Financial sector outlook Second half of 1999

The cut-off date for this report was 26 November 1999

Norges Bank's reports on financial stability

In addition to its responsibilities in the area of monetary policy, Norges Bank is also responsible for fostering stability in the financial sector, and therefore analyses and reports on the situation in the sector. The work includes both analyses of developments in financial institutions, primarily in the banking sector, and the relationship between macroeconomic developments and financial sector developments. Analyses of the financial position of households and enterprises are important elements.

Since 1995 Norges Bank has produced reports on the situation in the financial sector and the outlook for the sector. The reports are for internal use, but are also made available to the Ministry of Finance and the Banking, Insurance and Securities Commission. Since 1997, excerpts from these analyses have been published in *Economic Bulletin* nos 2 and 4 under the title 'Financial Sector Trends' (from June 1998: 'Financial Sector Outlook').

1 Summary

Mood has shifted in international financial markets

The uncertainty in international financial markets has been somewhat reduced over the past year. The situation in the crisis-hit Asian countries has improved, and current account deficits have been reversed to surpluses. Future developments in Latin America are more uncertain. The greatest threat to financial stability internationally is still the risk of a considerable fall in the US stock market. The risk of turbulence in international foreign exchange markets, which can be triggered by growing imbalances in world trade, represents another element of uncertainty.

Indications of an increase in domestic credit growth

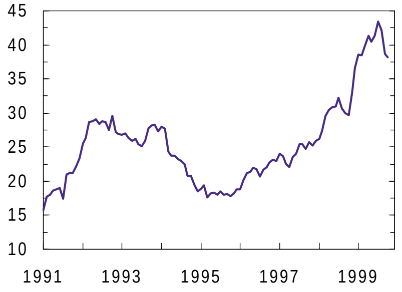
Domestic credit growth has slowed consistently in the past year, whereas foreign credit growth has been high. Growth in total credit to the private and municipal sectors has remained at just over 10%. In the last months, however, there have once again been signs of increased growth in credit from domestic sources. Underlying growth in domestic credit has expanded since the end of last year, and in September year-on-year growth returned to the level recorded at the start of 1999. Banks have recorded the highest lending growth in recent months.

A decline in domestic interest rates may have contributed to higher credit demand in the last few months. The continuing rise in house prices indicates that credit demand in the household sector remains strong. A slowdown in business investment suggests lower credit demand. Despite increasing growth in domestic credit in September, a falling trend is expected in the period ahead.

Positive results for banks this year…

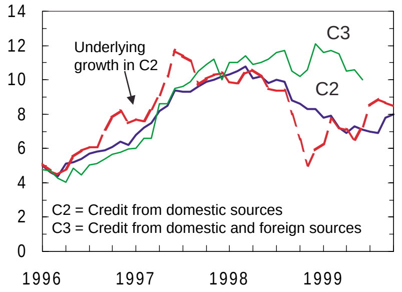
Both commercial and savings banks have achieved far better results this year than in the corresponding period in 1998. The improvement is to some extent due to one-off effects resulting from changes in accounting rules, but also to increased income as a result of developments in the securities markets. Higher net interest income and a slight reduction in operating expenses have also contributed to the improvement in profits. The improvement in net interest income is primarily due to the fact that the interest margin has been higher this year than in the same period in 1998, largely as a result of the rise in interest rates in autumn 1998.

Chart 1.1 *Price/earnings ratio for the S&P Industrials index in the US*



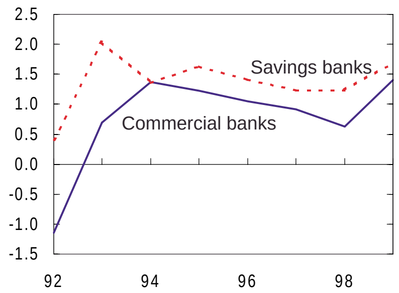
Source: *Financial Times*

Chart 1.2 *Credit from domestic and foreign sources. 12-month and underlying growth. Per cent*



Source: Norges Bank

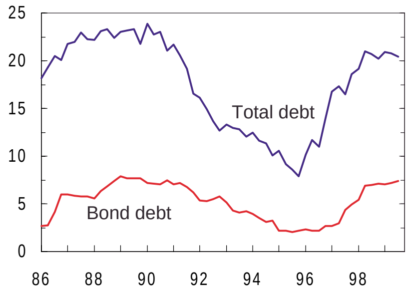
Chart 1.3 *Ordinary operating result before tax. Commercial and savings banks.*[1] *Percentage of ATA*



[1] Excluding foreign branches

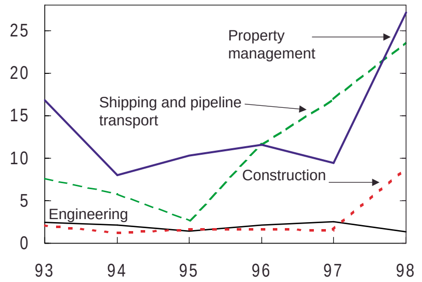
Source: Norges Bank

Chart 1.4 *Banks' foreign debt as a percentage of ATA*



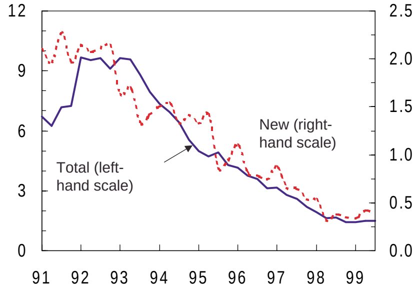
Source: Norges Bank

Chart 1.5 *Long-term debt in firms with weak or negative equity and negative earnings. Selected industries. In billions of NOK*



Source: Norges Bank

Chart 1.6 *Non-performing loans; total and new in last quarter. Commercial and savings banks.*[1] *Percentage of gross lending*



[1] Excluding foreign branches

Source: Norges Bank

…and some favourable developments in financing structure

Net interest income is also to some extent affected by trends in banks' financing structure which have been more favourable in the past 18 months than in the preceding three years. Foreign financing at the shortest end of the market has been reduced, and the steady decline in the deposit to loan ratio has stopped, at least temporarily. Both these elements help to reduce liquidity risk.

Deterioration in debt-servicing capacity among banks' customers, particularly enterprises

Despite a slight decrease this year, interest rates are still higher than in 1997 and the first half of 1998. Interest expenses for households and enterprises have therefore increased.

Households have generally maintained a sound financial position. Indicators for interest expenses and debt burden imply that the majority of households now have a better debt-servicing capacity than in the early 1990s, despite the increase in interest charges in the past year. Credit risk linked to households will only increase if unemployment should rise dramatically and/or house prices should fall sharply.

The situation is different in the enterprise sector. Strong growth in debt has increased financial exposure in recent years. In addition, profitability has been squeezed as a result of higher costs and intensified competition in several industries.

Accounting figures for 1998 show a clear rise in the number of enterprises with poor earnings and weak or negative equity, ie high-risk enterprises. Financial institutions' exposure to this type of enterprise increased considerably in 1998. This is primarily ascribable to a deterioration in existing loan customers' financial position. It appears that financial institutions are showing more caution in granting credit, as a smaller share of new loans were extended to enterprises classified as high risk in 1998 than in 1997. Overall, however, credit risk in financial institutions has increased.

But no clear rise in non-performing loans or loan losses

The increase in credit risk linked to corporate debt has so far not given rise to any sharp increase in the volume of non-performing loans, nor has there been any significant increase in recorded losses.

Banks continue to face considerable challenges in the period ahead

The trend in banks' earnings and financial strength in the current year has helped to limit vulnerability in the financial sector. Future challenges include the competitive situation and possible trends for banks' interest margins, as well as higher credit risk, and associated prospects of an increase in loan losses. If banks are to achieve earnings which can contribute to maintaining financial strength, it is possible that individual institutions will have to implement various measures, such as cost reductions and a greater emphasis on the correct pricing of risk.

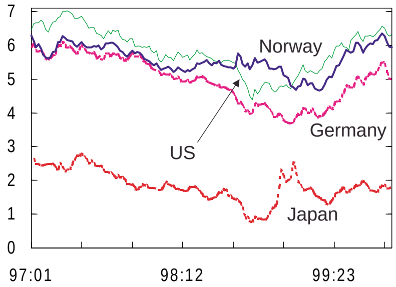
It is likely that activity in parts of the financial market will be lower and in some areas differ from the norm at the end of a year, in connection with the transition to the year 2000. Norges Bank does not expect any serious disturbances in the financial system in connection with the year 2000 (see separate box).

2 International and Norwegian securities markets

2.1 Developments in international financial markets

In the course of the past year, the mood in international financial markets has shifted from fear of a global recession to concern about rising inflation. The situation in the crisis-hit Asian countries has improved, and current account deficits have been reversed into large surpluses. The situation in Latin America is more uncertain. Sluggish growth and higher interest rates internationally make it difficult to redress the financial imbalances in a number of the countries. The greatest threats to financial stability internationally are still the possibilities of a negative reaction in the US equity market, and turbulence in international currency markets triggered by growing imbalances in world trade.

Chart 2.1 *Effective interest rate on 10-year government bonds. Weekly figures, Jan'97 - Nov'99. Per cent*

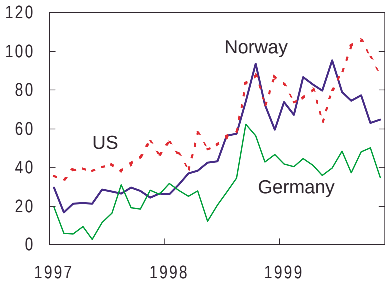


Source: Norges Bank

Rising interest rates contribute to more moderate equity price performance

There has been a global rise in long-term interest rates. Interest rates in the large countries have risen most in the US and some euro area countries, by almost 2, and about 1.5 percentage points, respectively, since the lows of about one year ago (see Chart 2.1). The rise in interest rates has been appreciably less in Japan. Virtually the same interest rate increase in Europe and the US may seem rather surprising in view of the fact that the two areas are at different stages of the business cycle. In both areas, however, there has been strong growth in credit to the private sector – in excess of 10%. In many countries, the increase in long-term interest rates has been followed by a tightening of monetary policy. This appears to have dampened fears of inflation, and contributed to lower long-term interest rates recently.

