

## **THE FAULT LINES IN CROSS-BORDER BANKING: LESSONS FROM THE ICELANDIC CASE**

by

Már Guðmundsson\*

### Abstract

This speech discusses the fault lines in cross-border banking, both at the global level and at the European Union/European Economic Area (EU/EEA) level, using the case of the three Icelandic cross-border banks as an example. Cross-currency liquidity risk built up prior to the crisis, especially maturity mismatches in foreign currency. This risk tended to be grossly underestimated at the time. There was a run on banks' FX liabilities after the collapse of Lehman Brothers in September 2008. The Icelandic banks were highly vulnerable to such a run and lacked a credible lender of last resort (LOLR) in terms of foreign currency. The crisis also exposed serious flaws in the EU and EEA framework for cross-border banking, including deposit insurance. One of the main lessons of the Icelandic experience is that sizeable cross-border banking operations in small countries with their own currency come with very significant risks. The Icelandic experience suggests that further reforms are needed for cross-border banking activities in the Single Market, where the key issue is to match the European passport for banks with pan-European supervision, deposit insurance and LOLR. Domestic banks could remain in the domestic system.

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**OECD work on financial sector guarantees**

OECD work on financial sector guarantees has intensified since the 2008 global financial crisis as most policy responses for achieving and maintaining financial stability have consisted of providing new or extended guarantees for the liabilities of financial institutions. But even before this, guarantees were becoming an instrument of first choice to address a number of financial policy objectives such as protecting consumers and investors and achieving better credit allocations.

A number of reports have been prepared that analyse financial sector guarantees in light of ongoing market developments, incoming data, discussions within the OECD Committee on Financial Markets. The reports show how the perception of the costs and benefits of financial sector guarantees has been evolving in reaction to financial market developments, including the outlook for financial stability. They are available at [www.oecd.org/daf/fin](http://www.oecd.org/daf/fin).

- Financial safety net interactions
- Deposit insurance
- Funding systemic crisis resolution
- Government-guaranteed bank bonds
- Guarantees to protect consumers and financial stability

As part of that work, the Symposium on “Financial crisis management and the use of government guarantees”, held at the OECD in Paris on 3 and 4 October 2011, focused on bank failure resolution and crisis management, in particular, the use of guarantees and the interconnections between banking and sovereign debt. Conclusions from the Symposium are included at the back of this article. This article is one of nine prepared for presentation at this Symposium.

- Managing crises without guarantees: How do we get there?
- Sovereign and banking debt interconnections through guarantees
- Costs and benefits of bank bond guarantees
- Impact of banking crises on public finances
- Fault lines in cross-border banking: Lessons from Iceland
- The macro-prudential authority: Powers, Scope and Accountability
- Effective practises in crisis management
- The Federal Agency for Financial Market Stabilisation in Germany
- The new EU architecture to avert a sovereign debt crisis

## 1 Introduction

Let me begin by thanking the OECD and other organisers and sponsors for inviting me to speak in this symposium. The title of your symposium is “Crisis management and the use of government guarantees”. This was a highly relevant issue when three cross-border banks in Iceland collapsed in early October 2008, and that is probably why I am here.<sup>1</sup>

In the panic that gripped global financial markets after the collapse of Lehman Brothers, these banks – like so many internationally active banks around the world – were faced with a wholesale run on their foreign currency liabilities, and were therefore heading towards a default on them in the absence of lender of last resort assistance in foreign currency. However, given the size of the balance sheets involved (10 times GDP overall, with over two-thirds in foreign currency), it was impossible for the Icelandic authorities to provide such assistance on their own. It would indeed have been catastrophic if they had made a full-scale attempt to do so.

The background to these events was that the Icelandic banking system expanded very rapidly in just under five years. Its balance sheet grew from under 2 times GDP at the end of 2003 to almost 10 times GDP by mid-2008. At the same time, it extended across national borders. Just before its collapse, the three major cross-border banks that constituted the bulk of the banking system had over 40% of their total assets in foreign subsidiaries, 60% of total lending was to non-residents, 60% of income was from foreign sources, and over two-thirds of total lending and deposits were denominated in foreign currencies.

