Could the Icelandic Banking Collapse of 2008 been Prevented? The Role of Economists in its Unfurling[§]

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Abstract In 2008 the three main banks in Iceland collapsed. The proximate cause was the freezing of the short-term international money markets, initiated by the subprime crisis, on which the Icelandic banks depended. However, concern about the Iceland banks and their rapid growth was expressed by, amongst others, the international rating agencies and the IMF a couple of years earlier, causing a temporary mini-crisis. Moreover, there is strong evidence that the banks would have become insolvent even without the subprime crisis. The Icelandic parliamentary Special Investigation Commission came to the conclusion that 2006 was the last date by which the excessive growth of the banks could have been curtailed and the collapse possibly averted. Yet there was a marked difference in opinion at the time about the viability of the Icelandic banks. A clean bill of health was given by two influential reports by Mishkin and Portes, just prior to the collapse. However, severe reservations about the Icelandic financial system were expressed by Wade. These contrasting views were widely debated in the media and elsewhere and may well have influenced foreign potential and actual depositors in the banks. This paper analyses the disparate arguments put forward and contrasts it with the actual outcome. It considers the influence of economists in public policy debates and draws some methodological conclusions.

Key words: 2008 Banking Crisis; financial regulation; Iceland; rating agencies; role of economists; Special Investigation Commission.

Introduction

On 9th October 2008, the UK Chancellor of the Exchequer, Alistair Darling unprecedentedly invoked the UK anti-terrorism laws to freeze the UK assets of the collapsed Icelandic Bank, Landsbanki Islands. This action was to protect the deposit savings of UK residents who had invested in the bank's online savings branch, Icesave. The nadir of the Icelandic banking system, which over the previous decade had enjoyed spectacular growth, was fast approaching. For a short time, Iceland had become an important international financial centre. The banking system came to dominate the small Icelandic economy, which only has a population of about 320,000, smaller than the city of Coventry, and an economy that is only five per cent the size of that of Denmark. At its zenith, shortly before the banking collapse in 2008, the consolidated financial assets of the three big banks (Glitnir, Kaupthing and Landsbanki) were over nine times the size of Iceland's GDP (Dwyer, 2011). Comparisons were drawn with other small countries

dominated by finance, namely Ireland, Luxembourg, and Switzerland. The exceptionally fast rate of growth of Iceland's banking system is evidenced by the fact that five years earlier the ratio of assets to GDP was less than two, and for a short time, brought unparalleled prosperity to the country. In 2008 the country's per capita income exceeded that of the United States, but the growth had been accompanied by increased income inequality with the increasing importance of the banking sector. Much of the gains of financialisation went to the already wealthy. (The Gini coefficient increased from 24.1 in 2004 to 29.6 in 2009. The share of income of the top one per cent of the population increased from 5 per cent in 2000 to 20 per cent in 2008.)

The banks collapsed on 8th and 9th October and the bankruptcy of the three banks is the third largest in the world, after Lehman Brothers and Washington Mutual.

The purpose of this paper is not primarily to discuss the causes and consequences of the Icelandic banking collapse, as these are by now well known. Moreover, there is now a comprehensive literature on this topic. The most notable is the report of the Special Investigatory Commission (SIC),² a 2,400 page, nine volume report to the Icelandic Parliament, published in 2010. The OECD (2009) survey of Iceland also provides a good discussion of the wider macroeconomic issues surrounding the collapse and Jännäri (2009)³ considers the performance of the regulatory system. We also do not discuss the subsequent events following the crisis, including the imposition of capital controls, remarkably endorsed by the IMF. This is discussed by Sigurgeirsdóttir and Wade (2014).

Instead, the focus of this paper is on why some economists anticipated the crash or, at least, took a very pessimistic view of the outlook for the Icelandic banking system. In particular, we shall consider the views of Wade and his Icelandic co-author, Sigurgeirsdóttir, (2009, 2010, 2012 a & b) who expressed a number of major concerns concerning the viability of the Icelandic

¹ However, the situation of Iceland differs in one significant respect from the other three countries. In Luxembourg, the banks' assets belong to the branches of foreign banks and, as such, the banks' deposits are guaranteed by their respective foreign countries. In Ireland, this applies to about 40% of the banks' assets. The Swiss banking system is much larger, but is so interconnected with the international financial system that there would almost certainly be a worldwide response if any of its banks were in any danger of failing. In Iceland, the Central Bank of Iceland (CBI) was the "lender of last resort" and this had relatively few financial resources, including foreign exchange, compared with the size of the Icelandic banking system just prior to its collapse (OECD, 2009, pp. 21-22).

²Only short, but informative, excerpts are available in English. Fortunately, Johnsen (2014), who was a Senior Researcher with the SIC has provided a detailed account of the crisis.

³Jännäri was the retired Director General of the Finnish Financial Supervision Authority, and, as a condition of the IMF standby agreement resulting from the crisis, was invited by the Icelandic government to produce a report on financial regulation in Iceland.

banking system and the effectiveness of its regulation. Wade *et al.* voiced these concerns not only in published articles, the *Financial Times*, and blogs, but also in semi-public lectures in Iceland prior to the collapse.

By way of contrast, two reports each came to the same diametrically opposed conclusions. These were the reports by Mishkin, and his co-author Herbertsson (2006, May) and Portes and Baldursson, with Ólafsson (2007, November). With a few minor reservations, both reports gave Icelandic banking a clean bill of health and any overseas investor accepting the conclusions of both these reports would not have had any reservations about keeping money in one of the Icelandic banks.

The collapse of the Icelandic banking system in October 2008 was preceded by a temporary loss of confidence in the banks by the international financial markets and international rating agencies (Fitch and Moody's) in 2006. There was also increasing concerns raised by the IMF in its country report on Iceland. The Danske Bank, the largest Danish bank, was so concerned about the Icelandic banking situation that, although Iceland was not one of their core research areas, it issued a research report in March 2006 entitled "Iceland: Geyser Crisis". Concentrating largely on the deteriorating macroeconomic indicators, the report concluded that "Iceland looks worse on all almost all measures than Thailand did before its crisis in 1997" (i.e., the Asian Financial Crisis). And "we see a substantial risk of a financial crisis developing as an integral part of an Icelandic Recession in 2007" (Danske Banke, 2006, p.1).

