

3 | Challenges

3.1 Risks

On the whole, the financial stability outlook is considered satisfactory. Liquidity risk, market risk and credit risk at banks remain relatively low in the short term. If macroeconomic developments are broadly in line with our projections, banks' loan losses and results should remain satisfactory over the next two to three years. Moreover, satisfactory capital ratios indicate that banks are well poised to meet a situation with higher loan losses.

The analyses in Sections 1 and 3 nevertheless indicate that certain developments may weaken the outlook. We will focus on six conditions in particular:

Uncertainty surrounding external economic developments

The Norwegian business sector is highly dependent on international markets. In recent years, Norwegian business and industry have benefited from buoyant global demand and favourable prices for our export goods. This has contributed to high corporate profitability in Norway and unusually low loan losses at Norwegian banks.

There are a number of conditions that may lead to a weakening of the global economy. Problems in segments of the US housing market may spread to other areas. This may lead to weaker growth in private consumption and lower growth, first in the US and then globally. Furthermore, global trade imbalances may lead to wide swings in exchange rates, interest rates and growth in the world economy. In addition, high prices for oil and other commodities may dampen growth while holding up inflation, which may result in higher global interest rates than implied by capacity utilisation. The recent years' high corporate and household debt accumulation in many countries has probably amplified the effects of interest rate increases on private demand.

An international downturn will weaken earnings in many Norwegian enterprises and eventually lead to higher losses on bank loans to the business sector.

An abrupt correction of global imbalances accompanied by marked exchange rate movements and higher long-term interest rates also have consequences for financial institutions' investment returns and funding costs. Price developments in the Norwegian securities market largely follow international developments. Norwegian financial institutions' credit risk, market risk and liquidity risk may increase as a result of external conditions.

Low risk premia

Risk premia in international financial markets are low from a historical perspective. The yield premium on corporate bonds has been low and there has been a high level of carry trades among foreign exchange market participants. The unrest in financial markets in February and March reduced risk willingness and triggered an unwinding of risky positions. The increase in risk premia was nevertheless modest and short-lived.

A weakening of the global economy or an incident at a major financial institution or company may reduce the willingness to take risk and result in higher risk premia. A marked change in risk pricing may increase enterprises' and financial institutions' funding costs. The value of financial institutions' securities portfolio may then also show a substantial fall.

High debt growth and house price inflation in Norway

The historically high and rising debt burden of Norwegian households has increased their vulnerability to economic disturbances.

Unemployment is unusually low and must be expected to rise in the medium term. Income growth will gradually slow, which may lead to debt-servicing problems in the household sector. Since 1992, real house prices have increased by 175% according to Statistics Norway and by 223% according to the statistics from the real estate industry and ECON. Periods of strong house price increases may be followed by a fall in house prices (see box on page 43). A fall in house prices can result in imbalances between liabilities and assets, with a fall in the value of banks' collateral. A weakening of households' financial position and falling house prices will lead to somewhat higher losses on banks' loans to households. Such a weakening will also lead to lower demand and weaker corporate earnings, with an attendant increase in losses on loans to enterprises.

High degree of optimism and rapid increase in commercial property prices

Bank lending to the property industry is rising at a fast pace. Lending to property companies now account for 13% of total bank loans. The financial position of both property companies and their lessees is solid at present. Commercial property prices have exhibited a considerable increase over the past year. Operators in the market expect prices to continue to rise at a fast pace. Lower demand in the Norwegian economy could result in a slower-than-expected rise in prices. Combined with higher interest rates, this may reduce profitability in the commercial property market, with an attendant increase in

bank losses. Losses on loans to the commercial property market accounted for a large share of banks' loan losses during the banking crisis (1988-1993).

Structural challenges to bank earnings

Competition in the banking market will continue to exert pressure on banks' interest margins and net interest income. The strong rate of increase in bank lending in recent years has counteracted the effect of the fall in interest margins on profits. The high debt burden of households and prospects of higher interest rates will eventually lead to slower lending growth. Because the high level of lending growth is not sustainable over time and pressures on interest margins are not likely to ease, banks must increase income from other sources or reduce costs in order to maintain profitability. Competition may also increase on the deposit side and in other segments such as payment and asset management services.