## 2 The EU framework and the Icelandic banks

How did this happen, and why was it allowed? I do not think we yet have the research and the consensus to provide a reasonably undisputed list of the main causal factors in this process; however, I think four factors will rank highly on that list. These are Iceland’s membership in the European Economic Area (EEA) in 1994, privatisation of the Icelandic banking system in the early 2000s in a manner that placed the major banks in the hands of risk-loving investment bankers, the global conditions of ample and cheap credit that prevailed in the years prior to the international financial crisis, and the tendency in Iceland both to adopt international and EU regulations without critical analysis of Iceland-specific risks and to base supervision to a significant degree on mechanical checks of adherence to those regulations.

Let me expand a bit on the EEA part, as it is highly relevant to my topic. The EEA Agreement provides a legal and regulatory framework based on European Union Directives, including a framework for free movement of capital and provision of financial services. The underlying principles are those of home licensing for operation anywhere in the area and of a level playing field for competition where size and location are not supposed to matter. This European “Passport” enabled the Icelandic banks to operate throughout the EEA, including through branches in other EEA countries.

I will discuss the flaws in this setup as regards banking later in my remarks, but in order to provide a proper perspective on the story, I must make two points. First, it goes against the grain of the underlying principles of the European Passport to consider the size of banks relative to GDP as a metric for concern, as is now rightly in fashion. Second, we should see this more in the nature of a necessary rather than a sufficient condition, and it does not exonerate Icelandic banks and authorities of blame for their part in the story.

The financial crisis revealed major fault lines in cross-border banking, the most important being large foreign currency balance sheets with significant maturity mismatches but with limited lender of last resort facilities in foreign currency. The nature and magnitude of this phenomenon were not well understood before the crisis.<sup>2</sup>

Maturity mismatches are, of course, the bread and butter of modern banking, although they make banks vulnerable to runs. In the case of solvent institutions, we have known theoretically since Thornton (1802) – and probably over a century, as a practical policy – how to deal with that vulnerability in a domestic setting: with central bank lender-of-last-resort (LOLR) operations, later complemented by deposit insurance.

In the current setting, it is far from guaranteed that this process can be replicated at the international level. Of course, in normal times and with developed capital markets, banks can use foreign exchange swap markets to convert domestic liquidity into foreign exchange liquidity swiftly and relatively cheaply. However, this process broke down almost completely during the global run on cross-border non-US bank liabilities in the immediate aftermath of the Lehman collapse.

In a situation like this, the home central bank's ability to assist banks in acquiring the foreign liquidity denied them on the market and thus avoid a failure to deliver on their foreign currency payments, is limited by the size of its reserves or the willingness of the central bank issuing the international currency in question to help. Although the provision of foreign currency liquidity through reserves was clearly important during the crisis, most studies seem to support the conclusion that dollar swap lines made the pivotal difference, especially when they were uncapped vis-à-vis some key central banks. To a significant degree, this was the domestic LOLR process replicated at the international level.

Does this mean that we have the solution? At the conceptual level, yes, but at the practical level, maybe not. At present, such swap lines are not a permanent and reliable feature of the international monetary system, and there are important unresolved governance issues, such as who should decide which countries get a swap line and which do not.

Let us now move back to the EU/EEA level, where we have the contradiction between the European Passport, on the one hand, and national supervision, a national safety net of deposit insurance and LOLR, and national crisis management and resolution regimes, on the other. The crisis revealed that this framework is deeply flawed. First, it ignores the FX liquidity risk that I discussed earlier. Banks from small countries with independent currencies are more exposed to this risk than, for instance, banks within the euro area. Second, country size and bank size relative to countries are important factors in the viability of bailout options. The Icelandic banks are a good example of this.

