# Should banks be bailed out?

Speech by Deputy Governor Jon Nicolaisen at the Norwegian Academy of Science and Letters, 14 April 2015.

Please note that the text below may differ slightly from the actual presentation.

On Sunday, 29 September 2008, two weeks after the bankruptcy of the US investment bank Lehman Brothers, the Irish government faced a dilemma: On the following morning, Monday, 30 September, the debt of a number of Irish banks was falling due, and many of these banks could not meet their obligations. Unable to issue new debt in the market, they were in danger of failing.

If the banks were to close, economic activity in Ireland would be crippled. The authorities had to act.

It was not a matter of a trifling amount. At the time, the debt of Irish-owned banks was over two times Ireland's GDP. [1] Over half of the banks' debt had been funded in the market.

That evening, the Irish government decided to guarantee most of the debt of Irish-owned banks for two years. The government and the Irish people thereby assumed a considerable risk. Eventually, the losses at Irish banks also proved to be enormous. Since then, the Irish authorities have made capital injections into banks equivalent to around 40 percent of GDP to keep the banks running. [2]

This is money the Irish government has had to borrow. Along with the downturn that followed in the wake of the financial crisis, the Irish bank bailout quadrupled Ireland's sovereign debt. [3] The interest on the debt is borne by all, rich and poor alike, regardless of who had benefited from the pre-crisis economic boom.

The banking crisis and the government debt led to a deep economic downturn in Ireland. It is only now that Ireland has returned to its pre-crisis level of prosperity. But the economic and social consequences would probably have been even more serious if the banks had not been kept afloat.

The Irish bank bailout illustrates a number of classic questions: Was it right for the government to risk its citizens' money to rescue the banks? Did the Irish authorities actually have a choice? When things went wrong, was it right to protect creditors as the Irish authorities ultimately did? How has this affected the future risk taking of the banks' owners and creditors?

The answer to the question of whether banks should be rescued is about economics and incentives. But the problems banks create and how these problems are solved are also a matter of morals and ethics – law and justice. Norway has also been faced with these problems.

## Why are banks bailed out?

In 1923, a little more than 90 years ago, there was a banking crisis in Norway. One of the banks in serious difficulty was Andresens og Bergens Kreditbank, or Foreningsbanken, as it was also known. [4] Losses were considerable, equity had to be written down sharply and the bank needed fresh funds to stay afloat. At that time, Foreningsbanken was indisputably Norway's largest bank, with total assets of more than NOK 600 million, equivalent at the time to 16 percent of GDP.

On behalf of the bank's board of directors, the businessman and former Prime Minister Christian Michelsen argued in favour of a rescue package in negotiations with the authorities. Michelsen warned Norges Bank of the problems that would result from allowing the bank to fail. Michelsen requested a government guarantee for the bank, or at least a NOK 100 million loan.

There were drawn-out negotiations between Norges Bank, headed by Governor Nicolai Rygg, and the board of Foreningsbanken. The resumption of pre-war gold parity, fiscal concerns and Norges Bank's financial position were crucial for Norges Bank's choice. But Rygg also emphasised the importance of Norges Bank's not supporting activities that should be wound up, activities that he referred to as "unsound lending and non-viable businesses". The negotiations ended with Norges Bank's refusal to provide support.

"We'll survive the bank's closure too," Rygg is reported to have said.

"Even if you're skinned alive, you'll still live", Christian Michelsen responded. [5]

In any event, there would be pain. Not long afterwards, Foreningsbanken had to petition to be placed under public administration. The bank Centralbanken for Norge followed only a few days later and then Handelsbanken.

Michelsen was on to a fundamental problem. Banks have critical functions in a modern economy. First, banks play a key role in the payment system. In one way or another, practically all payments go through banks. Individuals and firms have bank deposits that they depend on for making payments. Banks operate payment systems used by shops and other businesses. They operate interbank and international payment systems and payment systems for securities trading. If payments come to a halt, the economy will seize up.

Second, banks extend credit: Short-term trade credit and operating credit; long-term loans for investing in housing, real estate and businesses. Without this credit, businesses and investments come to a standstill.

Banks may be regarded as intermediaries. They channel money from depositors and other investors to borrowers. Banks determine who should be given credit and monitor borrowers and their projects. Moreover, they do so with considerable efficiency. Thus, depositors and investors avoid having to do this job themselves.

This function makes banks unique: Banks extend long-term credit and raise short-term debt. [6] We call this banks' maturity transformation. But this transformation also makes banks vulnerable.

