Thank you for inviting me to this seminar on primary capital certificates to give an introductory speech on developments in the banking industry and the balance of risks.

As we all know, there is a strong global focus on financial institutions and financial markets at present, with frequent use of words such as "turbulence", "problem" and "crisis". I will spend some time on the background to these developments and try to assess the possibility of similar problems in Norway. I will also point to other risk elements that the industry should bear in mind. First, however, I will give a brief review of the economic situation in Norway and how this has affected the banking industry.

The Norwegian economy and the financial sector

The Norwegian economy is now in a cyclical upturn. Over the past three years, mainland GDP has grown by approximately 4½ per cent annually, and this high rate of growth has continued in 2007. In the first half of the year, annualised growth was close to 6 per cent, and even if GDP growth in the third and fourth quarters should be zero, annual growth will be well over 4 per cent. As the chart shows, a four-year period of such strong growth has not been seen since 1971.

The strong rate of growth has only to a limited extent fed through to a higher rise in prices for consumer goods and services. Consumer price inflation adjusted for tax changes and excluding energy products (CPI-ATE) has admittedly picked up gradually since late summer 2006, but in relation to the economic situation, underlying inflation remains low. After hovering around 1-1½ per cent over a longer period, the year-on-year rise in the CPI-ATE was 1.8 per cent in August. Other measures of underlying inflation show approximately the same rise in prices. The year-on-year rise in the total consumer price index (CPI) has been just under ½ per cent in recent months. This is because electricity prices have been substantially lower this year than last year.

There are a number of reasons why inflation has been low in an environment of high economic growth.

First: Norway's terms of trade have improved. Prices for export goods such as oil and gas, freight, fish, industrial commodities and engineering products have increased considerably. In addition, market growth abroad has provided market opportunities for Norwegian export goods. At the same time, Norwegian importers have been able to shift demand to new markets in central Europe and Asia, which has led to a fall in prices for many imported consumer goods. The terms of trade have improved by about 40 per cent since 2002. This has resulted in a vigorous rise in Norway's disposable income. Even excluding oil, there has been a marked improvement.

Second: An ample supply of labour has boosted output growth. In particular, the supply of foreign labour has increased sharply after EU enlargement in 2004. Over the past two years, these labour inflows have accounted for over 30 per cent of growth in the labour force in Norway. At the same time, this has enabled Norwegian companies to be bolder in accepting new assignments and making investments, in the knowledge that they can procure labour
throughout Europe. High inward labour migration and the scope for relocating portions of production abroad have led to increased competition in the labour market and have probably curbed wage growth.

Third: The Norwegian business sector has been quick to adopt new technology and to reap the benefits. In comparison with other countries, productivity gains in service sectors stand out in particular.

On balance, these factors have contributed to the economy’s high capacity for growth. But strong activity growth has now resulted in a high level of capacity utilisation. Shortages of labour and other factor inputs have been reported. This may curb growth in the Norwegian economy and lead to higher wage and cost inflation. Inflation is expected to pick up ahead.

The upturn has also benefited the financial industry. Strong economic expansion has pushed up an already high level of lending growth. As a result, total assets in Norwegian banks and mortgage companies have risen sharply over the past decade. Growth in lending to households has been high since 2000, but growth in corporate lending showed a sharp rise towards the end of 2005. Profitability in the financial industry in Norway has been high. What is the outlook ahead? Will strong growth continue?

The strong rate of growth we have witnessed in the past few years is not sustainable over time. Capacity utilisation is very high with labour shortages in many sectors. Monetary policy must be oriented to bringing inflation up to target while avoiding an overheating of the real economy. The scenario ahead, then, is a continued upward adjustment of the interest rate while curbing the high rate of economic growth. It is likely that credit growth will gradually slow, and this may also pose challenges for banks. I will return to this later.

Risks to financial stability in Norway

In Norges Bank’s most recent Financial Stability report, published in June, we concluded that the overall outlook for financial stability was satisfactory. We nonetheless highlighted a number of factors that might constitute a risk. In connection with international risk factors, we placed emphasis on the uncertainty surrounding international economic conditions and the concern about the low risk premia in financial markets. I think it is fair to say that developments have borne us out here. Other risk factors were related to the vulnerability of Norwegian bank customers, lower interest margins for banks and the new capital adequacy rules.