Keeping in mind what I have said about the fault lines in cross-border banking, let us go back to the collapse of the Icelandic banks. What were the options facing the authorities? At that time, the official view was that the banks were solvent but faced a foreign currency liquidity problem. Their published CAD ratios were well above the 8% limit, and as late as August 2008, the Icelandic Financial Supervisory Authority had deemed them able to withstand severe capital shocks. Now, however, we know that this was probably not truly the case. Even if they had been solvent in the sense that equity was positive, in the aggregate they were below the 8% threshold when corrected for “weak” capital in the form of equity financed by lending from themselves. Furthermore, we know that, over time, an unchecked liquidity problem will turn into a solvency problem.

Be that as it may, with the solvency assumption in mind, the authorities had tried to build defences against potential foreign currency liquidity problems at the banks by negotiating swap lines and by tapping foreign capital markets, in both cases with limited success. The problem was surely exacerbated by the handling of a LOLR request from one of the banks in late September 2008. The announced solution was to nationalise the bank. This would have been a disaster if it had been carried out because it would have made the Government responsible for refinancing a bleeding foreign currency balance sheet, which it did not have the resources to do. FX reserves and swap lines amounted to only 35% of GDP, and at that point the Government itself was shut out of international capital markets. Nationalising the bank would have turned

a bank foreign currency refining problem into a sovereign problem with the serious risk that the sovereign might have defaulted on such foreign currency payments. The decision was, however, never implemented because of the ensuing full-scale run on the foreign liabilities of the banks and the domino effects inside the Icelandic economy. But the time to consider the options was rapidly running out.

### 3 The Emergency Act

Given the lack of international co-operation, the Icelandic authorities were forced at this point to consider radical solutions. Although they were not necessarily articulated fully at the time, these solutions had several goals: to preserve a functioning domestic payment system, ring-fence the state in the case of bank failures, limit the socialisation of private sector losses, and create the conditions for rebuilding a domestic banking system.

The adopted solution incorporated several elements. The Government declared that all deposits in Iceland were safe. Second, on 6 October, the so-called Emergency Act (see also Box 1) was rushed through Parliament, giving the Financial Supervisory Authority broad-based powers to intervene in failing institutions, granting all deposits seniority over other unsecured claims in case of bank failures, and giving permission for Government capital injections into new domestic banks.

The Emergency Act thus allowed new domestic banks to be created when the old cross-border banks failed and were placed in special resolution regimes followed by winding-up proceedings. In essence, the old banks became the property of the creditors, which were mostly foreign. The new banks were created by carving the domestic assets and liabilities out of the old banks, so it was not a good bank–bad bank split. The idea, then, was that the Government would recapitalise the banks and place compensation bonds in the estates of the failed banks. However, valuing the assets and liabilities proved a complicated process in the middle of an economic and financial crisis, and a solution emerged where the creditors of the failed banks became majority owners of two of the banks and kept a small equity stake in the third. This saved the Government significant expense in recapitalising the banks. The new banking system amounted to 1.7 times GDP.

As a result, the domestic payment system functioned more or less seamlessly throughout, and customers had continuous access to their deposits. The run on the domestic banks stopped, but at its peak, demand for cash tripled and the Central Bank almost ran out of banknotes. Nonetheless, international payment flows were seriously affected by the freezing order imposed by the UK, and the British authorities' suspicion that Iceland would not honour deposit insurance in UK branches of the failed Landsbanki and by general distrust among foreign counterparties. With heavy Central Bank involvement, international payment flows were gradually restored in the months that followed.

I have expanded at some length on the measures taken when the banks failed, as there are still a number of misconceptions about the process. Some have claimed that the banks were nationalised. They were not. The old banks are private companies. They are in winding-up proceedings governed by law; they are not under the control of the Government. The Government has a majority stake in only one of the new banks. Others have claimed that Iceland defaulted and got away with it. The opposite is true. The credit of the sovereign was preserved, and all debt obligations have been paid on time. This is why the sovereign was able to tap international capital markets last summer, and why its CDS spread is currently around 300 points.

### Box 1. Emergency Act of 6 October 2008

The aim of the Act was to ensure a functioning payment system and create the conditions for continued domestic banking operations in the event of failure of major banks.

