

Ensuring financial stability in turbulent times

Speech by Governor Øystein Olsen at the Finance Norway conference on 12 April 2011.

The text below may differ from the actual presentation. This speech does not contain assessments of the economic situation or current interest rate setting.

Introduction

< Chart 1: Global GDP growth, advanced and emerging economies >

The experience of the past few years has clearly shown the cost of financial instability. The near seizure of the financial system in autumn 2008 gave rise to the most severe economic downturn of our time. There was a dramatic decline in international trade and in 2009 world GDP decreased for the first time in generations.

Economic policy was used actively in most countries to curb the economic downturn. Substantial resources were deployed in the form of stimulus packages and measures to prevent financial market collapse. Nonetheless, unemployment in the OECD area rose by 15 million in the first year after the outbreak of the crisis. The downturn also led to a sharp fall in tax revenues. Budget deficits ballooned and government debt rose rapidly.

Global economic growth has recovered, but the effects of the financial crisis are still evident and will continue to be for some time yet. Unemployment is still high and the current situation and prospects for several countries bear evidence of strained government finances.

The financial crisis has followed a familiar pattern

Our actions during a financial crisis are very important, but the main task in our work on financial stability must be to prevent crises. History has shown that financial crises arise when financial imbalances have built up over a long period. Our most important task is therefore to contain the build-up of imbalances and secure a robust financial system.

<Chart 2: Run-up to financial crises – clear similarities>

No two financial crises are alike. However, similar features can often be identified in the run-up to the crises. This slide illustrates three features. These elements were also prominent in the unfolding of the most recent global financial crisis.

- The first feature is often a sharp and persistent rise in property and other asset prices.
- The second, strong debt growth, is closely linked to the first. Rising debt and increasing property prices is a mutually reinforcing dynamic. Higher property prices lead to higher collateral values for loans. With easier access to credit, purchasing power increases.

- Debt growth exceeds growth in bank deposits and banks must increasingly resort to market-based funding to finance the rise in lending. They become ever more reliant on market funding, which is often short term.

When this cycle is allowed to continue for a period, the financial system becomes vulnerable.

- Banks accumulate large loans secured on inflated collateral values.
- Borrowers' debt-servicing capacity becomes vulnerable to income loss.
- Banks become dependent on optimal market functioning at all times and on the confidence of market participants.

If this process goes too far, an external shock could turn a situation of vulnerability into a crisis. This is what is referred to as systemic risk – the risk that shocks will weaken the functioning of the financial system, rendering it unable to provide funding, execute payments or redistribute risk effectively. Systemic risk can build up over time through a rapid rise in asset prices and debt and in the form of increasing interdependence among institutions. Or systemic risk can build up when many institutions are exposed to the same risk factor, for example on the funding side.

Vulnerability also in Norway

A financial crisis can be triggered by domestic conditions or it can be triggered by external factors. This time, the crisis came to Norway through external channels. International funding channels dried up, creating a liquidity crisis in the Norwegian banking sector.

We can never fully insulate the financial system from shocks. But we can increase our resilience. One of the ways we can do this is by keeping our own house in order – by preventing major imbalances from building up in the economy or in the financial system, and by ensuring that the financial system in general is robust. We will then also be capable of withstanding disturbances generated by external conditions.

<Chart 3: Vulnerability also built up in Norway [\(1\)](#) >

As shown in Chart 3, there was also a clear build-up of financial vulnerability in Norway prior to the financial crisis.

- The rise in both house prices and debt in Norway was on a par with countries that were much harder hit by the crisis.
- In addition, Norwegian banks had also increasingly financed strong lending growth over a long period with market funding, of which a considerable share was short-term funding. The Norwegian banking sector became increasingly dependent on well functioning international money and capital markets, enabling banks to roll over their funding.

Nonetheless, the liquidity crisis never developed into a solvency crisis in Norway. Perhaps financial sector operators had learned from the previous banking crisis and engaged in more

responsible banking during the upturn. Furthermore, they were subject to stricter banking regulation in some areas. But other factors also played a role.

- Macroeconomic developments after the outbreak of the financial crisis were more favourable in Norway than in other countries. The decline in output and the rise in unemployment were far more limited. Because of particular features of the industry structure in Norway, it took time for the full impact of the international downturn to reach our economy. In the meantime, an expansionary monetary and fiscal policy had begun to take effect. Against the background of relatively favourable macroeconomic conditions, the vulnerability related to a high household debt burden and elevated house prices never translated into higher losses for banks.
- In addition, a number of targeted measures were implemented to mitigate the impact of tighter market funding. Long-term F-loans were provided for 108 banks, and 20 banks and 4 mortgage companies were supported through the swap facility. In addition, capital was supplied to a number of banks through the Norwegian State Finance Fund. These measures were not without financial risk for the Norwegian authorities when they were introduced, although it does not appear that the measures will ultimately prove costly.