Chart 2.2 *Differential between 10-year swap and government bond yields. Monthly figures, Jan'97 - Nov'99. Basis points*

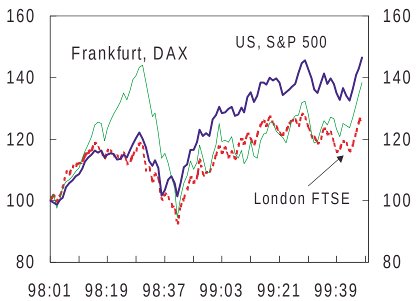


Source: Datastream

The differential between government bond yields and swap rates with a corresponding maturity remains distinctly higher than the levels in 1997 and the first half of 1998 (see Chart 2.2). This illustrates the fact that credit and liquidity risk associated with banks, and possibly also other non-government borrowers, is still regarded as higher than normal.

For a long time, equity markets were unaffected by the rise in interest rates, but during the autumn equity prices fell in many countries (see Chart 2.3). Recently they have risen again, and some have passed the record quotations of the summer of 1999. In the US, the Standard & Poor 500 index has tripled since 1994. this is the reason for the concern as to whether the US equity market is overvalued (see discussion in separate box).

Chart 2.3 *Equity price movements in selected countries. Weekly figures. Index, Jan'98=100*



Source: Norges Bank

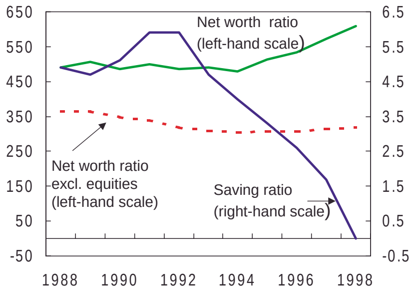
Table 2.1 *Movements of capital in the crisis-hit Asian countries[1]. In billions of USD*

	1996	1997	1998	1999[2]
Current account deficit	53.4	24.3	-68.8	-49.3
Covered by:				
- Private capital inflow	62.9	-22.1	-29.6	-18.1
- Official capital inflow	-4.6	30.4	20.2	-4.5
- Reduction in reserves	-5.5	30.5	-52.1	-39.9
- Statistical deviations	0.5	-14.5	-7.3	13.2

[1] Indonesia, Thailand, South Korea and Malaysia
[2] Forecast

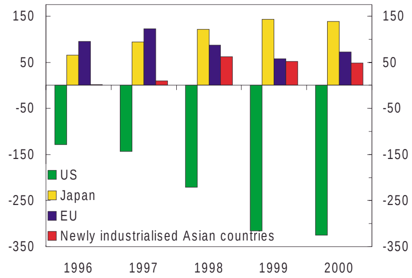
Source: IMF

Chart 2.4 *Household saving and net worth in the US. Percentage of disposable income*



Sources: Federal Reserve and Bureau of Economic Analysis

Chart 2.5 *Current account balance for selected countries and areas. Forecasts for 1999 and 2000. In billions of USD*



Source: IMF

Improvement of the situation in Asia…

The crisis-hit countries in Asia have performed a sweeping turnaround in the last 2 ½ years. The devaluation of currencies and contraction in domestic demand have led to the combined current account balance of these countries going from a deficit of over USD 50 billion in 1996 to a surplus of almost USD 70 billion in 1998 (see Table 2.1). The counterpart to this is an almost equally large change in the previously large inflows of private sector capital. In combination with the large inflows of public sector capital, the large operating profits have provided scope for a substantial accumulation of foreign exchange reserves. The IMF expects somewhat lower current account surpluses this year and in 2000 as a result of the recent appreciation of currencies and the rise in domestic demand.

… but continued uncertainty concerning Latin America

Whereas Brazil appears to have recovered remarkably rapidly from the crisis of last winter, a number of Latin American countries are struggling with high debt levels and large deficits. In September, Ecuador's problems escalated to the extent that the country stopped servicing Brady bonds.[1] Ecuador is the first country to suspend payments on loans of this type.

Signs of financial imbalances in the US

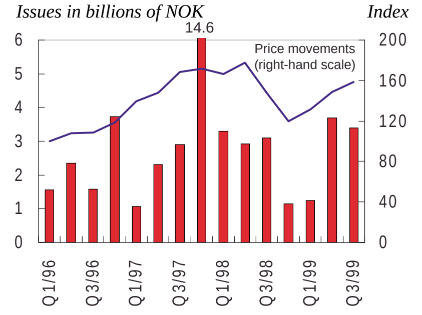
Towards the end of a prolonged upturn, there is often turbulence in financial markets. Over-optimism leads to financial imbalance and "bubbles". It is natural to ask whether this is the situation in the US economy, which has been experiencing a cyclical upturn since 1991/1992.

US households have experienced a substantial increase in wealth because of the strong rise in equity prices over the past few years. Financial assets account for about 70% of household wealth in the US. Although the financial position is very favourable, a sufficiently sharp fall in equity prices could lead to a substantial drop in household net wealth. It appears possible that households have reduced their saving because of their increased wealth (see Chart 2.4). A fall in the stock market could reverse this situation.

A rapidly growing trade deficit is the second US financial imbalance (see Chart 2.5). So far, there has been no problem in financing this deficit. The dollar exchange rate has been very strong at times. The question is whether international investors are willing to keep increasing the pace of the accumulation of their assets in US dollars. They must, if the expected increase in the US trade deficit is to be realised. If

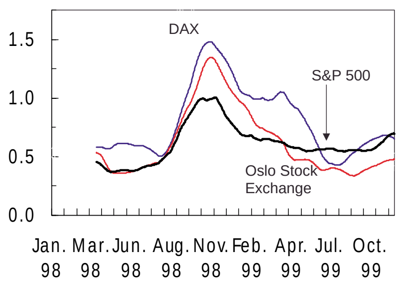
[1] "Brady bonds" are securities that were introduced as a step in the resolution of the 1980s debt crisis in Latin America. Government loans in banks in industrial countries were converted into bonds that were partially guaranteed by US government bonds.

Chart 2.6 *Price movements and equity issues on the Oslo Stock Exchange. Quarterly figures. Index, Q1 1996=100*



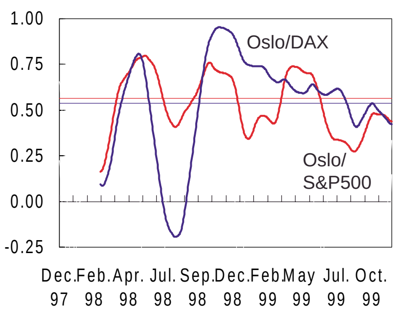
Sources: Oslo Stock Exchange and Norges Bank

Chart 2.7 *Volatility of equity price indices. Daily figures, Dec'97-Oct'99, 20-day moving average*



Source: Norges Bank

Chart 2.8 *Correlation between Oslo Stock Exchange and stock markets in US and Germany. Trend and daily average, Dec '97 - Oct' 99*



Source: Norges Bank

investors become more sceptical regarding the dollar, it could cause a pronounced exchange rate fall. This in turn could make it more attractive for foreigners to procure assets in dollars, and contribute to reducing the trade deficit and hence the need for capital inflows. But it would also give rise to further inflationary impulses. To prevent this, the authorities may raise interest rates. However, this could have a negative effect on equity prices. Thus the financial imbalances may limit the scope for manoeuvre in monetary policy.

2.2 Norwegian securities markets follow international trends

Price trends in the Norwegian securities markets have largely continued to follow international trends so far in 1999, with a rise in both bond and share prices. The all-share index on the Oslo Stock Exchange increased by 23% from the start of the year to end-October (see Chart 2.1), which represents a far greater increase than on most other European stock exchanges. The particularly sharp rise in prices in Norway is probably attributable to a fall in domestic interest rates, moderate wage settlements and a sharp increase in oil prices.

Growth in the turnover of shares on the Oslo Stock Exchange has been record high so far this year. Turnover is now nearly 26% higher than in the corresponding period last year. In the past two quarters, the volume of new issues on the stock exchange has exceeded the normal level of issues (see Chart 2.1). There appears to be a clear positive relationship between price trends and the volume of new issues in recent years, which is probably due to the fact that the general outlook is decisive for both variables.

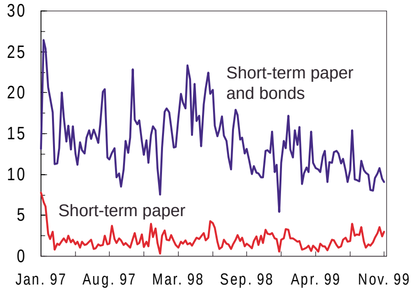
Price volatility in the Norwegian stock market, measured by the trend movement[2], shows that price fluctuations in the market have returned to a normal level, following substantial price changes in autumn 1998 (see Chart 2.2). It is also clear that volatility in the Norwegian market closely shadows developments in both the DAX and S&P 500 indices.

It is usually assumed that the correlation between different stock markets increases in periods of high volatility. The correlation, measured in terms of the trend rise[3], between the Oslo Stock Exchange and the German and US stock markets was high during the turbulence in 1998. Following this turbulence, the correlation between the Norwegian and US markets has declined and now lies below the historical average (see Chart 2.3). The observed correlation between the Oslo Stock Exchange and both the German and US stock markets is high, indicating that Norwegian securities markets will be affected by turbulence on the international stock markets.

[2] The trend movement is calculated as a 90-day moving average over a weighted average (last observation is given greatest weighting) of volatility over a 20-day period. Volatility is measured as the standard deviation in the return on the relevant stock index.

[3] The trend movement is calculated as a 90-day moving average over an average of 60-days' correlation.

Chart 2.9 *Volume of short-term paper and bonds sold on Oslo Stock Exchange. Weekly figures. In billions of NOK, Jan.'97- Nov.'99*



Source: Norges Bank

High activity in the stock market has spilled over into the derivatives market. Record turnover figures have been recorded on several occasions recently. An increasing number of investors are using equity derivatives to secure gains and take speculative positions.

The bond market is also affected by international trends. The correlation in daily absolute yield changes between Norwegian and German and US government bonds has varied in the past year. The correlation between Norwegian and German yields at the long end of the market increased in 1999, and has been stronger than the correlation between Norwegian and US yields. Turnover in the bond market has been lower so far this year than in the same period in 1998 (see Chart 2.4).

Although the correlation between securities markets in Norway and other countries is relatively high, the direct consequences of international turbulence for Norwegian banks are relatively small. Norwegian banks have little exposure in securities markets; therefore, turbulence in international financial markets will be of greatest significance to Norwegian financial institutions when it has consequences for the real economy in Norway and the Norwegian financial markets.