#### Measures:

- to permit the Minister of Finance, on behalf of the Treasury, to provide financing to establish new financial firms and acquire existing such firms, wholly or in part. Financing to savings banks was limited to 20% of net worth.
- to grant the Financial Supervisory Authority (FME) broad-based powers to intervene in the operation of distressed financial firms by
  - convening shareholders' meetings.
  - appropriating the power of shareholders in order to make what may be necessary decisions to limit the power of the Board or remove it, wholly or in part; to take over the assets, rights and responsibilities of the financial firm, wholly or in part; and to dispose of the firm, including merging it with another such firm.
  - appointing a Resolution Committee
  - limiting or prohibiting the disposal of funds and assets by the financial firm, safeguarding assets earmarked to meet liabilities, having asset values assessed for payment of claims.
  - requiring financial firms to apply for a moratorium on payment, request composition of creditors, or file for bankruptcy.
- to improve the financial safety net by making the following amendments to legislation on deposit guarantee schemes:
  - identifying deposits as priority claims in case of receivership.
  - redeeming deposits in the Icelandic króna (ISK).
  - providing for repayment of term deposits in harmony with the accounts' existing requirements, so as to avoid the development of liability for the Depositors' and Investors' Guarantee Fund until withdrawal is permitted.
  - setting rules on netting out deposits and debts within the same financial firm.
- to protect homeowners, the Government-owned Housing Financing Fund was given permission to take over the mortgages of the banks.

#### Implementation:

In October 2008, in accordance with the Act, FME placed Landsbanki, Glitnir and Kaupthing banks into receivership managed by separate resolution committees under its auspices. The domestic assets and liabilities of the old banks were transferred to new banks, and the assumptions behind the division of accounts were explained. In November and December 2008, the old banks entered formal winding-up proceedings, first with a moratorium on payment and then with resolution.

#### 4 Deposit guarantees

Before leaving the topic of crisis management and resolution in the case of the Icelandic banks, I would like to say a few words about deposit guarantees. Why did the Government give a verbal blanket guarantee only for domestic deposits and not the deposits in the banks' foreign branches? After all, this distinction probably added fuel to the fire of the so-called Icesave dispute about the settlement of deposit guarantees in Landsbanki's Dutch and British branches. The short answer is that such a guarantee would never have been credible. As a result, it would not have stopped the run on these deposits and, if attempted, might have bankrupted the Government. At the time, the Central Bank of Iceland's FX reserves amounted to 2½ billion euros, while the foreign currency deposits in Landsbanki's Dutch and British branches totalled 11½ billion euros and payment of the EU minimum deposit insurance would have required 4½ billion euros. In economic terms, given that these deposits were used to a significant degree to finance illiquid assets in these same countries, such a payment would have amounted to a net transfer of resources from Iceland to these countries at a time when Iceland was going through its deepest financial and economic crisis in the post-war period! That made no sense, and the only solution was for the governments concerned to pay out the insurance in their own currency with the aim of settling later with Iceland. There are legal arguments about the merit of such claims that I will not comment on here. The fact of the matter is, however, that the Icelandic Government made three good faith attempts to close the issue through negotiated settlements but got caught up in political dynamics and the case might be on its way to the EFTA Court. But the financial risks for the parties involved are dwindling, as it now appears that the estimated recovery from the estate of Landsbanki will cover almost 100% of all deposits in the foreign branches. And of course, the priority given to deposits in the Emergency Act is of vital importance to that result.

#### 5 Lessons learnt

Let us now turn to some of the lessons learnt from the crisis.

First, as regards the EU/EEA framework, the bottom line is that we cannot have a level playing field in banking, except perhaps in risk-adjusted terms, as long as the EU passport is not matched by EU supervision and an EU-wide safety net, which is the logical solution. Furthermore, EU-active banks from small countries with their own currencies should have reduced passport rights and/or face higher capital charges, as they have a less credible LOLR and are therefore more risky, other things being equal. Subjecting all banks in the EU to supervision by an EU supervisor is probably too much, and in practical terms, it might make sense to have two types of bank licences. In that case, national authorities would licence and supervise domestic banks, which would face significant restrictions on the type and scope of their cross-border activities. Their deposits would be insured by the domestic deposit insurance system, and the national central bank would be their LOLR. Banks wanting a European passport would be licensed and supervised by an EU authority; they would be part of an EU-wide deposit insurance system, and in most cases, their LOLR would be the ECB.

