

Risk and growth in the financial industry

Speech by Governor Svein Gjedrem at the Annual meeting of the Norwegian Savings Banks' Association in Bergen on 27 October 2005

The speech does not contain assessments of the economic situation or the monetary stance. Please note that the text below may differ slightly from the actual presentation.

1. Introduction

Over the past decades, debt and financial assets have risen sharply worldwide. The financial system serving lenders and borrowers has also expanded. The number of participants in these markets has soared, some new operators have appeared and a broad range of instruments has emerged. Growth in financial markets provides the basis for more efficient use and distribution of capital and for improved risk management. Developments in the financial industry have thus contributed to stronger and more stable economic global growth over the past decades.

New instruments have increased banks' possibilities of managing risk, among other things credit risk associated with lending. In many countries, growth in household borrowing has been high for several years. In Norway, mortgage loans account for an increasing share of banks' balance sheets.

I will now discuss different aspects of this.

2. Developments in the financial sector

Scale and size of the various markets

Financial markets have expanded strongly in many countries, partly as a result of extensive deregulation in the financial sector in the 1970s and 1980s. Technological advances reduced the effect of regulation and have, together with institutional changes, made it possible for market participants to respond in improved and more efficient ways. Credit institutions' total assets have increased sharply over the past few years in all countries in the comparison.

Banks' total assets, as a share of GDP, are not particularly high in Norway compared with other countries, even though banks are the main lenders to Norwegian households and enterprises. This may be because Norwegian banks extend few loans to the public sector and to foreign borrowers compared with banks in other countries, and because Norwegian enterprises borrow from foreign credit institutions more than enterprises in other countries.

Banks' total assets have increased while the number of employees and person-hours has declined. Productivity growth has been strong.

Direct mediation of assets and liabilities through the securities market has also increased. Nevertheless, bonds and notes do not account for more than about 7 per cent of domestic debt. This share has remained fairly stable in recent years. Private enterprises borrow less in the domestic bond market than enterprises in other countries. Particularly in the US, lending through these markets is well established.

The financial system in Norway is largely dominated by banks. Banks have a total market share of over 50 per cent, while mortgage companies and finance companies have a combined share of 14 per cent.

Growth in financial markets makes it easier to channel savings surpluses to customers with sound investment plans. It also makes it easier to diversify risk. Both enhance the economy's growth potential. At the same time, a larger financial sector may increase the consequences of financial instability for the real economy.

As a result of globalisation, debt and financial assets are now more widely distributed across countries. Home bias has declined. This has reduced the risk in the financial system and improved the relationship between risk and return. The Government Petroleum Fund has contributed to a sharp decline in home bias in Norway. In recent years, Norwegian life insurance companies have also invested more of their capital abroad.

Tendency towards larger entities and increased concentration

National consolidation

In the past few years, domestic mergers and acquisitions have been a central feature of the European banking industry. Concentration, which can for example be measured by the size of the five largest credit institutions, varies considerably across countries. However, concentration generally appears to be higher in small countries than in large ones. It is not particularly high in Norway, and is lower than in Denmark, Finland and Sweden.

Developments in the number of credit institutions are another measure of market consolidation. The total number of credit institutions in the euro area has been sharply reduced over the past eight years. The number has declined from 29 institutions per million inhabitants in 1997 to 21 in 2004.

The high level of concentration in small countries may be an indication that there are economies of scale in the financial industry. In large countries, even banks with small market shares can achieve economies of scale. Large credit institutions offering a range of services can also achieve economies of scope by selling several types of product to the same customer.

Norway has more banks per capita than the euro area, and the number of banks has remained fairly stable over the past few years. One reason may be that bank alliances have allowed smaller banks to benefit from economies of scale and scope. This occurs in part through integrated technology and product development solutions, and the sharing of knowledge and expertise. In addition, the number of foreign operators in Norway has increased.

Concentration in the banking industry also results in a concentration of risk. At the same time, larger entities may manage risk better than smaller entities.

