

## Nils Bernstein: Financial crises – talks in relation to financial stability in Denmark

Speech by Mr Nils Bernstein, Chairman of the Board of Governors of the National Bank of Denmark, at the conference to mark the 125th anniversary of the first Danish savings bank act – the Savings Bank Act of 1880, Copenhagen, 12 September 2006.

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Thank you for inviting me to participate in the celebration of the 125th anniversary of the first Danish savings bank act. I have been asked to speak about Danmarks Nationalbank's tasks in relation to financial stability under the main heading of "Financial crises".

Financial crises can involve very serious costs. A survey by two economists, Hoggarth and Saporta, covering 43 financial crises in developed and developing countries shows that the average costs to society amounted to around 15 per cent of GDP. It can also be a costly affair to save one major bank in order to prevent economic collapse. A domestic case in point is the rescue plan to assist Landmandsbanken in 1922-23. It cost the Treasury kr. 40 million, and according to the historian Søren Mørch that was equivalent to 2/3 of the total government budget for social expenditure at the time.

So, what are Danmarks Nationalbank's tasks in relation to financial stability?

If we go back to the Danmarks Nationalbank Act from 1936, it states that Danmarks Nationalbank shall "maintain a safe and secure currency system in this country, and [...] facilitate and regulate the traffic in money and the extension of credit".

There is thus no doubt that this is our task in relation to financial stability. However, the Act does not say how we should shoulder this responsibility. Perhaps that is just as well, since the task changes over time. At Danmarks Nationalbank we have defined financial stability as a state that exists:

*when the financial system is robust enough for any problems experienced within the sector not to spread and prevent the financial markets from functioning as providers of capital and financial services.*

In other words, the focus is on the functioning of the financial system. Smooth provision of money in our society is a prerequisite to a well-functioning Danish economy, but also the basis for effective implementation of a market-oriented monetary policy.

It is important to avoid problems in financial enterprises, not only for depositors and shareholders, but also for society at large. Problems within one bank tend to spread to other financial institutions – or at any rate to affect their reputation. Depositors and investors may lose faith in the financial system. A domino effect is created.

How does Danmarks Nationalbank actually solve its tasks in relation to financial stability? I would now like to show you some examples, and after that I will present a challenge.

Firstly, we seek to analyse the key risks to the financial sector. This includes situations that are very unlikely to arise, but which could potentially involve high costs to society. We perform stress tests on the financial system in order to calculate how large an adverse impact the existing buffers are able to absorb.

We publish these analyses in our annual Financial Stability report with a view to opening a dialogue with public authorities, banks and other sector representatives about risks to and developments within the financial sector. Some call this "open mouth" operations.

On the basis of analyses and stress tests, our most recent Financial Stability report concluded that the financial institutions are still robust, and that there are currently no black clouds on the horizon that could threaten financial stability in Denmark.

We have become accustomed to seeing the banks make record-high profits every year. An important factor in this context is the high growth in lending; a rate of growth last seen in the mid-1980s.

As Chart 1 shows, the high-growth period in the mid-1980s was followed by a gradual erosion of credit quality, with increased losses and provisions in the subsequent period.

I am not saying that history will repeat itself. We should not forget that the new Basel II Capital Accord, which takes effect at the beginning of 2007, has increased focus on the banks' credit risk management.

When we at Danmarks Nationalbank assess the banks' credit risk, our starting point is a failure-rate model developed on the basis of 400,000 annual accounts filed by Danish companies in the period from 1995 to 2002. This model is similar to those used by the banks as a basis for the advanced methods that may be used under Basel II. The failure-rate model estimates the probability that a company will fail.

As Chart 2 illustrates, our analysis based on the failure-rate model shows that there is a certain tendency for banks with high growth in lending in recent years also to have higher credit risk on their lending portfolios. There are exceptions, but we still need to be aware of the link between high growth in lending and the risk of subsequent higher losses.

Another topical issue we have examined is the large gross debt of Danish households compared to households in other countries. Chart 3 shows the debt as a ratio of GDP. The high gross debt ratio, combined with the extensive use of adjustable-rate mortgage-credit loans, makes the households more vulnerable to rising interest rates.