But this turned out to be just a short-lived crisis. It has come to be known as the "mini crisis" as, as, after a few months, there was a recovery in confidence in the banks. This was, however, only temporary and lasted until the eventual collapse in late 2008.

The conclusions of the Mishkin (2006) report stands in marked contrast to these pessimistic views. The subsequent Portes (2008) report was even more bullish although it was published only a year before the banks were nationalised. As Ferguson (2014, p. 256) notes, "his paper and accompanying Power Point presentation are full of phrases like "Internationalization of Icelandic Financial Sector is a Major Success" and "Financial Volatility Not A Threat".

This raises the question as to the role of the debates in the media in the run up to the collapse, and the two reports in influencing the financial decisions. The SIC, for example, implies that the Mishkin report was sufficiently influential that it had a role in ending the mini-crisis, and, implicitly, may have induced unwarranted confidence in the banking system. Indeed, there is little doubt that Mishkin's report "played a role in helping the Icelandic Banks to continue to borrow" (Ferguson, 2012, p.254).

Consequently, the importance of the reports by Mishkin (2006) and Portes (2007),⁴ which were commissioned, and paid for, by the Iceland Chamber of Commerce⁵ cannot be overstated. They were not some obscure academic reports, but were widely cited by the Icelandic government, *inter alios*, and used to persuade investors and the other central banks that the Iceland banking system was sound. This was in spite of the prescient warnings, noted above, of its possible imminent collapse. The Prime Minister of Iceland, for example, informed the 2008 annual meeting of the Central Bank of Iceland that the "prospects are good" and this "has been thoroughly confirmed by well-known scientists such as Fredric Mishkin, who has become governor of the US Federal Reserve, and Richard Portes, the well-known academic expert in the field" (cited by Wade, 2010, p.5).

Wade, however, comes to a completely opposite conclusion, as we have noted. He adopts what may be best described as a political economy approach to the crisis. In a series a papers he and Sigureirsdóttir have looked in detail at the historical political and economic changes in the Icelandic economy, including who were the beneficiaries of financial deregulation. The network of connections between what may be best described as the power and financial elite. Wade gives extensive examples in their analyses suggesting that these were important factors in the collapse. (See, for example, Wade, 2009 and Wade and Sigurgeirsdóttr, 2010 and 2012a). This stands in marked contrast to Mishkin and Portes who rely solely on standard economic indicators and what is little more than an assumption that the regulatory system was efficient.

We will return to Wade's analysis below, but for the moment it sufficient to note that in a letter to the *Financial Times* in July 2008 he pointed out that the case of Iceland with regard to the subprime crisis was like the "canary in the mine". The letter summarised many of the problems and dangers arising from poor regulation and conflicts of interest in the ownership of the Icelandic banking system. This drew an immediate response in the *Financial Times* from Baldursson and Portes (2008) that "Robert Wade gets Iceland very wrong". According to them, even as late as the latter part of 2008, the macroeconomic indicators were sound and there was

⁴ For convenience, we shall refer to the reports as simply Mishkin (2006) and Portes (2008).

⁵ Mishkin was paid a fee of \$135,000 for the 35-page report and Portes was paid £58,000 (Wade and Sigurgeirsdóttir (2010, pp. 16, fn. 16 and p.17 fn. 17 respectively). Mishkin disclosed the payment when he was "required to, on the government financial disclosure form required by the Federal Reserve Board" (Ferguson, 2012, p. 253). These reports were given prominence in Charles Ferguson's documentary *Inside Job* and his unashamedly polemical book of the same name (Ferguson, 2012). In his chapter entitled "The Ivory Tower", Ferguson notes the tendency of academics, particularly in the United States, to be funded, with the moneys nearly always undisclosed, by interests whose views they are either implicitly or explicitly supporting. In particular, Ferguson looks at the role of eight influential and prominent economists who have written on financial regulation and made considerable fortunes from the finance industry. Of particular interest here is the fact that he includes both Mishkin and Portes.

effective bank regulation. Implicitly, the real danger was the possibility of a panic-induced run on the putatively solvent banks, creating a self-fulfilling prophecy. In the European Economic Area, Baldursson and Portes argued, Iceland could not get away with 'as light a regulatory touch as possible' [citing, and *pace*, Wade]. "It has had to apply exactly the same legislation and regulatory framework as European Union member states and its Financial Services Authority is highly professional".

Much of Wade's letter was dismissed as "political, including rumour-mongering" by Baldursson and Portes. However, Wade's concerns were echoed by Gylfason (2008) and Zoega (2008). The former, while of the opinion that Iceland would not "go under", nevertheless emphasised some serious concerns resulting from the rapid expansion of the banks, and the latter considered that Iceland was in an unsustainable credit boom.

Yet Baldursson and Portes's letter was written at the very time that the Icelandic banks' credit default swap rates had soared to 800-1000 basis points (OECD, 2009, p. 44), one of Mishkin's key indicators of a financial crisis. This suggested that at least the international financial markets were expecting a severe financial crisis. Wade *et al.* were not mistaken. A mere three months after Portes had again given the Icelandic banks the all clear, beginning on the 7 October 2008 the Icelandic government was compelled to nationalise the three major banks Landsbanki, Glitner and Kaupthing and Iceland moved rapidly into a deep recession. The growth rate in 2008 of 1.1 per cent per annum ("a slowdown but hardly a catastrophe", according to Baldurasson and Portes, 2008) the *very next year* declined to minus 6.6 per cent and the following year was minus 4.1 per cent, the worst recession of any of the OECD countries. Inflation increased to over 18 per cent in 2009, largely as a result in the rapid depreciation of the currency (ISK). Unemployment soared.

This raises two issues. The first is the extent to which the impending crisis should have been foreseen by Mishkin and Portes, *inter alios*, but was not. After all, it could be argued that just as very few anticipated the subprime crisis, so likewise it would have been difficult to predict the Icelandic banking crisis. Moreover, in such an exercise there is always the danger of the benefit of hindsight. Care needs to be taken to consider only the information in the public domain at that time, or information that could, and should, have been obtained in making any contemporaneous assessment of the Icelandic economy. For example, while the SIC has undoubtedly produced the definitive assessment of the crisis on which we draw extensively, the Commission had access to a great deal of information not in the public domain. It took evidence, for example, from a large number of senior individuals involved in the Icelandic financial services. Thus, it is necessary when considering the debate prior to the crash not to assume that all this information was readily available at the time.