Is the US stock market overvalued?

Share prices in the US have risen sharply in recent years, and various observers have expressed concern that prices are not backed by fundamentals (see Chart 1). The traditional theory of finance states that the actual share price, P_t, shall be equal to the discounted value of the company's expected future dividend payments, D^e_{t+i} $(i\geq 0)$:

$$P_t = \sum_{i=1}^{\infty} \frac{D^e_{t+i}}{(1+\rho_t)^i} \qquad (1)$$

where ρ_t represents the ex-ante real cost of equity based on the information available at time t. Assuming that the expected dividend grows at a rate, g_t^e, so that $D^e_{t+i+1} = (1+g_t^e)\, D^e_{t+i}$ $(i\geq 0)$[1], (1) will be equal to:

$$P_t = D_t \sum_{i=1}^{\infty} \left(\frac{1+g_t^e}{1+\rho_t} \right)^i \qquad (2)$$

Applying the formula for the sum of an infinite geometrical progression, this can be written as[2]:

$$\frac{P_t}{D_t} = \frac{(1+g_t^e)}{((r_t+e)-g_t^e)} \qquad (3)$$

We have expressed the real cost of equity at time t as r_t+e, where r_t is the ex-ante real yield on 10-year government bonds[3] and e is a constant risk premium which the market demands to maintain positions in equities instead of cash or secure investments in government paper (assumed to be 6%[4]). Moreover, in this equation the price-dividend ratio (P_t/D_t) is expressed by the inverse of the effective return on the Standard & Poor 500 index (S&P 500)[5]. On the basis of the equation, it is conceivable that the sharp rise in share prices (P_t/D_t) in the 1990s may be based on (i) a higher

1 Expected growth in dividend, g_t^e, is assumed to be constant at all times t when discounting is carried out. This is an approach which simplifies the analysis.

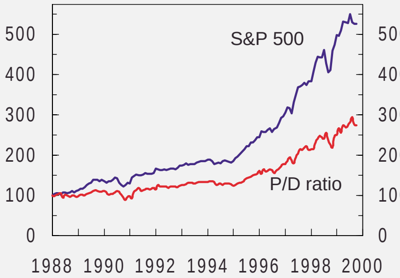
2 The expression $(1+g_t^e)/(1+\rho_t)$ must be smaller than 1, $1+\rho_t > 1+g_t^e$, for the geometrical progression to converge.

3 The monthly long-term ex-ante real yield, r_t, emerges from the expression $(1+i_t)=(1+r_t)(1+\pi_t)$, where i_t is the effective rate on 10-year government bonds (risk-free interest rate) and π_t is the average expected inflation in the next period. It is assumed that participants believe that future inflation will be equal to inflation in the last twelve-month period (adaptive expectations).

4 See Cerisola. M. and S. Dunaway (1999), "Recent Developments in U.S. Stock Prices", mimeo, IMF. The rates use a 6% risk premium based on earlier academic studies.

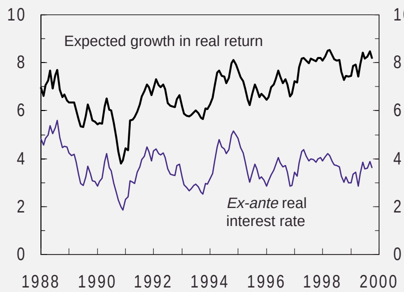
5 The effective return on the S&P 500 index is obtained from Datastream.

Chart 1 *Movements of the S&P 500 index and price/dividend ratio. Monthly figures, index Jan'88=100*



Sources: Datastream and Norges Bank

Chart 2 *Expected growth in real return and ex-ante real interest rates. Monthly figures, Jan'88-Oct'99. Per cent*



Sources: Datastream and Norges Bank

expected future real growth in dividend payments, (ii) lower real yields or (iii) lower risk premia for participants.

Chart 2 shows expected real growth in the return for the period January 1998 to September 1999 in the S&P 500 index (g_t^e in equation (3) where the equation is solved for g_t^e) along with the ex-ante real yield on 10-year government bonds. We see that the real yield cannot explain the rise in prices in recent years. Growth in (P_t/D_t) in the 1990s must thus be due to a lower risk premium, increased real growth in future dividend payments or both. If we assume a constant risk premium throughout the entire period, as has been done in the chart, then it is the constant upwards adjustment of real growth in dividend payments which is responsible for having pushed share prices up to the current historically high level.

In recent years, the US economy has had a prolonged cyclical upturn and undergone substantial structural changes. The economic situation and the structural changes have translated into strong earnings growth, which may in part have led to an increase in expected earnings growth. Nevertheless, exaggerated optimism may have meant that strong earnings growth has resulted in real bubbles in equity prices. Investors may have developed unrealistic expectations in future growth in corporate earnings.

If the expected growth in the real return is held constant, equal to the average for the period from mid 1994 to October 1999, equation 3 indicates that the risk premium must have fallen from 6% to nearly 2%. One of the reasons for a substantial fall in the risk premium may be that participants have observed that equities for a very long time have generated a higher return than investments in fixed-income securities and that they therefore consider it less risky to invest in equities than earlier. Another explanation may be that a greater portion of savings is channelled through institutional investors, such as securities funds or insurance companies, which have greater diversification possibilities than individual savers. It is also conceivable that substantially better access to information about stock markets has reduced the uncertainty of equities and therefore also the risk premium.

If it is actually the case that a fall in the risk premium is the main factor behind price gains, an important question will be whether the fall in the risk premium is permanent or temporary. If it is temporary, a negative shock, which reminds investors that equity prices can actually also fall, might result in a considerable increase in the risk premium.

Other factors that have been cited to explain the increase in equity prices are (i) a sharp increase in enterprises' equity buy-backs and (ii) demographic conditions with a large number of people in those cohorts that usually have high long-term saving. It is also possible that many investors have only invested in equities in order to profit from a rise in prices without having any opinion as to how equities are prices in relation to corporate earnings. Many participants have invested in equities and with a limited supply in the short term and higher demand, equity prices have been pushed up.

3. Financial exposure in the non-financial sector

3.1 Credit trends and the housing market

Rising credit growth in recent months

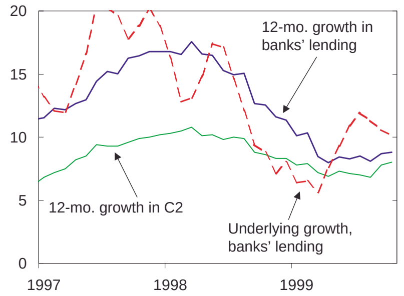
Underlying growth[4] in credit from domestic sources was 8.7% in September 1999 (see Chart 1.2 in the summary), roughly the same rate recorded in the two preceding months. Underlying growth has risen since end-1998, when it stood at 5%. Year-on-year growth was 7.9% at end-September this year, which is markedly higher than in the preceding months (see Chart 3.1).

Lending growth in banks has picked up in recent months (see Chart 3.1). Underlying growth in bank lending[5] has stood at around 11% for the past three months. Year-on-year growth was 8.8% in October[6]. There are, however, considerable differences between banks. CBK has recorded a rise in lending growth, whereas DnB has not increased lending in the past year (see Chart 3.2).

Credit growth for enterprises has declined following the peak recorded in March 1998, when the twelve-month growth rate was around 20%. Growth in lending to enterprises remains high – at around 10% at the end of the second quarter of 1999. Expectations of a slowdown in investment and weaker growth in the mainland economy suggest a further decline in credit demand among enterprises in the period ahead.

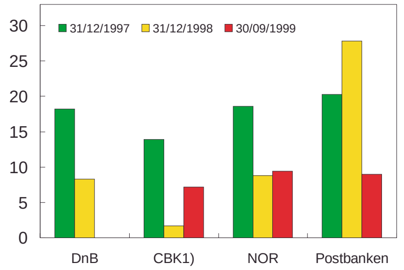
Credit growth in the household sector has been stable in the past few years. Annual growth was just under 7% in 1997 and 1998. Credit demand among households is expected to fall over the next few years, primarily as a result of expectations of lower wage growth and slightly higher unemployment, which will curb growth in disposable income, and thereby credit demand. Factors which imply the opposite include a possible continuation of the rise in house prices and expectations of further reductions in interest rates.

Chart 3.1 *Growth in domestic credit and banks' lending. Per cent*



Source: Norges Bank

Chart 3.2 *Lending by largest banks. Parent banks. 12-month growth. Per cent*



[1] Figures after transfers

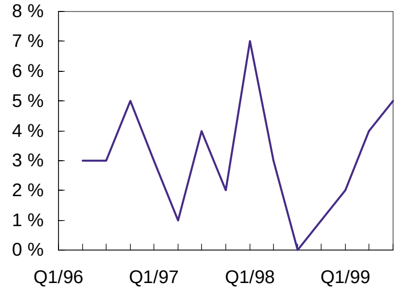
Source: Banks' quarterly and annual reports

[4] Underlying growth is defined as growth in the last three-month period against the preceding three-month period, annualised.

[5] Analyses have shown that there is no clear seasonal pattern in bank lending. Underlying growth is therefore calculated on the basis of actual figures.

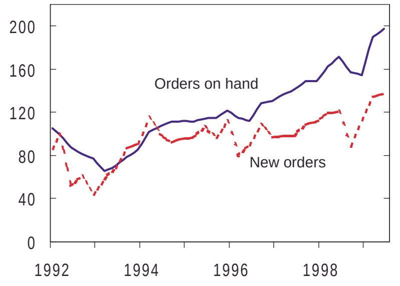
[6] Figures are adjusted for the transfer of a lending portfolio amounting to NOK 17 billion from BNbank to BNkreditt in December 1998, and a portfolio amounting to NOK 5 billion from Norgeskreditt to Kreditkassen in September 1999.

