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Unless otherwise stated, Kredittilsynet is the source of charts and tables. Cut-off date 20 February 2006. This report is the full version of the Norwegian report *Tilstanden i finansmarkedet 2005*, published 28 February 2006.

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## Introduction

The stability of the financial system has received much attention in recent years. Many countries, including most Nordic countries, have seen serious problems in their financial sectors, with substantial costs for society. The financial system redistributes capital and risk and attends to payment and settlement functions. Solid financial institutions and smoothly functioning financial and securities markets are needed if these functions are to be discharged in a satisfactory manner. Should confidence in the financial system fail, there could be substantial negative consequences for other sectors of the economy.

The experiences of a number of countries, including the Nordic countries, show that a combination of persistent, vigorous credit growth and rising prices in real estate and securities markets makes the financial system more vulnerable to macroeconomic shocks. Imbalances, which are just as likely to accumulate in periods of low and stable inflation as otherwise, may be difficult to identify – all the more so if accompanied by structural changes. During protracted cyclical upturns with low lending losses there is a greater risk that losses in the ensuing downturn will be underestimated. The presence of solid financial institutions reduces the risk that macroeconomic shocks and corrections of imbalances, for example in share markets or real estate markets, will lead to serious problems in the financial system.

Since 1994 Kredittilsynet has analysed and assessed potential stability problems in the Norwegian financial industry in the light of developments in the Norwegian and international economy. This is a necessary supplement to Kredittilsynet's ongoing supervision of individual institutions, since significant aspects of the assessment of individual institutions' profitability and financial strength need to be carried out against the background of the general state of the financial market. Kredittilsynet publishes annually its view of the state of the financial market and of the various categories of institutions.

## **Highlights**

Based on a review of the results reported by financial institutions and investment firms and an analysis of the economic prospects, the challenges facing the Norwegian financial market can be summarised as follows:

• Banks' results further improved in 2005, mainly as a result of low losses and a favourable cost trend. Net interest revenues remained under pressure, however, and may pose a threat to

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earnings after a time. The high growth in lending to households continued, accompanied in 2005 by a vigorous rise in lending to the business sector. The banking sector's overall financial position remained satisfactory. Although banks are currently in a very favourable situation, sound earnings and absence of losses may impair their vigilance. Household indebtedness is very high and rising, driven by low interest rates and a housing market upturn. A rise in interest rates or a housing market setback could kindle debt-servicing problems, particularly for younger households that have recently taken up sizeable home mortgage loans. Kredittilsynet's 2005 home loan survey shows that, as in 2004, banks' lending practice was such that many home loans overstepped a prudent assessment of the dwelling's value. A more restrictive lending practice from 2006 onwards would be an advantage for banks and the housing market alike. Thorough credit assessment is still needed in the corporate area. Banks must disclose sufficient information to their customers, who for their part should be capable of judging the consequences of possible negative changes in the economy for their personal finances.

- Kredittilsynet's annual survey of loans secured on financial instruments showed this type of loan to be growing in volume, but from a low initial level for the banking sector as a whole. The rise was particularly marked for loans for the purchase of structured products. Banks run a substantial reputation risk if they fail to give customers sufficient information on risk, rate of return and costs associated with such products.
- Life insurance companies' results in 2005 were a substantial improvement on the previous year thanks to higher financial revenues. Although risk-bearing capacity needs to be strengthened, the increase in buffer capital in 2005 was satisfactory. Life insurers still face challenges posed by persistent low interest rates. They have secured satisfactory current return ahead by investing part of the portfolio in bonds "held to maturity". However, low interest rates are making it difficult for life insurers to accumulate sufficient buffer capital while at the same time meeting their annual guarantee obligations towards their customers. Kredittilsynet decided to lower the minimum guaranteed interest rate from 3 to 2.75 per cent on all new contracts from 1 January 2006 onwards. Should long interest rates not rise significantly, a minimum guaranteed rate of 2.75 per cent or lower must be expected as from 1 January 2007, also for new accumulation of interest on already established contracts.
- Norwegian credit institutions and investment firms will be subject to new rules for calculating capital requirements (Basel II) from the start of 2007. A similar framework for insurance companies (Solvency II) will apply from 2010 at the earliest. Basel II is designed to enhance the stability of the financial system by ensuring that capital charges reflect the individual bank's risk and business to a greater degree and by requiring, and providing incentives for, better risk management. Significantly lower capital charges on home loans and loans to small and medium-size enterprises entail lower capital requirements for Norwegian banks. Assuring adequate capital buffers to meet a possible setback in the housing market and the spill-over effects this could have for the economy in general will be a challenge to both authorities and banks. The rules proposed by Kredittilsynet aim to enable the authorities to assure satisfactory

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capital levels at banks without kindling major competitive problems in relation to banks from other countries.

## **Summary**

Growth in the global economy picked up in 2005 after subsiding in the second half of 2004. Overall, however, the upturn appears to be weaker in 2005 than the previous year. USA and China continue to lead the growth standings, although activity levels in Japan and Europe appear to have strengthened somewhat. Despite high activity in many countries and record-high commodity prices, inflation remains low. This must be seen both in the light of globalisation and of tight inflation management exercised through monetary policy. The major forecasting institutes still expect relatively rapid global growth in 2006, primarily due to strong growth in non-OECD countries. Imbalances in the US economy and continued high oil prices make for uncertain developments ahead.

Money market rates in the past year were affected by interest rate hikes on the part of a number of central banks. This is especially true of the US Federal Reserve Bank which has raised its key rate by a total of 3.5 percentage points since June 2004. Long US rates have been little affected by the key rate, and fell during the summer of 2005, one reason being heavy demand for US bonds from Asian central banks. During the autumn, however, came signals of stronger growth and higher-than-expected inflation, and for 2005 as a whole US bond rates rose. The upturn has continued into 2006. Norwegian bond rates fell 0.4 percentage points in 2005, ending the year at 3.6 per cent. Thus far in 2006 some increase has been noted. International share markets showed a good overall increase in 2005. The US market grew by a sluggish 3 per cent, while European stock exchanges showed substantially stronger growth. Oslo Børs (Oslo Stock Exchange) recorded a very strong upturn of as much as 40.5 per cent in 2005. Oslo Børs is dominated by major oil companies and other large exporters that are profiting from unprecedented commodity prices. The upturn in the Norwegian market has continued into 2006, with new all-time price highs regularly noted.

The boom in the Norwegian economy continued in 2005, driven above all by oil investments, expansionary monetary policy and tax relief. After record-low price inflation in 2004, price pressures increased somewhat in 2005, although inflation remains at a very low level, and far below Norges Bank's target. The low interest rate has stimulated household consumption and housing investment. Improved enterprise earnings have gradually also kindled an upswing in mainland (non-oil) investment. A favourable outlook has prompted business and industry to resume borrowing, and by the end of 2005 domestic credit to enterprises had risen by as much as 14.6 per cent. The growth of credit from domestic sources is however offset by reduced borrowing from foreign sources. After a long period of weak growth in employment, the labour market has tightened significantly, fuelling household optimism. House prices rose by just over 9 per cent in 2005. The buoyant housing market is significantly reflected in the credit market where growth in credit to households was at an unprecedented 13.4 per cent at end-2005. The boom has also had a favourable impact on the market for commercial property. Office vacancies have fallen in the largest towns, and rental prices for the best

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premises have risen. The hurdle rate for some types of property has fallen significantly, however, making prices highly sensitive to interest rate changes.

Since 2000 credit has grown far more rapidly than incomes, resulting in a sharp increase in the debt burden. The interest burden has however been low due to the steep fall in interest rates as from December 2002. Households' financial wealth has increased significantly in recent years, particularly as a result of the upswing on the housing market. The size of their financial saving is uncertain, however. Moreover, households show wide variation both in terms of debt burden and financial wealth, and the lowest age groups are particularly exposed. According to Kredittilsynet's home loan survey, almost half of Norwegian households under the age of 35 borrowed more than 80 per cent of the dwelling's value, and 17 per cent borrowed in excess of 100 per cent. Enterprises' debt burden has diminished lately due to improved earnings and low debt growth, while lower interest rates have brought a steep fall in their interest burden. Kredittilsynet's survey of banks' exposure to selected industries shows a decline in high-risk commitments in most sectors.

Large financial groups predominate in the Norwegian financial industry, particularly in banking and life insurance. Even after the establishment of DnB NOR, Norway's largest financial conglomerate is far smaller than its largest Nordic counterparts. Foreign actors have gained increasing influence in recent years. Acquisitions of several Norwegian banks in 2005 further increased foreign actors' influence in the Norwegian market.

The significant improvement in the Norwegian banks' results in 2004 continued in 2005, mainly thanks to reversal of previous losses and lower costs. Non-performing loans were at a very low level, especially among the largest banks. However, recent years' pressure on net interest revenues continued in 2005. The spread in banks' results narrowed further, and only three small banks recorded a negative result in 2005. Banks' overall lending growth has quickened markedly in the last two years, especially lending to the retail market. 2005 also saw a strong increase in lending to the corporate sector, bringing overall growth in lending by Norwegian banks to almost 17 per cent by year-end. Overall lending by foreign branches rose 34 per cent. The financial position of the banking sector as a whole remained satisfactory. Since the end of 2002 when some banks faced higher liquidity risk, the situation has improved considerably. Despite persistent low interest rates and bull conditions in the share market, banks' deposit growth was high in 2005. However, bank lending rose more quickly than deposits, thereby reducing the deposit-to-loan ratio. None the less the level of long-term financing remains high. Should deposit growth slow substantially and banks compensate by means of short-term financing, liquidity risk may increase.

Buoyant share markets led to higher financial revenues for life insurance companies. However, low interest rates left low current earnings on fixed income securities. The value-adjusted result for 2005 was far better than the previous year's figure. Buffer capital rose by just over 1 percentage point in 2005 to reach 7.5 per cent of total assets at year-end. Between 2000 and 2002 life insurers reduced their equity exposures in line with their reduced risk-bearing capacity. In the period 2003 to end-2005 the share component rose to just below 20 per cent, about two-thirds of which were invested in foreign shares. The portion of bonds classified for accounting purposes as "held to maturity" tapered in 2004

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and 2005 to 28 per cent of life insurers' total balance sheet by last year-end. Interest rates on this part of the portfolio average 5.3 per cent, and about three-quarters of this portfolio mature after 2008 with an average interest rate of 5.2 per cent. Almost half of the bonds "held to maturity" are foreign.

Pension funds' return on capital rose in 2005 and was higher than that recorded by the life insurers. This was particularly true for private pension funds which have a significantly higher exposure to equity markets than life insurers and municipal pension funds. Lower foreign share components have also helped pension funds to profit from the vigorous upturn on Oslo Børs.

Non-life insurance companies' result of ordinary operations showed a strong improvement in 2005, both as a result of higher financial revenues and an improved technical account. After very poor results from 2000 to 2002, non-life insurers have posted very good results in the past three years.

Finance companies also improved their results in 2005, thanks partly to lower losses. After declining profit performances at the end of the 1990s, finance companies' results have been relatively stable over the last six years. Mortgage companies saw some reduction in profits in 2005.

A steep rise in share prices and high activity on Oslo Børs brought a substantial increase in revenues for investment firms in 2005. This was particularly true for non-bank investment firms which reported a large increase in revenues from issuance activity and consulting. Management companies for securities funds increased their operating profit by all of 74 per cent.

The state of the financial market in 2005 is viewed as satisfactory and prospects for 2006 seem bright. A low and falling level of non-performing loans indicates continued low loss levels in the short term. In some areas, however, risk is building up which could surface in the somewhat longer term. Persistent low interest rates still pose a challenge to life insurers. Their results depend to a significant extent on developments in securities markets and will be reduced over the next few years if interest rates remain at their current level, and share markets do not develop as strongly as in 2005. Despite a significant upturn in buffer capital in 2005, risk-bearing capacity remains low. Low share components prevent companies from fully benefiting from the vigorous share market upturn. Life insurers have assured a satisfactory current return ahead by investing a large portion of their portfolio in bonds "held to maturity". However, low interest rates make it difficult for life insurers to build up sufficient buffer capital and concurrently meet their minimum interest rate obligation to their customers. They therefore need to devote part of last year's net profit to further strengthening the buffer capital.

The banks are now in a very favourable situation. The rapid lending growth makes heavy requirements in terms of risk management, however, and a virtual absence of losses over a long period may reduce their vigilance. Growth in household borrowing is unprecedented, while growth in incomes is moderate. The debt burden has passed the end-1980s level and calculations show that in a couple of years' time households' overall debt will be more than twice the size of their overall earnings. Low interest rates may cause higher indebtedness to appear manageable for households. Kredittilsynet's home loan survey of 2005 shows that more than one in three loans had a high loan-to-value ratio, and virtually all borrowers opted for a floating interest rate. The housing market is the main driving force

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behind household debt incurrence. Although the upturn is driven in part by higher incomes, new home loan products and structural adjustments, factors such as debt and house prices are at a level where a setback cannot be ruled out. An increased supply of new dwellings can cause house prices to level off. Should indebtedness continue to rise rapidly and interest rates increase, price deflation is a real possibility. Changes in households' expectations will intensify an incipient decline. The unprecedented, rising debt burden increases the risk that even minor shocks will in due course trigger the vulnerability of the financial system. Vulnerability increases the longer the upturn in house prices and indebtedness lasts. Calculations from Statistics Norway show that even with declining credit growth ahead, a moderate interest rate increase will in two years' time mean that more than 350,000 households will be spending more than one-fifth of their income on interest payments. This is in addition to repayment of principal. Debt-servicing problems for households will fuel bank losses. The spill-over effects to business and industry caused by households being compelled to reduce their consumption in order to service debt are just as important as banks' direct losses on home loans.

Hence a significant challenge ahead is to instil in banks an understanding of the need to continue to subject corporate borrowers to thorough credit assessment. A more restrictive practice as regards lending for housing purposes is clearly desirable, starting in 2006. If any such tightening actually takes place after house prices have peaked, a downturn could in the event be intensified. Borrowers also need to assess the consequences for their personal finances of possible negative changes in the economy. Financial stability considerations suggest that normalising interest rates should not be put off for too long. In a situation where monetary policy has to balance the objective of price stability against the objective of financial stability, the authorities should also consider other policy instruments.

Norway's tax system gives strong stimuli to investing in dwellings as opposed to financial saving.

Consideration for the financial system and for the wider economy both call for greater emphasis on a neutral bias in the taxation of various types of financial wealth and property.

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## 1. Markets and economic trends

Global growth remained high throughout 2005, and at the start of 2006 the world economy is showing relatively high growth rates. The IMF puts global growth at 4.3 per cent in both 2005 and 2006. Imbalances in trade and capital flows between countries remain significant risk factors, together with the high oil price. USA and China are continuing to expand vigorously, while Japan and India are both growing above trend. Growth in the EU has been weaker. Should the existing growth pattern continue, the imbalances in the world economy will intensify and uncertainty about the future will increase. According to the major international forecasting institutes, the past two years' tendency for highest growth to be shown by countries outside the OECD is likely to persist.

Table 1.1 Growth forecast

	US		Euro area		Japan		Norway	
	2005	2006	2005	2006	2005	2006	2005	2006
GDP	3.6	3.4	1.4	1.9	2.5	2.2	3.4	2.4
Inflation	3.4	2.8	2.2	2.0	-0.2	0.2	1.6	2.3
Unemployment	5.1	4.9	8.6	8.3	4.4	4.1	4.6	3.9

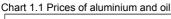
Sources: Consensus Forecasts, January 9, 2006, Economic Survey 6/2005, Statistics Norway

Growth in the US has been high since the start of 2002. In the past year growth was driven less by an expansionary monetary and fiscal policy, a development reflected above all in relatively stable employment growth. Preliminary national accounts figures show GDP growth of 3.5 per cent in 2005. Unemployment fell from 6.3 per cent in June 2003 to less than 5.0 per cent in January 2006. At the same time monetary policy has become less expansionary as result of higher interest rates and a stronger dollar. In January the Federal Reserve Bank raised its key rate to 4.5 per cent. Fiscal policy also tightened appreciably, and growth in public sector demand in 2005 was low. The contribution of other demand components is strong, however. Private sector investments have risen substantially, particularly as a result of increased housing investment and investment in ICT equipment. Capital gains from both the housing market and the share market, together with high income growth, have kindled a positive trend in private consumption and low saving. Signs of a slowdown in the housing market have been in evidence lately. With inflationary pressures in the US economy still low, households' real income growth is good. The growth in consumption has stimulated imports which, combined with weak export growth, has fuelled a deepening trade deficit. Today China alone accounts for 25 per cent of the deficit, while Japan and the EU each account for about 12.5 per cent.

Eastern Asia's importance for the world economy is steadily growing. China plays a leading role both regionally and globally and has almost quadrupled its GDP since 1990, growing annually by some 10 per cent. China is already the world's sixth largest economy. Last year's fear of overheating,

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prompting retrenchment measures on the part of the authorities, has abated, and China's economy continues its vigorous growth. Consumption, foreign trade and production are all increasing, and there are few signs of capacity problems. Investment grew about 30 per cent in 2005. Export growth is very strong, and the trade surplus in 2005 measured about 6 per cent of GDP. Exports to the EU grew by all of 41 per cent in 2005, partly due to the termination of the multi-fibre agreement, which enables China to take market shares from other low cost countries. Despite the currency revaluation in summer 2005, a strong external economy continues to exert pressure on the Chinese currency. China's commodityintensive growth is spurring higher international commodity prices, and the oil price in particular was high in 2005.



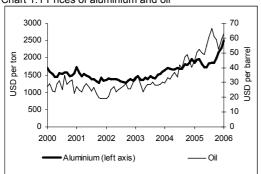
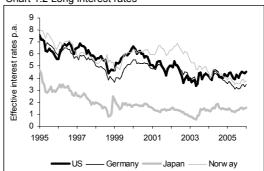


Chart 1.2 Long interest rates



Source: EcoWin

Source: EcoWin

The cyclical upturn in Japan, which started in 2002, appears to be back on track after a minor setback in summer and autumn 2004. GDP growth 2005 is estimated at 2.5 per cent. Unemployment has fallen to 4.5 per cent, and earnings in the Japanese business sector are good. The current account is about 65 per cent above the 2002 level, with a surplus equivalent to about 10 per cent of GDP, in other words close to the record level from the end-1980s. Good export growth and higher domestic demand have both contributed. Wage and price growth are low, however, and the central bank is continuing its zero interest rate policy.

Growth in the euro area remains weak but has edged up somewhat in the last couple of years. The Consensus Forecast puts growth in the euro area at 1.4 per cent in 2005. While a weaker euro has been important for developments in recent years, the euro area remains marked by high unemployment and major structural problems. The substantial differences between euro countries, with small countries doing well while several large ones are struggling, persists. The European Central Bank raised its key rate to 2.25 per cent in December.

Economic growth in the Nordic region remains strong. In Denmark the economy is forging ahead, and unemployment is low. At the same time house price growth is very strong and consumer confidence high. House price growth is estimated at 15 per cent in 2005, and a debate is under way on whether a housing bubble has arisen. Growth in the Swedish economy picked up considerably towards the end of 2005, driven by strong growth in both domestic demand and exports. In Finland both private consumption and net exports are contributors to growth, but unemployment still tops 9 per cent. In

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Iceland the GDP growth estimate for 2005 is about 5.5 per cent and the central bank key rate is as high as 10.75 per cent. The OECD has pointed to the risk of the Icelandic economy overheating.

