

Is the financial system stable?

Central Bank Governor Svein Gjedrem. Address at the 2001 Annual Meeting of the Norwegian Savings Banks Association
Haugesund, 18 October 2001

Introduction

The role of the financial industry in the economy has become increasingly important over the last decades. Deregulation and technological advances have increased the industry's opportunities and scope to channel savings to various projects. Strong competition has induced the industry to make use of these new opportunities. The range of saving and financial instruments is becoming ever wider. Systems and financial instruments for managing and controlling risk are becoming more advanced. As a result, it has become easier for households and enterprises to decouple consumption and investment from current income. In the second half of the 1990s, in particular, international capital markets have become more integrated.¹⁾ It has been easier for growing economies to finance investments through a balance-of-payment deficit and foreign capital. At the same time, countries with high savings can increasingly diversify their investments.

Globalisation places increasing demands on the business sector's ability to adapt. New products and technology squeeze out old solutions. This creative destruction, as Schumpeter called it, may foster a more efficient distribution of resources and higher economic growth in the long run. A rapidly changing environment places considerable demands on the financial industry. The financial prospects for a project must be assessed in relation to risk. A diversified portfolio of loans and investments limits expected losses. Losses on one project may be more than offset by gains on another.

Economic growth is cyclical. During an upswing most projects fare better than expected. A deep recession can lead to heavy losses, insolvency and financial crisis. Banks may address this risk by building up sufficient buffers during upturns. Often, this is not done in practice. Instead, financial enterprises tend to place special emphasis on increasing market shares while times are good and allow their capital ratios to fall.

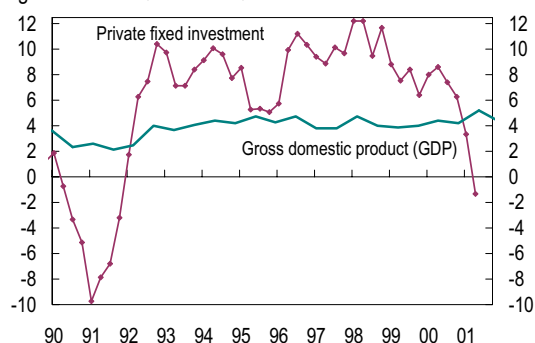
It is during an upturn that the basis for a downturn is laid. Financial crises are often characterised by a first phase when optimism predominates, risk assessments weaken and the willingness to borrow and asset prices increase. When negative news starts to spread, investments fall short of expectations and the mood shifts, asset prices fall and debt-servicing problems accumulate.

A financial bubble can first be identified with certainty after it has burst. There are a growing number of examples of this. After the Asian crisis, which started in

1997, and gradually had global spillover effects, there have been national financial crises in Turkey and Argentina.

During much of the 1990s, the US experienced extensive restructuring and high economic growth. The gap between the US and the rest of the world widened. Investment expanded sharply, particularly in the technology sector. This was made possible by dynamic credit and capital markets. Developments led to a broad expansion in other sectors of the economy and other countries. Restructuring and new technology may also have increased the long-term growth potential of the US economy. The marked turnaround that has now come shows that developments went too far. The technology stock bubble burst. The focus has now shifted towards heavily indebted households and businesses. Banks are expecting higher losses.

Chart 1 Growth in the US in the 1990s. Year-on-year real growth, 1990 Q1 – 2001 Q2



Sources: EcoWin and Norges Bank

The question may arise as to whether financial crises are an inherent feature of a market-based financial system. What can the authorities and the financial industry do to reduce the likelihood of future crises?

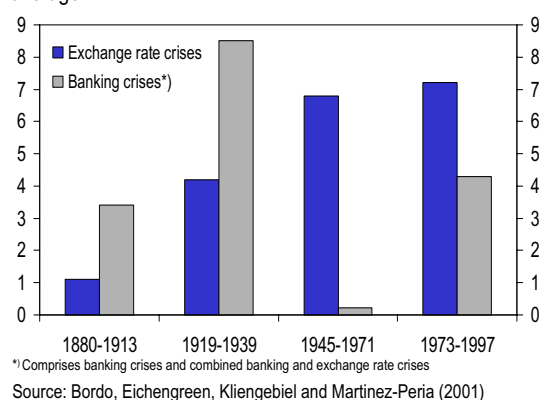
I will take a closer look at certain crisis periods that occurred before World War II and government responses in the form of legislation, regulation and the introduction of a financial safety net. In the decades prior to 1914, financial crises with a pronounced impact on banks were just as frequent as in our time.²⁾ During the interwar period, financial crises occurred even more frequently.

