FINANSTILSYNET
THE FINANCIAL SUPERVISORY
AUTHORITY OF NORWAY

Report

Risk Outlook

June 2024

Risk Outlook

Financial stability and well-functioning financial markets help ensure efficient use of society's resources, good services for consumers and other market participants and confidence in the financial system. The financial system should be able to cope with disruptions and unexpected events while carrying out its functions, thus preventing an economic downturn from being amplified. This requires sound and liquid financial institutions with good internal management and control.

The Risk Outlook report summarises Finanstilsynet's analyses and assessments of the stability of the Norwegian financial system. The report builds on Finanstilsynet's ongoing supervision of institutions and markets and provides an important basis for its work. The report is published twice a year, in June and December.

Developments in financial institutions and financial markets are discussed in more detail in the following reports from Finanstilsynet:

- Residential mortgage lending survey (in Norwegian only)
- Financial institutions' use of flexibility quotas in the lending regulations (in Norwegian only)
- Report on financial institutions' performance (in Norwegian only)
- Solvency reports for financial institutions (in Norwegian only)
- Report on bank' losses and non-performing loans (in Norwegian only)
- Report on developments in consumer loans (in Norwegian only)
- Report on alternative investment funds (in Norwegian only)
- Risk and vulnerability analysis for ICT security in the financial sector (in Norwegian only)

In addition, Finanstilsynet has published the following reports up until May 2024:

- Price survey of mutual funds offered to consumers (in Norwegian only)
- Competition in the Norwegian banking market (in Norwegian only)
- Consumers' position in the financial markets (in Norwegian only)

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SUMMARY

Global economic growth has slowed in recent years, but activity levels remain relatively high. A number of central banks raised their policy rates sharply through 2022 and 2023 in an effort to curb inflation. Inflation has declined significantly from very high levels. There are expectations of moderate growth and somewhat lower interest rates ahead, but the timing of interest rate cuts has been postponed.

The full effects of the higher interest rates have probably not yet materialised, especially in economies with a high proportion of fixed-rate loans. If inflation remains high, it will prolong the period of higher interest rates. This may pose increased challenges for households, non-financial corporations and governments with high debt levels.

Geopolitical unrest and tensions, particularly Russia's attack on Ukraine and the war in Gaza, create uncertainty, also concerning economic developments. An escalation of geopolitical tensions could have a sudden impact on commodity prices and trade restrictions, increase inflation and cause turbulence in global financial markets. Sophisticated cyberattacks may have consequences for financial stability.

Growth in the **Norwegian economy** has also abated. Unemployment is still at a low level. In the coming period, moderate growth, declining inflation and a slight rise in unemployment are expected. The interest rate level has risen, and the policy rate is expected to remain at the current level for some time.

High household debt and elevated residential and commercial property prices are still the key vulnerabilities in **the Norwegian financial system**. **Norwegian households** have a high level of debt relative to income, both in a historical perspective and compared with other OECD countries. Lower credit growth and higher nominal income growth have contributed to a certain reduction in households' debt burden over the past two years, which may indicate that this financial vulnerability is not building up further.

Households' financial resilience varies significantly. So far, there are few signs of serious debt servicing problems for the household sector overall. Low unemployment and financial buffers have contributed to dampening the effects of high inflation and rising interest rates. Households' demand may decline, and their debt servicing capacity may be impaired if economic developments prove to be weaker or interest rates higher than expected. Reduced household demand will contribute to reducing corporate earnings.

House prices have risen so far in 2024 after flattening out in 2023 and are at a historically high level measured as a share of household income. Debt levels and house prices may show increased growth if inflation and interest rates decline in the years ahead. Low housebuilding activity, high employment, rising household income and population growth in urban areas may push up house prices. Higher collateral values may contribute to further debt growth and increased vulnerabilities in the household sector.

Losses on loans to non-financial corporations are a risk factor for Norwegian banks. Profit levels in several main industries were down in 2022 and 2023. The decline in profits in a number of listed companies has continued in 2024. The weaker performance can be attributed to a combination of higher operating expenses and interest expenses and lower demand. Lower household demand, combined with continued high expenses, may amplify the challenges facing non-financial corporations.

Higher interest rates have led to a fall in the value of commercial properties and reduced earnings in commercial real estate (CRE) companies. A number of CRE companies have high debt, and a substantial share of their debt matures and must be refinanced in the coming years. The share of debt in companies with weak interest servicing capacity has risen. The yield on commercial real estate is still low compared with the interest rate on risk-free investments. If risk premiums normalise and

interest rates remain high, the share of high-risk debt may increase further and elevate banks' credit risk.

Relatively high activity and low unemployment have helped ensure low credit losses in **Norwegian banks**. Combined with an increase in net interest income, this has led to very high profits in this industry. Banks' net interest income must be expected to decline somewhat again, and loan losses may increase. This could put a damper on Norwegian banks' profitability.

The banks' record-high profits have led to questions about whether there is sufficient competition. In Finanstilsynet's opinion, there is effective competition in the Norwegian banking market. At the same time, Finanstilsynet has proposed measures that can help strengthen the position of consumers and has been commissioned to review some of these. In an advisory opinion, the EFTA Court has pointed out that contractual terms for interest rate adjustments must be clear and concise and enable consumers to understand the functioning of the method used for calculating interest rate adjustments. Finanstilsynet expects the banks to review their practices in light of this opinion.

In recent years, the share of Norwegian banks' loans with a significant increase in credit risk has risen, particularly in small banks. Total non-performing loans have been stable over the past year, but there has been an increase in the share of loans on which payments are up to 31 days past due. At the same time, banks' impairment losses on loans with heightened credit risk (provision rate) have declined. It is important that banks take sufficient account of the losses that may arise in the future.

Financial crises can generate significant economic costs. Banks' ability to bear risk and provide new loans to creditworthy customers during downturns requires that they have sufficient equity to absorb substantial loan losses. Over the past couple of years, the improvement in banks' solvency position has subsided. Norwegian banks should meet regulatory requirements by an ample margin.

The use of so-called **macroprudential measures** should help strengthen the resilience of the financial system. In spring 2024, Finanstilsynet assessed the design and level of the systemic risk buffer. Furthermore, Finanstilsynet has provided advice on which financial institutions should be regarded as systemically important and has prepared a consultation document with proposals for the implementation of expected changes to the Capital Requirements Regulation (CRR3). In the consultation document, an assessment has also been made of risk weights for residential and commercial mortgages. In addition, Finanstilsynet has set entity-specific capital requirements (Pillar 2 requirements) for a number of banks.

Finanstilsynet's annual stress test of Norwegian banks shows that the banks on average are financially sound, but that their capital adequacy levels may deteriorate during a severe downturn. In the stress scenario, the intensification of geopolitical conflicts leads to higher inflation and interest rates both in Norway and internationally, a decline in GDP, higher unemployment and a fall in residential and commercial property prices. Banks' loan losses rise, particularly on corporate loans but also on loans to personal customers. Losses are high but significantly lower than the banks' losses during the banking crisis in the early 1990s.

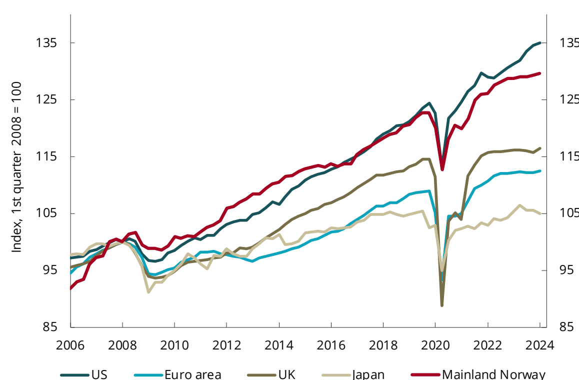
Norwegian life insurers and pension funds have strong profit and solvency levels. The higher interest rate level has also improved life insurers' solvency position. An increase in share income and interest income helped raise life insurers' returns in 2023 and the first quarter of 2024. Life insurers have a significant share of their investments in real estate-related equities and loans. Finanstilsynet expects the pension institutions' capital planning to factor in the risk in the real estate market. For **non-life insurers**, the increased scope and severity of weather and natural disasters, in addition to higher claims for own account under reinsurance contracts, have led to weaker earnings and heightened risk.

ECONOMIC DEVELOPMENTS AND RISKS

Weaker economic growth, soft landing expected

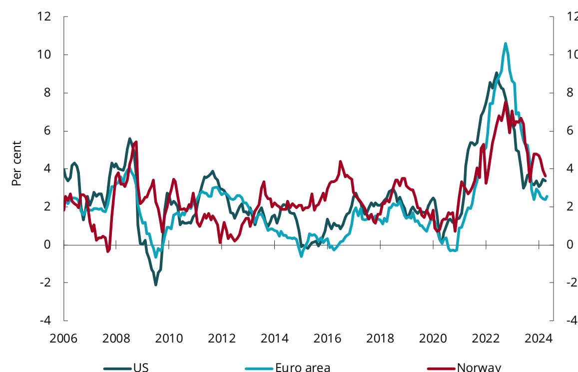
Global economic growth has slowed during the last couple of years (chart 1) but has been higher than several forecasters expected. Demand from both the public and private sector has contributed to supporting the overall activity level. At the same time, supply chains have largely normalised after a challenging period, and inflation has come down significantly in most countries. The IMF estimates global GDP growth at 3.2 per cent in both 2024 and 2025 and a gradual decrease in inflation.

Chart 1 Gross domestic product



Last observation: first quarter 2024. Source: LSEG Datastream

Chart 2 Inflation



Last observation: April 2024 for the US and Norway and May 2024 for the euro area. Source: LSEG Datastream

Growth in the Norwegian economy has abated over the past year. Unemployment has risen somewhat but is still low. Key forecasters expect low activity growth, a further decline in inflation and a moderate increase in unemployment. In May 2024, Norges Bank decided to keep its policy rate unchanged at 4.5 per cent and assessed that the policy rate is likely to remain at this level for some time ahead.

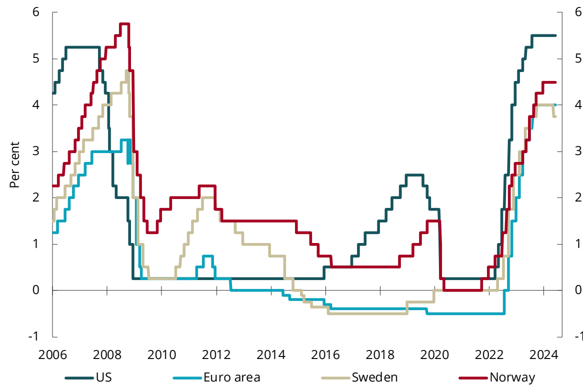
The interest rate level could remain high

In most countries, inflation has fallen significantly from the peak in 2023, but the rate of decline has levelled off somewhat in 2024 (chart 2). In general, goods inflation has shown the greatest reduction, while there has been a less pronounced fall in services inflation in many countries. Demands for higher wages in several countries may elevate prices in labour-intensive industries, which include most service-producing industries. The IMF estimates that global consumer price inflation will decline from 6.8 per cent in 2023 to 5.9 per cent in 2024 and 4.5 per cent in 2025.

In order to curb inflationary pressures, central banks in several countries have implemented significant policy rate hikes (chart 3). The full effects of the higher interest rates have probably not yet materi-alised in the economies. Especially economies with a high share of fixed-rate loans in the household and corporate sectors are thus far less affected by the interest rate hikes.

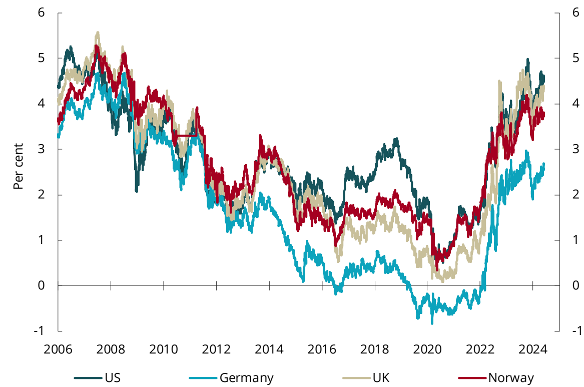
The financial position of households and firms could be further impaired in the future. The expected timing of central banks' policy rate cuts has been postponed. This is also reflected in money market rates (chart 4). If price growth remains above set inflation targets, the period of higher interest rates could be extended. This could contribute to dampening economic activity and have an adverse effect on the labour market.

Chart 3 Policy rates



For the US, the upper limit in the target interval is shown. For the euro area, the deposit rate is shown, which is the lowest of the three official policy rates. Source: LSEG Datastream

Chart 4 10-year government bond yields

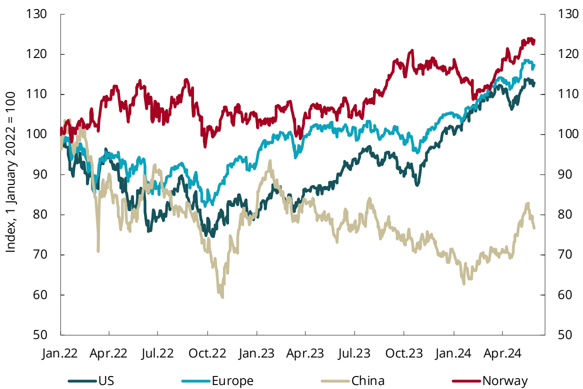


Source: LSEG Datastream

Geopolitical risks may trigger substantial repricing of financial products

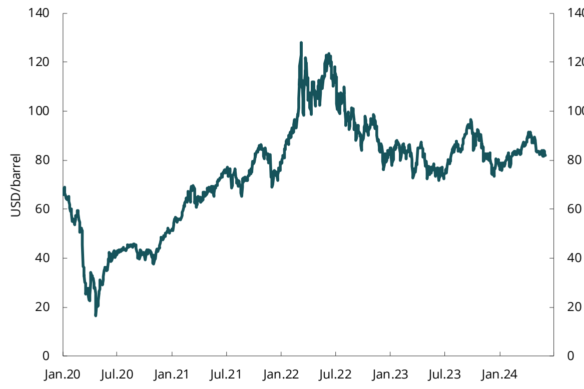
The stock markets have generally shown a positive development so far in 2024 (chart 5). Price fluctuations have largely been driven by changes in market expectations of interest rate cuts and developments in and expectations regarding the technology and energy sectors. The real estate sector is struggling in many countries. The Chinese stock market has shown a weak trend in recent years as a result of reduced economic growth and major challenges in the commercial real estate market, although developments in this region have also been positive so far in 2024. Geopolitical unrest and conflicts in the Middle East, coupled with production cuts and reduced oil production, contributed to a moderate rise in oil prices in the first half of 2024 (chart 6).

Chart 5 Equities, total return



MSCI indices. Source: LSEG Datastream

Chart 6 Oil price, Brent spot



Source: LSEG Datastream

Owing to significant geopolitical and economic uncertainty, forecasts for future economic growth remain uncertain. An escalation of ongoing wars or geopolitical tensions could lead to price drops in the securities and real estate markets, greater uncertainty and weaker growth prospects in many economies. Geopolitical risks affect the pricing of financial assets, but in several markets, the pricing largely reflects expectations of reduced inflation and lower interest rates. If disruptions in distribution chains or increasing commodity prices were to once again put upward pressure on inflation, expectations of future interest rates could also be raised. The IMF emphasises that unexpected inflation data or signals from central banks may suddenly change investor sentiment and prompt strong corrections in the financial markets.

Risk of adverse ICT incidents

Increased digitalisation and technological advances, for instance within artificial intelligence, provide benefits for society in the form of enhanced productivity and economic growth while expanding criminals' scope of action. Both organised criminals pursuing financial gain and state actors are involved in cyberattacks. Increased geopolitical tensions amplify this threat.

Serious failures in ICT systems could ultimately threaten financial stability and affect civil protection, whether the failure is caused by crimes committed to obtain a financial gain, targeted attacks by state actors or operational disruptions. Close interconnections within the financial system raise the risk that individual incidents will also affect other market players and services.

Digital resilience in the financial sector

Digital resilience in the financial sector is important for ensuring trust in the financial system. The introduction of the regulation on digital operational resilience in the financial sector (DORA), which will apply in the EU from 17 January 2025, will entail more comprehensive and detailed requirements for institutions in the Norwegian financial sector, including subcontractors. The purpose is to strengthen operational resilience and promote financial stability, customer protection and the safeguarding of critical functions in society.

Challenges in the commercial real estate sector in many countries

Prices of commercial properties have fallen in many countries as a result of higher interest rates and lower demand, caused by factors such as increased online shopping and remote working. With the current interest rate level, the expected yield on commercial real estate is still low in many regions, which could indicate a further decline in prices if the interest rate level remains high. The IMF points out that some banks have a very high exposure to commercial real estate, and that the volume of non-performing loans to this sector is expected to increase.

In the US, parts of the commercial real estate market are facing serious challenges, and many commercial properties are completely or partially empty. This has caused problems for several US regional banks. State regulators took over and closed the Philadelphia-based Republic First Bancorp in April this year after negotiations with investors regarding the funding of the bank failed.

There is particularly great concern linked to the commercial real estate sector in China, where several large companies are in default or bankrupt. This creates problems for banks and financial institutions that are heavily exposed to the real estate sector and have extensive property portfolios. According to the IMF, the crisis in the Chinese property market, if it worsens, could dampen growth in the global economy and contribute to financial instability.

