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Tryggvi Thor Herbertsson
Professor of Economics at Reykjavik University

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For more information contact: Malan Rietveld, assistant editor (**mrietveld@centralbanking.co.uk**)
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Central Banking Publications
Incisive Media Limited
Haymarket House
28-29 Haymarket
London SW1Y 4RX
T: +44 20 7004 7404

E-mail: **info@centralbanking.co.uk**
Website: **http://www.centralbanking.co.uk**

What the Icelandic collapse taught us

The reduction of a bloated banking sector presents an opportunity for a return to balanced growth, argues Tryggvi Thor Herbertsson.

As the current financial crisis rumbles on and its deleterious effect on growth and unemployment becomes painfully evident, many observers have concluded that the decision to let Lehman Brothers go under on 15 September 2008 was a grave mistake. Yet, the decision by various participants in the international financial system to starve Iceland of funding in the immediate aftermath of the Lehman collapse should be regarded as a mistake of similar magnitude.

In this brutal aftermath, almost all the funding lines of Icelandic banks were cut and they were left facing severe funding problems. The usual policy response to a systemic crisis such as this – to use the central bank as a lender of last resort – was not possible, as the funding needs of the banking system dwarfed the capabilities of the Central Bank of Iceland. The central bank's foreign reserves amounted to about half the country's GDP, while the consolidated balance sheet of the banking sector was roughly ten times GDP. The consequent systemic failure led to the three system banks being taken over by the Icelandic authorities. The crisis also led to a complete deterioration of the country's capital account and a fully fledged currency crisis.

Costs

The direct cost to the Icelandic taxpayer associated with the collapse of the Icelandic banking system is estimated, at the time of writing in January 2009, to be around 85% of the country's GDP. This estimate includes the cost of equity injected into the banks, which totals roughly 30% of GDP. What the cost in terms of lost output will be remains to be seen, but the first estimate of the International Monetary Fund is that GDP could contract by 10%.

It is useful to start the investigation of what went wrong, by summarising the events of the three years preceding the systemic collapse of the banking system

Tryggvi Thor Herbertsson is a professor of economics at Reykjavik University and a former special economic advisor to the prime minister of Iceland.

in September and October 2008. In many ways, the origins of the crisis could be traced to late 2005, when a number of analyst reports by leading financial institutions brought attention to high degree of leverage that characterised the Icelandic financial system and its key institutions. Stories of the shorting of stocks in Icelandic banks and companies – and even the currency – began to surface, and the increase in perceived risk was evident in the widening of spreads on various credit default swaps. In the coming months, Iceland became the talk of the town, with the state of its financial system receiving particularly intense scrutiny in March 2006. The research departments of all major banks paid disproportional attention to Iceland and issued reports on the country's financial system – the bloodier the better.

Frederic Mishkin

In March 2006 spreads on credit default swaps shot up to 110 basis points and Iceland came to be viewed as a risky place to invest. In May the same year, I co-authored a report with Frederick Mishkin of Columbia University (who was appointed to the Board of Governors of the Federal Reserve later the same year) concluding that this was a misconception. The country's fundamentals, we argued, were a very good state and the general outlook positive.[1] We concluded that if a number of relatively minor policy recommendations were followed, confidence in the Icelandic economy would be restored. Of course, this prediction could not take into account the depth and severity of the global financial crisis that would eventually topple the Icelandic banking system.

Improvement

Following the publication of our report, Morgan Stanley wrote a very position note on the state of the Icelandic economy, saying they essentially agreed with our position and that there was almost no danger of a financial crisis in Iceland. The authors concluded by recommending investment in the first-tier capital of Icelandic banks. The sense of a return to stability was enhanced by the fact that the Icelandic banks appeared to use this mini-crisis to get their act together. Cross-holdings were reviewed and some dissolved, funding structures were changed, transparency increased, and much more emphasis was placed on deposits as a source of funding.

Roughly a year later, however, this positive trend took a turn for the worst in the summer of 2007, especially after Bear Stearns decided to close two of its hedge funds in August. The episode triggered a downward spiral in which wholesale funding became gradually more difficult to obtain. By early 2008, Iceland was more or less entirely closed off from the market for wholesale funding. Icelandic banks ended up spending the first half of 2008 engaged in a scramble to raise funds through new deposits and private placements. By September, however, as the world watched in horror as venerable Wall Street institutions such as Lehman Brothers and AIG, either collapsed or were taken into public ownership, the funding problems of the Icelandic banks became untenable. On 29 September, after seeing its credit lines withdrawn in the

week following the Lehman collapse, news that Glitnir, the country's third largest bank, was facing severe funding difficulties and was seeking public help become known. Glitner was scheduled to meet a €750m payment on 15 October and saw no other way out of its predicament than to go to the central bank in search of an emergency loan.