In the period of extensive direct regulation of banks up to the 1970s, there was a virtual absence of banking

¹⁾ See Bank for International Settlements (2001). *71st Annual Report*. Basel

²⁾ Bordo, M., Eichengreen B., Klingebiel, D. and M. S. Martinez-Peria (2001). "Is the crisis problem growing more severe?" CEPR

Chart 2 Frequency of financial crises internationally. Annual average



crises. However, the system was not sustainable and was at the root of many of the problems that followed. With a succession of crises since the early 1980s, financial stability has again become an issue, both at home and abroad. Nevertheless, there is fairly broad consensus as to the merits of a market-based system and free cross-border capital movements. The frequency of financial crises must be reduced by fostering solid financial enterprises. Risk systems must be improved. Market access to information on developments in micro and macro performance must be enhanced in order to strengthen market discipline in the financial industry. Better and uniform standards for accounting and statistics are important. Financial safety nets may offer greater security to households and small enterprises, which have difficulty obtaining an adequate overview of the risks in the financial system. At the same time, however, they must not be so favourable that they encourage irresponsible risk-taking. Central banks are also faced with the challenge of ensuring financial stability through their analyses and monetary policy.

Developments from the 1800s to the present

The regulation of financial institutions has undergone considerable changes. In the 1800s and up to World War I, the regulation of banks and other financial institutions was very limited. Norway was one of the most liberal countries. Regulation in other countries such as the US and the UK was more extensive.

In Norway, savings banks were subject to separate legislation, because they were to have a more social function than commercial banks. There were no guarantee funds, and the law for savings banks was designed to ensure that they were operated in a manner that safeguarded depositors' funds.

Cross-border capital movements were also subject to little or no regulation in the decades prior to 1914.³⁾

³⁾ Bordo, M. D, B. Eichengreen and J. Kim (1998). "Was there really an earlier period of international financial integration comparable to today?" NBER Working papers 6738

Capital markets were integrated in countries that had adopted the gold standard. There was solid confidence in the gold standard, and exchange rate risk was regarded as very low. Movement of capital between countries was often long-term, and tended to be associated with specific projects. As a small, open economy, Norway was totally dependent on an open, smoothly functioning capital market. From 1885 to 1913, the fixed investment rate in Norway was on average higher than the saving ratio.

Although short-term gross capital movements were far from their current levels, they were nevertheless significant. Monetary policy was restricted by the gold standard. Capital was highly mobile, and the interest rate had to be set to ensure that the exchange rate remained between the gold points. As a result, monetary policy could not normally be used to stabilise economic developments. Countries that suspended the gold standard were penalised with higher interest rates.⁴⁾

A look at earlier crises

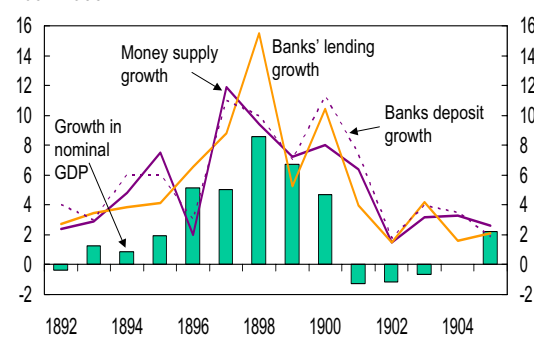
A weak stabilisation policy, relatively ineffective banking legislation combined with a poorly developed financial industry provided fertile ground for many financial crises.

The Oppland crisis occurred in 1864. It was a backlash of the boom in the latter half of the 1850s, when a sharp upswing in the timber industry led to widespread speculation.