Uncertainty surrounding developments in international economic conditions and financial markets

There has recently been considerable turbulence in international financial markets. Could this have a substantial impact on Norwegian financial markets and could it have serious consequences for growth and employment in Norway? Let us look at the reasons for the turbulence and how it has spread.

The source of the turbulence can be found in the US housing market and particularly in the subprime mortgage market. In addition, this type of loan is frequently offered at a low rate of interest with small repayments in the first years of the loan term and a higher interest rate later. Mortgages with this structure involve gambling on a rise in house prices. If house prices rise, borrowers’ collateral will increase in value, allowing the mortgage to be refinanced on better terms. Or the borrower can turn around and sell the dwelling at a profit. This is what happened for a period, but then house price inflation slowed, partly as a result of tighter monetary policy.

The fall in house prices towards the end of 2006 and in 2007 resulted in rising defaults on mortgages, especially in the subprime segment. In 2007 and 2008, interest rates will
increase for a substantial portion of the most recently granted subprime mortgages. This will probably result in a further rise in defaults on these mortgages.

Housing starts have also declined considerably. The sharp fall in housing investment has reduced the annual rate of US economic growth by about ¾ percentage point on average over the past year and a half. Housing market developments in the US may result in a more sluggish trend in private consumption and may further amplify the tendency to slower growth in the US, which may spread to the global economy. At the moment, the spillover effects seem to have been moderate and downward revisions of growth estimates have been modest.

In the US, more than half of total mortgage debt is securitised and sold to investment managers all over the world. This is one of the largest fixed income markets in the world and accounts in volume terms for almost 10 per cent of global securities debt. Subprime securitised issuance showed a sharp rise in 2004 and increased further in 2005. Estimates of subprime mortgages as a share of the total volume of securitised mortgages in the US are uncertain and vary from 12 to 18 per cent. In the chart, the share is 12 per cent, or USD 665 billion.

One reason for the popularity of securitised subprime mortgages was the development of collateralized debt obligations, CDOs, based on portfolios of these mortgages. The rating agencies have been actively involved in developing these products. Mortgages were often packaged in such a way that the securities in the most secure or senior tranches were given an AAA rating. This gave the subprime market access to funding from insurance companies and other investment managers that otherwise would not have invested in this market. High lending growth would probably not have developed without this type of financing. The securities in the least secured tranche (equity tranche) were in demand from investors seeking high returns, such as hedge funds. It has been difficult to price CDOs. As a rule, the issuer has calculated a fair value using complicated mathematical models. Because of the pricing difficulties, there has been little trading in these securities since their issue. This has resulted in problems for funds interested in selling, or who were forced to sell.

In winter 2007, the rise in defaults on subprime mortgages resulted in a sharp increase in credit spreads for bonds backed by this type of mortgages. The credit spread for bonds backed by subprime mortgages rose further in June in the wake of problems in two funds specialising in investment in this kind of bonds.

Credit premia also increased for other fixed income instruments, such as conventional mortgage bonds, corporate bonds and loans to emerging markets, from summer 2007, although on a far more moderate scale than for subprime-backed securities.

In the last half of July, the turbulence spread to other financial market segments. The risk premium required by investors rose, and equity prices fell sharply. The contagion was due to uncertainty as to the risk subprime-backed financial products represented for the financial system, and to a lack of information about who had invested in such products.

Conduits and Structured Investment Vehicles (SIVs) were among the investor groups investing in the financial products based on subprime mortgages. As a rule, these investment companies were wholly or partially owned by banks. They invested in assets with a high rating, such as the senior tranche in subprime-backed securities. These investments were debt-financed, primarily in the short-term money market through asset-backed commercial paper (ABCP). High ratings on these assets gave investment companies favourable funding rates. Due to the turbulence in the subprime market, interest rates for ABCP have risen sharply and maturities have been reduced. The flow of money to investment companies through money markets has dried up. Banks have to a large extent had to finance the investment companies themselves. However, this increases banks’ liquidity requirements. There have been examples of banks that did not have the capacity to finance their investment companies.
Due to uncertainty as to which financial institutions were exposed to the subprime market, many operators became very cautious about extending loans, and this eventually also led to liquidity problems in the interbank market. On 9 August and in the days ensuing, many central banks offered extra liquidity to safeguard liquidity in the banking system. Norges Bank supplied liquidity to the Norwegian banking system through ordinary market operations on 9 August. In many countries, the money market is still dependent on injections of extra liquidity from the central bank. The banking system’s capacity and willingness to redistribute funds is still moderate. This increases banks’ financing costs.