But as we shall see, although the Icelandic banking crisis was precipitated by the freezing of international liquidity after the collapse of Lehman Brothers, there were plenty of warning signs of the fragility of the banking system evident before the collapse. This is notwithstanding the fact that the Icelandic banks did not hold any toxic assets such as collateralised debt obligations (CDOs). Wade (2008) provides a list of these warning indicators in his question as "to why finance directors of UK companies, local government authorities, charities and police left their assets during the first half of 2008?".⁶

Part of the answer is that although the fragility of the Icelandic banking system was well known to the Icelandic authorities, as the SIC has documented, they preferred merely to mount a public relations campaign throughout 2008 in an attempt to convince the international markets that the banking system was fundamentally sound (SIC, chapter 21, pp.62-81). The Mishkin and Portes reports were extensively used in this context by the authorities in the media. As the SIC (2010, Chapter 2, p. 10) puts it:

The ministers focused too much on the image crisis facing the financial institutions rather than on the obvious problem, that the Icelandic financial system was far too large in relation to the Icelandic economy. When the ministers intended to improve the image of the banking system by partaking in public discussions, mainly abroad, it was done without any assessment of the financial capability of the state to come to the banks' assistance and without information being available on the cost of a financial shock.

The second issue is that the reports raise some interesting questions that go to the heart of conflicting methodologies in economics and the role of paradigmatic assumptions. It will be argued that the failure to see the impending Icelandic banking crisis was similar to the failure of Greenspan and many other mainstream economists to foresee the subprime crisis. A reliance on broad macroeconomic indicators and macroeconomic statistical relationships (based on the assumption of ergodicity) and a belief in the efficiency of financial markets.

⁶These include the government forecast of the Icelandic economy predicting a deterioration of the economy, the bubble in stock prices, the large bank liabilities and overvaluation of the Krona (ISK), the high proportion of "weak equity" of the banks and the excessive reliance on the volatile UK retail savings market.

⁷ In 2008, the international media began to take an increasing interest in the deteriorating Icelandic economic situation. An exception was the Icelandic press, which were owned indirectly by the banks through their shareholders and was understandably remarkably quiet. An attempt by parliament to break up this monopoly was thwarted by the President of Iceland using his power of veto. The role of the press has been discussed by Chartier (2008) and will not be considered here.

⁸See Bezemer (2009) for a discussion of those economists who did see it coming.

The conclusions of the SIC are clear-cut, although couched in diplomatic language. As Gylfason (2010) wryly notes "it uses the gentle word 'neglect' to refer to what might more accurately be called gross dereliction of duties". The fundamental cause was not the freezing of the international financial liquidity, although this was undoubtedly a contributory factor. It was the reckless behaviour of the banks. Flannery (2009)⁹, for example, notes that the Icelandic banks were likely to have become insolvent *before the 2008 subprime crisis*.

The Icelandic banking collapse is a story of reckless expansion after financial deregulation, totally inadequate regulatory control and regulatory capture, opaque financial accounting and bank reports, serious conflict of interest and possibly corruption. So why was it missed by so many?

THE RISE AND FALL OF THE ICELANDIC BANKING SYSTEM

In this section, we briefly set out the background concerning the Icelandic banks for the subsequent discussion. Wade and Sigurgeirsdóttir (2010, p.11), in particular, have traced the close ties of the political parties to commerce and finance in the early postwar period where "market transactions became political and personal, as credit and jobs were allocated by calculation of mutual advantage". This patronage was increasingly challenged in the 1970s and, in 1991, the Independence Party came to power committed to implementing the neoliberal philosophy of deregulation. Yet, paradoxically, it merely replaced one set of patronage with another. Financial deregulation began in 1994 when Iceland, as part of the European Free Trade Area, joined with the countries of the European Economic Community to form the European Economic Area (EEA), a European free trade area. In the 1990s the financial sector did not play a major role in the Icelandic economy. It was small and consisted mainly of publically owned banks, but this was to radically change in the early 2000s.

The banks were privatised with one of the big three, the Landsbanki, allocated to the leaders of the Independence Party and another, the Kaupthing, to those with influence in the Center Party, the Independence Party's coalition partner. The investor group Samson owned by these politicians, etc., obtained a 45 per cent interest in the Landsbanki, then the country's largest bank. There was no foreign competition in the privatisation process as foreign banks were barred from tendering for political reasons, even though at least one expressed an interest (OECD, 2009, p.19)¹⁰. This was the opposite of the original intention, which was to encourage

⁹ Flannery (2009) is also Appendix 3 of the SIC report and was prepared for the SIC investigation.

¹⁰ A Swedish Bank expressed an interest in buying a one-third share in Landsbanki in 1998 but shortly before the deal could be completed it was blocked by the Prime Minister. In 1999 the privatization of what was to be later called Glitnir was completed. The completion of the privatization of the other two banks was finalized in 2002 under what can best be described as arbitrary and opaque procedures. S-

foreign banks to take a share and hence draw on their banking experience. The third large bank was formed by the coalescence of a number of smaller ones with a single dominant shareholder. The new owners set up private equity companies that in turn bought large numbers of shares in the banks. Thus, the Icelandic banking system became highly concentrated with a few large shareholders and close ties to the political elite. As Wade notes, it was a curious mix of free market deregulation and crony capitalism. By 2003, Icelandic banking began to grow at an extraordinary fast rate, aided by low world interest rates and free capital mobility.

The Icelandic banks initially attracted high ratings from the international rating agencies, primarily because of their close political links and implicit government support. There was also a hybrid merger of the investment banks with the commercial banks, with no sharp demarcation between them. Until the rapid development of the banking system, Iceland had been heavily dependent upon only two export activities, namely, fishing and aluminium. Hence, there was a deliberate attempt to diversify and to turn Iceland into a low-tax financial sector based on the Swiss model. The rapid growth of the banks was enabled by their access to the international financial markets aided by their membership of the EEA. Their explosive growth came over the period 2003 to 2007, or, in other words, some years after financial deregulation. As the SIC (2010) report notes, in 2005 alone the big three banks raised around EUR 14 million in foreign debt securities, slightly larger than Iceland's total GDP.