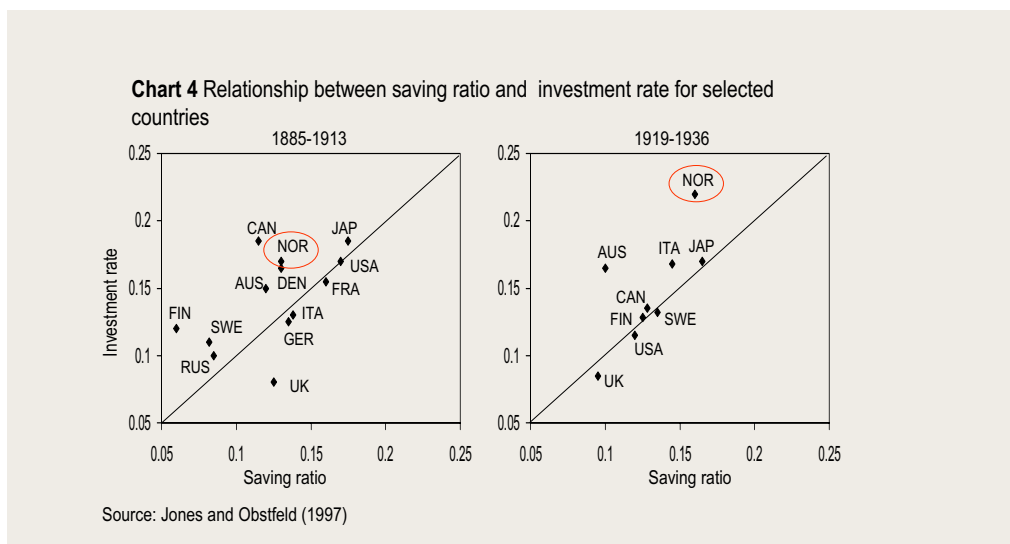
Growth was also very strong in the early 1870s. At the same time, the boom paved the way for a period with the most severe banking disasters up to that time. There was considerable overcapacity in many industries at the time of the turnaround in the international economic situation in 1874. The most serious crash occurred in Arendal in 1886.

Not long afterwards, in the late 1890s, Kristiania (now Oslo) experienced a financial bubble. A favourable international economic situation and the building of railways led to a period of prosperity in the Norwegian economy,

Chart 3 Growth and decline in the 1890s. Annual growth. 1892-1905



⁴⁾ Mauro, P., Sussman, N. and Y. Yafeh (2000). "Emerging Market Spreads: Then Versus Now." IMF Working Paper.



particularly in the capital. The money market was highly liquid as a result of the inflow of gold, and interest rates were relatively low. Growth in banks' deposits and lending increased in pace with the money supply. Kristiania's population grew and there was an explosive period of construction, of both dwellings and commercial buildings. Prices for land, building materials and houses rose dramatically. The crash was triggered in 1899 by a major bankruptcy. The crisis gradually became more acute for Norwegian banks, particularly commercial banks. It had lasting consequences for the Norwegian financial industry and the economy. The stock market was virtually at a standstill until World War I.

The crash compelled Norges Bank, for the first time in its history, to channel crisis liquidity to the banking industry.

The next financial bubble occurred during World War I. During the first half of the war, in particular, there was strong growth in the Norwegian economy. This provided the foundation for a boom that is unparalleled in history. Banks' lending rose sharply. The build-up of risk in the financial system was far more pronounced than in previous episodes. A strong inflow of gold led to uncontrolled growth in the money supply and inflation at the beginning of the war. In addition, the constraints implicit in the gold standard gradually broke down, and the money supply expanded sharply. The banking crisis came in the wake of a cyclical downturn in the early 1920s and can largely be attributed to the build-up of risk during the boom period. The bulk of bank losses occurred before the introduction of parity policy.⁵⁾

The authorities' response

In response to the extensive banking crises in the interwar period, a financial safety net for banks was introduced in most developed countries. In Norway, guaran-

tee funds were introduced for savings banks in 1921 and for commercial banks in 1938. There was also a need for separate rules on public administration of banks. These arrangements helped to dampen the effects of the crises and prevent new ones.

Commercial banks were subject to separate legislation and supervised by the newly established Banking and Savings Bank Inspectorate. Supervision of savings banks commenced as early as 1900, with the establishment of the position of Inspector of Savings Banks. This was probably one reason why savings banks were not as expansive as commercial banks during World War I. Nor were they as severely affected by the banking crisis.

