the lowest possible risk.

Differences between life insurers' and pension funds' investment profile

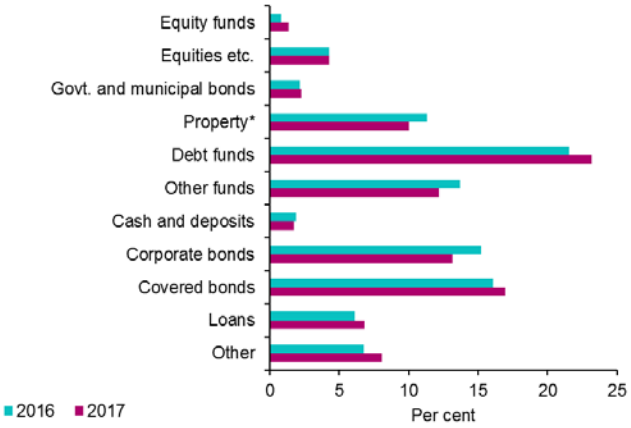
For life insurers as a whole the need for stable return and a long-term perspective on investment

4.6 Investments in the collective portfolio – pension funds overall



Source: Finanstilsynet

4.7 Life insurers' investments



* Property includes 'real estate' (CIC 9), 'equity of real estate related corporations' (CIC 32), 'real estate funds' (CIC 45), 'real estate exposure related to collateralised securities' (CIC 65) and 'mortgages' (84) and NACE codes F41 and L which inter alia include property bonds. Source: Finanstilsynet, Solvency II quarterly reporting at solo level.

entails that about one-half of investments in the collective portfolio are accounted for at amortised cost. Fixed-income securities classified as hold-to-maturity have been reduced somewhat since 2012 (chart 4.5). Loans and receivables at amortised cost have however risen substantially in recent years and accounted at end-2017 for 35 per cent of the collective portfolio, 17 percentage points higher than in 2010. This portfolio includes other bonds measured at amortised cost along with loans, including residential mortgages. Residential mortgages increased by about NOK 2.5 billion to NOK 46.5 billion in 2017, corresponding to 3 per cent of life insurers' aggregate managed assets.

Pension funds generally assume higher risk than life insurers with the aim of achieving higher expected return. For pension funds, bonds accounted for at amortised cost make up a smaller share (chart 4.6). Their equity component is however significantly higher and has risen somewhat in recent years.

LIFE INSURERS' INVESTMENTS UNDER SOLVENCY II[12]

Changes in investments can affect the price of financial assets

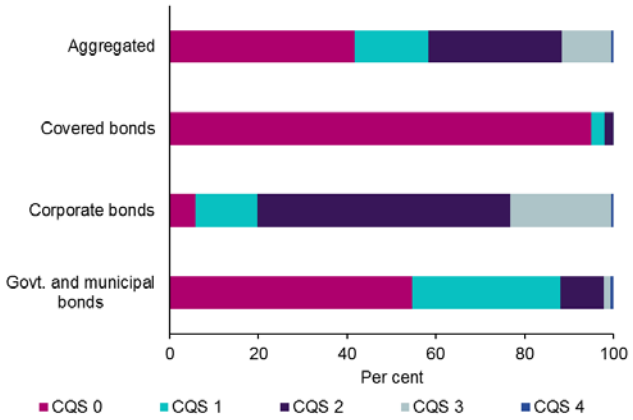
In the Solvency II balance sheet all assets and liabilities are measured at fair value, which may induce insurers to act in a more procyclical manner than previously. Life insurers traditionally pursue a conservative investment strategy in which a large portion of investments are in fixed-income securities. At the end of 2017 debt funds and corporate bonds accounted respectively for 13 per cent and 23 per cent of investments (measured at fair value), (chart 4.7).

Covered bonds accounted for 10 per cent of the investments in the Solvency II balance sheet. The proportion of government bonds has declined compared with 2016, while corporate bonds have increased somewhat. The overall portfolio of bonds made up a smaller share of total investments than in most European countries.

Non-rated bonds accounted for 20 per cent of life insurers' bond portfolio, exc. debt funds, at the end of 2017. The credit quality step (risk class) of the remaining fixed-income securities varies considerably (chart 4.8). Investments are mainly in credit quality step 0 (42 per cent) and credit quality step 2 (30 per cent), corresponding to an AAA and A credit rating respectively. Government bonds, municipal bonds, and covered bonds belong mainly to these risk classes.

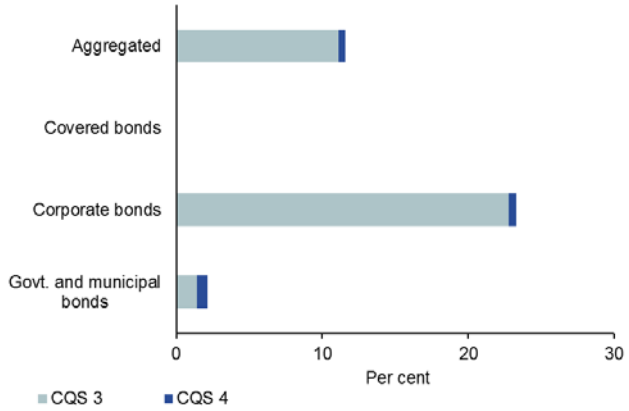
[12] This account does not apply to unit-linked defined contribution pensions.

4.8 Credit quality step (CQS) as a share of credit quality steps in aggregate for various fixed income securities, as at 31 December 2017



Source: Finanstilsynet, Solvency II quarterly reporting at solo level

4.9 Credit quality step (CQS) 3 and 4 as a share of credit quality steps for various fixed income securities, as at 31 December 2017



Source: Finanstilsynet, Solvency II quarterly reporting at solo level

A substantial portion of investments in other corporate bonds have a credit rating equal to BBB (chart 4.9).

15 per cent of Norwegian life insurers' investments are placed in equities and equity funds (shares in property companies not included). Solvency II gives insurers an incentive to place their funds in less risky investments. At the same time the low interest rate level challenges insurers' ability to achieve sufficient return on their investments. EIOPA's Investment Behaviour Report from 2017 notes a slight increase in higher risk investments, including fixed income securities with lower credit quality, among European insurers in the past five years. The proportion of corporate bonds of lower credit quality has also increased somewhat among Norwegian life insurers.

A substantial portion invested in property

Although European insurers have shown a tendency to invest to a greater degree in asset classes such as residential mortgages and property in recent years, these investments still account for no more than 7 per cent of total investments. Compared with their counterparts in other European countries, Norwegian life insurers' investments make up a substantial share, 17 per cent, of their total investments. 54 per cent of property investments by Norwegian life insurers are property-related equities managed through subsidiaries and related undertakings. The investments are located mainly in Norway.

Loans mainly comprise residential mortgages. Residential mortgages with a low loan to value ratio are treated favourably under Solvency II. Fixed-rate mortgages carrying low interest rate risk are likely to be particularly attractive to life insurers. Over the course of the last two years the largest life insurers have taken over portfolios of residential mortgages from banks in the same group. Norwegian authorities are concerned to ensure that the solvency rules do not spur arbitrage-motivated migration between banks and insurance companies. In connection with the incorporation of Solvency II into the EEA Agreement, an adjustment text opens the way for Norwegian authorities to set capital requirements for insurers' residential mortgages in line with the capital requirement applying to banks' residential mortgages.

Investments in bonds issued by property companies accounted for 11 per cent of property investments at the end of 2017. The capital requirement for bonds secured on commercial property has been under discussion in the life insurance industry. In connection with on-site inspections at the six largest life insurers in the second half of 2016 and the first half of 2017, Finanstilsynet stated that the requirement that there should be "no material positive correlation between the credit quality of the counterparty and the value of

the collateral"[13] will not be met in the case of loans to property companies that are secured on rental property. Such entities will have no, or few, assets or sources of revenue other than the properties in question, and the entity's creditworthiness will therefore heavily depend on the value of the property that is furnished as collateral. Finance Norway took up this issue in a letter dated 3 July 2017, and the question was referred to EIOPA for consideration. EIOPA's reply was in accordance with Finanstilsynet's assessment.[14]

Significant exposure to banks increases the risk of contagion

Insurers' (overall) exposure to banks increases the risk of contagion in the event of financial market turbulence. Investments in bank-related assets account for a significant proportion (18 per cent) of life insurers' investments in the Solvency II balance sheet. Investments in bank-related activity are mainly in corporate bonds and covered bonds. Covered bonds carry a relatively low stress factor under Solvency II and could appear favourable to insurers.

HIGHER EQUITY COMPONENT WHEN THE POLICYHOLDER BEARS THE RISK

Life insurers' product composition has changed over recent years. New sales consist almost exclusively of products without a guaranteed return and without lifelong benefits. Defined contribution pensions accounted for 37 per cent of overall insurance liabilities in private, collective pensions in 2017.[15] Unit-linked defined contribution pensions in private, collective pensions schemes have risen considerably, from about NOK 3 billion in gross written premiums in 2006 to NOK 26 billion in 2017. The transition to defined contribution pension schemes (unit linked) is also noted in other European countries.

Where risk is largely passed on to the policyholders, it is imperative that policyholders' interests and need for information are attended to. Policyholders' pension assets will depend on the risk profile selected and developments in the securities markets. Pension assets are based mainly in funds containing a relatively low proportion of fixed-income securities and a high proportion of equities. The equity component in the case of unit-linked defined contribution pensions was 56 per cent at the end of 2017, significantly higher than in the collective portfolio.

Box 7:
Conclusion of the public administration of Silver

Silver Pensjonsforsikring AS was unable to fulfil the requirements of Solvency II and was placed into public administration in February 2017 – the first ever Norwegian life insurer to suffer this fate. See Risk Outlook June 2017 (pp. 47 and 48) for background information. The administration board appointed by Finanstilsynet concluded that policyholders' interests were best served by converting paid-up policies with guaranteed return into unit-linked paid up policies and by transferring the policyholders to another life insurer. After a bidding process, the administration board decided to enter into an agreement with Storebrand Livsforsikring AS regarding the takeover of Silver's portfolio. This solution was widely supported by Silver's policyholders. Silver's portfolio was transferred to Storebrand Livsforsikring AS in January 2018.

NON-LIFE INSURANCE

Weaker profitability, but combined ratio remains low in a European perspective

Non-life insurers overall recorded a pre-tax profit of NOK 8.7 billion (20.3 per cent of premium revenues) and a technical result of NOK 4.9 billion (11.3 per cent of premium revenues) in 2017. This performance was somewhat weaker than in the previous year. The combined ratio, which measures the profitability of insurance-related operations, was somewhat weaker

[13] Article 214 of the annex to regulations supplementing the Solvency II regulations.
[14] EIOPA's reply is published in a spreadsheet (no. 1369) posted on EIOPA's website: https://eiopa.europa.eu/Pages/Guidelines/Q-and-A-on-Regulation-Answers-Delegated-Regulation.aspx
[15] Source: Finance Norway

at 89.2 per cent. A long, snow-rich winter contributed to a further weakening in the first quarter of 2018 (chart 4.10). In each year since 2003, overall insurance-related operations have been profitable, below 100 per cent in terms of the combined ratio, despite fluctuating profitability through the year. Compared with other European countries, Norwegian non-life insurers are highly profitable, mainly as a result of a lower cost ratio.

A number of non-life insurers have increased focus on developing digital processes, including for the purpose of claims settlement and purchase of insurance. Increasing digitalisation and simplification of processes is expected to contribute to lower costs. However, automating and digitalisation more processes may heighten operational risk in the period ahead.

Non-life insurers financially sound overall

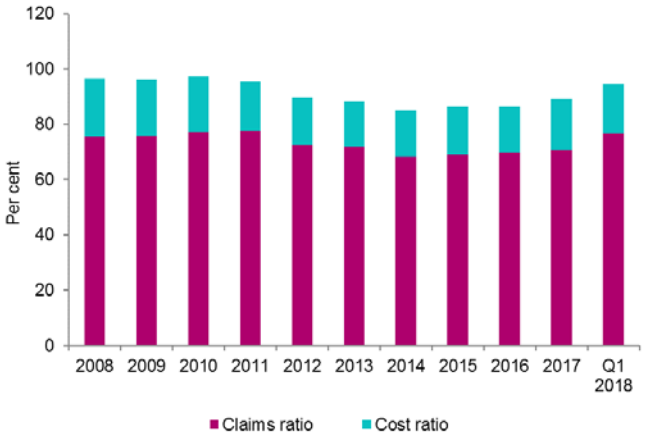
Non-life insurers are broadly speaking financially sound with an overall solvency coverage ratio of 195 per cent at the end of 2017 (chart 4.11). This is somewhat higher than in 2016. The market is dominated by large participants such as Gjensidige Forsikring ASA, SpareBank 1 Skadeforsikring AS and foreign participants such as Tryg Forsikring and If Skadeforsikring. However, the market share of other participants has risen in recent years and stood at just below 30 per cent at the end of 2017.[16] Foreign participants with branches in Norway, including Tryg Forsikring and If Skadeforsikring, had a market share of 38 per cent in 2017. This is a considerable reduction compared with 2000 when foreign branches held a market share of well over 50 per cent of the Norwegian non-life insurance market.

New actors and challenges at some non-life insurers

Some fairly recently established non-life insurance companies have faced challenges in terms of profitability and financial soundness in recent years. Several have pursued an explicit strategy of challenging the major market participants. However, achieving sufficient volume and profitability has been

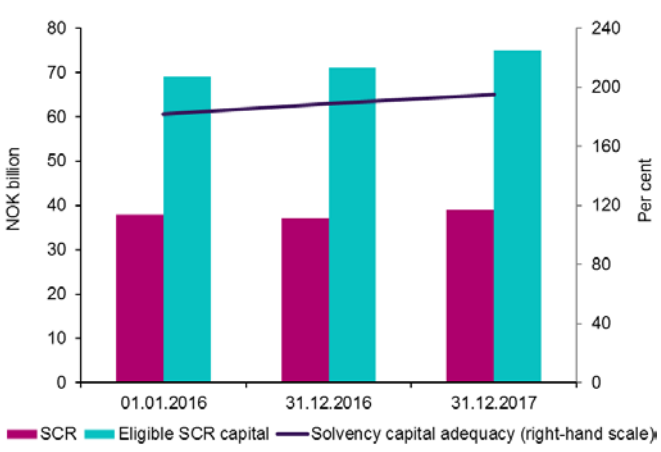
[16] Measured by non-life premiums (a proxy). Country-based

4.10 Profitability (combined ratio) of non-life insurers*



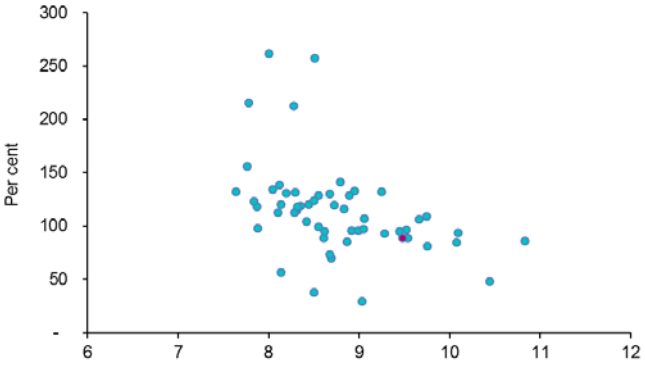
* Exc. captives and non-life insurers with diverging financial years. Source: Finanstilsynet

4.11 Solvency coverage ratio of non-life insurers



Source: Finanstilsynet

4.12 Spread in profitability (combined ratio) at non-life insurers*



* The x-axis denotes companies' total assets (TA) stated as log10(TA). The pink dot show overall combined ratio and average total assets, as at 31 December 2017. Source: Finanstilsynet

insurance overall. Source: Finance Norway

particularly demanding for smaller, fledgling businesses.

There is a significantly wider spread of profitability levels among entities with assets below NOK 1 billion[17] under management than among larger entities, and the number of entities with a combined ratio above
100 per cent is considerably higher (chart 4.12).

Finanstilsynet approved in November 2017 the merger of Insr Insurance Group ASA (Insr) and Nemi Forsikring AS (Nemi) with Insr as the acquiring entity. The merger was carried out in March 2018. Tryg Forsikring's (Tryg) acquisition of Troll Forsikring AS was also approved by Finanstilsynet, one year after Tryg took over the portfolio of OBOS Forsikring AS.

The previous owner of Nemi, Danish non-life insurer Alpha Insurance A/S, was on 8 May 2018 declared bankrupt after being ordered to halt subscriptions. Alpha's weak financial situation was due in part to flaws identified in the basis for provisioning, in part to the absence of risk cover as a result of the bankruptcy of their largest reinsurer, CBL Insurance Limited. Reinsurance is a risk-mitigating tool for insurers where part of the risk related to insurance liabilities is transferred to other insurers or reinsurers. Reinsurance also entails an increase in the number of interconnections in the insurance sector. Counterparty risk may be particularly high in cases where the insurer has a high proportion of reinsurance and utilises a small number of reinsurance companies.

[17] 9 on the x-axis in chart 4.12.

CHAPTER 5: REGULATION

Norwegian legislation is in keeping with EU rules in important areas. The regulations on the EU's financial supervisory authorities were incorporated in the EEA agreement in 2016, and the process of incorporating a number of EU rules in the financial market area in the EEA Agreement is under way. Proposed rule changes for incorporation of the EU's capital requirements directive (CRD IV) and regulation (CRR) were circulated for public consultation on 30 May 2018.