The strategy of the banks was to borrow heavily in the foreign capital markets to finance loans made to only a few Icelandic investment companies, such as Baugur and Samson. These companies were controlled by the main shareholders in the banks. The investment companies, in turn, used the loans to buy substantial equity stakes in foreign firms. By the end of 2007 the three largest banks relied on short-term financing for three-quarters of their funds, nearly all obtained from abroad. 58 per cent of their overall income was derived from branches located abroad. The net external debt increased by 142 per cent of GDP over the next four years and most of this was due to the banks' overseas borrowings. The net equity assets as a percentage of GDP grew to 99 per cent of GDP, extraordinarily large by international standards. The OECD (2009, p. 22) not prone to hyperbole, likened Iceland's international investment position to the "balance sheet of a hedge fund, with large debt-finance equity positions". This posed two systemic risks.

The first was that if the prices of the international equities collapsed and the firms became insolvent, this would lead to a serious credit loss to the banks. Secondly, the banks relied

group who became the purchasers of Bunadarbanki (which was later to merge with Kaupthing and eventually take that name) claimed that they had a German bank in the investor group. However, after the deal was concluded the German bank turned out to have never even heard of Bunadarbanki, (Johnsen, Chapter 5). This was a forerunner of things to come.

heavily on the wholesale financial markets, rather than expanding through the growth of deposits. The former are generally more short term in nature, having to be rolled over at regular intervals. Deposits, short of a run on the bank, are generally much more stable, but take longer to mobilise. Hence, in the dash for growth the Icelandic banks initially concentrated on the former.

There was widespread conflict of interest in the privatised banking system right from the beginning. The owners of all the big three banks also became the major borrowers from the banks, at low rates of interest. They also received preferential treatment from the banks subsidiaries. As the SIC (2010) noted, "the largest owners of all the big banks had abnormally easy access at the banks they owned, apparently in their capacity as owners" (chapter 2, p.2), Thus the owners were the principal borrowers and their debts in many cases exceed the total equity of the banks. The investment banks also gave loans to the owners on preferential and favourable conditions, acting in their interests, rather than that of the ordinary small shareholders. "It is difficult to see how chance alone could have been the reasons behind the investment decisions" (SIC, 2010, chapter 2, p.3) The SIC also noted with characteristic understatement: "Generally speaking bank employees are not in a good position to assess objectively whether the bank's owner is a good borrower or not" (chapter 2, p.3).

In many cases the activities of the owners was a classic case of Ponzi finance. They borrowed heavily using the proceeds to buy shares in the very same bank, driving up the price of the bank's shares. At other times they purchased shares in one of the other big banks; the owners of which reciprocated, a practice known as "cross financing". This weakened the banks' ability to withstand financial shocks as such share capital, as it is financed by the banks, does not provide against any loss. All the banks purchased their own shares in automatically matched trades in the Stock Exchange¹¹ in an "attempt to elicit abnormal demand for their own shares" (SIC, 2010 chapter 2, p. 8). A vicious circle developed as, when the crisis unfolded, the more the shares dropped in value the more shares the owners purchased, in an attempt to stave off the impending crisis.

The SIC came to the conclusion that this and the excessive leverage threatened the stability of the banking system long before the collapse. But there was also a related effect. The apparently larger equity base provided the foundations for rapid growth, but one that led to an increase in operational risk. The fall in the banks' share price was not the fundamental cause of the problem; it was a consequence of the risks already inherent in the Icelandic banking system.

¹¹ They automatically placed orders to sell and buy their own shares, thus misleading the markets.

This was also aided and abetted by expansionary policies of the Central Bank of Iceland, which cut direct and indirect taxes and the relaxation in the guidelines for housing loans in 2004 was one of the biggest mistakes in macroeconomic policy. These led to major macroeconomic imbalances in the economy, which by itself would have led to the hard landing. The collapse of property and construction bubble was a major factor in the subsequent collapse of the banks. ¹² The picture emerges of the Board of Governors of the CBI following a reckless expansionary macroeconomic policy, even taking decisions against the advice of the Bank's chief economist. The SIC comes to the damming conclusion that the CBI knew of the weaknesses of the banks yet did nothing to prevent them and continued to make huge loans to the banks against the weak equity that was barely compatible with the legal provision of valid collateral. What is interesting is that the parlous state of the banking system was known to the CBI and also to the banking regulators long before the crash. The SIC report considers that 2006 was probably the last chance the government had of taking decisive action to prevent the crash.

As we have noted in 2006 there was a mini economic crisis in Iceland. In spite of its explosive growth, the size of the financial system was still relatively small in absolute terms. Thus, it fell under the radar of the international financial media and markets until about 2006. It was then that concern by the rating agencies, based on macroeconomic indicators that suggested severe imbalances, set off the mini crisis. As the SIC noted, this was successfully weathered for a short time, not because of the introduction of corrective policies (in spite of concerns from the CBI which were not communicated to the government), but because the perception of a weakness in the Icelandic banks passed, at least momentarily. However, "it appears that the banks did not adequately address the questions outside analysts had raised in early 2006 about the quality of their loans" (Flannery 2009, p. 103). It was mainly window dressing.

This has been carefully documented by Wade and Sigurgeirsdóttir (2012, p.137). The Iceland Chamber of Commerce, run by representatives of the big three banks, "invited a string of economists to come to Ireland to assure the audience of the stunning success of the neoliberal model". They also commissioned the two extremely favourable reports of Mishkin and Portes discussed in the introduction. ¹³ Contrary warnings came from Wade "in semi-public lectures"

¹² The housing and construction bubble was the result of the commercial banks entering the housing market to compete with state-run Housing Financing Fund. The commercial banks did not require a house purchase for the loan and so was used extensively for equity release, contributing to a housing and credit bubble.

¹³They continue: "Either these economists did not know how to identify a bubble, in which case they took the money under false pretences, or they did know but ignored the signs because they accepted an implicit contract to endorse the Chambers' conclusions. With their blessing no one paid attention to the Danske Bank and IMF reports" (Wade and Sigurgeirsdóttir, 2012, fn. 10, p.137).

from Summer 2005 onwards, in which he drew attention to parallels with the build up to the East Asian crisis".

Of course, even if the underlying structure of the banking system had been prudent and solvent, critical and speculative comments could have still caused a damaging run. This could have serious economic consequences, especially given the size of the banking system meant that the CBI did not have the financial resources to act as an effective lender of last resort. Nevertheless, the latter in itself should have been a substantial cause for concern for the government, as it increasingly was with the international financial markets.