Banks are dependent on public trust. If any doubt arises as to a bank's ability to service its debt, a run on the bank may ensue. Depositors will then try to withdraw their funds before the bank runs out of cash and other liquid funds. The bank will in turn be forced to sell its long-term assets – its loans. This is a slow and loss-generating process. Normally, a bank will fail long before it gets that far.

Until recently, such bank runs were usually associated with the Great Depression of the 1930s. That is, until 2007, when the UK bank Northern Rock failed, with long queues of depositors outside its doors. This was a forceful reminder that banks may also be vulnerable today.

The closure of a bank can create fear that also other banks will have to close, and depositors and other investors may begin to withdraw their funding from a large number of banks at the same time. Problem banks can infect other banks, partly because banks have claims on one another. If a large bank should experience difficulties, the contagion to other banks and the rest of the economy can be very serious.

This is called systemic risk. Banks' activities have considerable externalities. [7]

Few bank failures illustrate this point better than the bankruptcy of Lehman Brothers on 15 September 2008. In the course of the week following the closure of the bank, interbank lending rates soared. Banks distrusted one another. Short-term funding markets, money markets, dried up worldwide. US money market funds experienced payment problems. The spillovers spread throughout the financial system. One of the world's largest insurance companies, AIG, teetered on the edge of bankruptcy.

To prevent the Lehman bankruptcy from ending in the complete collapse of the financial system, the authorities in a large number of countries took measures on an unprecedented scale. Central banks in many countries injected large quantities of liquidity into the banking system to keep the wheels turning. The aim of these measures was to keep the banking system operating so that the rest of the economy would not be impacted.

That is why banks are bailed out. The costs associated with closing a bank are largely borne by parties other than the bank itself. We bail out banks to prevent systemic crises. We bail out banks to limit the substantial damage a deep banking crisis can inflict on the economy.

## Why should banks not be bailed out?

But it is not that simple. There are also compelling arguments against bank bailouts.

Most of the government measures in 2008 were targeted at viable banks and were intended to prevent the crisis from spreading. Supporting otherwise viable banks in times of financial turbulence may be necessary and profitable for society. An interesting feature of the Irish crisis is that this was exactly what the authorities *believed* they were doing when the first

guarantees were issued. But eventually it transpired that Irish banks were sitting on huge losses.

Government support for insolvent banks violates a fundamental principle of economics: We should avoid supporting unprofitable activities. We do not rescue a business that is bankrupt. Instead, we should allow businesses that are profitable to take over. Over time, this improves the conditions for a healthy economy.

Apportioning losses following a crisis may also be viewed as a matter of morality and fairness. When the authorities bail out banks, some parties are spared the consequences of their own choices. Bailing out investors and owners using public funds conflicts with people's ordinary sense of fairness.

Moreover, government support for insolvent banks undermines the stability of the financial system. When the authorities bail out banks, the banks can transfer their losses to others, while reaping the gains in good times.

When the government assumes a substantial portion of bank risk in this way, a problem arises that we economists refer to as moral hazard: If there is a widespread perception that the authorities in reality stand behind banks, banks may take insufficient account of the risk of losses when making decisions. In particular, the risk that things can go horribly wrong may be underestimated, because banks do not have to bear the *consequences* of a crisis. By bailing out banks, we in turn reduce the motivation of banks' owners and creditors to take full account of the risk associated with their activities. The pricing of risk is easily set too low. Banks may therefore end up taking excessive risk.

Now, the authorities that bail out banks will often require that the former owners forfeit their equity. This means that bank owners should, at the outset, have incentives to hedge against the risk of large losses. But owners' risk is limited. It does not cover losses beyond paid-in capital. Owners' motivation to avoid risk may therefore be weakened at a bank with little equity. The lower the equity capital is, the more serious the problem of moral hazard becomes.

An interesting feature of the financial crisis was precisely banks' low pre-crisis equity ratios. Many large international banks operated with equity of around three percent of their total portfolios. [8] This means that for every dollar or euro the banks owned they invested thirty. It is obvious that the risk inherent in such activity may easily become too high. And the solution is in itself simple enough: The authorities should require higher equity ratios for banks, so that owners must absorb a larger share of the losses if things go wrong.

Another solution to this might be the one Governor Rygg chose in his day: Close insolvent banks and place the losses where they belong. If the authorities intervene and bail out one bank, expectations are created that they will also bail out others. We may then end up with a system in which banks take excessive risk, potentially increasing the likelihood of new and greater banking crises in the future. Therefore, banks should not be bailed out.