HOUSEHOLDS

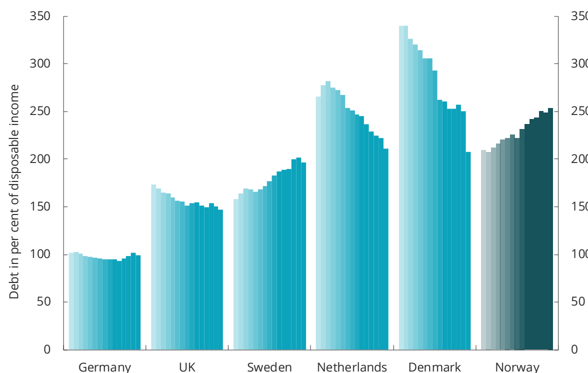
Norwegian households are vulnerable to higher interest rates

The debt burden[1] of Norwegian households is high, both in historical terms and compared with other OECD countries. While households in some countries reduced their debt burden in the wake of the international financial crisis in 2008–2009, the household debt burden in Norway continued to rise (chart 7). Since the late 1990s, the debt burden of Norwegian households has risen markedly but has declined somewhat since year-end 2021 (chart 8). The reduction is due to lower credit growth and a more rapid increase in households' nominal income during a period of high inflation. At the end of the first quarter of 2024, households' average debt burden was approximately 235 per cent.

Finanstilsynet's residential mortgage lending survey in autumn 2023 showed a decline in the share of new residential mortgages taken out by borrowers with very high debt-to-income (DTI) ratios. Nevertheless, the debt level remains high.

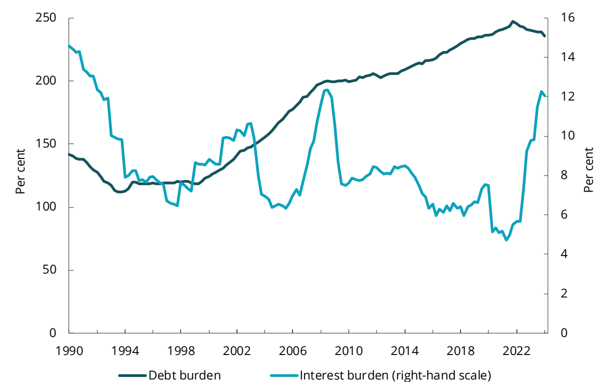
According to Norges Bank's loan survey for the first quarter of 2024, household credit demand fell slightly in the first quarter. Banks have reported lower demand for residential mortgages over the past three quarters but expect no further decline in the second quarter of 2024. Credit standards for households were approximately unchanged in the first quarter, and the banks expect no change in the second quarter.

Chart 7 Household debt burden in selected countries. 2008–2022



Source: OECD

Chart 8 Household debt burden and interest burden



Last observation: first quarter 2024. Sources: Statistics Norway and Finanstilsynet

Households' interest burden[2] has increased significantly. From the second quarter of 2021 to the first quarter of 2024, households' average interest burden rose from a historically low level of 4.8 per cent to 12.1 per cent. Only a small proportion of Norwegian household debt carries fixed interest rates.[3] Higher interest rates are therefore quickly reflected in rising interest expenses. Many Norwegian households have annuity loans, which means that the liquidity effect of interest rate increases is partially offset by reduced instalment payments.

[1] Measured as debt in per cent of disposable income.

[2] Measured as interest expenses in per cent of disposable income before deducting interest expenses.

[3] At year-end 2023, 96.0 per cent of households' loans from banks, mortgage companies, finance companies and state lending institutions (excluding the Norwegian Public Service Pension Fund) had no or short fixed-rate periods (up to three months).

Household debt and interest burden under stress test assumptions

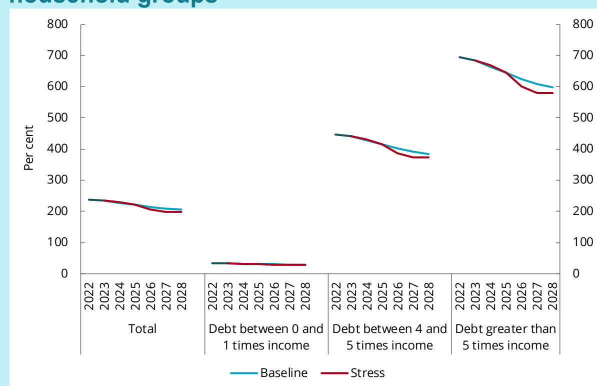
The effect of higher interest rates on households' interest burden can be illustrated by an example based on average income, wealth and debt for various household groups.

The calculations are based on the assumption that developments in total household income and debt are the same as in the stress test of banks' capital adequacy. All household groups are assumed to experience the same relative increase in income and debt and the same absolute change in interest rates (measured in percentage points). It is also assumed that there is no migration in or out of household groups during the projection period.

The average debt burden (debt in per cent of after-tax income) for households combined is estimated at 236 per cent at year-end 2023.[4] If developments in the Norwegian economy are in line with the baseline scenario, the overall household debt burden will decline to 205 per cent at the end of the projection period in 2028 (chart 9). In the stress scenario, the overall household debt burden is estimated to be reduced to 199 per cent in 2027 and 2028.

For households with debt greater than five times after-tax income, the average debt burden decreases from 685 per cent at year-end 2023 to 597 per cent in 2028 in the baseline scenario. In the stress scenario, the debt burden is down to 578 per cent in 2028. This group represented 11 per cent of Norwegian households in 2022 and accounted for 32 per cent of total household debt.

Chart 9 Developments in the debt burden, selected household groups



Sources: Statistics Norway and Finanstilsynet

Chart 10 Developments in the interest burden, selected household groups

Sources: Statistics Norway and Finanstilsynet

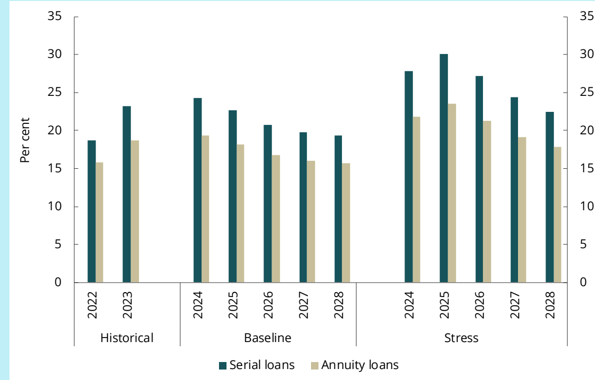
If interest rates follow the path outlined in the baseline scenario, the average interest burden for households combined increases from 6 per cent in 2022 to 11 per cent in 2024 and thereafter declines to 8 per cent at the end of the projection period. In the stress scenario, the interest burden increases to 16 per cent in 2025 and thereafter declines to 11 per cent in 2028.

For households with debt greater than five times after-tax income, the average interest burden increases from 24 per cent in 2023 to 26 per cent in 2024 and thereafter declines to 19 per cent in 2028. In the stress scenario, the interest burden of households with debt greater than five times after-tax income increases to 35 per cent in 2025 (i.e. 9 percentage points higher than the peak level in the baseline scenario) and declines to 26 per cent in 2028 (chart 10).

A large share of the households have low or no debt and will therefore be little affected by higher lending rates. In 2022, 28 per cent of Norwegian households had a level of debt below after-tax income. These households' debt accounted for 4 per cent of total household debt in 2022.

[4] The figures presented here do not include non-profit organisations, and dividends received are not deducted. This is in contrast to the figures presented in chart 8. Chart 8 also uses disposable income, as defined in the national accounts, and domestic loan debt (C2). These calculations use 'after-tax income', which means that interest expenses are used as an estimate of housing services, and household debt, as reported in the income tax return. The estimated values for the debt and interest burden in this box therefore deviate somewhat from those found in chart 8.

Chart 11 Debt service ratio in the first year for loans with a 20-year repayment period



Sources: Statistics Norway and Finanstilsynet

Households' debt service ratio (the share of after-tax income used to pay interest expenses and instalments) depends on the interest rate level, the repayment period and whether the loan is an annuity loan or a serial loan. Annuity loans are widely used in the Norwegian market. Annuity loans are repaid by the borrower in equal amounts (the sum of interest expenses and instalments) at regular intervals throughout the repayment period, provided that the interest rate remains unchanged. In the case of serial loans, the borrower pays interest on the remaining loan balance and equal instalments over the life of the loan, whereby repayment amounts are reduced during the repayment period.

For a serial loan corresponding to households' average debt raised in 2023 with a 20-year repayment period and an average interest rate, the debt service ratio in the first year will be 23 per cent for a household with average after-tax income (chart 11). For an annuity loan with the same interest rate and repayment period, the debt service ratio will be 19 per cent the first year. In the stress scenario, the debt service ratio rises in the first year to 30 per cent for a serial loan and 24 per cent for an annuity loan raised in 2025 (both equal to households' average debt in 2025 and taken out by a household with average after-tax income).

Loan default and payment problems in households

So far, there are few signs of serious debt servicing problems for the Norwegian household sector overall. The share of non-performing loans in the personal customer market has increased in recent years, but is still below pre-pandemic levels, and banks' loan losses remain low. The volume of non-performing loans for collection by debt collection agencies has also been fairly stable. Twelve-month growth in the total principal in debt collection cases where the debtor is a private individual increased from 4 per cent in June 2023 to 5 per cent in December 2023.

Statistics Norway and Norges Bank estimate that inflation will fall towards a level close to the central bank's target of 2.0 per cent in 2027, while the interest rate level is expected to decline by approximately 1.5 percentage points. Unemployment is expected to remain low. Experience shows that such forecasts are highly uncertain.

Norwegian households are affected to varying degrees by the higher interest rate level. Their financial resilience also varies. Some households have narrow margins between income and expenses and limited buffers to draw on. These households will be particularly vulnerable in the event of a loss of income, higher interest rates or a fall in house prices.

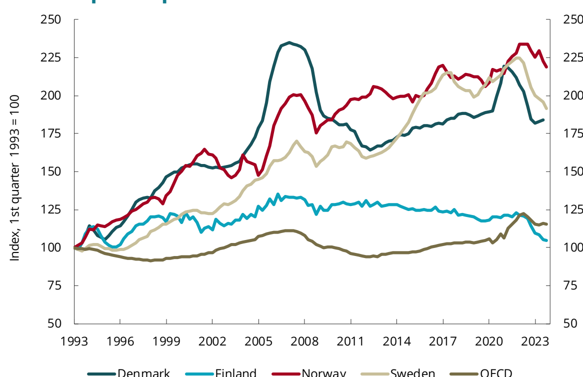
House prices on the rise

Developments in household debt and in house prices are closely interconnected. When house prices rise, many households will have to take out larger loans to finance home purchases. At the same time, the value of their collateral increases, both for first-time buyers and for households that already own a

home. This could trigger the mutually reinforcing effect between house price inflation and increasing household debt. Correspondingly, such a spiral could amplify an economic downturn.

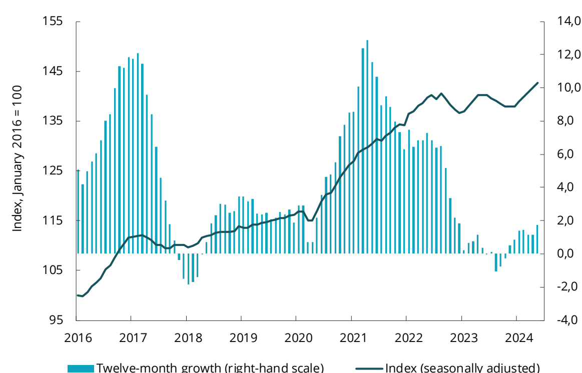
For a long period, house prices in Norway have risen at a faster pace than households' disposable income (chart 12). The ratio of house prices to disposable income per capita in Norway was at its highest in 2022 but decreased somewhat in 2023. This is because disposable household income increased throughout the year, while house prices flattened out. Prices of existing homes have risen thus far in 2024, and in May, the twelve-month growth in house prices was 1.7 per cent on a national basis (chart 13).

Chart 12 House prices as a share of disposable income per capita



Last observation: fourth quarter 2023. For Denmark, the last observation is third quarter 2023. Source: OECD

Chart 13 House prices in Norway



Last observation: May 2024. Sources: Real Estate Norway, Eiendomsverdi and Finn.no

Although sales of existing homes remained high in 2023, the number of unsold homes increased throughout the year and contributed to a weak trend in house prices. After a decline at the beginning of 2024, there was once again a significant increase in the number of unsold homes in May. At the same time, both sales of new homes and housing starts declined significantly last year and levelled off at a low level in the first four months of 2024.

Both Statistics Norway and Norges Bank expect low housebuilding activity and a gradual reduction in interest rates to contribute to raising house prices in the coming years. Statistics Norway estimates that house prices will rise by an average of 2.5 per cent each year until 2027 but emphasises that population growth and high interest rates make the forecasts for house price developments uncertain. Norges Bank expects house prices to rise moderately this year and increase by close to 7 per cent on average each year from 2025 to 2027.

Future developments in house prices are uncertain. There could be a further increase in debt levels and house prices if inflation and interest rates decline in the years ahead. Low housebuilding activity in the recent period, high employment, rising household income due to higher wage growth and population growth in urban areas may push up house prices. This may contribute to further debt growth and increased vulnerabilities in the household sector.

On the other hand, house prices are still at a historically high level as a share of household income, and households' debt burden is high. This indicates that there is risk of a significant fall in house prices, especially in the event of a sharp downturn.

NON-FINANCIAL CORPORATIONS

Weaker results in a number of industries

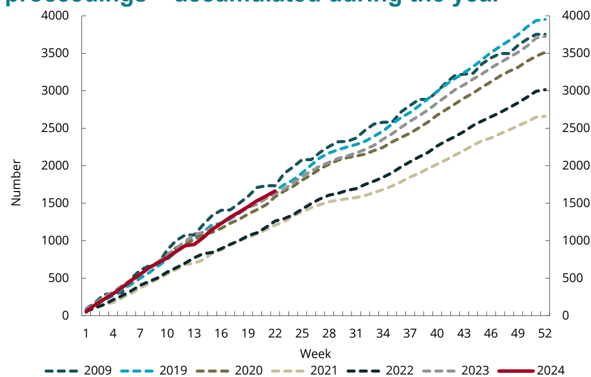
Losses on loans to non-financial corporations represent the greatest risk for most Norwegian banks. Developments in profitability and solvency in these corporations are therefore important. As mentioned in Risk Outlook December 2023, there was a decline in profits in a number of main industries in 2022 and 2023. Listed companies' accounts for the first quarter of 2024 show that this trend has continued. The weaker performance can often be attributed to a combination of higher operating expenses and interest expenses and lower demand.

According to the latest economic barometer presented by NHO – Confederation of Norwegian Enterprise, there is a majority of negative responses regarding the market outlook in most industries. Figures from Norges Bank's regional network show a similar picture. Apart from oil-related industries and services, enterprises expect a decline in activity.

The number of bankruptcies is back at pre-pandemic levels

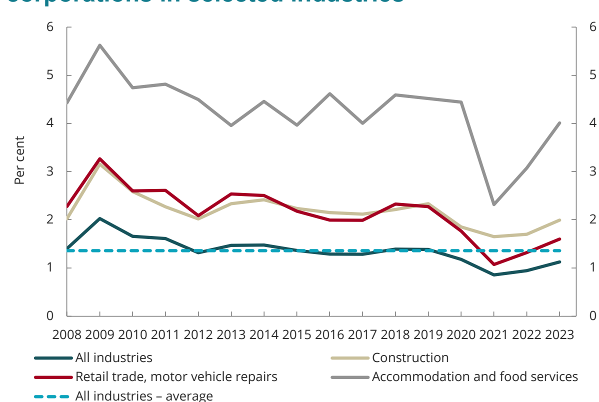
From January to May 2024, 1 662 bankruptcy proceedings were initiated in non-financial corporations, which is on a level with the corresponding period in 2019 and last year, but 40 per cent higher than in 2021 (chart 14). The overall bankruptcy rate[5] for non-financial corporations has increased over the past two years. In 2023, however, it was below the average level in the period 2008 to 2023 (chart 15).

Chart 14 Number of initiated corporate bankruptcy proceedings – accumulated during the year



Source: Statistics Norway

Chart 15 Bankruptcy rate for non-financial corporations in selected industries



Norwegian private and public limited companies. The bankruptcy rate is the number of corporate bankruptcies divided by the number of private and public limited companies that have submitted annual accounts.
Sources: Statistics Norway and Finanstilsynet

60 per cent of the bankruptcies in non-financial corporations in the period 2008 to 2023 were in the 'retail trade', 'accommodation and food services' and 'construction' industries. For these three industries, the bankruptcy rate has increased over the past two years but is still lower than the average level in the period 2008 to 2023. The increase over the past two years indicates that the state of the Norwegian economy has deteriorated somewhat, and that credit risk has risen in some of the banks' corporate portfolios.

[5] The bankruptcy rate is the number of bankruptcies divided by the number of private and public limited companies that have submitted annual accounts.

Continued challenges within commercial real estate

Interest rate developments and interest servicing capacity

Since the beginning of 2022, the interest rate level for CRE loans has risen by just over 4 percentage points. In addition, the credit risk premium has increased.[6] Many CRE companies have fixed interest rates on parts of their interest-bearing debt, which helps dampen the effect of higher interest rates for a certain period.