Consequently, by 2006 the signs for all to see were that there was a crisis looming, but perhaps not that it would lead to a financial meltdown. The Government set up an ad hoc coordination committee, although this proved largely ineffective. A possible solution was to switch away from borrowing on the wholesale money market to increasing retail deposits. As we noted above, the latter are normally considered to be safer under normal banking conditions, but then these were not normal times. In this regard, the Landsbanki set up internet bank Icesave in October 2006 in the UK. This paid the best interest rates available to UK savers (although this should itself have been a warning signal) and the deposits flooded in. It was a remarkable success and represented a fundamental difference in the way the bank was financing itself. But it brought attendant, but different, risks to the whole of the Iceland baking system. Icesave was a branch of the Landsbanki which meant not only was regulated by the Iceland authorities (the FME)¹⁴ but that its deposits were also guaranteed by the Iceland government, through the Depositors' and Investors' Guarantee Fund (DIGF). 15 If its legal entity had been a UK subsidiary, then it would have been regulated by the UK and, more importantly, been covered by the UK deposit insurance scheme. The reason this was not done is that under the UK regulatory authority, it would have been far more difficult to transfer the funds to other parts of the Icelandic banking group.¹⁶

The other two banks followed with similar schemes not only in the UK but also in a large number of European Countries. But in spite of their success, the inflow of funds from the retail depositors could not offset the outflow from the wholesale deposits.

¹⁴Although the UK's FSA did have some supervisory role.

¹⁵ The SIC notes that they were unable to obtain any evidence that the FME had done any form of risk assessment on the Icesaver accounts.

¹⁶ As the crisis developed in 2008 there were serious and increasingly desperate plans to transfer the deposit taking activities to a London based subsidiary, but these never materialised. In the UK these involved detailed discussions with the UK financial authorities. The drawback was that the accounts had become an important source of liquidity for the Iceland banks.

Nevertheless the Icelandic banks continued their rapid growth in providing loans, increasingly to those institutions that could not obtain them any more from their normal sources, because of the subprime crisis.

With the collapse of Northern Rock in February 2007, the British media turned its attention to other possible banking risks and Iceland, with its rising CDS spreads, came under intense scrutiny. The problem with Icesave and related accounts was that if there was a run on the deposits, these would have to be paid for in pounds sterling whereas the DIGB could only pay in ISK, with severe implications for the exchange rate and the CBIs foreign exchange reserves.

By March 2008 the CEO of Landsbanki was talking about "two time-bombs", namely, the problems associated with the Iceland deposits and the difficulties relating to the wholesale deposit market. He is quoted in the CBI draft minutes as saying "the likelihood of the Icelandic banks getting through this is very, very little" (SIC, 2010, Chapter 18, p. 42). But there were no contingency plans put into place by the Icelandic government, even though it had been told the bank could only withstand a run for six days. The various Iceland regulatory authorities had very little understanding about the seriousness of what was transpiring, in spite of the large numbers of articles appearing in the British press.

The details of the Icelandic crisis are well-known and need not detain us to long. It commenced with the freezing of the international financial markets in mid-2007 due to the subprime crisis. The Icelandic investment banks did not hold any toxic assets, but were heavily dependent upon the wholesale deposit markets to roll over their short-term borrowing, which the banks had lent long. Several of these loans had domestic securities as collateral and the value of the latter fell as the shares fell. The big three banks took over the financing from the investment banks, so the loans to foreign banks could be repaid, but thereby increased their own liquidity problems. They were ironically acting as lender of last resort for the investment banks. As we have noted, the banks also held a lot of their own shares as collateral and as the share prices declined so the value of their loan portfolio declined. Was the cause of the big three banks collapse the subprime crisis, in other words, just an unfortunate and unforeseen accident? It is instructive to cite the SIC on this which makes the argument succinctly.

In the light of the prevailing market situation since the autumn of 2007, the banks found it hard to unwind the risks that had developed within the system. It is appropriate to keep in mind that the banks took those risks in their operations when the market situation was more favourable. A risk is developed when it is taken, not when prices start dropping. A large part of the problem that the banks attempted to respond to in the period leading up to their collapse was due to risks that were already in place within the system when the liquidity crisis occurred in the autumn of 2007. Increased lending to the owners of the banks, acquisitions of foreign financing, losses due to the buying and selling of their own shares and comparable conduct of the banks

... can hardly be considered as justifiable responses to such a crisis or to be in line with healthy and normal business practices. (SIC, 2010, Chapter 2, p. 8, emphasis added)

TO WHAT EXTENT SHOULD THE BANKING CRASH HAVE BEEN FORESEEN?

In this section we turn to the question as to what warnings were given about the crash and provide an assessment of the Mishkin and Portes reports. As has been stressed, in order to do this it is necessary to consider what information and concerns were already in the public domain or could have been readily obtained. Mishkin and Herbertsson's *Financial Stability in Iceland* was published in May 2006, while Portes and Baldursson's *The Internationalisation of Iceland's Financial Sector* was published later in November 2007.

Concerns were building up in 2005. Johnsen, an Icelander who had worked at the IMF on credit crises (see Hilbers *et al*, 2005) was particularly worried. Under certain conditions, the rapid growth of credit such as Iceland was experiencing is a clear indication of an impending banking crisis. Although Hilbers *et al* was primarily concerned with credit growth in the CEE countries, as part of the work the team identified countries where a boom was in progress and that included Iceland. Empirical research suggests that there is a credit boom if the growth of real credit exceeds 17 per cent per annum and about 50 percent over a three-year period. As may be seen from Table 1 this should have set alarm bells ringing. The three-year cumulative percentage growth rates since 2000 were 42.7 (2000); 44.8 (2001); 45.28 (2002); 36.80 (2003); 44.57(2004); 77.11 (2005) 97.64 (2006) and 77.88 (2007). Concerned by such findings Johansen approached the CBI, The prime ministry of Iceland and the FME, none were interested in discussing the matter with her.¹⁷ The Icelandic authorities simply did not want to hear of any potential problems. Johansen expressed her concerns in an article published in the business newspaper *Vidskiptabladid* in 2007.

The next early warning came from Fitch, which published two reports in 2006 (a and b) and set off the mini crisis in Icelandic banking. As Flannery (2009) has noted, in Fitch's report of 6 February 2006, on the basis of macroeconomic prudential indicators, they came to the conclusion that "the credit boom in Iceland gives most cause for concern".