Chart 3.3 *Resale home prices. Whole country. Seasonally adjusted change from previous quarter. Per cent*



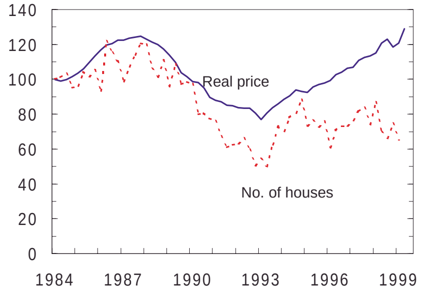
Sources: NEF and ECON

Chart 3.4 *Orders for house construction. Seasonally adjusted volume indices. Index, Mar'92 =100*



Sources: Statistics Norway and Ministry of Finance

Chart 3.5 *Volume of housing starts and real price of resale homes. Indices 1984=100*



Sources: Statistics Norway and Ministry of Finance

Sharp rise in house prices continues

Developments in the housing market may not only influence future demand, but also banks' willingness to extend credit. House prices are also of importance to the value of banks' collateral. The housing market primarily represents a problem for banks if house prices rise significantly above the market equilibrium price. In such a situation, the potential price fall is so substantial that (unexpected) changes in other economic factors, eg interest rates, tax rules, wage trends and unemployment, may lead to a sharp reduction in prices. When the value of banks' collateral drops, the risk of losses increases.

Having increased by around 8% per year since 1994, resale house prices continued to rise in 1999. According to figures from ECON/NEF[7], resale house prices rose by 13% from the third quarter of 1998 to the third quarter of 1999, for the country as a whole. The increase from the second to the third quarter this year remained high, with growth at 5%, adjusted for seasonal variations (see Chart 3.3).

Figures from Statistics Norway show a marked increase in new orders for housing starts in 1999, following a sharp fall in autumn 1998 (see Chart 3.4). Order reserves have followed a similar trend. Robust growth in new housing starts can be expected through the remainder of 1999 and next year, due to the order situation, diminishing capacity problems in the construction industry and the continued rise in prices, which improves the profitability of building new dwellings. It will, however, take time before this has any substantial effect on house prices.

Income growth in the household sector (see section 3.2) and the low volume of housing starts in recent years may partly explain the sharp upward price trend in the housing market (see Chart 3.5). Lower income growth, a slight rise in unemployment and an increase in housing starts are expected in the period ahead – factors which all suggest a slower rise in house prices. If, however, house prices should continue to increase at the same rate as in recent years, there is a danger that imbalances will develop in the housing market.

3.2 Financial exposure in the household sector

Continued strong growth in disposable income

Household disposable income has increased sharply in recent years, which is largely ascribable to growth in wage income. However, growth in wage income is expected to slow, due to weaker economic growth in 1999. Overall, growth in real disposable income in 1999 is still expected to be strong.

[7]ECON, centre for economic analysis and the Norwegian Association of Real Estate Agents.

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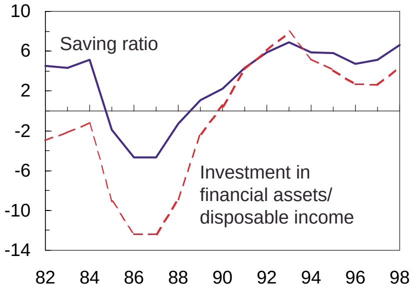
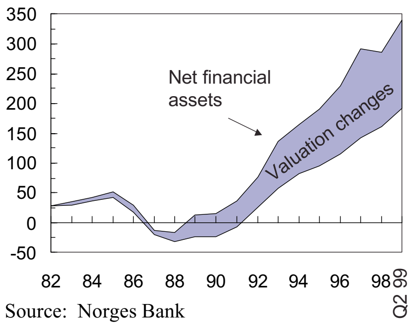
Chart 3.6 *Household saving ratio and net investment in financial assets as a percentage of disposable income*



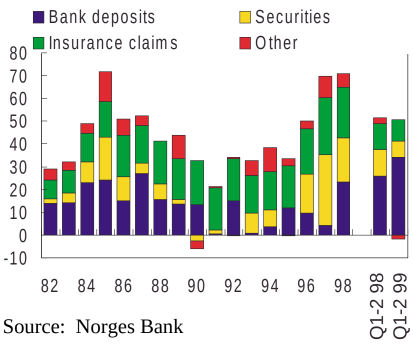
Sources: Statistics Norway and Norges Bank

Chart 3.7 *Household net financial assets and accumulated revaluations. In billions of NOK*



Source: Norges Bank

Chart 3.8 *Household gross investment in various financial assets. In billions of NOK*



Source: Norges Bank

Household saving contributes to increase in net financial assets…

Growth in real disposable income has provided households with an increased financial leeway and improved their financial position. Both the saving ratio and net lending have been positive throughout the 1990s (see Chart 3.6). An increase in the saving rate and the share used to invest in financial instruments and to repay debt was recorded in 1998, as a result of uncertainty regarding economic developments.

…but trend in the securities markets is uncertain

In addition to net lending, households' financial position also depends on changes in the market value of stocks and other securities (valuation changes) (see Chart 3.7). The chart shows that valuation changes have contributed to an improvement in households' financial position throughout the 1990s to 1998, when the fall in share prices in the second half of the year resulted in such substantial negative valuation changes that net assets were lower at end-1998 than end-1997 – despite positive net lending. Valuation changes have resulted in an increase in net financial assets so far in 1999.

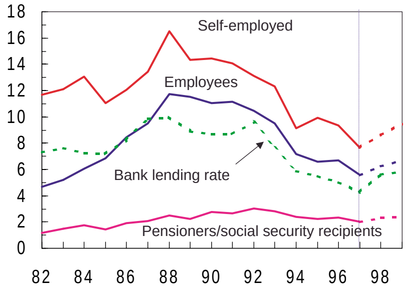
Changes in the composition of households' financial investment

Developments in the latter half of 1998 also had a significant effect on households' choice of investment instruments. In 1997, over NOK 30 billion was invested in securities, whereas this share was reduced to NOK 19 billion in 1998 (see Chart 3.8). Financial investment in securities remained somewhat lower in the first half of 1999 than in the same period in 1998.

Bank deposits as a share of households' overall gross assets have fallen steady for some years now. The trend from end-1997 to end-1998 represents an important exception. During this period, bank deposits' share rose by a nominal 6.9%, which illustrates that turbulence in the securities markets can have important consequences for investment choices. However, securities funds have generated high returns in the long term, and it is expected that saving in the form of securities funds will increase in the period ahead, at the expense of bank deposits. This will affect banks' financing costs, as a larger share of bank activities will have to be financed from sources other than customer deposits (see Section 4).

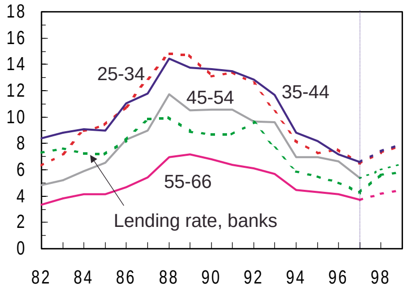
Although the financial position of the household sector as a whole is sound, there are substantial differences between households. In recent years, securities have helped to increase net assets, but the distribution among households is skewed. Insurance claims account for just over a third of gross assets, but are less liquid than other assets. When insurance claims and securities are excluded, the household sector is in a net debt position. This debt amounted to NOK 269 billion at the end of the second quarter of 1999, and largely comprises

Chart 3.9 *Interest expenses (after tax) as a percentage of cash income by socio-economic group. 1998 and 1999 are estimates. Nominal bank lending rate after tax. Per cent*



Sources: Statistics Norway and Norges Bank

Chart 3.10 *Interest expenses (after tax) as a percentage of cash income by age group. 1998 and 1999 are estimates. Nominal bank lending rate after tax. Per cent*



Sources: Statistics Norway and Norges Bank

interest-bearing debt. Unexpected changes in interest rates and unemployment may therefore have a substantial impact on individual households' financial situation.

Interest burden varies among household groups

The banking crisis shows that high debt and interest burden in the household sector contributed to a high level of defaults on bank loans. Interest expenses as a percentage of cash income (income gearing)[8] can therefore be used as an indicator for households' financial exposure. Charts 3.9 and 3.10 show the share of households' cash income needed to cover gross interest expenses (after tax). Households are divided into three groups according to main income earner's socio-economic status in Chart 3.9, and age in Chart 3.10. Figures are based on Statistics Norway's annual income and wealth survey up to and including 1997. In the period covered by the data, the interest burden was greatest for the self-employed, and lowest for social security recipients and pensioners.

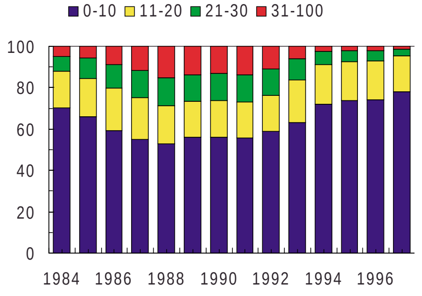
In addition, Chart 3.9 shows that there is a close relationship between the average lending rate in banks and the debt burden for employees and the self-employed over time. This indicates that there is also a close relationship between changes in cash income and interest-bearing debt, and that the average household adjusts itself in such a way that this relationship remains roughly the same over time, regardless of short interest rates. The interest burden will, however, vary between different age groups, and is greatest for newly-established households, which normally have the highest debt. In the long term, the population's age distribution will therefore influence the average interest burden in the household sector.

The increase in the number of fixed-interest rate agreements from end-1998 may entail that changes in short interest rates will be of less significance to households' disposable income in coming years[9], in which case this will, in isolation, have reduced financial exposure in the household sector.

[8] Cash income is defined as disposable income + interest expenses – receivable interest. Receivable interest is illiquid until life insurance is paid out, and is therefore not included in the calculation of cash income.

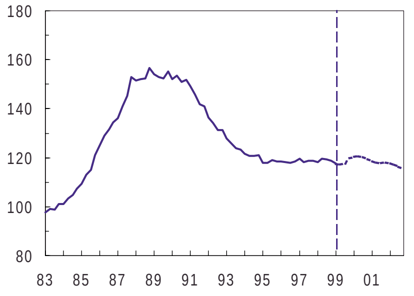
[9] According to the State Educational Loan Fund, 211 000 customers, ie roughly half, have opted for fixed-interest rate agreements from 1 July 1999. The number of fixed-interest rate agreements in the Norwegian State Housing Bank rose sharply towards the end of 1998 and at the start of 1999. Around 87 000 loans, a good half of all loans, in the State Housing Bank are now fixed-rate loans. According to Banking, Insurance and Securities Commission's mortgage survey for 1999, 13% of new housing loans from banks now have fixed-rate loans, whereas this share was half a per cent one year earlier. The survey is based on 13 commercial banks and 16 savings banks. The results from a questionnaire published by *Dagens Næringsliv* (28 October 1999) show that the share of fixed-rate loans has increased in some financial institutions.