A gradual increase in the regulation and supervision of financial enterprises and the introduction of a financial safety net did not mean that the market-based system was abandoned. However, recessions and demands for more protectionism led to restrictions on international trade and capital movements. The result was that domestic investments increasingly had to be financed through domestic savings. This can be illustrated by looking at the relationship between the saving ratio and the fixed investment rate for selected countries. A strong correlation indicates a limited degree of openness. Measured in this way, integration was greater before 1914 than in the interwar period.⁶⁾ Protectionism had a very harmful effect on economic developments.

After World War II, international organisations were established to promote economic cooperation and their objective was increased integration of international trade and fixed investment. However, cross-border capital movements remained heavily regulated. The same applied to direct regulation of financial enterprises. Other considerations, than returns and risk, took precedence in connection with the provision of credit and capital movements.

⁵⁾ Ecklund, G. J. and S. Knutsen (2000). *Vern mot kriser? Norsk finanstilsyn gjennom 100 år*. (Protection against crises? 100 years of Norwegian financial supervision) Fagbokforlaget.

⁶⁾ Jones, M. T. and M. Obstfeld (1997). "Saving, Investment, and Gold: A Reassessment of Historical Current Account Data". NBER Working Paper Series.

At the end of the 1970s, direct controls were gradually removed. As a result of the emergence of new financial instruments, the controls no longer had the same effect. There was a growing realisation that the existing controls had a negative effect on the allocation of credit and capital, and hence on long-term economic growth. Cross-border capital movements were gradually liberalised. It was not until the 1990s that capital was able to move between countries as freely as before 1914.

Because of the serious effects of financial crises, the financial industry is subject to many regulations and to extensive supervision. The industry is by no means deregulated, but the regulations are now designed to make markets function more securely and more efficiently. Clear requirements have been established for both capital adequacy and liquidity. Nevertheless, the regulations do not eliminate the possibility of financial crises.

Are financial crises an inherent feature of today's system?

The transition to a market-based system has increased the scope for financial cycles.⁷⁾ The cycles may be amplified by unrestricted cross-border capital flows. Because of the central role of the financial industry as a credit and capital intermediary, this can also influence macroeconomic developments. At worst, an upswing in the economy can be amplified through the build-up of financial imbalances, which may trigger and reinforce a downturn and financial crisis.

Technological innovations that increase productivity in the economy may rapidly lead to general optimism and a broad economic upturn. Since the 1800s, we have seen waves of optimism and large-scale investment in railways, shipping, hydroelectric power stations and now, most recently, information technology. Upturns may also be driven, or amplified, by demand-side factors in the economy.

During an upturn, income growth is high in both the enterprise and the household sector. The value of property and securities, and thus the collateral for new loans, rises. Financial and other enterprises are upgraded by credit rating agencies. Banks record low losses and solid results and can increase lending without weakening capital adequacy. Demand for credit can easily be met by obtaining financing on favourable terms in both domestic and foreign money and capital markets. As a rule, it is also easier to raise equity during economic upturns.

Under these circumstances, credit risk may be underestimated and not priced into margins. The financial industry may share in the generally prevailing optimism, and strong competition may lead to a contest for market shares. In this way, banks contribute to building up risk in the financial system. The loans with the highest risk

⁷⁾ See Bank for International Settlements (2001): *71st Annual Report. Basel*

are probably those granted at the peak of the economic cycle. Households and enterprises often have a relatively high debt burden at such times, and loans are secured by inflated property and asset prices.

The securities and capital markets are another important source of capital for enterprises. During an upturn, many enterprises find that capital is “cheap”, because the outlook for the future is regarded as very bright. There is a risk of over-investment.

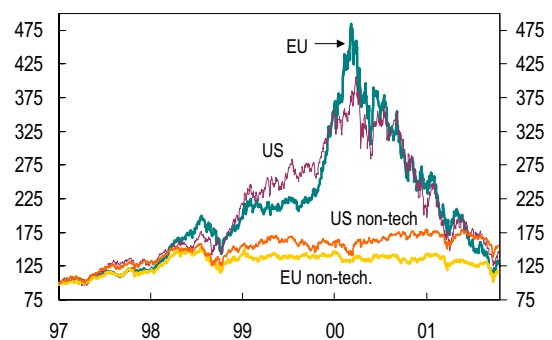
Optimism may rapidly give way to pessimism if investments fall short of expectations and negative news starts to spread. As a result, the risk that has accumulated during the upturn period may materialise. The financial sector may choose to interpret developments as a sign that the risk associated with new projects has also increased, with the result that this risk may be overestimated. A drying up of credit and capital may trigger or amplify a crisis.