¹⁷ Johansen, who it will be recalled was researcher with the IMF and an expert on credit crises, was told by the FME that she would have to take a proficiency test before speaking with them. (Johansen, 2014, p, 10).

Table 1 Credit to the Private Sector as a share of GDP; Iceland 1990-2010.						
Year	Ration of Private Credit	Annual Growth Rate				
	to GDP	(%)				
1990	41.3					
1991	41.5	0.39				
1992	45.2	8.96				
1993	46.5	2.98				
1994	44.3	-4.95				
1995	44.7	1.08				
1996	45.9	2.52				
1997	55.6	21.26				
1998	61.8	11.16				
1999	66.1	6.99				
2000	82.3	24.49				
2001	93.3	13.30				
2002	100.3	7.49				
2003	116.3	16.01				
2004	130.8	21.07				
2005	197.2	10.04				
2006	269.3	36.54				
2007	272.8	1.3				
2008	184.3	-32.45				
2009	118.9	-35.45				
2010	109.3	-8.14				
Source: Johnsen, (2014, p.7)						

It is interesting to note the explicit concern raised by Fitch (2006a) with respect to the Iceland banks was as follows:

The risk is that if the credit cycle turns and equity and property prices fall sharply, banks will suffer deterioration in loan quality with an adverse impact of financial performance. Icelandic banks, through a combination of direct equity holdings and collateral exposure to Icelandic corporates, have a relatively large exposure to small and volatile stock market. (p.3)

Two weeks later, on February 21, Fitch downgraded the Icelandic companies' Issuer Default Ratings from "stable" to "negative" on the basis of macroeconomic prudential indicators, what it saw as an unsustainable current account deficit and the rapid increase in international indebtedness. Fitch warned that the three large banks "remain heavily dependent on foreign funding and could ill afford to be shut out of international capital markets".

Table 2 reports some key indicators taken from the "Fitch International Credit Analysis of Iceland" of 14 November 2006. Of particular concern were the substantial current account deficits and the large gross external debt to GDP ratio. Evidence suggests that only a part of the former was due to the investment in the aluminium and metal sectors. Even excluding this component, the Danske report (2006, p.2) concludes that the "current account deficit is substantial and amongst the largest in the world." While the ratio of public debt to GDP was low, concern was also expressed at the rapid growth of domestic credit and the housing and stock price bubble.

Table 2 Selected Key Economic Indicators for Iceland 2002-2006

	2002	2003	2004	2005	2006
Real GDP Growth (%)	-1.3	3.6	6.2	7.5	3.7
Unemployment (%)	2.5	3.3	3.1	2.1	1.6
Inflation (%)	5.2	2.1	2.8	4.2	7.5
General Government Debt (% of GDP)	42.6	40.6	35.1	26.6	30.0
Current Account Balance (% of GDP)	1.6	-4.8	-10.1	-16.2	-20.7
Gross Financing Requirement (% of official reserves) ^a	336.0	461.1	379.3	580.0	626.9
Net External Debt (% of GDP)	102.4	104.8	132.9	146.4	161.4
Gross External Debt (% of GDP)	127.7	151.6	206.8	281.5	370.7
Short term Interest rate	8.4	5.4	6.1	9.4	12.5

Notes: 2006 is an estimate; ^a current account balance plus amortization of medium and long-term debt, over official international reserves.

As Fitch also point out, "one of the most important lessons to come out of the Asia crisis was that countries with seemingly sound public finances ignore private sector imbalances at their peril". All of these are symptoms of an impending financial crisis (Reinhart and Roggoff, 2009).

Fitch later revised its assessment upwards and in November 2006 rated the big three banks at A, but largely on the basis of the banks' own assessment. According to Fitch (2006c) "As 2006 draws to a close, all three major banks – Kaupthing Bank, Glitnir Bank and Landsbanki Islands,

all rated 'A'/ stable – can confirm that they have secured sufficient funding at longer-term maturities to meet their 2007 obligations".

In February 2006, the international credit rating agency Moody's Investor Service announced a downgrade of Kaupthing Bank, Landsbanki Islands, and Glitnir Bank. Other analyst reports raised more specific concerns in reports in March 2006. Both JP Morgan and Merrill Lynch expressed serious concern about the degree of cross-holdings and nominee accounts, which turned out to be a fully justified, as we have seen. Merrill Lynch (2006) produced a detailed report that included analysing the banks financial statements. The report argues that the weaknesses of the banks "merit a *significant* risk premium to other European banks (p.1, emphasis added) and because of the systemic risk should be compared more with emerging market banks." It was notable that Merrill Lynch considered it necessary to state that they did not foresee a banking crisis in 2006 but considered that a greater risk premium was needed. They also, presciently, noted in a headline that "we are only at the beginning of the Icelandic banks' problems" (p.1) Both also raised concerns about credit quality, including the reliability of the stress testing that had been undertaken and the degree of leverage. There were also concerns about the degree to which the banks relied on short-term funding – "a serious flaw in their business model" according to JPMorgan.

As we have noted above, a short but incisive warning was issued by the research department of the Danske Bank on 21 March 2006, entitled "Iceland: Geyser Crisis". The report argued that many of the macroeconomic indicators for Iceland were worse than those for Thailand, immediately before the 1997 Asian crisis and Turkey before the 2001 crisis. These indicators suggested that the Icelandic economy was overheating with a current account deficit in 2005 of 20.8 percent of GDP, total debt of about 250 percent, and gross external debt of 300 per cent. While the report noted there were differences between the three countries, especially as the Icelandic Krona (ISK) was floating, unlike the Thai baht and the Turkish lira. However, estimates suggested that because of the high Icelandic interest rates, the ISK was 20 percent overvalued (and in the subsequent crisis it rapidly fell 30 percent). Perhaps more importantly, the report raised the distinct possibility of a financial crisis. "The Icelandic economy has become increasingly dependent on foreign capital and international terms of lending. Iceland seems not only to be overheating, but also looks very dependent on the willingness-to-lend of global financial markets. This raises the question of whether the economy is facing not just a recession – but also a severe financial crisis." (p. 5). The SIC (2010, chapter 2, p. 6) later concurred with this assessment. At the beginning of 2006, "all the prerequisites for a financial crisis were in place".