Chart 3.11 *Breakdown of households by ratio between pre-tax interest expenses and cash income. Per cent*



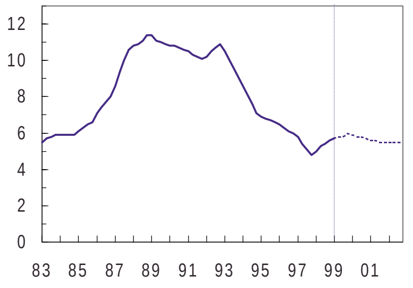
Source: Norges Bank

Chart 3.12 *Gross borrowing as a percentage of disposable income. Household sector. Moving Q4 average*



Source: Norges Bank

Chart 3.13 *Interest expenses as a percentage of cash income. Household sector. Moving Q4 average*



Source: Norges Bank

Chart 3.11 shows the distribution of households by size of interest burden. The share of households with an interest burden in excess of 20% has fallen steadily in the 1990s, whereas the share with an interest burden of up to 10% has increased. This indicates lower financial exposure in the household sector.

Our calculations indicate that the share of households with an interest burden in excess of 30% will increase again from 1998, as a result of the rise in interest rates. Expectations of weaker economic growth in the period ahead also imply that this share will remain at a higher level in the next few years, which, in isolation, entails that the risk of losses in connection with the household sector has increased. One indication of this is the 8.1% increase in the number of personal bankruptcies in the first three quarters of 1999, compared with the same period last year.

Projections[10] show that households' debt-servicing capacity will generally be good in the period ahead

The economy is now entering a period of slower growth, following the sharp upturn that started in 1992. Growth in the mainland economy is expected to be low both this year and next year, and will then pick up again in 2001. Households' real disposable income is expected to increase by around 2 ¼% this year and roughly a quarter per cent in 2000.

Gross debt as a share of disposable income is expected to remain low over the next few years (see Chart 3.12). Household borrowing as a percentage of disposable income edged up somewhat as a result of high lending growth in 1998 and 1999, but may fall to around 115% towards the end of the projection period.

Even though growth in households' nominal cash income is halved from 2000, assumptions regarding lower interest rates and slower lending growth will reduce the interest burden (see Chart 3.13). Towards the end of the projection period, growth in households' cash income will rise again, which in turn will further reduce the interest burden. Technical assumptions entail that interest rates are higher than presumed in Financial Sector Outlook 1999/1. However, the indicator is historically very low.

10 Projections are based on Norges Bank's macroeconomic model, RIMINI. Assumptions regarding interest rates – where it is assumed that interest rates will follow market expectations, as indicated by forward rates – and economic developments are in line with the projections in Inflation Report 1999/3.

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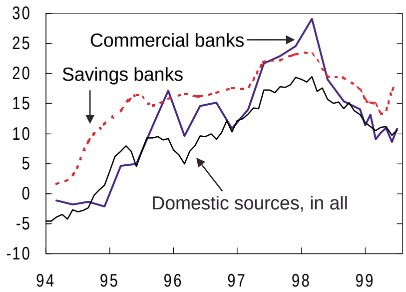
3.3 Financial exposure in the enterprise sector

As a result of strong growth in borrowing in the enterprise sector, combined with weaker financial trends in some parts of the sector, financial institutions must expect higher loan losses in the period ahead. Developments within the property management, shipping and pipeline transport and construction industries are of greatest concern. Enterprises which are particularly exposed to risk now account for a considerable share of long-term debt in these industries.

Parts of Norwegian industry, particularly the shipbuilding and offshore industry, are reporting a slower inflow of orders, increased competition from abroad, and reduced capacity utilisation. A weak trend in the industry could have negative consequences for sub-contractors and service industries, among others.

Chart 3.14 *Lending to private enterprises. 12-month growth. Per cent*



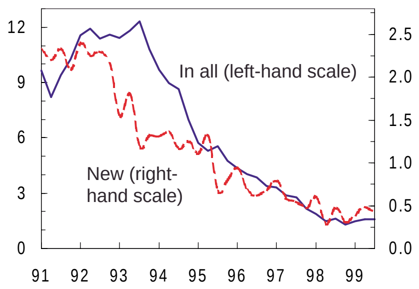
Source: Norges Bank

Enterprise sector trends

Norwegian enterprises recorded substantial growth in activity from 1993 to 1998, with an associated rise in investment and borrowing (see Chart 3.14). Growth in borrowing has slowed in the past year, but high credit growth in the years to 1998 increased enterprises' debt burden, which places greater demands on future earnings.

Enterprises' financial position is expected to deteriorate in the next few years, following a period of weak growth in the mainland economy. A drop in investment is likely to result in a further decline in enterprises' credit growth over the next years.

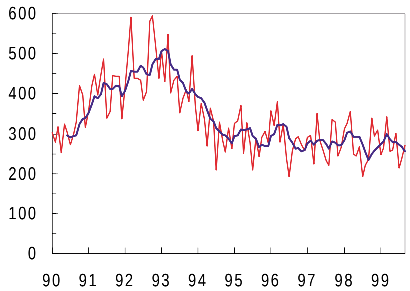
Chart 3.15 *Non-performing loans: total and new in last quarter. Loans to enterprises from private banks. Percentage of gross lending*



Source: Norges Bank

Losses on loans to the enterprise sector have remained at an historically low level in recent years. Reduced earnings in enterprises will lead to a higher risk of loan defaults. Developments in the first three quarters of 1999 show a slight rise in new non-performing loans and total non-performing loans to enterprises from commercial and savings banks (see Chart 3.15). Total non-performing loans to the enterprise sector from commercial and savings banks came to 1.6% of gross lending in the third quarter 1999 – the same as in the third quarter 1998.

Chart 3.16 *Number of bankruptcies per month. Actual and trend (6-month moving average)*



Source: Statistics Norway

As with non-performing loans, figures for business failures so far in 1999 indicate a stable trend (see Chart 3.16). However, more failures have been recorded in the construction industry than in the same period last year. The bulk of business failures in recent years have been among small businesses with low turnover and few employees. So far in 1999 there has been a shift towards a higher share of business failures among larger enterprises. The number of employees in failed businesses was 45% higher in the first three quarters of 1999 than in the same period in 1998.

The trend in enterprises' earnings will determine whether the number of non-performing loans increases. Chart 3.17

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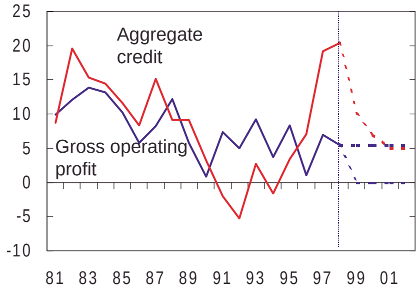
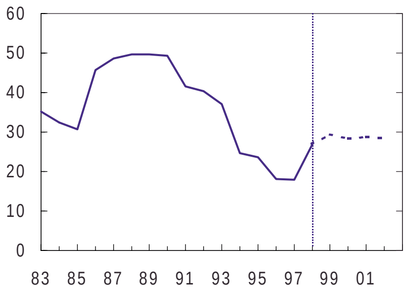
Chart 3.17 *Growth in aggregate credit from domestic and foreign sources and gross operating result. Enterprises. Per cent*



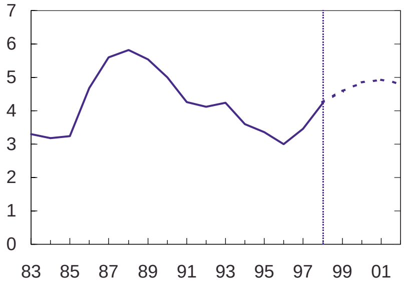
Sources: Statistics Norway and Norges Bank

Chart 3.18 *Interest expenses as a percentage of cash surplus. Private, non-financial enterprises*



Source: Norges Bank

Chart 3.19 *Interest-bearing debt as a share of cash surplus excl.interest expenses. Private, non-financial enterprises*



Source: Norges Bank

shows the trend in enterprise sector credit from both domestic and foreign sources, as well as the trend in gross operating results. The chart shows that credit growth has been higher than growth in operating profit in recent years. As a result, enterprises' debt burden has increased. Although credit growth is expected to slow in the period ahead, the debt burden may continue to rise, as the anticipated slowdown in the economy will probably result in weaker earnings for enterprises. This is illustrated in the chart by two scenarios: one where operating profits continue to grow in line with the trend in 1998 over the next few years, and the other where there is zero growth. Due to the relatively long period with higher growth in borrowing than in operating profits, the risk attached to loans to enterprises continues to increase.

Enterprise sector debt burden, ie the relationship between interest expenses and cash surplus[11], has increased substantially from 1997 to date (see Chart 3.18). According to our calculations, the debt interest/cash surplus ratio will level off and remain stable at around 30% in the period ahead[12].

The debt interest/cash surplus ratio for enterprises has risen steadily in the past few years (see Chart 3.19). On the basis of the above assumptions, the debt interest/cash surplus ratio will continue to rise to just under 5 in the period to 2002. Such a high debt burden has not been recorded in the enterprise sector since the end of the 1980s, when the ratio stood at around 6, which resulted in substantial losses for financial institutions.

If, contrary to the assumptions presented in this report, credit growth remains at the current level over the next 2-3 years, the debt interest/cash surplus ratio will deteriorate further, with a corresponding increase in the risk of losses.

Risk classification of individual enterprises

Norges Bank has developed a model for classifying risk attached to individual enterprises based on reported accounting figures. Using this model, it is possible to establish a risk profile for financial institutions' loans to enterprises. In the following section, we have used this model to look at the enterprise sector as a whole, and to evaluate some industries in more detail.

Weaker profitability, higher credit growth and higher interest burden…

Enterprise sector[13] total ordinary operating profit rose by 16% from 1996 to 1997, whereas it fell by 1% from 1997 to 1998.

The same companies recorded a 9% increase in total turnover from 1996 to 1997. One year later, growth in turnover had fallen to 5%.

[11] Cash surplus is defined as gross product + financial income – wage costs + tax.
[12] Projections are based on the real economic situation presented in Inflation Report 1999/3. Projections for enterprise sector credit trends have also been included.
[13] Turnover and profitability are only evaluated for companies which submitted accounts for each year from 1996 to 1998.

Enterprises have recorded high activity in periods through the 1990s, and a substantial part of the growth in activity has been financed by long-term borrowing. In nominal terms, debt increased from NOK 329 billion in 1994 to NOK 524 billion in 1998, equivalent to a 60% increase over four years. If bank overdrafts are included, debt amounted to NOK 561 billion at end-1998.