The Storting (parliament) adopted in March 2018 law provisions to implement the Bank Recovery and Resolution Directive (BRRD) and the Deposit Guarantee Directive (DSG) in Norwegian law.[18] New rules on accounting treatment of loan losses, IFRS 9, entered into force for listed companies as from 2018. The revised Payment Services Directive (PSD 2) entered into force in the EU as from 2018. Finanstilsynet has drawn up a proposal for provisions to implement the public law provisions of PSD 2 in Norwegian law. The proposal is under consideration at the Ministry of Finance. The Ministry of Justice and Preparedness is preparing the implementation of the private law provisions of PSD 2. The EU adopted in June 2017 a regulation on money market funds which will enter into force in July 2018. Finanstilsynet's proposal for transposing the regulation into Norwegian law has been circulated for comment and is now being considered by the Ministry of Finance.

BANKS ETC.

CAPITAL REQUIREMENTS – PILLAR 1

The Norwegian capital adequacy framework is essentially aligned with the EU's capital requirements directive (CRD IV) and regulation (CRR), which build on the Basel Committee's standards. Work is under way to incorporate the directive and regulation into the EEA Agreement. This process will require technical changes and clarification of national discretions. The Ministry of Finance asked Finanstilsynet on 16 November 2017 to prepare a discussion document proposing rule changes to prepare the incorporation of the above legal acts into the EEA Agreement. Finanstilsynet's recommendation was circulated for comment by the Ministry of Finance on 13 May, with the deadline for response set at 30 August 2018.

Box 8:
Norwegian implementation of the EU's solvency framework (CRR / CRD IV)

On 30 April 2018 Finanstilsynet forwarded to the Ministry Finance its proposal for rule changes to incorporate the EU's capital requirements directive (CRD IV) and regulation (CRR) into Norwegian law. The proposal was circulated for comment on 30 May 2018 with the deadline for response set at 30 August 2018.

The most important substantive changes in the proposal are:

Reduced capital requirements for loans to SMBs ("SMB discount")

The provision of CRR Article 501 regarding a 23.8 per cent reduction in capital requirements for loans to SMBs will take effect in Norway upon incorporation of the CRR. This will lead to an increase in Norwegian banks' capital adequacy without financial positions being strengthened in real terms.

Basel 1 floor

The Basel 1 floor – the requirement that risk-weighted assets for capital and buffer requirements cannot be lower than 80 per cent of what they would have been under the previous framework – will lapse upon implementation of the CRR, with the result that IRB banks will achieve a higher risk-weighted capital adequacy ratio with no improvement in financial soundness.

[18] The Banking Recovery and Resolution Directive is incorporated in the EEA Agreement. Work is under way on incorporating the Deposit Guarantee Directive in the EEA Agreement.

Reporting of assets in collaborating groups

A simplified report form for collaborating groups has been developed in Norway which is not part of the fully harmonised reporting regime in the EU. The simplified form is not compatible with EU provisions and must, in Finanstilsynet's assessment, be phased out. All banks and mortgage companies will be required to use the EU report form in respect of solvency requirements, also at consolidated level.

Further, an account is given of clarifications and national discretions as regards the incorporation of CRR / CRD IV. Reference is made to Finanstilsynet's consultation memorandum and forwarding letter of 27 April 2018.*

Adapting to the CRR will in some areas entail less stringent calculation of capital requirements under Pillar 1 than under current Norwegian requirements. When approving and following up on internal models, Finanstilsynet will attach importance to robust calibration with satisfactory safety margins. Further, Finanstilsynet will when determining Pillar 2 requirements consider it important that these requirement should cover risk that is not fully covered under the Pillar 1 requirement.

* https://www.regjeringen.no/no/dokumenter/horing---gjennomforing-av-eus-kapitalkravsregelverk-crrcrd-iv/id2602878/

The Basel Committee has in recent years proposed changes to several of the standards on measurement of capital adequacy. New standards published on 7 December 2017 embrace new standardised approaches for credit risk and operational risk along with a revised "output floor" for internally modelled capital requirements. The floor is set at 72.5 per cent of risk-weighted assets calculated using the revised standardised approach.

By letter of 18 December 2017 the Ministry of Finance also asked Finanstilsynet to incorporate draft rules corresponding to the Basel Committee's new recommendation regarding an IRB output floor in its response on the assignment regarding implementation of the CRR / CRD IV. The Ministry of Finance subsequently stated that this part of the assignment can be deferred until further notice.

The changes described above do not affect the basic provisions on capital requirements under Pillar 1. Banks, mortgage companies and finance companies are required by the Financial Institutions Act to maintain a minimum (measured against risk-weighted assets) of 4.5 per cent CET 1 capital, 6 per cent tier 1 capital and 8 per cent own funds. Institutions must in addition maintain a capital conservation buffer of 2.5 per cent, a systemic risk buffer of 3 per cent and a countercyclical capital buffer between 0 and 2.5 per cent. Systemically important institutions are in addition required to maintain a buffer of 2 per cent. The buffer requirements must be met out of CET 1 capital.

Table 5.1 Minimum and buffer requirements for CET 1 capital adequacy, tier 1 capital adequacy and capital adequacy for banks, mortgage companies and finance companies

Per cent	Systemically important institutions	Other institutions
CET 1 capital ratio	14.0	12.0
Tier 1 capital ratio	15.5	13.5
Total capital ratio	17.5	15.5

Source: Finanstilsynet

The countercyclical capital buffer requirement is set by the Ministry of Finance each quarter. This requirement is 2.0 per cent as from 31 December 2017. Institutions must have in place capital to meet an institution-specific capital buffer requirement, which is a weighted average of the rates applying in

each country in which the institution has credit exposures.

The Ministry of Finance is each year required, based on Finanstilsynet's advice, to decide which financial institutions are to be regarded as systemically important in Norway. This was done for the first time in June 2014, when DNB Bank ASA, Nordea Bank Norway ASA and Kommunalbanken AS were designated as systemically important institutions. However, Nordea Bank Norway ASA was converted into a branch of Nordea Bank AB with effect from 2 January 2017. Hence in 2018 only DNB Bank ASA and Kommunalbanken AS are regarded as systemically important institutions in Norway.

Table 5.1 shows the overall requirements on capital under Pillar 1 for systemically important institutions and other banks, mortgage companies and finance companies. The requirements apply at entity level and at consolidated level. Nine banks, eight mortgage companies and two finance companies have permission to apply internal models (IRB) to calculate the capital charge for credit risk. Other institutions use the standardised approach.

According to current Norwegian legislation, risk-weighted assets cannot, when internal models are applied, be lower than 80 per cent of risk-weighted assets under the Basel 1 framework. Unless agreement is reached on adjustment texts, the provision concerned must be amended upon incorporation of CRR and CRD IV into the EEA Agreement. There is cause to believe that the EU's regulation will be amended in keeping with the Basel Committee's recommendation on a new floor requirement; see further details above and in box 9.

Consolidation of holdings in collaborating institutions

Parent entities in collaborating groups are required, when applying rules on capital requirements and other prudential requirements, to consolidate their holdings in jointly owned entities on a pro rata basis. This applies regardless of the size of the holding concerned. The requirement applied as from 1 January 2017 to entities with holdings between 10 and 20 per cent in jointly owned financial institutions. As from 1 January 2018 the extended consolidation obligation also applies to holdings below 10 per cent. The change affects inter alia a number of banks with holdings in reidential mortgage companies.

Box 9:
New standards from the Basel Committee

The Basel Committee's highest body, the Group of Governors and Heads of Supervision (GHOS), adopted on 7 December 2017 global capital adequacy standards which will likely be implemented in the European capital adequacy framework. The new standards will enter into force on 1 January 2022.

The standards hitherto adopted cover inter alia:

- A new standardised approach for credit risk with the increased level of risk sensitiveness
- A new output floor corresponding to 72.5 per cent of risk-weighted assets based on new standardised approaches. A phase-in period, starting in 2022 at 50 per cent, will last until 2027
- Restrictions on the use of IRB models for certain exposures and floors on model parameters
- A new standardised approach for operational risk to replace existing calculation methods

Basel III was first adopted in 2010 in the wake of the financial crisis. The object was a comprehensive revision of banking regulation in the interests of financially sound banks and financial stability. With the standards now adopted, Basel III is considered to be complete.

CAPITAL REQUIREMENTS – PILLAR 2

CRD IV sets requirements for institutions' own assessment of risk and capital need (ICAAP – Internal

Capital Adequacy Assessment Process) and requirements on the supervisory authorities' review (SREP – Supervisory Review and Evaluation Process). Under the directive, supervisory authorities can set requirements (Pillar 2 requirements) for adjustments to institutions' business or capital beyond the minimum requirements and buffer requirements of Pillar 1.

The SREP review document contains Finanstilsynet's decision regarding a Pillar 2 requirement, which is binding, and an assessment of capital needs in a forward-looking perspective. The decisions are published consecutively on Finanstilsynet's website.

Finanstilsynet's circular no. 12/2016 describes the main elements of the SREP process. The circular builds on guidelines published by the European Banking Authority in December 2014 and on the Ministry of Finance's clarifications provided by letter of 17 March 2016 to Finanstilsynet.

CAPITAL REQUIREMENTS – LEVERAGE RATIO

Banks, mortgage companies, finance companies, holding companies of financial groups that are not insurance groups, and investment firms authorised to provide specified investment services, have since 30 June 2017 been subject to a leverage ratio requirement of 3 per cent. All banks are in addition required to maintain a buffer of at least 2 per cent. Systemically important banks have a further buffer requirement of at least 1 per cent. Institutions not in compliance with the leverage ratio requirement must submit a plan to Finanstilsynet for increasing their leverage ratio.

Unlike Norwegian rules, the EU's capital adequacy framework (CRR / CRD IV) contains no quantified leverage ratio requirement. A minimum leverage ratio requirement is a part of the EU Commission's proposal for changes to the CRR / CRD IV (CRR 2) now being considered by the European Parliament. The Commission proposes a minimum leverage ratio requirement of 3 per cent. It is not clear whether further requirements will be imposed on systemically important situations. Finanstilsynet's assumption is that the Norwegian buffer requirements can be retained under Pillar 2.

Box 10:
Proposed changes to CRR / CRD IV

The EU Commission published on 23 November 2016 a proposal for changes to the CRR / CRD IV.* The proposals were adopted by the Council on 25 May 2018 and are now being considered by the European Parliament.

The Commission proposes inter alia:

- A Pillar 1 leverage ratio requirement of 3 per cent
- A long-term funding requirement (NSFR) of 100 per cent
- New methods for calculating capital charges for market risk, counterparty risk and exposures to central counterparties (CCPs) that mirror the Basel Committee's new standards, but with dispensation clauses allowing the use of current calculation techniques
- Changes to the rules regarding Pillar 2 to harmonise international practices
- A switch in the capital measure for large exposures (from own funds to tier 1 capital)
- Rules allowing the effect of the transition from IAS 39 to IFRS 9 to be phased in gradually over a five-year period

* https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX:52016PC0850

LIQUIDITY REQUIREMENTS

EU rules set two quantitative liquidity requirements in the form of (a) a liquidity buffer (Liquidity Coverage Ratio – LCR) and (b) stable funding (Net Stable Funding Ratio – NSFR). The rules governing the LCR were given effect in the EU as from 1 October 2015, with a gradual phase-in up to 2018.

The liquidity coverage ratio was incorporated in Norwegian regulations (CRR / CRD IV regulations) with effect from 31 December 2015. As from 31 December 2017, all institutions are required to meet the liquidity reserve requirement by at least 100 per cent. The EU Commission presented in November 2016 its proposal for the design of the NSFR requirement. It is not clear when the NSFR, beyond the current reporting requirements, will be introduced.

The Ministry of Finance adopted with effect from 30 September 2017 the requirement of an LCR in each significant currency (any currency which on its own accounts for more than 5 per cent of an institution's total debt). For banks and mortgage companies having the euro or US dollar as a significant currency, a liquidity reserve requirement of at least 50 per cent in Norwegian kroner applies. For institutions that have neither the euro nor US dollar as a significant currency, no minimum requirement as to a liquidity reserves in Norwegian kroner applies. The liquidity requirement for all currencies combined will apply irrespective.

NEW REQUIREMENTS FOR BANKS' CASH PREPAREDNESS

According to the Financial Institutions Act section 16-4, banks are obliged to accept cash and to make deposits available to their customers in the form of cash, in accordance with the customer's expectations and needs. Pursuant to amending regulations adopted by the Ministry of Finance on 17 April 2018, banks are also required to have in place solutions enabling them to fulfil the requirement of the Financial Institutions Act section 16-4 in the event of increased demand for cash due to loss of access to the electronic payments systems. Such solutions must be tailored to documented assessments of the risk of increased demand for cash in such situations. Electronic preparedness can be taken into account when determining the dimensions of the cash solutions. The bank's must meet the new requirements by 1 January 2019.

Box 11: Finanstilsynet's participation in the European system of financial supervision

In January 2011 the new European financial supervision system was established, with an overarching macroprudential oversight body, the ESRB, and the sectoral oversight bodies EBA (banking), ESMA (securities) and EIOPA (insurance and pensions). Since autumn 2016 Finanstilsynet has participated as a member of the EU's three supervisory authorities, with the same rights and obligations as the EU member states' national financial supervisors, but without voting rights. This entails that Finanstilsynet participates on a par with other members in all work of a non-binding nature, including supervisory cooperation and preparation of regulations. The EU's financial supervisors are empowered to make recommendations and to give guidance vis-à-vis government authorities and private market participants in the EEA/EFTA member states. The EU financial supervisors may not however adopt binding decisions towards authorities or market participants in the EEA/EFTA member states. Any supranational decisions may only be adopted by EFTA's surveillance authority, which also participates in the EU's financial supervisory authorities.

NEW RULES FOR ACCOUNTING TREATMENT OF LOAN LOSSES

The International Accounting Standards Board (IASB) completed in July 2014 a new standard, IFRS 9, including a new expected loss impairment model. The standard applies as from 2018. For European companies (including stock exchange listed Norwegian companies) use of the standard was mandatory from the same point in time; see Commission Regulation

2016/2067. The Ministry of Finance adopted on 18 December 2017 regulations implementing IFRS 9 in Norwegian law.

The object of the new standard is to improve the presentation of financial instruments in financial statements, in particular by switching to a more forward-looking model for recognition of expected losses on financial assets. The new standard requires loss provisioning of new, performing loans by requiring a write-down for expected credit losses resulting from default events that are possible over the coming 12 months. In the case of loans where credit risk has risen significantly after the loans were granted, expected credit losses are to be written down over the lifetime of the loan.

The Ministry of Finance has established transitional rules for capital adequacy purposes for impairment write-downs under IFRS 9 in keeping with EU transitional rules. For banks that utilise the transitional measure, the new standard will be fully phased into Norwegian law as of 31 December 2022. Only four banks in Norway have availed themselves of the transitional rule.

CRISIS MANAGEMENT AND DEPOSIT GUARANTEE

The EU Bank Recovery and Resolution Directive 2014/59 (BRRD) provides mortgage companies and investment firms, as well as government authorities, with tools for preventing and managing crises at an early stage. An important object of the BRRD is to curb costs to the taxpayer resulting from a crisis and to prevent a crisis at a financial institution from threatening financial stability. Emphasis is given to the need for shareholders and creditors to bear their portion of the costs when an institution is in crisis.

The Storting passed on 16 March 2018 the Act on the Norwegian Banks' Guarantee Fund and the Act on amendments to the Financial Institutions Act etc. The enactments are based on proposals tabled in Proposition 159 L (2016–2017), and transpose the EU's Bank Recovery and Resolution Directive and the Deposit Guarantee Directive into Norwegian law. The BRRD is incorporated into the EEA Agreement, and incorporation of the Deposit Guarantee Directive is in process. The enactments build on the Banking Law Commission's Report no. 30 (NOU 2016: 23).

The provisions regarding capital inadequacy and government-directed administration of institutions in the banking sector entail new rules and tasks for institutions and public authorities alike. This includes rules on crisis recovery plans and resolution plans, rules on write-down or conversion of own funds and eligible debt to equity and the establishment of a national resolution fund. Finanstilsynet will be the resolution authority in Norway, while decisions of significance for financial stability will be taken by the Ministry of Finance.

A key aspect of the rules governing resolution is the requirement regarding own funds and eligible debt that can be written down or converted to equity (Minimum Requirement for Own Funds and Eligible Liabilities, MREL). In the event of a bail-in, capital instruments and debt are written down and/or converted to equity. Norway already has in place rules on bail-in involving capital instruments (equity and subordinated debt). With the introduction of MREL, some bondholders and depositors will also play a part in covering losses in a resolution process.

A limitation of crisis resolution is that resolution measures entailing that creditors and shareholders achieve poorer coverage of their claims than they would have achieved if the institution had been wound up (the 'no creditor worse off (NCWO) principle') cannot be applied. One way to avoid conflict with the NCWO principle is to require instruments that meet the MREL requirement, and that may be subject to write-down or conversion, to be given lower ranking priority than other debt that is not covered by the MREL requirement. The requirement of lower ranking priority may be met either by way of the instruments' characteristics, specified in law or loan agreement, or by way of a holding company's debt issuance.

Statutory or contractual subordination

The EU Commission has proposed the introduction of a requirement that national authorities should permit the establishment of a new class of debt with priority between ordinary unsecured senior debt and subordinated debt. France, Spain, Sweden and Denmark are among the countries intending to introduce such a solution. It will oblige institutions covered by requirements on eligible debt to issue unsecured debt ranking below other unsecured senior debt and above subordinated debt. Such debt instruments are generally called Tier 3 or lower-ranking senior debt.

Issuance by a holding company (structural subordination)

Another way to avoid breaching the NCWO principle is to require the establishment of a crisis resolution unit within the group, typically a holding company that is the paramount parent company of the group. This approach has been opted for inter alia in the United Kingdom. Deposits and other debt reside in the operational entity (the bank) while external issuance of debt is done by the holding company. The holding company's debt ranks behind the debt in the operative bank and can therefore be written down under MREL without breaching the NCWO principle.