On the whole, the Norwegian economy fared well through the financial crisis. Nonetheless, the Norwegian economy and the Norwegian financial system were vulnerable in a number of areas. The continued existence of this vulnerability gives cause for concern.

<Chart 4: Vulnerability still exists>

House prices are now rising rapidly again and have already passed the previous peak levels. Household debt growth in Norway has edged down, but the level of debt shows no signs of falling. Overall indebtedness in the economy is also higher than at the outbreak of the financial crisis and the proportion of market funding is still high. There is therefore every reason to keep a close eye on systemic risk going forward.

Systemic risk and households

In our view monitoring developments in the household sector and the housing market is particularly important. There are many reasons for this.

- A good half of Norwegian banks' loans are extended to households. The bulk of the loans is secured on the dwelling.
- The loans are backed by collateral whose value swings considerably, notably dwellings. Long periods of upswing in the housing market are often followed by periods of decline. Therefore, there is no guarantee that the collateral value will cover the loan in the event of default.
- In addition, variable rate mortgages account for the bulk of housing loans in Norway, which means that changes in short-term interest rates have a substantial impact on household income.

In spite of this, the direct losses associated with loans to households are seldom large in Norway. Even during the banking crisis a good 20 years ago, losses were limited. However, historically low losses are no guarantee of low losses in the future.

<Chart 5: Level of debt high for many households >

The household debt to income ratio is now clearly higher than prior to the banking crisis. The increase has been highest for medium and lower income groups (deciles). As shown in the chart, there are also a far higher number of households that have a high debt to income ratio. The number is sufficiently high to engender negative spillover effects in the economy in the event of an abrupt change in behaviour.

Such spillover effects may have serious implications for bank losses, which is the main reason why we closely follow developments in the household sector in the work on financial stability.

<Chart 6: Interaction between real economy and financial sector>

The interaction between different sectors of the economy and between the real economy and the financial economy is complex. There are reinforcing mechanisms during both upturns and downturns. Norges Bank has therefore devoted considerable resources to developing a suite of models for analysing this interaction.

Somewhat simplified, the interplay can be illustrated by developments during the previous banking crisis in the early 1990s in Norway. Households had accumulated excessive debt at that time. They had to tighten spending in order to reduce debt. They increased their financial saving markedly and reduced spending on consumption and housing investment correspondingly. This resulted in a sharp fall in earnings among companies that provided goods and services to households. Banks sustained substantial losses on their loans to these companies. Bankruptcies and lower activity resulted in lower household income and further spillovers to the economy.

Such interaction effects are important in explaining that financial crises tend to follow in the wake of imbalances in the property market. It is difficult to determine with certainty when asset prices exceed levels that are not sustainable over time. Nevertheless, a long period of debt-financed increases in house prices seems to be a potent signal of a build-up of risk in the financial system, a signal that should be taken seriously. If we can restrain the build-up of such imbalances, we also reduce the risk of financial instability.

The question can be raised as to whether the interest rate should be used to a further extent in preventing the build-up of systemic risk. Higher interest rates can curb the rise in both debt and house prices during an economic upturn. But systemic risk will depend on both the vulnerabilities that accumulate internally in the banking system and the sources of risk outside the banking system. The interest rate may only have a dampening effect on the build-up along some of these dimensions. In the March issue of the Monetary Policy Report, we wrote that the consideration of guarding against the risk of future financial imbalances that may disturb activity and inflation somewhat further ahead suggest that key policy rate

should be increased in the near future. The consideration with regard to financial imbalances is thus part of the basis for setting the interest rate.

At the same time, there are limits as to how many considerations the interest rate can bear. The interest rate also has effects on other assets prices, such as the krone exchange rate. A monetary policy that aims at bringing down the value of domestic assets can easily push the value of the krone in the opposite direction. In interest rate setting we can never lose sight of the primary objective of monetary policy, which is low and stable inflation. In assessing the different considerations, monetary policy must adhere to the operational mandate – low and stable inflation. Without results that show that the inflation target is actually attained over time, there is a risk that monetary policy will lose credibility.

<Chart 7: Basel III provides for a more robust system>

We therefore need more targeted instruments to dampen the build-up of risk in the financial system. The most important component is a long-term framework for financial market regulation that lays the basis for a robust financial system. The new Basel III framework is an important step in the right direction. An important feature of this regulatory framework is that the system-wide risk in the financial sector will be explicitly taken into account, and not only institution-specific risk. This chart showing a bank's balance sheet provides a simplified presentation of how the new regulation will affect banks. They will be required to hold more capital and capital of higher quality. New capital requirements will be supplemented with stricter liquidity management requirements and quantitative requirements regarding liquidity buffers and stable funding. This will reduce banks' vulnerability to market turbulence.