Transition to new capital adequacy rules

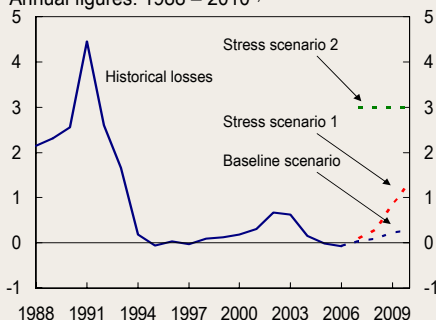
In the interest of financial stability, it is very important for banks to maintain sufficient capital buffers to absorb unexpected loan losses. Banks should ensure that they have sufficient capital to meet a possible economic downturn. The capital adequacy regulation will, through the minimum capital adequacy requirement, contribute to ensuring this. The new capital adequacy rules introduced in 2007 (Basel II) will enhance risk management. The distribution of capital among financial institutions will to a greater extent reflect differences in risk. This promotes financial stability.

However, Basel II will lead to markedly lower minimum capital requirements at most banks in the years ahead. The transition to the new capital adequacy rules entails some degree of risk that banks will reduce capital to the extent that the buffers for meeting unforeseen events become smaller than what is considered desirable.

3.2 Stress testing of banks' results

Banks' prospects and vulnerability can be assessed using forecasts and stress tests. We have looked at possible consequences of higher loan losses on the profits and capital adequacy of Norway's five largest banks. An increase in loan losses may be triggered by a pronounced economic downturn. Such a development is described in the box "Factors behind banks' problem loans" (see page 50). In this scenario, interest rates increase markedly owing to prospects for high inflation, while property prices and economic growth show a pronounced decline.

Chart 3.1 Banks' losses on lending to households and non-financial enterprises. Baseline scenario¹⁾ and stress scenarios 2007-2010. Percentage of lending to households and non-financial enterprises. Annual figures. 1988 – 2010²⁾

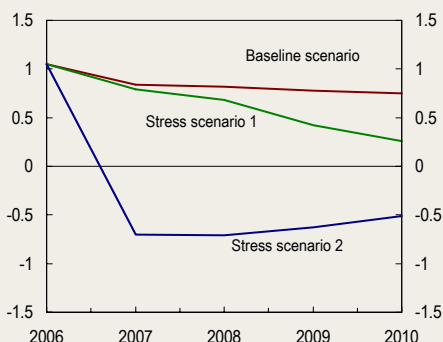


¹⁾ Baseline scenario from *Monetary Policy Report 1/07* is used

²⁾ Historical losses in the period 1988 - 2006. Projections and stress scenarios in the period 2007 - 2010

Source: Norges Bank

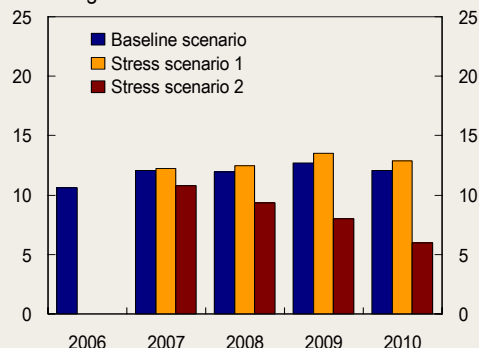
Chart 3.2 Projections of post-tax profit as a percentage of average total assets in Norway's five largest banks¹⁾. Annual figures. 2007 – 2010



¹⁾ DnB NOR Bank (excl. branches abroad), SpareBank 1 SR-Bank, Sparebanken Vest, SpareBank 1 Nord-Norge and SpareBank 1 Midt-Norge

Source: Norges Bank

Chart 3.3 Projections of capital adequacy in per cent in Norway's five largest banks¹⁾. Annual figures. 2007 – 2010



¹⁾ DnB NOR Bank (excl. branches abroad), SpareBank 1 SR-Bank, Sparebanken Vest, SpareBank 1 Nord-Norge and SpareBank 1 Midt-Norge

Source: Norges Bank

An economic slowdown with higher loan losses could also occur against the background of a global downturn, triggered by factors described in Section 3.1.

The calculations are based on the following assumptions: For the projection period 2007-2010, three scenarios are assessed; the baseline scenario and two stress alternatives. The baseline scenario for growth in loan volume and loan losses are based on the projections for the economy described in *Monetary Policy Report 1/07* and the analyses in the same report.