The global imbalances and the resulting structure of international financial markets have brought a downward tendency in long interest rates in the last couple of years. In 2005 a sound macroeconomic trend, higher inflationary expectations and the Federal Reserve's interest rate hikes gave long rates a positive impetus, while heavy demand for US bonds from Asian central banks along with concern over the consequences of the US economic imbalances have continued to push long rates down. Long rates fell also in the euro area in 2005.

Developments in international share markets varied in 2005. Both a mixed profit showing and changed macroeconomic forecasts, together with energy prices – above all the oil price – contributed. Whereas the US share market was burdened somewhat by high energy prices, signs of improved economic prospects contributed to a good trend in both the Japanese and the European share markets. The share market upturn was especially strong through the summer up to October, when share values received a sharp correction, partly due to Hurricane Katrina. In 2005 S&P 500 climbed 3 per cent, Eurosone STOXX TMI 24.2 per cent, Nikkei 225 40.2 per cent and MS World Index 13.7 per cent. The Norwegian share market shadows the price trend for energy products, and the high oil price has been especially significant. The Oslo Børs all-share index rose 40.5 per cent in 2005. Markets in the other Nordic countries also developed well in 2005. Issue activity on Oslo Børs picked up in 2005 after a slow three preceding years.





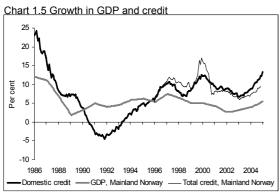
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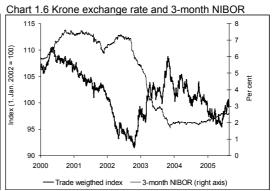
The US dollar appreciated in 2005 against the euro and the yen by 13.4 and 13.1 per cent respectively. The dollar appreciation should be viewed against the background of high return on American fixed income securities and prospects of continued strong economic growth in the US. Influenced by the high oil price, the Norwegian krone climbed 3.1 per cent against the euro, while falling 11.9 per cent against the dollar over the year. Trade-weighted, the krone appreciated 1.9 per cent.

Norwegian money market rates largely shadowed Norges Bank's key lending rate, which was raised to 2.25 per cent in November 2005. In September Norwegian 10-year government bonds fell to 3.42 per cent – their lowest level in 50 years. Low key rates, ample market liquidity and demographic factors all contributed.

The Norwegian economy is in the midst of a boom. Quarterly growth has remained above trend since the second quarter of 2003. In the autumn of 2005 growth in employment also picked up and unemployment fell after a sluggish trend in the labour market thus far in the current cycle. Household demand remains strong, contributing to a sound trend in service industries. In the past year low interest rates and growing optimism in business and industry have spurred investment. Price pressures remain low, however, holding down interest rates and fuelling liquidity supply.

While growth in the Norwegian economy seems broad-based, oil investment has grown particularly strongly in the past year, boosted both by high oil prices and the effect of low interest rates on general investment activity in the economy. Oil investment rose 20 per cent between 2004 and 2005. According to preliminary estimates, investment growth in mainland (non-oil) enterprises rose about 7 per cent in 2005, and, for the first time since 1998, investment did not fall as a share of industry's gross product. Higher investment reflects the optimism that has made itself felt in Norwegian business and industry in the past year, and is confirmed by industry's cyclical barometer. Low interest rates have also stimulated household demand. Both housing investments and demand for other consumer goods have been buoyant for some time, although housing investment edged down somewhat towards the end of 2005. The international upturn has concurrently brought high growth in traditional exports. Export prices have also risen which, together with far weaker growth in import prices, yielded a sharp improvement in the terms of trade in 2005. At the same time import growth has been high, and much of the increase in domestic demand was met from that source. Even so, mainland Norway's GDP for the first three quarters of 2005 was 3.6 per cent higher than in the same period of the previous year, according to quarterly national accounts.





Source: Statistics Norway and Norges Bank

Source: EcoWin

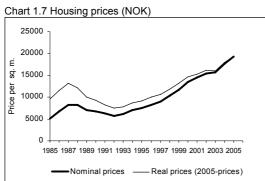
Price pressures in the economy are low. 12-month growth in core inflation (consumer price index adjusted for indirect tax changes and excluding energy) has hovered around 1 per cent in the last three years and in January was about 0.8 per cent. Prices of imported goods continued to fall, and a somewhat stronger krone combined with increased imports from low cost countries kept price inflation down in 2005. Domestic inflation pulled in the opposite direction. Wage growth in Norway has been low in the past two years, roughly on a par with our trading partners, and has consequently not contributed to domestic price impulses.

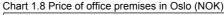
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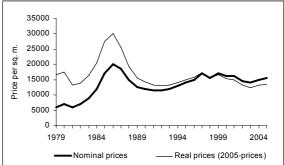
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Despite high growth, the trend in the labour market has been weak throughout the boom period, giving no basis for wage growth of any significance. However, clear indications of an improving labour market were seen in the autumn of 2005. Registered unemployment fell appreciably from the autumn onwards, and employment measured in hours worked rose markedly. At the start of 2006 the figures for registered unemployment confirm that the labour market has picked up substantially lately. At the same time interest in employing labour from the new EU countries is growing, bringing competitively exposed occupational categories under pressure.

Price growth, sales and housing starts are all at high levels in the housing market. According to January 2006 figures from the Norwegian Association of Real Estate Agents and ECON, house prices were 139 per cent higher than in the previous peak year of 1987. Inflation-adjusted prices were 55 per cent higher. Compared with the trough year of 1992 prices are nominally 256 per cent higher, in real terms 149 per cent higher. Prices on all types of dwellings have soared since 1992. In January, twelvemonth growth in house prices was 8.8 per cent. Activity in the housing market has also been high on the supply side. In 2005 31,608 new dwellings were built, 7.3 per cent more than in 2004. Moreover, the third quarter saw an unprecedented number of sales (2,600) of built-on recreational properties on the open market. The high activity in the housing market is reflected in unprecedented numbers of new real estate agencies; as many as 106 first-time licences were issued in 2006 compared with 68 in 2004.







Sources: NEF, EFF, Finn.no and ECON

Source: OPAK and Kredittilsynet

Low interest rates have stimulated sales of commercial property in the past couple of years. Both property funds and pure syndication companies have turned to real estate as an investment medium. Properties with long rental contracts are especially attractive since they generate higher return than that available on other types of investment carrying similar risk. OPAK's calculations suggest that the hurdle rate on some types of property fell from 7.5 per cent at the start of 2003 to 5.5 per cent at the end of 2005. Such a low hurdle rate makes prices sensitive to interest rate increases. Commercial building starts remain very low. However, OPAK's assessment of the rental market suggests that rental prices are picking up, at the same time as price differentiation between different types of office premises is expected to become more and more marked.

## 2. Financial institutions

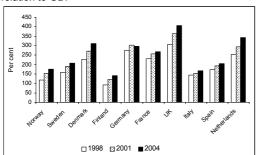
Financial institutions' financial position needs to be assessed in light of the trend in economic conditions and markets, discussed in Chapter 1. This chapter starts by briefly describing the structure of Norway's financial market. It then summarises results reported in 2005 by financial institutions: banks, finance companies and mortgage companies, life insurance companies, pension funds and non-life insurance companies, as well as investment firms and management companies for securities funds.

## Financial market structure

The Norwegian and international financial markets have undergone major changes in the past 10-20 years. Deregulation of financial markets, liberalisation of capital markets, along with technological and demographic changes, have altered financial institutions' operating environment. Cross-border establishments and cross-border services have grown in scope, bringing national financial markets closer together. This fuels competition, both within and across the traditional segments of the financial industry. Although financial institutions will retain their dominant role in many countries as savings and financing intermediaries, the importance of securities markets is likely to increase ahead.

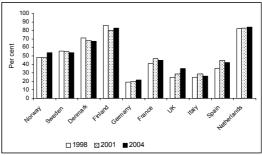
There are wide variations between European countries in terms of credit institutions' size in relation to the overall economy. Their share has risen substantially in recent years across Europe.

Chart 2.1 Credit institutions' total assets in relation to GDP



Sources: ECB, Kredittilsynet and Statistics Norway

Chart 2.2 Five largest credit institutions' share of total assets in the credit market



Sources: ECB and Kredittilsynet

Concentration in the credit market, measured by the five largest institutions' share of the total credit market, varies between European countries. Concentration is highest in Finland and the Netherlands, where the five largest credit institutions had a market share of, respectively, 83 and 84 per cent.

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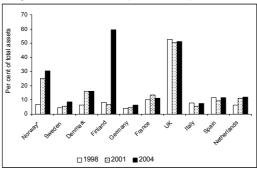
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Germany has the lowest concentration at 22 per cent. The five largest credit institutions in Norway – DnB NOR, Nordea Bank Norway, Fokus Bank, Handelsbanken and Sparebanken Rogaland – had a combined market share of 53 per cent of the Norwegian credit market at the end of 2005.

Foreign actors have acquired increasing influence in the credit markets of most European countries. As a financial centre, the United Kingdom has for many years attracted foreign financial actors. The foreign share has consequently been substantially higher here than in most other European countries, with the exception of Luxembourg. After the reorganisation of Nordea, in which Nordea Bank Finland became a foreign-owned subsidiary, the foreign share in Finland rose from about 7 per cent to close to 60 per cent. Norway has also seen a substantial increase in the foreign share in recent years.

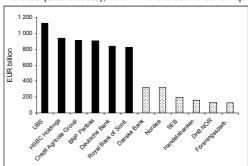
The Nordic financial conglomerates are small in a European perspective. The largest European financial conglomerate, UBS, had assets totalling 1,127 billion euro at the end of 2004, while the sixth largest financial conglomerate, Royal Bank of Scotland, had total assets of 823 billion euro. In comparison, the two largest Nordic financial conglomerates, Danske Bank and Nordea, had total assets of about 320 billion euro (end of third quarter 2005).

Chart 2.3 Market shares of foreign branches and foreign-owned subsidiaries (credit market)



Sources: ECB and Kredittilsynet

Chart 2.4 Largest European and Nordic financial conglomerates (total assets), 2004 / Nordic countries: 3<sup>rd</sup> qtr 2005



Sources: The Banker and Annual reports

Five sizeable financial groups account for a substantial share of the Norwegian financial market. With the merger of DnB and Gjensidige NOR the merged entity, DnB NOR, acquired substantial shares of the banking, life insurance and securities funds markets. Two large collaborative groups – SpareBank 1 Group and Terra Group – comprise respectively 19 and 80 banks.

Six life insurance companies are engaged in traditional life insurance in Norway, the three largest of which – Vital, KLP and Storebrand – hold a combined market share of 87 per cent. The four major players in the Norwegian non-life insurance market – Gjensidige Forsikring, If, Vesta and Sparebank 1 skadeforsikring – hold a combined market share of 75 per cent measured by gross premium revenues. The strategic cooperation agreement between Gjensidige and DnB NOR was terminated in 2005, and the two entities now compete with each other in many of the same arenas.

Foreign ownership shares in the Norwegian market are especially large among finance companies. Branches and subsidiaries accounted for a total market share of 65 per cent measured by total assets. There are 33 foreign-owned finance companies operating in the Norwegian market, half of them foreign branches. In the non-life insurance field, the foreign share is 42 per cent. If and Vesta Forsikring are the largest foreign-owned companies. Foreign actors have shown keen interest in the banking market in recent years. Foreign-owned subsidiaries' market share is primarily accounted for by Nordea Bank Norway and Fokus Bank. Íslandsbanki's acquisition of Kredittbanken and BNbank, SEB's purchase of Privatbanken and Santander's acquisition of Bankia Bank and its merger with Elcon Finans, have however further increased the foreign share. In addition, several of the foreign branches, of which Handelsbanken is the largest, reported very high lending growth in the Norwegian market in 2005.

Table 2.1 Structure of the Norwegian financial market at end-2005

Per cent of total assets	Banks	Finance	Mortgage	Life insurance	Non-life insurance*
DnB NOR (incl. Nordlandsbanken)	38.0	20.3	8.1	33.1	0.0**
Nordea Bank Norge	13.3	6.6	5.0	5.6	0.0
SpareBank 1 Group***	11.3	3.8	0.0	3.1	7.6
Storebrand	1.3	0.0	0.0	25.9	0.3
Terra Group***	5.4	0.5	0.5	0.0	2.2
Total financial groups	69.3	31.2	13.6	67.7	10.1
Other companies	30.7	68.8	86.4	32.3	89.9
Total	100.0	100.0	100.0	100.0	100.0
- of which foreign branches in Norway	10.7	29.7	1.8	0.8	26.7
- of which foreign subsidiaries	20.8	35.8	11.7	6.0	15.6

<sup>\*</sup>As per cent of gross premium income. \*\* Vital Skadeforsikring mediates non-life insurance.

#### Securities markets

Bringing in capital by way of securities markets is an alternative to borrowing from credit institutions. Smoothly functioning secondary markets for securities is important if issuance of shares and fixed income securities is to be a competitive financing option. Recent years have seen increased cooperation between stock exchanges – including the establishment of the NOREX alliance by the Nordic and Baltic stock exchanges – as well as ownership consolidation.

The size of securities markets varies widely between countries. The market capitalisation of Norwegian companies listed on Oslo Børs came to about one-third of Norway's GDP at the end of 2002. The same was true of the German share market, whereas in the United Kingdom and Finland the market capitalisation of domestic listed companies was on a par with GDP.

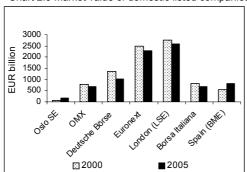
With a few exceptions, among them Norway and Spain, the market value of quoted shares has yet to return to the level prior to the slump in the first half of 2000, see Chart 2.5. The share market downturn is also reflected in issue volumes, which plunged after 2000. Risk capital was in far greater supply in 2000 than in 2005, when share issues on Oslo Børs came to NOK 28.4 billion.

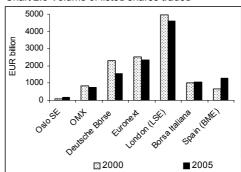
<sup>\*\*\*</sup>For SpareBank 1 Group and Terra Group, market shares include the owner banks.

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Chart 2.5 Market value of domestic listed companies 
Chart 2.6 Volume of listed shares traded



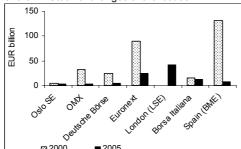


Sources: FESE and EcoWin

Source: FESE

The proportion of quoted company shares in foreign ownership rose in the 1990s, but then appears to have subsided up to 2003. A large foreign ownership share is not specific to Oslo Børs. On the other hand, a large government ownership interest is more prominent in the case of Norway than other countries. Government increased its ownership from 23 to 34 per cent from 2000 to 2005, essentially due to the admission of Statoil and Telenor to stock exchange listing.

Chart 2.7 Stock exchanges share issues



LSE figures for 2000 n.a. Source: FESE

Chart 2.8 Share ownership Foreign ■ Public sector Sent 600 □ Private households ☐ Private non-financial enterprices Private financial Pais Pais Delte the Borse Coperthager Borsa Italiana enterprises

Deutsche Börse figures for 2002. Source: FESE

## **Banks**

The Norwegian economy has seen a period of strong economic expansion since the summer of 2003. This has brought a substantial improvement in Norwegian banks' results in recent years, and the banking sector's overall performance in 2005 was the best since 2000. The result of ordinary operations (before tax) was NOK 24 billion, an increase of NOK 4 billion over 2004. The result measured 1.29 per cent of average total assets. Return on equity rose from 13.8 per cent in 2004 to 16.5 per cent in 2005.

Compared with the previous year, net interest revenues as a ratio of average total assets fell 0.13 percentage points to 1.74 per cent. This was compensated for by reduced costs and some increase in net gains on securities. Overall the banks reported a net gain on loan losses in 2005. Only three small banks ended the year in a deficit position, the same number as the previous year. The majority of banks (measured by their share of this sector's aggregate total assets) achieved a result above 1.0 per cent of average total assets in 2005, and a larger share achieved a result above 1.5 per cent than in 2004.

Chart 2.9 Loan losses and results before tax

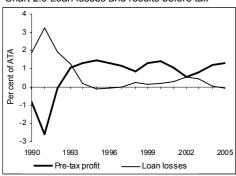
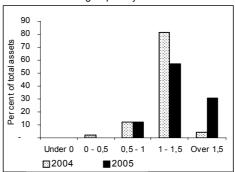


Chart 2.10 Banks grouped by results



Results for various groups of banks (by size) are illustrated in Chart 2.11. While DnB NOR's (including Nordlandsbanken) pre-tax result was roughly on a par with the 2004 figure, other groups of banks posted improved results. Changes in loan losses have been of greatest significance for changes in banks' results in recent years, see Chart 2.12.

Chart 2.11 Pre-tax profit for banks grouped by size

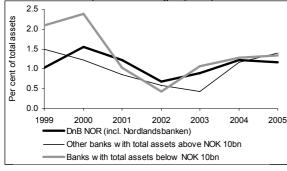
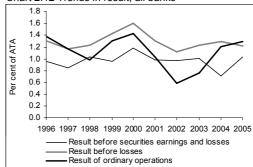


Chart 2.12 Trends in result, all banks



Several of the largest banks reported substantial write-backs on previous loan losses in 2005. These were partly write-backs on previous losses on loans to Pan Fish and partly write-backs on losses after settlements were reached by several banks with KPMG and Lloyds in the Finance Credit affair. The sizeable write-backs meant that banks as a whole recovered NOK 1.2 billion, net, on loan losses in 2005. Even without write-backs, however, loan losses were very low, about 0.02 per cent of gross outstanding loans to customers.

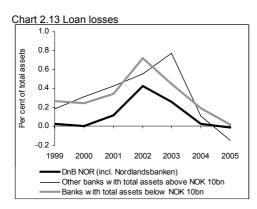
The volume of non-performing loans reported by Norwegian banks has fallen since 2002, and was very low at the end of 2005, particularly among the largest banks. Non-performing loans for all banks measured 0.8 per cent of total loan volume, down from 1.1 per cent one year previously.

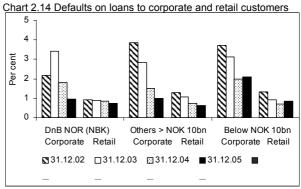
While non-performing loans to retail customers showed a slight volume increase in 2005, they none the less fell in relation to lending, ending the year at 0.7 per cent. The level of non-performance among corporate customers is higher than among retail customers, falling to 1.1 per cent of total loan volume

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in 2005 compared with 1.7 per cent one year previously. Non-performance for the smallest banks as a whole rose slightly in 2005.





The interest margin shows the difference between interest rates on lending (including commissions) and interest rates on deposits. At the end of 2005 interest margins were at their lowest level since measurements started in December 1987. Margins have fallen by half in the past ten years, and at the end of the third quarter 2005 stood at 2.5 per cent. Although the strong lending growth has increased banks' loan volume, the volume increase has not compensated for the reduction in interest margins. Hence net interest revenues in relation to total assets continued to fall for all groups of banks. Keen competition in the loan market has brought lower average lending rates. At the same time the low interest rate level has made it difficult to lower deposit rates any further. Net interest revenues are higher in relation to total assets among small and medium-size banks than among larger banks. This is to some extent related to differences in balance sheets composition.