The amendments to the Financial Institutions Act implement the central rules of the directives, but a number of more detailed provisions must be established in national regulations, including rules on the application of MREL. In addition, there will be a need to implement supplementary level 2 legal acts. Finanstilsynet will on commission from the Ministry of Finance draft regulations to that end. The draft regulations will be forwarded to the Ministry by 1 November 2018.

COVERED BONDS

The Ministry Finance requested Finanstilsynet by letter of 14 February 2017 to review the body of rules governing covered bonds. The Ministry requested inter alia an updated assessment of (a) whether the rules take sufficient account of potential contagion effects and (b) the adequacy of the capital requirements for covered bond issuing entities. Finanstilsynet forwarded its assessment to the Ministry of Finance by letter of 1 September 2017.

In Finanstilsynet's assessment the Norwegian rules are robust and in all essentials compliant with the EBA's guidelines for covered bonds. It was recommended to defer any major changes to the rules for covered bonds pending adoption of a new body of rules by the EU.

Finanstilsynet nonetheless proposed a new provision requiring parent banks to disclose information on the risks to which they are exposed. The object is to take account of risk posed by the interconnections between parent banks and mortgage companies. The proposal was circulated for comment by the Ministry of Finance with the deadline for response set at 12 January 2018. The matter is under consideration at the Ministry of Finance.

In March 2018 the EU Commission presented a proposal for a pan-European framework for covered bonds. This will take the form of a covered bonds directive, although certain characteristics of covered bonds are likely to be regulated by the CRR. The proposal is designed to ensure that covered bonds share the same structural features throughout the EU and that these features conform to relevant supervisory requirements, particularly in view of the special treatment given to covered bonds in several contexts under EU rules. The proposal is a minimum harmonisation directive that allows member states some scope for taking account of national conditions when framing regulations. The proposal is under consideration at the European Parliament.

NEW MEASURES TARGETING CONSUMER LENDING

A number of measures have been taken since spring 2017 to regulate the consumer loan market. A brief account of the various measures follows below.

Regulations on marketing of credit

The Ministry of Justice and Preparedness adopted on 5 April 2017 regulations on marketing of credit. The object of the regulations is to prevent aggressive and

insistent marketing that leads customers' attention away from the negative consequences of credit use. Marketing may not highlight the merits of rapid access to credit and simple application processes. The regulations entered into force on 1 July 2017.

The consumer authority has reviewed announcements, e-mails and letters advertising credit facilities. Several loan providers in breach of the regulations have subsequently been followed up. Common faults are an absence of statutory information on effective interest rates and overall cost in the marketing, or that this type of information is difficult to find.

Regulations on invoicing of credit card debt etc.

The Ministry of Finance adopted on 4 April 2017 regulations on invoicing of credit card debt. The regulations build on Finanstilsynet's earlier guidelines. The regulations establish that the amount payable should normally be the full amount outstanding.

A financial institution may agree with the consumer that a minimum amount should be stated as the amount payable. Such an agreement may be entered into at the time of the first due date at the earliest. The financial institution shall each year suggest to the consumer that requests for payment should show the full amount outstanding.

The regulations on invoicing of credit card debt entered into force in April 2017. Prior to that Finanstilsynet had received a large number of approaches concerning non-compliance. Since the regulations were adopted, Finanstilsynet has received few approaches of this nature.

Regulations on prudent lending practices

Finanstilsynet adopted in June 2017 guidelines on prudent consumer lending practices. The guidelines set requirements for institutions' creditworthiness assessments and processing of loan applications, including a requirement to ensure that a prospective borrower's debt servicing ability in the event of an interest rate increase of at least 5 percentage points should be checked, that the customer's income information is checked against tax assessment data, that the customer's debt information is checked against (the forthcoming) debt register and that the customer's record of non-payments, if any, should be checked. Further, the loan agreement should set requirements with regard to amortisation and maximum loan term. Financial institutions' creditworthiness assessments must consider and take into account the financial situation of the individual customer. The guidelines build on similar requirements in the residential mortgage lending regulations.

Further checks on compliance with the guidelines will be carried out at on-site inspections in 2018. In addition to reviewing the organisation and operation of the banks, Finanstilsynet will examine the banks' implementation of the authorities' regulation of unsecured debt to consumers, including compliance with Finanstilsynet's guidelines.

Debt Information Act

The Storting (parliament) adopted in June 2017 an act on debt information in connection with creditworthiness assessments of private individuals. The act opens the way for private market participants, including financial institutions, to obtain a licence to provide debt information services. The object of the act is to facilitate the registration and surrender of debt information, thereby contributing to better creditworthiness assessments and to preventing debt problems among private individuals. Registration of unsecured credit will provide institutions with better information on prospective borrowers' actual debt situation.

The act permits the establishment of more than one debt information services provider. The debt register will include all unsecured consumer debt, and financial institutions are obligated to surrender information to the providers of debt information services. The act entered into force on 1 November 2017. The Ministry of Children and Equality has received two applications for a licence to operate debt information business. The debt register is expected to be in place in the fourth quarter of 2018 at the earliest.

Interest rate ceiling

The Ministry of Finance presented in its Financial Market Report 2016–2017 various measures intended to safeguard against debt problems among households. The Ministry of Finance has received a request from the Storting to report on the merits of introducing an interest rate ceiling, and the Ministry asked Finanstilsynet by letter of 6 November 2017 for input. In its reply of 28 February 2018 Finanstilsynet recommends postponing any introduction of an interest rate ceiling until existing measures have had time to work. In the Financial Market Report 2017–2018 an interest rate ceiling is stated to be a relevant policy instrument but would not be introduced for the time being. The Ministry will come back to the matter in next year's financial market report.

ASSESSMENT OF THE RESIDENTIAL MORTGAGE LENDING REGULATIONS

The regulations on requirements on new residential mortgages (the residential mortgage lending regulations) apply up to 30 June 2018. The Ministry of Finance asked Finanstilsynet by letter of 6 November 2017 to consider whether the regulations should be dispensed with, retained as they stand, or be revised.

Finanstilsynet forwarded its proposal for new mortgage lending regulations on 28 February 2018. The proposal is based on the current regulations, with some adjustments. Finanstilsynet proposes that the scope allowed for divergences from the regulation should be reduced from 10 per cent to 8 per cent and that the requirements for loans exclusively secured on property in Oslo should be dispensed with. The proposal was circulated for comment with the deadline for response set at 11 April 2018 and is under consideration at the Ministry of Finance.

PAYMENT SERVICES

The Payments Services Directive (Directive 2007/64/EC, hereafter PSD1) was implemented in Norwegian law in 2010. The Revised Payment Services Directive (Directive 2015/2366, PSD 2) replaces the first Payments Services Directive and entered into force in the EU on 13 January 2018.

Together with the Regulation on interchange fees and the SEPA Regulation (Single Euro Payments Area), the overarching purpose of PSD2 is to assure modern, efficient and cheaper payments services, and to protect the customers. PSD2 is designed to promote competition through facilitating innovation and market access for new market participants. This applies in particular to services related to mobile and internet payments.

The Payment Services Directive regulates providers of payment services which are in the main mortgage companies, e-money institutions and payment institutions. PSD2 brings two changes of significance for the development of the payment services area: it opens the way for (a) new payment services and (b) new regulation of the interaction between service providers, including access to customers' payments account. The two new payment services are payment initiation services and account information services.

Payment initiation services consist in receiving and passing on a payment order linked to a payment account at another account services provider, at the customer's request. Account information services consist in providing the customer with an assembled digital overview of all his/her payment accounts with his/her account services provider. Both services depend on the account services provider being given access to the customer's payment account. PSD2 regulates the interaction between the various payment service providers, including secure connections to the customer's account service providers. The two new payment services can be provided by existing regulated payment service providers. Payment initiation services can also be provided by a new type of payment service provider, i.e. payment agents ("betalingsfullmektiger"). Account information services can also be provided by a new type of payment services provider, i.e. account information agents ("opplysningsfullmektiger").

Finanstilsynet prepared on commission from the Ministry of Finance a consultation memorandum proposing implementation of PSD2 in Norwegian law. The deadline for response was 18 August 2017.

Finanstilsynet's assignment and consultation memorandum were confined to those sections of the directive that bring changes in the area of the Financial Contracts Act. Changes in the area of the Financial Contracts Act are included in the Ministry of Justice and Preparedness's consultation memorandum for a new Financial Contracts Act. The deadline for response was 15 December 2017. The proposed text of the act is under consideration at the Ministry of Finance and the Ministry of Justice and Preparedness.

INSURANCE AND PENSIONS

CAPITAL REQUIREMENTS ETC.

New rules on capital requirements etc for insurance companies were established in the Solvency II Directive in force as from 1 January 2016. The provisions concerned were implemented in Norway in the Financial Institutions Act and the Solvency II Regulations of 25 August 2015. In connection with the Solvency II Directive, the EU has adopted a regulation (2015/35) which amplifies the overarching provisions of the directive. Finanstilsynet adopted on 21 December 2015 the EU regulation as Norwegian national regulations, with an adjustment entailing that exposure to regional and local authorities that are not rated by an approved credit rating agency should be treated as exposures in one risk class higher than the risk class based on the rating of the central authority in the state concerned. Finanstilsynet adopted on 21 December 2016 amendments to adapt the Norwegian regulations to the EU Regulation 2016/467. The amendments concern inter alia the introduction of lower capital requirements for exposures to infrastructure projects that meet specific criteria.

The above EU regulations were incorporated into the EEA Agreement on 23 March 2018. An adjustment text was included which permits continuation of current Norwegian rules on exposures to regional and local authorities. An adjustment text also permits the establishment of a minimum value for the capital requirement on residential mortgages so that mortgages which have hitherto been subject to a zero capital requirement for counterparty risk now receive a capital requirement on a par with that applying to banks. As a result of the EU regulations' incorporation into the EEA Agreement, the current Norwegian regulations providing supplementary rules to the Solvency II regulations will be rescinded and replaced by a reference to the EU regulation.

In Regulation 2017/1542 the EU has adopted further changes to Regulation 2015/35. The changes set somewhat lower capital requirements for exposures to infrastructure undertakings that meet established criteria. The changes are not included in the EEA Agreement for the time being and have not been implemented in Norwegian law.

The EU Commission has asked The European Insurance and Occupational Pensions Authority (EIOPA) to draw up a proposal for changes to the Solvency II framework. EIOPA forwarded on 30 October 2017 an initial set of proposals for regulatory changes. EIOPA proposes inter alia that the look-through approach should also be applied to investments in related undertakings, such that insurers' property investments through subsidiaries would be treated as property risk in the calculation of the solvency capital requirement at corporate level. EIOPA also proposes lower capital requirements for exposures to certain regional and local authorities corresponding to the adjustment made in the Norwegian regulations.

EIOPA forwarded on 28 February 2018 a second set of proposals for regulatory changes. These include higher stress factors in the calculation of interest rate risk. EIOPA has thus far not carried out full impact assessments of the proposed method, but it is thought to significantly reduce the solvency coverage ratio of life insurers. The Commission has however signalled its intention to postpone assessment of possible changes in the capital requirements for interest rate risk until 2020. In the course of 2018, the EU Commission will take a position on the other proposals from EIOPA and present its own proposal for regulatory changes, which will thereafter be considered by the EU Parliament and Council.

RULES GOVERNING SIGNIFICANT HOLDINGS

Pursuant to the Financial Institutions Act, insurance institutions and pension undertakings cannot engage in activity that is unrelated to insurance. According to the act, the prohibition does not apply to "limited liability entities representing up to 15 per cent of the capital or votes of the undertaking". The Ministry of Finance asked Finanstilsynet by letter of 5 April 2017 to consider whether the 15 per cent threshold should be removed. It was pointed out that Solvency II entails more risk sensitive capital requirements, thereby calling into question the need for the threshold. Finanstilsynet proposes by letter of 1 June 2017 that the threshold should be removed. The Ministry of Finance circulated the proposal for comment with the deadline for response set at 7 September 2017. The proposal is being considered by the Ministry.

INSURANCE DISTRIBUTION DIRECTIVE

The Insurance Distribution Directive (IDD) regulates all distribution of insurance. The directive is to be given effect in EU member states as from 1 October 2018 but has thus far not been incorporated into the EEA Agreement. Compared with current EEA rules, the IDD extends regulation to include insurers' direct sales – not just agents' and brokers' distribution. The object of the directive is to protect consumers, strengthen policyholders' confidence, strengthen the single market and to provide a level playing field for distribution channels. The EU adopted three regulations supplementing the IDD in August and September 2017.

By letter of 9 January 2017 the Ministry of Finance asked Finanstilsynet to draw up a consultation memorandum proposing provisions of primary and/or secondary legislation to implement the IDD and possible other necessary adjustments. Finanstilsynet's draft was sent to the Ministry of Finance on 23 June 2017 and was circulated for comment on 6 March 2018. In parallel with this, the Ministry of Justice and Public Security circulated for comment proposed amendments to the Insurance Contracts Act and associated regulations. In addition to the rules implementing the IDD, a restructuring of the act is proposed along with the introduction of general rules on compensation, burden of proof and digital first choice.

IFRS 17 – INSURANCE CONTRACTS

The IASB published on 18 May 2017 a new standard for insurance contracts, IFRS 17. The standard replaces IFRS 4 and will apply as from January 2021, with the option of earlier application. IFRS 17 brings significant changes to the valuation of insurance contracts and the presentation of insurer's financial position. Assuming approval by the EU, the standard will be given effect in Norway for consolidated accounts prepared and presented under IFRS.

IFRS 9 – FINANCIAL INSTRUMENTS

Finanstilsynet sent on 19 September 2017 to the Ministry of Finance a draft consultation paper proposing changes to the accounting rules for insurers and pension undertakings. The background to the proposal is the replacement of IAS 39, the international accounting standards for recognition and measurement of financial instruments, by IFRS 9. Finanstilsynet recommends that the current rules on accounting for financial instruments (IAS 39) be continued for the company accounts of life insurers and pension undertakings up to and including the fiscal year 2020. For the company accounts of non-life insurers the option of a choice between IAS 39 and IFRS 9 is recommended up to including the fiscal year 2020. From 2021 onwards an obligation to apply IFRS 9 is recommended for all insurers and pension undertakings. The consultation memorandum also proposes new note disclosure requirements as a result of IFRS 9 and also some technical changes in the regulations. The Ministry of Finance circulated the document for comment with the deadline for response set at 28 May 2018. The proposal is currently being considered by the Ministry.

SECURITIES AREA

MARKET FOR FINANCIAL INSTRUMENTS

The EU adopted in 2014 the Markets in Financial Instruments Directive (MiFID) and the Markets in Financial Instruments Regulation (MiFIR). The main object of this framework is to promote more transparent and well-functioning markets and greater

investor protection. The committee was appointed to propose provisions implementing the new EU framework. The committee presented its proposal for implementation in NOU 2017: 1.

The directive and regulation were given effect in the EU as from 3 January 2018, but have yet to be incorporated into the EEA Agreement. Rules corresponding to the directive and the regulation were adopted in Norwegian law by regulations of 4 December 2017 no. 1914 (the MiFIR regulations). The Norwegian MiFID regulations are based on the draft law presented in NOU 2017: 1, and the Norwegian MiFIR regulations essentially mirror the rules of MiFIR. Both regulations entered into force on 1 January 2018.

On 20 December 2017 Finanstilsynet adopted regulations to supplement the Norwegian MiFID II and MiFIR regulations. The supplementing regulations establish rules corresponding to 48 commission regulations that supplement MiFID II and MiFIR, and rules corresponding to the commission directive supplementing MiFID II (level 2 rules). The regulations entered into force on 1 January 2018.

On 10 April 2018 the Ministry of Finance presented a proposal for amendments to the Securities Trading Act and for revocation of the Stock Exchange Act; cf. Proposition 77 L (2017–2018). The Securities Trading Act committee presented its interim report on implementation of supplementary legal acts to MiFID II and MiFIR on 11 January 2018 (NOU 2018: 1).

ESMA adopted in March 2018, pursuant to MiFIR, a resolution that temporarily restricts the right to market, distribute and sell CFDs and binary options in the EU. Where binary options are concerned, the resolution will become effective on 2 July while for CFDs it will become effective on 1 August 2018. ESMA's resolution is not binding in Norway. Only after MiFIR has been incorporated into the EEA Agreement can binding decisions be adopted that will apply across the EEA/EFTA area, but in that event by the EFTA surveillance agency. The MiFIR Regulation assigns Finanstilsynet competence to adopt national provisions or restrictions. These may be of a more permanent nature. After a round of consultation Finanstilsynet adopted permanent regulations with the same content and entry into force as ESMA's resolution.

MARKET ABUSE

In spring 2014 the EU adopted new rules on market abuse, including the Market Abuse Regulation (MAR)[19] and a directive on criminal sanctions for market abuse (MAD II).[20] The EU has in addition adopted a comprehensive set of supplementary provisions in the MAR area.

The main object of the MAR and adjacent rules is to strengthen the integrity of the securities market and to ensure a more uniform enforcement of the framework across the EU. The MAR concurrently extends the scope of application of the market abuse rules to more trading venues and financial instruments than the current Norwegian rules

The MAR and MAD II entered into force in the EU on 3 July 2016. The MAR has yet to be incorporated into the EEA Agreement. MAD II is not EEA-relevant, but the Securities Trading Act committee – which was mandated to consider and draft changes needed in law and regulations to implement the MAR in Norwegian law – was also mandated in light of the MAR to undertake an "overall review of the Stock Exchange Act's and the Securities Trading Act's provisions on criminal and administrative sanctions, and to consider the need for any law amendments".

The law committee presented on 23 June 2017 its interim report NOU 2017: 14 on implementation of forthcoming EEA rules corresponding to the MAR, and a review of the Securities Trading Act's provisions on administrative and criminal sanctions. The Ministry of Finance circulated the report for comment on 18 July 2017 with the deadline for response set at 31 October of the same year. The matter is under consideration at the Ministry of Finance.