We have calculated the households' additional mortgage interest burden if interest rates rise. On average, mortgage interest expenses will increase by 1.2 per cent of the household's gross income if interest rates rise by 1 percentage point, but there are considerable variations. Some households will be financially challenged if interest rates increase by a few percentage points. This could impose losses on banks and mortgage-credit institutes. Nevertheless, our overall assessment is that the development in homeowners' exposure to rising interest rates does not threaten the functioning of the financial system – or financial stability. To put it bluntly, the failure of a number of households to meet their obligations to their credit institutions is not necessarily a financial stability problem.

In the past year, the IMF has visited Denmark in connection with its FSAP, Financial Sector Assessment Program. As in other member countries, the IMF assessed the structure of the Danish financial system. A report will be published within a month or so.

In connection with the FSAP a stress test was conducted to assess whether the Danish financial system is robust to cyclical changes. The basis for the stress test included Danmarks Nationalbank's macro model, MONA, and a stress test module that we have estimated. The worst-case scenario applied by the IMF involves a slowdown of the domestic economy, exacerbated by monetary-policy tightening by the ECB. House prices will fall by 30 per cent and GDP by 3 per cent over a 3-year period. A strong cocktail indeed.

The result of Danmarks Nationalbank's stress test is shown in Chart 4, where the blue line represents the actual, historical losses to the banks, while the yellow line shows modelled calculations of the historical development, and the broken line is the expected development, given the stress scenario. According to the calculations, the banks' average losses would increase to almost 1.5 per cent of loans and guarantees. This is somewhat lower than in the early 1990s, when losses and provisions reached 2.5 per cent on average. Overall, the Danish financial system is therefore reasonably robust.

Nevertheless, a few banks may suffer substantially higher losses, just as there were banks in the early 1990s that lost more than 10 per cent.

Stress testing will be given higher priority in our future assessments of financial stability. Our ambition is to learn more about how the banks affect each other and the economy in stress situations.

Another task for Danmarks Nationalbank in relation to financial stability is to ensure that Denmark has a secure and effective financial infrastructure that can safely be used for settlement of payments, securities trading and other financial transactions. Danmarks Nationalbank now has a statutory obligation to oversee payment and settlement systems in Denmark.

Part of the IMF's FSAP was to assess the core elements of the Danish financial infrastructure in relation to international standards. The IMF recommended a few changes. Danmarks Nationalbank will work with those responsible for the systems to ensure that the necessary improvements are made. However, we will not blindly adhere to all recommendations.

For example, the IMF recommends that we establish a buffer pool to ensure the settlement of securities transactions and retail payments even if the largest participant is not able to settle its payment obligations. Danmarks Nationalbank finds that the best safeguard is to ensure that

participants have easy and flexible access to liquidity, combined with participants' large portfolios of securities that can be pledged as collateral for loans from Danmarks Nationalbank. Consequently, we do not currently see any need for special measures to ensure settlement in the Danish systems.

A third area that we are looking at is situations where the financial system is affected by dramatic external events. These could be acts of terrorism, widespread epidemics, natural disasters or other situations where the financial system threatens to collapse.

Danmarks Nationalbank chairs a task force to ensure coordination of the financial institutions' business continuity plans in such situations.

Finally, Danmarks Nationalbank acts as lender of last resort to the Danish banks. Danmarks Nationalbank can extend loans to a bank that urgently needs liquidity and cannot procure it in the market, even though the bank is solvent.

Fortunately, we are seldom called on to do that.

Should a situation occur where it is necessary to rescue an ailing bank, Danmarks Nationalbank's position is that a market-based solution should be found.

Nothing definite can be said beforehand about Danmarks Nationalbank's role. It would depend on a concrete assessment of the situation and the – direct or indirect – consequences for the Danish banking system and Danish society.

However, we can look at what Danmarks Nationalbank has done on previous occasions.

In a number of cases, Danmarks Nationalbank has played a role in connection with public intervention to help ailing banks – by providing financial assistance or expertise. Each time the situation has been so serious that it could potentially have a negative impact on the Danish banking system or cause foreign banks to lose faith in Danish banks.