In March 2006, JP Morgan noted that the Iceland banks had now grown so big that they were no longer being ignored by investors. Much of the three banks' aggressive overseas expansion was funded by issuing bonds denominated in foreign currency, but this had all but dried up in 2006. In March 2006 the US money funds refused to extend the maturity of a 13-month, extendible notes, because of "concerns about the operating environment in Iceland" (Moody's October 2006). As Flannery (2009) emphasises, all these concerns predated the US subprime crisis and the 2006 mini crisis suggests that the Icelandic banks would have been in danger of a major financial crisis even in the absence of the subprime crisis. While the banks responded to the mini-crisis, although according to Flannery "more in style than in substance", they "never fully dispelled the concerns first raised in early 2006. Indeed, these same issues of reliable funding and uncertainty about credit quality would remain important through 2008" (Flannery, 2009, p.99).

The IMF in its Staff Report on Iceland of 13th July 2006 expressed guarded worries about the financial sector, although they had to accept the traditional indictors that the financial sector was healthy. Nevertheless they warned "international markets are concerned that this pace of growth has exposed the Icelandic financial system to vulnerabilities that could undermine its health" (IMF, 2006, p.3). The report implicitly accepted the assurances that the "authorities have put in place a consultation process and contingency plans to support financial stability" (p.24). (There is a limit to how far international organisations can criticise the member governments of the organisation.) In fact, the SIC report shows that this was entirely fictitious. When the major crisis came in 2008, one of the most damning aspects of the authorities' behaviour was the complete lack of coordination between the CBI and the government and failure to implement anything like a coherent plan.

Other economists expressed concern. Aliber, a specialist in international finance and asset and credit bubbles, expressed grave concerns about the Icelandic economy on a visit there in 2007 (see Wade 2009, p.22). He was scathing about the professional competence of the bank officials and the FME. Discussions in Iceland convinced him Iceland was sitting on top of a "staggering" credit bubble. Looking back on the crisis, Aliber (2011,p 5) wrote that, because of the macroeconomic imbalances, the huge current account deficit (even when excluding FDI), the rapid increase in the prices of stocks and of the assets of the big three banks, "it was also obvious that Iceland would experience a crash like the one observed in Mexico and Thailand, since a 'limit theorem' applies to the external indebtedness of a country, which cannot increase relative to its GDP for an extended period".

The first major report to contradict such concerns was that of Mishkin and Herbertsson (2006) to which we turn next.

"Financial Stability in Iceland". The Report by Mishkin and Herbertsson (May 2008)

The core of Mishkin's report is the discussion of what is seen as the three main routes to financial instability. These are (i) "financial liberalization with weak prudential regulation and supervision", (ii) "severe fiscal imbalances" and (iii) "imprudent monetary policy". None of these were considered to present a major problem for Iceland, but it is useful to consider the report under these headings to see how they stand up to scrutiny. The report draws heavily on published financial and other indicators from which inferences are drawn. It clearly was not considered necessary to put the privatization and growth of the banks into a political and historical context. There was no detailed discussion about the functioning of specific financial institutions and their performance, beyond *assuming* that the banks operated in a prudent manner and financial regulation by the FME was effective.

(i) "Financial liberalization with weak prudential regulation and supervision".

The report outlines the causes of financial crisis, following Mishkin (1991), who attributes them to a combination of asymmetric information, adverse selection and moral hazard. The first, drawing on the work of Akerlof (1970) and the "market for lemons", occurs when the lenders in the debt and equity markets have difficulty in differentiating whether a borrower represents a good or bad risk. Consequently, the purchasers of, say, a security of a firm will only be prepared to pay the average price; lower than the true value for a high quality firm and higher than that warranted for a low quality firm. Under these circumstances the financial markets will not function well and credit rationing will occur. Adverse selection results when, with high interest rates, only those with very risky projects will seek funds. Thus, even a small rise in the interest rate can lead, according to Mishkin, to a large decrease in lending as banks become increasingly concerned about adverse selection. Moral hazard occurs after a loan has been granted and is where the borrower engages in activities that if known by the lender, would not have led to the loan being advanced. Methods to overcome the asymmetric problem are through collateral put up by the borrower or the existence of sufficient net worth of the borrower to cover the cost of any default. The other way of overcoming this information market failure is through the private production and sale of information about the potential borrower, although if widely available this will lead to a free rider problem. In this case there is no incentive for any potential lender to pay for the information.

Although Iceland is an advanced country, as Mishkin is at pains to point out in an attempt to downplay the Dankse Banks' reference to Thailand's financial crisis, curiously the emphasis in

the discussion is on the developing countries.¹⁸ Nevertheless, the mechanism of a rapid fall in the exchange rate increasing the value of the debts of institutions that are denominated in foreign currency is applicable to the case of Iceland. Although it was floating, with the onset of the crisis the real effective exchange rate fell by 21 per cent over the period 2007 to 2008.

Mishkin's (2006, p.31) definition of financial instability is:

Financial instability occurs when there is a disruption to financial markets in which asymmetric information and hence adverse selection and moral hazard become much worse, so that financial markets are unable to channel funds efficiently to those with the most productive investment opportunities.

This approach emphasises the risks posed to the banks by poor performing loans rather than the risks generated by the banks themselves. It assumes that without these informational failures, the banks will optimally allocate financial capital rather than themselves generating financial instability and the misallocation of capital. But, in the case of Iceland, the instability almost entirely came from the actions of the banks.

Mishkin notes that bank instability generally occurs immediately after financial liberalisation, when regulation is in its infancy and is not particularly effective, because of lack of experience. He thus tended to discount poor regulation and lack of banking expertise as a problem in Iceland, as financial deregulation in Iceland was concluded about ten years earlier in 1995. "The economy has already adjusted to financial liberalization, which was already completed a long time ago, while prudential regulation and supervision is generally quite strong" (Mishkin, 2006, p. 8).

But what he overlooks is that it was only in 2003 that the privatization of the banks was finalized. It was then that the incentive structure of the banks operators' changed, leading to greater risk taking in search for higher rates of return and the banks started on their policy of extremely rapid growth. Employees were encouraged to buy shares in the banks and the whole incentive structure encouraged fast growth. Mishkin, as noted above, was well aware of this rapid growth, but doesn't express any concern. According to the Report, the banks had more than enough time since 1995 to "develop the expertise to manage risk" given by the new opportunities that deregulation brought.