The turbulence in the financial markets has also led to a sharp rise in prices for transferring credit risk, i.e. credit default swaps (CDS), for both banks and other companies. CDS prices for US banks rose for the first time in March and began to rise again at end-June. Developments in CDS prices for European banks lagged behind somewhat, but in the last half of July CDS prices rose sharply for both US and European banks. This also affects Norwegian banks and enterprises, but the increase in CDS prices for DnB NOR was considerably lower than for European banks on average.

Kredittilsynet (Financial Supervisory Authority of Norway) announced at the end of August that financial market turbulence seems to have had little impact on Norwegian banks. Kredittilsynet’s analyses showed that Norwegian banks are not directly exposed to the subprime market and that they have limited exposure to hedge funds. Norwegian banks have some indirect exposure through their regular connections with foreign banks and credit institutions that are more exposed to subprime mortgages and hedge funds than their Norwegian counterparts. However, general liquidity problems in international money markets might also affect Norwegian banks and lead to higher funding costs. To some extent, this has in fact happened.

Norwegian money market rates have risen relative to the risk-free interest rate, but less than in the major economies. It is uncertain how sensitive risk premia will be in the event of higher demand for funding. The price of obtaining dollar liquidity seems to have increased, and this also affects Norwegian banks.

Since the end of June, the yield curve in the Norwegian money market has become steeper at the short end. Two- and three-month rates have risen more than the other money market rates in this period.

We do not know how long the turbulence will last or what the consequences will be for the real economy. So far, the turbulence has not resulted in substantial reassessments of the international outlook for economic growth. The OECD has revised down its growth estimates for 2007 somewhat, particularly for the US and some European countries, and the IMF has indicated that it will do the same. Uncertainty with regard to 2008 is probably greater, but the turbulence seems to have had little impact on emerging economies so far, with the prospect that strong growth will continue in the world economy as a whole. The turbulence has led to a fall in short-term interest rate expectations, particularly in the US. Long-term interest rates have also declined. Interest rate expectations have also fallen somewhat in Norway.

**Covered bonds**

Norwegian banks and mortgage companies have also been given the right to securitise mortgages. Will this lead to developments similar to those we have seen in the US? The rules for covered bonds entered into force on 1 June 2007. These bonds give the bondholder a preferential claim in relation to a specified selection of a mortgage company’s assets. DnB NOR, Terra-Gruppen and the SpareBank 1 group have all established their own covered bonds companies for this purpose. So far mortgages that have been transferred from banks to this type of mortgage institution have a high level of security. Because of this high level of security, the new type of bond is expected to have a somewhat lower yield than traditional
bank bonds, which is likely to reduce banks’ total funding costs. DnB NOR Boligkreditt and Terra Boligkreditt have both issued covered bonds.

In addition to lower financing costs, the reason why banks establish mortgage credit institutions is that the assets in a mortgage credit institution can easily be converted to liquidity by issuing covered bonds.

Norwegian covered bonds are very different from US CDOs backed by subprime mortgages. The regulations ensure that Norwegian covered bonds are a more transparent and substantially more secure investment alternative. The cover pool in the mortgage credit institutions consists of mortgages with a maximum loan to value ratio of 75 per cent. The loan to value ratio of the cover pool in Norwegian mortgage credit institutions that have so far issued covered bonds is well below this. All holders of covered bonds have the same right to the mortgage credit institution’s cover pool. In other words, there is no tranching as is the case for CDOs backed subprime mortgages. Investors will also have an overview of the risk parameters for mortgages that are part of the cover pool. This means that Norwegian covered bonds are far more transparent with respect to the assets that are the bondholders’ cover than CDOs backed by US subprime mortgages.

Another difference between subprime mortgages in the US and Norwegian mortgages is that the regulations relating to the provision of credit are stricter in Norway. Subprime mortgages in the US have been sold through agents and mortgage brokers that have not been subject to federal supervision. In a number of cases, mortgages have been extended to persons with no income. Before Norwegian banks extend a loan, they assess a customer’s debt-servicing capacity. Norwegian banks are also required to advise a customer against taking out a mortgage if they feel that the customer will find it difficult to service the loan.