The initial step has been to provide stand-by liquidity facilities so as to give the bank in question some room to manoeuvre. However, Danmarks Nationalbank has also provided guarantees to creditors jointly with the private banks – often on the basis of a government guarantee. In several cases, the involvement of Danmarks Nationalbank has been conducive to a solution with the participation of private banks.

A classic example of our role as lender of last resort was an episode in the summer of 1992 when there were rumours that Unibank was facing difficulties. Since it was Denmark's second largest bank, it was certainly a bank that was of significance to the Danish banking system. The episode coincided with the banking crisis in the other Nordic countries and is mentioned in Danmarks Nationalbank's Report and Accounts 1992:

"Early in the summer, rumours arose that Unibank was facing difficulties. These rumours were immediately disproved by the Danish Financial Supervisory Authority, but in order to counter any liquidity problems abroad for Danish banks as a consequence of the rumours concerning a bank which did comply with the solvency requirements, the Nationalbank made a stand-by agreement with Unibank to supply liquidity if necessary, cf. the Nationalbank's press release of June 21, 1992." As we know, Unibank pulled through.

Finally, I would like to draw attention to a challenge that we are facing.

In the banking area, financial integration is at a more advanced level in the Nordic region than in the rest of the EU, and most large banks have branches or subsidiaries in other Nordic countries. The most prominent example is Nordea, which has significant market shares in each of the Nordic countries (except Iceland) – in Denmark's case almost a quarter of all deposits.

EU legislation has contributed to harmonising the basis for conducting activities in the financial sector and removed barriers to cross-border operations. This is part of the process to create a single financial market in the EU.

Nordea currently operates with a subsidiary structure, so that the national authorities are still responsible for supervision and oversight of its activities in each country. For Nordea Denmark, this responsibility lies with the Danish Financial Supervisory Authority.

This will change if Nordea – as announced some years ago – chooses to merge into one bank with branches in the various countries. In that case, the authorities in its home country – presumably Sweden – would have the principal responsibility for activities in Denmark, just as the Danish

authorities currently supervise e.g. Danske Bank's activities in its Swedish branch. That is how the EU legislation is designed.

This legislation is suitable if a bank has a relatively small branch in another country.

However, the Swedish authorities cannot hold responsibility for Nordea's impact on financial stability in Denmark. It is still Denmark's responsibility that our financial system functions – even if we do not have insight into almost one quarter of the Danish banking market.

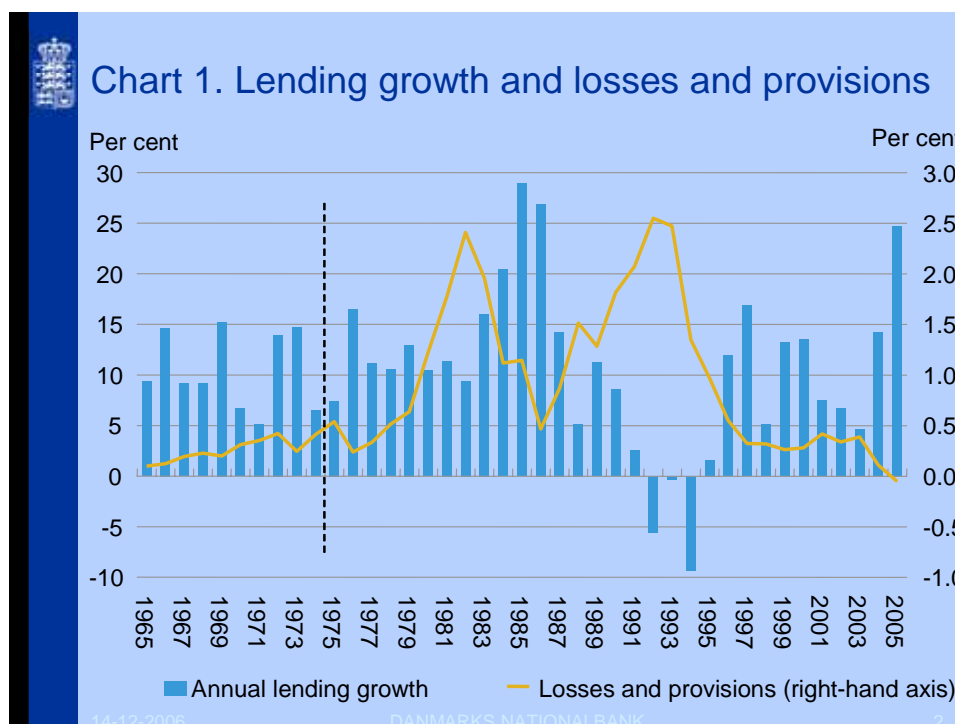
Consequently, Danmarks Nationalbank is of the opinion that where large branches are involved that may affect financial stability in another member state, we need more binding cooperation between the authorities of the home country and the host country than EU legislation provides for.