In the baseline scenario, loan losses increase from about zero to around ¼% in 2010 (see Chart 3.1). Lending growth for the five banks combined gradually slows to 10% in 2010. It is also assumed that interest margins decline somewhat ahead as a result of slightly lower deposit margins. Other operating expenses are assumed to increase by 4% annually. The strong growth in other operating income recorded in recent years is assumed to show a gradual decline. With a few exceptions, all other profit items are projected to be in line with average growth over the past five years.

All five banks have been authorised to apply the internal-ratings based approach under Basel II, and report capital adequacy in accordance with this as from 2007. The Basel II framework implies a reduction in the capital requirement for these banks compared with Basel I. The minimum capital adequacy requirement of 8% still applies. The capital requirement is reduced because banks' assets are given on average a lower risk weight, which reduces risk-weighted assets (the denominator in the capital adequacy ratio). The reduction can be taken in full as from 2010. In 2007, risk-weighted assets shall account for no less than 95% of what would have been required under Basel I. In 2008 and 2009, the corresponding floor is 90% and 80%, respectively. In the analysis, it is assumed that the floor is binding and risk-weighted assets in 2010 are still 80% of what would have been required under Basel I.

Developments in profits and capital adequacy in the baseline scenario are shown in Charts 3.2 and 3.3. Profits are relatively stable through the projection period, despite the fall in the interest margin, given the assumption of continued high growth in loan volume and other operating income. Moreover, loan losses are virtually unchanged. The capital adequacy ratios for the five banks are approximately unchanged through the projection period and well above the minimum requirement. The transition to Basel II contributes to holding up capital adequacy ratios.

The baseline scenario calculations show that developments in Norway's five largest banks combined remain favourable if developments in the Norwegian economy are broadly in line with projections.

In stress alternative 1, loan losses are assumed to increase gradually to 1.3% in 2010 (see Chart 5 on page 52). Growth in loan volumes slows markedly to 3%. Growth in other operating income also slows to a further extent than in the baseline scenario. Other assumptions remain the same as in the baseline scenario.

Bank profits deteriorate markedly in stress alternative 1, but remain positive through the projection period (see Chart 3.2). As a result of lower retained profits, growth in the banks' capital is lower in the stress alternative. In isolation, this pushes down capital adequacy, but the effect is curbed by our assumption that half of the post-tax profit is used for dividend payments. Lower lending growth results in slower growth in total volume of risk-weighted assets. This pushes up capital adequacy. All in all, capital adequacy therefore shows little change in the stress alternative (see Chart 3.3). If the assumption concerning lending growth had been the same as in the baseline scenario, capital adequacy would have been weaker in the stress alternative than in the baseline scenario.

The level of loan losses in stress alternative 1 is lower than during the banking crisis, when annual losses averaged around 3% in the period 1989-1992. In stress alternative 2, we have therefore assumed that annual losses average 3% through the projection period. The other assumptions are the same as in stress alternative 1. The result is then negative in each year. Capital ratios also show a considerable weakening, and are at the minimum requirement in 2009 before falling well below the minimum requirement in 2010. The analysis thus indicates that the banks are well poised to meet weaker developments, but that an increase in losses on a par with that witnessed during the banking crisis may result in capital ratios that are lower than the regulatory requirement.

There are still conditions that may lead to a more critical situation than illustrated here. Banks that use the internal-ratings based approach estimate the risk weights on the basis of historical data. When loan losses increase, the risk weights and hence the capital requirement will also increase. Our analysis does not take this into account. In addition, loan customers may be granted loan payment deferrals in the event of payment problems. This will result in a higher volume of outstanding loans and a higher calculation basis than assumed. Capital ratios will then be lower than in the stress alternatives.

Under the assumptions concerning economic developments in stress alternative 2, it is unlikely that the banks will be in a position to raise subordinated loan capital and other funding to the same extent as in recent years.

The scenarios are confined to the period up to and including 2010. Under the stress alternatives, it is unlikely that 2011 will be a normal business year. On the other hand, the banks will not remain passive in the face of such a development. In response to large loan losses, banks will probably seek to increase interest margins. Developments in interest margins in such a scenario will depend on competition in the loan market.