We are facing a dilemma. Bailing out banks increases the risk of instability in the long term. Yet the cost of refraining is even greater instability in the short term. Once the crisis has

arisen, there is no escaping it. If banks are facing sizeable losses, then someone *must* bear those losses. If we do not allow the Treasury to bear the losses through support for the banks, the populace will still be affected, especially if the consequence is a systemic crisis and economic downturn.

This dilemma is what is called a time-inconsistency problem. In principle, it may be desirable to allow insolvent banks to fail, but there will be valid reasons to depart from this principle when actually faced with the decision. This means that even if it is the stated intention of the authorities to refrain from bailing out banks, this intention will not be particularly credible.

In other words, and put succinctly: Banks *should not* be bailed out, but they *must* be bailed out nevertheless.

#### Who should be bailed out?

If we must bail out banks to avoid an economic breakdown, the next question is: Is there anything we can do to reduce the damage arising from setting aside normal bankruptcy rules? The question becomes *how*, rather than *whether*, banks should be bailed out. Or more directly: *Who* should be bailed out?

It is a critical function for a bank to accept and provide access to deposits. Depositors must have confidence that their deposits are safe. Arrangements that guarantee deposits and the ability of solid banks to meet their obligations stabilise banks and support a socially beneficial activity. Such measures are intended to reduce banks' susceptibility to panicky withdrawals. Moreover, ordinary considerations of fairness dictate that small depositors should be protected. Some form of deposit guarantee for limited amounts has therefore become common in most western countries.

At the other end of the scale, we find bank owners – the shareholders. It seems reasonable, and in keeping with general perceptions of fairness, to allow shareholders to lose the equity they have paid into the bank when an insolvent bank must be taken over by the authorities. Moreover, allowing shareholders to bear losses will not result in the closure of the bank, since shareholders are not able to withdraw their capital.

The current debate is focused on how creditors other than small depositors should be treated – the extent to which funding obtained in the market is to be guaranteed if banks fail.

In this area, headway has been made in the years following the financial crisis, especially in Europe. However, how creditors can be made to pay when banks suffer losses – and exactly which creditors can be made to pay without triggering crises are not simple questions. To elucidate this, let me begin with Norwegian legislation as it currently stands.

#### **Guarantee Schemes Act**

It is barely 24 years since the largest banks in Norway were on their knees. On 17 October 1991, Finance Minister Sigbjørn Johnsen addressed the Storting (Norwegian Parliament) on

the Government's extraordinary measures aimed at the banking industry. By then the second largest bank, Kreditkassen, had lost more than its equity capital, and it quickly transpired that the other two large commercial banks were not in much better shape. Johnsen underscored the seriousness of the potential consequences for the Norwegian economy if the Government did not intervene resolutely in the crisis: [9]

"The gravity of the situation is simply this: A collapse of the banks will also break the backbone of the Norwegian economy. If we do not implement extensive measures now, a good many ordinary people may lose their savings."

But the Minister of Finance made an important reservation. In the same account, he also stated that the banks' owners could not expect to escape unscathed:

"At the same time, the instruments are designed so that banks themselves will have a principal responsibility for solving their financial problems. They will not simply be able to send the bill for their misjudgements to the government."

That was also the case in practice. The shares in banks that lost all their equity capital were written down to zero, in line with the principles pertaining to the bankruptcy of other enterprises. The capital injections banks received were made on the condition that they restored order to their organisations while cutting unnecessary costs. In other words: we bailed out the financial system, but not the banks' owners. On the other hand, practically no creditors lost their assets, even in the banks that had lost more than their equity. Creditors were bailed out through the government's recapitalisation of the failed banks.

In the aftermath of the crisis, the Banking Law Commission was tasked with drafting a new law on crisis resolution. In 1996, the Bank Guarantee Schemes Act was passed, which continues to be current Norwegian law. The act makes it possible to write down equity capital and force banks to issue new shares to the government, enabling them to be nationalised. Subordinated debt – debt instruments with characteristics similar to equity capital – is to be written down in proportion to banks' losses. In this way, banks can continue operating under government ownership. Should a bank nevertheless be closed, deposits of up to NOK 2 million per depositor are guaranteed by the Norwegian Banks' Guarantee Fund.

For a long time, this was one of the world's most modern bank resolution laws and Norway weathered the crisis in 2008 better than most countries. Moreover, Norwegian banks have probably also drawn lessons from the banking crisis of the 1990s. Norwegian banks had via that crisis gained greater insight into crisis risk than banks in many other countries had before the global financial crisis erupted in 2007. Managements and boards of Norwegian banks were probably also more conscious of their social responsibility than those in many so called leading financial centres elsewhere in the world.