Chart 2.15 Net interest revenues and interest rates

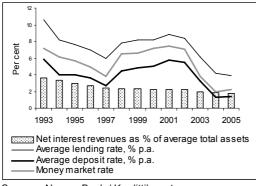
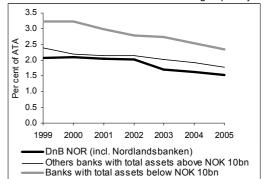


Chart 2.16 Net interest revenues for banks grouped by size



Sources: Norges Bank / Kredittilsynet

A shift in banks' loan portfolios towards home mortgage loans, assumed to pose lower credit risk, is contributing to the pressure on banks' interest margins. Competition for home loan customers is intense. Part of the observed growth in home loans may be related to banks' adjustment to a new capital adequacy framework, Basel II, entailing lower capital charges on well-secured home loans (see Chapter 4).

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Growth in bank lending, above all the growth in home loans, has been strong in Sweden and Denmark too. The economic upturn has also led to quicker growth in loans to non-financial enterprises. Charts 2.17 and 2.18 show the trend in lending margins (average lending rate less money market rate) on loans to households and non-financial enterprises in Sweden, Denmark and Norway. Norwegian banks' margin on lending to households is below the level for Swedish and Danish banks. This is partly because loans for housing purposes in Sweden and Denmark are provided by mortgage companies as fixed-interest loans. In Norway loans for housing purposes account for more than 60 per cent of total loans from banks and more than 90 per cent of them carry a floating interest rate.

Chart 2.17 Margin on lending to non-financial enterprises

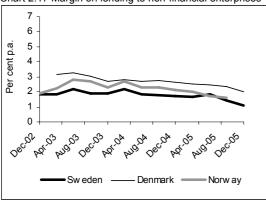
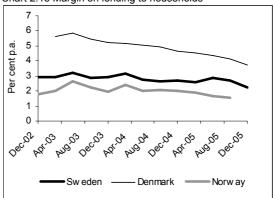


Chart 2.18 Margin on lending to households

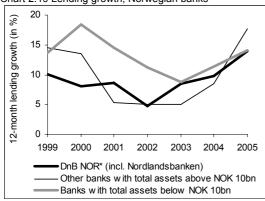


Sources: Nordic central banks

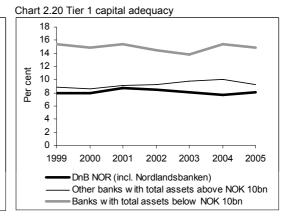
Sources: Nordic central banks

Norwegian banks reported substantial growth in lending in 2005, close to 17 per cent (adjusted for portfolio transfers between banks and mortgage companies). Lending growth has been on the rise since the third quarter of 2003. Growth in lending to wage earners has been high for several years, and rose by almost 15 per cent in the past year (adjusted for portfolio transfers). Increased fixed investment has brought quickening growth in loans (almost 17 per cent in 2005) to Norwegian corporate customers. Growth in lending to foreign corporate customers rose by 64 per cent in the same period, mainly through the largest Norwegian banks' foreign branches. Foreign branches in Norway posted far higher growth than Norwegian banks, at 34 per cent in December 2005.

Chart 2.19 Lending growth, Norwegian banks



\*Not corrected for portfolio transfer.



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The trend in banks' tier 1 capital adequacy depends inter alia on their growth in lending. Even with strong lending growth, banks' tier 1 capital adequacy has been relatively stable in recent years. Banks have brought in new capital, both in the form of equity and hybrid capital, while recent years' buoyant earnings have increased their equity. Many banks have seen slower growth in their risk-weighted assets due to the increased share of home mortgage loans. This has been of greatest significance for small and medium-size banks for which home loans make up the bulk of their loan portfolio. Banks' overall tier 1 capital adequacy was 9.6 per cent at the end of 2005, approximately the same as 12 months previously. Total capital adequacy stood at 11.9 per cent. Growth in customer deposits was high in 2005, at 12 per cent, but none the less below the growth in lending, thereby lowering the deposit-to-loan ratio compared with 2004.

### More about hybrid capital instruments

Several banks have raised capital in recent years by issuing hybrid capital instruments. Hybrid capital instruments share clear similarities with both debt and equity capital instruments. They enjoy better priority than share capital but poorer priority than subordinated loan capital. There is no repayment obligation with hybrid capital instruments. Holders of such instruments have no organisational rights within the company. Hybrid capital instruments yield interest at a predetermined rate, but no interest is payable in years of no dividend payments. For tax purposes they are regarded as debt instruments and payments are classified as interest. Hybrid capital instruments can constitute up to 15 per cent of the tier 1 capital of a financial institution. The first time a Norwegian bank employed hybrid capital instruments as tier 1 capital was in 2001. The number of banks having issued hybrid capital instruments rose from 29 in 2004 to 47 in 2005.

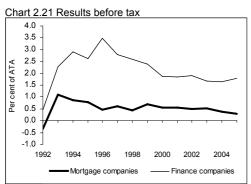
Table 2.2 Hybrid capital instruments – banking sector (NOKm and per cent)

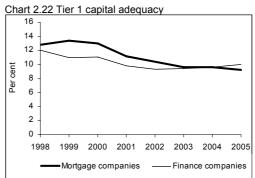
	Q4 2004	Q4 2005
No. of banks with hybrid capital instruments	29	47
Hybrid capital instruments in tier 1	8 553	9 703
Hybrid capital instruments in tier 2 (beyond 15% in tier 1)	267	497
Total hybrid capital instruments	8 820	10 200
Hybrid capital instruments in tier 1 as per cent of total tier 1 capital	7.8	8.0
Hybrid capital instruments in tier 1 as per cent of risk-weigthed assets	0.8	0.7

## Finance companies and mortgage companies

Finance companies offer various forms of special-purpose financing to business and retail customers, with the emphasis on leasing, factoring, car financing and consumer financing. Finance companies' net interest revenues have also been under pressure, and net interest revenues for all types of finance companies diminished as a ratio of average total assets. Even so, lower loan losses brought improved results in 2005. Branches of foreign finance companies are highly active in the Norwegian market, accounting for a quarter of finance companies' aggregate total assets. Foreign branches' results are better than those of Norwegian companies. This is due to their higher level of net interest revenues in relation to average total assets, for one thing because a larger proportion of foreign companies are engaged in consumer financing (see Chapter 3 for further details).

Mortgage companies generally offer first priority mortgages to finance commercial business and house purchases. Mortgage companies' overall results have been stable for many years, but showed a slight decline in 2005 compared with the previous year. Their net interest revenues and their losses are low, thanks to a high level of collateral in their loan portfolios.

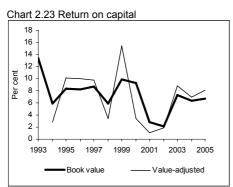


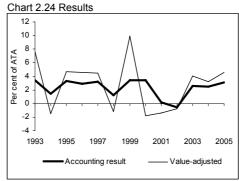


Lending by Norwegian finance companies and branches of foreign finance companies has increased rapidly for some time, in 2005 by 18 and 16 per cent respectively. Where mortgage companies are concerned, the vigorous 18 per cent growth in their aggregate lending was due to portfolio transfers from banks to mortgage companies in the period. Despite a long period of strong lending growth, tier 1 capital adequacy has been relatively stable in recent years.

## Life insurance companies

Life insurers reduced their equity exposure in the wake of the period of securities market fluctuations in 2001 and 2002. As a result they entered 2003 with a lower share component in their balance sheets. Their equity exposure was still relatively low at the end of 2005 at around 20 per cent, despite having increased somewhat. Since two-thirds of their share investments are in foreign equity markets, the strong upturn on Oslo Børs has had limited impact on their performance. However, as in 2004, returns on foreign markets in 2005 were good, leaving life insurers with high net gains on their share portfolios in 2005. On the other hand, low interest rates brought relatively low returns on their fixed income securities.





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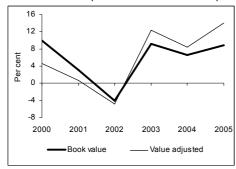
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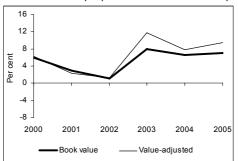
Higher gains on securities holdings yielded an value-adjusted result for 2005 that was NOK 9 billion above the 2004 figure. Value-adjusted return on capital was 8.1 per cent in 2005 compared with 7.0 per cent in 2004. The book return on capital was 6.7 per cent, about the same as the previous year. Total premium revenues rose by 13 per cent in 2005. Part of the increase in premium revenues was due to increased sales of endowment insurance.

## **Pension funds**

The largest private and municipal pension funds, accounting for 80 per cent of pension funds' aggregate total assets, performed better in 2005 than in 2004. Several major pension funds with a high proportion of shares in their balance sheets have raised this proportion further in recent years. Since pension funds have a lower share of their equity portfolio invested abroad than life insurers, they have drawn greater benefit from the vigorous upturn on Oslo Børs. Pension funds' value-adjusted return on capital was 12.7 per cent compared with 8.2 per cent the previous year, while life insurers posted an value-adjusted return of 8.1 per cent. Private pension funds had higher exposure to shares than municipal pension funds and accordingly achieved higher return on capital, 14.0 per cent compared with 9.5 per cent.

Chart 2.25 Private pension funds' return on capital Chart 2.26 Municipal pension funds' return on capital



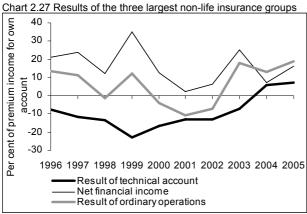


## Non-life insurance companies

In this survey the non-life insurance companies are represented by the three largest non-life insurance groups (Gjensidige Forsikring Group, Vesta Skadekonsern and Sparebank 1 Skadeforsikring), which account for about two-thirds of the non-life insurance market, excluding branches of foreign companies.

After weak results in 2000, 2001 and 2002, the three largest groups have resumed a profit position since 2003 thanks to higher financial revenues and an improvement in their insurance-related business. The buoyant trend on Oslo Børs and sound return on foreign stock exchanges explain the overall net increase in financial revenues – from NOK 1.5 billion in 2004 to NOK 3.7 billion in 2005. Gjensidige Forsikring Group realised a gain of NOK 1.3 billion on their disposal of DnB NOR shares in 2005. When extraordinary revenues are excluded, financial revenues were still higher than in 2004.

The three largest non-life groups recorded an overall increase of about 10 per cent in premium revenues in 2005, largely due to a marked decline in the reinsurance ratio. The claims ratio (claims expenses in relation to premiums earned) also fell slightly in 2005. Profit performance in insurance-related business showed improvement, and the result of the technical account was NOK 2.9 billion. The result of ordinary operations came to NOK 5.4 billion, an improvement of NOK 2.7 billion over 2004. Branches of foreign companies hold a prominent position in the Norwegian non-life insurance market due to If Skadeforsikring's large share of the market. The low claims ratio indicates little need for general premium increases ahead. The good results can be expected to intensify competition, potentially reducing the level of premiums on a number of products.



The result of the technical account is exclusive of allocated investment return.

## **Investment firms**

It is useful to distinguish between investment firms that are banks offering investment services in connection with ordinary banking operations, and non-bank institutions. At the end of 2005 75 investment firms were licensed to offer investment services. Sixteen of these were banks.

Chart 2.28 Operating revenues of investment firms which are banks

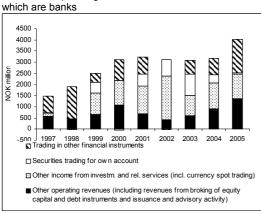
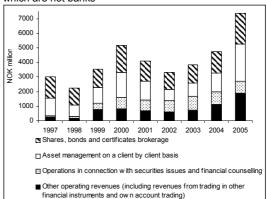


Chart 2.29 Operating revenues of investment firms which are not banks



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Banks' revenues from investment services largely derive from trading in foreign-exchange and fixed income securities. Investment firms that are banks recorded operating revenues totalling NOK 4.0 billion in 2005, an increase of NOK 0.9 billion over 2004. The principal revenue components for nonbank investment firms are broking of equity capital and debt instruments, stock issuance and counselling activity, and active management of portfolios on behalf of insurance companies, pension funds and private firms. Non-bank investment firms recorded operating revenues of NOK 7.4 billion in 2005, an increase of NOK 2.6 billion over the 2004 figure, and an overall operating profit of NOK 3.6 billion, an increase of NOK 1.9 billion over the previous year.

## Management companies for securities funds

At the end of 2005 21 companies were licensed to manage securities funds. Management companies' revenues largely comprise remuneration from the management of securities funds. Management companies also earn commission revenues on subscription and redemption of mutual fund units. As from August 2003 management companies became eligible, subject to authorisation, to engage in active management of investor portfolios. At the end of 2005 nine management companies were licensed to provide active management services.

Chart 2.30 Management companies' operating

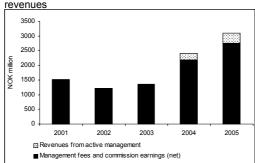
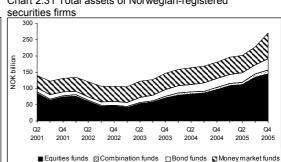


Chart 2.31 Total assets of Norwegian-registered



Management companies' overall operating profit came to NOK 1.2 billion, an increase of NOK 0.5 billion over 2004. Aggregate operating revenues rose from NOK 2.4 billion in 2004 to NOK 3.1 billion in 2005, of which active management revenues accounted for NOK 0.3 billion. At the end of 2005, capital under active management totalled NOK 438.4 billion, an increase of NOK 59.9 billion over the previous year. Total assets in securities funds managed by Norwegian management companies came to NOK 271 billion.

Securities funds are independent legal entities. Capital invested in securities funds will not be affected in the event of the management company's failure.

## Nordic financial conglomerates

An improved economic climate in Europe has contributed to good results for European financial institutions in recent years. As in the case of Nordic financial conglomerates, intensified competition in the loan market has brought net interest revenues under pressure, while very low losses and reduced costs have made a positive contribution to results.

Low losses were recorded in both 2004 and 2005, and several conglomerates had net recovery of losses. Return on equity improved at all the largest Nordic conglomerates in the first three quarters of 2005 compared with the same period of 2004.

Chart 2.32 Nordic conglomerates' return on equity

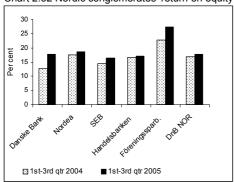
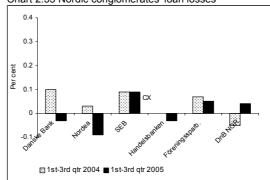


Chart 2.33 Nordic conglomerates' loan losses

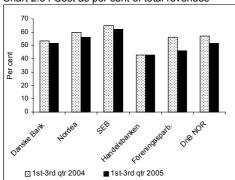


Source: Interim reports

Source: Interim reports

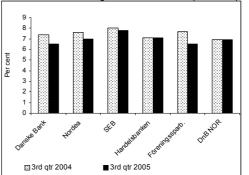
All the largest conglomerates recorded a lower cost-income ratio (expenses as a per cent of total revenues) in the first three quarters of 2005 compared with the same period of 2004. Tier 1 capital adequacy fell slightly, apart from at DnB NOR and Handelsbanken where it remained unchanged at group level. Recently published fourth-quarter figures for three of the conglomerates show largely the same trend for the full year as for the first three quarters of 2005.

Chart 2.34 Cost as per cent of total revenues



Source: Interim reports

Chart 2.35 Nordic conglomerates' tier 1 capital adequacy



Source: Interim reports

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## 3. Risk areas

Against the background of the macroeconomic developments outlined in Chapter 1, Chapter 2 described the trend in profitability and financial strength in 2005, for financial institutions, investment firms and management companies for securities funds. The present chapter takes a closer look at the various types of risk facing financial institutions. For banks and other credit institutions credit risk is of greatest significance, although liquidity risk and operational risk are also important – the latter are the most important for investment firms. While Norwegian banks are little exposed to market risk, this type of risk in combination with insurance risk is of major significance to insurance companies.

## Credit risk

Credit risk is the risk that banks or other credit institutions will not receive payment as agreed, thereby incurring loss. Hence credit risk includes both the likelihood of a counterparty being unable to honour its obligations and the loss the credit institution incurs in that event, account being taken of the value of any collateral held by the institution.

### Credit growth

Credit growth to the non-financial private sector (households and enterprises, but also including municipal administrations) from domestic sources (C2) has quickened over the past two years, in December reaching a year-on-year rate of 13.3 per cent compared with 6.8 per cent two years previously. The credit volume from foreign sources has declined since end-2003, especially to Mainland Norway (i.e. the non-oil sector). Total annual growth in credit to the non-financial private sector (C3) was 10.2 per cent at end-November 2005, disregarding oil and shipping. This is far higher than the economy's nominal growth rate, but lower than domestic credit growth.

Chart 3.1 Growth in domestic credit and in credit from private banks

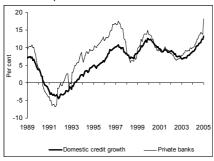
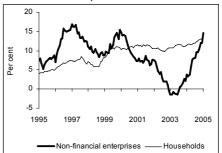


Chart 3.2 Growth in credit to households and non-financial enterprises



Source: Norges Bank

Source: Norges Bank

The housing market upturn has contributed to a very high level of growth in credit to households in the last six years. In 2005 growth quickened sharply, reaching an unprecedented 13.4 per cent in December on an annual basis. In the wake of the economic turnaround business investment has picked up, and annual growth in credit to enterprises was 14.6 per cent at end-2005. However, this is partly due to a shift from foreign to domestic credit sources.

Banks account for just over two-thirds of total domestic credit. Total growth in lending by Norwegian banks and branches of foreign banks rose markedly in 2005. By the end of December year-on-year growth in C2 was as high as 18.1 per cent compared with 13.8 per cent the previous month. However, parts of the upturn are due to portfolio transfers from mortgage companies to banks. Growth in credit from finance companies has also quickened appreciably in the past two years.

Chart 3.3 Growth in banks' home mortgage loans to wage earners

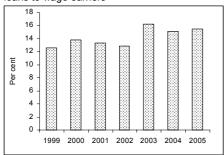
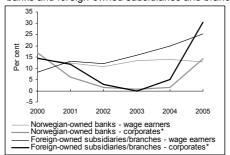


Chart 3.4 Growth in lending by Norwegian-owned banks and foreign-owned subsidiaries and branches



\*Loans to Norwegian corporate customers.

Growth in bank lending to wage earners has been particularly high in the past two years, and now accounts for about 90 per cent of lending to households (which also include the self-employed and unincorporated businesses). Lending to wage earners rose by 15 per cent in 2005. Almost 90 per cent of lending to wage earners is secured on dwellings. Since growth in lending secured on dwellings has been very high for some time, home mortgage lending rose by 16 per cent in 2005, banks are increasingly linked to developments in the housing market.

Whereas Norwegian-owned banks have shown relatively stable, high growth in lending to wage earners in the past five years, foreign subsidiaries and branches have substantially stepped up their lending both to wage earners and businesses.