[19] Regulation (EU) No. 596/2014 on market abuse

[20] Directive 2014/57/EU (MAD II)

REFERENCE VALUES IN THE FINANCIAL AREA

EU Regulation 2016/1011 lays down rules on the setting of reference rates and other indices used as reference values in financial instruments and contracts, or to measure the performance of investment funds. See the account in Risk Outlook November 2017. Finanstilsynet's proposal for implementation is being considered by the Ministry of Finance.

SECURITIES SETTLEMENT AND SECURITIES REGISTERS

The Ministry of Finance commissioned Finanstilsynet in 2015 to appoint and head up a working group charged with drafting rules to implement expected EEA rules corresponding to Regulation (EU) No 909/2014 on improving securities settlement and on central securities depositories (the CSD Regulation). The working group was in addition asked to draft rules granting bond issuers insight into the identity of the holders of the bonds they have issued. (See page 46 of Risk Outlook II 2016 for further details). The Ministry of Finance circulated the working group's proposed rule changes for comment with the deadline for response set at 8 February 2017. The matter is being considered by the ministry.

SECURITIES FUNDS ACT

Amendments to the Securities Funds Act on remuneration schemes for senior employees of fund management companies, on depositories' obligations and on sanctions entered into force on 1 January 2018. Reference is made to Proposition 154 L (2015–2016) on amendments to the Securities Funds Act etc. The amendments implement the UCITS V Directive (Directive 2014/91/EU) in Norwegian law. Among the amendments is a new provision on administrative penalties for violation of the securities funds legislation. Further rules are set forth in the Securities Funds Regulations.

Commission Regulation (EU) 2016/438, supplementing the rules of UCITS V on depositories' obligations, was given application in the form of regulations to the Securities Funds Act as from 3 April 2018.

RULES APPLYING TO TWO OR MORE TYPES OF INSTITUTIONS

RULES ON OTC DERIVATIVES, CENTRAL COUNTERPARTIES AND TRADE REPOSITORIES (EMIR)

The European Market Infrastructure Regulation (EMIR), adopted by the EU in July 2012, introduces rules on mandatory clearing and other risk mitigating measures in respect of OTC derivatives, a requirement regarding reporting of derivatives trades to trade repositories and pan-European rules governing central counterparties and trade repositories. The rules entered into force in Norway on 1 July 2017. The regulation is supplemented by a number of sets of rules established by the EU Commission. The majority of these have neither been incorporated into the EEA Agreement or implemented in Norwegian law. Finanstilsynet has expressed an expectation that supervised entities and other relevant actors will in principle abide by the rules in force at any time in the EU. The Ministry of Finance circulated for comment on 30 May 2018 draft regulations which transpose several of the EU Commission's sets of rules into Norwegian regulations. These regulations are scheduled to apply as from 1 July 2018.

ANTI-MONEY LAUNDERING MEASURES

The Ministry of Finance forwarded Proposition 14 L (2017–2018) concerning the Act on measures to combat money laundering and the financing of terrorism to the Storting (parliament) on 16 February 2018. The Act was approved by the King in Council on 1 June 2018. Finanstilsynet has been commissioned to prepare regulations to the new Anti-Money Laundering Act.

The EU Commission has proposed changes to the fourth anti-money laundering directive. The proposed changes have been considered by the European Parliament and are under review by the Council. The proposal includes provisions making exchange platforms for virtual currencies, and providers of digital wallets for virtual currencies, subject to a

reporting requirement under the anti-money laundering directive.

The EU Commission adopted on 7 May 2018 a regulatory technical standard (RTS) on criteria for the designation of central contact points for agents of e-money institutions and foreign payment institutions within the EU, and on obligations to be imposed on a national contact point. Central Contact points will function as intermediaries between the provider of payment services/electronic money and the supervisory authorities of the host state. Finanstilsynet will propose implementing the regulation in conjunction with the task of drafting Norwegian regulations assigned to it by the Ministry of Finance.

CROWDFUNDING

Finanstilsynet published on 4 December 2017 a circular providing guidance on loan-based crowdfunding. This circular explains how such business must be organised in order for the party concerned to qualify as a registered loan intermediary. The circular also sets out circumstances requiring a payment institution licence if a loan intermediary is to have a settlement function.

The EU Commission presented on 8 March 2018 a proposal for a Europe-wide body of rules on crowdfunding. The proposal includes both equity- and debt-based crowdfunding in the corporate market (not consumer loans). The intention is to make it simpler to provide cross-border crowdfunding services and to improve investors' security under the law. The Commission proposes implementing the proposal in the form of a regulation. The proposal is not designed to encroach on the existing national legislation and existing licences, but to give providers of crowdfunding services the opportunity to acquire an EU licence that provides a basis for cross-border activity subject to certain conditions.

THEME I: STRESS TEST 2018

Finanstilsynet performs each year a stress test of Norwegian banks and the Norwegian economy. This year's stress scenario entails a marked fall in world trade resulting from increased trade barriers, a steep fall in the oil price and higher interest rates abroad spreading to Norway. This chapter describes the assumptions underlying the development of the Norwegian economy in both the baseline scenario and the stress scenario. The effect on banks' financial results and capital adequacy are also analysed.

The baseline scenario reflects a steady trend in the Norwegian economy. Growth in property prices is somewhat more moderate than in recent years, whereas unemployment stays low. As a result of the relatively benign trend, households' debt build-up continues. The interest burden increases somewhat as a result of higher interest rates. Banks' loan losses remain low.

The stress scenario has large spillover effects on the Norwegian economy. Higher interest rates bring a hefty increase in the interest burden. Financial consolidation leads to a marked reduction in private consumption which, together with reduced investments and exports, contributes to negative GDP growth for Mainland (non-oil) Norway in three successive years. Unemployment rises, and the proportion of unemployed persons is about three percentage points higher than in the baseline scenario at the end of the period. Households' high debt burden is maintained due to very weak growth in disposable income. The proportion of problem loans and loan losses in the banks rises steeply, both as regards losses on personal borrowers and on corporates.

Many banks see a substantial reduction in CET1 capital adequacy in the stress scenario. At the end of the period several banks will have a CET1 capital ratio below the overall capital requirement (including buffer requirements and Pillar 2 requirements) in effect at the start of the stressed period. The most important reasons for the reduction in capital adequacy in the stress scenario are heavier loan losses, in particular losses on loans to corporates. Heavier losses on loans to households, including consumer loans, also contribute to negative results. Reduced net interest income is a further important cause of lower earnings in the stress scenario.

The stress test applies to the period from 2018 to the end of 2022. The scenarios for the Norwegian economy are not forecasts, but describe two possible paths of development. Finanstilsynet does not prepare forecasts.

NORWEGIAN ECONOMY

This part of the theme chapter describes how the Norwegian economy may develop in the period to the end of 2022. The analyses and calculations are based on projections made using the macro model NAM-FT[21].

The model generates estimates of important economic variables such as gross domestic product (GDP), investments, consumption, unemployment, wages, credit growth, lending rates, property prices and banks' loan losses. In order to project these model-determined variables, the level of variables determined outside the model (exogenous variables) needs to be established. The latter are discussed at the start of the descriptions of the two scenarios.

In the event of a serious setback in the Norwegian economy, the authorities will consider fiscal and monetary policy measures and/or other measures to curb the setback. When conducting stress tests, Finanstilsynet does not take a position on what measures should or should not be considered or put in place during a stressed period. Fiscal policy is accordingly the same in the stress scenario and in the baseline scenario.

[21] NAM-FT is based on the Norwegian Aggregate Model (NAM), and was developed specifically with a view to stress testing of banks and analysis of financial stability. NAM was developed by Professors Gunnar Bårdsen and Ragnar Nymoen. Model documentation is available at normetrics.no. See Risk Outlook issues from 2014–2017 for more detail.

BASELINE SCENARIO

The baseline scenario reflects as mentioned a smooth development of the Norwegian economy. This scenario builds on available information from futures markets and on forecasts from Statistics Norway and Norges Bank. Growth in general government consumption and investment along with oil investments is set in accordance with estimates from Statistics Norway. All exogenous variables are determined on the basis of information available at the end of the first quarter of the current year.

Growth in international trade and international consumer prices is assumed to be relatively stable in the projection period. Growth in global trade declines somewhat, from 5.3 per cent in 2018 to 4 per cent in 2022, while international consumer prices gradually pick up to 2 per cent in 2022. Foreign money market rates, measured by the euro rate, are assumed to rise by about 1.5 percentage points in the projection period, to 1.2 per cent in 2022.[22] The oil price is set equal to the forward price of oil throughout the projection period, and is assumed to decline from its current level to about USD 55 at the end of the period. Norges Bank's base rate is set in keeping with the bank's forecasts. Risk in the equity and bond markets is assumed to remain moderate.

Due to the increase in international money market rates, the calculations show that Norwegian lending rates rise by about 1.5 percentage points in the projection period. This contributes to the increase in households' debt burden[23] to a level in excess of 10 per cent in 2022. The relatively strong increase in the debt burden is due both to higher interest rates, and continued fairly strong growth in household indebtedness.

The calculations show that activity levels in the Norwegian economy in the projection period remain stable with an annual growth in Mainland Norway's GDP of around 2 per cent. Relatively weak housing investment pulls down growth somewhat, while a buoyant trend in other investments and exports help to maintain GDP growth. Growth in private consumption is calculated to decline from 2.3 per cent in 2017 to about 1.5 per cent in 2022. This follows from an increased household debt burden owing to higher interest rates and moderate growth in disposable incomes.

After many years of strong growth in property prices, followed by a correction in the housing market, property price growth is more moderate in the baseline scenario. According to model estimates, house prices show positive growth throughout the period, and rise overall by just under 15 per cent. Prices of commercial property rise by 22 per cent, cumulatively, in the period from 2018 to 2022.

The strong rate of growth in household debt abates somewhat later in the period. The calculations show that credit growth will continue to exceed growth in household incomes, and the debt burden will accordingly continue to rise. Norwegian households' debt burden[24] has never been higher than at the start of this year's stress test period. The baseline scenario's stable path in the Norwegian economy is accompanied by a steady rise in households' debt burden from 225 per cent in the fourth quarter of 2017 to 247 per cent in 2022. Unemployment remains at a stable, low level in the projection period.

The calculations show that the proportions of problem loans[25] and loan losses in the banks also remain low. This applies both to loans to personal borrowers and to corporates.

ASSUMPTIONS UNDERLYING THE STRESS SCENARIO

This year's scenario entails a dramatic fall in global trade as a result of increased trade barriers, and a substantial fall in the oil price. Risk premiums in the fixed-income markets rise markedly. Concurrently

[22] The estimates are based on forward rates from the European Central Bank (ECB).
[23] The interest burden is defined as households' interest expense relative to disposable income before interest expenses.
[24] Households' debt burden is defined as their holding of debt divided by the sum of disposable income over the past four quarters. There are wide differences in debt burdened among individual households; see the account in Risk Outlook November 2017.
[25] Problem loans are defined as the sum of non-performing loans and performing loans that have been written down.

equity prices and property prices fall as a hefty correction to the low level of risk premiums and the upswing in the equity and property markets in recent years. Market participants' uncertainty increases strongly. This has major repercussions for the Norwegian real economy and the banks. The assumptions underlying the stress scenario are discussed below followed by a description of the effects of the stress on Norway's real economy, the Norwegian equity market, credit and house price growth and households' interest and debt burden.

Global trade is assumed to fall by 14 per cent, cumulatively, over a two-year period before growth picks up again towards the end of the projection period. This scenario entails a relatively brief, steep fall in trade, and new trade channels are assumed to be established in due course. The oil price is assumed to fall to USD 20 at the end of 2019. It thereafter picks up, to USD 30, and levels out towards the end of the period. The oil price is substantially lower in the stress scenario than in the baseline scenario throughout the projection period. Oil investments, which are not model-determined, are assumed to fall steeply in 2019 and thereafter to remain flat to the end of the projection period. The assumptions for Norwegian exports of oil and gas are identical in the baseline scenario and the stress scenario. Oil production from existing fields is assumed to hold up and to be traded on the global market despite the turbulence.

Risk premiums in the fixed income markets rise markedly as a result of growing uncertainty among investors, entailing higher money market rates. Foreign money market rates are assumed to rise to 4 per cent in 2019 before gradually falling to 2 per cent by the end of the projection period. The international recession is assumed to contribute to low inflation in the initial years of the projection period before inflation picks up slightly.

All variables referred to in the above paragraphs are exogenous variables that are determined outside the model, with the exception of equity prices and bond rates. In addition, international producer prices, general government demand for goods and services, general government investments and general government consumption are determined outside the model. In the case of investments and consumption, the same assumptions apply in the baseline scenario and the stress scenario.

STRESS SCENARIO

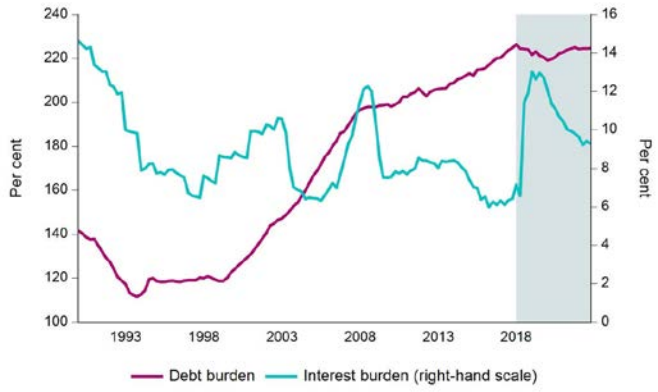
Increased uncertainty among investors entails a steep fall in equity markets. The calculations show that international equity markets fall by 27 per cent over the first two projection years, before growth picks up again towards the end of the period. The Norwegian equity market is hit far harder by the crisis owing to the effect of the oil price fall which is a factor additional to the increased uncertainty and the decline in global trade. The price of Norwegian equities falls by 60 per cent, cumulatively, in 2018 and 2019. The calculations show that equity markets see sound growth towards the end of the period, but from a lower level than at the start of the projections.

Increased interest rates abroad spread to the Norwegian economy. The model calculations show that Norwegian money market rates rise by about 4.5 percentage points to 5.3 per cent up to 2019 before gradually declining to 2.4 per cent at the end of the period. Bank lending rates depend to a large extent on interest rates in the money market. The banks' average lending rate rises by about 3.5 percentage points over the course of the two first years of the period. When the economy improves towards the end of the projections, lending rates decline somewhat, and are about 1.4 percentage points higher in 2022 than in 2017.

An abrupt, steep hike in lending rates will have major consequences for Norwegian households, both on account of their high debt level and the large proportion of floating rate mortgages. There are wide differences in debt burden between households, rendering individual households more vulnerable to an interest rate hike.

Households' interest burden is calculated to be 13 per cent on average in 2019. This is on a par with the interest burden during the financial crisis, but

I.1 Stress scenario. Households' average debt burden and interest burden



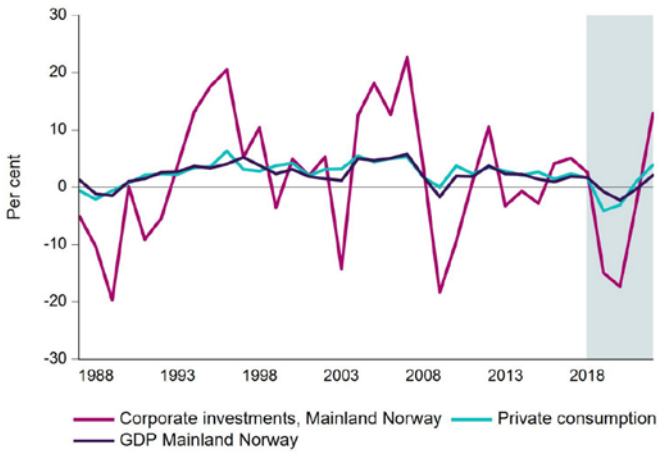
Sources: Statistics Norway and Finanstilsynet

I.2 Stress scenario. Credit growth* for households and non-financial firms

* 12-month growth in outstanding holding may diverge from transaction-based growth in the C2 statistics.
Sources: Statistics Norway and Finanstilsynet

nonetheless well below households' interest burden during the banking crisis at the start of the 1990s (chart I.1). Due to an improvement in the economy and to households' financial consolidation towards the end of the projection period, the interest burden will abate somewhat and by the end of the period is somewhat lower than in the baseline scenario. Although households are in a position to consolidate and repay parts of their debt, the calculations show that the debt burden in the stress scenario remains at just over 220 per cent (chart I.1). Very weak income growth (close to zero for several years) in the projection period is a contributory factor. Growth in disposable income only picks up somewhat in 2022.

I.3 Stress scenario. GDP Mainland Norway, private consumption and corporate investments in Mainland Norway



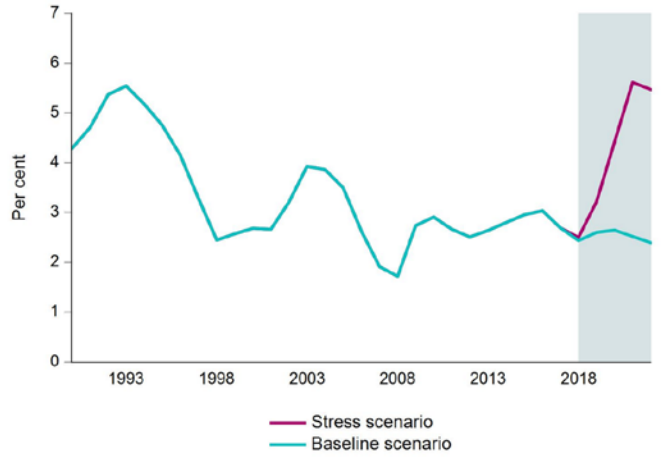
Sources: Statistics Norway and Finanstilsynet

Among corporates, the interest burden will also rise steeply as a result of higher interest rates combined with a weak trend in incomes. Estimated credit growth among corporates is negative as from 2018, and credit to corporates falls in aggregate by just under 5 per cent in the projection period. The model shows that households' credit growth is weak throughout the period (chart I.2).