But the Bank Guarantee Schemes Act does not provide for the imposition of losses on creditors who have made ordinary loans to banks, without, in practice, closing the bank.

### **EU Bank Recovery and Resolution Directive**

Just as the banking crisis led to Norway's Bank Guarantee Schemes Act, the financial crisis gave rise to a new EU framework for crisis resolution. In January 2015, the Bank Recovery and Resolution Directive entered into force. [10] The aim of the directive is to enable insolvent banks to be resolved in a manner that ensures continuity of their critical functions, but without banks necessarily receiving public funds. The authorities are empowered to take control of a bank that is insolvent, or is at risk of becoming insolvent, and ensure that critical functions continue without bailing out shareholders and creditors.

A new tool will make this possible. Beginning in 2016, national authorities in Europe will be able to write down and convert liabilities to equity while a troubled bank is kept open. The value of the bank's assets is to be calculated and losses apportioned in accordance with the order of priority of claims. If the bank does not have sufficient equity, liabilities will be converted to share capital.

This tool is called bail-in. [11] Bail-in requires that creditors, and not the authorities, initially cover losses in excess of equity. Creditor claims are converted into equity to ensure continued operation. Short-term liabilities and secured deposits are exempted. It is primarily long-term liabilities not backed by certain assets or guarantee arrangements that will be eligible for bail-in. [12] Long-term creditors will then have to take account in advance of the real risk inherent in the bank they fund. This should also result in risk being priced into these loans to banks.

Creditors have been written down while a bank was kept open. On 5 February 2011, the Danish resolution authority Finansiel Stabilitet A/S took control of Amagerbanken, a midsized Danish bank. [13] All equity was written down to zero, and non-guaranteed deposits and wholesale funding were initially written down by nearly half of their original value. This was done over a weekend. On Monday morning, the online banking service was open and all depositors obtained access to their remaining deposits. The bank was kept open as a subsidiary of Finansiel Stabilitet A/S. The bank's critical functions were kept running. Shareholders and unsecured creditors were not bailed out. Over time, the creditors who were not covered by the deposit guarantee were paid back around 85 percent of the value of their original claims. The value of the bank's assets was preserved to a larger extent than if the bank had been wound up.

Danish banks' funding costs rose following the resolution of Amagerbanken. However, it did not trigger a systemic crisis in the Danish banking sector, despite its occurrence in the middle of the European debt crisis. What the Danes got was a pricing of the true risk in their banks. Over time, this provides a basis for a less risky financial system.

Bail-in may nevertheless be difficult to implement. Bail-in of a large bank, that is a bank with substantial liabilities, will inflict losses on a large number of creditors. That is the intention. But if these liabilities are owned by institutions that are critical to the functioning of the financial system, the problems in one bank can spread quickly. If the losses are substantial, the authorities run the risk of triggering a systemic crisis. Moreover, bail-in of creditors may make funding more expensive for other banks, particularly in turbulent times. For large, systemically important banks, the time-inconsistency problem remains. This weakens the credibility of the bail-in regime.

Therefore, the Bank Recovery and Resolution Directive also provides for measures intended to bolster credibility. An important measure is that national authorities are to prepare resolution plans for individual banks. The authorities are to devise a strategy *in advance* for managing the bank if it is danger of failing. If the bank is large and important, there is to be a plan to ensure continued operation.

If the bank is so large and complex that it probably cannot be resolved without the use of public funds, it can be restructured. The resolution authority can demand that complex parts of the institution be transferred to separate subsidiaries. As a last resort, the authorities can demand that large banks be broken up into several smaller ones.

There should also be a plan for how continued operations can be funded. All systemically important banks in Europe shall hold a minimum amount of liabilities that can quickly be bailed-in. This entails a limit on the share of short-term and secured debt banks may issue. The authorities must also ensure that large banks and systemically important investors do not invest too much in other banks' risky debt.

This is a new perspective on banks' funding structure. In the future, banks will have to ensure that portions of their liabilities can quickly be written down and converted to equity.

Bail-in as an instrument will be implemented in the EU on 1 January 2016, a year after the rest of the Directive. The Directive must be followed up in Norway under the EEA Agreement. Norway's own bank resolution legislation must be updated. As regards the Norwegian framework, the new elements are in particular the requirements for resolution plans and bail-in. Otherwise, a large part of the framework is already in place.