#### Lending in a period of strong economic expansion

Knowing precisely how the level of banks' credit risk varies over the economic cycle poses a major challenge to banks and supervisory authorities alike. It requires a good knowledge of how cycles are created and of the role played by the credit markets in this process. Experiences from a number of other countries suggest that strong credit growth during cyclical upturns makes it more likely that risk will accumulate which could trigger significant problems in the financial sector when a turnaround occurs. Problems have often surfaced after upturns featuring steep debt build-up, rapid investment growth and vigorous upswing in real estate and securities markets. Debt growth and asset market upturns are often mutually reinforcing. Credit growth is normally higher during an economic upturn than in a downturn. However, credit growth that reinforces the economic cycle, for example by

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fuelling over-investment in dwellings or in commercial projects in a boom, while profitable projects are left without funding in a slump, will result in misallocation of resources and higher risk of stability problems in financial markets.

There are many reasons for potential problems of this kind in credit markets. Keen competition in financial markets may encourage financial institutions to assume greater risk, a tendency which may be augmented should banks become incautious during protracted upturns when losses are low. Further, banks' models for measuring and managing risk may be based on data that fail to capture changes in credit risk across entire economic cycles. Financial crises are rare, and after a time it becomes difficult for financial institutions and borrowers alike to keep their eye on a trend which previously created problems, particularly if it now assumes a slightly different form and course. Ensuring that institutions maintain high-quality credit practice during a period of economic expansion, and hold the buffers needed to cushion a possible setback, poses a challenge to the supervisory authorities.

#### Households

#### Household indebtedness

Gross household indebtedness has risen sharply in the past six years, driven by strong growth in house prices, a favourable economic climate and low interest rates. Debt growth has been substantially higher than incomes growth, spurring a sharp increase in the debt burden. Norges Bank puts households' indebtedness at the end of the first half of 2005 at about 174 per cent of disposable income. Norges Bank has also produced projections of households' debt burden. The projections are based on the assumptions underlying the central bank's Inflation Report 3/2005 which envisages a gradual rise in the sight deposit rate from its present level of 2.25 per cent to 4.5 per cent by the end of 2008. Results from work done on household indebtedness and house prices are also utilised. The projections indicate a steep increase in households' debt burden. Whereas debt measured 160 per cent of household incomes in the peak year before the banking crisis, it will, based on the assumptions employed, average 210 per cent of disposable income in 2008. Large groups of the population will see their debt rise to three times their income.

Chart 3.5 Household debt and interest burden as per cent of disposable income

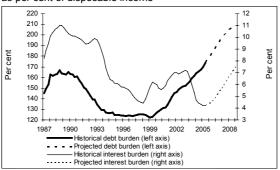
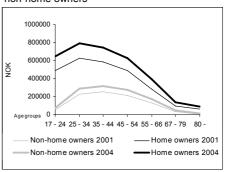


Chart 3.6 Average debt of home owners and non-home owners



Loan debt as % of disposable income less on insurance claims Source: Statistics Norway (liquid disposable income). After-tax interest expenditure as % of liquid disposable income plus interest expenditure.

Sources: Statistics Norway and Norges Bank

Despite households' heavy debt accumulation, their interest burden declined substantially up to the end of the first half of 2005, primarily thanks to the sizeable reduction in interest rates from 2002 onwards. But the interest burden bottomed out in 2005. On Norges Bank's projections, the interest burden will rise in the period to 2008 to reach approximately the same level as in 2002.

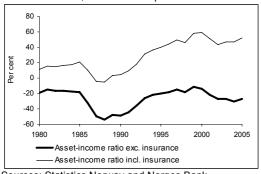
There are wide variations between different groups of households. Indebtedness and interest expenses are highest among younger households gaining a foothold in the housing market. According to figures for 2004 from Statistics Norway, home owners in the age range 25-34 carried debt averaging close to NOK 800,000, and in recent years their indebtedness has risen far quicker than their incomes. In view of the rapid increase in house prices since 2004, home owners' average indebtedness can be safely assumed to be far higher now, at the start of 2006.

### Households' financial wealth and financial saving

Household saving is substantial, despite this sector's accumulation of debt. The wealth produced by saving is distributed between housing, other real capital and investments in financial objects. Preliminary national accounts figures for 2004 show that the upturn in housing wealth was the main contributor to the 10 per cent real growth in assets. Financial wealth can provide a cushion should households meet harder times, for instance a sudden interest rate hike or rising joblessness. But this only applies to liquid wealth: household wealth mainly comprises housing assets. Moreover, as much as 36 per cent of households' financial wealth is tied up in illiquid insurance claims and cannot therefore serve as a buffer.

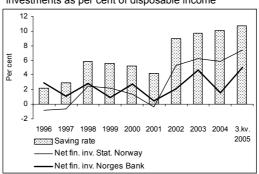
Like indebtedness, financial wealth is very unevenly distributed. According to the Income Tax Return Statistics for 2004, the over-54s have the highest gross wealth, and since 2003 the oldest age groups have accounted for the largest increase in wealth.

Chart 3.7 Households' net assets, with and without insurance claims, as share of disposable income



Sources: Statistics Norway and Norges Bank

Chart 3.8 Household saving rate and net financial investments as per cent of disposable income



Sources: Statistics Norway and Norges Bank

Households' net financial investments reflect the change in households' financial saving. Since it is not possible to observe directly all financial transactions undertaken by households, net financial investments have to be estimated. Both Statistics Norway and Norges Bank publish figures for households' net financial investments, using somewhat differing methods, and some discrepancies are only to be expected. In recent years, however, the discrepancies have been very substantial with Statistics Norway producing significantly higher figures than Norges Bank. Not only the calculation

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methods used, but also the treatment of extraordinary, tax-motivated stock dividends taken out prior to the reintroduction of dividend tax from 2006, have contributed to the discrepancies. Only a small proportion of households receive share dividends, and this does not represent a sound buffer for households in general in the event of an economic downturn. Statistics Norway cites a savings rate of around 10 per cent for the past two years. However, figures from Norges Bank show that when adjusted for reinvested share dividends, net financial investments turn negative leaving the savings rate at just under 6 per cent. On Statistics Norway's estimate the savings rate will fall to almost 1 per cent in 2007. Uncertainty surrounding the size of household saving in general, and of financial saving in particular, is substantial.

## Home mortgage loans

Banks' annual growth in lending secured on dwellings has exceeded 10 per cent since the end of 1999, and by the end of 2005 it was close to 16 per cent. This was substantially higher than the growth in house prices, which had climbed 9.2 per cent by year-end. Since 1994 Kredittilsynet has conducted surveys of banks' practice as regards home mortgage loans. In the survey carried out in autumn 2005 29 banks were each asked to report data on 100 new home mortgage loans. The 29 banks accounted for about 86 per cent of all bank loans secured on dwellings in Norway.

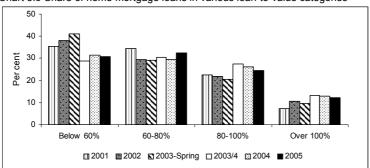


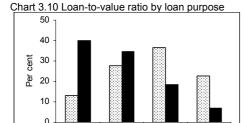
Chart 3.9 Share of home mortgage loans in various loan-to-value categories

Despite some decline in the proportion of loans going to refinancing in the latest survey, more than half were for this purpose. One in seven of these loans were to refinance a loan from another lender. The figure for the previous year was a mere one in eleven.

Thirty-seven per cent of loans in the reported portfolio exceeded 80 per cent of property valuation, a decline of 2 percentage points from one year previously. Twelve per cent were in excess of 100 per cent, a slight decline on the previous year. Of the latter, four out of ten lacked (sufficient) additional collateral to bring overall security into line with the loan amount. This was a slight improvement on the autumn 2004 survey. The loan-to-value ratio for loans going to house purchase showed a slight increase on the previous year with loans in excess of 80 per cent of property valuation rising from 57 to 59 per cent of the reported portfolio.

The home loan survey broke down the loan-to-value ratio by borrower age. As a rule younger borrowers have less equity available than their older counterparts. In the case of the under-35s almost half the portfolio comprised loans in excess of 80 per cent of property valuation. Seventeen per cent of the loans were in excess of 100 per cent. For borrowers in the age range 35 to 66, 22 per cent of the

portfolio had a loan-to-value ratio in excess of 80 per cent, while for the over-67s the figure was a mere 7 per cent.



60-80%

80-100%

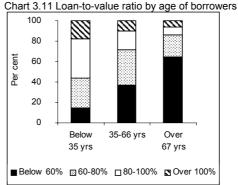
Over

100%

Relow

60%

■ Refinancing/other



The volume of reported loans carrying fixed interest was very low, just under 1 per cent. Of the overall portfolio of home mortgage loans granted by all Norwegian banks, 9.5 per cent had a lock-in period at end-September 2005, after a decline of just under 1 percentage point over the past year. Of loans with a residual lock-in period above one year the decline was almost 4 percentage points, to 5.1 per cent. This is low compared with other countries, which is why interest rate changes rapidly translate into changes in borrowers' interest burden.

Recent years have seen a clear shift towards longer loan periods. The average loan period was more than two years longer than in the 2001 survey. The increase was obvious for all loan-to-value ratios, except for loans in excess of property valuation.

Bank's main focus when processing loan applications is on the borrower's debt-servicing ability, while collateralisation generally serves as a second line of defence. Most banks use models to compute borrowers' cash position after payment of fixed expenses. Their guidelines also require loan officers to assess the impact of higher interest rates on the borrowers' finances. Most banks add a mark-up of 4-5 percentage points to the current lending rate. The lowest reported mark-up was 2 percentage points. A majority of banks state that customers are informed of the impact of interest rate increases on their personal finances during the application process.

In the past year a growing number of banks have proactively offered a new loan product in the form of a credit facility secured on the borrower's dwelling. The product, which largely targets older borrowers with little or no previous mortgage on their dwelling, focuses on the possibility of borrowing on the dwelling to finance consumption. The customer can draw on the facility without having to apply each time ready funds are needed. The repayment period is largely up to the individual customer, and interest is payable on the amount outstanding at any time. Several banks report a relatively high volume of flexible home mortgages/credit facilities in autumn 2005, approaching 20 per cent of all new loans and credits secured on dwellings. Overall credit facilities secured on dwellings totalled about NOK 30 billion at the end of 2005.

Some banks offer equity-release and home-equity pension products providing credit in the form of a lump sum payment and/or fixed monthly payments for a limited number of years against a house or

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recreational property. These products link banks' credit risk even more closely to the housing market. The risk is none the less acceptable provided banks practise prudent guidelines for loan-to-value-ratio and debt servicing capacity in a consistent manner.

#### Consumer loans

A substantial share of loans for consumption purposes is secured on dwellings. The emergence of new equity-release and home-equity pension products increases the potential for consumer financing linked to home mortgages. In addition, both banks and finance companies offer pure consumer loans, usually unsecured and entailing high credit risk. In 2005, a survey was again conducted of a sample of nine companies whose main business is consumer finance. They included Santander Consumer Bank's consumer finance arm (formerly Bankia Bank) and DnB NOR Kort, which includes the Cresco brand. In this context consumer loans include both card-based loans and unsecured consumer loans. The companies offer various products, for example credit cards providing credit up to NOK 75,000 and unsecured loans ranging from NOK 10,000 to NOK 200,000. The effective interest rate on these loans varies from about 10 to over 30 per cent, depending on the loan's size and repayment period.

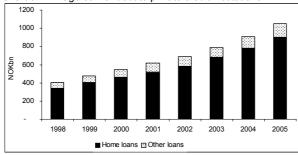
Table 3.1 Trend in consumer loans in a selection of companies\*

	2001	2002	2003	2004	2005
Consumer loans (NOKm)	16,755	19,381	20,816	22,823	26,276
Growth % (12-month)	27.3	15.7	7.4	9.6	15.1
Book losses (NOKm)	277	511	574	398	382
Losses as % of consumer loans	1.7	2.6	2.8	1.7	1.5
Net interest as % of ATA	8.2	8.4	10.1	12.0	11.6
Ordinary operating profits as % of ATA	4.2	4.0	4.9	7.7	7.6
Loan defaults, net (NOKm)	1,013	1,338	1,473	1,412	1,467
Defaults as % of consumer loans	6.0	6.9	7.1	6.2	5.6

<sup>\*</sup>GE Money Bank, Enter Card, Finaref, Ikano Finans, Citifinancial Europe, Europay Norge, Diners Club Norge, Santander Consumer Bank (Bankia Bank), DnB NOR Kort (Cresco).

Several of the companies in the sample have shown relatively rapid lending growth in recent years. By the end of 2005 all companies combined reported annual growth of 15.1 per cent. Growth in 2003 and 2004 was affected by a lending reduction by a major company in this period. Overall growth for the nine companies is somewhat lower than lending growth among other finance companies.

Chart 3.12 Wage earner debt to private credit institutions



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Book losses and loan defaults for companies engaged in pure consumer finance are higher than for finance companies in general. Losses constituted 1.5 per cent of gross outstanding loans, while net defaults measured 5.6 per cent of consumer loans at end-2005. However, there was a reduction in both losses and defaults as a ratio of consumer loans compared with 2004. There are relatively wide variations between the companies in the sample. As a group, their net interest revenues were 11.6 per cent of average total assets, clearly higher than for other companies. At 7.6 per cent of average total assets in 2005, these companies' profit is also higher than that of other companies.

The volume of pure consumer lending constitutes only a small proportion of gross lending to wage earners by banks, mortgage companies and finance companies. Servicing such loans will primarily be a problem for some borrowers and has little bearing on financial stability.

#### Households' sensitivity to interest rate increases

Since 2003, on commission from Kredittilsynet, Statistics Norway has made model-based projections of households' debt and interest burden two years ahead. The model also analyses households' interest burden in the event of a substantial interest rate increase at the end of the projection period. The study conducted in autumn 2005 provides projections to the end of 2007. The interest rate increase in the stress test is incorporated at end-2007/start-2008.

The model starts out from volume figures for 2003 taken from the tax assessment statistics. The assumptions underlying the projections are based on historical data up to and including 2003, where available, while the forecasts for wage growth and bank lending rates are taken from Economic Survey (September 2005). In September Statistics Norway's interest rate forecast was below market expectations. The tax programme in the model comprises current 2006 rules, which as a purely technical assumption are continued for 2007 such that the thresholds in 2006 are wage-adjusted for 2007.

Two projections are made, one with falling and one with rising growth in credit to households. In the first, credit growth gradually falls from the current level of more than 13 per cent to 11 per cent in 2006 and to 10 per cent in 2007. In the second, household credit growth rises to 14 per cent in 2006, thereafter declining to 13 per cent in 2007.

Under the assumptions outlined, the calculations show that households' total debt burden, which in 2003 measured about 149 per cent of total incomes, rises to 193 per cent by the end of 2007 in the path of falling credit growth and to 201 per cent in the path of rising credit growth. The figures diverge somewhat from Norges Bank's projections since the model is based on a sample of households and employs a different definition of income.

Whereas households are in a relatively favourable financial position overall, some groups are substantially more vulnerable to interest-rate changes than others. Households are classified in three main groups on the basis of interest burden (defined as interest rate expenses as a share of disposable income). The model projects the number of households falling within each of the three groups in 2007, as well as each group's share of total debt.

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Table 3.2 Number of households and share of total debt by interest burden, decelerating debt growth

	2003		200	)7	2007, interest rate up 3 percentage points		
Interest burden:	Number	% of total	Number	% of total	Number	% of total	
	(thousands)	debt	(thousands)	debt	(thousands)	debt	
0.1 – 19.9 %	1,414	66	1,596	85	1,312	53	
20 – 30 %	149	19	46	7	222	24	
Over 30 %	69	13	23	6	132	21	

Source: Statistics Norway

The steep interest rate fall, the assumption of persistent low interest rates in the projection period and expected slower growth in credit significantly reduce the number of households with an interest burden above 20 per cent in 2007. The proportion of total debt among households with a high interest burden is also sharply reduced to 13 per cent.

Should, on the other hand, interest rates rapidly climb, the most vulnerable groups will be substantially affected. A stress test is carried out in which interest rates rise 3 percentage points by the start of 2008. Such an increase is within Norges Bank's range of possibility (uncertainty fan) as presented in Inflation Report 3/2005. In this case the calculations show that 354,000 households acquire an interest burden in excess of 20 per cent, and 132,000 a burden in excess of 30 per cent. About 45 per cent of the overall debt will reside with these groups.

The number of households with a high interest burden in 2007 also declines in the rising credit growth scenario. When interest rates again increase by 3 percentage points at the start of 2008, the number of households with an interest burden in excess of 20 per cent rises to 380,000, and almost 150,000 of them have to spend more than 30 per cent of their income on interest payments. The high-interest-burden group carries 47 per cent of aggregate debt.

Table 3.3 Number of households and share of total debt by interest burden, accelerating debt growth

	2003		20	07	2007, interest rate up 3		
			20	07	percentage points		
Interest burden:	Number	% of total	Number	% of total	Number	% of total	
Interest burden:	(thousands)	debt	(thousands)	debt	(thousands)	debt	
0.1 – 19.9 %	1,414	66	1,588	84	1,286	50	
20 – 30 %	149	19	51	8	230	24	
Over 30 %	69	13	25	6	149	23	

Source: Statistics Norway

A buffer in the form of liquid assets puts households in a far better position to tackle the debt and interest burden. In 2003 the group with the lowest interest burden held 66 per cent of the total debt, while financial assets made up 68 per cent of this group's debt. Similarly assets held by the group with an interest burden between 20 and 30 per cent made up 10 per cent of their debt, while the assets of the most heavily burdened group made up 15 per cent of their debt. The latter group holds a high proportion of shares, contributing to wide variation in this group's assets over time. The stress tests show that when interest rates are increased, assets decline as a proportion of indebtedness, in the case of the most heavily burdened households to 12-13 per cent.

The calculations show that households are highly financially sensitive to interest rate increases given quickening credit growth and a low share of fixed interest loans. A sudden rise in interest rates is not the most likely scenario, and a gradual increase is expected. If interest rates remain low for a long

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period and households' rapid credit growth persists or accelerates, the stage may be set for a substantial increase in households' credit risk in the medium term. Figures from Statistics Norway's incomes and wealth survey show that recent years' debt growth has been highest in the youngest groups and lowest-income groups. Groups with the highest debt burden have the lowest financial wealth, and their share of total assets has edged down in recent years.

The housing market has been an important driver for households' debt incurrence. According to the OECD, Norwegian house prices may be overvalued by about 18 per cent. There is reason to believe that a rise in indebtedness and higher interest rates combined with a growing supply of dwellings will result in a correction in the form of a levelling-off of house prices. Should indebtedness continue to rise rapidly and interest rates increase substantially, a fall in prices will be a real possibility. Banks have significantly stepped up their exposure to households in recent years, and are increasingly linked to housing market trends.

#### Banks' information to borrowers

In the autumn of 2004 Kredittilsynet conducted a survey of home-loan borrowers' perceptions of information they had received from banks. The survey showed that borrowers were highly satisfied both with the amount of information received and the clarity of its presentation, although a large proportion did not recall receiving information on important aspects of the loan. In the wake of the survey (winter-spring 2005) Kredittilsynet dialogued with the Savings Banks Association and the Financial Services Association on ways to enhance the information flow between lender and borrower. The two associations communicated the conclusions drawn from the dialogue to their members. Banks were asked in a joint circular to supplement statutory, written information with other information designed to ensure that customers are actually informed of important aspects of taking out a loan. New standardised texts giving information about the risk, and consequences, of future interest rate increases were also prepared for inclusion in loan documents.