Interest expenses for listed companies engaged in property rental and management ('property rental companies') increased from approximately 2.2 per cent of interest-bearing debt in 2021 to 4.2 per cent in 2023.[7] If the interest rate level follows Norges Bank's most recent interest rate path, interest expenses will increase further in 2024 before falling somewhat towards the end of 2027. In 2023, listed property rental companies' interest expenses came to approximately 60 per cent of the companies' net rental income, up from 35 per cent in 2021. If rental income is adjusted in accordance with changes in the consumer price index, interest expenses in the years 2024–2027 will on average represent approximately 60 per cent of net rental income. This limits the CRE companies' scope of action.

The accounts of *non-listed* companies for 2023 are not yet publicly available. In recent years, non-listed CRE companies' interest expenses as a share of interest-bearing debt have on average been about 1 to 1.5 percentage points higher than for listed companies. It is common also among non-listed CRE companies to fix the interest rate on parts of their interest-bearing debt. However, available information indicates that the fixed-rate ratio is generally lower, and that the fixed-rate periods are shorter than for listed CRE companies. Many of the non-listed companies also have to pay higher credit risk premiums.

Interest coverage ratio (ICR)

The listed property rental companies' IRE, i.e. net rental income divided by net interest expenses, was relatively stable at around 2.7 in the years prior to the interest rate increases. In 2022, however, the indicator declined to approximately 2.1 and further to 1.8 in 2023. If interest rate developments roughly follow Norges Bank's most recent interest rate path and rental income is adjusted in accordance with changes in the consumer price index, the ICR for listed property rental companies combined will decrease to approximately 1.6 in 2024 and thereafter gradually increase to 1.9 in 2027.[8]

Based on the same technical assumptions, there will be a somewhat larger decline in the ICR for non-listed property rental companies. This is a slightly more negative trend than what was presented in Risk Outlook December 2023. In the December issue, it was estimated that about 20 per cent of listed and unlisted CRE companies' total interest-bearing debt is in companies where net rental income does not cover net interest expenses. This is almost three times as high as in the final years prior to the interest rate increases.[9]

Rental income

Most leases are adjusted annually in step with changes in the consumer price index. In principle, this helps safeguard future rental income when interest expenses increase. However, lessors are dependent on the tenants' payment ability and willingness to extend the leases.

It cannot be ruled out that the payment ability of some tenants will be impaired in the future, and that commercial properties will have to be rented out to new tenants on less favourable terms or, at the worst, that the properties will be left completely or partially vacant. There are indications that tenants

[6] See, for example, the UNION Bank Survey Q2 2024 (in Norwegian only).
[7] *Recreate ASA*, which was previously listed but declared bankrupt as a result of failing debt servicing capacity, is not included in the sample.
[8] The calculation is based on unchanged credit risk premiums and unchanged debt volumes and on the assumption that none of the original fixed-rate contracts will expire over the next four years.
[9] See chart 49 in Risk Outlook December 2023.

are setting ever stricter requirements when renting premises, and that the costs of adapting the premises to the tenants' requirements have increased.[10] In a weak market with increasing construction costs, the lessor may have to cover part of the renovation costs.

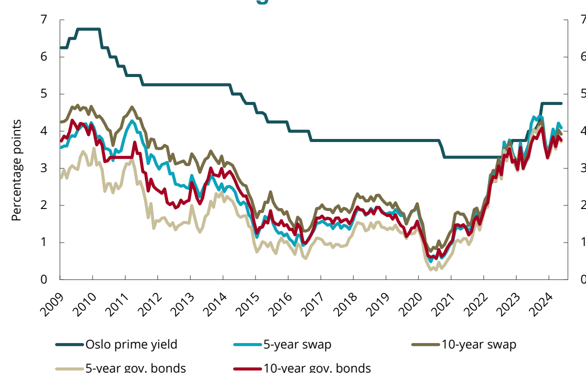
The share of renegotiated leases was record high in 2023. In the short term, this share is expected to remain high. Tenants' search for new office premises also starts earlier than before.[11] Some of the renegotiated leases are valid from the current year or later. Further, several tenants are reviewing their use of office space in combination with remote working, which may cause changes in future rental needs. Overall, this contributes to uncertainty about the industry's future profitability.[12, 13]

Employment growth in mainland Norway has an impact on demand for office space. According to Norges Bank's latest forecast, growth in total employment will be around 0.5 per cent over the next two to three years and increase to just under 1 per cent in 2027. The employment of office workers has normally been less cyclically sensitive than the employment of workers in other industries.[14]

Commercial property values and yield

Yield, i.e. net rental income divided by the estimated value of the property, should over time be higher than the return on virtually risk-free investments. This was the case for the most attractive office properties in Oslo ('Oslo prime') in the period from the end of the financial crisis to the interest rate hikes implemented from year-end 2021 (chart 16). Over the past two years, the yield for this property segment has roughly equalled the return achieved by investing in virtually risk-free Norwegian government bonds with long maturities.

Chart 16 Yield and long-term interest rates



Sources: Akershus Eiendom and LSEG Datastream

The yield is an unobservable variable that is subject to considerable uncertainty.[15] High interest rates and reduced demand for office space could mean that properties must be sold at prices below book value.[16] For less attractive properties, there may be few or no investors willing to inject new equity or buy the property. For lenders, this could entail an increased risk of loan losses.

[10] According to DNB Næringsmegling (in Norwegian only) , the renovation costs incurred when taking in new tenants have increased by 40 per cent since 2021 and correspond to an average of three to four years' rental income. Renovation costs related to existing tenants are about half of this and are reported to grow at a somewhat slower rate.
[11] Renegotiated leases represented 65 per cent of total leases in 2023, up from an average of 34 per cent in the period 2003–2022. In central Oslo, the proportion of renegotiated contracts was 84 per cent in 2023. Source: Akershus Eiendom, Innsyn og Utsyn, March 2024.
[12] See article by the architectural firm Mellomrom in the business daily DN on 14 April 2024 (in Norwegian only).
[13] As an example, Equinor renegotiated a lease at year-end 2022, whereby its office space was reduced by just over 25 per cent and the rental price per square metre was reduced by close to 20 per cent. In return, Equinor extended the lease from 5 to 15 years and paid compensation of NOK 407 million to the lessor. However, the lessor incurred significant renovation costs for the premises that were vacated (Source: Finansavisen, 27 November 2022).
[14] Cf., for example, Akershus Eiendom.
[15] The yield is observable only at the moment a real estate transaction is carried out. See 'Valuation of commercial real estate' on pages 34–35 in Risk Outlook December 2023 for a more detailed description of yield and valuation.
[16] As an example, the 'Equinor building' (see footnote 15) was recently sold for NOK 2.84 billion, which is about NOK 1.1 billion, or almost 30 per cent, lower than the purchase price in 2016. The price reduction is probably far greater if measured from the unobservable peak price prior to the interest rate hikes in 2022.

There was a significantly lower transaction volume in the commercial real estate market in 2023 compared with the preceding years. So far in 2024, the transaction volume is about half the 2023 volume. The low transaction volume makes valuations particularly challenging. Some CRE companies are struggling to obtain debt financing. Due to higher yield requirements, life insurers wrote down property values in 2023. Overall, there has been an increase in banks' impairment losses on CRE loans in recent years, but the level is still very low as a share of total CRE lending (accounting for about one-third of corporate lending).

NORWEGIAN BANKS

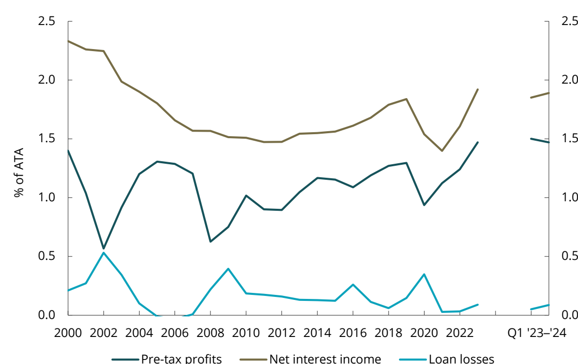
Norwegian banks are profitable and financially sound

Norwegian banks' profitability is at a historically high level (chart 17). This is primarily attributable to an increase in net interest income, which is at its highest level since 2003, measured as a share of total assets. This development is largely driven by the sharp rise in interest rates since 2021. Lending rates have increased more than deposit rates during this period, which has helped boost net interest income. The increase in net interest income slowed somewhat in the first quarter of 2024 for the banks combined, but this reflects developments in a small number of banks. For most banks, net interest income has continued to rise. The banks' loan losses have increased somewhat but are still at a low level for the banks combined.

Pre-tax profits in the first quarter of 2024 declined slightly compared with the first quarter of 2023. Prospects of a slower rise in net interest income as a result of more subdued credit growth, a more stable interest rate level and increased competition for deposit customers, as well as somewhat higher loan losses, may cause a dip in banks' profitability in the period ahead.

Parallel to the significant increase in Norwegian households' interest burden, the banks have recorded record-high profits and widening interest margins. In Finanstilsynet's opinion, there is effective competition in the Norwegian banking market. At the same time, some aspects of the market restrict customer mobility and thus competition[17]. Finanstilsynet has been commissioned to assess certain measures that can strengthen consumers' position in the financial markets[18]. In an advisory opinion on variable interest rate mortgages in Iceland, the EFTA Court found that the Mortgage Credit Directive and the Unfair Contract Terms Directive require that contractual terms on interest rate adjustments must be intelligible and enable consumers to understand the method used for calculating such adjustments[19]. Finanstilsynet expects the banks to review their practices in light of this opinion.

Chart 17 Profitability of Norwegian banks



Source: Finanstilsynet

[17] See Finanstilsynet's report on competition in the Norwegian banking market and subsequent assignment letter (in Norwegian only).
[18] See Finanstilsynet's report on consumers' position in the financial markets (in Norwegian only).
[19] See press release from the EFTA Court dated 23 May 2024.

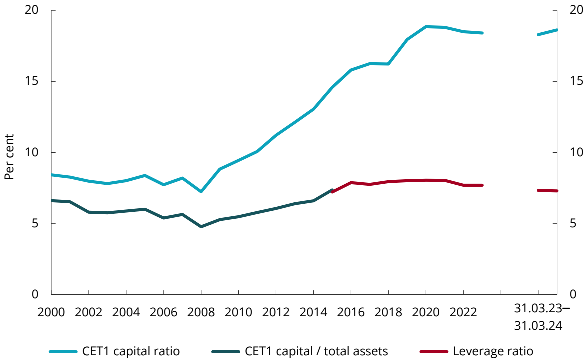
Norwegian banks meet current capital requirements.[20] The margin to the requirements varies, but the large banks generally have narrower margins to the capital requirements than small and medium-sized banks. The common equity Tier 1 (CET1) capital ratio increased significantly in the period 2008 to 2020 (chart 18). Over the past couple of years, Norwegian banks CET1 capital ratio and leverage ratio have declined somewhat, although there was a slight increase in the CET1 capital ratio during the first quarter of this year.

Calculations of CET1 capital ratios are sensitive to the underlying assumptions. The individual bank's basis for calculation depends both on the composition of the bank's loan portfolio and on the risk weights used for the various exposures. The risk weights are either based on fixed rates for different types of loans (the standardised approach) or on the bank's own estimates of probability of default (PD) and loss given default (LGD) (internal ratings-based approach, IRB). The ratio of risk-weighted assets to total assets shows – somewhat simplified – average risk weights for all the banks' loans (chart 19)[21]. For the IRB banks, there has been a significant reduction in this ratio in recent years, while it has been more stable for the banks using the standardised approach.

There was a clear decline in this ratio for the IRB banks from 2018 to 2019 and a somewhat smaller drop for the banks using the standardised approach. This is mainly due to a reduction in risk-weighted assets, which must be seen in light of the regulatory easing during this period.[22] The increased difference between IRB banks and the banks using the standardised approach in recent years can be explained by stronger growth in the IRB banks' total assets.

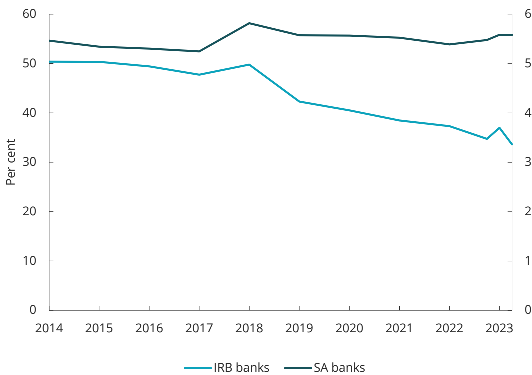
The significant decline contrasts with persistent and increasing vulnerabilities in the Norwegian economy and considerable uncertainty surrounding future economic developments.

Chart 18 Capital adequacy of Norwegian banks



The chart shows CET1 capital / total assets up to and including 31 December 2015 and the leverage ratio as from 31 December 2015. Both are measures of non-risk-weighted capital adequacy.
Source: Finanstilsynet

Chart 19 Risk-weighted assets as a share of total assets



The banks are divided into groups based on whether or not they are authorised to use the IRB approach. IRB banks use the standardised approach for some portfolios, but this is not reflected here.
Source: Finanstilsynet

Somewhat higher credit risk in the banks

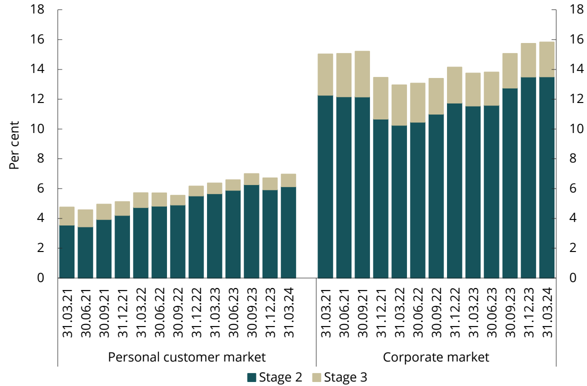
In recent years, the proportion of banks' lending with a significant increase in credit risk (stage 2 and stage 3) has increased for loans to both personal customers and firms.[23] The share of banks' loans to the personal customer market with a significant increase in credit risk rose from 4.8 per cent at end-

[20]See Finanstilsynet's Solvency report for financial institutions etc. (in Norwegian only).
[21] The increase from 2017 to 2018 is due to the requirement for full consolidation of holdings in cooperating groups as from and including 2018, which had the most pronounced effect on the group of small banks.
[22] Removal of the Basel I floor and the SME supporting factor.
[23] In the calculation of expected losses according to the accounting standard IFRS 9, the banks must sort each loan into one of three stages. Stage 1 includes loans that have not seen a significant increase in credit risk. Loans that have seen a significant increase in credit risk since initial recognition must be sorted in stage 2. When the credit risk has increased so much that the loan is considered to be credit impaired, the loan must be classified in stage 3.

June 2021 to 7.0 per cent at end-March 2024 (chart 20). In the corporate market, the share of loans with a significant increase in credit risk rose to 15.8 per cent at end-March 2024. While the share of stage 2 loans has increased in both the personal customer and corporate markets, the share of stage 3 loans has decreased somewhat.

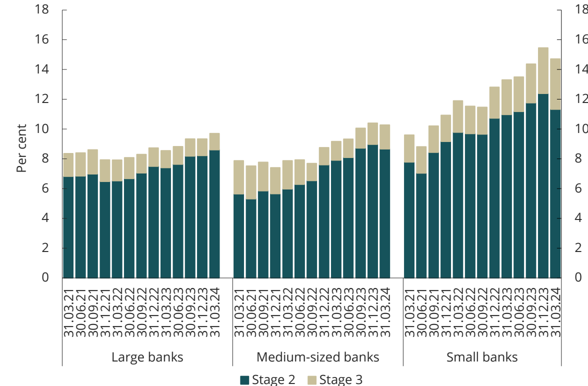
While there is a similar trend across banking groups, there has been a stronger increase in credit risk in small banks. This group also has a higher share of loans in stage 2 and stage 3 than the large and medium-sized banks (chart 21). The increase in the share of stage 2 loans also started earlier in small banks than in medium-sized and large banks. This also applies when consumer loan banks are excluded. However, the share of stage 2 loans decreased in small and medium-sized banks in the first quarter of 2024 after a prolonged increase. This may be partly due to improved macroeconomic prospects and the migration of lending volume to other stages. The share of stage 3 loans also rose in the first quarter of 2024 for small and medium-sized banks.

Chart 20 Share of loans with a significant increase in credit risk broken down on customer groups



Source: Finanstilsynet

Chart 21 Share of loans with a significant increase in credit risk broken down on banking groups



Source: Finanstilsynet

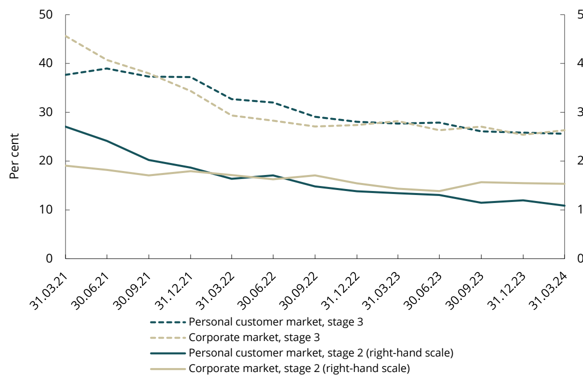
The criteria for classifying a loan in stage 3 are relatively clear, and this stage primarily comprises loans that are actually in default. However, expected credit losses, probability of default and the classification of loans in stage 1 and stage 2 are calculated and assessed differently by the banks. Estimated probabilities of default are important when assessing which loans have experienced 'a significant increase in credit risk without being credit impaired' (stage 2).[24] There has been a limited volume of loans in default in the banks' portfolios for many years, partly as a result of low and falling interest rates up until 2020. Based on past history, there is a risk that the probability of default may be underestimated.