We will probably never entirely solve time inconsistency. There may still be creditors who count on being bailed out. Owners with little at stake may take on excessive risk. One of the most important things we do, therefore, is to ensure that banks are solid.

This has two important effects. First, the obvious one: Higher capital ratios reduce the probability that banks will experience a crisis. Banks will be able to absorb larger losses before encountering problems. But as I touched on earlier, higher capital ratios also have long-term effects on owners and bank behaviour: The more equity a bank has, the more capital owners stand to lose. They will have a stronger motivation to ensure that the bank operates prudently.

Capital ratios at Norwegian banks are generally somewhat higher than at banks in other European countries, which is a good thing. The plan to gradually increase Norwegian banks' capital requirements as laid down in 2013 will continue until July 2016. The minimum risk-weighted equity ratio for systemically important banks in Norway will then be 13 percent.

#### What should be done?

So what are the lessons we have drawn?

Banks *should* not be bailed out, but banks' *functions* must be bailed out. If not, all economic activity will be affected. We will bail out the small depositors – that is both profitable and fair.

We should not bail out all creditors. If the equity capital in bank is lost, long-term lenders should also bear losses. The new tools that have now been introduced in Europe will ensure that this happens. Norwegian legislation must be updated in line with the new directive. This will improve the pricing of risk in the banking system.

We will not bail out the shareholders. Ultimately, bank owners and management must ensure that banks are run prudently. It is crucial that they are aware of their responsibilities. We cannot regulate banks to death. I am confident that owners and managers of Norwegian banks will act responsibly.

At the same time, banks must be regulated. Capital requirements must be high and we must ensure that banks are solid and well-run. This will reduce the risk of a systemic crisis. This will also give banks' owners a stronger motive to take account of long-term risk. Banks themselves and Finanstilsynet (Financial Supervisory Authority of Norway) have done a good job to ensure a solid Norwegian banking sector, so that the authorities *avoid* having to bail out banks.

#### **Footnotes**

- 1. IMF Country Report No. 15/20.
- 2. Schoenmacher Dirk (2015), "Stabilizing and Healing the Irish Banking System: Policy Lessons", CBI-CEPR-IMF Conference, Dublin, 15 January 2015
- 3. IMF Country Report No. 14/165.
- 4. At that time, Norges Bank had already injected NOK 10 million in share capital as part of a new share issue totalling NOK 50 million in autumn 1922 (see Rygg, Nicolai (1950) Norges Bank i mellomkrigstiden [Norges Bank in the interwar years], p. 90 (in Norwegian)).
- 5. Ibid, p. 119.
- 6. For a description of the relationship between bank lending and deposits, see McLeay et al. (2014), "Money creation in the modern economy", *Quarterly Bulletin* Q1 2014, Bank of England.
- 7. A description of externalities in the banking sector and how they may justify regulation is found in Borchgrevink et al. (2012), "Why regulate banks?" *Norges Bank Staff Memo* 16/2013.
- 8. *IMF Global Financial Stability Report*, October 2008, contains averages for leverage ratios of both commercial banks and investment banks. Morris, Steven and Shin, Hyun Song (2008), "Financial Regulation in a Systemic Context", *Brookings Papers on Economic Activity*, vol. 2008 (Fall 2008), pp. 229-261 reports figures for the large US investment banks.

- 9. Forhandlinger i Stortinget [Proceedings of the Storting] No. 18, 17 October 1991: Address by the Minister of Finance on the situation at Kreditkassen etc. (in Norwegian).
- 10. The Bank Recovery and Resolution Directive may be found at <a href="http://eurlex.europa.eu/legal-content/EN/TXT/?uri=celex:32014L0059">http://eurlex.europa.eu/legal-content/EN/TXT/?uri=celex:32014L0059</a>.
- 11. A more detailed description of the rules for bail-in and how it works is found in Vale, Bent (2014), "Kriseløsing av banker ved hjelp av bail-in momenter ved innføring i Norge" [Bank resolution with the aid of bail-ins factors associated with introduction in Norway], Norges Bank Staff Memo 12/2014 (in Norwegian).
- 12. In addition, a number of other types of liabilities are exempted, such as covered bonds, accrued but unpaid salary, taxes payable and liabilities to ordinary commercial suppliers of goods and services necessary for the daily functioning of the bank.
- 13. A detailed description of the resolution of Amagerbanken is found in the Finansiel Stabilitet A/S Annual Report for 2011 (in Danish).