The costs of financial instability may be very substantial. Therefore, it is necessary to dampen financial cycles.

The outlook for financial stability

The outlook for the global economy is now weak. The terrorist attacks on the US on 11 September have increased uncertainty. We have witnessed a bubble in technology shares. From 1998, the price of technology shares rose substantially more than earnings, and since March 2000, there has been a sharp correction in prices. Life insurance companies and pension funds, both at home and abroad, have lost a considerable portion of their buffers due to the decline in share prices. Telecommunications companies have been through a phase marked by substantial borrowing. Credit rating companies have downgraded many telcoms due to high debt levels in relation to future prospects. This has increased funding costs.

Chart 5 The technology share bubble. Index, Jan. 1997 = 100. 01.01.97 - 15.10.01



Source: Norges Bank

When economic growth slows, problems in enterprises and countries with high debt burdens rise to the surface. There has been constant unrest in countries like Turkey

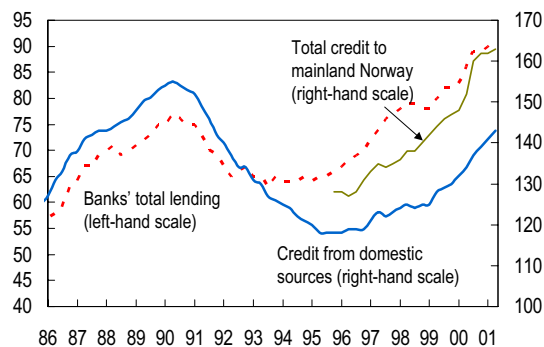
and Argentina, which are struggling with high borrowing costs. Japan has not yet recovered from its more than 10-year-long banking crisis and is vulnerable to new shocks.

Up to this autumn, the effects of the international turnaround on the Norwegian economy were limited. It now appears clear that Norway will also be affected by the slowdown. A number of Norwegian enterprises in export industries and the travel industry have felt the effects of growing caution among households and businesses worldwide. Investment in mainland enterprises will probably also decline.

Domestic credit growth remains high, and since 1993 has been stronger than growth in value added measured in terms of GDP. Banks in particular have contributed to this.

At times, growth in lending has been markedly higher

Chart 6 Credit growth. Percentage of mainland GDP. 1986-2001



Sources: Statistics Norway and Norges Bank

in savings banks than in commercial banks. At the end of August, year-on-year growth in lending was 11.7 per cent for savings banks and 9.2 per cent for commercial banks, when adjusted for portfolio transfers. There seems to be an indication of growing competition for market shares. Savings banks are also competing increasingly in commercial banks' traditional business areas. There is a risk of overcapacity.

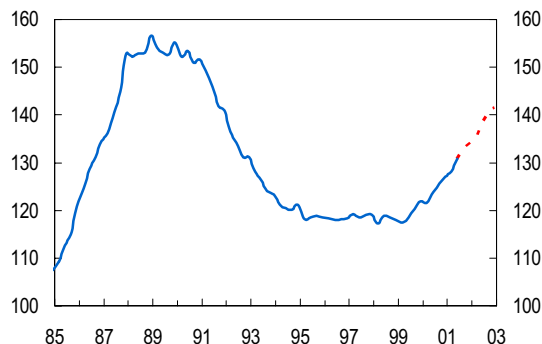
Credit growth in both the household and enterprise sectors has been strong. At the end of August, year-on-year growth was 11 and 9.1 per cent respectively. Growth in lending to the enterprise sector has slowed recently while demand for credit in the household sector has remained stable. Both households and mainland enterprises have increased their debt burden markedly in recent years.

If credit to the household sector continues to grow through next year, household gross debt is expected to increase to more than 140 per cent of disposable income by the end of next year. Even with such high debt, the interest rate will have to rise by more than 3 percentage points for gross interest expenses to constitute the same burden, measured as a percentage of income⁸⁾ as before

⁸⁾ Income here is defined as household disposable income before deduction of gross interest expenses.