Lower impairment losses as a share of lending volume

The banks' impairment losses must be forward-looking, unbiased and based on scenarios that reflect estimated future macroeconomic developments. The classification of loans in stage 2 is largely based on judgment. Judgment is also applied when the banks assess the need for and the level of impairment losses. The banks' *total* impairment losses as a share of lending volume (provision rate) have been relatively stable in recent quarters but have decreased overall since 2021. The most pronounced decline has been observed for large and medium-sized banks. It is worth noting that the banks' impairment losses have generally been stable or decreasing, even though the banks' share of loans with a significant increased credit risk has risen during the same period.

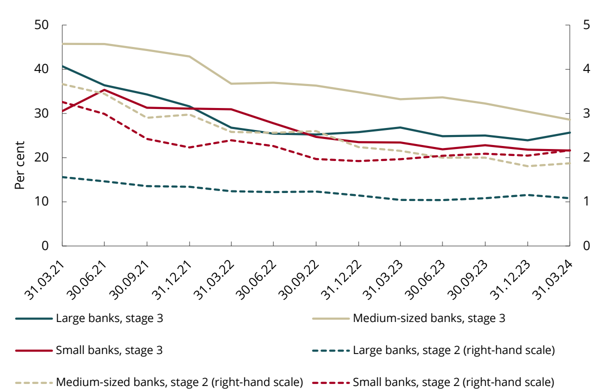
[24] Other factors that can lead to loans being classified in stage 2 are payments that are more than 30 days past due, the granting of forbearance and watchlisting.

Chart 22 Provision rate for loans in IFRS 9 stages broken down on customer groups



Source: Finanstilsynet

Chart 23 Provision rate for loans in IFRS 9 stages broken down on banking groups



Source: Finanstilsynet

The provision rates for loans in stage 2 and stage 3, respectively, have been reduced since 2021 (charts 22 and 23). This must be seen in light of the sale of portfolios of non-performing consumer loans and write-offs and reversals, particularly on loans to the oil sector. The banks' losses have nevertheless been low for a very long time, and there is a danger that risks and future losses may be underestimated when based on experience from the last two decades. The banks must take this into consideration.

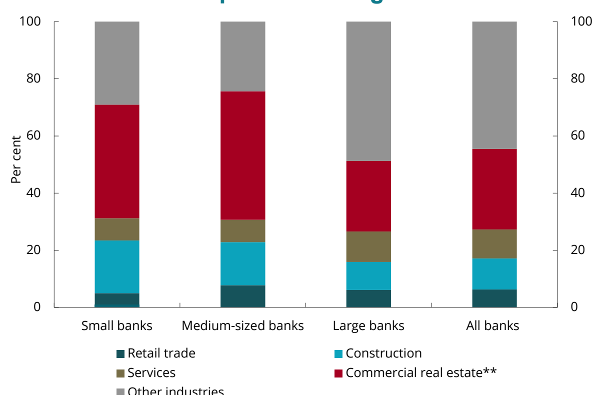
More bankruptcies in non-financial corporations

In recent years, ‘retail trade’ and parts of the ‘services’ and ‘construction’ industries have accounted for a significant share of all corporate bankruptcies in Norway. See further account in the chapter on non-financial corporations. Activities in these industries may be affected if households change their demand pattern.

Lending to these industries and to commercial real estate makes up more than half of the banks' total lending to non-financial corporations (chart 24). For small and medium-sized banks, the proportion is over 70 per cent, and commercial real estate alone accounts for between 40 and 45 per cent of these banks' lending to non-financial corporations. For small banks, the proportion of lending to commercial real estate and the other above-mentioned industries rose from 2022 to 2023, while the proportion decreased somewhat for medium-sized and large banks. Over the past year, all banking groups have increased their exposure to commercial real estate. Small banks have recorded the biggest increase of 2.4 percentage points.

Lending to non-financial corporations where bankruptcy proceedings had been initiated as at 3 June 2024 accounted for 0.25 per cent of the banks' total corporate market portfolio at year-end 2023. There are wide differences between banking groups and at individual bank level. Some small and medium-sized banks have a considerably higher proportion of loans to corporations that have gone bankrupt in 2024. At some of these banks, corporate exposures also constitute a relatively large proportion of total lending. The highest proportion of lending to non-financial corporations that have gone bankrupt in 2024 is 3.48 per cent for a single bank.

Chart 24 Exposures* to selected industries as a share of banks' corporate lending

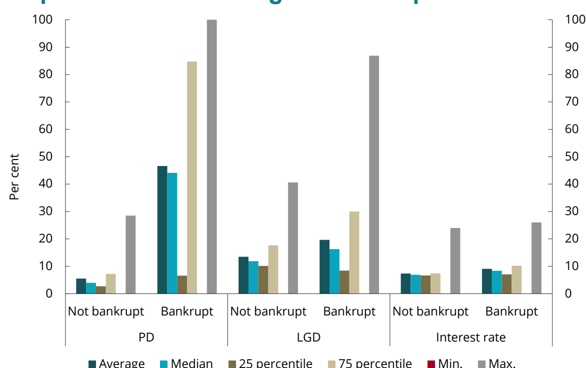


As at 31 December 2023. *Loans granted to non-financial corporations **Real estate activities. Source: Finanstilsynet

At the start of 2024, the banks' estimated probability of default (PD) and loss given default (LGD) were, on average, higher for the corporations where bankruptcy proceedings were later initiated than for other corporations (chart 25). The interest rate on the banks' loans to these corporations was also somewhat higher than for corporations where bankruptcy proceedings have not been initiated.

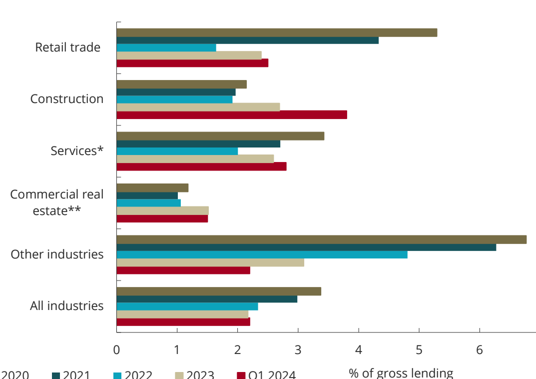
Total non-performing loans[25] have declined over the past three years and represented 2.2 per cent of lending at end-March 2024. However, there are wide variations between industries, and non-performing loans have increased in industries with high bankruptcy rates (chart 26). The most pronounced increase has taken place in the 'construction' industry. There has also been a significant rise in non-performing loans in 'retail trade' and 'services', which includes 'accommodation and food services'. However, non-performing loans are still modest in a historical perspective. The proportion of loans in stage 2 for these three industries and 'commercial real estate' has also increased during the same period. Impairment losses have also risen for 'retail trade' and 'construction but been stable for 'commercial real estate'.

Chart 25 Average probability of default (PD), loss given default (LGD) and interest rates for corporations that have gone bankrupt



As at 3 June 2024. Source: Finanstilsynet

Chart 26 Non-performing loans in individual industries



*Accommodation and food services, information and communication and professional, business and other services **Real estate activities. Source: Finanstilsynet

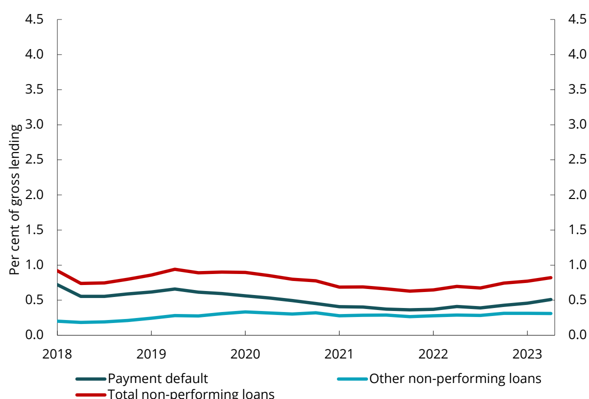
Loans to corporations for which bankruptcy proceedings have been initiated still represent a small proportion of the banks' lending. The number of bankruptcies is also relatively stable.

[25] Total non-performing loans comprise payment defaults (payments past due more than 90 days) and 'other non-performing loans' (loans where the bank considers it unlikely that the counterparty will be able to meet its obligations).

Small increase in total non-performing loans, but higher growth in past due loans

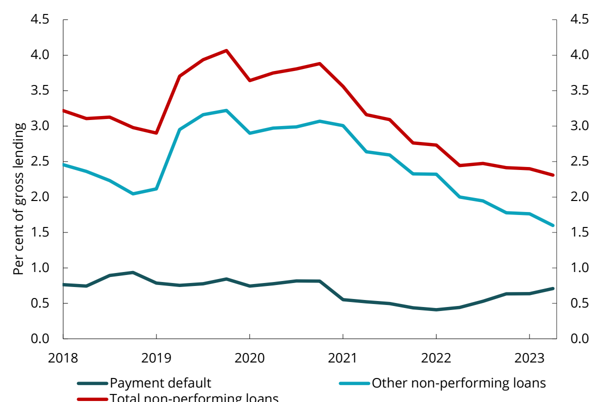
In both the personal customer and corporate markets, there has been a rise in payment defaults, while the share of ‘other non-performing loans’ is lower or stable. The proportion of non-performing loans to personal customers continued to increase in the first quarter of 2024 (chart 27). It is mainly payment defaults that have increased. There has been a steady decline in non-performing corporate loans since 2021 (chart 28). The decrease can mainly be seen in the category ‘other non-performing loans’.

Chart 27 Non-performing loans in Norwegian banks and mortgage companies – personal customer market



Source: Finanstilsynet

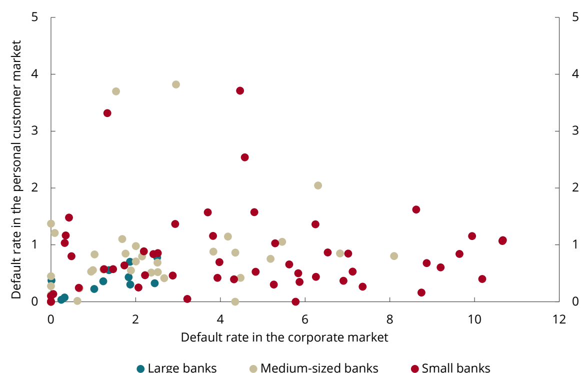
Chart 28 Non-performing loans in Norwegian banks and mortgage companies – corporate market



Source: Finanstilsynet

There are wide differences in default rates among banks and banking groups (chart 29). The group of small banks has the highest default rate for corporate loans. The small banks also have a somewhat higher default rate for personal customer loans.

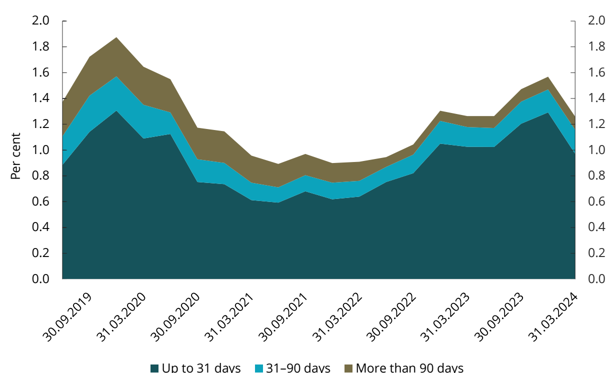
Chart 29 Default rates in Norwegian banks and mortgage companies – personal customer and corporate markets



As at 31 March 2024. Includes only banks with lending to both the personal customer and corporate markets. Some extreme observations are excluded.
Source: Finanstilsynet

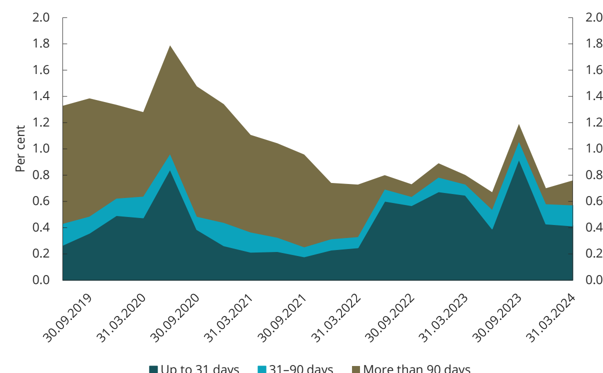
In both the personal customer and corporate markets, the proportion of claims that are up to 31 days past due has increased in recent years (charts 30 and 31), but there has been weaker growth in claims that are between 30 and 90 days past due. This may indicate an increase in temporary liquidity challenges for borrowers and somewhat impaired debt servicing capacity. The levels are nevertheless still low.

Chart 30 Share of loans to households at least one day past due



Figures from eleven of the largest banks. Source: Finanstilsynet

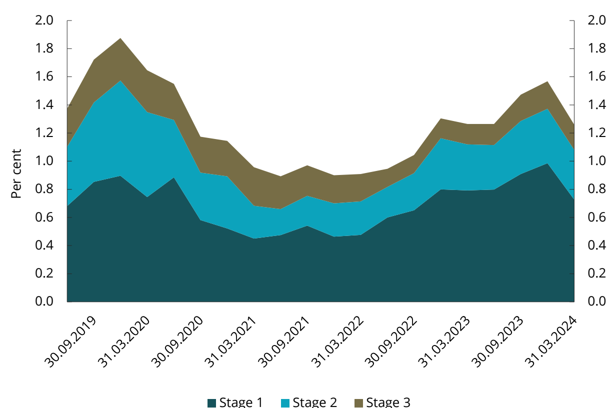
Chart 31 Share of loans to non-financial corporations at least one day past due



Figures from eleven of the largest banks. Source: Finanstilsynet

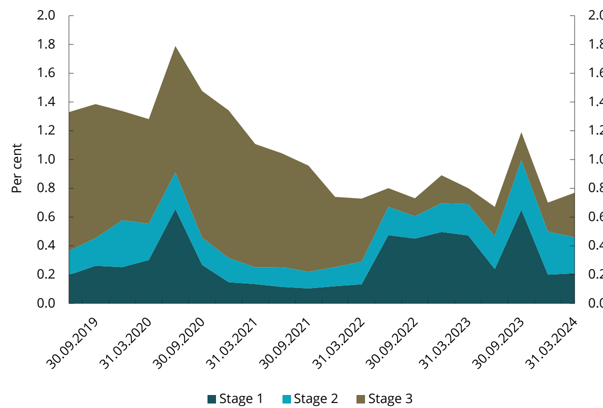
The majority of these loans are categorised in stage 1 (charts 32 and 33). This means that the banks themselves consider that there is little risk of losses on loans that are at least one day past due. If a large proportion of these loans are not paid but remain past due for up to and more than 90 days, an increase in impairment losses may be required.

Chart 32 Classification of past due loans into stages – households



Figures from eleven of the largest banks. Source: Finanstilsynet

Chart 33 Classification of past due loans into stages – non-financial corporations

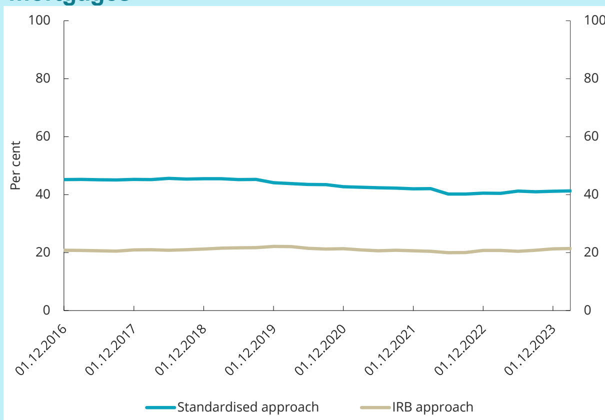


Figures from eleven of the largest banks. Source: Finanstilsynet

Standardised and internal ratings-based approach to calculating credit risk

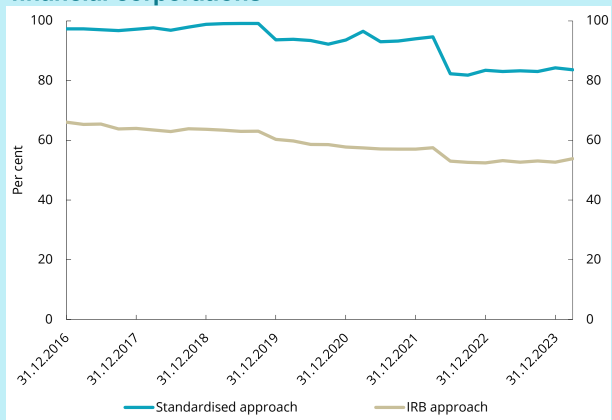
The EU's capital adequacy framework, which sets extensive requirements for the banks' models and for the authorities' follow-up, should contribute to prudent risk measurement. The framework allows for two different approaches that banks can use to estimate credit risk. In the standardised approach, SA, the risk weights are given according to fixed rates based on a few broad categories, while the internal ratings-based approach, IRB, requires approval by the authorities. After the IRB approach was introduced, the banks that use this approach have significantly less equity backing their gross lending than banks using the standardised approach.