**Risk factors related to domestic conditions**

Events that have taken place abroad are actually more a liquidity crisis rooted in uncertainty about the valuation of assets and the distribution of losses among institutions than a crisis due to the size of the losses themselves. The credit risk for the more senior tranches of subprime CDOs is probably manageable. But we should not forget credit risk in the traditional sense when we assess risk elements.

Loans to Norwegian households and enterprises account for approximately 70 per cent of banks’ balance sheets. Risk factors related to these customer groups are therefore very important to financial stability in Norway.

**Households**

Strong household debt growth and the sharp rise in house prices constitute a risk factor with regard to financial stability in Norway. Household debt growth has been high since 2000, primarily driven by low interest rates and a sharp rise in house prices and income. Loans secured on dwellings have shown high and increasing growth. Strong competition between banks has pushed down lending margins. The new capital adequacy rules (Basel II), which involve a substantial reduction in risk weights for mortgages, may also have contributed to the rise in mortgage growth and the decline in lending margins.

Real house prices, deflated by consumer prices, building costs and house rents, are historically high. Deflated by disposable income, however, house prices have only risen moderately over the past ten years.

In recent months, there have been signs of a slackening in the housing market. The rise in house prices has slowed. Resale home turnover is still high, but it is taking longer to sell a dwelling compared with the same time last year.
Financial market innovations have also contributed to strong lending growth. In recent years loan products have been introduced that facilitate mortgage equity withdrawal – credit lines secured on dwellings. These loans are normally extended to borrowers with good collateral and debt-servicing capacity. They therefore present very little risk in a financial stability context. Credit lines secured on dwellings have rapidly increased in volume and now account for over 12 per cent of mortgages in banks and mortgage credit institutions. Foreign-owned banks were among the first to offer credit lines secured on dwellings and a far higher share of their mortgages are classified as this kind of loan.

Other aspects of household behaviour in the housing market are increasing their vulnerability and giving greater cause for concern. First, the number of interest-only mortgages has risen. The possibility of interest-only periods is a buffer for households with debt-servicing problems. For many households, this buffer has already been used. Kredittilsynsnet’s 2006 mortgage survey, which includes loans secured on dwellings excluding credit lines, showed that around one in six mortgages in the survey had included an introductory interest-only period. This share was somewhat higher than in 2005. Another aspect that increases vulnerability is that a number of borrowers have a high loan to value ratio, particularly those below the age of 35.

Household debt growth has been higher than income growth since 1999. The debt burden, defined as debt in relation to disposable income, has therefore increased markedly. Households’ financial position is nonetheless sound. As measured here, housing wealth in Norway is almost four times higher than total household debt. Debt and wealth are, however, unevenly distributed. Combined with any marked turnaround in the housing market, this would create problems for exposed groups.

However, the financial situation of households as a whole is satisfactory. Unemployment is unusually low, but must be expected to increase somewhat in the medium term. Household disposable income is expected to show continued high growth ahead. Due to the long period of strong debt growth and sharply rising house prices, however, households’ financial position has become more vulnerable.

Corporate sector

Corporate profits have been very high in recent years. These positive developments have been broadly based and are mainly driven by favourable economic conditions in Norway and abroad. Enterprises have on average large financial buffers.

Banks’ lending to the property industry accounts for approximately one third of their lending to the corporate sector. This sizeable exposure to one industry is a possible risk factor in relation to financial stability in Norway. Both property enterprises and their tenants are in a generally healthy financial position. Prices in the commercial property market have risen considerably in the past two years, and market participants are expecting the sharp rise to continue. Lower demand in the Norwegian economy may result in a slower rise than the market expects. Combined with higher interest rates, this may reduce profitability in the commercial property market, increasing banks’ losses. Losses on loans to the property industry accounted for a large share of banks’ loan losses during the banking crisis.

Outlook for the banking industry

Banks in Norway have experienced extremely favourable developments over the past few years: strong lending growth, minimal loan losses, high returns in securities markets and firm cost control.

Despite lower interest margins, banks’ net interest income in NOK is rising as a result of strong lending growth. Measured in relation to total assets, however, net interest income is
falling. In recent years, this has been offset by a reduction in costs. Today’s high debt growth is not sustainable over time, and it is unlikely that the pressure on interest margins will abate. Given these developments, banks must reduce costs or increase income from other sources if they are to maintain their current profitability.

To illustrate the effect of lower lending growth on banks’ income, we have carried out a simple calculation where the interest margin is held constant. If lending growth among banks had only been 3 per cent in 2006, banks’ net interest income and pre-tax results would both have been approximately 6 per cent lower this year.