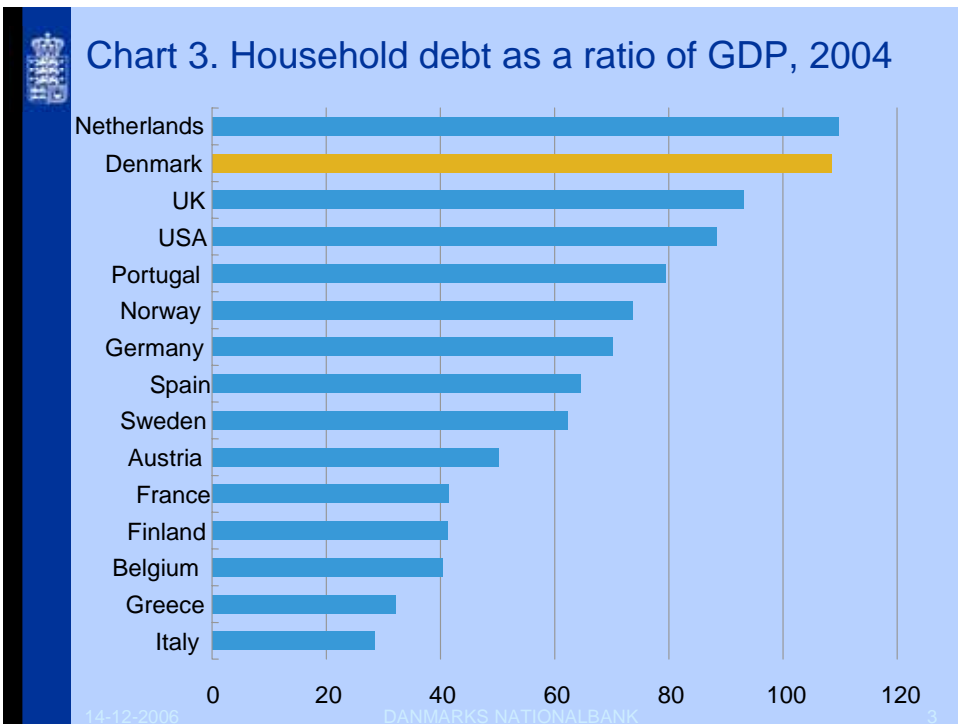
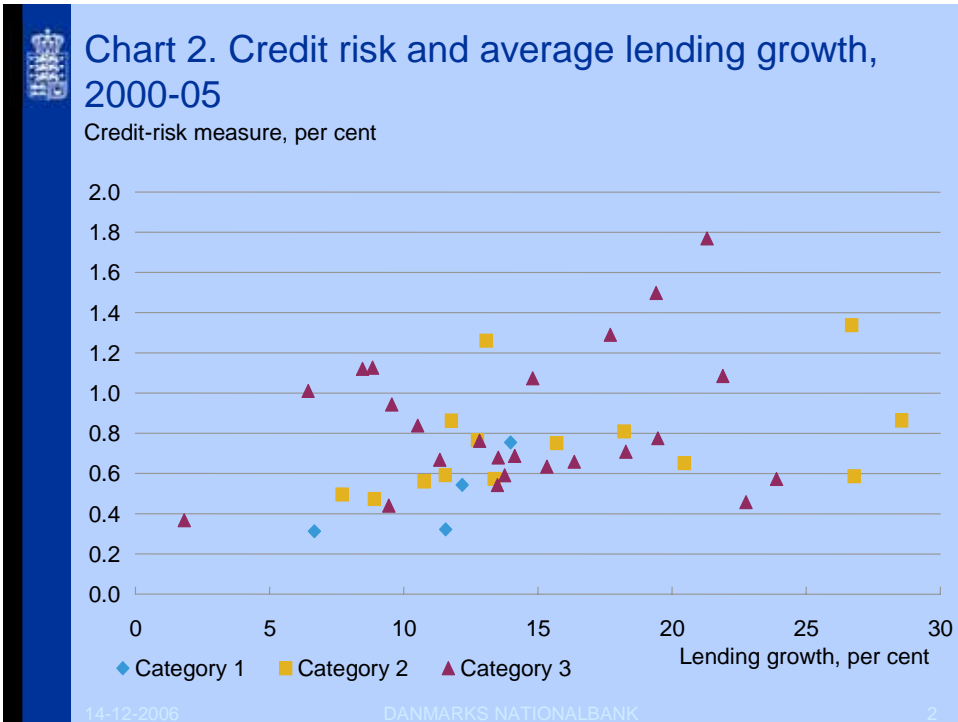
Both the supervisory authorities and the central banks in the Nordic countries have concluded collaboration agreements relating to cross-border financial enterprises. We have a long-standing tradition for Nordic cooperation, and presumably we will be able to negotiate the necessary insight into large Danish branches of banks domiciled in other Nordic countries, and vice versa.