Chart 34 Average risk weighting of residential mortgages



Source: Finanstilsynet

Chart 35 Average risk weighting of loans to non-financial corporations



Source: Finanstilsynet

Since 2016, the risk-weighted exposure to residential mortgages has, on average, represented 22.3 percentage points more of unweighted exposure for the banks using the standardised approach than for the IRB banks (charts 34 and 35). Correspondingly, loans to non-financial corporations have represented 33.5 percentage points more of unweighted exposure for the banks using the standardised approach. The IRB banks thus need less equity measured against total unweighted exposure than the banks using the standardised approach in order to meet the capital requirements.

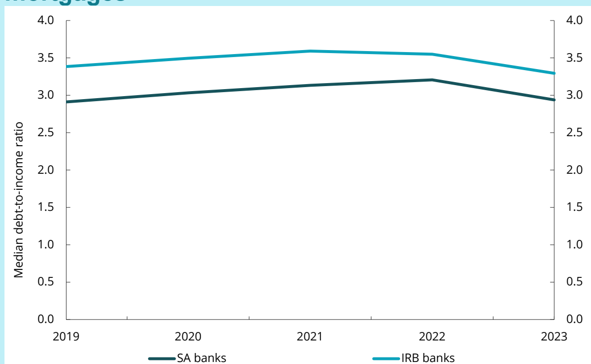
The IRB approach entails that the risk weights are calculated based on the bank's own estimates of non-performing loans and loss given default (LGD). The risk weight calculation is based on several uncertain assumptions about the correlation between the banks' observed defaults and losses and potential losses in a severe downturn. The uncertainty is reinforced by the fact that the level of defaults and losses in the banks has been very modest since the Norwegian banking crisis in the early 1990s, which means that there is inadequate underlying data for periods with significant losses.

One of the reasons for introducing greater risk sensitivity in the capital weights through the IRB approach was that capital weights that are based solely on a few principal categories, as in the standardised approach, can provide incentives to increase the proportion of loans with higher risk in order to raise return on equity. If the risk is greatest in banks that follow the standardised approach, it is also correct that the risk weights are higher.

Finanstilsynet's annual residential mortgage lending survey comprises a sample of new lines of credit and instalment loans. With respect to new personal customer loans, there seems to be a somewhat greater proportion of loans with a higher risk profile in the IRB banks than in the banks using the standardised approach. Based on the sample in the lending survey, the debt-to-income ratio (DTI) and the loan-to-value ratio (LTV) have consistently been somewhat higher for the median customer in the IRB banks than in banks using the standardised approach (charts 36 and 37)[26]. In addition, the banks using the standardised approach appear to set stricter requirements for debt servicing capacity, as their borrowers have higher remaining liquidity after the stress test, with the exception of residential mortgages issued in 2020 (chart 38). The IRB banks have a nominal interest rate on new loans that, since 2016, on average has been 13 basis points below the rate offered by the banks using the standardised approach (chart 39).

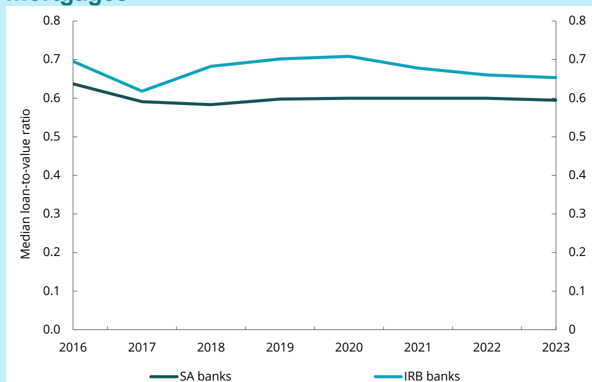
[26] Average values give a corresponding difference.

Chart 36 Median debt-to-income ratio – residential mortgages



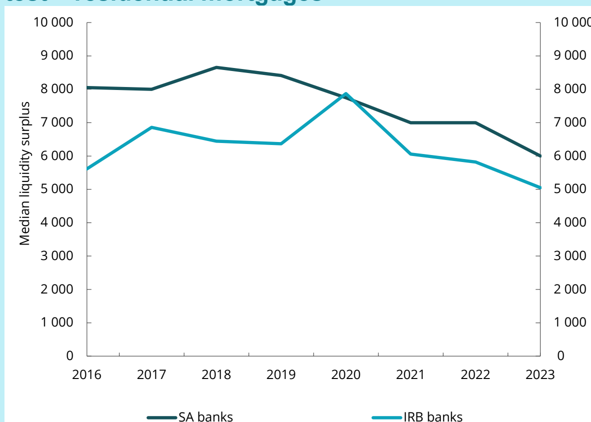
The banks are divided into groups based on whether or not they are authorised to use the IRB approach, but it is not given that the IRB approach has been applied to the loans reported in the lending survey.
Source: Finanstilsynet

Chart 37 Median loan-to-value ratio – residential mortgages



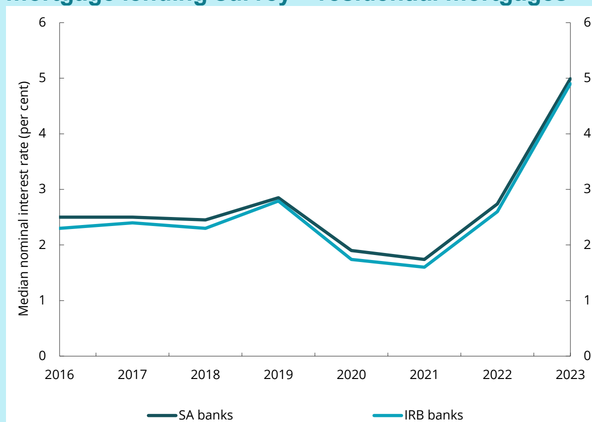
The banks are divided into groups based on whether or not they are authorised to use the IRB approach, but it is not given that the IRB approach has been applied to the loans reported in the lending survey.
Source: Finanstilsynet

Chart 38 Median liquidity surplus after the stress test – residential mortgages



The banks are divided into groups based on whether or not they are authorised to use the IRB approach, but it is not given that the IRB approach has been applied to the loans reported in the lending survey.
Source: Finanstilsynet

Chart 39 Median nominal interest rate – residential mortgage lending survey – residential mortgages



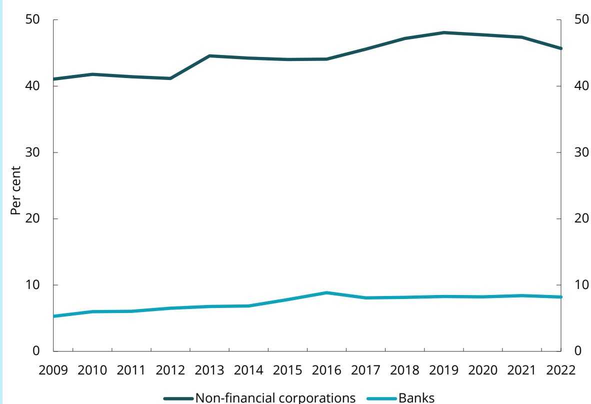
The banks are divided into groups based on whether or not they are authorised to use the IRB approach, but it is not given that the IRB approach has been applied to the loans reported in the lending survey.
Source: Finanstilsynet

Capital ratio in banks and non-financial corporations

Internationally and in Norway, there is an ongoing debate about whether the capital requirements are designed to distort competition, and to what extent higher equity requirements for banks contribute to raising the banks' average cost of capital, pushing up lending rates and dampening credit growth, real investment and consumption.

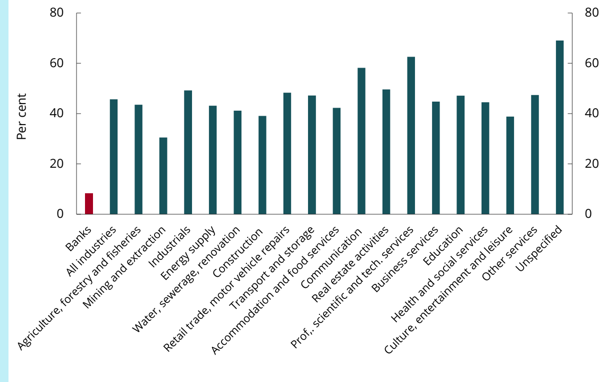
The equity ratio varies significantly according to industry and entity size. Banks nevertheless stand out with a very low equity ratio (charts 40 and 41).

Chart 40 Total equity ratio



Sources: Finanstilsynet and Statistics Norway

Chart 41 Equity ratios in various industries in 2022

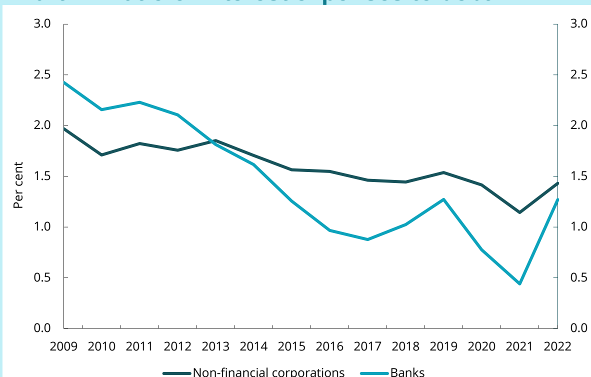


Sources: Finanstilsynet and Statistics Norway

There are several significant differences between banks and non-financial corporations that may have an impact on how they adapt their capital structure. The greater part of Norwegian banks' debt consists of deposits from the private non-financial sector, which provides benefits to depositors other than the return achieved, such as safe custody and payment transactions. Society is dependent on stable and financially sound banks, and parts of the banks' debt are therefore covered by a deposit guarantee scheme. In addition, there may be a general expectation that the banks will receive help from the authorities in a crisis.

The banks can take advantage of such explicit and implicit guarantees in the form of lower risk premiums on the banks' debt than would have been the case without these guarantees. This makes debt a cheaper form of funding for the banks than equity and can provide incentives to choose a lower equity ratio. Data from Statistics Norway show that the ratio of interest expenses to debt has been lower in banks than in non-financial corporations in the years subsequent to the financial crisis (chart 42). This must probably be seen in light of high profitability and improved solvency. Since 2013, the banks' ratio of interest expenses to debt has been 38 basis points lower than for non-financial corporations. At the same time, return on equity, measured as profit after tax divided by equity, has been at (roughly) the same level for banks and non-financial corporations (chart 43).

Chart 42 Ratio of interest expenses to debt



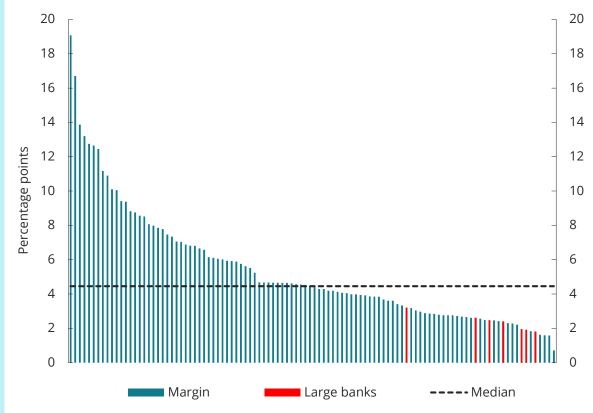
Debt items that are not interest-bearing are excluded. Sources: Finanstilsynet and Statistics Norway

Chart 43 Return on equity

Annual return on equity after tax. Sources: Finanstilsynet and Statistics Norway

The significant social costs of a solvency crisis in the banking system, as well as a potential shift in the banks' incentives from equity financing to debt financing, are the most important arguments for maintaining minimum capital requirements for banks. The banks meet the capital requirements by a margin (chart 44).

Chart 44 Margin to capital requirement



As at 31 March 2024. Source: Finanstilsynet

STRESS TEST OF NORWEGIAN BANKS

Finanstilsynet conducts annual stress tests to assess the impact of a severe economic downturn on Norwegian banks' capital adequacy. The stress test for 2024 shows that the capital adequacy (ratios) of a number of Norwegian banks may fall below the aggregate CET1 capital requirement during a severe stress, even if the countercyclical capital buffer were to be reduced to zero. Losses on loans to firms and private individuals have the most adverse impact on banks' capital adequacy.

Background for the stress test

In Finanstilsynet's annual stress tests of capital adequacy, the effect of various adverse events on the banks' profits and capital adequacy is estimated. The calculations illustrate how well banks will fare through such scenarios. 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. The calculations are based on the individual bank's financial statements and exposures. The projections are made by using the macroeconometric model NAM-FT[27].

The assessments in this chapter are based on a baseline scenario and a stress scenario. The two scenarios describe possible development paths for the Norwegian economy from 2024 to 2028. The scenarios do not represent forecasts of future developments. The probability of the stress scenario occurring is relatively low, but not zero. This year's stress test has similarities with the scenarios in the previous three years' stress tests and with the scenario in this year's stress test coordinated by the European Insurance and Occupational Pensions Authority (EIOPA).

NORWEGIAN ECONOMY

Baseline scenario

In the baseline scenario, developments in the Norwegian economy are assumed to be largely consistent with the forecasts in Statistics Norway's Economic Survey 1/2024 and Norges Bank's Monetary Policy Report 1/2024 (table 1).

Table 1 Developments in key international variables. Annual growth in per cent unless otherwise stated

		2023	2024	2025	2026	2027	2028
Foreign consumer prices (trade weighted)	Baseline	6.6	2.2	1.8	2.0	2.0	2.0
	Stress	6.6	7.9	5.0	4.5	3.5	3.0
European 3-month money market rate (Euribor, level)	Baseline	3.4	3.6	2.6	2.4	2.4	2.4
	Stress	3.4	5.7	6.5	6.4	5.4	4.4
Oil price in USD (level)	Baseline	83	80	76	73	71	70
	Stress	83	90	100	90	80	80
Export market indicator (trade weighted)	Baseline	0.8	1.8	1.9	3.7	3.8	2.0
	Stress	0.8	-8.0	-7.0	-3.0	-1.5	0.0

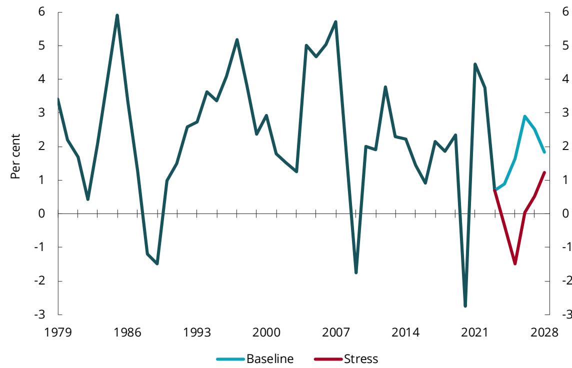
Sources: Statistics Norway and Finanstilsynet

In the baseline scenario, inflation continues to decline and is close to the central bank's inflation target at the end of the projection period. It is assumed that the policy rate will be reduced as indicated by Norges Bank's policy rate path in the Monetary Policy Report 1/2024. Following a weak trend in the Norwegian economy in 2023, the growth in GDP for mainland Norway is expected to pick up in the period ahead but to remain below trend until 2026 (chart 45). Unemployment (labour force survey – LFS) rises to a somewhat higher level than the historical average (chart 46). Developments in public

[27] NAM-FT is based on the Norwegian Aggregate Model (NAM) and has been developed specifically with a view to stress testing of banks and analysis of financial stability. NAM was developed by Professor Gunnar Bårdsen (Norwegian University of Science and Technology) and Professor Ragnar Nymoen (University of Oslo). Documentation of NAM can be found at Normetrics.no.

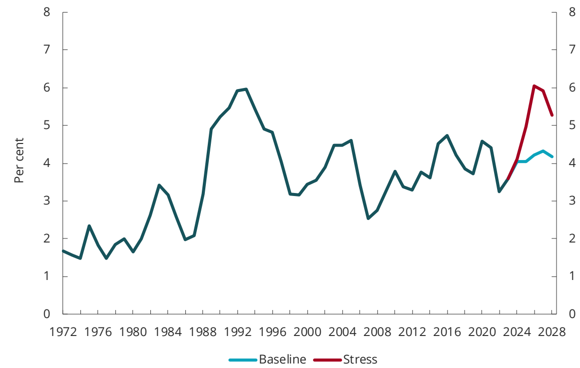
demand are assumed to be in line with Statistics Norway's forecasts. House prices are expected to rise moderately during the projection period, while commercial property prices decline further in 2024 and 2025 before rising towards the end of the period (charts 47 and 48).