The path of households' debt and interest burden has major spillover effects on private consumption. The effects are stronger the higher the debt burden among households. In the model calculations, consumption falls altogether by more than 7 per cent up to 2020. Private consumption accounts for a substantial portion of Mainland Norway's GDP, and the fall contributes heavily to the negative trend in mainland GDP in the three following years in the projection period (chart I.3). The fall in housing investments, in private commercial investments in Mainland Norway and in exports contributes to negative GDP growth. Both housing investments and commercial investments fall by well over 30 per cent in aggregate before growth picks up somewhat towards the end of the projection period.

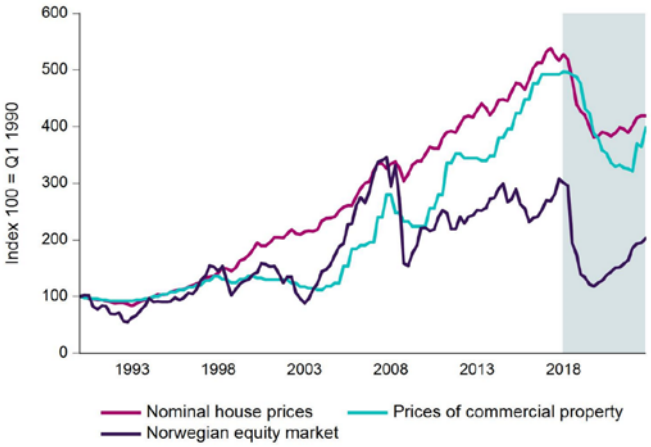
Unemployment rises strongly in the projections (chart I.4). In 2021 registered unemployed persons account for 5.6 per cent of the total labour force. Even though

I.4 Baseline scenario and stress scenario. Unemployment



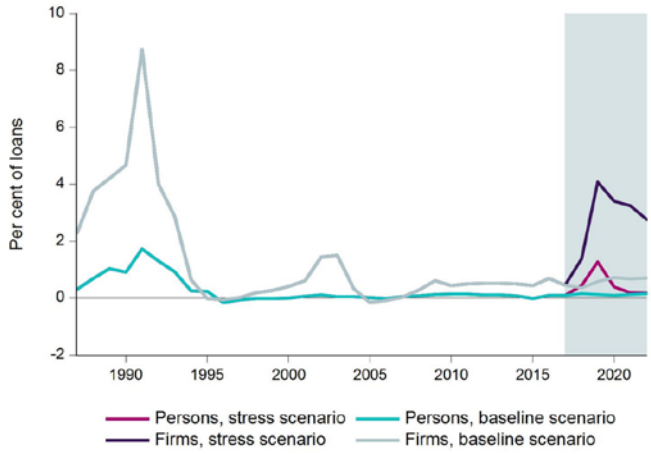
Sources: Statistics Norway and Finanstilsynet

I.5 Stress scenario. House prices, prices of commercial property and Norwegian equity market



Sources: Statistics Norway, OPAK / Dagens Næringsliv, Thomson Reuters and Finanstilsynet

I.6 Baseline scenario and stress scenario. Loan losses



Source: Finanstilsynet

the stress test scenario is front-loaded and hits hardest in the initial years of the projection period, unemployment is higher at the end than at the start of the period, but shows signs of subsiding towards the end of the projection period. In 2022 unemployment in the stress scenario is 3 percentage points higher than in the baseline scenario.

The growth in property prices is moderate in the baseline scenario calculations. The stress scenario hits the economy hard and has major consequences for the markets. House prices fall nominally by 29 per cent in the course of the first three years of the stress scenario. Commercial property prices fall by 37 per cent over a four-year period. The decline in the Norwegian equity market is stronger than in the housing and commercial property markets, but follows approximately the same path (chart I.5).

Banks' problem loans as a share of total lending grow markedly in the projection period, both in the case of personal loans and corporate loans. Banks' losses on loans both to households and corporates increase, but by a substantially larger margin in the case of loans to corporates (chart I.6).

Accumulated losses on loans to corporates are estimated at 14.9 per cent of total lending throughout the projection period. For loans to households, accumulated losses account for 2.5 per cent in the period. Losses in the stress scenario are high, but appreciably lower than bank losses during the banking crisis in the 1990s.

STRESS TESTS OF NORWEGIAN BANKS

Stress tests are a useful tool for assessing risks present in banks. Stress testing seeks to gauge the overall effect of various risks, while at the same time making allowance for the possibility of risks and imbalances in the economy developing over time. Finanstilsynet's data for all Norwegian banks and mortgage companies enable analysis of both individual entities and the banking industry as a whole. The design of the stress tests seeks to capture the interaction between various

risks present in the banks and in the economy as a whole.

A characteristic of banks is their high indebtedness relative to assets. At the end of 2016 debt owed to Norwegian banks accounted for about 92 per cent of their aggregate total assets, compared with a figure of about 55 per cent for Norwegian non-financial firms. Further, banks' profit for the year measured only about 1 per cent of their total assets compared with a figure of about 3 per cent for non-financial firms. Hence a far smaller profit impairment is needed for banks than for non-financial firms to turn profits into losses and for capital and liquidity positions to become impaired. Since banks have a low equity ratio (or high debt ratio) at the outset, even a small reduction may lead to the equity ratio falling below critical levels established by the government authorities or expected by the banks' investors and creditors. Banks' sensitivity to impairment of profit and equity means that banks with apparently similar earnings and funding structures are nonetheless affected differently in the stress test.

The main intention behind Finanstilsynet's stress tests is to find indications of how well the banks will cope with serious stress scenarios in the absence of extraordinary governmental support measures. In normal economic times banks' revenues and costs change relatively little, and profits, capitalisation and liquidity are therefore fairly stable. However, in a serious economic downturn revenues will fall and costs increase both rapidly and by a large margin. Loan losses will no longer be associated with a small number of borrowers or a particular industry, but will involve a large number of borrowers across the majority of industries. Securities holdings will plunge in value, and banks' funding costs will rise. Although Norwegian borrowers' mortgage rates are largely variable rate, it does not go without saying that the entire increase in banks' funding costs can be passed on to borrowers. Moreover it is not easy to do away with weak borrowers since most banks neither wish nor are able to take over such customers.

Finanstilsynet utilises two models to stress test banks. One is based on consolidated data and covers the 19 largest bank groups.[26] The other utilises unconsolidated data and covers the smaller banks. Both models also utilise data from CRD IV reporting, reporting of corporate client exposures (SEBRA reporting) and other sources of data.

NORWEGIAN BANKING GROUPS

The total assets of banks included in the banking groups model accounted for about 77 per cent of Norwegian banks' aggregate total assets at the end of 2017. Branches that are part of foreign banking groups are not included in the selection. See box 12 and 13 for a description of the stress test methodology and the assumptions underlying the stress test. See box 13 for a description of how the losses have been distributed among the banks.

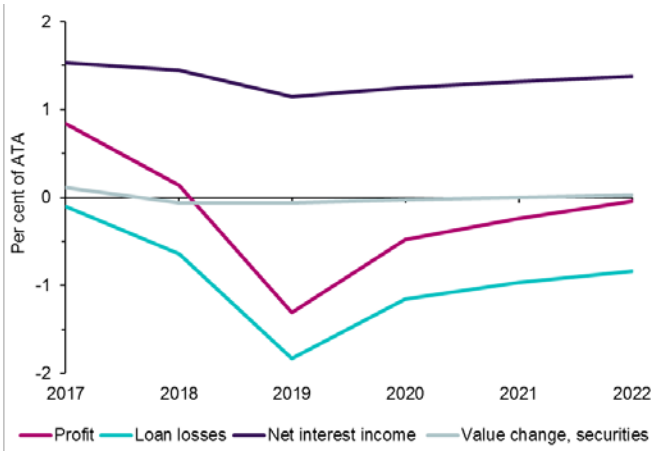
Baseline scenario

The banking groups' combined net interest income[27] is approximately unchanged in the baseline scenario. Losses on loans to households are at a stable low level in the first four years, but rise slightly in the fifth year. Losses on loans to non-financial firms show a weak rise in the baseline scenario. Overall, the increase in total loan losses is relatively small in the baseline scenario. Profit (after tax) as a share of average total assets (ATA) falls slightly. If, as a technical assumption, 50 per cent of the profit is paid out in dividend and fresh equity is not injected, the banking groups' CET1 capital adequacy ratio is reduced from 15.9 per cent at the start of the projection period to 15.4 per cent at the end of 2022. There are differences between banks as regards the development of capital positions in the baseline scenario. Some banks see a marginal increase in CET1 capital ratios while others show a decline. Finanstilsynet does not prepare forecasts, and the

[26] DNB Bank (the banking group), SpareBank 1 SR-Bank, SpareBank 1 SMN, Sparebanken Vest, SpareBank 1 Østlandet, SpareBank 1 Nord-Norge, Sparebanken Sør, Sparebanken Møre, Sparebanken Sogn og Fjordane, Gjensidige Bank, Sparebanken Øst, Storebrand Bank, Helgeland Sparebank, Landkreditt Bank, BN Bank, Sandnes Sparebank, Fana Sparebank, Totens Sparebank, Aurskog Sparebank.

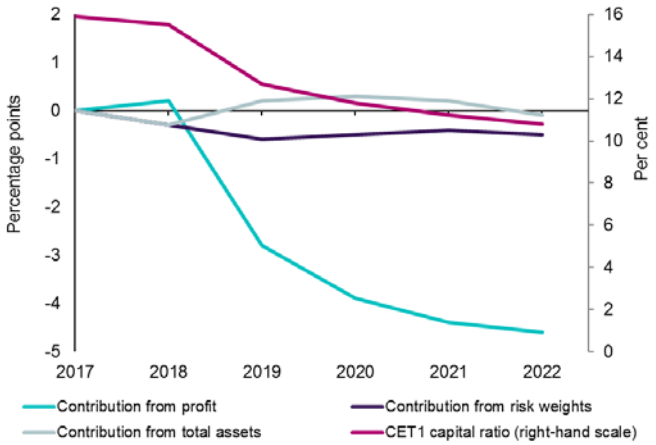
[27] Total interest revenues less the sum of interest expenses in per cent of average total assets (ATA).

I.7 Profit and main profit components. Stress scenario. Norwegian banking groups



Source: Finanstilsynet

I.8 CET1 capital adequacy and accumulated contribution to change. Stress scenario. Norwegian banking groups



Source: Finanstilsynet

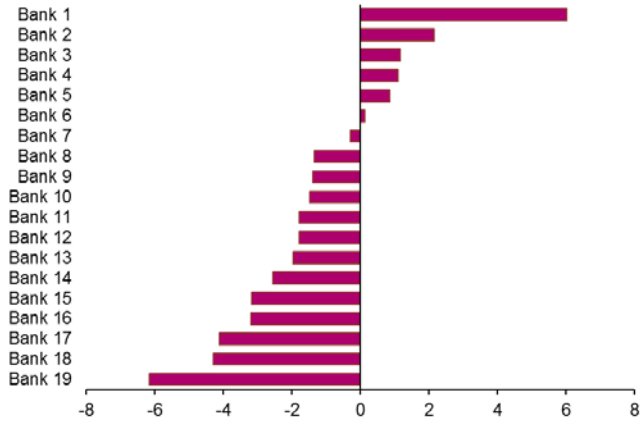
baseline scenario reflects a possible outturn. See also the account of the macro scenarios in the introduction.

Stress scenario

The macroeconomic development is far weaker in the stress scenario. A severe economic setback strikes in earnest in 2019. According to the projections, the bank groups' overall net interest income gradually falls as a share of average total assets from 1.53 per cent in 2017 to 1.38 per cent in 2022 (chart I.7). The main reason for the weakening is the assumption of a reduced interest margin in the stress scenario for all loans (box 12). It is additionally assumed that banks are unable to pass the entire interest rate increase on to those borrowers who already have weak debt-servicing capacity at the start of the stressed period.[28] Falling equity markets and increased credit risk spreads render the profit contribution from value changes on equities and bonds marginally negative through the stressed period.[29] Loan losses increase sharply from and including 2019.[30] Increased loan losses are the main reason why the bank groups' after-tax profit weakens from 0.84 per cent of ATA in 2017 to minus 1.31 per cent in 2019 before improving to about zero at the end of the period.

The banks' CET1 capital adequacy falls throughout the stressed period, from 15.9 per cent at the start of the period to 11.0 per cent in 2022 (chart I.8). The reduction is mainly due to negative profit. As a technical assumption, a dividend payout of 50 per cent of the profit for the year is set for the years in which the banks record positive profit. It is also assumed that fresh equity is not injected. An increase in risk weights estimated by projecting probabilities of default using Finanstilsynet's SEBRA model (see a description in

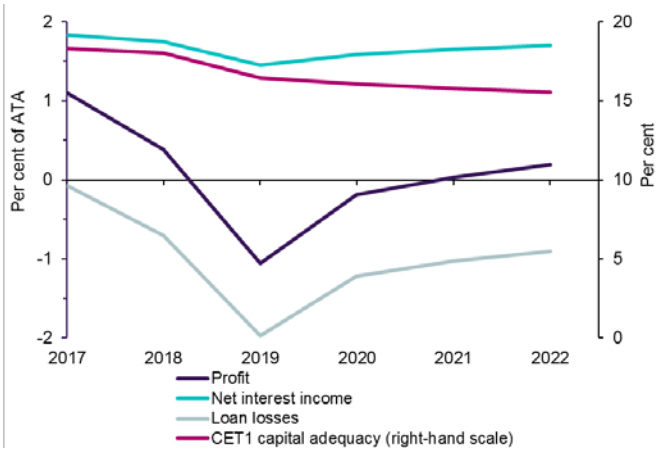
I.9 Difference between actual CET1 capital adequacy and required CET1 capital adequacy at the end of the stress scenario (incl. Pillar 2 requirements and buffer requirements; countercyclical capital buffer assumed to remain unchanged at 2 per cent throughout the period). Stress scenario. Norwegian banking groups



Source: Finanstilsynet

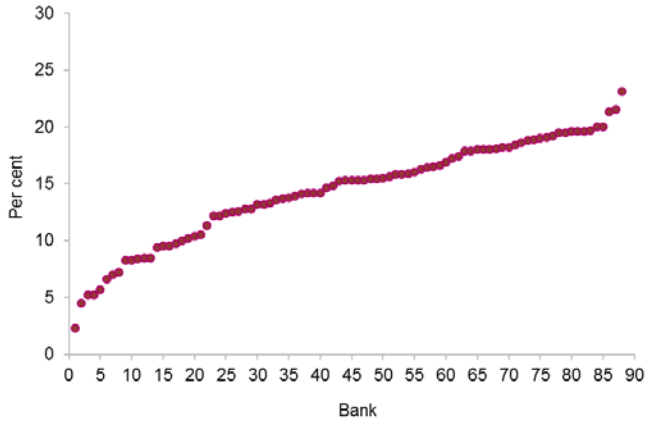
[28] Lending rates rise by about 3.5 percentage points in the first two years of the stress period and thereafter recede somewhat.
[29] Applies only to the 13 largest banks. Losses related to securities portfolios are not calculated for the smaller banks owing to absence of data.
[30] See box 13 for more details on loan losses.

I.10 CET1 capital adequacy, profit, net interest income and loan losses. Stress scenario. Small Norwegian banks



Source: Finanstilsynet

I.11 CET1 capital adequacy at the end of 2022. Stress scenario. Small Norwegian banks



Source: Finanstilsynet

Risk Outlook June 2017), and increased total assets, also make some contribution to the reduction in CET1 capital adequacy.

In addition to meeting the ordinary minimum capital and buffer requirements, the banks are required to meet an individual Pillar 2 requirement set by Finanstilsynet.[31] Chart I.9 shows the difference between CET1 capital adequacy in the stress scenario and the total CET1 requirement for the individual bankng group, including the Pilar 2 requirement.

At the end of 2022, six of the 19 bank groups have a CET1 capital ratio below the total CET1 requirement including buffer requirements and Pillar 2 requirements. The countercyclical capital buffer is assumed to be zero from and including 2019. The minimum requirement, the remaining buffer requirements and the individually determined Pillar 2 requirements are assumed to remain unchanged throughout the stressed period. If the countercyclical capital buffer is maintained at 2 per cent throughout the period, 13 banks fall short of the capital requirement at the end of 2022 (chart I.9). The bank groups' aggregate leverage ratio falls from 7.0 to 5.0 per cent in the stressed period. In 2022, two banks are below the leverage ratio requirement.

The bank groups that fare worst in the stress scenario either have a relatively large share of loans to non-financial firms, high estimated credit risk on loans to non-financial firms, relatively low net interest income or relatively low overall earnings at the start of the period, or a combination of these factors. See boxes 12 and 13 for a closer account. The stress scenario affects all banks and the financial industry. Banks are therefore assumed to have limited scope to implement extraordinary measures over the course of the projection period, such as selling off non-performing loans.

SMALL NORWEGIAN BANKS

Small Norwegian banks (89 banks) are stress tested at single-company level (parent bank) based on unconsolidated parent-bank figures. A further six banks – mainly with consumer and credit card loans – also stress tested based on other assumptions. The macro scenarios, stress test methodology and assumptions are identical to those applied to the bank groups. However, securities holdings of small

[31] For systemically important banks the minimum and buffer requirement on CET1 capital adequacy is 14.0 per cent as from 31 December 2017, while for other banks it is 12.0 per cent. Only the DNB banking group is defined as systemically important among banks included in Finanstilsynet's stress test. Kommunalbanken is the other systemically important institution in Norway, but is not included in the stress test because Finanstilsynet's banking model is not suited to the bank's activity.

Norwegian banks are not stressed tested due to insufficient data.