As mentioned earlier, enterprises' interest burden has increased considerably in the past few years. According to accounting figures, the share of enterprises' profit which is used to cover interest expenses rose from 12% in 1996 to 17% in 1998. Although the level recorded in 1998 is lower than in the early 1990s, the increase entails a substantially higher burden in relation to enterprises' earnings.

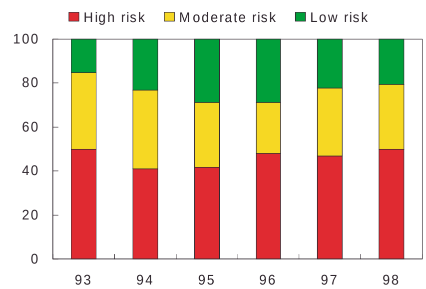
…lead to a greater risk of loan losses

The outlook for financial institutions' losses depends to a large extent on the volume of loans to the weakest enterprises. The financial position of enterprises with debt has deteriorated steadily in recent years. In 1998, enterprises classified as high risk according to our model, accounted for 50% of enterprise sector long-term debt and overdrafts (see Chart 3.20). This share has risen steadily since 1994, when it stood at 41%. In nominal terms, debt in high-risk enterprises increased from NOK 142 billion in 1994 to NOK 280 billion in 1998. Financial institutions are therefore considerably more exposed to risk linked to enterprises than they were a few years ago.

The increased risk is primarily ascribable to weaker earnings in the enterprise sector. Liquidity in enterprises which do not achieve sufficient earnings over time is weakened, and they will eventually have problems in meeting their payment obligations. This in turn will result in loan defaults and higher losses for financial institutions.

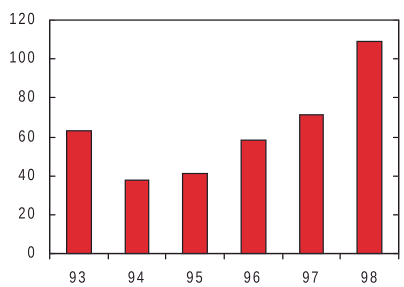
Enterprises in a particularly weak financial position, ie enterprises with negative cash earnings[14] and a low or negative equity ratio, had long-term debt and overdrafts amounting to NOK 38 billion in 1994. By end-1998, this figure had risen to NOK 109 billion (see Chart 3.21). These enterprises constitute a considerable potential for losses for banks. Even though banks have collateral, previous experience shows that the value of the collateral is often reduced when operations in enterprises are not profitable.

Chart 3.20 *Risk classification of long-term debt and line of credit debt. All enterprises. Per cent*



Source: Norges Bank

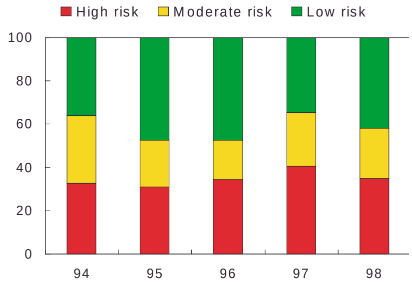
Chart 3.21 *Long-term debt and line of credit debt associated with enterprises with low or negative equity holdings and negative earnings. All enterprises. In billions of NOK*



Source: Norges Bank

[14] Profits before extraordinary items, excluding depreciation and write-downs, but after tax expenses.

Chart 3.22 *Risk classification of new long-term debt, measured by the enterprise's risk the year before taking up new debt. Per cent*



Source: Norges Bank

Table 3.1 *Total long-term debt in selected industries. In billions of NOK*

	1996	1997	1998
Property management	74.4	84.1	111.5
Shipping and pipeline transport	55.9	91.7	110.7
Retail trade	39.4	43.1	45.1
Provision of commercial services	11.0	18.0	20.7
Construction	8.9	9.9	16.8
Engineering	11.6	13.5	14.4
Food and drink	9.2	11.7	10.3
Hotel and restaurant	7.5	7.8	8.8
Fishing and trapping	4.9	6.0	7.5
Total selected industries	222.8	285.8	345.8

Sources: Dun & Bradstreet and Norges Bank

Table 3.2 *Long-term debt in enterprises with low or negative equity holdings and negative earnings, by industry. In billions of NOK*

	1996	1997	1998
Property management	11.6	9.4	27.1
Shipping and pipeline transport	11.6	17.0	23.6
Retail trade	4.9	8.2	8.3
Provision of commercial services	1.9	6.6	4.2
Construction	1.6	1.6	8.8
Engineering	2.2	2.6	1.4
Food and drink	1.1	2.3	0.8
Hotel and restaurant	1.4	1.3	1.6
Fishing and trapping	1.3	1.4	1.2
Total selected industries	37.6	50.4	77.0

Sources: Dun & Bradstreet and Norges Bank

Banks' lending policy, however, appears to be improving

The negative trend in loan debt in the enterprise sector is largely the result of a deterioration in the financial position of existing customers. Looking at the risk classification of enterprises the year before they raised new loans provides an indication of financial institutions' willingness to extend loans to enterprises in the various risk categories. Accounting figures indicate that financial institutions have become more cautious in granting credit.

The share of new long-term debt in enterprises, which were classified as high risk one year prior to receiving the loan, increased from 31 to 41% between 1995 and 1997 (see Chart 3.22). By 1998, this share had fallen to 35%. One of the reasons may be that financial institutions have become more restrictive in granting loans to enterprises exposed to risk. In discussions with Norges Bank, several banks have stated that more emphasis is now placed on the quality of loan portfolios.

Trends in different business segments

Some industries are traditionally more exposed to debt-servicing problems and bankruptcy than others, primarily those that are more sensitive to cyclical fluctuations, where changes rapidly translate into a deterioration in profitability and a reduction in the value of enterprises' assets. Examples are the property management, shipping and construction industries.

Property management

During the last banking crisis, a large proportion of banks' losses were on loans to real estate enterprises, as a result of a fall in enterprises' earnings and the value of financial institutions' collateral.

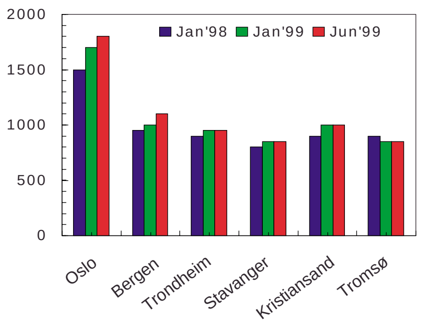
The property management industry accounts for roughly one fifth of total long-term debt in the enterprise sector, and therefore has considerable weighting in financial institutions' lending portfolios (see Table 3.1). Total long-term loans to the real estate industry rose sharply in 1998. The increase was greatest among those enterprises most exposed to risk. At end-1998, enterprises with a low or negative equity ratio and negative earnings accounted for NOK 27 billion, or one fourth of the industry's total long-term debt (see Table 3.2). Real estate enterprises' interest burden, measured by the median enterprise, also increased in 1998. In other words, financial institutions' exposure in the property market has risen substantially, in addition to an increase in the risk linked to the industry.

When a real estate enterprise raises a loan, both the enterprise's earnings and the security furnished to the financial institution are linked to the same market. As a result, loans to these enterprises are particularly exposed to cyclical changes or a fall in prices peculiar to the property market. Following price trends in the commercial property market is therefore important to surveillance work in connection with financial stability. A sharp increase in prices will, in isolation, entail a greater drop if prices should fall, and therefore increase the risk of losses for financial institutions.

The bulk of the real estate industry's turnover involves the purchase and sale of real estate. Sales prices are, however, strongly influenced by prices in the rental market. We assume that rental prices provide an earlier indication of trends in the property market than sales prices, and therefore focus on trends in rental prices in the largest cities.

Average rent for office premises in the largest cities have followed a flat trend, with the exception of a slight increase in Bergen, and a continued rise in Oslo (see Chart 3.23). Several of the major market participants agree that the price trend will remain flat over the next six months, but is expected to be positive in the medium term.

Chart 3.23 *Average rental for office premises in largest cities. NOK/m²*



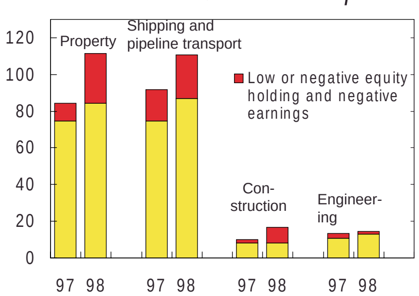
Source: *Dagens Næringsliv*

However, the real estate company, Eiendomsspar, expects a considerable increase in the completion of square meters under construction from 2000. Combined with the expected fall in demand for commercial property, this will result in a rise in the availability of premises from next year. Availability of premises in the Oslo area is currently around 4%, and is expected to rise to a more normal level of around 6-8%.

The increase in debt recorded in 1998, combined with expectations of a rise in the availability of premises in coming years and the frequency of business failures in the industry, entail that developments in the real estate industry should be monitored closely in the period ahead. Although there is little likelihood of sharp price corrections in the commercial property market, a marked increase in interest rates or a sharp fall in oil prices, for example, could change this picture.

Shipping and pipeline transport. Data indicate that the risk linked to financial institutions' loans to the shipping and pipeline transport industry also increased considerably in 1998. Long-term debt in enterprises with a low or negative equity ratio and negative earnings rose from NOK 17 billion to NOK 24 billion (see Chart 3.24). The shipping industry is capital-intensive and sensitive to cyclical fluctuations.

Chart 3.24 *Total long-term debt in selected industries. In billions of NOK*



Source: Norges Bank

The median enterprise's earnings in percentage of long-term debt have deteriorated each year from 1994, whereas the interest burden has increased gradually since 1996, and is now at roughly the same level recorded in 1993. However, the industry's total equity capital ratio and that of the median enterprise was much higher in 1998 than in 1993, which shows that enterprises generally have more capital at their disposal than just a few years ago.

Construction. Financial institutions' risk exposure in the construction industry has increased considerably. Enterprises in this industry have traditionally experienced substantial fluctuations in earnings. The industry's total long-term debt rose from NOK 10 billion in 1997 to NOK 17 billion in 1998. Enterprises with a low or negative equity capital ratio and negative earnings now account for nearly NOK 9 billion, or 53% of total long-term debt (see Chart 3.24). The recent increase in the number of business failures in the industry appears to confirm this negative trend.