Chart 45 GDP for mainland Norway, year-over-year growth



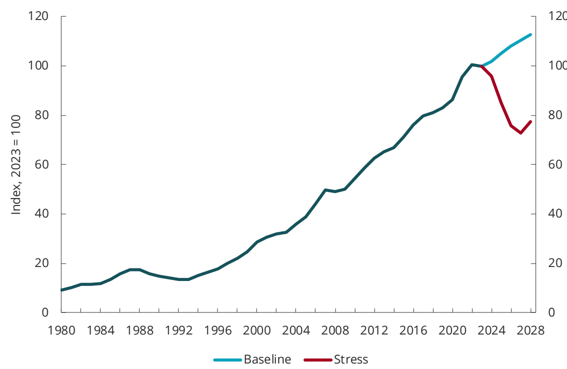
Sources: Statistics Norway and Finanstilsynet

Chart 46 Unemployment (LFS)



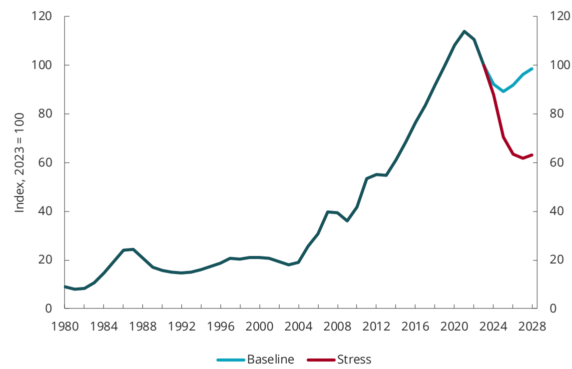
Sources: Statistics Norway and Finanstilsynet

Chart 47 House prices



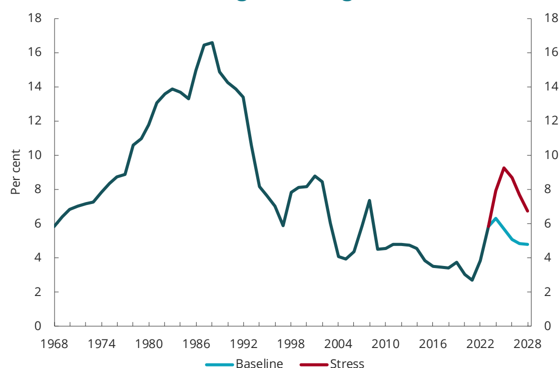
Sources: Statistics Norway and Finanstilsynet

Chart 48 Commercial property prices



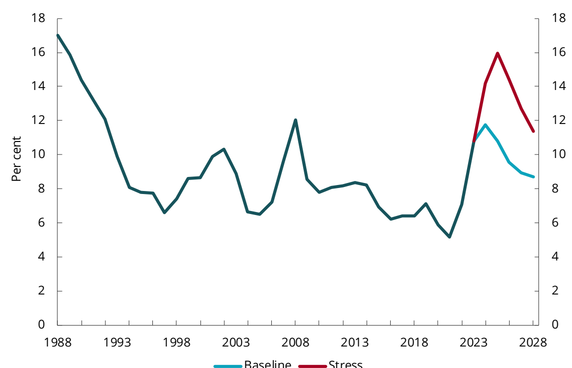
Sources: Dagens Næringsliv, OPAK, Entra and Finanstilsynet

Chart 49 Banks' average lending rate



Sources: Statistics Norway and Finanstilsynet

Chart 50 Households' interest burden*



*The interest burden is interest expenses in per cent of the sum of interest expenses and disposable income excluding dividends received.
Sources: Statistics Norway and Finanstilsynet

In the baseline scenario, banks' average lending rate rises by 0.5 percentage points in the first year, to 6.3 per cent, and thereafter declines by approximately 1.5 percentage points (chart 49). In consequence of high debt levels and elevated interest rates, households' interest burden increases to

almost 12 per cent in 2024 and thereafter declines to just below 9 per cent in 2028 (chart 50). During the projection period, growth in households' disposable income exceeds credit growth, and the debt burden is therefore reduced from 238 per cent in 2023 to 205 per cent in 2028. Banks' losses on loans remain low during the projection period in both the personal customer market and the corporate market.

About stress testing

There is broad agreement on the importance of a sound banking system, which in contingent on both the necessary level of equity and a strong governance and control framework in the individual bank. At the same time, it is difficult to identify relevant risk factors and to estimate how great the risk will actually be in the years ahead. Experience shows that crises can occur suddenly. Crisis prevention measures must therefore be implemented during good times.

There is high systemic risk in the banking industry. This reflects the high leverage ratio, exposure to the same risk factors and the 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 judgment in assessing banks' capital needs.

Stress testing of the banks' results and capital adequacy supplements traditional risk measurements and risk weight calculations. 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 purpose 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. In the event of a serious setback in the Norwegian economy, the authorities will consider fiscal and monetary policy measures and possibly other measures to dampen the downturn and counteract detrimental effects on the economy and the financial system. It is beyond the scope of a stress test to consider what government measures should or could be implemented during a stress scenario in order to mitigate the effects.

Finanstilsynet's assessments of banks' capital needs include a significant element of discretion. Reference models have been developed as a tool in setting capital requirements for risk that is not fully captured by the capital requirements under Pillar 1. Finanstilsynet's stress test tool is used both in assessments of financial stability and in assessments of individual banks' capital needs.

Stress scenario

In the stress scenario, it is assumed that an escalation of geopolitical conflicts will lead to disruptions in supply chains and higher commodity prices. This contributes to further inflationary pressures. International inflation (trade weighted) is assumed to rise from 6.6 per cent in 2023 to 7.9 per cent in 2024 (table 1). Central banks are expected to raise their policy rates substantially in an effort to curb inflation. This results in higher market rates, repricing in the financial and property markets and a setback in the global real economy. Policy and market rates remain high[28] during the projection period as inflation is expected to be above the central banks' inflation targets due to wage-price spirals.

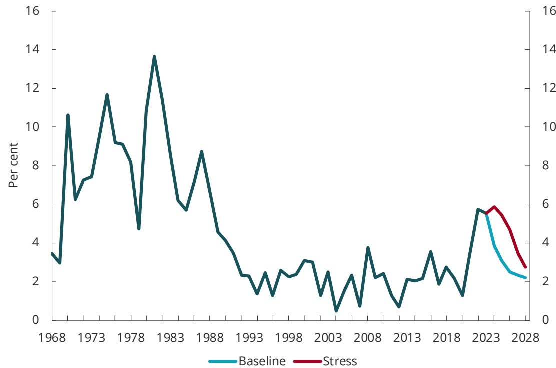
Developments in Norway largely mirror international developments. In consequence of lower foreign demand, rising prices and higher interest rates, the Norwegian economy enters a recession with a decline in mainland GDP and a significant increase in unemployment. In the stress scenario, inflation

[28] Compared to average rates in the period from 2015 to 2021.

is up from 5.5 per cent in 2023 to 5.9 per cent in 2024 (chart 51). The Norwegian money market rate (3-month Nibor) rises from 4.2 per cent in 2023 to 8.9 per cent in 2025.

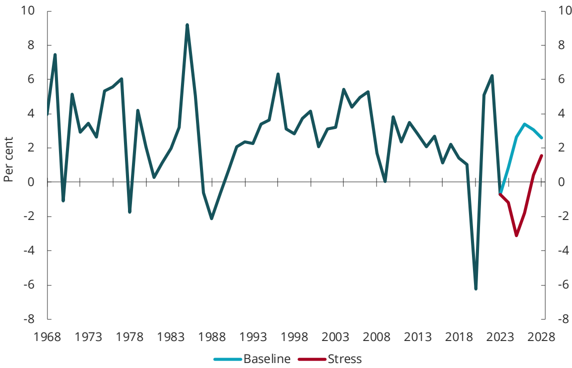
The banks' average lending rate is up from 5.8 per cent in 2023 to 9.3 per cent in 2025 (chart 49). Such an interest rate increase has major consequences for Norwegian households due to their high level of debt and the fact that more than 95 per cent of household debt carries floating interest rates. Households' interest burden rises from 10.8 per cent in 2023 to 16.0 per cent in 2025 (chart 50). This is higher than the interest burden during the global financial crisis but somewhat lower than the level during the late 1980s. The interest burden remains high, even though it drops to 11.4 per cent in 2028. The high interest burden coupled with high inflation result in a decline in households' real disposable income in 2025. Firms' interest burden increases from 13.6 per cent in 2023 to 21.2 per cent in 2025.

Chart 51 Consumer price index in Norway, year-over-year growth



Sources: Statistics Norway and Finanstilsynet

Chart 52 Household consumption, year-over-year growth



Sources: Statistics Norway and Finanstilsynet

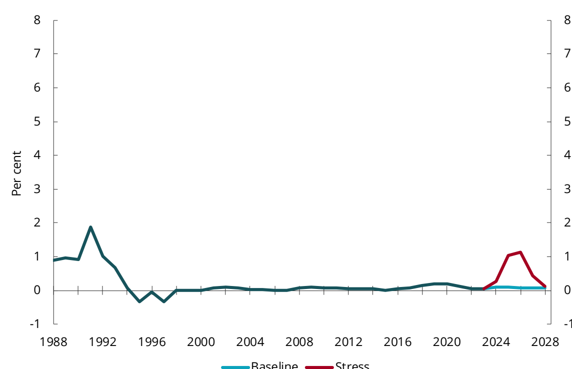
Income growth exceeds the increase in household debt during the projection period, and the debt burden is reduced by 40 percentage points in the stress scenario, to just over 198 per cent in 2028.

Rising interest rates, declining house prices and weak real income growth among households put a strong damper on private consumption, which is down by a total of 6 per cent from 2023 to 2026 (chart 52). Along with a reduction in mainland investment and exports of traditional goods and services, this weighs heavily on economic activity in Norway. Public demand, investments on the Norwegian continental shelf and exports of oil and gas are kept unchanged from the baseline scenario. GDP for mainland Norway declines by 2 per cent from 2023 to 2025 before rising to approximately the same level as in 2023 at the end of the projection period (chart 45). Unemployment (LFS) increases from 3.6 per cent in 2023 to 6.0 per cent in 2026 (chart 46).

The economic downturn in Norway results in a pronounced fall in prices of residential and commercial property. Measured as an annual average change, house prices are down 27 per cent and commercial property prices 38 per cent in nominal terms from 2023 to their lowest level in 2027 (charts 47 and 48).[29] Overall, there is a decline of 49 per cent in the Norwegian stock market from 2023 to 2025.

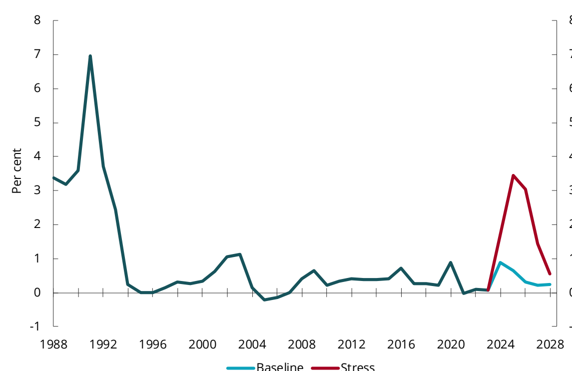
[29] By way of comparison, house prices in Norway fell by 24 per cent in nominal terms (measured as a change in the annual average) from 1987 to 1992. During the same period, prices of office premises were down 40 per cent.

Chart 53 Banks' losses on loans to personal customers



Source: Finanstilsynet

Chart 54 Banks' losses on corporate loans



Source: Finanstilsynet

Banks' losses on loans to both personal customers and firms rise in the stress scenario. Losses on corporate loans increase the most and represent the highest volumes (charts 53 and 54). Accumulated losses on corporate loans during the projection period come to 10.2 per cent of lending. For loans to personal customers, accumulated losses represent 3.0 per cent. Losses in the stress scenario are high, but clearly lower than the banks' losses during the banking crisis in the early 1990s. In the five-year period from 1988 to 1992, banks' losses on corporate loans amounted to 20.8 per cent, and losses on loans to personal customers represented 5.7 per cent.

In the macroeconomic model NAM-FT, banks' loan losses are estimated on the basis of historical data covering the period 1987 to 2023. Household debt is considerably higher than during the Norwegian banking crisis at the beginning of this period. In the stress scenario, households' interest burden increases to a level not observed since the late 1980s parallel to a rise in unemployment. In such a scenario, banks' losses on loans to households may be higher than projected. Losses on loans to non-financial corporations may also exceed the level in the stress scenario.

The banks' results in the baseline scenario

In the baseline scenario, the banks have stable and high earnings and a low level of loan losses over the next few years. As a result of the notification period for raising interest rates on loans to personal customers, the banks' net interest income in per cent of total assets declines during the first year of the projection period. During this period, net interest income is assumed to gradually decline to the average level for the last five years.

Overall, these factors help ensure stable and rising profitability and profits in the banking sector. Seen in isolation, this strengthens the banks' capital adequacy. At the same time, the growth in lending gives a rise in the banks' risk-weighted exposures.

Banks' overall capital adequacy improves in the baseline scenario. The banks are assumed to distribute 50 per cent of annual profits in dividends. For 17 of the largest banking groups combined (referred to as the macro bank), the CET1 capital ratio increases from 18.0 per cent at year-end 2023 to 18.8 per cent at year-end 2028. If the payout ratio is set at 80 per cent of annual profits, the baseline scenario gives a CET1 capital ratio of 16.2 per cent in 2028.

The banks' results in the stress scenario

Assumptions underlying the stress test

In the stress scenario, banks' results are impaired by reduced income and large loan losses. Banks' lending rates are raised in step with increases in policy and market rates in Norway and internationally. The banks' funding costs also rise as market and deposit rates increase. Banks' net interest

income reached a very high level in 2023. It is assumed that all banks will record a reduction in net interest income, leaving the net interest income of the macro bank at the average level for the last five years throughout the projection period.

Owing in part to the notification period for interest rate increases on loans to personal customers, there is a reduction in net interest income in years where interest rates rise steeply. It is assumed that the banks' commission and fee income declines by 20 per cent as a result of lower activity levels in the economy, while administrative expenses follow developments in general wage expenses. Furthermore, it is assumed that banks do not earn income from dividends or gains from hedging transactions through the projection period.

Market and operational risk is taken into account in the stress test. Higher credit risk premiums, declining stock markets and falling property prices give a negative contribution to profits in the first years of the stress test (market risk). In line with the methodology used in the stress test coordinated by the European Banking Authority (EBA), losses arising from operational risk are deemed to be a share of average total assets (ATA).[30]

In the stress scenario, most banks record annual net losses in 2025 and 2026. This is based on the assumption that 50 per cent of profit after tax is paid as dividends during years when the banks operate at a profit. Furthermore, it is assumed that no new equity is injected.

Distribution of loan losses between the banks

The banks' total losses on loans to personal customers and non-financial corporations, respectively, are calculated using Finanstilsynet’s macro model NAM-FT. In the model, loan losses are calculated as a percentage of total loan exposure for each of the years 2024–2028. Furthermore, banks' lending to personal customers and non-financial corporations is projected. The annual loss rate multiplied by the total loan exposure constitutes the banks' total loan losses in NOK. Total loan losses are distributed between the banks by weighting the corporate portfolio by the credit risk in non-financial corporations estimated by the SEMKO model and the personal customer portfolio by the individual bank's share of total loans granted to personal customers.

SEMKO is Finanstilsynet’s bankruptcy and probability of default model. In SEMKO, the probability of bankruptcy (PB) for non-financial corporations in ten industry groups is estimated as a function of their annual financial statements, entity-specific information and macroeconomic variables. By using estimates from NAM-FT for the macroeconomic variables in 2024–2028 and the corporations' most recent accounting figures, the PBs are projected in both the baseline and the stress scenario. The PBs are scaled to probabilities of default (PD) by calibrating them against the banks' average PDs per industry at year-end 2023.

In previous stress tests, banks' risk-weighted assets were projected by using only credit growth estimated by NAM-FT. This year's stress test also includes a technical projection of capital adequacy according to which the banks' risk-weighted assets increase more than in the credit growth projections. The purpose is to illustrate that banks' capital adequacy is also sensitive to assumptions about developments in risk-weighted assets. In a severe stress that lasts for several years, the risk weights may also increase. It is difficult to estimate exactly how risk-weighted assets will develop in an adverse scenario that lasts for an extended period. The additional calculation helps illustrate the wide range of possible outcomes.

See also Risk Outlook June 2021 for a description of the methodology for the distribution of losses between the banks.

[30] The EBA’s stress test spans three years. In Finanstilsynet’s stress test, losses are distributed over five years and therefore constitute a weaker annual stress factor.

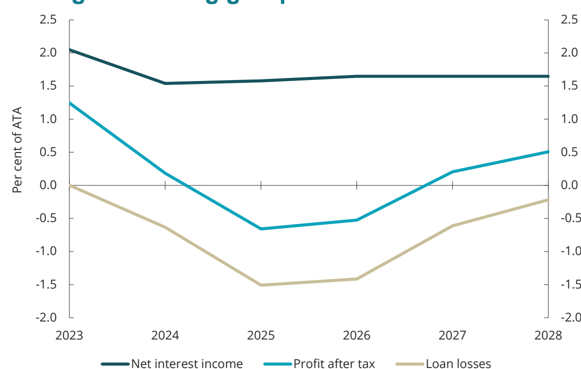
Stress test results for Norwegian banking groups

Finanstilsynet's stress test includes all Norwegian banks. Developments for the macro bank and the banks included therein are discussed below. Branches of foreign banking groups are not included in the sample.

The banking groups' main source of income, net interest income, declines from 2.05 per cent of ATA in 2023 to 1.54 per cent in 2024 and 1.58 per cent in 2025 and thereafter increases to 1.65 per cent at the end of the projection period (chart 55). As stated above, it is assumed that all banks will record a reduction in net interest income, leaving the net interest income of the macro bank at the average level for the last five years throughout the projection period. Reduced net interest income, declining commission and fee income and higher administrative expenses put pressure on banks' earnings. When the economic situation deteriorates and loan losses increase, most banks record an annual net loss. This reduces the banks' equity. The banks' strong profitability at the beginning of the period helps cushion the impact.