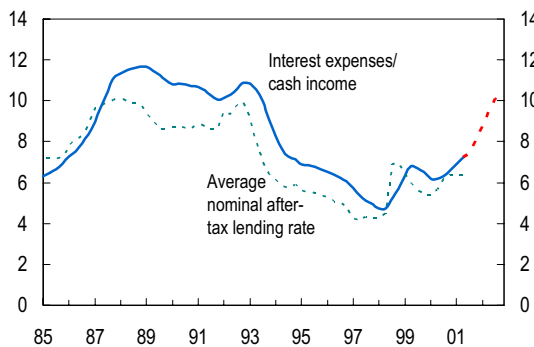
the banking crisis, when it was around 10 per cent. This illustrates that we have a long way to go before households are as vulnerable as they were then, but no one wants us to come that far either.

Chart 7a Household debt servicing capacity. Gross borrowing as a percentage of disposable income



Source: Norges Bank
 --- Assuming lending growth of 11 per cent until end-2002 and an interest rate increase of 3 percentage points from 2000Q4

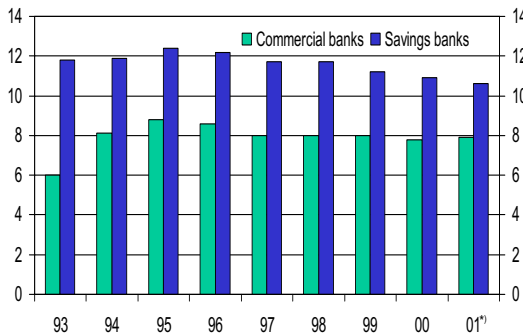
Chart 7b Household debt servicing capacity. Interest expenses as a percentage of cash income



Source: Norges Bank
 --- Assuming lending growth of 11 per cent until end-2002 and an interest rate increase of 3 percentage points from 2000Q4

High credit growth has resulted in a falling core capital ratio. However, capital adequacy ratios at many savings banks remain high.

Chart 8 Banks' core capital ratio. Per cent

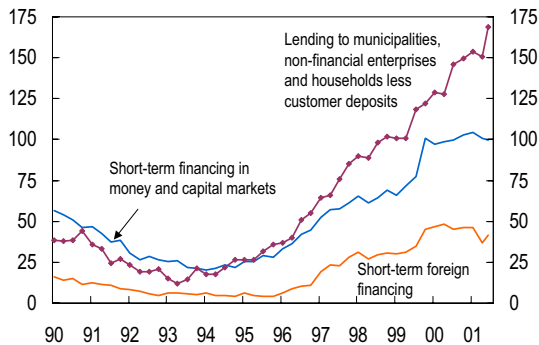


Source: Norges Bank
 *) Surplus for first half year not included

Bank lending has increased more than deposits, and in the last few years banks have become more dependent on money and capital markets. Small and medium-sized

banks have substantially increased their borrowing from other credit institutions. Short-term foreign debt has also risen. Although the decline in stock markets appears to have improved the financing situation in recent months, other forms of saving are expected to compete strongly with bank deposits.

Chart 9 Savings banks' funding requirements. In billions of NOK. March 1990 - August 2001



Source: Norges Bank

In general, foreign borrowing is a source of diversification and thus risk reduction, but it can also spread unrest. By international standards, Norwegian savings banks are small. It can be costly to change a source of funding if one source should dry up. In the event of considerable financial unrest in international financial and capital markets, savings banks may be affected. Today, the shocks are often global.

If the current high credit growth continues, financial stability in Norway will be threatened. We will become more vulnerable to all kinds of shocks. I have already touched upon the weak outlook for the global economy. There is also reason to expect considerable structural changes in the business sector, for example, when economic resources have to be transferred to the public sector and other sheltered sectors. Restructuring may take place within established companies, but may also take place in a far less controlled manner and result in losses for banks and other lenders.

Policy challenges

Like banks and other market participants, the authorities also learn from crises. I will discuss three areas in which we have learned important lessons.

First, economic policy must be oriented towards stable economic development. An inappropriate economic policy has been a contributing cause of crises both in Norway and abroad.