Engineering industry (including shipbuilding). Total long-term debt in the engineering industry edged up from 1997 to 1998, whereas debt in enterprises with a low or negative equity ratio and negative earnings declined from NOK 2.6 billion to NOK 1.4 billion over the same period. Other key indicators only showed marginal changes. Data for the engineering industry indicate that financial institutions are not particularly exposed to losses in connection with this industry.

Accounting figures for 1998 do not, however, capture negative developments, such as empty order books and a substantial number of redundancies, in segments of the industry this year.

Other industries. There have been relatively small changes in the following industries: commercial services, food and alcoholic beverages, tobacco, etc., fishery, the distributive trades and hotel and restaurant. Total long-term debt in enterprises with a low or negative equity ratio and negative earnings was reduced in the first three industries in 1998, whereas a marginal increase was recorded in the latter two industries. Changes in other key indicators were also moderate. There is therefore reason to assume that the loss outlook in these industries has not changed significantly.

Regions and industries. Table 3.3 shows total long-term debt in the most risk-exposed enterprises by industry and region. The table shows that the greatest potential for loss is in the property management, shipping and pipeline transport and construction industries in the central, eastern region of Norway.

Tabell 3.3 *Long-term debt in enterprises with low or negative equity capital and negative earnings, by region and sector. Figures for 1998, in millions of NOK.*

NOKm	North[1]	West[2]	South[3]	East[4]	Inland[5]	Oslo/ Akershus
Property management	2266	1843	1743	1275	450	19548
Shipping and pipeline transport	359	1806	2134	681	24	18619
Retail trade	791	1210	642	812	413	4391
Commercial services	171	293	240	231	40	3196
Construction	258	284	146	109	58	7993
Engineering	116	380	247	199	309	105
Food and drink	228	287	112	49	32	96
Hotel and restaurant	301	224	177	156	214	564
Fishing and trapping	605	489	81	1	0	0
Sum all sectors	5095	6816	5522	3513	1504	54512

[1] Finnmark, Troms, Nordland, Nord- and Sør-Trøndelag
[2] Møre og Romsdal, Sogn og Fjordane, Hordaland
[3] Rogaland, Aust- og Vest-Agder
[4] Vestfold, Østfold, Buskerud
[5] Oppland, Hedmark, Telemark

Commitments to enterprises most exposed to risk in the fishing industry are largely concentrated in the county of northern Norway and along the west coast of Norway. The highest risk exposure in connection with loans to the engineering industry is linked to enterprises in western and southern Norway, whereas particularly exposed commitments in the hotel and restaurant industry are to be found largely in northern Norway and the Oslo/Akershus region. However, the potential for losses in these industries is marginal compared with the property management and shipping and pipeline transport industries.

4 FINANCIAL EXPOSURE IN THE FINANCIAL SECTOR

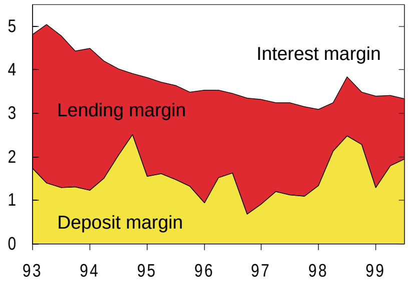
4.1 Competition in the financial industry

Correct pricing of products in the financial industry is harder than in many other industries. Financial institutions seek to set a price that covers financing costs, administration costs and risk, as well as providing a satisfactory return on equity. Pricing risk is particularly difficult, as institutions do not always have all the information they require. Competition in the financial market also sets limits on the maximum price an institution can demand. In some segments of the industry, the profitability margin is very low due to keen competition.

Higher interest margin due to changes in interest rates

Changes in banks' interest margins[15] provide an indication of the intensity of competition in the banking market. The interest margin declined from the start of the 1990s, and finally troughed at 3.1% in the first quarter of 1998 (see Chart 4.1), only to increase sharply to 3.8% in the third quarter of 1998 as a result of the rise in interest rates last year. The interest margin then narrowed again, and has remained relatively stable through the last three quarters at 3.4-3.5%. This raises the question of whether this is a new "equilibrium level" or whether the interest margin will change in the period ahead.

Chart 4.1 *Banks' deposit and lending margins, and overall interest margin. Per cent*



Source: Norges Bank

The interest margin can be divided into a deposit margin and a lending margin[16]. The deposit margin was very low until the start of 1998, but then increased substantially for a period in connection with the interest rate hikes in 1998. Money market rates have since fallen again, and the stock market has followed a positive trend, making it more attractive to invest in the securities market (see Section 2). Competition for savings may therefore force banks to reduce the deposit margin further.

The lending margin has fluctuated in the last few quarters, probably as a result of the changes in interest rates. Credit demand is expected to slow in the period ahead (see Section 3). In isolation, this implies intensified competition among financial institutions for customer credit, which indicates a reduction in the lending margin. The analysis presented in Section 3 implies that bank lending to enterprises has become more risky, which suggests higher lending margins. However, actual losses continue to be moderate, and both commercial

[15] The interest margin is defined as the difference between banks' average interest rates on all loans, excluding non-accrual loans, and customer deposits.

[16] The deposit margin is defined as the difference between the effective three-month NIBOR rate and average interest on deposits. The lending margin is defined as the difference between average interest rates for all loans, excluding non-accrual loans, and the effective three-month NIBOR rate.

and savings banks recorded better profits after tax in the first three quarters of 1999 than in the same period in 1998 (see Section 4.2). Strong competition implies that prices set by the banking industry will not be sufficient to offset the higher credit risk, until losses increase and profits deteriorate.

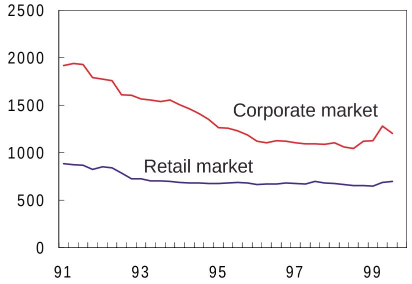
Competition for customers remains strong

The Nordic banks' acquisition of Norwegian banks is not likely to have major consequences for competition in the short term. In the medium term, Nordic banks will probably use these acquisitions as a basis for further expansion in Norway. These banks will constitute tough competition for Norwegian banks, as they have substantial expertise and capital. The Nordic banks are likely to use low prices as a means to enter new markets, at least in parts of the mass market. This may lead to pressure on interest margins.

There is currently little indication that the introduction of the euro has had any significant impact on Norwegian banks' competitive position. The consequences may, however, be greater over time. Among other things, the euro may amplify existing trends in connection with growing cross-border competition and larger securities markets.

There have been a number of mergers and acquisitions within the Norwegian financial industry in the past year. In isolation, this will weaken competition, which may help to curb the downward pressure on margins. Measured by the Herfindahl Index[17], concentration in the Norwegian banking market remains low in relative terms (see Chart 4.2) and competition is expected to be strong in most segments of the market.

Chart 4.2 *Market concentration. Herfindahl index for commercial and savings bank lending[1]. Index value*



[1] In the calculations, DnB and Postbanken are merged from the end of the first half of 1999

Source: Norges Bank

Technological developments and new distribution channels also help to dismantle barriers to entering the banking market for both new participants and for existing participants hoping to enter new parts of the market. There are currently strong underlying forces fuelling increased competition.

All in all, the total interest rate margin is expected to narrow slightly in the short term. In the longer term, however, banks' loan losses are likely to increase. In addition, several of the largest banks will again find themselves in a tax position, which will weaken results. If banks are to achieve sufficient earnings to provide shareholders and owners of primary capital certificates with a satisfactory return on invested capital, they will probably have to implement measures such as cost reductions and higher interest margins.

[17] The Herfindahl Index is used to measure the concentration in the market for private and commercial loans. US competition authorities interpret a market where the Herfindahl Index is under 1000 as a market with low concentration and a market with values in excess of 1800 as concentrated. According to this measure, the market for private and commercial loans has low concentration. Index values are higher for the commercial loans market, but the market can still not be regarded as concentrated.

4.2 Profit trends and balance sheets

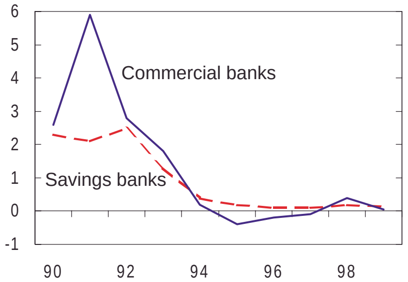
Table 4.1 *Operating results and financial strength of commercial banks.[1] First three quarters of 1998 and 1999. In billions of NOK and as a % of ATA*

	NOK bn		% of ATA	
	Q3 98	Q3 99	Q3 98	Q3 99
Net interest income	7.4	8.3	1.92	2.00
Non-interest income	3.5	5.2	0.90	1.24
Other operating expenses	7.5	7.5	1.96	1.80
Pre-loss operating profit	3.3	6.0	0.87	1.44
Recorded losses	0.5	0.2	0.12	0.04
Write-down/losses long-term securities	0.1	-0.4	0.02	-0.09
Pre-tax operating profit	2.8	6.2	0.73	1.49
Core capital ratio[2]			7.2	7.7

[1] Norwegian parent banks excluding foreign-owned branches in Norway, Norwegian branches abroad and Postbanken
[2] As a percentage of the basis of measurement

Source: Norges Bank

Chart 4.3 *Recorded losses by commercial and savings banks [1]. Losses as a percentage of gross lending other than to financial institutions*



[1] Incl. branches of Norwegian banks abroad and foreign-owned branches or subsidiaries in Norway

Source: Norges Bank

Table 4.2 *Operating results and financial strength in savings banks. First three quarters of 1998 and 1999. In billions of NOK and as a % of ATA*

	NOK bn		% of ATA	
	Q3 98	Q3 99	Q3 98	Q3 99
Net interest income	7.8	9.3	2.72	2.87
Other operating income	1.8	3.5	0.63	1.07
Other operating expenses	6.1	6.8	2.13	2.09
Pre-loss operating profit	3.5	6.0	1.22	1.84
Recorded losses	0.2	0.5	0.08	0.17
Write-down/loss long-term securities.	-0.1	-0.4	-0.04	-0.11
Pre-tax operating profit	3.4	5.8	1.18	1.79
Core capital ratio[1]			10.5	10.3

[1] As a percentage of the basis of measurement

Source: Norges Bank

Positive profit trend in the first three quarters of 1999

Commercial banks'[18] ordinary operating profit before tax was considerably better in the first three quarters of 1999 than in the same period in 1998, measured both in NOK and as a share of average total assets (ATA) (see Table 4.1). The improvement is primarily due to a sharp increase in non-interest income, as a result of positive financial market developments in the first three quarters of the year. The improvement in non-interest income is in part attributable to new accounting rules. Higher net interest income and a reduction in other operating expenses (as a share of ATA) also contributed to improved profits. Recorded losses remained very low at the end of the first three quarters, in contrast to 1998, when losses rose sharply in the third quarter (see Chart 4.3).