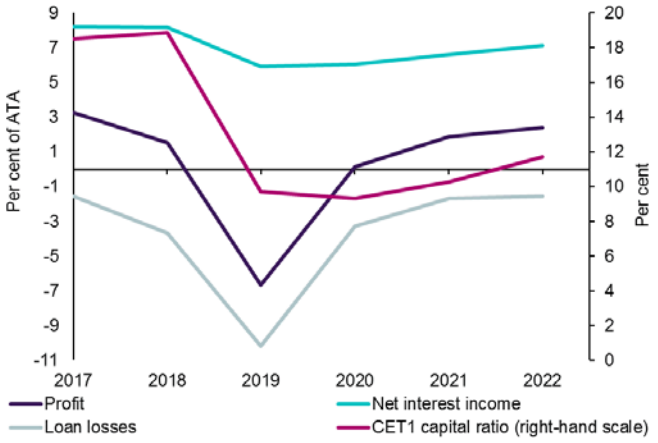
The overall profit of small Norwegian banks declines steeply in the first two years of the stress scenario (chart I.10), driven mainly by somewhat higher losses on loans to personal borrowers in 2019 and increased losses on loans to non-financial firms as from 2019. Small banks have in aggregate higher net interest income relative to ATA than the bank groups at the start of the stressed period. This is mainly because the small banks generally have a higher proportion of loans relative to ATA than the bank groups. The small banks' net interest income relative to ATA falls by about the same margin as those of the bank groups in the stressed period.

Losses on loans to non-financial firms relative to overall loans to non-financial firms are higher for the small banks compared with the large banks. The reason for this is that small banks consistently carry higher risk in their corporate portfolios as measured by the SEBRA model. However, the small banks incur somewhat lower losses on their commercial portfolios as a share of ATA than the large bank groups. This can be explained by the fact that the small banks, on average, have a lower proportion of loans to non-financial firms compared with the large banks.

CET1 capital adequacy among the small banks in aggregate is not reduced by the same margin as among the bank groups. Moreover, in aggregate, the small banks have a higher CET1 capital ratio at the start of the stressed period (18.5 per cent). At the end of the stressed period the small banks' CET1 ratio stands at 15.3 per cent compared with 11 per cent for the bank groups. However, there is wide variation between the banks (chart I.11). If it is assumed that the countercyclical capital buffer is set at zero from and including 2019, 21 of the 89 banks fall short of the overall capital requirements including buffer requirements and the Pillar 2 requirement. If the countercyclical capital buffer requirement of 2 per cent is maintained throughout the period, 32 of the 89 banks fail to meet the capital requirements.

[32] Bank Norwegian, yA Bank, Komplett Bank, Monobank, Easybank and Instabank.

I.12 CET1 capital adequacy, profit, net interest income and loan losses (as a share of average total assets). Stress scenario. Norwegian consumer loan banks



Source: Finanstilsynet

CONSUMER LOAN BANKS

A number of consumer loan banks have started business in recent years. Six banks whose main business is consumer lending are included in Finanstilsynet's stress test.[32] Consumer loans have existed for a long time, but it is only in recent years that their volume in Norway has risen steeply. Analyses of loan losses in a normal economic periods show that losses on loans to households are between eight and 20 times larger in the case of consumer loans compared with secured loans. Hence it is not unlikely that losses on consumer loans in a stressed period would be very high. If consumer loan banks find themselves in a testing situation, they may seek to sell off parts of their stock of non-performing loans to debt collection agencies et al. However, selling such portfolios may be difficult in a period of severe stress, and the selling price of non-performing portfolios will in any case most likely be low. In the stress test Finanstilsynet has assumed that losses on consumer loans will be 10 times higher than losses secured on loans to households, in the main residential mortgages.

Consumer loan banks' accumulated losses in the stressed period total about 27 per cent of their aggregate net lending at the start of the period. Losses are highest in 2019, reaching about 13 per cent. By way of comparison, the accumulated losses of the

smaller savings banks measure about 7 per cent of their overall net lending at the start of the period.

Consumer loan banks' overall net interest income came to 8.2 per cent of their average total assets at the start of the stressed period (I.12). Hence their net interest income is far higher than those of the traditional banks. In the stress scenario net interest income is reduced to 6.1 per cent on average in 2020, thereafter increasing to just over 7.1 per cent in 2022.[33]

The CET1 capital adequacy ratio is reduced from 18.5 per cent in 2017 to 11.7 per cent at the end of the period. However, this ratio is as low as 9.3 per cent at the end of 2019, but picks up somewhat towards the end of the period as a result of lower loan losses.

Five of the six consumer loan banks fail to meet the overall capital requirements, including buffer requirements and the Pillar 2 requirement, at the end of the stressed period. The number of banks falling short of the requirement is not affected by whether the countercyclical buffer requirement is retained or set to zero.

Box 12:
Projection of banks' net interest income

Norwegian banks borrow and lend largely at floating rates. Changes in funding rates are usually rapidly followed by a corresponding change in lending rates (the "float-float" principle).* This principle is the starting point for Finanstilsynet's projection of banks' net interest income. However, three exceptions apply:

(i) It is assumed that performing forbearance customers** are able to pay the lending rate agreed at the start of the stressed period, but unable to service an increase in the lending rate. The rationale for this assumption is that these customers already have debt servicing problems, and that their debt servicing capacity will be further impaired in the stress scenario. Hence it is realistic to assume that customers will on average encounter problems in the event of a sharp increase in the lending rate.***

(ii) In view of the notice required for an increase in the mortgage lending rate, a six-week lag is assumed before any such increase takes effect.

(iii) In addition to (i) and (ii), it is assumed that the lending margin is under general pressure, inter alia because competition for the best borrowers probably increases when the economy fares badly. A further assumption is that banks are unable to increase the lending rates on their entire loan portfolio in step with the increase in funding costs, and that their lending rate increases are subject to a time lag. Historical data show that the net interest margin (lending rate weighted by loans minus deposit rate weighted by deposits) varies from year to year and in some five-year periods in the 2000s has fallen by more than 30–40 interest rate points from its original level. Based on this, the banks' net interest income relative to ATA is discretionarily reduced by 0.2 percentage point in 2019 and 2020 compared with the interest margin in 2017. Interest margins are thereafter assumed to increase by 0.05 percentage point in 2021 and by a further 0.05 percentage point in 2022 compared with 2019–2020.

Consumer loan banks have far higher interest margins than other, traditional, banks. In the stress scenario it is assumed that the consumer loan banks are unable to pass the increase in

[33] See the assumptions on changes in net interest income in box 12.

the general interest rate level on to their customers, and that borrowers' impaired debt servicing capacity and the increased competition for borrowers and depositors reduce interest margins as a share of average total assets by 2.2 percentage points in 2019 and 2020 compared with the original interest margin at the start of the period (2017). The interest margin recovers by 0.55 percentage point in 2021 and by a further 0.55 percentage point in 2022 compared with 2020.

The volume of performing forbearance borrowers is projected using the change in the proportion of problem loans estimated using the macro model NAM-FT. This means that all banks receive an identical percentage change in the forbearance volume in the projections. The starting point for the proportion of performing forbearance loans varies in some cases widely from one bank to the next.

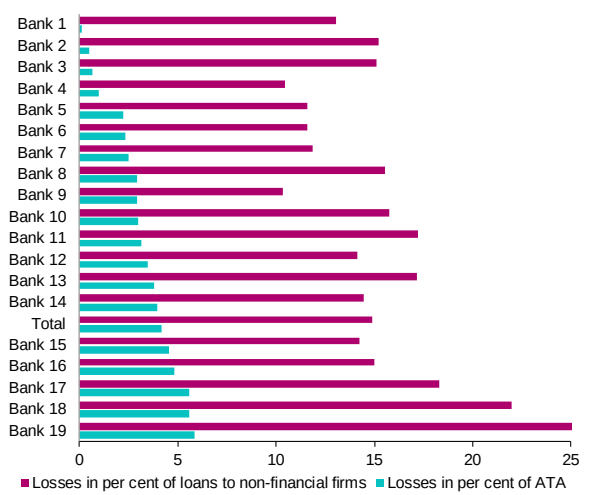
* For residential mortgages the required notice of interest rate changes is six weeks. Finanstilsynet's stress test model takes this into account.

** "Performing" forbearance customers means borrowers who are not in default or for whom no impairment write-downs have been made, but where other negative events have occurred related to the borrower's debt servicing ability. These include, for example, deferment of instalment payments or breach of loan terms as a result of a weak trend in the economy.

*** An upper limit of 15 per cent is set for the share of performing forbearance loans where the borrower is unable to service the interest rate increase in the stress scenario.

Box 13:
More on losses on loans to non-financial firms

I.A Accumulated losses on loans (2018-2022) to non-financial firms in per cent of ATA and loans to non-financial firms respectively as at 31 December 2017. Stress scenario. Norwegian banking groups



In the stress scenario (2018–2022) the accumulated loss on loans to personal borrowers amounts to 2.5 per cent of total loans to personal borrowers, while the accumulated loss on loans to non-financial firms accounts for 14.7 per cent of total loans to non-financial firms. During the banking crisis (1988–1992) accumulated losses on loans to non-financial firms amounted to more than 20 per cent.* The underlying macro-economic path in the stress test is approximately as it was during the banking crisis. The fact that accumulated loan losses in the stress scenario come to only about two-thirds of losses during the banking crisis is due in part to the fact that non-financial firms are on average in a better financial position now than at the start of the banking crisis.

This helps to curb loan losses compared with the banking crisis.

The accumulated loan losses in the 19 bank groups are summarised in chart I.A. Banks with a high estimated credit risk on their loans to non-financial firms account for a relatively large share of the total loss on loans to these customers. Banks which in addition have a relatively large proportion of loans to non-financial firms will incur higher accumulated losses relative to ATA than banks with a low proportion. This is because loan losses are on average far higher in the case of non-financial firms than personal borrowers.

The accumulated loss on loans to non-financial firms varies between bank groups (chart I.A). High accumulated loan losses are a result of banking groups having a relatively large volume of loans to borrowers with high average estimated credit risk.

Risk Outlook June 2017 gives a closer description of how loan losses projected in the macro model are distributed among the banks in the stress test.

* There is some uncertainty as to the distribution of loan losses between personal borrowers and non-financial firms during the banking crisis.

OVERALL ASSESSMENT OF THE STRESS TEST RESULTS

Norwegian banks' capital adequacy has risen in recent years as a result of higher capital requirements. At the same time the requirement as to the quality of capital has increased. Banks' equity ratio (equity relative to total assets), which is a traditional measure of financial soundness, is nonetheless not significantly higher now than it was in the early 1990s.

Measurement of risk, related for example to individual loans, investments in interest rate derivatives or equities, is complicated and is based on a number of assumptions. How large a risk is in factual terms is therefore uncertain. For some instruments, and in some periods, uncertainty about risk is particularly large. Measuring risk is especially difficult when the system in itself generates risk that is not reflected in risk measurements of individual exposures (loans etc.). In the banking industry systemic risk is high. This is related to a high debt ratio, exposure to the same risk factors and to interconnectedness between financial institutions.

Since risk measurements and risk-sensitive capital requirements are attended by considerable uncertainty and do not capture all relevant risk factors, the banks themselves and the supervisory authorities must exercise considerable judgement in assessing banks capital needs. Stress testing banks' results and capital adequacy supplements traditional risk measurement and calculation of risk weights. Whereas risk measurement systems are based on assumptions about risk factors' probability distributions, an important aspect of stress testing is not to assume that risk factors follow given probability distributions. The rationale is that a significant portion of uncertainty cannot be modelled in the sense that probabilities cannot be linked to outcomes. The object of stress testing is to assess the consequences of an accumulation of events which are unlikely to occur and are inadequately captured by risk measurement systems, but which nonetheless are often recognised from history in some combination or other. Crises in the financial system have occurred despite their likelihood being considered very low beforehand.

Finanstilsynet's assessments of banks' capital needs include an important and substantial element of judgement. Reference models have been developed to assist the determination of capital requirements for risk that is not fully captured by the capital requirements under Pillar 1. Finanstilsynet's stress test tool was primarily developed to support assessments of financial stability, but is also a tool supporting the assessment of individual banks' need for capital.

As in previous years, the stress scenario in 2018 is a serious one for the Norwegian economy and

Norwegian banks. The probability of this scenario materialising is low, but not unrealistic. A steep fall in global trade, increased uncertainty in financial markets accompanied by a substantial interest rate hike, a steep fall in equities and property, and a marked fall in the oil price, have all occurred previously. The decline is assumed to be particularly strong over a period of two to three years. Thereafter a gradual normalisation is assumed.

The accumulated effect on the banks' capital adequacy is considerable. The stress scenario is particularly serious in its initial years. At the end of 2022 six of 19 banking groups will be unable to meet the overall requirement on CET1 capital, despite the assumed removal of the countercyclical capital buffer requirement in the period. The situation is driven mainly by losses on loans to non-financial firms, although increased losses on loans to households (including consumer loans) also contribute.

The calculations illustrate that the banks' high debt ratio renders several banks vulnerable to protracted shocks. Some banks' capital adequacy could fall below the regulatory requirements. This would create increased uncertainty in the markets, which could further exacerbate the situation. The calculations do not reflect this type of dynamics, and are also static in the sense that there is no assumption of government measures, with the exception of a possible reduction in the countercyclical capital buffer.

When the management board of a bank sets capital targets, its objective is to enable the bank to maintain normal growth in lending, and the bank's capitalisation to support access to the capital markets, under difficult market conditions. Should Finanstilsynet in its risk and capital assessment find that the institution's capital targets and its actual adjustment of the level of CET1 capital do not sufficiently reflect this objective, Finanstilsynet will expect a higher target to be set for CET1 capital. Such an expectation could be grounded in the view that the capital target and actual capital ratio are not in keeping with the institution's business model or justified by the results of Finanstilsynet's stress tests.

THEME II: IMPORTANCE OF FISH FARMING IN NORWAY

The fish farming industry accounts for a considerable share of Norwegian exports, but a small share of Norway's overall production value and employment. In historical terms, production and profitability have been far more volatile in the fish farming industry than in other industries. Financial results have varied from excellent to very poor, often in just a short period. The marked volatility is related to the substantial risk to which the industry is exposed in many areas including selling price risk, production and disease risk, trade barrier risk and exchange rate risk. In recent years production costs in the fish farming industry have risen rapidly. A steep fall in selling prices, as witnessed on several occasions, can severely impair earnings. Norwegian financial institutions, with a few exceptions, have little exposure to the fish farming industry.

FISH FARMING INDUSTRY IN BRIEF

The development of production technology for salmon farming started in Norway in the mid-1960s. During the 1970s farming of salmon and trout became established as an instrument of regional policy and secondary source of income for farmers along the coast. Farming of fish species other than salmon and trout has been attempted in Norway, including cod farming, but profitability has thus far proven insufficient for large-scale farming. Today salmon accounts for 95 per cent of the sales volume of Norwegian farmed fish, while trout and rainbow trout account for 5 per cent.

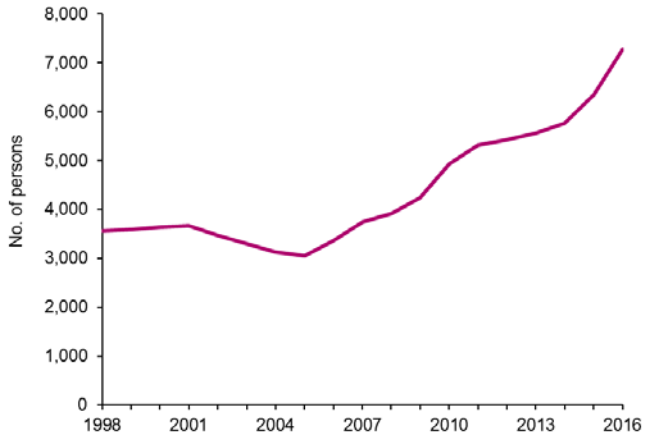
The fish farming industry has undergone numerous booms and declines since its establishment in the 1970s. At the end of the 1980s the price of salmon fell by half, and many farmers encountered serious problems. Several Norwegian banks had to take major losses on loans to the fish farming industry in this period. The fish farming industry faced serious problems anew at the start of the 2000s, when the price of salmon once again fell steeply. Between 1991 and 2012 punitive customs duty was imposed on exports of whole fresh Norwegian salmon to the USA, while Norwegian fish exports to the EU face a duty of 13 per cent on processed fish products and 2 per cent on unprocessed fish. Strong demand for Norwegian farmed salmon has contributed to high salmon prices in recent years, and the fish farming industry in general has shown a positive trend. Trade restrictions on exports of Norwegian salmon to China probably led to a smaller increase in the sales volume than would otherwise have been the case. The Chinese trade restrictions were lifted in 2017. While Norwegian fish farming facilities have been affected by salmon lice and disease, such problems have probably been more serious in Chile – the largest competitor to Norwegian farmed salmon. Norway is currently the world's largest producer of farmed salmon and the sixth largest fish farming nation in terms of its share of all farmed fish.

The fish farming industry in Norway is dominated by a small number of large companies, including six listed companies. According to figures from the Norwegian Directorate of Fisheries, the ten largest companies accounted for 68 per cent of the volume of farmed fish sold in 2016, compared with just 19 per cent in 1996. However, there are many fish farming companies along the coast of Norway. At the end of 2016 more than 600 limited companies (legal entities) in the fish farming industry were registered in Norway.