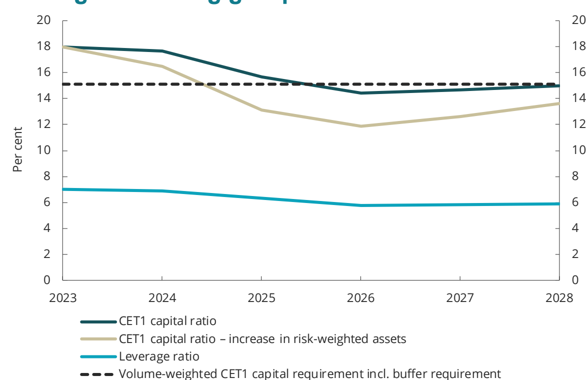
Losses on corporate loans rise from close to zero in 2023 to 3.2 per cent of total lending to this sector in 2025. Losses on loans to households, which make up the largest part of the banks' loan portfolios, increase to 1.0 per cent of total personal customer loans in 2025. As a consequence, the banking groups' profits after tax decline from 1.2 per cent of ATA in 2023 to a net loss of 0.7 per cent in 2025 and a net loss of 0.5 per cent in 2026. In the stress scenario, the banking groups' CET1 capital ratio decreases from 18.0 per cent at the start of the period to 14.6 per cent in 2026. The reduction is primarily due to negative profits, driven by sizeable loan losses and weaker earnings before loan losses. If risk-weighted assets increase as a result of higher risk weights, the CET1 capital ratio decreases to 11.8 per cent (chart 56).

Chart 55 Profits and main profit components. Norwegian banking groups. Stress scenario



Source: Finanstilsynet

Chart 56 Developments in capital adequacy ratios. Norwegian banking groups. Stress scenario



Source: Finanstilsynet

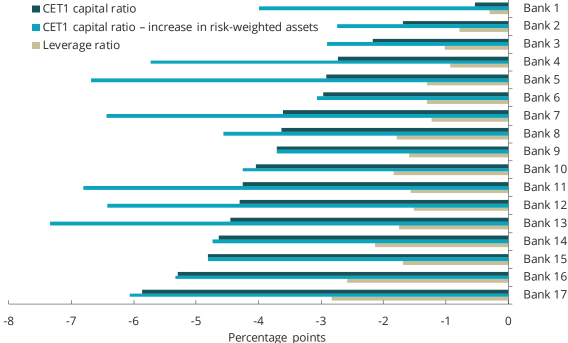
Ten of the 17 banking groups maintain a level of CET1 capital that does not cover the aggregate capital requirement (minimum requirement, buffer requirement and Pillar 2 requirement) throughout the stress period. If the countercyclical capital buffer is assumed to be reduced to zero, four of the 17 banking groups will not meet the minimum requirement and the buffer requirement for CET1 capital in the stress scenario. If risk-weighted assets increase as a result of higher risk weights, 13 of the 17 banking groups will not meet the minimum requirement and the buffer requirement for CET1 capital. Given that the countercyclical capital buffer is set at zero, this applies to ten banking groups.

There are wide differences between the banks with respect to how much their capital adequacy ratios decrease in the stress scenario (chart 57). This is mainly due to differences in how large a share loans to non-financial corporations represent of the individual bank's total lending and how high the credit risk is on these loans[31]. As a consequence of the sharp decline in capital adequacy experienced by

[31] Measured by SEMKO. For more information about SEMKO, see the box 'Distribution of loan losses between the banks'.

several of the banks, market turbulence could be amplified, and the confidence in individual banks and groups of banks could be impaired. Such a development could lead to a further tightening of lending and even higher risk premiums on banks' funding. This type of dynamics is not modelled and is therefore not included in the calculations. The banking groups' leverage ratio declines from 7.0 per cent in 2023 to 5.8 per cent in 2026. None of the banking groups fail to meet the minimum leverage ratio requirement of 3 per cent in the scenario.

Chart 57 Change in capital adequacy from 2023 to the minimum level. Norwegian banking groups. Stress scenario



Source: Finanstilsynet

Other Norwegian banks

Other Norwegian banks (82 in total) mainly comprise small and medium-sized savings banks. The capital adequacy of these institutions is stress tested at single company level (parent bank). The same macro scenarios and the same methodology as for banking groups are used.

Aggregate profits for small Norwegian banks decline steeply in the first three years of the stress scenario. This can partly be explained by higher losses on loans to personal customers, while the increase in losses on loans to non-financial corporations is the main factor behind the decline. Losses on loans to non-financial corporations relative to total loans to non-financial corporations are higher for the small banks than for the large banks.

Overall, small and medium-sized banks have a higher CET1 capital ratio than the large banks at the start of the stress period (21.1 per cent). In the stress scenario, this ratio is down to 15.8 per cent in 2026 and based on an increase in risk-weighted assets, it falls to 12.9 per cent. This year, 37 of the 82 banks will not meet the overall capital requirement. If the countercyclical capital buffer is set at zero, 23 of the banks will not meet the requirement. Correspondingly, 45 of the banks will fail to meet the overall capital requirement if risk-assets increase, while this will be the case for 30 of the banks if the countercyclical capital buffer is also set to zero.

Consumer loan banks

There is uncertainty surrounding how the losses on consumer loans will develop during a serious crisis. Analyses show that in normal economic periods, losses on consumer loans could be between 10 and 20 times higher than on other loans to households, primarily residential mortgages. In a stress scenario, losses on consumer loans could be very high. The uncertainty is magnified as Norway has not experienced a sharp and prolonged economic setback with high losses on loans to the personal customer market since the banking crisis in the early 1990s. At the time, the share of consumer loans was lower than today.

The lack of historical experience makes it difficult to conduct a scenario-based stress test of consumer loan banks. Therefore, as in 2023, the stress test is carried out as a 'reverse stress test' by calculating the maximum losses that the consumer loan banks combined may record without being in breach of the capital adequacy requirements. The stress test highlights the banks' ability to absorb losses during

a serious crisis. Six banks that were classified as ‘consumer loan banks’ at year-end 2023 are included in Finanstilsynet's stress test.

Accumulated over the stress period, total losses may come to approximately 13.6 per cent of banks' total lending at the start of the period before the banks collectively breach the capital adequacy requirements if the countercyclical capital buffer is set at zero. By way of comparison, the accumulated losses of the macro bank and the small savings banks included in the stress test measure 5.9 per cent and 7.5 per cent, respectively, of their total net lending at the start of the period.

INSURERS AND PENSION FUNDS

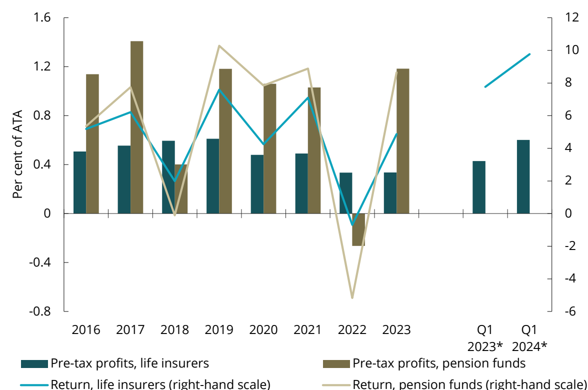
Pension institutions enjoy higher returns and strong solvency

A positive stock market trend helped raise returns and profits for pension institutions (life insurers and pension funds) in 2023 compared with 2022 (chart 58). Increased returns from equity investments and somewhat higher interest income were partly offset by write-downs of property values in 2023, driven by higher requirements for yield as a result of the higher interest rate level. These write-downs accounted for 0.7 per cent and 0.4 per cent of total assets in the collective portfolios of life insurers and pension funds, respectively. Many international stock markets experienced a continued rise in prices in the first quarter of 2024, which helped increase the return on life insurers' collective portfolio to 9.8 per cent (annualised), from 7.8 per cent in the same quarter of 2023.

Overall, Norwegian insurers and pension funds enjoy a strong solvency position. Life insurers' solvency ratio widened from 202 per cent when the Solvency II framework was introduced on 1 January 2016 to 266 per cent as at 31 December 2023 (chart 59). The increase in the solvency ratio in 2023 is partly due to reduced capital requirements for market risk, increased volatility adjustment[32] and strong profits.

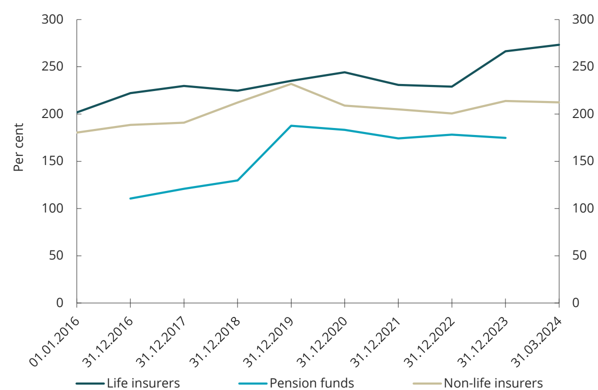
The volatility adjustment is intended to dampen the effect on the undertakings' solvency of changes in credit margins in the bond markets that are not considered to represent real changes in credit risk. The volatility adjustment increases as credit premiums rise and contributes to greater consistency between fluctuations in bond values and in technical provisions. The volatility adjustment for Norway was 27 basis points at year-end 2023, up from 5 basis points a year earlier. The adjustment gave an 18 percentage point rise in life insurers' solvency ratio in 2023, while the ratio increased by 5 percentage points the previous year. In the first quarter of 2024, the solvency ratio was further strengthened, partly as a result of the higher interest rate level, which contributed to reducing the value of insurance obligations and increasing solvency capital.

Chart 58 Pension institutions' profits and returns[33]



*Annualised return on the collective portfolio.
Source: Finanstilsynet

Chart 59 Solvency ratios of insurers and pension funds*



*The requirement for a solvency ratio above 100 for pension funds was introduced on 1 January 2019. The basis of the calculations was also changed.
Source: Finanstilsynet

[32] Several Norwegian life insurers use EIOPA's volatility-adjusted interest rate curve. This has resulted in an add-on to the risk-free interest rate and contributes to increasing the interest rate used to calculate insurance liabilities.
[33] The references to book and adjusted returns have been removed from the Regulations on the calculation of return on capital in life insurers and pension institutions as a result of the introduction of Regulations on the implementation of rules on buffer funds for private guaranteed pension products. Consequently, as from of 1 January 2024, only one return shall be calculated for the collective portfolio, corresponding to the previous adjusted return.

High exposure to alternative and climate-sensitive investments

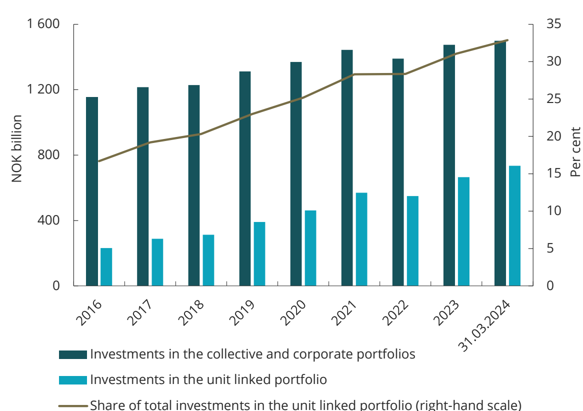
Life insurers' investments totalled NOK 2 233 billion at end-March 2024, of which NOK 734 billion kroner was placed in the unit linked portfolio (chart 60). The share of investments in the unit linked portfolio has increased significantly in recent years. After levelling off in 2022, there was a further rise of 5 percentage points through 2023 and the first quarter of 2024 in the form of funds injected by customers and positive returns in the financial markets. The transition to defined-contribution pension schemes means that members of the pension schemes increasingly choose the allocation and bear the return risk themselves. Equities, including equity funds, constitute a major part of investments in the unit linked portfolio at 67 per cent at end-March 2024. Since 2016, the proportion of equities has risen by 13 percentage points.

Alternative investments

Life insurers' investments in equities (excl. real estate) and bonds, as well as equity and bond funds, make up most of the investments in the collective and corporate portfolios. Norwegian life insurers nevertheless hold a significant share of so-called alternative investments[34], which include real estate-related equities, real estate funds, private equity funds, infrastructure funds, mortgages and other loans, as well as structured notes and collateralised securities. Alternative investments can provide higher returns but also represent higher risk as they are more complex, more difficult to value or less liquid. The capital can be tied up for several years without providing regular payments, and in some cases the undertaking does not receive payments until the investments are sold. At the same time, some of these investments can also give the undertakings the desired long-term exposure and stable cash flows.

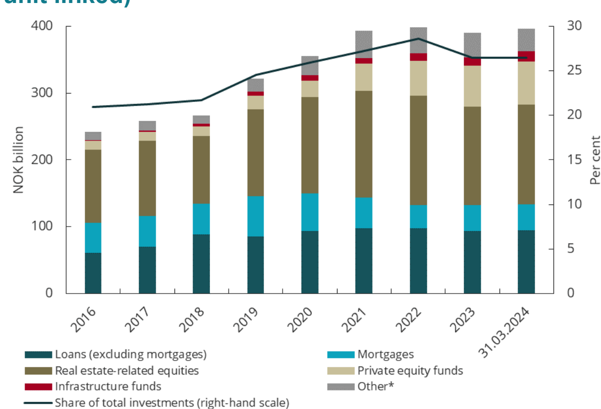
Alternative investments accounted for 26 per cent of life insurers' total investments in the collective and corporate portfolios at end-March 2024 (chart 61). A significant share of the alternative investments is in real estate-related equities and loans, and most of the loans are to Norwegian municipalities with low risk. The decline in 2023 was mainly due to a fall in the value of equities in real estate companies and property sales. In the unit linked portfolio, alternative investments accounted for 5 per cent of investments at end-March 2024. This proportion has remained relatively stable in recent years.

Chart 60 Life insurers' investments



Source: Finanstilsynet

Chart 61 Life insurers' alternative investments (excl. unit linked)



* The 'Other' category includes real estate (excluding properties for own use), real estate funds, alternative investment funds, structured notes and collateralised securities. Source: Finanstilsynet

[34] Alternative investments are defined herein as in EIOPA's Financial Stability Report December 2023.

Climate-sensitive investments

Climate risk, like other types of risk, affects the value of pension institutions' financial assets. The institutions are exposed to physical risk related to climate change and transition risk arising from uncertainty about climate policy measures and the transition to climate-friendly technology.

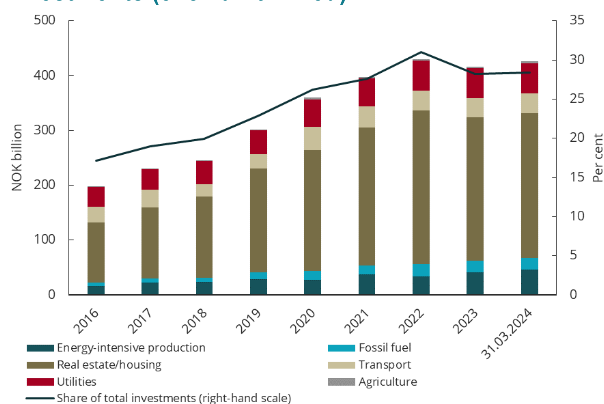
Norwegian life insurers have a relatively high share of investments in industries that are expected to be positively or negatively affected during a possible disorderly transition to a low-emission society. At end-March 2024, more than 28 per cent of Norwegian life insurers' total investments in the collective and corporate portfolios was in climate-sensitive industries, as defined in the framework of Battiston et al. (2022)[35] (chart 62). This share has been increasing since the end of 2016 but has fallen by 3 percentage points since year-end 2022. A high proportion of these investments relates to real estate, where write-downs in 2023 account for parts of the decline. Excluding real estate, the share has increased somewhat compared with 2016 and stood at approximately 11 per cent at end-March 2024.

Investments in green bonds

There has been a significant expansion in the market for green bonds in recent years. The funds generated through green bonds shall be used to finance sustainable or 'green' investments. Several criteria must be met for a bond to be classified as green.[36] Life insurers' investments in such bonds have increased markedly, but still account for a limited share of total investments in the collective and corporate portfolios (chart 63). At end-March 2024, the value of green bonds in the unit linked portfolio was NOK 3.7 billion, representing 0.5 per cent of the portfolio. 83 per cent of the green bonds had a Norwegian issuer. Norwegian life insurers are exposed to just under 11 per cent of the total outstanding green bonds issued in Norway.

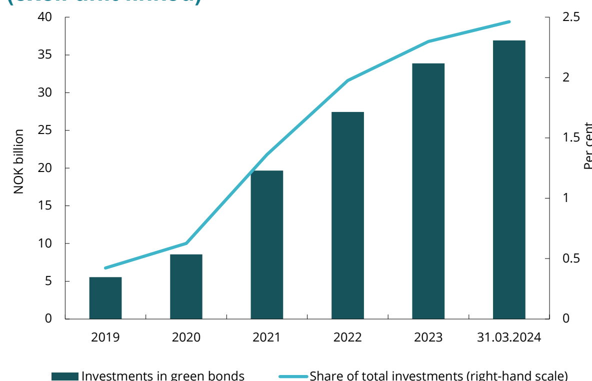
In autumn 2023, the EU adopted a regulation on green bonds and other sustainability-linked bonds. The regulation establishes a European green bond standard for all issuers, both within and outside the financial sector. The rules are expected to be incorporated into the EEA Agreement, and Finanstilsynet has proposed (in Norwegian only) that the regulation be implemented in Norwegian law in the Securities Trading Act. In March 2024, the European Securities and Markets Authority (ESMA) published a Consultation on technical standards with a deadline for response on 14 June 2024.