The improvement in net interest income is primarily due to a higher interest margin than in 1998 (see Chart 4.1) and presentation of interest margins in Section 4.1. Net interest income is also influenced by a positive trend in the composition of balance sheets. Customer deposits have grown more than lending in the past twelve months, and the deposit to loan ratio has therefore improved.

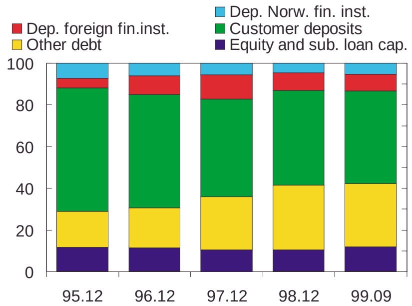
Commercial banks' other operating expenses remained unchanged, in nominal terms, from the first three quarters of 1998 to the same period this year. Cost trends were therefore more favourable than in 1998, when nominal costs rose by nearly 8% on the year before. Measured as a share of ATA, expenses edged down by 0.16 percentage point in the first three quarters of 1999, compared with the same period last year.

Savings banks' ordinary operating profit before tax also improved considerably in the first three quarters of 1999 on the same period in 1998 (see Table 4.2), for largely the same reasons as commercial banks. Net interest income rose more for savings banks than for commercial banks, as a result of a greater increase in the interest margin. Savings banks recorded a considerably lower rise in nominal costs than commercial banks from 1997 to 1998, whereas the contrary was the case in the first three quarters of 1999. Savings banks recorded a nominal increase of 11.9% in other operating expenses, compared with the first three quarters of 1998, but figures are influenced, among other things, by Sparbanken NOR's merger with Gjensidige Bank.

Other operating income as a share of ATA rose more for savings banks than for commercial banks. One reason for this may be that savings banks hedge their securities portfolios to a

[18] The commercial banks group comprises all commercial banks (parent banks), excluding Postbanken, foreign bank branches in Norway and Norwegian bank branches abroad.

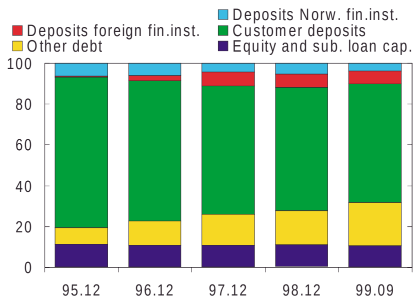
Chart 4.4 *Financing structure of commercial banks [1]. Percentage of ATA*



[1] Excluding Postbanken, foreign-owned branches in Norway and branches of Norwegian banks abroad

Source: Norges Bank

Chart 4.5 *Financing structure of savings banks. Percentage of ATA*



Source: Norges Bank

lesser degree than commercial banks, so that the fluctuations are greater. In addition, accounting figures show that, in contrast to commercial banks, there was a sharp increase in recorded losses for savings banks, although losses in savings banks remain at a very low level (see Chart 4.3).

Overall, developments indicate that banks' ordinary operating profit will be considerably higher in 1999 than in 1998. Much of the improvement in profits is, however, ascribable to one-off effects, and banks' underlying earnings have not necessarily improved. In other words, banks must continue to prioritise cost reductions and other measures to improve profits, in order to maintain or improve financial strength.

Banks' balance sheets and financial strength

Developments in banks' financing structure appear to have been more positive in 1998 and 1999 than in the three preceding years. Charts 4.4 and 4.5 show a reduction in foreign financing at the shortest end of the market, compared with end-1997, and the trend towards an increasingly lower share of customer deposits has ceased. The liquidity risk therefore appears to have been reduced somewhat.

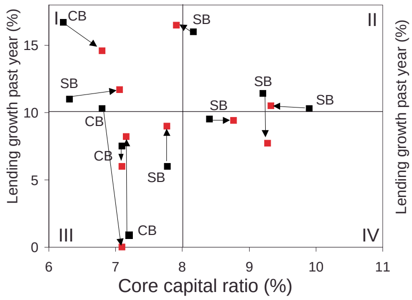
Other debt has increased in line with the steady fall in the share of customer deposits. In both bank groups, bonds accounted for just under 60% and commercial paper debt for around 20% of debt. These shares have remained more or less unchanged for commercial banks in recent years, whereas the share for bonds has increased in relation to the share for commercial paper for savings banks.

In the last twelve months, growth in deposits for both bank groups as a whole, has exceeded lending growth, and the deposit to loan ratio has therefore improved. However, the ratio has narrowed so far in 1999, compared with end-1998, which may reflect the general downward trend in interest rates and the positive trend in the stock market. This type of development normally results in customers choosing other forms of saving rather than bank deposits.

Commercial banks' assets have become more liquid in the past twelve months, as the share of cash and deposits has increased, whereas the lending share has fallen somewhat. The opposite has happened in savings banks, with a slight decrease in the share of cash and deposits, and a marginal increase in the lending share.

Financial strength (core capital ratio) in banks deteriorated in 1996 and 1997, but remained stable from 1997 to 1998. Figures for the first three quarters of this year (see Tables 4.1 and 4.2) show that the core capital ratio has increased slightly for commercial banks on the same period in 1998, whereas there has been a slight fall for savings banks. The difference between the two bank groups may in part be ascribable to higher lending growth for savings banks than for commercial banks

Chart 4.6 *Core capital ratio and 12-month lending growth in largest banks*[1] *at the end of Q3 1998 and Q3 1999*



[1] Parent banks excl. Postbanken. After transfers
CB = Commercial banks SB = Savings banks

Source: Norges Bank

Changes in the core capital ratio for the ten largest banks are shown in Chart 4.6[19]. The chart shows a mixed but primarily positive trend. Only two banks have recorded a decline in their core capital ratio, and that was from a high level. However, both these banks have also recorded an small increase in lending. Of the banks with a relatively low core capital ratio, ie under 8%, three commercial banks have reduced lending growth (one considerably), whereas one commercial bank and two savings banks have recorded an increase in lending growth. At the end of the third quarter 1999, there are still three banks in Area 1 (those most exposed to risk).

Overall, a more positive trend for banks in coming years

Developments in the banking sector have generally been positive this year. The favourable profit trend is, however, to a large extent a result of changes in accounting rules, a favourable trend in the securities market and the rise in interest rates last autumn, which increased the interest margin.

There are indications that profits will be weaker in the period ahead than those recorded so far in 1999. Continued strong competition in the financial services industry will probably result in pressure on margins, and the abnormally low level of losses in banks is not likely to continue. Developments in segments of the enterprise sector indicate a sharp increase in credit risk. If cyclical trends are as expected, this will result in higher loan losses in the next few years. Although banks' earnings are expected to decline in the period ahead, expectations of slow growth in credit will help to maintain financial strength in banks.

[19] Banks in Area 1 have high lending growth and a relatively low core capital ratio. Area II is characterised by high lending growth and a relatively high core capital ratio. In Area III, lending growth and the core capital ratio are relatively low, whereas banks in Area IV are characterised by a sound core capital ratio and low lending growth. This entails that if a bank moves downwards and to the right from one year to the next, lending growth falls and the core capital ratio increases, ie exposure to risk is reduced.

Preparations in the financial sector for the year 2000

In the Government's management plan for the transition to the year 2000, the financial sector is defined as one of seven critical sectors. All market participants have primary responsibility for their own preparations for 2000. The Banking, Insurance and Securities Commission and Norges Bank are responsible for following up these preparations, and for preparations in the sector's joint systems.

In a summary of the last survey of the preparations of the market participants and the clearing and settlement systems they use, dated 30 June 1999, the Banking, Insurance and Securities Commission concluded that preparations were satisfactory. The Commission found no reason to believe that problems would arise in connection with the transition to the next millennium in these areas.

Financial infrastructure

The banking and financial sectors are extremely dependent on IT systems, which in turn rely on access to telecommunications systems and an electricity supply. Payment orders and financial transactions pass through the systems of several participants in the sector.

The payment system relies on a smooth-functioning financial infrastructure in order to function efficiently, and on participants carrying out their responsibilities and meeting their obligations as intended. Testing and trail runs to ensure that the infrastructure can cope with the transition to the next millennium, and that participants are prepared to solve any problems that may arise together, have therefore been important elements in preparations in the payments system for the transition to 2000.

In line with its obligation to ensure a robust and efficient payments system, Norges Bank has been responsible for the follow-up of preparations in the payments system's common infrastructure. As part of this work, Norges Bank has established a working group and a contingency group (Continuity Group), which include representatives from the financial sector.

The working group is responsible for ensuring the smoothest possible transition to 2000 for electronic funds transfer systems. The group has evaluated the joint tests that have been completed and all submitted plans, and has concluded that there is no need to recommend any further tests of joint functions within the payments system. Furthermore, the working group is of the view that the banking industry's strategy and action plans for information are sound and thoroughly elaborated, and that there is therefore no need to propose any further joint information measures.

The Continuity Group is responsible for the implementation and coordination of measures to resolve crises and other situations which may result in major disturbances in the financial infrastructure. In a crisis situation, the group is obligated to notify and inform affected participants and authorities of the problems that have arisen and the measures to be implemented in order to solve them. The intention is that the Continuity Group will become a permanent feature of the payments system, but in the first instance that they are prepared to deal with any problems that may arise in connection with the transition to the new millennium. Preparations have included the establishment and testing of routines for information and notification to affected participants and authorities.

Liquidity

The recent rise in international money market rates reflects fears that financial markets will experience a liquidity shortfall in connection with the transition to 2000. Norges Bank will, as at all other times of the year, supply the money market with sufficient liquidity at the start of the new year. Contingency plans have also been made for a larger than normal supply of cash.

It is possible that activity in parts of the financial market will be lower and in some areas deviate more in connection with the transition to 2000, than that which is the norm at the end of the year. Norges Bank does not expect the turn of the millennium to entail any serious disturbances in the financial system.