SIGNIFICANCE FOR THE NORWEGIAN ECONOMY

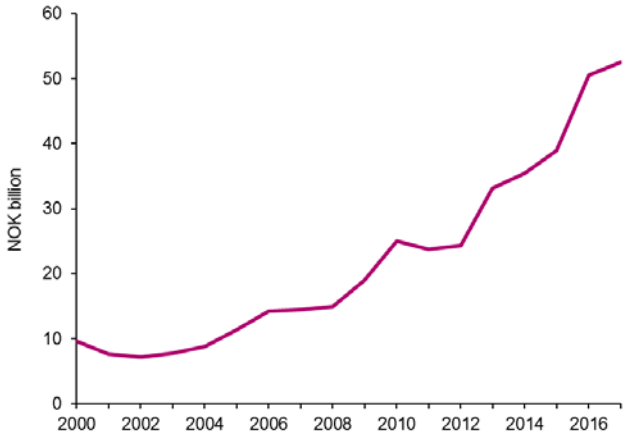
Despite the vigorous expansion of the fish farming industry over the past 30 years, aquaculture (production of fish and shellfish, of which salmon farming accounts for 93 per cent) remains a minor contributor to the Norwegian economy's overall production. Whereas the fishing / hunting and aquaculture industries accounted for 0.8 per cent of output in 1990, this share had risen to 1.7 per cent in 2017, mainly due to the growth of salmon farming. Investments are small. In 2017 overall investments in the fishing / hunting and aquaculture sectors accounted for 0.7 per cent of investments in Mainland

II.1 Number of persons employed in aquaculture



Source: Statistics Norway

II.2 Norwegian exports of salmon



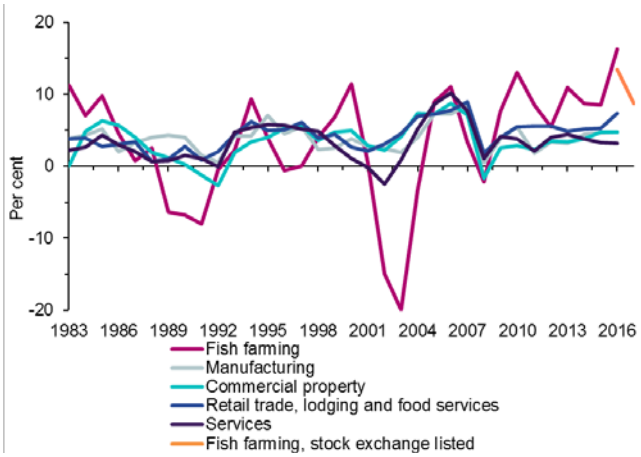
Source: Statistics Norway

(non-oil) Norway. Employment is also modest. In 2016 close to 7,300 persons were employed in aquaculture (chart II.1). This represents about 0.25 per cent of total employment in Norway. Although aquaculture is of minor significance for overall employment, it has somewhat greater significance for employment in the counties of Hordaland and Nordland. Norway is in large measure a commodity producer, and employment in the fishing industry that is based on farmed fish is consequently limited.

Aquaculture's primary significance is as an export industry. From a modest level at the turn of the millennium, exports of salmon rose to more than NOK 50 billion in 2017 (chart II.2). This development is due both to rising volumes and prices. Exports of fresh and frozen salmon make up about 14 per cent of traditional goods exports and 4.6 per cent of total exports. By way of comparison, exports of crude oil and natural gas amounted to NOK 442 billion in 2017, representing 38 per cent of total exports. Aquaculture thus has a long way to go before surpassing the petroleum industry's role in the export sector.

The industry is marked by uncertainty which may curb growth ahead. The problems of pollution, disease and medication, salmon lice and escape of farmed fish are considerable. It may be asked whether the industry's pace of growth is sustainable. To continue growing, the industry is dependent on a good standing and increased demand for salmon in the international

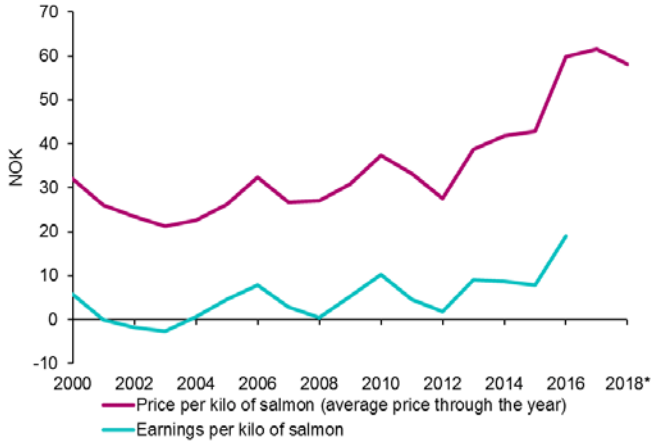
II.3 Total return on capital in selected main industries. Norwegian-registered limited companies. Non-consolidated company accounts*



*Total return on capital is defined as Profit for the year after tax in per cent of total assets at year-end. The years 1983–1987 are based on a limited selection of companies. The selection of stock exchange listed fish farming companies in 2016–2017 is based on these companies' published consolidated accounts.
Source: Finanstilsynet

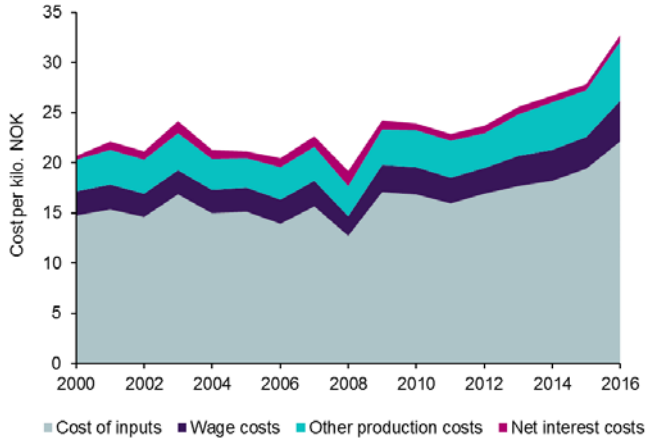
market. Customs barriers and other trade barriers have previously debarred Norwegian salmon from important markets such as the USA and China. In the current climate of growing protectionism, the outlook for further growth is uncertain. The Ministry of Finance is currently contemplating the introduction of a resource rent tax for fish farming businesses. Such a tax will, all else equal, add to the costs faced by fish farming companies.

II.4 Norwegian fish farming companies' earnings and price per kilo of salmon. Nominal Norwegian kroner



* Average first quarter.
Sources: Finanstilsynet, Directorate of Fisheries and Statistics Norway

II.5 Norwegian fish farming companies' production costs per kilo of salmon



Sources: Finanstilsynet, Directorate of Fisheries and Statistics Norway

FINANCIAL DEVELOPMENT

Fish farming has been the most volatile of Norway's main industries since the start of the 1980s (chart II.3). Total return on capital has varied from very high to very low, often in just a brief period. The marked volatility is due to fish farming companies' exposure to high risk in many areas, including selling price risk, production and disease risk, risk related to trade barriers and exchange rate risk.

Total return on capital in the fish farming industry reached a record level in 2016, despite China's trade restrictions. The main reason was very high salmon prices (chart II.4). In 2017 Norwegian listed fish farming companies saw a severe impairment of total return on capital, mainly due to a negative development in fair value accounting adjustments related to fish farmers' holding of farmed fish. Total return on capital was nonetheless 9 per cent in 2017, which is high both in historical terms and compared with other industries.

The selling price per kilo of salmon has varied widely. However, since 2012 it has risen almost continuously (chart II.4). There is a relatively close historical link between salmon prices and fish farming companies' earnings. Between 2012 and 2016, however, the selling price rose by NOK 32 per kilo of salmon, whereas the companies' basic earnings only increased by an estimated NOK 17 per kilo of salmon sold.

Production costs increased from an estimated NOK 22 per kilo of salmon sold in 2012 to NOK 32 in 2016 (chart II.5). The largest contributor to the cost trend is inputs, which rose by an estimated NOK 5 per kilo. Feed costs, which represent about one-half of the cost of inputs, accounted for NOK 3 of this increase. Increased costs in connection with treatment of salmon lice and lower survival rates also contributed to the increase in input costs. Both wage costs and other production costs rose in percentage terms more than input costs, but represent a far smaller share of fish farming companies' total production costs. Net interest costs account for a small portion of fish farming companies' total costs.

The fish farming industry's debt servicing capacity[34] and equity ratio have on average been roughly on a par with those of the other main industries in the period 1988–2016 (see table II.1). However the variations have been far wider in the fish farming industry than in the other industries.

At the start of the 1990s most fish farming companies' debt serving capacity, equity ratios and liquidity

[34] Debt servicing capacity is defined here as profit for the year after tax, but before depreciation and write-downs, in per cent of total debt.

Table II.1: Debt servicing capacity, equity assets ratio, debt weighted probability of default and loan losses in selected main industries. 1988–2016

	Debt servicing capacity. Profit before tax and depreciation/write-down in per cent of total debt				
	Fish farming*	Manufacturing	Commercial property (leasing/management and purchase/sale)	Retail trade, lodging and food services	Services
Annual average	10.8	11.2	8.3	11.1	12.0
Standard deviation	10.1	2.8	3.7	3.3	4.1
Maximum	33.6	17.2	15.5	17.1	20.4
Minimum	–8.7	6.8	–0.2	4.9	3.9
	Losses on loans in per cent of total loans to the industry**				
	Fish farming*	Manufacturing	Commercial property (leasing/management and purchase/sale)	Retail trade, lodging and food services	Services
Annual average	33.3	37.7	34.8	32.6	35.8
Standard deviation	14.4	6.9	9.5	6.9	8.0
Maximum	50.5	51.0	49.6	46.2	48.5
Minimum	4.2	24.7	18.2	21.2	20.6
	Debt-weighted probability of default. Finanstilsynet's SEBRA model. Per cent				
	Fish farming*	Manufacturing	Commercial property (leasing/management and purchase/sale)	Retail trade, lodging and food services	Services
Annual average	7.2	1.8	1.7	3.2	3.7
Standard deviation	9.7	0.6	1.0	1.6	1.6
Maximum	32.4	3.5	4.3	8.1	7.2
Minimum	0.8	0.9	1.0	1.7	2.0
	Losses on loans in per cent of total loans to the industry**				
	Fish farming*	Manufacturing	Commercial property (leasing/management and purchase/sale)	Retail trade, lodging and food services	Services
Annual average	1.7	1.5	1.0	1.3	1.1
Standard deviation	3.3	1.8	2.1	1.9	1.8
Maximum	9.9	7.2	8.8	5.9	7.1
Minimum	–4.1	–0.6	–0.4	–0.3	–0.7

* Primary industries include fish farming, ordinary fishery (not fishery industry production), agriculture and forestry. In historical terms, fish farming has accounted for the bulk of the loan losses in the primary industries.
**Negative value signifies that reversals were higher than the year's loan losses.
Source: Finanstilsynet

positions were very weak or negative. This was a factor in the increase in their debt-weighted probability of default (PD) computed by Finanstilsynet's SEBRA model for the fish farming industry to a level in excess of 30 per cent. In the two industries with the next highest debt-weighted PD ("retail trade, lodging and food services" and "services"), debt-weighted PD rose to 8 and 7 per cent respectively during the banking crisis.

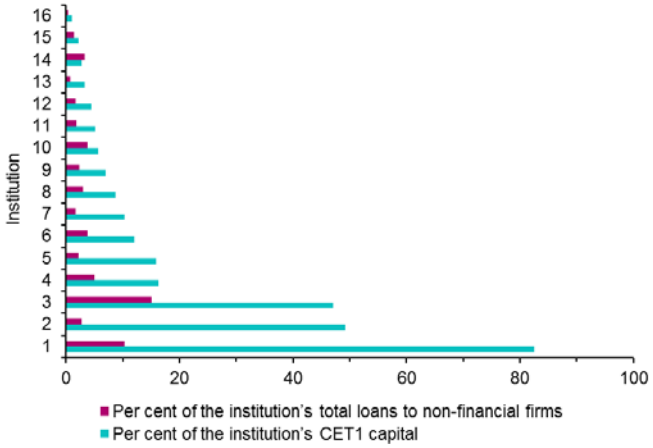
According to Finanstilsynet's estimates, the primary industries were among those accounting for the

highest loan losses in monetary terms during the banking crisis at the start of the 1990s, despite the fact that the primary industries' loan volume was considerably smaller than that of many of the largest main industries. Banking statistics do not enable the separation of loan losses in the fish farming industry from losses incurred in the other primary industries. However, public reports on the banking crisis point to the fact that losses on loans to the fish farming industry were high. Further, the very high debt-weighted PD indicates that credit risk was particularly high in the fish farming industry during the banking crisis.

The fish farming industry was at an early and experimental stage in the 1980s, and fish farming companies were for the most part small operations lacking a professional administration. Later in the 1990s and in subsequent years production technology improved, accompanied by strong consolidation in the industry. Today, production technology in the fish farming industry is far more advanced and the industry is dominated by a small number of large companies. This suggests that comparing periods in the 1980s and early 1990s and subsequent years is of limited value. On the other hand, as already mentioned, the industry continues to face challenges and uncertainty. Furthermore, single name concentration risk is far higher today. Historically, a large portion of banks' loan losses have been incurred on loans to major companies.

Losses on loans to the fish farming industry also rose steeply at the start of the 2000s. On that occasion too, plunging salmon prices were an important cause. However, in contrast to the situation during the banking crisis, a large portion of the loan losses related to a single company grouping, Pan Fish (the predecessor of Marine Harvest). Partly thanks to new owners taking over Pan Fish and restructuring of the company, much of the loan loss was reversed in ensuing years. Hence the sharp increase in losses on loans to the fish farming industry at the start of the 2000s subsequently proved to be less dramatic than it

II.6 Norwegian banks' and finance companies' exposures granted to the fish farming industry. Share of CET1 capital as at 31 December 2017



Source: Finanstilsynet

appeared to be at the outset. As in the case of the majority of industries, losses on loans to the fish farming industry rose during the financial crisis, but were – as in the case of the other industries – relatively low.

At the end of 2016 the debt-weighted probability of default in the fish farming industry was lower than in all other main industries in Norway. The high salmon prices and the performance of listed fish farming companies in 2017 and so far in 2018 indicate that debt servicing capacity, equity ratios and liquidity positions in the fish farming industry remain sound by and large. However, as mentioned, financial conditions in the industry have on previous occasions changed rapidly and comprehensively.

NORWEGIAN BANKS' EXPOSURE

At the end of 2017 Norwegian financial institutions had an overall loan exposure (credit granted) of NOK 42 billion to the fish farming industry, representing 1.7 per cent of financial institutions' total loan exposure to non-financial firms. A total of 30 financial institutions had loan exposure to the fish farming industry. These institutions' aggregate exposure measures about 9 per cent of their CET1 capital. About half of these institutions had an exposure in excess of 1 per cent of their CET1 capital (chart II.6). A few institutions are heavily exposed to

the fish farming industry. A crisis in the fish farming industry could subject these institutions to major challenges.

CONCLUSION

The fish farming industry is of major significance for the economy of a number of localities in Norway. While the industry has substantial exports, its significance in terms of its share of GDP and overall employment is limited. A setback in the industry is therefore likely to have modest spillover effects on the wider mainland (non-oil) economy. Moreover, the industry receives few inputs from other sectors, and large-scale processing of farmed fish is negligible. However, problems in the fish farming industry could lead to an appreciable decline in export earnings.

The fish farming industry in general has shown a positive trend in recent years, but history shows that the industry's production and profitability are volatile. Norwegian financial institutions have in general little exposure to the fish farming industry, but a few smaller institutions are heavily exposed. Problems arising in the industry could subject these institutions to heavy losses. Given the financial institutions' size and the fish farming industry's limited significance for production and employment, a decline in this industry in isolation is unlikely to impair the country's financial stability to any appreciable extent.

THEME III: STRUCTURE OF THE EUROPEAN BANKING MARKET

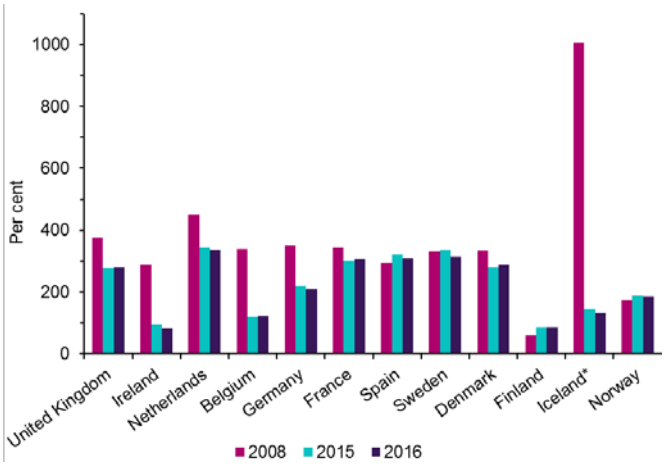
A lesson learned from the international financial crisis in 2008 is that a large banking sector can contribute to financial instability and potentially large ripple effects throughout the economy. The structure of Europe's banking sector has changed a lot since the financial crisis. In many countries where it had grown very large relative to the country's economy, the sector has undergone substantial restructuring.

In several countries large risk exposures, on and off the balance sheet, were an important cause of the growth of the banking sector. The increased risk was not offset by sufficient equity. When the crisis surfaced, the consequences for many European banks were heavy losses, balance sheet reductions and business restructuring. In many countries the banking sector's share of GDP continues to shrink, banks are posting smaller losses and their ability to withstand hard times is improving. Tighter regulation and increased capital requirements have helped to improve banks' capital and liquidity positions.

THE BANKING SECTOR IN RELATION TO THE COUNTRY'S VALUE CREATION

The size of the banking sector[35] measured as total assets relative to gross domestic product (GDP) varies widely between countries in Europe. Some countries have a banking sector on a level with the country's GDP, while in other countries the banking sector is two or three times larger (chart III.1). Since the financial crisis in 2008 the banking sector has shrunk substantially in several European countries. For the euro countries in aggregate, the banking sector measured 225 per cent of overall GDP at the end of 2016.