A similar survey of borrowers was conducted in autumn 2005. As in 2004, a substantial majority was satisfied with the information received. There were still a large number of customers who claimed that they had not received information on the effective interest rate and consequences of defaulting on the loan, although there seems to have been some improvement in this area in the case of most banks. Some improvement is also apparent as regards information given on the possibility of higher interest rates, and on the associated consequences for personal finances. Kredittilsynet will watch developments in this area.

### Corporate sector

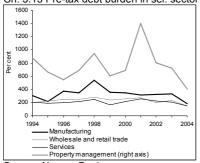
The slowdown up to mid-2003 brought a weak trend among mainland (non-oil sector) enterprises. Production picked up in 2004, and growth continued into 2005. The favourable economic trend has boosted mainland investment, and corporate borrowing rose significantly towards the end of 2005. Corporate profitability improved sharply from 2003 to 2004, and preliminary figures on listed companies indicate that the positive trend continued in 2005. Improvement is noted in most industries, and above all fish farming appears to be faring better after several difficult years.

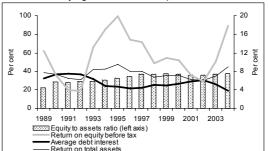
Improved earnings reduced corporate indebtedness in most industries in 2004, and continued low interest rates also reduced the interest burden. The stage is set for a profit improvement in excess of

debt growth in 2005, signalling a further decline in the debt burden. However, both the debt and interest burden are likely to resume an upward trend from 2006 onwards.

In keeping with the cyclical upturn from 2003, the number of bankruptcies continued to fall, leaving the total number of bankruptcies in 2005 18 per cent below the previous year's figure. Improved financial positions and prospects of good profits suggest that the bankruptcy rate may remain moderate this year, like last. The impression of a favourable trend for the business sector is confirmed by projections using KMV's credit risk model and Norges Bank's bankruptcy prediction model.

Ch. 3.13 Pre-tax debt burden in sel. sector Chart 3.14 Key figures for the enterprise sector





Source: Norges Bank

Limited companies except in the oil and gas industry, financial industry and public sector. Debt interest is computed as the ratio of interest expenses to total debt. Source: Norges Bank.

Moody's KMV Credit Monitor and Private Firm Model calculate the likelihood of default for the 4,000 or so largest Norwegian companies, which in aggregate account for the bulk of the corporate sector's debt. Since the KMV model utilises market information, it can be said to be more forward-looking than models based on historical, accounting data. Norwegian enterprises' likelihood of default has been calculated on the basis of data up to December 2005. The likelihood of default has fallen appreciably since 2003 and was at a very low level at the end of 2005.

Chart 3.15 Likelihood of default, Norwegian enterprises

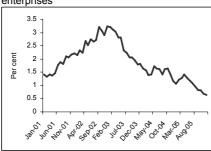


Chart 3.16 Predicted bankruptcy probabilities for non-financial enterprises



Source: Moody's KMV

The positive trend in Norway's business sector is reflected in Norges Bank's bankruptcy prediction model which estimates the likelihood of limited companies going bankrupt over the next three accounting years. The figures predicted after the accounting year 2004 are slightly lower than one year previously. The decline is somewhat larger for the most exposed enterprises than for the median enterprise.

#### Exposure to selected industries

Each year since 1998 Kredittilsynet has investigated banks' exposure to selected industries. The 2005 survey covered shipping, the shipbuilding industry, offshore industry, extraction of oil and gas, fishing and whaling, fish farming, property management and construction. The last-mentioned industry was included in the 2004 survey, while fishing and whaling feature in 2005 for the first time. The 11 largest banks are covered, and the analysis is based on the banks' own risk assessments and classifications.

Table 3.4 Banks exposure to selected industries as of the third quarter of 2005

Industry	Loan co	mmitments	Amount drawn	U	c as % of t drawn	Exposure as %	
,	NOK billion	Growth Q3 04 – Q3 05 as %	NOK billion	Q3 2004	Q3 2005	of capital base	
Shipping	159.4	32.5	152.3	2.8	1.8	147.6	
Shipbuilding	7.7	24.9	3.7	4.9	16.1	7.1	
Offshore	11.6	-29.0	4.7	5.0	0.8	10.7	
Oil/gas extraction	37.7	23.7	8.9	0.5	1.3	34.9	
Fishing, sealing and whaling	14.8		14.0		9.2	13.7	
Fish farming	13.3	-2.9	10.5	41.8	17.8	12.3	
Property management	172.4	16.3	152.3	6.8	3.7	159.7	
Building and construction	28.7	-4.4	18.4	5.4	4.6	26.5	
Total	445.6	18.0	364.6				

The banks included in the survey increased their total commitments by 18 per cent from the third quarter 2004 to the same quarter 2005. As of the third quarter 2005 there was a decline in loans to the offshore industry, fish farming and construction. Shipping and property management are the two largest industries in terms of lending volume, and a substantial increase was noted in commitments to these industries compared with the third quarter 2004. The third quarter 2005 survey showed that, apart from the ship building industry and oil and gas extraction, all industries had reduced the high-risk portion in relation to drawn commitments compared with the previous year. The largest reduction was in fish farming where banks have converted loans to shares.

#### Loans backed by securities

Since 1997 Kredittilsynet has conducted annual surveys of the volume, and banks' treatment, of loans backed by securities. Twenty-two banks participated in the 2005 survey. The survey draws a distinction between commercial credits and other lending. Commercial credits have a term of up to one year, other lending a term above one year. In order to identify the extent of debt-financed structured products and other savings mediums secured on financial instruments, the 2005 survey was extended to include specific products such as index-linked deposits, equity and index bonds, individual endowment insurance and shares or interests in real estate projects. These products come under the category of terms above one year.

The volume of loans backed by financial instruments, traditionally low in Norway compared with other countries, has risen in recent years. The volume of commercial credits remains low, accounting for a total of 0.5 per cent of gross outstanding loans made by the selected banks. For other lending the figure is 3.0 per cent. Overall, the volume has increased from just over NOK 31 billion as of the third

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quarter 2004 to almost 47 billion as of the third quarter 2005. This is an increase of close to 50 per cent, bringing such loans' share of banks' total gross outstanding loans to 3.5 per cent. The figure for the five most exposed banks is 20.8 per cent.

Table 3.5 Credits backed by financial instruments. 3rd gtr 2005

		ial credits b	,		loans back cial instrun	,	Total loans backed by financial instruments			
	NOKbn	As % of gross loans		NOKbn	As % of gross loans		NOKbn	As % of gross loans		
	Q3 05	Q3 04	Q3 05	Q3 05	Q3 04	Q3 05	Q3 05	Q3 04	Q3 05	
5 most exposed banks	0.6	0.3	1.1	12.0	9.1	19.8	12.7	9.5	20.8	
Total	6.4	0.3	0.5	40.4	2.4	3.0	46.8	2.7	3.5	

Table 3.6 gives a specified overview of loans for purchase of structured products, individual endowment insurance and shares/interests in real estate projects. For the banks as a whole, loans for purchase of these product types measured 2.3 per cent of gross outstanding loans. While total exposure is limited, some banks in the selection are more exposed than others to this type of commitment.

Table 3.6 Credits backed by financial instruments, 3rd qtr 2005

Table 5.5 Orealis backed by illiancial instruments, ord qui 2005												
	Equity and index bonds		Index-linl	ked deposits	insuranc	al endowment ce / interest in tate projects	Total specified products					
	NOKbn	% of gross loans	NOKbn	% of gross loans	NOKbn	% of gross loans	NOKbn	% of gross loans				
5 most exposed banks	3.0	5.0	6.1	9.9	1.8	3.0	10.9	17.9				
Total	15.9	1.2	7.5	0.6	7.5	0.6	30.8	2.3				

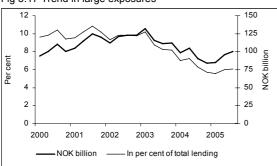
Banks' sales of structured products have shown an increasing trend in recent years. A total of NOK 46.2 billion was invested in equity bonds, index bonds and index-linked deposits with banks as of the third quarter 2005, an increase of NOK 10.2 billion over the third quarter 2004. The 22 banks in the survey reported a total investment of NOK 23.4 billion in the above products as of the third quarter 2005, with the bulk of this figure invested in equity bonds and index bonds. In other words, half of the investments in the structured products mentioned are debt-financed and secured on the same instruments. Debt finance of the other savings mediums in the survey was not particularly widespread as of the third quarter 2005. Only four of the 22 banks reported debt-financed individual endowment insurances. The loan volume for all banks combined was NOK 4.2 billion. The total loan volume for purchase of shares and interests in real estate projects was NOK 3.3 billion, and five banks reported such commitments.

In light of the expanding sales of structured products, Kredittilsynet conducted a survey in autumn 2005 to throw light on the information disclosed by institutions in their marketing of such products. (The report is available on Kredittilsynet's website.) The survey revealed a need to consider measures to assure customers better information on these products. Kredittilsynet appointed a group to draft such measures.

#### Large commitments in financial institutions

All Norwegian banks submit a quarterly report on large commitments to individual customers or groups of customers. A large commitment is defined as a commitment which prior to weighting represents more than 10 per cent of a bank's net capital base. Institutions are not permitted to carry commitments measuring in aggregate more than 800 per cent of their capital base or any single commitment measuring more than 25 per cent. This rule is designed to reduce banks' concentration on individual commitments.

Fig 3.17 Trend in large exposures



From 1998 to 2003, banks' total volume of large commitments (after weighting) measured about 10 per cent of their total lending, but has since fallen considerably. This development reflects the fact that mergers have been more frequent and speedier in the banking sector than elsewhere in recent years. There was an increase in large commitments in 2005, bringing the overall volume at year-end to almost NOK 100 billion. Large commitments have also increased as a share of overall lending, which must be seen in light of banks' substantial renewal of lending to the business sector.

Eighteen banks carry large commitments which altogether after weighting exceed the respective bank's net capital base, although no bank is anywhere near the maximum limit of 800 per cent of its net capital base.

#### The largest banks' exposures to credit risk

Changes are under way in the supervisory process as an adjustment to Pillar 2 of the new capital adequacy framework (see chapter 4). In 2005 Kredittilsynet prepared, for the first time, an overall risk assessment of the nine largest banks/conglomerates. The aim was to obtain an overview of the most significant risk exposures, and of management and control of the various risk areas.

Risk-based supervision includes modules for assessing the various areas of risk to which supervised entities are exposed. Credit risk is assessed using the "Credit Risk Module" which is published on Kredittilsynet's website. In addition to reviewing the reported data, the institution's overviews and analyses of its loan portfolio, Kredittilsynet conducts its own analysis of the corporate portfolio at the individual bank using Norges Bank's credit risk model SEBRA. The model predicts the likelihood of bankruptcy of bank customers as a function of age, size, sectoral criteria and accounting variables.

Overall credit risk was considered to be moderate in 2005, with some spread apparent among banks. Management and control of credit risk was largely perceived to be satisfactory, although there were

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reports of flaws and deficiencies at some banks. There is still room for improvement as regards pricing of credit risk.

#### Market risk

Market risk is the risk of loss of revenue or capital as a result of changes in the market prices of shares, fixed income instruments, currencies or commodities. The scale of market risk depends on both the volatility of market prices and the size of positions taken. Life insurance companies are more exposed to market risk than are banks.

#### Life insurance companies

Major changes took place in portfolio composition between 2000 and 2002 when life insurers reduced their shareholdings and increased their holding of bonds "held to maturity". Since 2002 the equity component has increased anew, accounting for almost 20 per cent of the companies' total assets at the end of 2005. Money market instruments and bonds held as current assets increased somewhat over the year to reach 31 per cent of total assets. Bonds "held to maturity" accounted for 28.3 per cent of total assets at year-end compared with 32.5 per cent one year earlier.

Life insurers expanded their foreign securities component substantially from the mid-1990s onwards, with the strongest increase recorded in shares. Although it declined slightly in 2005, the foreign share component still accounted for 65 per cent of total shares held at year-end. The portion of foreign bonds held as current assets and money market instruments remained unchanged at 39 per cent.

Life insurers' buffer capital is designed to cushion their market risk and other risk. Buffer capital is defined as surplus tier 1 capital, supplementary provisions with an upward limit of one year's interest guarantee (less supplementary provisions used to compute regulatory capital) and fluctuation reserves. Supplementary provisions are entirely customer assets, whereas fluctuation reserves mainly comprise customer assets and tier 1 capital comprises the company's assets.

Chart 3.18 Shares and fixed income securities

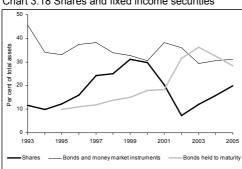
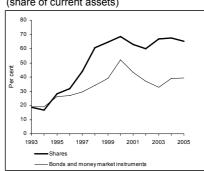


Chart 3.19 Foreign securities (share of current assets)



At the end of 2005 life insurers had buffer capital of NOK 43 billion, or 7.5 per cent of total assets, compared with NOK 32.6 billion or 6.4 per cent one year previously. A positive trend in securities

markets, some increase in shareholdings and in the proportion of Norwegian shares held fuelled the rise in buffer capital. The level of buffer capital at end-2005 was the highest since the peak year 1999 when life insurers' aggregate buffer capital measured 11.1 per cent of total assets.

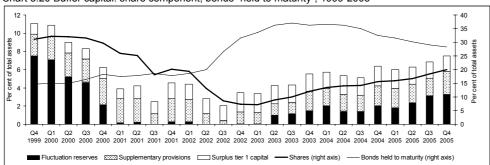


Chart 3.20 Buffer capital: share component, bonds "held to maturity", 1999-2005

#### Stress tests

Both Kredittilsynet and life insurers employ stress testing when assessing insurers' ability to withstand unexpected, unfavourable market movements. The outcome of three different stress tests, with a basis in companies' buffer capital at the end of 2005, is illustrated below. They contain no information on the likelihood of the scenarios actually materialising.

**Scenario 1** assumes a 30 per cent fall in the Oslo Børs all-share index, a 20 per cent fall in equivalent indices at international equity markets, and no interest rate change in Norwegian and international fixed income markets.

Scenario 2 assumes a 10 per cent fall in the real estate market.

**Scenario 3** assumes a 1.0 percentage point interest rate rise in Norwegian and international fixed income markets.

T 11 2 7	<b>C</b> .	1:0			. 21 12 2005
Table 3 /	Stress te	sts for lite	e insurance co	omnanies as	at 31.12.2005
I dolo 5.7	Du Coo to	ous for fire	, iiibaiaiice e	offipatifies as	at 31.12.2003

rable 5.7 baress tests for the insurance companies as at 51.12.2005											
	Buffer c	apital	\	Value fall in stress scenario, NOK billion							
	before s tes		Equitie	Equities		Bonds		Total	after stress test		
	NOKm	% of TA	Norwegian	Foreign		Norwegian	Foreign		NOKm	% of TA	
Scenario 1	43,045	7.5	-11,868	-14,930	0	0	0	-26,798	16,246	2.8	
Scenario 2	43,045	7.5	0	0	-5,856	0	0	-5,856	37,189	6.5	
Scenario 3	43,045	7.5	0	0	0	-2,094	-2,524	-4,618	38,427	6.7	
1,2,og 3	43,045	7.5	-11,868	-14,930	-5,856	-2,094	-2,524	-37,272	5,773	1.0	

Five of the six companies have the buffer capital needed to withstand a combination of the three scenarios. In stress tests as illustrated above, the focus is on the short-term effects of higher interest rates through capital losses on holdings. In the longer term an increase in long rates will have a favourable effect on companies' results. Persistent low interest rates are a substantial challenge to companies' ability to meet their obligations, as discussed below.

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### Long-term projections

Projections have been made of life insurers' results for the period 2006 to 2010. Calculations start out from actual results for 2005. Assumptions include a slow rise in long interest rates ahead, to 5 per cent in Norway and 4.8 per cent in the US in 2010. An annual rise of 8 per cent is incorporated for shares (reference path). In addition, alternative projections have been made in which share prices are assumed to rise by 20 per cent and 0 per cent (good and poor alternative, respectively, see Chart 3.22).

Chart 3.21 Value- adjusted result

2001

Chart 3.22 Result with differing share value trends

12
10
8
8
9
0
2
1993 1995 1997 1999 2001 2003 2005 2007 2009
1993 1995 1997 1999 2001 2003 2005 2007 2009
1993 1995 1997 1999 2001 2003 2005 2007 2009

Persistent low interest rates in the years immediately ahead pose substantial challenges to life insurers. With low interest rates, a moderate upturn in equity markets and a balance sheet mix similar to today's, results will remain at low levels in the years immediately ahead: stronger equity market growth will bring somewhat better results. Poor results will limit the opportunity to accumulate buffer capital by way of operations, and continued low risk-bearing capacity will impede companies' opportunity to increase risk exposure and expected long-term return.

#### Pension funds

At the end of 2005 shares made up 30 per cent of pension funds' aggregate total assets. Private pension funds raised their equity component by 4 percentage points, bringing it to 34 per cent of total assets by year-end. Municipal pension funds' equity component was 20 per cent, a 3 percentage point increase since 2004.

Pension funds have a relatively large foreign equity component, albeit far smaller than life insurance companies. At the end of 2005 foreign shares made up 50 per cent of private pension funds' current assets compared with 48 per cent one year previously, while municipal pension funds held 57 per cent in foreign shares compared with 54 per cent at end-2004.

Chart 3.23 Equities and fixed income securities in private pension funds

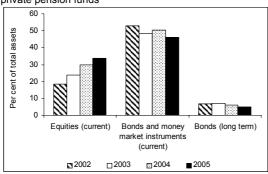
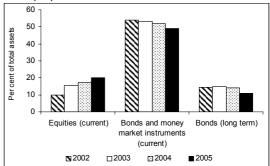


Chart 3.24 Equities and fixed income securities in municipal pension funds



The trend in securities markets in 2005 contributed to strengthening of pension funds' overall buffer capital. Capital buffers (defined as surplus tier 1 capital, supplementary provisions with an upward limit of one year's interest guarantee, and fluctuation reserves) measured 13.5 per cent of total assets at end-2005 compared with 9.4 per cent one year previously. There is a wide difference in buffer capital levels between private and municipal pension funds in the sample, respectively 15.4 per cent and 8.7 per cent of total assets.

Chart 3.25 Private pension funds' buffer capital

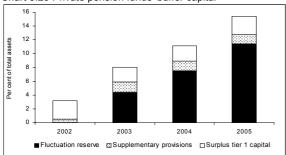
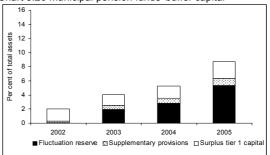


Chart 3.26 Municipal pension funds' buffer capital



Premium funds made up 6 per cent of total assets at end-2005. Under current rules, the premium fund can only be used to make good a deficit in a situation where supplementary provisions, tier 1 capital and other key capital elements have been exhausted. In defined contribution schemes with a unit-linked element (which can be arranged with a pension fund or insurer), however, the premium fund can be used to make good a shortfall in return.