3.3 Conditions that may mitigate the risk of financial instability

The stress tests show that weaker macroeconomic developments can lead to a considerable increase in these banks' loan losses. Combined with continued strong competition and pressure on bank income, this may result in a deterioration in profitability and the financial position of the banks. However, there are conditions that may contribute to mitigating the risk of a marked weakening of profitability and financial strength in the coming years:

New loan products place considerable demands on credit assessments and customer advice. When interest rates are low, it can be challenging for borrowers to assess their own debt-servicing capacity over time. Good information from lenders about the consequences of interest rate increases and principal payment deferrals will alleviate the risk of increased payment problems in the future.

The strong and almost uninterrupted rise in house prices since the beginning of the 1990s may have fuelled expectations that house prices will only continue to increase, but history shows that this period has been extraordinary. Over a longer time horizon, the average rise in house prices has been clearly lower than over the past 15 years, and there have been periods of sharp declines. If the loan-to-collateral value ratio is kept at a low level, banks' collateral will be less vulnerable to a fall in house prices and borrowers will be in a better position to meet their debt obligations.

A very small portion of Norwegian households have chosen fixed-rate loans. In many other countries, fixed-rate loans are more common. Households that prefer a higher degree of predictability with regard to interest expenses can consider the option of a fixed-rate loan.

Commercial property prices have increased markedly over the past year. The market is characterised by a high degree of optimism about future rental prices. The value of the collateral underlying the loans may decline rapidly in the event of a cyclical downturn. Banks that take this into account in their lending practice are in a better position to meet a weaker property market.

The current high level of lending growth places considerable demand on risk management at banks. Some banks have low lending margins. It is important that margins reflect loan administration costs and expected losses while providing a reasonable return on equity.

A further challenge facing banks is that the transition to new capital adequacy rules comes at a time when the economy is booming with strong competition for market shares. Banks whose risk models take account of the unusually low level of losses in recent years are less vulnerable to the risk that a fall in capital will be too large to meet unforeseen events and higher losses.

Under Pillar 2 of the Basel II framework, banks are required to establish a process for assessing their risk profile and capital needs. Banks' work to design such a process will make a contribution to averting a crisis in individual institutions. The cyclical swings in the capital requirement under Pillar 1 can be counteracted by capital buffer requirements under Pillar 2.

The introduction of a separate capital requirement for operational risk in the Basel II framework makes this type of risk more visible to banks. Operational risk is demanding to quantify and can comprise a broad spectrum of risks from natural disasters to failed confidence in banks' services. If confidence in banks' electronic services should fail, this may prompt customers to use services that are more costly for banks or could lead to a fall in customer use of banking services. Developing and maintaining customer-friendly and reliable services with a high level of public confidence are therefore important for bank profitability.

Liquidity risk has received considerable international attention in recent years. Reduced deposit-financing and growing dependence on professional funding markets, such as the interbank market and securities market, increase the likelihood that in periods of market disturbances it may be more difficult for banks to renew funding. Dependence on foreign funding sources may increase vulnerability. Banks have access to liquidity in Norges Bank against approved collateral, but growing internationalisation also requires liquidity in different currencies and markets. It is therefore important that banks have a diversified funding and maturity structure that is adapted to the bank's business.

Sound risk management at financial institutions is the most important condition for preventing instability in the financial system. Even if this condition is satisfied at most financial institutions, we must be prepared for a situation where financial problems arise in individual financial institutions. Problems may then spread to other financial institutions. It is therefore important that banking regulation is designed to

prevent problems from spreading and intensifying during a crisis. It is particularly important that the regulatory framework for deposit guarantee schemes and public administration provide private operators with incentives to resolve a crisis without government support. The banks' owners, managers and creditors must know that the authorities may rapidly place a crisis bank under public administration if that proves necessary. The banks' guarantee funds have taken a closer look at the practical routines involved in placing a bank under public administration. It is important that these routines are adapted to today's banking structure and payment systems.

The EU has increased its focus on the need for improving the framework for crisis management, particularly for cross-border banks. Good national information routines and a clear division of responsibility are a precondition for dealing with crises at cross-border banks rapidly and effectively.

In Norway, closer cooperation was established in 2006 between the Ministry of Finance, Kredittilsynet (Financial Supervisory Authority of Norway) and Norges Bank in the area of financial stability and crisis management. Furthermore, crisis exercises are carried out on a regular basis, both at national and international level, to test whether the regulations and routines are appropriate at all times.