However, the system should also be designed to handle business integration between north and south within the EU. In this respect, the tradition for cooperation is less well-established than among the Nordic countries. It may therefore be necessary to rethink the EU legislation so that the individual member states are still empowered to safeguard financial stability – even with the presence of large foreign branches whose operations may have an impact on the financial system.

The EU needs a legal handle to ensure that the authorities of the host country gain the necessary insight into a large branch of a foreign bank.

The problem is naturally not acute, but amendments to EU legislation take their time, and we do not know when the need may arise. This is an issue that we will pursue in cooperation with other Danish authorities.

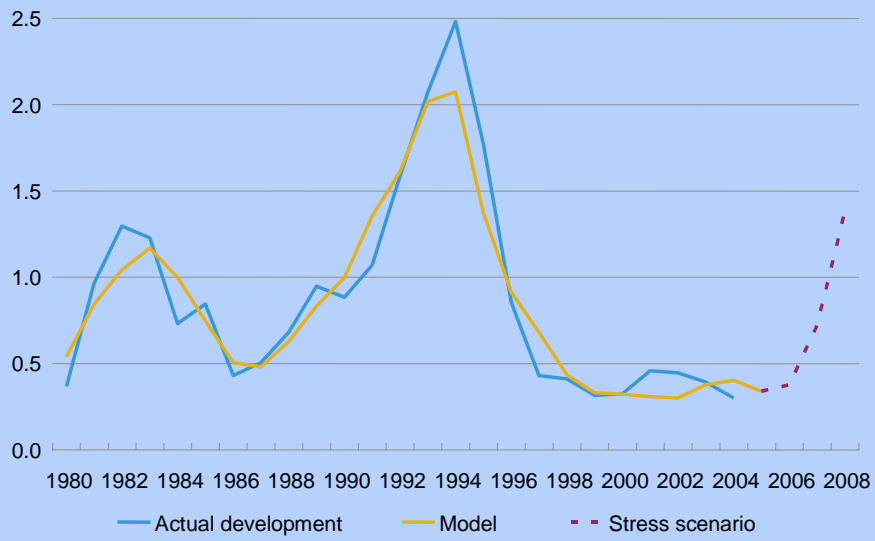






## Chart 4. Macro stress test of the Danish banking sector

Losses as a percentage of loans and guarantees



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4