Second, at the national level the key issue is that, as long as global risks and EU flaws are not dealt with, individual countries are forced to take action to protect themselves: action that might contribute further to the retreat of cross-border banking. Such action might take the form of restricting international activities of home banks and placing much stricter prudential limits on foreign currency maturity mismatches. For example, when Iceland lifts its current capital controls on outflows, it will probably impose restrictions on the size and composition of the foreign currency balance sheets of home-headquartered banks. Some might see such restrictions as capital controls in another form, but I see them as prudential rules.

Finally, deposit insurance and the LOLR are logically related and should be in the same currency. Part of the rationale behind them is to prevent and stop runs. In the final analysis, it only works if the bank liabilities are flowing into a central bank that has the duty, willingness, and capacity to recycle them against collateral and expand its balance sheet as needed. The question therefore arises whether national deposit insurance systems should cover domestic deposits only and the payout should likewise be in domestic currency only, even for foreign-denominated deposits.

In closing, let me note that the saga of the financial crisis in Iceland and its interaction with the European and global financial system is a complex one. My remarks today have only given you glimpses here and there. But as with other sagas, Icelanders will be writing about this for decades, if not centuries, and I think we can be confident that they will be better at writing about it than at running and supervising cross-border banks.

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## NOTES

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- 1 Some of the topics discussed in this speech are dealt with at greater length in the following two sources: Gudmundsson & Thorgeirsson (2010) and Gudmundsson (2010).
- 2 My former colleagues at the BIS have been doing important research in this area, see, for example, McGuire and von Peter (2009), Baba and Packer (2008) and Baba, Packer and Nagano (2008).

## Symposium on “Financial crisis management and the use of government guarantees”\*

(OECD, Paris, 3 and 4 October 2011)

### *Background*

Almost three years after what many observers had considered the peak of this global financial crisis, we are still waiting for normalcy to prevail. Instead, tensions in funding markets have risen very significantly in recent weeks mainly as a consequence of the sovereign debt crisis in Europe. Currently, we find ourselves once again contemplating guarantees, with some observers calling for the creation of explicit government-supported arrangements for guaranteeing bank debt, such as those temporarily put in place by many governments in 2008/09. In this context, the Symposium on “Financial crisis management and the use of government guarantees” held on 3 and 4 October 2011 turned out to be very topical, certainly more topical than policy makers would have wished.

The Symposium was characterized by an open and frank dialogue between policy makers, policy consultants and other academics on the policy response to the financial crisis, the use of guarantees, failure resolution, banking and sovereign debt interconnections, as well as other financial safety net aspects. The mix of participants from academia and the public and private sector, and both from the economic and the legal profession helped participants appreciate some of the institutional details that get lost in much of the public debate on the topic. Numerous policy suggestions were made as to how to improve the use of government-supported guarantees and the design of the financial safety net, so as to improve existing mechanisms to avert future crises or check them at an early stage. One key message was that guarantees can be a powerful policy tool, but that they need to be employed with limits and priced appropriately.

### *Costs and benefits of the use of guarantees*

The use of guarantees, where they worked well and where they precipitated other problems, were issues that came up throughout the Symposium. Together with measures to enhance liquidity and capital of financial institutions, sovereigns effectively provided the function of the guarantor of last resort for financial claims in response to the global banking crisis. Despite the rather ad hoc nature of some policy measures, the policy response helped avoid the worst outcome, which could have been a series of failures of systemically important financial institutions, with dire consequences for real activity. Despite their associated problems, guarantees have been an important element in preserving liquidity and restoring market functionality, and it would be difficult to manage financial crises without them. Moreover, other forms of intervention are likely to be more intrusive.

Nonetheless, guarantees were not without cost. Further to administrative costs, they created significant contingent potential liabilities for sovereigns, which was compounded by a failure to charge fees commensurate with the risk which created additional costs. The costs of such underpriced insurance included potential distortions to competition and incentives, which give rise to moral hazard and the potential for additional problems down the road.