#### Non-life insurance companies

Non-life insurers have a high share of fixed income securities and a significant proportion of shares in their balance sheets. In the case of the three largest non-life insurance groups, their aggregate holdings of money market instruments and bonds classified as current assets constituted 46.5 per cent of total assets at the end of 2005, while bonds "held to maturity" accounted for 9.5 per cent of their total assets at the same point. Shares and units classified as current assets made up 14.4 per cent of total assets at end-2005, 9.7 percentage points more than the previous year. The portion of fixed income securities was reduced by 8.7 percentage points in the same period. The foreign component in the overall shareholding was very high at the end of 2005.

Chart 3.27 Shares and fixed-income securities

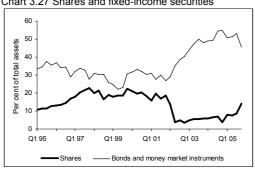
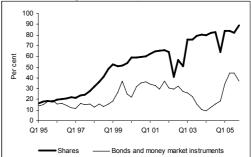


Chart 3.28 Foreign securities (share of current assets)



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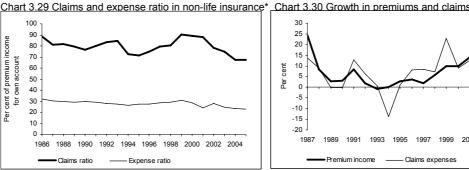
The past three years' sound results have substantially strengthened non-life insurers' financial position. Their exposure to market risk is in general moderate in relation to buffer capital (capital over and above the minimum statutory requirement). Hence large falls in securities markets will not lead to serious capital problems among non-life insurers.

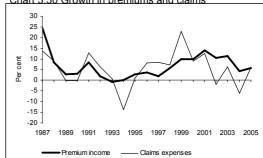
#### Insurance risk

Insurance risk is rooted in the balance between claims expenses and other insurance-related expenses on the one hand and premium income on the other – a balance which varies unpredictably over time. The main cause of insurance risk is that claims expenses diverge from what was anticipated when the premium levels were set.

Insurance risk usually affects non-life insurers' results more than it does life insurers' results, since claims expenses are more variable in the non-life sector. While the mortality trend is relatively stable in life insurance, changes in life expectancy may represent a substantial insurance risk in the longer term. In the short term, variations in the disability trend may affect results. Even so, the dominant risk for life insurers in the short term is market risk, i.e. that their investment returns will fail to cover the minimum interest guarantee to policyholders.

The non-life insurance sector has seen wide fluctuations in recent years in the relationship between claims expenses and premium income (the claims ratio). The expense ratio (insurance-related operating expenses as a per cent of premium income) has shown a more stable trend, but tending to fall over time. The growth in claims expenses was particularly high in 1999 to 2001, but has since slowed sharply. Premium growth was insufficient to compensate for the rise in claims expenses in 1999, and only peaked in 2001. It subsequently edged down, but remained above the growth in claims up to 2005.





\*Norwegian non-life insures and branches of foreign non-life insurers

Cyclical variations in the claims ratio are explained by unexpected changes in claims expenses. Changes in the premium level lag changes in the claims level, both because it takes a while for premium adjustment decisions to be fully reflected in the accounts, and because such decisions are delayed by uncertainty about whether the changes are lasting or merely temporary random fluctuations. The cyclical nature of the non-life insurance market is an international phenomenon. Most countries in Europe are currently seeing excellent results in non-life insurance. In recent years European companies have reported a somewhat lower average claims ratio than their Norwegian counterparts.

The claims ratio has varied widely over time, also within branches, and some trend differences are evident between branches. Chart 3.31 shows recent years' claims ratio trend for the principal non-life branches. This ratio was very high in occupational injury insurance from 1998 to 2000, and remains appreciably higher than in other branches, reflecting lasting upward adjustments of estimates of future claims payments. In other sectors the claims ratio shows a clear falling tendency in recent years. In 2004 the claims ratio was lowest in fire insurance and combined insurance, particularly in the business market.

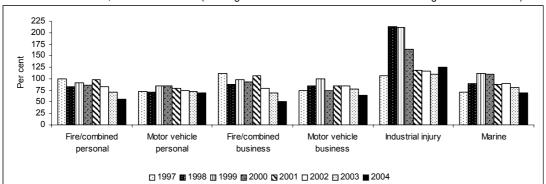


Chart 3.31 Claims ratio, selected branches (Norwegian non-life insurers and branches of foreign non-life insurers)

# Liquidity risk

Liquidity risk, i.e. the risk that an institution will be unable to honour its commitments as they fall due without incurring substantial additional costs, is rooted in differing maturities on banks' assets and liabilities. A high level of short-term funding of lending activity and other illiquid assets entails high refinancing requirements. Banks' access to funding in the market, and the price of such funding, depends to a large extent on their earnings and financial strength. Small banks generally have poorer access than large banks to funding on money and securities markets, especially in periods of tighter market liquidity, and are therefore more dependent on customer deposits as a source of funding.

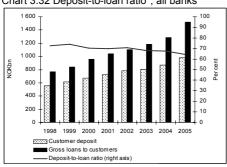
Despite low interest rates, bank deposits showed rapid growth of 12.1 per cent in 2005. However, since this was slower than the growth in lending, the deposit-to-loan ratio fell 2 percentage points in 2005 to 64 per cent at year-end. The smallest banks have a higher deposit-to-loan ratio than larger banks. Although customer deposits can be withdrawn at short notice, they are regarded as a stable, long-term source of funding. Banks' mandatory membership of the guarantee fund means that deposits up to the maximum covered by the guarantee scheme are viewed as a "risk-free" investment option for customers. Under the Guarantee Schemes Act the fund is required to cover deposits of up to NOK 2

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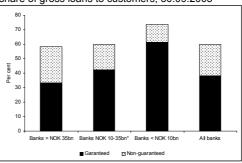
million per depositor. Deposits by financial institutions, among others, are not covered by this requirement. Deposits coming under the Guarantee Schemes Act's definition of guaranteed deposits accounted for about 60 per cent of total customer deposits at the end of the third quarter of 2005. The smallest banks have the highest ratio of guaranteed deposits to loans.

Chart 3.32 Deposit-to-loan ratio\*, all banks



\*Deposits from customers as % of loans to customers

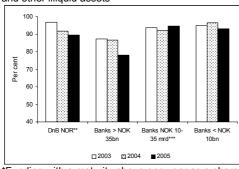
Chart 3.33 Guaranteed and non-guaranteed deposits, share of gross loans to customers, 30.09.2005



Excl. BNbank.
Sources: Banks Guarantee Scheme and Kredittilsynet

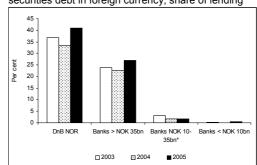
Both the large banks and the smallest banks reduced their long-term funding (including customer deposits, bonds with a maturity of more than one year and equity capital) in 2005, mainly as a result of the rapid growth in lending. Rapid lending growth imposes major demands on banks' ability to obtain long-term funding.

Chart 3.34 Long term funding as a share of loans and other illiquid assets



\*Funding with a maturity above one year as a share of illiquid assets. \*\*Incl. Nordlandsbanken \*\*\*Excl. Bnbank

Chart 3.35 Debt to foreign credit institutions and securities debt in foreign currency, share of lending



Whereas the large banks raise debt in the interbank and securities markets in Norway and elsewhere, small banks are more dependent on customer deposits as a source of long-term funding. DnB NOR and Nordea Bank Norway account for more than 80 per cent of Norwegian banks' foreign funding. In Nordea's case, this also reflects the fact that much of its funding comes from the parent company. Higher risk may attend funding from foreign sources than from domestic sources, for one thing because foreign actors are better able to respond collectively to negative changes in the Norwegian economy or Norwegian financial markets in general. On the other hand, funding from a variety of sources can provide improved diversification of funding risk. Funding in foreign currency makes

banks more vulnerable to reduced liquidity in the swap market. DnB NOR is an important funding source for small Norwegian banks, and the contagion effects of any reduction in DnB NOR's access to foreign funding could be substantial.

#### Monitoring banks' liquidity situation

Kredittilsynet investigated liquidity risk at 14 large banks in 2005. Kredittilsynet bases itself on the Basel Recommendations when reviewing banks' management and control of their liquidity situation. Since 2002, when some banks experienced a difficult liquidity situation, all banks in the survey have increased their long-term funding.

The survey showed that all banks included in the same survey in 2002 have improved their management and control of liquidity risk. The liquidity area receives considerable attention from the banks' top management, and proper organisation and clear placement of responsibility are assured. However, attention is drawn to weak or insufficient independence between operative liquidity management and control functions at almost half of the banks. Compared with the previous survey, the impression is that more banks have made organisational changes to ensure greater independence.

It is pointed out that banks should continue their effort to define and concretise the management board's risk tolerance as expressed in the liquidity strategy. Although banks have devoted much energy to developing contingency plans since the 2002 survey, work remains to be done on concretising initiatives and instruments at several banks. Banks mostly apply limits to their net funding requirement today, especially for short and medium term horizons. Kredittilsynet's observations are mainly to the effect that the framework established falls short of the standard required by the Basel Recommendations, and that routines for action when limits are breached are inadequate. Kredittilsynet finds that while more banks employ stress testing than before, only a small number take the test results into account when setting limits.

# **Operational risk**

Operational risk means the risk of loss resulting from inadequate or failed internal processes or systems, human error or external events. According to the Basel Framework and the EU Directive the term also includes legal risk, but not strategic risk or reputational risk. Kredittilsynet applies this definition when interpreting and implementing the framework.

It is not possible to estimate the scale of operational loss in the financial industry due to lack of data. Under the new capital adequacy regime, institutions opting for the standardised approach or the advanced measurement approach for calculating minimum capital charges for operational risk must have a system in place for registering events and losses. In due course this will enable a better overview of losses in the area, at the same time as the system will be a good tool for improving management and control routines.

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The financial industry in general, but possibly banks and finance companies in particular, are increasingly exposed to financial crime. This is an international trend, which also affects Norway. Familiar examples of this type of crime are money laundering, corruption and manipulation of accounts. Various forms of computer crime have begun to come more to the fore, for instance theft of data from card customers, production of counterfeit credit cards, and internet fraud. The first professional attempt at phishing (a fraud scam conducted for the purposes of information or identity theft) perpetrated against online bank customers was seen in 2005. This could prove to be a growing problem for the financial industry. While financial crime involving employees at institutions has a prominent role in international surveys, it appears to be a lesser problem in Norway. Kredittilsynet keeps a close watch on financial crime in the national and international arenas through its collaboration with other national authorities and participation in international forums that combat organised crime.

Operational risk is a significant risk in connection with structural changes in the financial market, for example mergers and acquisitions, which often entail reorganisation, staff reductions and switch of IT systems and service providers. In 2005 the major changes taking place in the information and communication technology area in Norway were seen to cause, in some cases large, disruptions. This entailed, directly and indirectly, reduced access for customers and financial loss for institutions. The measures taken in this area have not been satisfactory, and there is every reason to emphasise the need for management and control when implementing this kind of process. Follow-up of this type of change project is prioritised by means of targeted inspections.

Operational risk is the principal type of risk in the securities area. The securities market saw in 2005 the importance of good control routines in regard to operational risk. At one management company and one investment firm the absence of control of operational risk was shown to have resulted in serious and systematic violation of provisions of, respectively, the Securities Funds Act and the Securities Trading Act. Both undertakings had their licences withdrawn. From 2007 onwards investment firms will also come under the new capital adequacy rules and the management and control requirements derived from these rules.

# IMF and assessment of the Norwegian financial sector (FSAP)

The string of banking and financial crises in the 1990s, in developing and industrialised economies alike, prompted the IMF in 1999, in collaboration with the World Bank, to establish a Financial Sector Assessment Program (FSAP). An FSAP assesses weaknesses and strengths in the financial system along with the challenges facing the sector. All aspects of the financial sector are examined: markets, financial institutions and financial infrastructure (including settlement and payment systems). The principal risk sources linked with the macroeconomic situation are identified, and much emphasis is given to gauging the financial system's ability to bear risk. The IMF also examines structural and institutional aspects of the financial system such as assignment of responsibilities, cooperation and the framework for monitoring financial stability, regulation and supervision of the financial sector, crisis management, and the financial sector's safety net.

Most IMF member countries have been FSAP-reviewed, including the Nordic countries: Iceland and Finland in 2001, Sweden in 2002 and Norway in 2005. Denmark's FSAP review will be completed in 2006. Countries such as China and the US have yet to be reviewed by the IMF. Norway's FSAP took place from autumn 2004 to spring 2005. The IMF held meetings with Norwegian authorities (Ministry of Finance, Norges Bank and Kredittilsynet), financial institutions and trade associations. The IMF's assessments, published in June 2005, focused on the situation in the financial sector and Norway's observance of international standards and codes for banking, insurance and payment systems. Measures were also recommended to the authorities in various areas – stability along with structural and institutional conditions – which in the IMF's view will serve to strengthen the financial system. The IMF's assessments of Norway were in general favourable, concluding that "Norway's financial system appears sound, well managed, and competitive, and shorter-term vulnerabilities appear low overall".

The IMF's assessment of observance of international standards and codes is presented in Reports on the Observance of Standards and Codes (ROSC). In the field of banking supervision a basis is taken in the Basel Core Principles for Effective Banking Supervision. Where insurance supervision is concerned, Kredittilsynet is a member of the International Association of Insurance Supervisors (IAIS) which has developed several standards, among them the Insurance Core Principles on which the IMF based its assessment. The IMF's conclusion in relation to international supervisory standards was that Norway's supervisory regime is strong, that its goals are clearly formulated and that the requisite legal bases are in place. The IMF nonetheless recommends raising the level of authority delegated to Kredittilsynet both as regards granting licences and similar authorisations, and as regards issuance of regulations and supervisory decisions. The IMF also calls for more explicit criteria governing the composition of Kredittilsynet's Board with a view to assuring more uniform representation of consumers', supervisory entities' and supervisory authority's interests, and greater transparency as regards supervisory activities and the budget process.

Where payment and settlement systems are concerned, the IMF took a basis in Core Principles for Systemically Important Payment Systems (drawn up by the Committee on Payment and Settlement System under the BIS). The FSAP report concluded that supervision of the payment system in Norway meets international standards. The IMF nonetheless recommends more formalisation and publication of supervisory requirements and standards for payment and securities settlement systems, and measures to mitigate risk in the payment and settlement system.

The IMF praises the level of coordination and collaboration between the Nordic authorities on the Nordic financial conglomerates, and recommends continued cooperation with other Nordic authorities on the framework for handling cross-border crises. The IMF recommends further formalisation of the distribution of responsibilities and roles between the Ministry of Finance, Kredittilsynet and Norges Bank with respect to financial stability, for example by way of a cooperation agreement.

Although the IMF viewed the shorter-term vulnerabilities of Norway's financial system as low, it recommended keeping a close watch on household indebtedness and the housing market, and to consider extra capital adequacy for banks in view of the reduced risk weighting of home mortgage

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loans under Basel II (see Chapter 4). Use of stress tests to compute the effect of extreme – but unlikely – economic shocks on the results and soundness of one or more financial institutions is at centre-stage in the IMF's FSAP. The IMF, Norges Bank and Kredittilsynet together calculated banks' losses resulting from two macroeconomic scenarios – one starting out from a domestic cost shock and another starting out from an oil price fall and depreciation of the Norwegian currency. The tests showed that the bank sector as a whole could withstand the consequences of reduced quality of the loan portfolio resulting from relatively large changes in key macroeconomic variables. While market risk is of minor import for Norwegian banks, it is a significant risk for insurance companies. Stress tests of insurance companies showed that whereas a steep fall in share prices would make substantial inroads into the solvency margin capital and buffer capital of life insurers, non-life insurers were most exposed to substantial changes in their technical provisions.

The results of the stress tests showed that the risk of stability problems in the Norwegian financial system is limited in the short term. Stress tests of this type suffer from a number of weaknesses, and caution must be exercised when interpreting their results. For one thing, the macro stress tests employed have a time horizon which may be too short for the purpose of analysing the full effects of major economic disturbances. Should the vulnerabilities posited by the stress tests build up further before a shock sets in, losses could be far heavier than envisaged in the FSAP review.

In addition to recommendations regarding financial stability and observance of international supervisory standards, the IMF recommends a reassessment of important aspects of the deposit guarantee arrangement and an assessment of governmental participation on DnB NOR.

Kredittilsynet saw the IMF's FSAP as a useful, impartial review both of risk in financial markets, of legislation, supervision and other institutional aspects of Norwegian financial markets. In light of the IMF's recommendations Norges Bank and Kredittilsynet, among others, have examined where responsibilities for financial stability lie and have written a letter on the matter to the Ministry of Finance dated 16 December 2005. (The letter and the report are available on Kredittilsynet's website.)

In addition to the IMF's FSAP, the Financial Action Task Force (FATF) completed in January 2005 an assessment of Norway's compliance with FATF recommendations for combating money laundering and financing of terrorism. Norway was one of the first countries to be evaluated under the new, more stringent standards, and not all the new standards were expected to have been implemented. Where Kredittilsynet is concerned, the report was nonetheless largely favourable, although the FATF called for further sanctions, more resources for anti-money-laundering measures, and improved guidelines tailored to some categories of supervised entities.

# 4. New capital adequacy and accounting rules

Major changes are being made to the rules governing financial markets. In Norway this is occurring within the wider framework of harmonised European legislation. The changes pose a long-term challenge for institutions and authorities alike. This chapter gives an overview of changes in a number of key areas. Changes in the capital adequacy framework for credit institutions and investment firms will be effective from 2007 onwards (Basel II). For insurance companies, equivalent changes lie somewhat further ahead in time (Solvency II). New accounting rules have already taken effect for stock exchange listed financial groups (IFRS).

# New capital adequacy rules - Basel II

#### Background for rule changes

The Basel Committee – comprising representatives of the banking supervisory authorities and central banks of Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom and the United States –arrived at an initial agreement on guidelines for capital adequacy for banks in 1988. Growth in bank lending had been rapid and hazardous in a number of countries. The minimum capital requirements were designed to provide banks with a cushion against loss and encourage prudent banking on the part of bank owners who themselves stood to lose capital if things went wrong. An international standard heralded a largely level playing field for banks in all countries. The new guidelines also introduced more risk-sensitive capital adequacy requirements by dividing banks' assets into risk classes and bringing off-balance sheet items under the capital requirements.

The Basel Accord was reflected in EU legislation, in the US, Canada, Japan and other industrialised countries. Way over 100 countries now employ a capital adequacy framework drawn up with a basis in Basel I. Norway introduced the new rules into Norwegian legislation in 1991. Apart from in the case of Denmark, the new rules somewhat tightened the requirements on regulatory capital in European countries – among them Norway. In 1993 Basel I was supplemented with guidelines for capital requirements for market risk. The corresponding EU Directive was implemented in Norway in 1996.

A number of objections were subsequently raised against the current rules, especially their failure to precisely gauge credit risk or to recognise the value of modern risk mitigating techniques. These weaknesses could result in mispricing and misallocation of credit, but might also have a bearing on the

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relationship between banks and the securities market as a source of funding. So long as banks have to put up 8 per cent regulatory capital for loans to even the soundest of companies, direct borrowing in the securities market provides cheaper funding. Banks' risk-exposure increases and they lose market share because their financially soundest customers opt to borrow in the securities market. The only risks covered by the current rules are credit and market risk.