Cross-border activity

In countries with a high level of concentration, more consolidation may weaken competition. Particularly in small countries, it has been necessary for banks to establish activities in other countries in order to achieve economies of scale. In the Nordic countries, Nordic financial conglomerates have emerged in recent years, and the largest banks now define the entire Nordic region as their domestic market. The Nordic region is very advanced in the development of cross-border solutions.

Foreign bank branches and subsidiaries have more than doubled their market share in the Norwegian banking market since 1999. The share is considerably higher than in Sweden and Denmark, although the proportion of foreign institutions has also increased markedly in these countries. The sharp rise in Finland is due to Nordea's becoming a Swedish rather than a Finnish bank in 2004.

Cross-border activity contributes to increased competition, a wider range of options for operators and the sharing of expertise. With banks from several geographical markets, the financial system is also less vulnerable to cyclical developments in any one country.

Growth in new, less well-known markets makes risk assessment more demanding. A consequence of cross-border institutions may also be that turbulence in financial markets in one country more easily spills over to other countries. Moreover, a crisis may be more complicated to resolve in an internationally active institution than in a national institution.

Conglomerates

The trend in financial markets is moving towards large financial conglomerates and alliances. In addition to traditional banking services, these conglomerates also offer other financial services. Large banking and financial groups in Norway have substantial market shares in several sectors. Compared with other Nordic banking conglomerates, Norwegian banking conglomerates earn a larger share of their revenues from services outside the bank itself.

Banks that grow into other sectors will face challenges relating to risk management, product knowledge and customer relations. Banks' exposure to reputation risk also changes since problems in another, non-banking part of the conglomerate may influence and damage the bank's reputation. In terms of financial stability, it may nonetheless be an advantage that bank conglomerates spread their revenue base. This is particularly true if earnings from new activities do not fluctuate in step with earnings from traditional banking activities. However, this is not entirely certain since most sources of bank revenues failed during the banking crisis at the beginning of the 1990s.

Risk diversification through the securities market

Credit that is channelled directly through the securities market diversifies risk and thereby eases the burden on the banking system. Developments in the securities market have made

it easier for banks to vary their financing. In addition, the emergence of a number of new credit sources and new instruments has made it possible for banks to engage in risk trading. Therefore, it has also become easier for banks to diversify risk.

The structure of the financial system varies considerably across countries. This is illustrated by the different ways enterprises finance their activities. Norwegian enterprises have a fairly low level of borrowing in the bond and short-term paper market, representing as little as 8 per cent of total financing.

Different financing structures mean that the risk associated with extending credit and providing other financial services varies across countries. It is an advantage for enterprises and other operators in the financial market to have several financing sources to draw on. If problems arise in parts of the financial system, operators can find alternative sources of credit. A larger bond market would enhance financial stability. This is also the case in Norway.

New investment and risk management instruments

Structural changes and strong growth over the past decades have led to more perfect financial markets. This has made the markets more efficient and improved the distribution of resources and risk between operators, sectors and regions, and over time. There is rapid growth in product development in financial markets, and trading in instruments for the transfer of credit risk is rising. Greater focus on risk management by banks and other operators generates demand for these products. The emergence of new instruments is being driven forward by intensified competition, technological developments and new, more risk-based capital adequacy requirements.

In many countries, there has been a tendency towards separating those who provide loans and who assess and price the risk, from those who take over the loans and bear the risk. Through securitisation, banks can sell entire loan portfolios to special purpose vehicles that issue bonds that are collateralised by these loans. It is the buyers of these bonds that bear the risk. Such special purpose vehicles are not subject to capital adequacy requirements or supervision. Asset-backed bonds are a similar instrument where bond holders have collateral in loans that banks have transferred to a mortgage company. Mortgage companies are subject to supervision and capital adequacy requirements. Efforts are being made to allow these instruments in Norway. Use of these instruments will probably strengthen the bond market and thereby improve the diversification and management of risk.

In recent years, we have seen the development of new instruments that make it possible to sell the credit risk associated with a loan while the actual loan remains on the balance sheet. This makes it easier to diversify and manage risk. A credit default swap is a type of credit insurance contract linked to one or more loans. The purchaser of the contract is guaranteed payment if the loan defaults. The contract issuer must pay.