III.1 The banking sector's total assets in per cent of GDP. Consolidated figures for domestic banks



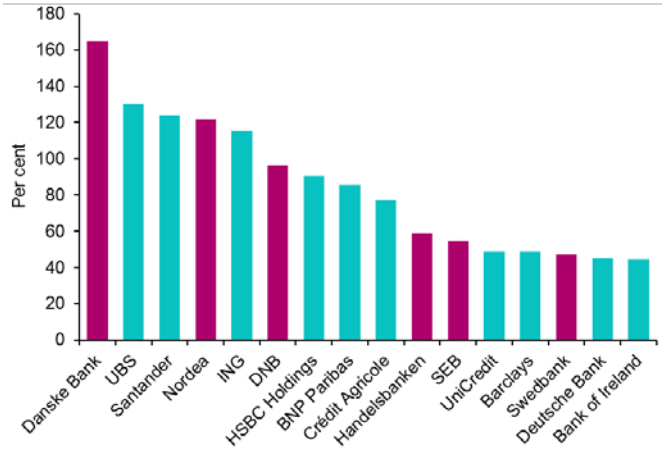
* The 2008 figure for Iceland's banking sector refers to end-September.
Sources: Eurostat, ECB, Statistics Norway and Finanstilsynet

Norway's banking sector is fairly small relative to Mainland (non-oil) GDP, one reason being that Norwegian banks' lending to borrowers abroad through branches and subsidiaries and to the public sector is on a smaller scale. In the period 2008–2016 the Norwegian banking sector expanded from 175 per cent of Mainland GDP to 189 per cent. A possible reason is that Norwegian banks were hit less hard by the financial crisis and accordingly had less need to reduce their balance sheets than banks in many other countries. Norwegian banks have also been better positioned to meet new capital requirements than many other European banks. When subsidiaries and branches of foreign banks are included, Norway's banking sector measures 243 per cent of Mainland GDP.

At the end of 2016 the banking sector in several countries, among them Sweden and Denmark, measured about 300 per cent of GDP. The banking sector in Finland is small when only consolidated domestic banks are included (86 per cent of GDP). Nordea Bank Finland and Danske Bank Finland constitute a large portion of the Finnish banking sector. When subsidiaries and branches of foreign banks are included, Finland's banking sector measures 249 per cent of GDP. The relocation of Nordea's head

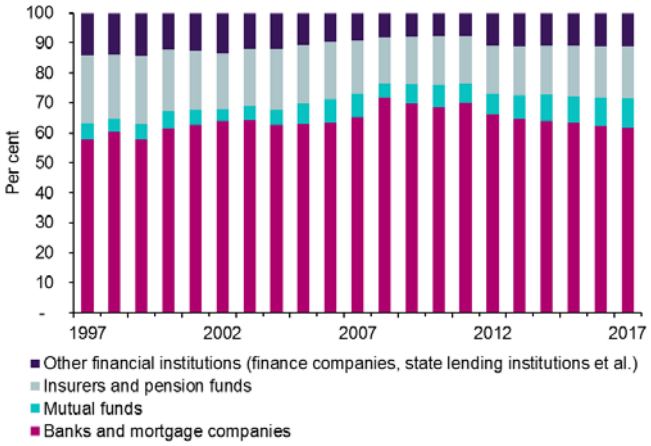
[35] Banks headquartered in Norway.

III.2 The bank's total assets (consolidated) in per cent of the home country's GDP, as at 31 December 2017



Sources: Eurostat, Statistics Norway, and the banks' annual reports

III.3 Composition of the Norwegian financial sector, measured by a share of aggregate total assets



Source: Statistics Norway

office to Finland will substantially increase the size of the Finnish banking sector, from 86 per cent to 371 per cent of GDP, based on the group's size at the end of 2016.

In some countries such as Ireland, Belgium and Iceland the banking sector was reduced by more than half as a share of GDP after the financial crisis. A number of Irish banks were compelled to write down substantial assets and to be bailed out by the Irish government. Several Belgian banks were acquired by foreign banks in 2009, also contributing to a substantial fall in the banking sector's share of the country's GDP. The Icelandic banking sector was hit hard when the three largest banks failed after several years of aggressive expansion abroad.

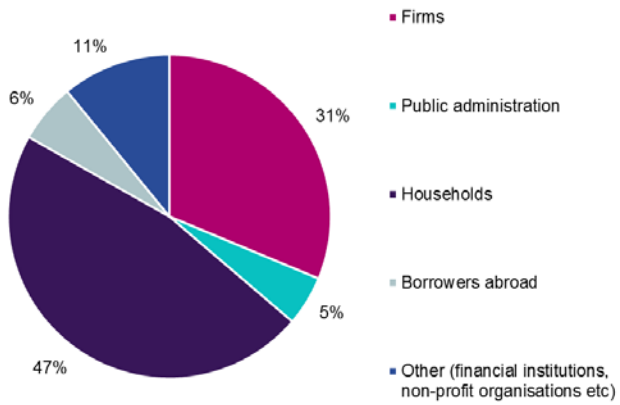
For several of the largest European banks, total assets are equal in size to, or larger than, GDP (chart III.2). This is also true of several Nordic banks.

COMPOSITION OF THE FINANCIAL SECTOR

The restructuring of the banking sector has brought a substantial reduction in the number of banks. Between 2008 and 2016 the number of banks and mortgage companies in the euro area fell by about 1,700. The number of foreign branches remained approximately unchanged in the period. Banks' total assets also declined sharply following the financial crisis, whereas other financial institutions (insurance companies, pension funds, investment firms and finance companies) increased their total assets. In the euro countries, the banking sector's share of the financial sector, measured in terms of total assets, fell from 57 per cent in 2008 to less than 45 per cent in 2016.

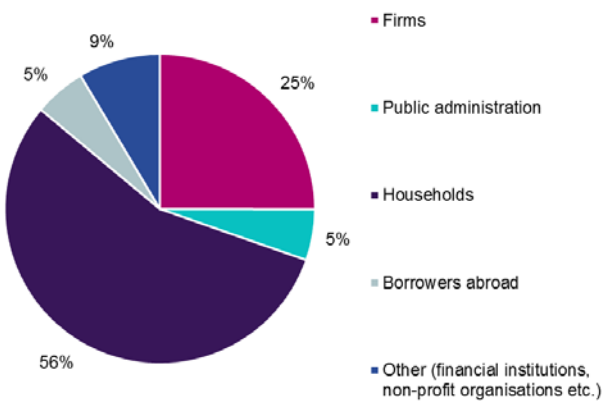
Norway's banking sector has undergone less structural change. Moreover, a number of specialised banks have been established, leaving the total number of banks in the period 2008–2016 virtually unchanged. At the end of 2017 there were 159 banks and mortgage companies in Norway. Banking accounts for the largest share of the financial sector in Norway. As in the euro countries, the banking sector in Norway has fallen as a share of the overall financial sector. This is due to a stronger increase in the total assets of other financial institutions, especially mutual funds. In the period 2008–2017 the banking sector's share of the financial sector fell from 70 to per cent to 62 per cent (chart III.3). The aggregate total assets of mutual funds have quadrupled since 2008 due to increased saving in mutual funds and rising equity prices.

III.4 Banks' and mortgage companies' loans to various sectors as at 31 December 2008



Source: Statistics Norway

III.5 Banks' and mortgage companies' loans to various sectors as at 31 December 2017



Source: Statistics Norway

NORWEGIAN BANKS' LENDING

Banks and mortgage companies in Norway account for more than 80 per cent of the financing of households and firms[36]. Firms also obtain part of their funding in the bond market (14 per cent at the end of 2017). Households borrow almost exclusively through banks[37].

Norwegian banks and mortgage companies increased their exposures to the household sector in the period 2008–2017. Loans to households account for more than half of total lending. The proportion of loans to firms has concurrently fallen (III.4 and III.5). This is because growth in household borrowing has remained at a stable high level for a long time, whereas growth in lending to firms has in parts of the period since the financial crisis been very low.

Norwegian banks have virtually no loans to the public sector – in the period 2008–2017 just below 1 per cent of their overall lending. In the case of mortgage companies, on the other hands, 14 per cent of outstanding loans were to the public sector at the end of 2017, mainly in the form of loans granted by Kommunalbanken. For banks and mortgage companies overall the figure was 5 per cent – unchanged since 2008.

Norwegian banks' exposure to foreign borrowers is also low. Loans to foreign borrowers through branches and subsidiaries accounted for 8 per cent of overall lending at the end of 2017. For mortgage companies the figure was virtually negligible (below 1 per cent). The overall share of banks' and mortgage companies' loans to foreign borrowers was stable at 5 per cent in the period 2008–2017.

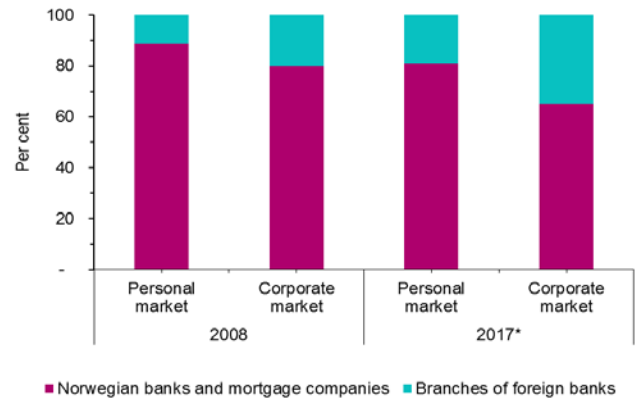
Compared with Swedish banks, Norwegian banks have limited exposure to foreign countries. At the end of 2016, 33 per cent of Swedish banks' loans were to foreign borrowers. The bulk of outstanding loans of Sweden's largest bank, Nordea Bank[38], are to foreign borrowers by way of the bank's branches and subsidiaries.

SCALE AND SIGNIFICANCE OF BRANCHES OF FOREIGN BANKS

Branches of foreign banks represent a smaller share of the overall number of banks in Norway than in many EU member states. Foreign banks' branches nonetheless hold a substantial share of the Norwegian market for loans. Three of the four largest banks are branches of foreign banks, and all branches combined account for a particularly large share of the corporate

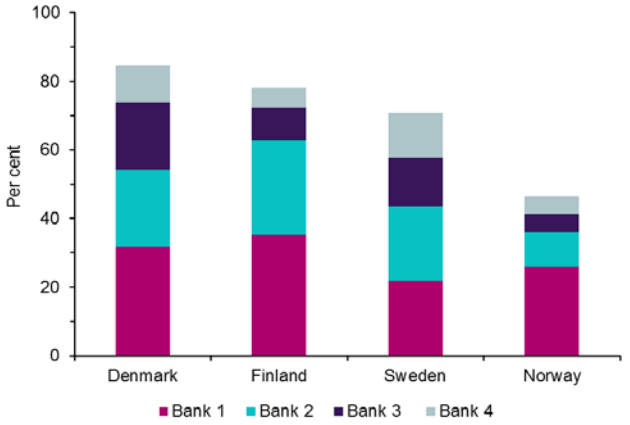
[36] Exc. state lending institutions (Housing Bank, Educational Loan Fund et al.)
[37] A large portion of loans are transferred to mortgage companies owned by the banks for the purpose of covered bond issuance.
[38] Nordea Bank has notified relocation to Finland in 2018.

III.6 Market share of loans in per cent of total loans



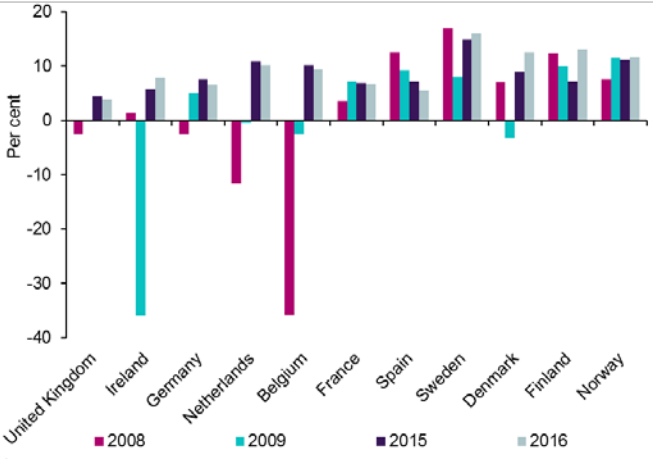
* Nordea's overall activity in Norway is included in the branches' market share in 2017. Source: Finanstilsynet

III.7 Market share of the four largest banks in the Nordic countries measured as the bank's share of all private banks' loans to borrowers, as at 31 December 2016



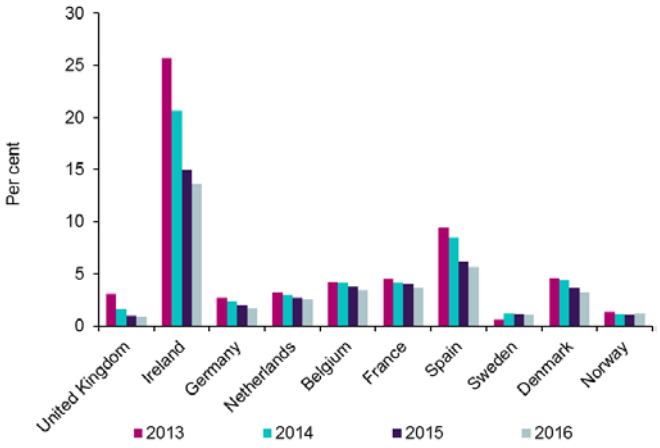
Sources: Nordic supervisory authorities, central banks and bankers' associations

III.8 Return on equity



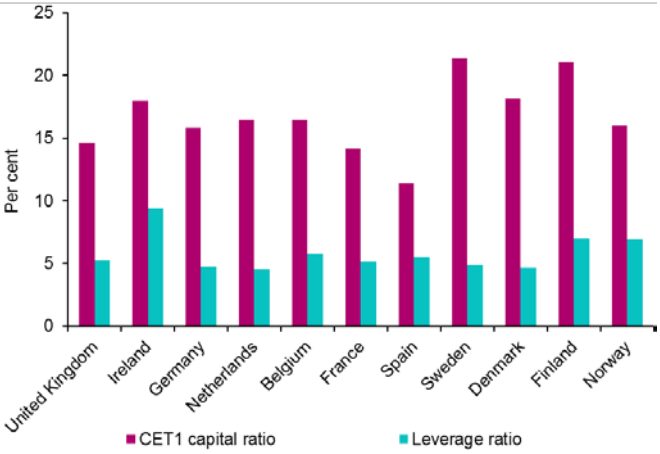
Source: IMF

III.9 Non-performing loans as a share of total loans



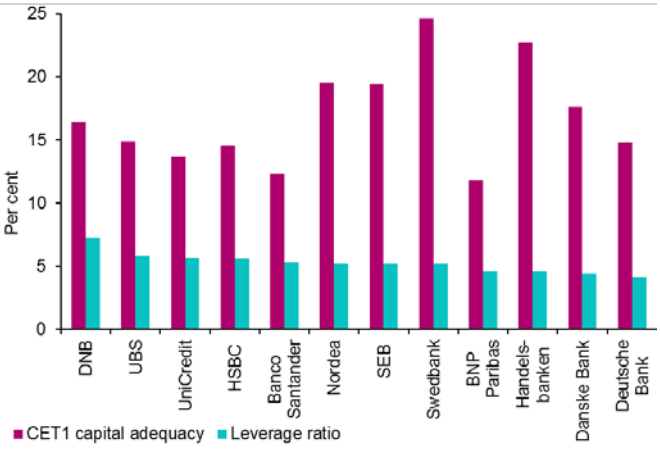
Source: IMF

III.10 CET1 capital ratio and leverage ratio as at 31 December 2017



Aggregated figures for the largest banks in each country.
Source: EBA

III.11 Large European banks' CET1 capital adequacy and leverage ratio as at 31 December 2017



Sources: The banks' annual reports

market. Their market share for loans to firms rose from 20 per cent to 35 per cent in the period 2008–2017. This large increase is due to the conversion of Nordea Bank Norway to branch status in 2017. For loans to personal borrowers, the same period saw an 8 percentage point increase to a market share of 19 per cent at the end of 2017 (chart III.6).

BANKS' MARKET CONCENTRATION

The Norwegian banking sector features a large number of small banks, but a small number of large banks hold a relatively large share of the market. The four largest banks' share of the market for loans was just under 50 per cent at the end of 2016. The four largest banks in Sweden, Denmark and Finland hold a considerably higher overall market share than the four largest banks in Norway (III.7).

TREND IN BANK'S PROFITABILITY

Profitability in the banking sector in various countries has varied widely since the financial crisis (III.8). With the exception of Denmark, the banking sector in the Nordic countries reported good profitability in the period 2008–2016.

A falling proportion of non-performing loans has contributed to improved profitability for European banks in recent years (III.9). Figures from the European Banking Authority, EBA[39], show that the proportion of non-performing loans continued to fall in 2017. Norwegian and Swedish banks have for several years shown a considerably lower level of non-performance than their counterparts in most other European countries.

BANKS' CAPITAL SITUATION

European banks' capitalisation has gradually strengthened following the introduction of the capital adequacy framework CRR / CRD IV in 2014. Banks in Norway are well capitalised compared with other European banks. This is evidenced above all by their leverage ratio[40] (chart III.10).

There was considerable variation in CET1 capital ratios among the largest European banks at the end of 2017 (chart III.11). DNB had a CET1 capital ratio of 16.4 per cent, on a par with the average of the largest European banks. On the other hand, DNB Bank had the highest leverage ratio of the largest European banks.

[39] EBA Risk Dashboard. Based on data for the largest banks in each country, 189 banks in total. Norwegian banks included are DNB Bank, SpareBank 1 SR-Bank and SpareBank 1 SMN.

[40] The leverage ratio is defined as CET1 capital in per cent of the exposure measure. The exposure measure is the sum of total assets and off-balance sheet items where conversion factors are applied.

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