The composition of banks’ income has been fairly stable in the past ten years, even though net interest income has become less important since 2002. One reason for these developments is that net price gains on securities have increased in this period. Bearing in mind that this was a favourable period for securities markets, it will be difficult to maintain the income share from price gains in periods of more normal returns in securities markets.

With a slower rise in house and commercial property prices and lower lending growth, combined with a normalisation of loan losses, banks may find it more difficult to maintain the high level of profitability that we have witnessed in recent years. The new capital adequacy rules have had a strong impact on Norwegian banks and will continue to do so in the years ahead. How banks choose to utilise capital freed up as a result of the reduced minimum capital requirements, may have an impact on both competition and structure in the Norwegian banking sector. Freed-up capital may be used to finance lending growth, acquire other institutions or pay back capital to shareholders and other stakeholders. On average, Norwegian banks’ capital adequacy is solid. However, the substantial reduction in minimum capital requirements, even though there are transitional arrangements, also entails some risk that banks will reduce their capital to such an extent that the buffer needed to meet unforeseen events may become smaller than advisable.

Banks’ profitability may also depend on the duration and severity of liquidity problems in international financial markets. Although Norwegian banks are probably somewhat less exposed than banks in many other countries, the impact may nonetheless be felt. It must also be expected that there will be strong focus on liquidity risk by financial institutions and supervisory authorities, and not least in the work on international regulations in the period ahead.

Thank you for your attention.
Mainland GDP

Sources: Statistics Norway and Norges Bank

Inflation
CPI and CPI-AE, 12-month change. Per cent

Source: Statistics Norway
Terms of trade
Index, 1995 = 100. 1995 – 2006

Sources: Statistics Norway and Norges Bank

Growth in lending and total assets for banks and mortgage companies in Norway¹)
Annual growth. Per cent. 2001 – 2007²)

¹) All banks and mortgage companies in Norway
²) Growth in 2007 is calculated as the growth from Q1 2002 to Q3 2002

Source: Norges Bank
Outstanding volume of mortgage loans in the US in 2006
In banks and as mortgage-backed securities (MBS). Billions of USD

Credit spreads for mortgage-backed bonds with rating BBB- backed by subprime and conventional mortgages
Basis points. 3 Jul 2006 – 10 Sep 2007

Source: Leirman Brothers
International equity indices
Indexed, 1 Jan 2007 = 100. 1 Jan 2007 – 11 Sep 2007

Source: Reuters (EcoWtn)

US interest rates with varying degree of risk
90-day rates. 1 Jan 2007 – 11 Sep 2007

Source: Reuters (EcoWtn)
Prices for hedging against credit risk. Prices for 5-year credit default swaps (CDS) for banks
Basis points, 1 Jul 2005 – 10 Sep 2007

Interest rate spreads
Spread between 3-month interbank rate and treasury bill rate
Basis points, 1 Feb 2007 - 10 Sep 2007

Sources: Bloomberg, Reuters and Thomson Datastream

Source: Reuters (EcoWin)
The Norwegian money market
Interest rate spread between T/N, 3-month NIBOR and sight deposit rate.
Percentage points, 1 Jul 2007 – 10 Sep 2007

3-month NIBOR

Source: Reuters (Economist)

12-month growth in credit to households
Per cent, Jan 1998 – Jul 2007

Mortgage loans

Domestic credit to households

Source: Statistics Norway

BIS Review 100/2007
Real house prices
Indices, 1965 = 100. 1985 – 2006

Rise in house prices
12-month rise and annualised 3-month rise.

Sources: Association of Norwegian Real Estate Agents, ECON, Fmtno, Association of Real Estate Agency Firms, Statistics Norway and Norges Bank
Credit lines secured on dwellings
Share of total mortgage loans in banks and covered bonds companies¹

¹ All banks and covered bonds companies in Norway

Source: Norges Bank

Household debt burden
Per cent. 1987 Q1 – 2007 Q2

Sources: Statistics Norway and Norges Bank
Household liabilities and assets
Billions of NOK. 2006 Q4

Sources: Association of Norwegian Real Estate Agents, ECON, FINN.no, Association of Real Estate Agency Firms, Statistics Norway and Norges Bank

Rental and selling prices for office premises in Oslo

Sources: Dagens Næringsliv and OPAK