Norges Bank has been given an operational target for monetary policy, which means that monetary policy instruments shall be used with a view to maintaining low and stable inflation. The inflation target is set at 2½

per cent. Low and stable inflation is probably the best contribution monetary policy can make to financial stability. This is also supported by empirical studies.⁹⁾

However, there have been episodes where bubbles have accumulated in the form of sharp increases in asset prices in the property and financial markets while inflation has been low. Developments in Japan in the 1980s and in the US in the 1990s may be examples of this. When the bubbles burst, the result may be an economic downturn. Thus, developments in the financial and property markets may also fuel more unstable inflation. In principle, it might be appropriate to use the interest rate to counter this. In practice, however, it is difficult to assess whether developments in prices for property and financial assets are sustainable.

When Norges Bank concludes that the key rate should be changed, the change will in most cases be made gradually. If special emphasis is placed on developments in financial or property markets when the key rate is changed, Norges Bank will provide an assessment of this.

It is Norges Bank's responsibility to present its view on the risks facing the financial system from a macro-economic perspective. This is the purpose of Financial Stability, a report published twice a year.

Second, the international financial infrastructure must be strengthened. This also entails increased international cooperation.

Many financial crises in the 1980s and up to today have occurred in countries where rules and supervision are relatively ineffective. As a result, the financial sector has become fragile. The capital strength of financial institutions has been inadequate. Deregulation has occurred before the country's financial infrastructure is in place. This has fuelled the build-up of financial bubbles. Large fluctuations in capital movements have often intensified the problems. Elements of this were also present during the banking crisis in the Nordic countries.

The financial safety net should help prevent financial instability and curb the effects if instability should arise. This may also prevent the development of imbalances. Deposit guarantees, crisis liquidity schemes and the assumption that large banks will be rescued by the government may weaken market discipline. The result may be increased risk-taking.

International organisations have developed international codes and standards for the financial infrastructure and for the regulation and supervision of the financial sector, which are in line with good practices.¹⁰⁾ These codes and standards should contribute to improving policy and creating more robust financial systems. They should make it easier for investors and others to keep abreast of developments, which in turn will

⁹⁾ Bordo, M. D., Dueker, M. J. and D. C. Wheelock (2000). "Aggregate price shocks and financial instability: An historical analysis." NBER Working Paper 7652

¹⁰⁾ See BIS, Financial Stability Forum (2001). International Standards and Codes to Strengthen Financial Systems.

increase their ability to assess risks in a country. This will reduce the risk of herd behaviour and the build-up of substantial imbalances.

The International Monetary Fund plays an important role in international surveillance and crisis management. They have substantially strengthened their oversight of the financial systems in member countries. Other international organisations are also intensifying their efforts in the area of financial stability.

In the Nordic countries, both the supervisory authorities and the central banks have expanded their cooperation as a result of the integration of the Nordic banking industry. One question that will arise is whether guarantee funds and other rules and regulations can differ when markets are so closely integrated.

Next year, an important international milestone will be reached when the Basel Committee on Banking Supervision presents the new capital adequacy rules. According to plan, the rules will apply from 2005. Basel II has a three-pillar architecture. First, the rules relating to minimum capital requirements will be further developed. Second, the supervisory authorities will monitor banks more actively. Third, information disclosure requirements will enhance market discipline. Combined, this will constitute a coherent system for protecting the financial strength of banks. The regulations will improve the balance between capital requirements and banks' financial risk. This will also increase the focus on the development of risk management systems.

Finally, I would like to place particular emphasis on the need for market discipline, which is the third pillar in the proposed Basel Capital Accord. Financial stability is dependent on the identification, management and control of risk. This also means that we must factor in risk. This applies to banks in their internal credit routines, and others with interests in banks – shareholders, lenders, bondholders and depositors. Market participants must understand that equity, subordinated loan capital and other claims on banks not covered by deposit guarantees may be lost. The financial industry must therefore be forward-looking. Buffers must be built up in periods of expansion when losses are low and profitability is high.

The financial safety net must be reassessed if it is so favourable that banks and market participants are not encouraged to exercise market discipline. For example, deposit guarantees in Norway cover larger amounts than in many other countries.

Despite the lessons that both the authorities and the financial industry have learned from financial crises, such crises may nevertheless occur in the future. Experience indicates that crises are often a result of inherent processes in the financial system. There is still reason to hope that the authorities through their policies and formulation of rules and the financial industry through its management of risk will reduce the frequency of financial crises.