Capital injection

The Central Bank of Iceland, however, rejected Glitnir's request for a loan and insisted that it would inject €600m in equity into the bank in exchange for a 75% ownership stake in it. As a consequence, the bank's shareholders were practically wiped out. The following morning Glitnir's share price fell by 75% in matter of minutes and the value of Stodir, an unlisted holding company that was its biggest shareholder, fell even more dramatically, forcing it into a moratorium a day later. In addition, the majority of Glitnir's stock had been pledged to Kaupthing and Landsbanki, the country's two largest banks. With the fall of Glitnir's share price, stockholders were subject to margin calls that they could not meet, as the collateral used to meet these margin calls became practically worthless. A crippling domino effect was taking hold where the fall in price of bank's share price would plunge others into crisis. It became apparent that the authorities would have to resort to something altogether more dramatic to avoid the collapse of the entire Icelandic financial system.

The plan devised in the days that followed detailed how the banks would be taken in public ownership one-by-one, if needed. It was apparent that the central bank could not come to the rescue of the banking system without taking them over, as the size of the banks was absolutely disproportional to the capabilities of the sovereign. It was decided that a blanket guarantee should be given to depositors in local banks and that depositors should be first in line as claimants on the assets of the banks. Unlike the approach adopted by the Nordic countries during their financial crisis in the 1990s, which provided a blanket guarantee to the creditors as well, Iceland only guaranteed deposits. This meant that the Icelandic banks had now effectively defaulted on their senior debt.

Anti-terrorism laws

The Icelandic parliament rushed through an emergency law giving the Icelandic Financial Supervisory Authority, the financial regulator, the authority to take institutions into public ownership – similar to those of Federal Deposit Insurance Corporation in the United States. Within one week, all three major banks were nationalized: Glitnir (on 7 October, one day after the passing of the emergency law), Landsbanki (on 9 October) and, finally, Kaupthing (on 10 October after the British government of Gordon Brown used anti-terrorism legislation to freeze all of Landsbanki's assets in the United Kingdom).

Gordon Brown

The government's plan for this sweeping takeover of the banking system followed a six-step process. In the first phase, various ministries and the Icelandic Financial Supervisory Authority, the regulatory authority, drew up a plan for taking over the banks, particularly the legal framework

and operational structure for the soon-to-be nationalised entities. The second phase was to execute the plan, with the primary responsibility falling on shoulders of the regulator. The third phase was to value the assets, which was the responsibility of an oversight committee (with one appointed for each bank by the regulator). The fourth step involved selling those assets whose value would otherwise deteriorate quickly. The fifth phase, which will be a long-running process, is to restructure the banks financially and will be the responsibility of the management of the banks. A sixth phase can possibly be added, involving the re-privatisation of the banks, but no such decision has been taken at the time of writing.

In each case, the restructuring involved the creation of a new bank, which held all deposits guaranteed directly by the sovereign. A preliminary evaluation of the assets was carried out, and assets amounting to deposits moved to the new banks. The state injected new capital into the banks, targeting a capital adequacy ratio of 10%. What remained in the old banks were all assets that had not been moved to the new banks, a note on the new banks, and claims of certain creditors (such as deposits in branches outside of Iceland and claims of bondholders). The capital contribution of the Icelandic government amounted almost 30% of GDP. The overall size of the assets and liability of the new banking system is about three times the country's GDP, compared to almost 10 times GDP before the crisis. Moreover, the new system is almost fully financed in Icelandic krona.

Nordic tiger

Thus far, I have described the events that led directly to the collapse of the Icelandic financial system. But it is important to consider some of the more deep-rooted origins of the crisis. Indeed, up to the crisis, it could be said that the first decade of the 21st century were unusually favourable to Iceland. The liberalisation of the economy made the country the fifth richest member of the OECD. The United Nations ranked Iceland as the number one country in the world according to a number of indicators of living standards.

Economically, Iceland appeared to flourish: output, consumption and investment – both foreign direct and domestic – grew rapidly. Public finances were in great shape and taxes were lowered. Indeed, at less than 6% of GDP, government debt was almost non-existent at the start of 2008. Moreover, the long-term picture looked rosy: pensions amounted to almost 1.5 times GDP and, unlike many other industrialised countries, the demographic composition of the population was favourable. There was virtually no unemployment. Favourable fundamentals justified optimism: Iceland was the "Nordic tiger".

Behind this story of success lies an incredible transformation of the country's banking system. At the turn of the century, the Icelandic banking system was more or less government owned. It was a simple depositary system with a consolidated balance sheet amounting to approximately one time the country's GDP. The loan portfolio was mostly domestic, fairly low risk, and credit losses were small. The trend towards deregulation and privatisation started (with the initial emphasis of deregulation) under Iceland's membership to the European Economic Area and the country's adoption of the European Financial Directive in the early 1990s. After privatisation, the banks' flow of foreign credit increased rapidly. Domestic liquidity fuelled an investment boom and later an asset-price bubble. International creditors were willing and

able to lend what appeared to be limitless amounts to Iceland. House prices rose dramatically with easier excess to capital and the stock market boomed.