<Chart 8: Capital requirements in Basel III>

Under the new regulatory framework, it will be more costly for banks to expand rapidly. They will not have the option to finance growth with short-term market funding to the same extent as earlier. Moreover, the new framework includes macro-prudential measures that can be triggered when necessary. Basel III includes a countercyclical buffer that is effective when credit growth becomes excessive. When this buffer is effective, the banks must set aside more capital for their loans. This will increase their capacity to absorb future losses, which to some extent can also dampen credit growth during an upturn. In today's situation in Norway, with elevated debt burdens and rising house prices, a countercyclical buffer could be a useful instrument.

Basel III will be an important step towards a framework that strengthens the basis for financial stability. It will reduce the procyclicality of the financial sector.

Higher capital requirements are an important component of the new framework. The capital requirements are set in relation to banks' risk-weighted assets. The risk weights in the calculation are therefore also important for the system's robustness. This may give rise to challenges, particularly with regard to housing loans.

<Chart 9: Possibility of low risk weights on residential mortgages>

Under Basel III, a bank must set aside about NOK 2.50 for every NOK 100 they lend if the regulation's standard risk weights for residential mortgages are applied. This is to cover the equity capital and conservation buffer requirements. If the countercyclical buffer has been turned on at maximum, the bank must provide one additional krone for each hundred kroner of loans.

However, Basel III also provides banks with the option of full use of internal models for calculating their risk weights. When banks calculate risk weights using internal models, only institution-specific risk is taken into account and not system-wide risk. Norwegian banks that use such models arrive at risk weights that in some cases are a third of the standard weights, and for some Swedish banks that operate in Norway they are even lower. The capital requirements are then reduced correspondingly. In the case of full use of internal models, these banks will only have to set aside 1 krone for every NOK 100 in residential mortgage loans, even when the countercyclical buffer is fully turned on. This may seem unreasonably low for loans that may be a considerable source of risk accumulation in the financial system as a whole. This also raises the question of whether lower limits for risk weights for residential mortgage loans for banks using internal models should be incorporated into a new regulatory framework.

Crisis management and systemic risk

Even with a sound, long-term framework, situations will arise where a crisis management system is needed. Such a system is also important for preventing crises. With a credible crisis management system, a bank can continue providing key banking services when it encounters problems, while the owners and unsecured creditors bear the losses. This is the most important instrument we have to counter moral hazard in the financial system.

<Chart 10: Crisis resolution - some possible improvements>

The system for crisis management in Norway was never put to the test during the financial crisis. International experience nevertheless suggests that changes to the Norwegian system should be made in order to improve it and enhance its credibility. Banks should be required to draw up plans for winding up operations without putting financial stability in jeopardy. For it to be credible, banks must have transparent group structures. In addition, clear rules should be introduced to define when the authorities are to intervene and apply the crisis resolution tools in a problem bank. This must occur before the problems in a bank become so serious that it can no longer operate without external recapitalisation.

The authorities must have instruments that can be applied rapidly in such an early intervention. In some countries the authorities already have the option of splitting up a bank and subsequently selling it in parts, or the option of transferring vital parts to a bridge bank for continued operation. A newer instrument in the international debate is what is called internal recapitalisation – or bail-in. Internal recapitalisation means in principle that debt is converted into equity capital. This can provide a basis for the bank to continue operating. Creditors have to take the losses and the authorities do not have to provide capital.

With such a crisis management system, lenders will have a stronger financial incentive to monitor banks' risk-taking. They can price funding so that it reflects to a further extent the

risk taken by banks. This will reduce the risk of excess debt growth and lessen the likelihood of crisis.

Conclusion

As I mentioned by way of introduction, our most important task in the work on financial stability is to contribute to containing imbalances and secure a robust financial system. Prevention is thus a key component of the work: that is to say prevention by means of a sound, general framework that does not stimulate risk-taking among financial market participants; prevention through surveillance of financial imbalances and through active use of instruments when we see clear signs of a build-up of serious imbalances.

It is unlikely that we will be fully immune to financial instability. But with solid work in the area of prevention we will be better poised, also in turbulent times.

Thank you for your attention.

Footnotes

- 1) A. House prices deflated by the consumer price index. Index 2000=100. Sources: Association of Norwegian Real Estate Agents, ECON Pöyry, Finn.no, Association of Real Estate Agency Firms and Statistics Norway.
- B. Corporate credit, mainland Norway (C3)/mainland GDP. Index 2000=100. Source: Statistics Norway.
- C. Market funding and other debt excluding deposits in Norwegian-owned banks and covered bond mortgage companies. As a percentage of total assets. Source: Norges Bank.