In June 2004 the Basel Committee adopted new guidelines for measuring banks' capital adequacy (Basel II). In October 2005 changes in the capital adequacy Directives were adopted by the EU. The Directives build broadly on the work of the Basel Committee, but also apply to investment firms and management companies licensed to provide active management services.

#### Content of the new requirements

The new capital adequacy Directives bring fundamental changes to the current rules. In addition to general minimum requirements for regulatory capital, they introduce rules on overall capital assessment and capital adequacy disclosure requirements. The Directives continue the present minimum requirement of an 8 per cent capital ratio. An overview of the new capital adequacy framework is shown in Chart 4.1. The Directives build on three Pillars:

- Minimum capital requirements (Pillar 1)
- Supervisory review process (Pillar 2)
- Market discipline (Pillar 3)

Three Basic Pillars Minimum capital Supervisory review Market requirements discipline process Risk weighted Definition of capital assets Credit risk Operational Market Supplementary Core risk risks Capital Capital Standardised Internal Basic Standardised Advanced Standardised Models Indicator Approach Ratings-based Approach Measurement Approach Approach Approach Approach Approaches

Chart 4.1 New capital adequacy rules

#### Pillar 1 – Minimum capital requirements Credit risk

The capital charge for credit risk is computed using the standardised approach or the internal ratings based approach, IRB. The standardised approach builds largely on the current rules, with risk weights for claims on various debtors. The risk weights can also be set based on debtors' rating from external credit rating agencies (Standard & Poor's, Moody's, Fitch etc.). The risk weight for well secured home mortgage loans is reduced from 50 per cent in the current framework to 35 per cent, while the risk weight for other home mortgage loans falls from 100 to 75 per cent.

In the case of loans to households and small and medium-size enterprises the risk weight is reduced, subject to further requirements, from 100 to 75 per cent. A key requirement is that the exposure is one of many with similar characteristics, so that the risk associated with such loans is substantially reduced. A further requirement is that overall exposure to a counterparty cannot exceed EUR 1 million.

As an alternative to the standardised approach, institutions may use the IRB approach when computing capital charges. This presupposes that the institution meets specific requirements and that the supervisory authority has given its permission. Using the IRB approach entails that the capital charge to a greater extent reflects differences in underlying credit risk. The capital charge may be higher or lower than under current rules, and it can be calculated using either the fundamental or the advanced IRB approach. With the fundamental IRB approach the institution estimates the probability of default (PD). The other risk parameters – loss given default (LGD) and exposure at default (EAD) – are set by the supervisory authorities. With the advanced IRB approach, and in the case of retail exposures, the institution may be permitted by the authorities to estimate LGD and EAD, in addition to PD.

DnB NOR, Sparebanken Rogaland, Sparebanken Midt-Norge, Sparebanken Nord-Norge and Sparebanken Vest have applied to Kredittilsynet to use the fundamental IRB approach from 1 January 2007 onwards. Kredittilsynet is also involved in the Swedish supervisory authority's treatment of a similar application from Nordea. The applications must be dealt with before the new framework takes effect, and Kredittilsynet aims to process the majority of them by autumn 2006.

A key aspect of the new framework for credit risk is provisions on what risk mitigants can be taken into account when computing capital charges. Eligible mitigants are pledges over specified assets, netting of deposits and loans, netting of buyback obligations, guarantees and credit derivatives.

#### Counterparty risk

There are four alternative approaches to measuring capital requirements for counterparty exposures, of which two are a continuation of current rules and one requires Kredittilsynet's permission.

#### Market risk

The definition of financial instruments is wider than under the present rules. Additionally, more detailed provisions are introduced on own account trading, inter alia on management and control of the trading portfolio and valuation of positions included in this portfolio. A number of the provisions are changed as a result of changes to the provisions regulating credit risk. Credit derivatives used to hedge positions in the trading portfolio can now be taken into account when computing capital charges for

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credit risk. A choice between four approaches is introduced for computing capital charges for positions in securities fund units. The choice of approach will depend on knowledge of the underlying investments.

#### Operational risk

The capital requirement for operational risk is new. This requirement can be calculated using various approaches: the basic indicator approach, standardised approach and advanced measurement approach (AMA). The basic indicator approach can in principle be used by all institutions. The capital charge is based wholly on the size of the business in terms of the institution's revenue. The charge is set at 15 per cent of the average of the last three years' revenue, as further defined. In order to be eligible to use the standardised approach the institution must have control and management systems for operational risk in place that are an integral part of the institution's risk management. The capital charge is calculated in accordance with a principle similar to the basic indicator approach, but the business is divided into business areas and differentiated risk weights are applied to asset management, lead management assignments, intermediary business etc.

With the advanced measurement approach, institutions can calculate the capital charge for operational risk based on their own systems and approaches, provided they meet quantitative and qualitative requirements. Using an advanced measurement approach requires permission from the authorities.

#### Pillar 2 – Supervisory review process

The general provisions on minimum capital requirements (Pillar 1) do not take into account all risks present in the individual institution's portfolio and operations. Therefore there are provisions on active supervision of institutions' risks and capital needs (Pillar 2) which complement and supplement the general requirements of Pillar 1. Under Pillar 2 institutions take account of all significant risks in their analysis and assessment of the capital situation. This means that risk that is not captured by the minimum capital requirement must be included, such as interest rate risk in the banking portfolio and concentration risk. Moreover, institutions must be forward-looking and take into account plans, growth and access to equity capital markets. Allowance must also be made for economic climate and funding needs. It is still important to have sufficient capital to live through economic downturns bringing negative results and possibly also problems in bringing in new capital.

Pillar 2 is based on four main principles:

- Institutions should have a process in place for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.
- The supervisory authority should review and evaluate banks' internal capital adequacy
  assessments and strategies, as well as their ability to monitor and ensure compliance with
  regulatory capital ratios. Supervisors should take appropriate supervisory action if they are
  not satisfied with the result of this process.
- The supervisory authority should expect banks to operate above the minimum regulatory capital ratios.

• The supervisory authority should intervene at an early stage to prevent capital from falling below the minimum levels required to support the institution's risk characteristics and should take action if capital is not maintained.

The four main principles are reflected in the Directive in the form of specific requirements on the institution's internal management and control, as well as on its internal risk assessment and internal capital adequacy assessment process (ICAAP) and the authorities' supervisory review and evaluation process (SREP). Supervisory authorities are expected to review and evaluate banks' ICAAP at least once a year. According to the Directive, the authorities can take action vis-à-vis institutions that fail to meet the requirements.

#### The authorities may require:

- A capital level in excess of the minimum requirements.
- Reinforced management and control linked with the institution's assessment of its need for risk capital.
- Higher capital adequacy based on the institution's loss provisioning practice or treatment of assets.
- Restriction of the scope of the business.
- Mitigation of risk associated with the overall business or parts of it.

ICAAP is based on a principle of proportionality, i.e. larger, complex institutions are expected to have more advanced systems and processes for assessing overall capital requirements than smaller institutions. The same principle applies to supervisory authorities' follow-up of larger and smaller institutions through SREP. The Committee of European Supervisors (CEBS) has drawn up further guidelines for ICAAP and SREP.

#### Pillar 3 – Market discipline

The aim of Pillar 3 is to promote market discipline by requiring the disclosure of information enabling the market, including analysts and investors, to assess the institution's risk profile and capitalisation, as well as its management and control.

Institutions are required to publish information on their organisational structure, risk management system, reporting channels and on their risk control structure and organisation. Detailed rules are set out on disclosing capital level, capital structure and risk exposures (depending on which approach is used under Pillar 1). Institutions using the IRB approach are also required to disclose information on the design and structure of systems, rating process, systems validation etc.

#### National and international timetable

The new capital adequacy rules were adopted at EU political level in October 2005. The Directives will enter into force on 1 January 2007. The advanced methods for calculating capital requirements for credit risk and operational risk (advanced IRB and AMA, respectively) only enter into force on 1 January 2008.

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In the US Basel II will only be implemented for the largest banks. These banks will only be permitted to use the most advanced approaches under Pillar 1 (advanced IRB and AMA). For other banks some modifications to current capital adequacy rules are proposed, referred to as Basel 1a. In the US it has been decided to postpone implementation of Basel II to 2009, the reason being that results from Quantitative Impact Study 4 - (QIS4), carried out in 2005, showed that the capital requirement was reduced by more than the US authorities expected. The results also showed wide differences between banks with an apparently similar risk profile.

In Norway the new capital adequacy regime is being implemented as part of the country's EEA obligations. Draft rules on IRB, credit risk mitigation and operational risk were circulated by Kredittilsynet for comment in June 2005. Kredittilsynet also drafted law amendments that were sent to the Ministry of Finance in June 2005. The ministry circulated the draft, with some changes, for comment in December 2005, and Kredittilsynet aims to forward a final draft to the Ministry of Finance in spring of 2006. The new capital adequacy rules will be adopted in Norway during the course of 2006. The common European capital adequacy reporting regime developed by CEBS will also be introduced by Kredittilsynet in 2006.

# Possible impact of Basel II on capital levels Banks

The capital requirements in Pillar 1 are based on an average of calculations for a number of countries, and the Basel Committee states that each country will need to assess whether capital requirement are aligned with loss structures. Home mortgage loans and loans to small and medium-size enterprises will attract a lower capital charge under Basel II than Basel I. Residential mortgages account for almost 60 per cent of Norwegian banks' lending, and this, combined with substantial lending to small and medium-size enterprises, will instigate a larger reduction in the minimum capital requirement in Norway than is the case in many other countries. Calculations from 2003 (based on results for the four largest Norwegian banks participating in the international quantitative impact studies in 2003, and calculations done by Kredittilsynet for 21 smaller and medium-size banks) showed a 32 per cent fall in the capital charge for credit risk. Capital requirements for operational risk contributed to a subsequent increase of 7 per cent so that, according to the calculations, the overall minimum capital requirement will fall 25 per cent. Kredittilsynet updated these calculations for the same banks at the start of 2006. The new calculations draw partly on results from a new international QIS carried out in 2005 (QIS5, in which DnB NOR participated). More banks have signalled their intention to seek permission to employ IRB (as from 1 January 2007 or later) than was assumed in the 2003 QIS. Moreover, the burgeoning growth in home mortgage loans in recent years has increased the proportion of these loans in Norwegian banks' portfolios since 2003. Calculations show that the minimum capital requirement for credit risk could fall by close to 40 per cent, substantially more than shown by the 2003 calculations. Since capital requirements for operational risk serve to raise the minimum requirement, the overall minimum requirements may be reduced by close to 35 per cent in the case of the banks included in the calculations. Substantial uncertainty encumbers these estimates, however. The effects will also depend on the rules that are finally adopted and on how Kredittilsynet chooses to deal with applications to use IRB approaches to calculate capital charges.

The Basel Committee will summarise and assess the results from the new quantitative impact study QIS5 in spring 2006. Should they show a similar effect for European banks as QIS4 did in the US, it may be necessary to implement adjustments resulting in somewhat more stringent minimum requirements.

A main principle of Pillar 2 is that the supervisory authority must expect institutions to operate above the actual minimum regulatory capital ratios. It is uncertain how far banks will wish to reduce capital levels when the minimum capital requirement is reduced. This will partly depend on the banks' internal capital assessment process (ICAAP), market assessments, including how rating agencies feel about possible large reductions in capital levels, and how supervisory authorities practise Pillar 2. The transitional rules planned in the Directive will determine how rapidly a reduction in actual capital levels can take place. Over time banks may wish to adjust to Basel II by maintaining an appreciably lower capital level than they do at present. This will, in the event, free up capital in the bank sector enabling acquisitions or other consolidation measures, quicker expansion or return of capital to shareholders. It is however too early to assess with any certainty what the consequences of a substantial release of capital might be.

Institutions using risk management models will be exposed to model risk, i.e. the risk that a model is erroneous or implemented incorrectly. The importance of managing and controlling model risk is reflected in Basel II's validation requirements. However, since validation requirements cannot eliminate all model risk it is important that institutions maintain capital buffers to cover such risk. This will be particularly important until institutions gain more experience in determining capitalisation with the aid of risk management models. If institutions increasingly build on the same methods and models, model risk could become more significant.

#### Investment firms

All aspects of the new capital adequacy framework will apply equally to investment firms and management companies licensed to engage in active management. The new standard will produce different effects for these undertakings than for banks, with significantly larger effects arising from the introduction of capital charges for operational risk than from changes in capital charges for credit and market risk.

Two impact studies have been conducted under EU Commission auspices to identify the effect of imposing capital requirements for operational risk on investment firms. The EU Commission has only published results from the latest impact study (2004), which covered 15 countries. The study showed that in the case of a large number of investment firms, whose exposure to market risk and credit risk is negligible, the introduction of an explicit requirement for operational risk will bring a significant increase in the capital requirement. This also applies to Norwegian investment firms.

Kredittilsynet's calculations showed that a requirement to hold capital against operational risk triggered a 37 per cent increase in the overall capital requirement (as of end-2005) for investment firms with an initial capital requirement of EUR 730,000, and 30 per cent for investment firms with an initial

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capital requirement of EUR 125,000. As regards other Nordic countries, the EU study from 2003 showed increased capital requirements – for Swedish, Finnish and Danish investment firms with an initial capital requirement of EUR 730,000 – of respectively 65 per cent, 58 per cent and 20 per cent, while the corresponding increase for investment firms with an initial capital requirement of EUR 125,000 was 56 per cent, 38 per cent and 11 per cent. In addition to an increase of about 37 per cent in the capital requirement for operational risk for Norwegian investment firms, come changes in capital requirements for credit and market risk under Basel II. About a third of the capital requirement for investment firms is likely to be ascribable to market and credit risk.

While wide differences exist among investment firms, the great majority maintain regulatory capital in excess of the minimum required under Basel II. Based on the Commission's impact study, some types of investment firms will be eligible for exemption from capital charges for operational risk. Kredittilsynet has recommended exemption for investment firms whose business is confined to active management and/or marketing of financial instruments.

#### Basel II and financial stability

The capital adequacy rules are a central aspect of the framework which is designed to strengthen the stability of the financial system. Basel II aims to support this overarching objective both through requirements and incentives to induce improved risk management. The basic idea was that the overall minimum capital requirement should remain unchanged across the financial system as a whole, at the same time as the capital requirement on the individual institution should be more closely aligned with the risk it faces. Key elements of the new framework are that all institutions must have a process in place for computing their overall risk and hold capital consistent with this, that the supervisory authorities should assess these processes and should have instruments available to intervene when weaknesses are identified. Tighter disclosure requirements with a view to strengthening market discipline are a further central aspect of the new regime.

An important issue is whether Basel II will bring further procyclicality to the financial system. Procyclicality refers to the tendency for bank lending to fluctuate with and intensify the business/economic cycle, such that lending rises strongly in an upturn and weakly, or even falls, in a downturn (see also Chapter 3). More risk-sensitive capital requirements could produce these effects. Should default probabilities and other parameters underlying banks' computation of capital requirements (PD, LGD, EAD, see above) increase when economic growth slows and fall when it accelerates, procyclical effects could be intensified. The Basel Committee has in several instances looked into possible problems of this type in Basel II, and the rules contain provisions designed to countervail such effects. They include requirements on the data employed when the parameters are fixed, requirements as to stress testing and, not least, requirements that institutions should maintain buffers in relation to the minimum requirement. The European Central Bank will monitor Basel II for any procyclical impact.

The new capital adequacy framework will apply as from 1 January 2007, in a period which could still feature strong growth in indebtedness and house prices (see previous chapters). Some of the growth in home mortgage loans in recent years is ascribable to adjustments to new, lower capital charges on

these loans under Basel II. The steep rise in house prices and indebtedness creates uncertainty. Banks must maintain a level of capital which is consistent with this uncertainty and which will enable them to withstand a setback in the housing market, with spillover effects to the economy at large. Although minimum capital requirements are set to fall, especially for IRB banks, transitional rules for these banks will curb a reduction in capital levels in the years immediately ahead. Through its supervision of individual banks, Kredittilsynet will keep a close eye on factors which render the individual bank vulnerable to possible setbacks. One of the aims of implementing Basel II in Norway is to give the supervisory authorities sufficient freedom of action to ensure satisfactory capital adequacy for domestic banks without creating significant competitive disadvantages in relation to banks from other countries.

# Solvency II

Like the Basel II framework, the EU's new insurance regime, Solvency II, will comprise three Pillars. The first Pillar will include quantitative rules in regard to technical provisions, solvency capital requirements (SCR) and minimum capital requirements. Use of internal models will be permitted for calculating SCR. Pillar 1 will also include quantitative and qualitative requirements in regard to investment of companies' assets. The second Pillar will include rules for supervisory oversight and monitoring which will enable individual capital requirements to be tailored to the risk present in a company. The third Pillar will comprise market discipline rules, including rules on the reporting and disclosure obligation towards both the public and the supervisory authorities.

The new regime will establish solvency standards that capture the various forms of risk facing insurance companies. The standards' requirements for technical provisions and capital requirements within the EU/EEA will be coordinated with a view to (approximately) full harmonisation. The new solvency capital requirement is expected to be higher than the capital requirement under the present regime. It is meanwhile possible for the supervisory authorities to intervene at an earlier stage through the establishment of solvency control levels.

Both the asset side and the liabilities side of insurance companies' balance sheet are to be recognised at fair value. The principles embodied in the International Accounting Board's (IASB's) accounting standard for insurance contracts (IFRS 4 – International Financial Reporting Standards) will – as far as possible – underlie the valuation of technical provisions.

The Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) has initiated impact studies of alternative options for computing requirements on technical provisions and capital requirements. The first phase, covering methods of computing requirements for technical provisions, has been completed. Further impact studies covering the existing alternatives for designing the two sets of capital requirements (SCR and MCR) will be completed in the course of summer and spring 2006. Analyses of the impact studies are expected to become available in autumn 2006.

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At the same time as it is working on formulating the new Solvency II-rules for insurance companies, the EU Commission is also working on a codification of the existing insurance directives. The proposal for a codified directive including the Solvency II provisions is not expected to be finalised until summer 2007. Given customary deadlines for completing a new EU-based framework, the new Solvency II requirements will take effect from and including 2010 at the earliest.

Several countries, among them Denmark and Sweden, have already introduced supervisory methods based on principles very similar to those underlying the Solvency II project. The assessment in these countries is that these measures are needed to ensure a financially sound insurance industry in the period to the implementation of the Solvency II regime.

# Provisional capital requirements for insurance companies in the period 2007-2009

Although the work on the Solvency II regime was intensified in 2004 and 2005, a new framework of risk-based capital requirements for insurance companies will clearly not be implemented until 2010 at the earliest, three years after the Basel II regime is in place for banks and other credit institutions.

Norwegian insurance companies still operate under the original capital adequacy framework from 1990, in addition to the current solvency margin regime (Solvency I). It is natural to query whether the original regulations on minimum capital requirements should still apply to insurance companies, or whether an alternative risk-based capital requirement, taking into account the progress made with the Solvency II rules, may be more appropriate to the challenges faced.