Chart 62 Life insurers' climate-sensitive investments (excl. unit linked)



Source: Finanstilsynet

Chart 63 Life insurers' green bond investments (excl. unit linked)



Sources: LSEG Datastream and Finanstilsynet

Non-life insurers record weaker profits

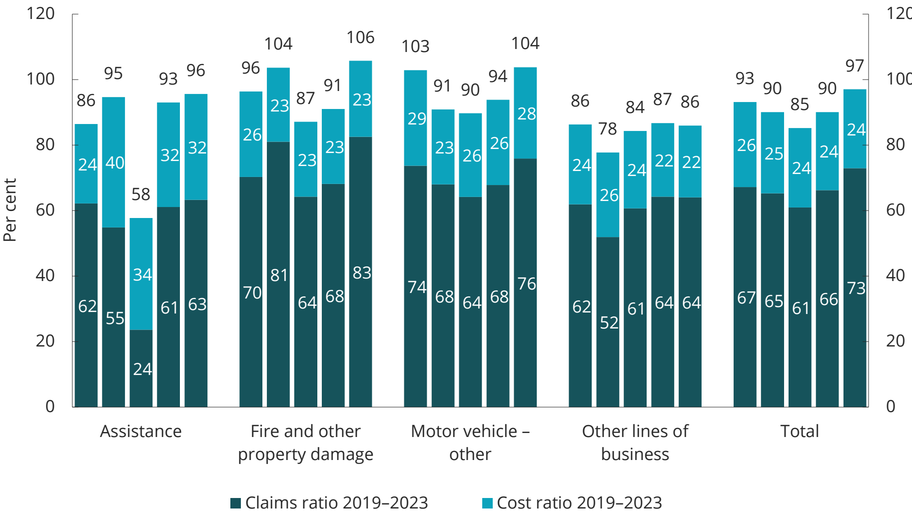
The results of non-life insurers were adversely affected by natural disasters and extreme weather events throughout 2023, such as the natural damage in Halden in the second quarter, the extreme weather 'Hans' and torrential rain in Eastern Norway in the third quarter. Combined with increased

[35] Universität Zürich. Department of Finance. Climate Policy Relevant Sectors.
[36] Cf. Climate bonds 'Explaining climate bonds'.

claims for own account on all reinsurance contracts, most undertakings offering land-based insurance products recorded a significant decline in profits in 2023. An extraordinarily snowy and slippery winter in the fourth quarter contributed to further weakening profitability, particularly for motor vehicle insurance. The net combined ratio (the total of the claims ratio and the cost ratio), i.e. the ratio of net costs related to claims payments and operations to net premium income, was 97 per cent in 2023, up from 90 per cent in 2022 (chart 64).

During the pandemic, people travelled less and made less use of their cars. This led to a far lower claims frequency without a corresponding downward adjustment of premiums, which raised the profitability of assistance insurance (travel insurance) and motor vehicle insurance. Since the pandemic, the claims frequency has increased, and the undertakings have also had to deal with a faster pace of inflation. Premiums are increased as insurance policies are renewed, which usually takes place evenly through the year, and are earned during the contract period. Therefore, increases in premiums are gradually reflected in the undertakings' insurance results. In the first quarter of 2024, the net combined ratio was 102 per cent, compared with 93 per cent in the corresponding quarter last year. This raises questions about whether climate change and a higher proportion of electric cars (with powerful engines) have resulted in a lasting increase in claims frequencies.

Chart 64 Net combined ratio for all non-life insurers*. Selected lines of business



* Assuranceforeningen Skuld has a diverging financial year and has been excluded. Source: Finanstilsynet

Historically high payments related to weather and natural damage in 2023

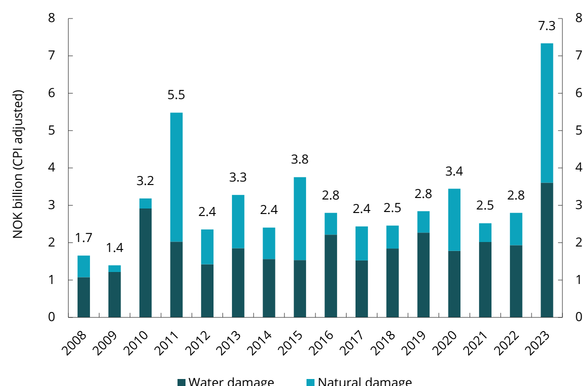
Climate change is already noticeable in Norway, and it is likely to get warmer and wetter in the years to come. On average, there is now 20 per cent more precipitation annually in Norway compared to the early 1900s.[37] Both the amount of precipitation and the number of days with precipitation have increased. Torrential rain resulting in surface water and river flooding occurs more frequently and causes damage to buildings and infrastructure. Increased precipitation also triggers floods and landslides. The average temperature has risen, resulting in shorter winters, shrinking glaciers and a longer growing season.

In 2023, several heat records were set globally, both on land and at sea, and the World Meteorological Organization (WMO) is now sounding the Red Alert about climate change. According to Finance Norway, all weather and natural damage to buildings and contents in Norway came to as much as NOK 7.3 billion in 2023, up from NOK 2.8 billion in 2022 (chart 65).[38] EIOPA has circulated for consultation proposed changes to the capital requirement for natural disaster risk. Among other things,

[37] Norwegian Meteorological Institute 'Global warming is changing precipitation in Norway' (in Norwegian only).
[38] Finance Norway 'Climate report 2024' (in Norwegian only).

it is proposed that the capital requirement for natural disaster risk for Norway and other Nordic countries should include flood risk in addition to the current requirement for windstorm risk.

Chart 65 Natural and weather damage to buildings and contents



Source: Finance Norway

Natural damage insurance scheme

The natural damage insurance scheme ensures that all buildings and contents that are insured against fire are automatically insured against natural damage. The premium rate is identical for all policyholders irrespective of where in Norway the insured is resident, even though some areas are far more susceptible to natural damage than others. This puts Norway in a unique position internationally. In many countries, individuals must be insured against natural damage, and vulnerable areas are not necessarily considered to be insurable. When the extreme weather 'Bernd' hit Germany in 2021, less than half of those affected were adequately insured.[39] There are now several places in Europe where it is not possible to buy insurance against natural damage, including in certain parts of Denmark and by the Thames in England.[40]

When natural damage covered by the natural damage insurance scheme in Norway occurs, the policyholder relates to his or her insurer. The insurers settle claims with policyholders and report total claims payment costs to the Norwegian Natural Damage Pool, which distributes these on the insures based on market shares. Amendments have been adopted to the Natural Damage Insurance Act that will apply from 1 January 2025. Under the new legislation, a common fund managed by the Norwegian Natural Damage Pool will be established into which the insurers will pay natural damage capital. The natural damage capital that is built up, and the return on this capital, will be used to cover natural damage.

With respect to weather and climate-related damage that is *not* covered by the natural damage insurance (for example water damage caused by blocked drains, frost or other water intrusion from outside), the individual insurer will settle the damage. Such damage is also increasing in frequency and magnitude. In addition, Norway has a government natural damage scheme that applies in cases where no ordinary insurance is offered for what has been damaged, for example damage to agricultural or forest land, bridges or parts of the road network.

Damage prevention incentives

For several years, it has been pointed out, for example in Official Norwegian Report 2019:4 on the organisation of Norwegian natural damage insurance (in Norwegian only) and Official Norwegian Report 2018:17 on climate risk and the Norwegian economy (in Norwegian only), that the natural damage insurance scheme only to a limited extent stimulates damage prevention measures. Due to the

[39] Finance Norway 'Climate report 2024' (in Norwegian only).
[40] Gjensidige.no 'Several plots unsuitable for construction' (in Norwegian only).

lack of incentives for prevention, the adaptation to a climate with more extreme weather may come at a higher economic cost than necessary. Increased funds for flood and avalanche protection, and water and sewage systems that are dimensioned to drain surface water after torrential rain, are considered a more sustainable solution. According to Report to the Storting: Climate change – together for a climate-resilient society (in Norwegian only), the government will look at how the natural damage insurance scheme can be organised to ensure that preventive measures are better addressed. However, this should not take priority over the principle of solidarity and equal premiums for policyholders throughout the country. In the latest Report to the Storting: A safer future – prepare for flooding and avalanches (in Norwegian only), the government points out that it wants to strengthen measures to prevent floods and landslides. Prevention includes both physical security measures and measures such as mapping, land use planning, monitoring and notification.

As highlighted in the previous issue of Risk Outlook, a more challenging reinsurance market resulted in higher claims for own account in 2023 than in previous years. In consequence of more extensive and frequent climate-related events, international reinsurers may raise prices further, which means higher reinsurance costs for Norwegian insurers and higher insurance premiums for policyholders. The price of reinsuring the Norwegian Natural Damage Pool increased by as much as 34 per cent for 2023.[41]

Reconstruction in areas affected by natural damage

Several Norwegian insurers have argued against being held liable for damage after major natural disasters, such as the extreme weather 'Hans' in the autumn of 2023. This also applies in cases where responsibility for the natural damage is unclear (man-made vs. natural disaster), or where municipal-ities have allowed reconstruction in areas that have been affected by natural damage. Gjensidige Forsikring has previously sought recourse against Nord-Fron municipality, which granted a building permit for a house that was once again taken by flooding. The municipality was acquitted of Gjensidige's claim that the municipality should be held liable for damages, and Gjensidige's appeal to the Supreme Court was rejected.

Non-life insurers' use of artificial intelligence

There are rapid technological developments, and non-life insurers are increasingly using data and advanced analysis methods, for example based on machine learning and artificial intelligence (AI). In a letter dated 5 March 2024 (in Norwegian only), Finanstilsynet expressed its expectations regarding undertakings' use of advanced analytics. Finanstilsynet assumes that undertakings using advanced technology comply with sectoral regulations and relevant guidelines and with principles for prudent management and control.

The use of advanced analytical methods with a higher number of explanatory variables can provide more accurate classification of risk covers and thus contribute to ensuring that the insurer's premiums are proportionate to the risk assumed. On the other hand, this may lead to certain customers and customer groups in practice being excluded from the insurance collective. It is important that the undertakings ensure equal distribution of risk between members of an insurance collective and take financial inclusion into account. This is especially relevant for products providing significant benefits to society or in cases where exclusion may affect vulnerable customer groups in particular.

An imbalance may arise between the undertakings, which can use large amounts of data to price a risk, and the customers and their insight and ability to assess whether this price is reasonable in relation to the inherent risk and the services provided. Finanstilsynet expects the undertakings to be aware of this potential imbalance and refers to the requirement in the Act on Insurance Activity that premiums must be proportionate to the risk assumed and the services provided. Finanstilsynet

[41] Report to the Storting 26 (2022-2023) Climate change – together for a climate-resilient society (in Norwegian only).

assumes that the undertakings will not adopt a practice where the price is maximised on the basis of the customer's willingness to pay for the insurance product. Finanstilsynet also expects the undertakings to ensure that prices are transparent and can be explained to the customer.

TOPIC: MACROPRUDENTIAL SUPERVISION

Macroprudential supervision to increase resilience

The purpose of macroprudential supervision and macroprudential instruments is to monitor the stability of the financial system, reduce the risk of future crises in the financial system and mitigate the consequences if a crisis does occur. Crises in the financial system can come suddenly, create significant market turmoil and spread rapidly between market participants, both nationally and internationally.

Vulnerabilities in economies and in the financial system have an impact on how quickly a shock spreads and how extensive the adverse consequences become. The economic costs of financial crises can be very high and prolonged, particularly if the crisis has originated in the domestic market.

Banks' capacity to take on risk and willingness to provide new loans to creditworthy customers during downturns are conditional on sufficient equity to absorb substantial loan losses. Compared with non-financial corporations, the banking industry has a low equity ratio and a high leverage ratio both in Norway and internationally. Experience shows that more equity and less debt make banks less exposed to risk and contribute to reducing banks' funding costs.

Over time, it is the regulatory requirements that ensure that banks maintain adequate solvency levels. The overall capital requirements must therefore be proportionate to the risk facing the banks. Reduced capital requirements may lead to a gradual weakening of banks' solvency. This would be unfortunate in light of the risk in the financial system. In Finanstilsynet's opinion, the Norwegian capital requirements, within the constraints of the European regulatory framework, should be designed to help maintain the necessary solvency level in the banking industry.

Several of the macroprudential instruments are being reviewed and evaluated in 2024. As referred to below, Finanstilsynet has recently provided advice and prepared reports for the Ministry of Finance that come in addition to the quarterly assessments Finanstilsynet shares with Norges Bank on the countercyclical capital buffer (in Norwegian only).

Systemic risk buffer

The systemic risk buffer requirement is intended to increase the resilience of financial institutions to loan losses and other disruptions that may occur as a result of structural vulnerabilities in the economy and other persistent systemic risk. The systemic risk buffer shall help reduce banks' vulnerability to systemic risk not covered by other capital requirements, such as the countercyclical capital buffer and the buffer for systemically important institutions. Under the European capital adequacy framework, the systemic risk buffer requirement can also be designed to help reduce vulnerability related to exposures to individual sectors.

Finanstilsynet has submitted its views on the design and level of the systemic risk buffer to Norges Bank, and Norges Bank has provided advice to the Ministry of Finance. In order to promote financial stability and a resilient financial system, it is Finanstilsynet's view that the systemic risk buffer rate should be retained at the current level of 4.5 per cent for domestic exposures, and that the current model with one general systemic risk buffer rate should be maintained.

Systemically important financial institutions

Systemically important financial institutions are of particular importance to the financial system and the real economy. In line with the capital adequacy framework, such institutions (banks, mortgage companies and finance companies) are therefore subject to a higher capital requirement than non-systemically important financial institutions. This reduces the likelihood that systemically important financial institutions will experience financial problems, which in themselves could have serious negative consequences for the financial system and the real economy but also spill over to other financial institutions and thus exacerbate a crisis.

Each year, Finanstilsynet assesses which institutions should be designed as systemically important in Norway. Finanstilsynet's advice to the Ministry of Finance regarding systemically important institutions for 2025 is that DNB Bank ASA, Kommunalbanken AS, Nordea Eiendomskreditt AS and Sparebank 1 SR-Bank ASA continue to be designated as systemically important. DNB should be subject to a special buffer requirement of 2 per cent, and the other banks should be subject to a special requirement of 1 per cent.

Amendments to the Capital Requirements Regulation – CRR3

On commission from the Ministry of Finance (in Norwegian only), Finanstilsynet has prepared a consultation document on the implementation of expected EEA regulations corresponding to amendments to the Capital Requirements Regulation (CRR) (in Norwegian only). The amendments, referred to as CRR3, are part of the ‘2021 banking package’, which, among other things, completes the European implementation of the Basel III recommendations. The amendments to CRR3 will take effect in the EU as of 1 January 2025. The Ministry of Finance aims for the amendments to enter into force in Norway at the same time as in the EU.

CRR3 introduces a more risk-sensitive standardised approach for calculating capital requirements for credit risk, which may result in lower risk weights, for instance for residential and commercial property with low LTV ratios. For banks using the IRB approach, CRR3 entails some restrictions on the use of models, including input floors for certain parameters and a floor for the overall capital requirement, but also more lenient requirements for individual parameters and risk weighting. Furthermore, CRR3 introduces stricter requirements for the valuation of real estate that will be relevant to both the IRB and the standardised approach. CRR3 will, without the use of national discretion, entail reductions in capital requirements for most Norwegian banks.

As part of its work on the consultation document (in Norwegian only), Finanstilsynet has assessed the risk weights for exposures secured by real estate, including the floors for the average risk weighting of exposures secured by residential and commercial real estate for banks using the IRB approach.

There are significant vulnerabilities and risks in the Norwegian economy and in the real estate markets. This warrants continued use of macroprudential instruments and national discretion to help ensure sufficient solvency in the Norwegian banking system. Finanstilsynet recommends that the various macroprudential instruments be designed as follows:

Standardised approach

- The risk weights for loans secured by residential real estate follow the main rule.
- For loans secured by holiday homes, the LTV threshold is lowered to 40 per cent to enable the use of a 20 per cent risk weight.
- The risk weights for loans secured on income-producing commercial properties are made applicable to all commercial real estate.

IRB approach

- The current LGD[42] floor is not retained.
- The minimum average risk weight requirement for residential mortgages is set at 25 per cent.
- The minimum average risk weight requirement for commercial mortgages is set at 45 per cent.

It is uncertain whether the implementation of CRR3 with the proposed use of national discretion will strengthen or weaken Norwegian banks' overall capital adequacy. The proposal entails more harmonised capital requirements for banks that follow the standardised approach and the IRB approach, respectively. Through the principles of reciprocity, the requirements can also be made applicable to foreign entities operating in the Norwegian market.

Lending Regulations

The Lending Regulations aim to promote financial stability by setting requirements for financial institutions' lending practices to prevent financial vulnerability among households and financial institutions. The current regulations expire on 31 December 2024. By 23 August 2024, Finanstilsynet shall submit advice to the Ministry of Finance (in Norwegian only) on the design and wording of the Lending Regulations after the turn of the year.

[42] Loss given default

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