### *Pricing government guarantees*

In principle, pricing structures should be designed in such a way that the premiums paid by beneficiaries of guarantees reflect the costs that they would have incurred if markets had functioned properly. As it turns out, however, pricing was not always appropriate. For example, the case of Ireland has highlighted the risk of underestimating losses from already existing claims, but where the ultimate extent of losses arising from those claims is uncertain. Guarantees have also been introduced for new liabilities, such as bank bonds, in many OECD in an effort to help banks regain access to markets. This effort was generally considered a success. However, fees typically were set as a function of the characteristics of the issue or the issuer and, in practice, were on average broadly flat across countries. In Europe, an effort was undertaken to harmonise fee structures across borders, making them a close function of a measure of the history of credit default swap spreads for the issuer, with the explicit aim being to avoid competitive distortions between banks.

Unfortunately, the costs for banks of issuing such government-guaranteed bonds turned out to be significantly affected by the identity of the guarantor. This is not so surprising, as theory suggests that the market value of a sovereign guarantee is not only a positive function of the weakness of the borrower but also a positive function of the creditworthiness of the sovereign. Thus, to avoid competitive distortions, the strength of the sovereign should be taken into account in the pricing of government-provided guarantees.

### *Crisis management experiences and changes in the financial safety net*

The costs and benefits of guarantees have to be weighed against the alternatives. In Iceland, for example, an all-encompassing guarantee would not have been credible. The more limited guarantee announced together with the resolution approach adopted implied that shareholders were wiped out and that unsecured non-priority creditors bore losses. The link between bank and sovereign credit risk was severed. Whether that approach was available elsewhere is questionable. In fact, extensive guarantees were in many cases introduced precisely because alternative tools for resolving severe problems were either not available or not trusted to work smoothly enough to avoid a systemic fallout. In particular, effective failure resolution mechanisms for some types of troubled financial institutions tended to be absent.

In the meantime, special legislation for dealing with stressed financial institutions has been introduced in many countries, which has successfully addressed some issues. For example, new institutions and legal frameworks have been introduced that facilitate the restructuring of stressed banks and the rescue of systemically relevant parts of banks. Other issues prevail, however, including the issue of how to resolve stressed large financial institutions in a cross-border context. For example, further reforms are needed for cross-border banking activities in the European Single Market, where the issue is to match the European passport for banks with a pan-European safety net including deposit insurance and supervision.

While use of guarantees was a central theme, the Symposium also analyzed other aspects of the design of safety nets. There is a need for policymakers to elaborate on the specific roles of the various safety net participants and stakeholders so as to better understand how the financial safety net should work during times of crisis. Moreover, the traditional three-tier safety net, consisting of a lender of last resort, bank deposit insurance, and a (micro-prudential) regulator-supervisor was considered incomplete, which led to calls for the creation of additional players or functions, including:

- a macro-prudential authority, with the power to alter the composition of central bank assets, to adjust capital adequacy and liquidity ratios, and to propose fiscal and structural changes affecting financial intermediaries.
- an institutionalized tiered systemic crisis insurance function, inspired by mechanisms developed for funding resolution of natural or man-made catastrophes. To limit moral hazard, a layered approach with self-insurance as the first layer, private insurance and reinsurance as another layer and the government as a reinsurer of last resort was suggested.
- a bank failure resolution fund, which would be separate from the general government budget and funded through ex ante contributions of financial intermediaries according to their systemic importance, to finance resolution measures that require the rapid availability of funds in systemic crises.
- an institutionalized investor of last resort, which would establish ex ante conditions for providing support and establish credible bounds to the extent of support in systemic crises, thus helping to legitimize future support measures and limit associated moral hazard.

\* OECD Secretariat assessment, facilitated by the rapporteur James McCollum. The opinions expressed here do not necessarily reflect the official views of the Organisation or of the governments of its member countries. For further enquiries please contact Sebastian Schich at [Sebastian.Schich@oecd.org](mailto:Sebastian.Schich@oecd.org).