Collateralised debt obligations, or CDOs, are another popular instrument. Simplified, this is often a corporate loan that has been transferred from a bank and split into tranches with varying risk profiles. Debt instruments are issued for the various tranches. If the loan

defaults, the first losses will be incurred by the lowest tranche (which has the highest risk). The bank that has transferred the loan often holds this tranche. The tranche that incurs losses last will thus be very secure. The return in the various tranches will naturally be related to risk. In this way, it is possible to create many different combinations of risk and return and tailor them to individual investors. Synthetic CDOs involve credit default swaps rather than loans. This makes it even easier to achieve the combination of risk and return the investor is seeking.

In the global market, banks are net buyers of risk protection, whereas insurance companies are net sellers. Nevertheless, the majority of transactions are between banks and not between banks and insurance companies.

In terms of financial stability, there are both advantages and disadvantages to these new instruments. Among other things, they allow the transfer of risk to market participants that are willing to bear it. Such participants are often specialised and well equipped to bear the risk. If the credit risk is spread to market participants outside the banking sector, banks' risk exposure is reduced.

Disadvantages arise if there is a concentration rather than a diversification of risk on the buyer side. If individual market participants take on too much risk, their counterparties (such as banks) may be exposed to losses. There is always a risk that buyers lack sufficient knowledge of new products. Another problem has been that the new markets' infrastructure has not kept pace with turnover so that operational risk in the system has increased.

Risk management implies that investors take into account how risk and return are correlated for different investments. Normally, such assessments are based on correlations under normal circumstances, and the challenge lies in dealing with a completely different correlation during a crisis. New instruments can make such risk management more demanding. There may be poor liquidity in these markets and this can increase price fluctuations during a crisis and spread turbulence from one market to another.

In general, the new instruments for risk management and diversification have probably contributed to stronger and more stable economic growth. As a result, economies have become more efficient. Thus far, it also appears that improved opportunities for risk management have resulted in more stable developments. The consequences of considerable financial turbulence, as for example when the IT bubble burst in 2000, have become less severe than earlier. Norway is lagging behind international developments in this area, together with a number of other European countries.

3. Developments in the household sector and house prices

In recent years, considerable attention has been focused on higher house prices and strong growth in household debt in many countries, including Norway. The International Monetary Fund (IMF), for example, has expressed concern that house prices may be too high in relation to fundamentals in some countries. A sharp fall in house prices or other financial assets can trigger turbulence in financial markets.

Norges Bank's analyses show that high house prices may explain most of the growth in household debt. Sales of new dwellings have also made a positive contribution. The contribution from interest rate changes was high in 2003 and 2004, but has diminished recently. Lower unemployment in 2004 and increased house sales have pushed up debt growth.

Higher house prices affect debt for a long period. Changes in the loan-to-asset value ratio of a dwelling is closely related to turnover and only a small share of the housing stock is for sale at any given time. Even if house prices stabilise following a sharp rise, there will be a long period during which houses change hands at a higher price level than the last time they were sold.

What influences developments in the housing market?

Norges Bank's calculations show that high wage income has pushed up house prices. The contribution from interest rate changes has also been high in the past two years but has diminished somewhat recently. Interest rate changes have a strong and rapid impact.

From 2004, housing starts were substantially as a result of high house prices, low interest rates and a favourable economic outlook. In Oslo in particular, housing starts have been high. A higher supply of dwellings will reduce pressures in the housing market.

When we increase the interest rate, we expect house prices to rise at a slower pace. Norges Bank increased the interest rate by $\frac{1}{4}$ percentage point last summer. Before this increase, banks' mortgage rates fell, even though Norges Bank's sight deposit rate remained unchanged. Stiff competition for mortgage loans and lower capital requirements for mortgage loans when the Basel II Accord comes into force may have contributed to this.

In recent years, nominal long-term interest rates have fallen more than inflation. The real interest rate has declined. This may not only be an expression of economic conditions, but may also reflect a lower normal level for real interest rates. A lower normal real interest rate level will result in higher equilibrium prices for all capital goods, including houses, because the present value of future returns increases.