Ponzi game

In retrospect it could be argued what was happing in Icelandic finance resembled a Ponzi game: financiers could start with a certain amount, buy stocks and pledge the stock in a bank. Then they could buy more of these stocks, thereby increasing its price, and pledge the increase. This would raise funds to start the cycle again, generating and ultimately exacerbating a supposedly virtuous cycle, which pumped up the stock market and created a bubble.

Gradually, the banking and financial system turned from being a fairly simple depositary system to fully fledged international financial intermediation. The banking system was, however, not supervised prudently enough. The banks, the regulatory authority and to some extent the central bank did not fully understand the systemic risks that had built up in the system. Too much focus was placed on measures of capital adequacy and other formalities, rather than systemic risk and funding.

Regulatory problems

There were also problems with the institutional structure of regulation. One of the policy recommendations put forward in the report that Mishkin and I wrote was to consolidate the financial stability mandate of the Central Bank of Iceland and the banking supervisory functions of the Financial Supervisory Authority in the central bank, which we argued would enable a stronger emphasis on actual risks and financial stability, rather than a narrower emphasis on regulatory requirements. Ultimately, the failure to follow this advice led to the same mistakes – born out of a detachment of lender-of-last-resort and supervision responsibilities – that occurred in the United Kingdom around the collapse of Northern Rock.

In addition to issues of finance and banking, the framework for macroeconomic policy was important. In 2001, the framework for monetary policy was changed from a fixed exchange rate regime to one characterised by a floating exchange rate and inflation targeting. The first four years this new policy was successful. But by the 2005, the carry game being played by both households and firms meant that they were becoming increasingly immune to increases in the policy rate: in fact, the higher the interest rate, the more you gained on the carry trade. Monetary policy, therefore, became almost impotent in preventing the acceleration of the economy, asset prices and inflation. The sustained strong exchange rate helped to maintain investor confidence and created a perception of low exchange-rate risk related to foreign currency borrowing, increased demand for imports and an illusionary wealth effect. Both households and firms borrowed heavily in foreign currency, which became a major problem once the krona started to depreciate.

Non-linear inflation targeting

What the Icelandic experience under inflation targeting demonstrated is that the framework can have non-linear effects, which can be particularly acute for a small, open economy – of which Iceland is a textbook example. When the domestic policy rate is sufficiently close to some average of interest rates in the leading economies, the domestic monetary transmission mechanism works fine. But as the domestic policy rate moves further away from this "global rate", its effects on domestic demand diminish as the carry trade sets in. Consequently,

the currency appreciates and demand increases because of illusionary wealth effects. In the case of Iceland, this led to a sharp increase in inflation (even more so as the target measure included house prices). The current-account deficit rose sharply, and peaked at a monumental 20% of GDP.

As mentioned earlier, initial concerns over the Icelandic financial system in 2005/06 did lead to a positive response from the banks. But these efforts would, in retrospect, prove to be a case of "too little, too late", as by this time the banking system has already become far too big for the currency and a country with a population of only 320,000. The banks may possibly have understood their own risks, but they by no means had an adequate understanding of the systemic risks that resulted from their collective action. The early warnings contained in the concerns over the Icelandic banking system in 2005/06 should have been seen as a call for these institutions to deleverage and de-risk, and they should have been required by the regulatory authorities to do so.

Lessons

What may the future hold for Iceland and what lessons can we draw from the crisis? As a starting point, the Icelandic crisis raises fundamental questions about whether a small, open economy can have an independent and freely floating currency in the current global financial system. I doubt that it can, unless the country was willing to effectively "turn back the clock" and return to basics: maintaining a balance between imports and exports, restrictions on capital movement and a deposit-based financial system. As this set of conditions is unlikely to appeal to the citizens of Iceland, a more likely route is to join the European Union and adopt the euro. In doing so, Iceland would lose the flexibility that comes with an independent currency, but would gain the stability that comes with a credible fixed exchange rate.

Once financial calm is restored to Iceland – and indeed the global economy – the outlook remains positive. Unlike most other countries that have suffered financial collapse, the fundamentals remain strong in Iceland. The export industries, fisheries, heavy industries, energy and tourism are in a healthy state, aside from the balance-sheet effect from the collapsed currency. The country has abundant human capital and favourable demographics. Public finances remain manageable, in spite of the fact that the crisis will put a burden on Icelandic taxpayers in the near future. There are, it would appear, benefit to reducing the financial system to a more manageable size, even if this occurs within one week.

With this optimistic outlook comes a significant caveat: what Iceland has to worry about is unjust redistribution of wealth, corruption and crony capitalism during the period of restructuring. The experience of Finland in the 1990s in terms of redistribution of wealth was not good and the outcome still is a matter of controversy. A lot of good assets, such as big chunks of Nokia, where sold to foreigners at distressed prices.[2] More generally, the chaos that surrounds transformations on this scale gives rise to corruption. Therefore it is of paramount importance to keep the process transparent and to have as much independent advice as possible. By doing so the soil for corruption cannot be cultivated as easily. ❑

Notes

1. See Herbertsson, T. and Mishkin, F. (2006). *Financial Stability in Iceland*, Icelandic Chamber of Commerce.
2. I owe this point to Pentti Kouri.