Against this background Kredittilsynet prepared a report outlining various alternative designs for provisional capital requirements applicable to insurance companies in the period up to implementation of the Solvency II framework. The report, which was sent to the Ministry of Finance on 9 December 2005, is available on Kredittilsynet's website. The alternatives are:

- (A) To continue with capital requirements based on the Basel rules.
- (B) To establish a supplementary capital requirement based on stress tests, i.e. in part a refinement of relevant provisions of the current regulations on insurance companies' asset management, but making allowance for stress testing methods developed and (likely to be) implemented in Denmark and Sweden, among other countries.
- (C) A further development of the current solvency margin regime (Solvency I), as far as possible making allowance for the stage reached in designing standard methods for calculating, respectively, minimum requirements for capital and solvency capital within the framework of Solvency II.

Where the two latter alternatives are concerned, the assumption is that the present capital requirement for insurance will be removed. The current solvency margin rules will however continue for all three alternatives by virtue of Norway's obligations under the EEA agreement. According to these rules, the

solvency margin requirement is computed partly with a basis in the life insurance fund in the life area and in premium revenues in the non-life area. Solvency margin capital comprises insurers' regulatory capital plus other solvency margin capital where the latter capital elements include 50 per cent of supplementary provisions in life insurance and parts of the contingency provisions in non-life insurance.

In Kredittilsynet's assessment it would not be particularly appropriate to continue with a capital requirements of the Basel type (alternative A) for Norwegian insurance companies. The asset mix in insurance companies' balance sheet changed significantly from 1990 to 2004. The loan portion was reduced to a mere 2 per cent or so of insurance companies' aggregate total assets by end-2004, while financial assets accounted for 75-80 per cent of aggregate total assets at the same point. Basel I was originally devised to measure credit risk at banks and is not well suited to measuring market risk at insurance companies. Hence applying the capital adequacy framework to insurance is inappropriate and in some situations is at odds with the solvency margin rules.

As regards alternatives B (capital requirements based on stress testing) and C (direct capital requirements), the methods used to compute the capital requirement will be very similar. In both cases relatively simple factor methods are envisaged. Moreover, largely the same issues need to be resolved as regards formulating design details:

- (a) Which risk categories are to be covered by the supplementary capital requirement?
- (b) Which calculation bases are to be used for the individual risk categories?
- (c) How is the company's overall capital requirement to be calculated taking account of the various risk categories / risk elements which the company faces?
- (d) How is buffer capital to be defined in terms of the supplementary capital requirement?
- (e) Where should the supplementary capital requirement lie compared with the current solvency margin capital requirement (Solvency I requirement)?
- (f) How frequently should stress testing be carried out, and what action should be taken if a company fails the tests (i.e. how binding should the tests be)?

Kredittilsynet's report outlines proposed solutions to the technical problems (a)-(d), but is somewhat more cautious on the overarching issues (e) and (f).

The main difference between alternatives B and C is a legal one (whether breaches of the respective requirements will trigger sanctions against companies). In that connection it is relevant to assess the consequences of breaching a direct capital requirement as opposed to failing a stress test; whether stress testing will in general be more stringent than direct capital requirements (e.g. if stress testing includes a number of scenarios); which alternative will in practice provide the clearest body of rules, and which alternative will provide most flexibility.

In Kredittilsynet's assessment the primary focus should be on the alternative in which the supplementary capital requirement is based on stress testing. This alternative comes across as the most flexible, which could be an advantage seeing that it will be employed in a transitional period until the

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Solvency II framework is in place. Moreover, this solution is the one chosen in Denmark and Sweden. The solutions introduced by these countries differ somewhat, and there will be ample opportunity to draw benefit from the studies behind their stress testing systems.

Preliminary impact assessments of the Danish and Swedish stress testing regimes applied to Norwegian companies show that non-life insurers will have no problem meeting stress tests of this type. For life insurance companies, however, stress testing would appear to serve no purpose unless significant rule changes are made. Changes need to be made to the rules for valuing insurance obligations (transition to a risk-free interest rate as the discount rate) and to the definition of companies' buffer capital (further elements should be eligible for inclusion). A main challenge will be to arrive at appropriate measures for reducing the duration gap between insurance obligations and interest-bearing assets (i.e. achieve longer duration on the asset side).

Kredittilsynet has recommended the Ministry of Finance to take the report on provisional capital requirements as the basis for a round of consultation, which includes the insurance industry and other affected parties, on the alternatives discussed in the report. It will in any case be a matter of a gradual introduction of methods that are already in use in neighbouring countries and which are expected to become EEA requirements within a few years.

# New accounting rules for financial institutions

The European Parliament and the Council adopted on 19 July 2002 Regulation (EC) No 1606/2002 on the application of international accounting standards (IFRS) to publicly traded companies (the IFRS Regulation). The Regulation requires listed companies, both financial and non-financial, to prepare consolidated financial statements in accordance with the international accounting standards of 1 January 2005. This was made mandatory for Norwegian listed companies through amendments to the Accounting Act. Non-listed groups are permitted, but not required, to comply with the Regulation when preparing their consolidated accounts. The accounting standards are drawn up by the IASB. The IFRS Regulation is a part of the EU's financial services action plan which is designed to promote comparability of financial statements and allow them to give a fairer presentation of a company's financial position.

Experience gained thus far with IFRS for financial institutions is that the largest impacts on accounts arise from new rules for treatment of goodwill, increased fair valuation of financial instruments and new rules on consolidation. The transition to new accounting principles for pensions had in some cases substantial one-time effects on institutions' equity. Balance sheets have grown now that financial instruments are recognised at fair value. Indeed all derivatives must now be recognised at fair value irrespective of whether or not they are employed as hedging instruments. In the case of banks which own insurers, balance sheets have grown since insurance business has to be fully consolidated under IFRS. IFRS has clearer criteria for when and how banks can provision for loss. New loss provisioning practices may explain why loss provisioning is lower than previously. In its reports on financial stability the European Central Bank views this as a problem in the event that economic conditions

The Financial Market in Norway 2005: Risk Outlook **Kredittilsynet** 

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unexpectedly and rapidly change and losses grow. In the case of insurance companies, developments in international accounting standards are multi-staged, and only the first stage of a complete standard for accounting for insurance contracts has been introduced.

As regards the capital adequacy framework, CEBS circulated in 2004 guidelines on prudential filters in relation to the new international accounting standards (IFRS). Introducing prudential filters in keeping with the CEBS guidelines will reduce, and in some cases neutralise, the impact of new accounting rules when it comes to measuring capital adequacy. An important rationale for introducing prudential filters is the need to maintain the quality requirements applied to institutions' own funds. Own funds must be available to absorb losses and must be sufficiently stable.

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# 5. Financial stability – what happened in 2005?

# Kredittilsynet's financial stability goal

Through its oversight of enterprises and markets Kredittilsynet promotes financial stability and orderly market conditions as well as users' confidence that financial contracts and services will be honoured as intended. The financial system includes institutions, markets and infrastructure. Weaknesses here, or in the legal and institutional framework that regulates the activity in the system, may increase the risk of financial instability. Regulation and supervision of banks, insurance companies and securities markets are both important contributors to stability and public confidence in the financial system.

Since Kredittilsynet alone is not in a position to ensure financial stability, there is no direct correlation between its activities and the situation in the financial system or at individual institutions. Financial stability depends essentially on factors and actions beyond Kredittilsynet's control – related in the first instance to the design of monetary and fiscal policy in which the chief role is played by the central bank, the government and the Storting (parliament). Overarching responsibility for laws and rules regulating the financial sector rests with the Storting, government and Ministry of Finance. The EEA Agreement and EU development of financial legislation set important premises in the latter context.

Kredittilsynet's principal instrument for promoting financial stability is various forms of supervision: on-site supervision, off-site supervision and macroeconomic surveillance. Supervision focuses on financial strength, risk awareness, fit and proper management and internal control routines at individual institutions, but at the same time builds on the premise that responsibility for business operations rests with institutions' board and management. Hence Kredittilsynet's instruments are primarily geared to preventing problems at individual institutions from spreading to the financial system at large. Follow-up of the largest institutions is prioritised in this context.

The supervisory authority's opportunity to countervail systemic risk due to macro shocks and imbalances that accumulate in housing, securities or credit markets is more limited. Kredittilsynet does however have a responsibility for pointing out that monetary policy or changes to tax rules could kindle a build-up of risk which may at some point compromise financial market stability. Through general analyses and public statements Kredittilsynet can influence other authorities, market actors and the general public. Where rule drafting is concerned, Kredittilsynet can exert influence through its

advisory function. When EU legislation is to be transposed into Norwegian law, the agency can, within the framework set by EU rules, exert influence at the implementation stage.

### Assessments of financial stability at the start of 2005

In 2005 Kredittilsynet's work on financial stability focused especially on debt trends and housing markets. In its analyses, including *The Financial Market in Norway 2004: Risk Outlook* (presented in March 2005), Kredittilsynet pointed to challenges facing the banks in the somewhat longer term. A continuing increase in household indebtedness, rapidly rising house prices and high loan-to-value ratios on new home loans heighten the risk of problems for households and banks once interest rates start to climb from their current abnormally low level. A low volume of fixed interest borrowing increases households' vulnerability. It was also pointed out that over the past five years the debt burden had risen furthest in the lowest income and age groups, which also have low financial buffers, and that debt problems in significant parts of the household sector could have spillover effects to the wider economy. Further, financial stability considerations called for a gradual increase in interest rates, which should not be put off too long. Continued interest deductibility combined with lower tax on dwellings in 2005 led to further over-investment in the housing market and rising debt burdens.

The second area of significance for financial stability that was highlighted at the start of 2005 was the challenges facing life insurance companies as a result of low interest rates. It was pointed out that these companies are finding it difficult to build up sufficient capital buffers and risk-bearing capacity. To improve prospects of higher return and assure a sound long-term return on assets under management, life insurers' risk-bearing capacity needs to be strengthened. The good results achieved in 2004 gave life insurers an opportunity to increase their buffer capital. It was also pointed out that the challenges faced are of a medium-term nature. Although buffer capital should preferably be increasing more rapidly than appeared to be the case, life insurers are equipped to meet their obligations in the years immediately ahead.

# Developments in the economy and markets in 2005

Global growth in 2005 turned out more or less as expected. The high oil price which emerged in 2004 continued to rise through 2005, reaching all of USD 64 per barrel in September. This unexpectedly sharp increase is ascribable to an unusually violent hurricane season in the Gulf of Mexico. This was accompanied by supply reductions due to unrest in several producer countries. Expected demand growth was also underestimated. The high oil price did not put a damper on international growth in 2005, however. Indeed, international growth quickened, bringing a somewhat better trend to Norway's competitively exposed sectors than had been forecast. The high oil price also produced stronger ripple effects to the Norwegian economy and a better-than-expected trend in Norwegian equity markets. Despite stronger-than-expected growth, and the fact that many central banks began to raise their key rates, the decline in long rates continued. Consensus Forecasts' estimates from December 2004 for 10-year bond rates at the end of 2005 were: 5.1 per cent for the US, 4.5 per cent for Germany and 5.1 per

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cent for Norway. At end-December 2005 the US 10-year bond rate was 4.4 per cent, while its German and Norwegian counterparts were, respectively, 3.3 and 3.6 per cent, i.e. far lower than the estimates a year previously.

Rapid growth in the Norwegian economy in 2005 did not fuel inflation, however, and inflation figures proved surprisingly low, with the 12-month rate of increase edging down over the year. Whereas Norges Bank in November 2004 envisaged a rise in the price index (adjusted for indirect taxes and energy) of 1.5 per cent in 2005, the outcome was a mere 1.0 per cent. In 2005 too, imported inflation appears to have contributed little to price inflation. Market expectations of interest rate hikes therefore diminished, and the expected rise has been pushed further ahead in time. Lower interest rates, combined with a weaker-than-expected currency, similarly produced larger nominal stimuli to the economy in 2005 than was assumed at the end of 2004. The changed interest rate picture in the wake of slower inflation led to quicker growth in house prices in 2005 than envisaged a year previously. In December 2004 Statistics Norway forecast a 4.3 per cent rise in house prices in 2005. This was raised to 7.8 per cent in Economic Survey for December 2005. Activity in the housing market remained surprisingly high, reflected in a sharp rise in the rate of real estate agency start-ups. New financing offers were launched, for example housing cooperatives targeting young people where the co-op share price and the co-op mortgage are rebalanced. The temperature in the housing market is clearly very high, also in that section of the market where the supply of credit plays a significant role.

Growth in household borrowing continued in 2005 to reach all of 13.4 per cent by year-end, a far quicker rate than assumed at the end of 2004. Kredittilsynet based its stress test for the trend in households' debt burden on a debt growth of 11 per cent in both 2005 and 2006. In this perspective risk accumulation in the household sector was even stronger than assumed in the model projections. Low interest rates, together with the international increase in commodity prices, have also stimulated enterprise investment, and towards the end of 2005 enterprises' debt growth also quickened by a surprising margin.

# Developments at banks and life insurance companies in 2005

The chief factors behind Norwegian banks' results are net interest revenues and loan losses. Despite substantially higher-than-expected credit growth, pressure on banks (net) interest margins led to even lower-than-expected net interest revenues in 2005. Low loan losses in 2005 pulled in opposite direction, to an even stronger degree. Even when substantial write-backs on two sizeable earlier loss-making commitments – Pan Fish and Finance Credit – are disregarded, the general level of losses was very low in 2005. Nor were there any losses on sizeable loan commitments to affect banks' results. Banks' results in 2005 proved even better than expected one year previously.

For life insurers the securities market trend is crucial to results. The Norwegian share market in particular developed strongly in 2005, with positive effects on life insurers' results. Instead of the expected upturn, long rates fell in 2005. This resulted on the one hand in lower capital losses on holdings of current bonds than a stronger trend in interest rates would have produced. On the other

hand, continued low interest rates yielded lower current return on fixed income securities, thereby augmenting the companies' medium-term challenges. The benefit accruing from bonds "held to maturity" became clear. The increase in both revaluation reserves and supplementary provisions led to a substantial growth in companies' buffer capital, although it is still lower than desired. This growth is partly due to the emphasis given to the need for increased buffer capital in Kredittilsynet's ongoing dialogue with life insurers.

Moody's and Fitch left their ratings of Norwegian banks unchanged in 2005. S&P on the other hand upgraded both Norwegian banks that were rated in 2005. Where insurers are concerned, one company was upgraded by Moody's and Fitch, while S&P made no changes over the year.

# Changes in the outlook for financial stability

Early in 2005 Kredittilsynet drew attention to the risk posed by the continued growth in household indebtedness, the continuing rise in house prices and the increasing exposure of banks and households alike to the housing market, stating that financial stability could be compromised in the medium term. Kredittilsynet communicated its view to other authorities and the general public and raised the issue at supervisory meetings with banks. Market and economic developments in 2005 suggest that the risk increased over the year. Although Norges Bank raised its key rate twice in 2005, interest rates remain low. Inflation in 2005 and into 2006 appears to have somewhat weakened market expectations that Norges Bank would raise interest rates more rapidly than it indicated in November 2005.

Developments in 2005 confirmed Kredittilsynet's assessments of the risk picture outlined at the start of the year. The developments should above all be viewed in light of the economic policy and the fact that the still low level of nominal interest rates and real after-tax interest rates is fuelling demand for both housing and credit.

For life insurers 2005 improved the situation somewhat. Although the medium-term challenges persist and have in some respects been reinforced, insurers have seen a satisfactory increase in their capital buffers.

#### **ANNEX**

# The Financial Market in Norway 2005 - Kredittilsynet

# Selected result items and balance-sheet items for Norwegian financial institutions

(Foreign branches in Norway are not included.)

Table 1: Banks: selected result and balance-sheet items.

	20	2002		2003		2004		05
	NOKm	% of ATA						
Net interest revenues	31,101	2.19	30,518	1.98	30,818	1.87	32,295	1.74
Other revenues	9,698	0.68	13,700	0.89	15,178	0.92	16,106	0.87
Other expenses	25,055	1.76	25,487	1.65	26,265	1.60	26,226	1.41
Book losses	7,560	0.53	6,892	0.45	1,372	0.08	-1,218	-0.07
Result of ordinary operations before tax	8,267	0.58	12,023	0.78	19,912	1.21	24,013	1.29
Result of ordinary operations after tax	5,859	0.41	9,261	0.60	14,702	0.89	18,006	0.97
	NOKm	% of TA						
Total assets	1,461,528		1,568,960		1,661,898		1,948,104	
Gross loans to customers	1,119,898	76.6	1,197,603	76.3	1,343,645	80.8	1,554,100	79.8
Deposits and debt from clients	792,844	54.2	814,910	51.9	886,719	53.4	993,933	51.0
Tier 1 capital adequacy (%)	9.6		9.7		9.8		9.6	

ATA: average total assets TA: total assets

Table 2: Life insurance companies: selected results and balance-sheet items.

	2002		2003		2004		2005	
	NOKm	% of ATA						
Premium revenues for own account	42,780	10.5	44,990	10.3	56,835	11.7	61,023	11.3
Net revenues from financial assets	7,275	1.8	36,441	8.3	32,326	6.7	42,528	7.9
Claims	27,882	6.8	29,610	6.8	31,465	6.5	32,028	5.9
Change in technical provisions	23,946	5.8	29,327	6.7	37,741	7.8	41,639	7.7
Result before new supplementary provisions, allocation to policyholders and tax	-2,434	-0.6	11,201	2.6	12,077	2.5	16,528	3.1
Change in fluctuation reserves	-1,025	-0.3	6,818	1.6	3,487	0.7	8,204	1.5
Value-adjusted result before new supplementary provisions, allocation to policyholders and tax	-3,459	-0.8	18,019	4.1	15,565	3.2	24,732	4.6
	NOKm	% of TA						
Total assets	414,154		458,679		509,461		573,477	
Bonds held to maturity	124,673	30.1	166,229	36.2	165,405	32.5	162,333	28.3
Equities and units (current assets)	30,497	7.4	55,440	12.0	79,812	15.7	114,328	19.9
Money market instruments and bonds (current assets)	155,530	37.6	134,297	29.3	155,791	30.6	178,376	31.1
Buffer capital	14,274	3.4	25,266	5.5	32,568	6.4	43,045	7.5

Table 3: Non-life insurance companies (three largest non-life groups); selected result and balance-sheet items

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	20	02	2003		2004		20	05
	NOKm	% of PFO						
Premium revenue for own account	16,326		18,746		20,985		22,954	
Claims expenses for own account	13,286	81.4	14,807	79.0	14,368	68.5	15,478	67.4
Operating expenses for own account	3,963	24.3	4,245	22.6	4,384	20.9	4,868	21.2
Result of technical account	-276	-1.7	186	1.0	2,387	11.4	2,937	12.8
Net financial revenues	1,048	6.4	4,749	25.3	1,506	7.2	3,716	16.2
Result of ordinary operations	-1,175	-7.2	3,404	18.2	2,715	12.9	5,376	23.4
	NOKm	% of TA						
Total assets	40,674		48,745		55,428		64,013	
Equities and units (current assets)	1,544	3.8	3,141	6.4	2,621	4.7	9,233	14.4
Bonds and money market instr. (total)	22,487	55.3	26,148	53.6	35,876	64.7	35,831	56.0
Technical provisions	28,157	69.2	32,062	65.8	35,671	64.4	39,495	61.7

PFO: premium revenue for own account