Norges Bank's estimates, which are based on the assumption that interest rates in Norway will increase gradually¹, show that the rise in house prices will slow until 2008 and then stabilise. As the chart illustrates, there is considerable uncertainty associated with such estimates and we may also experience that prices fall.

Household wealth

In recent years, higher house prices have resulted in increased housing wealth. There is considerable uncertainty associated with estimates for housing wealth, but a conservative estimate indicates that housing wealth is 11 per cent higher than household financial assets and more than 40 per cent higher than household debt.

Household gross financial assets have also increased more than debt in recent years (measured in NOK). This financial buffer reduces some of the concern related to debt growth. Nonetheless, developments in saving are uncertain. Credit market statistics may indicate that saving has declined considerably and is now fairly low after adjusting for the fact that owners are ploughing huge profits back into their companies as equity capital. The national accounts present a picture of higher saving.

Total debt is unevenly distributed

Developments in assets and debt are, naturally, unevenly distributed among different groups of households. Compared with the 1980s, the debt burden has increased in low- and middle-income households (deciles 1-6), often younger households in the start-up phase. This partly reflects changes in the tax system. Before the tax reform in 1992, extensive borrowing was very profitable for individuals with high income.

In order to shed further light on the distribution of debt and assets between households, Norges Bank now analyses data for households included in the income and wealth survey published by Statistics Norway (2003). The data cover 17,000 households, of which 14,000 have debt. The chart on the left presents the relationship between gross income and debt for households with debt. The households with the highest debt and income have been excluded. For approximately 1,400 households, debt is higher than three times their income. For the entire population, this figure would be scarcely 200,000 households.

Income is the first line of defence against debt-servicing problems. The next line of defence is financial assets. The chart on the right shows the relationship between debt and financial assets for the same households. Many of the households have very limited financial assets. Households with less than NOK 19,000 in financial assets account for a total of NOK 198 billion in debt. This represents a quarter of the households.

Consequences of developments in household debt

The household interest burden, i.e. interest expenses after tax in relation to the sum of interest expenses and disposable income, is low despite strong growth in debt. The interest burden will increase, however, when the interest rate reaches a more normal level.

Only 14 per cent of household loans are fixed-rate loans. This is low in relation to other countries and makes households vulnerable to an interest rate increase that is higher than expected.

Losses were low on loans to the household sector compared with loans to the enterprise sector during the banking crisis at the end of the 1980s and beginning of the 1990s. Despite high real interest rates and a decline in income, households were largely able to service their debt. High interest expenses and a decline in income, however, led to a reduction in household consumption. This led subsequently to lower turnover in the enterprise sector and weakened profitability and debt-servicing capacity. In this way, households contributed to an increase in banks' losses on loans to the enterprise sector. The higher the household debt burden is, the stronger the spillover effect can be from households to enterprises.

4. The stability of the financial system

Given the current picture, a sharp increase in bank losses is not likely in the near future. This is also the assessment of the IMF, which recently evaluated the Norwegian financial system. The IMF concluded that the Norwegian financial system is solid and well managed, and that short-term vulnerabilities are low. Even with a strong negative shock to the economy, losses are expected to be far lower than during the banking crisis. This is probably because of the increase in the share of loans to households, for which losses are normally not very high, and because enterprises are now in a far stronger financial position than they were at the end of the 1980s and beginning of the 1990s.

Long periods of strong growth in debt, asset prices and investment may be a source of subsequent instability and problems in the financial system. We have observed this phenomenon both in Norway and in other countries. When optimism turns to pessimism, the financial system can come under pressure. However, it is not possible to determine with any certainty the value of debt, asset prices and investment that may constitute an unacceptable risk in this context.

The pace of growth in household borrowing cannot be sustained over time. It would probably be wise for both borrowers and lenders to acknowledge that the root of subsequent problems, and demanding corrections, is often to be found during such periods.

Thank you for your attention.

Footnotes

¹ See Norges Bank's *Inflation Report 2/05*.

References

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