¹⁸ It is probable that the report was partly commissioned by the Icelandic Chamber of Commerce as a response and rebuttal to the Danske Bank's comparison of Iceland's economic situation to that of Thailand and Turkey.

The new owners of the banks had virtually no experience of banking. The banks grew rapidly by both internal growth (making more loans) and external growth (buying up other financial institutions or other assets). The problem of the former is that with its rapid growth the quality of the loans decreases and the management of the loans becomes poorer. This can give rise in future years to problems of default. There was an exceptionally rapid growth of the banks in both these areas from 2003. External growth rates were 57.5 per cent in 2004 and 24.7 per cent in 2005, and in organic growth was 43.5 per cent (2004) and 59.5 per cent (2005). By 2006 it should have been apparent that the banks' asset portfolio was likely to be high risk. As the SIC put it:

Such big and high-risk growth is not compatible with long-term interests of a robust bank but, on the other hand, there were strong incentives for growth within the banks. The incentives included the banks' incentive schemes, as well as heavy indebtedness by the biggest owners (chapter 21 p. 3).

Mishkin asserted, however, there was no cause for concern and "prudential regulation and supervision is generally quite strong" (p.8). The financial regulator is the Financial Supervisory Authority (FME) which is independent of the CBI. Mishkin takes too sanguine a view of the FME: "In contrast to the inadequate prudential supervision in countries that have experienced financial instability, Iceland's prudential supervisors are seen as honest and competent. *Their statements that the banking system is safe and sound should be taken at face value*" (p.42).

The evidence is based largely on a number of highly aggregate indicators such as the corruption perception index and economic freedom index which place Iceland in a favourable light. For example, Iceland's ranking in the Corruption Perception Index was 1 and Economic Freedom was 5. However, this is clearly no substitute for a detailed assessment of the financial structure of the Icelandic banking system.¹⁹ Such indicators would suggest that the Savings and Loans crisis in the US could not have occurred, nor the Nordic Banking crisis of the early 1990s. The latter, in particular, has many parallels with the Icelandic crisis, namely deregulation and the removal of cross-border restrictions together with the banks' inadequate internal risk management controls. (See, for example, Drees and Pazarbasioğlu, 1995.)²⁰

¹⁹It also changed after the crisis. An opinion poll for the University of Iceland in 2012 found that 76 per cent of the population did not trust its government.

²⁰ For details of the unethical and corrupt behaviour of the US banks, see Coleman (2015, Chapter 5). In 2012 alone there were the following scandals. JP Morgan Chase's reported \$2 billion loss was corrected to \$5.8 billion. A number of senior executives lost their jobs over the affair. The manipulation of the Libor rate became apparent. UBS paid \$1.5 billion after it admitted not only to manipulating the rate to make its financial position look healthier to outsiders but it actively colluded with the other banks. HSBC

The regulatory powers of the FME are seen as comprehensive and sufficient by Mishkin, but as Wade has pointed out, there is a world of difference between having such powers and the ability to use them effectively. Were there any indications in 2006 that the FME would turn out to be so ineffective as documented by the SIC? In particular, was there any evidence that the resources and expertise of the FME had not matched the rapid growth and increasing complexity of the banking system?

Wade *et al* (2012), in the more informal style of a blog, note that the offices of the FME were decrepit and the financiers and bank officials were scornfully dismissive when called to meetings there. The website of the FME, and its annual reports, make the FME appear very professional. However, even a cursory glance at the size of the FME's staff should have raised some questions. In 2003 the composition of the 23 specialists in the FME was 13 with degrees in business administration, 8 were lawyers, 2 were actuaries and 2 were computer specialists. In 2006 the figures were 14 business specialists, 10 lawyers. 2 actuaries and 4 computer specialists (together with 5 other undefined specialists). These are very small numbers to regulate the rapidly expanding financial sector and these figures are readily obtainable from the FME annual reports. The FME lacked the necessary information technology and computer experts for continuous financial monitoring, so that the FME "did not really have the foresight of the activities of the financial institutions that was so urgently needed" (SIC, 2010, chapter 21 p. 100). Furthermore, the turnover of the staff of the FME was high, especially in the two divisions covering the credit and securities market. (The average length of employment was only three or four years.)

But the position was worse than this. "The FME did not sufficiently concern itself with some basic questions, such as the size of the banking system, and the Authority's necessary reactions in regard to its much too rapid growth" (SIC, chapter 21, p.99). It furthermore lacked firmness to ensure that those decisions it made were implemented by the financial corporations, although it had the legal powers to do so. An important example is to do with the degree of diversification in the banks' equity and risk. To minimise risk, the equity base should be as diversified as possible, but in a number of important cases, the banks treated as separate assets, equities that were linked through close economic relationships and hence the price movements

paid \$1.9 billion to the US and UK over its lax money laundering policies that allowed billions of dollars of Mexican drug money and Iranian terrorist money to enter the US financial system. Standard Charter paid fines for similar offences. UBS lost \$2 billion because of the actions of one of its traders making unauthorised deals (Forbes, 2012). As Coleman (2015) points out, often these are described as rogue traders, but the regularity of their occurrence suggests that they are a result of the culture and lack of ethics in much of the banking system. Prior to the Icelandic crash, the S&L crisis and the Nordic banking crisis provided abundant evidence of criminal and/or imprudent behaviour of the banks.

were highly correlated. This was a deliberate strategy of the banks, and who simply ignored the recommendations of the FME, on this and other issues. Moreover, the FME simply did not use its legal powers to enforce these violations of the law and other recommendations that were ignored. The FME, right up until the end of 2008, "unreasonably" (as the SIC put it) did not consider that there were any major problems threatening the banks. The stress tests of the FME were flawed, and gave a misleading impression of the banks' situation. As Flannery (2009, p. 102) notes, "the questions raised [by outside analysts] about the Icelandic bank's portfolios were quite specific, dealing with the extent of lending to related parties and credit risk concentrations". One major problem was reflected in the repeated concerns about the limited information of the bank's asset quality. The "weak equity" meant that the reported capital adequacy ratios were misleadingly high. In fact, as we have seen, many questions were raised by the JP Morgan and Merrill Lynch about the asset quality of the banks. Yet these important questions were not considered, let alone answered, in the report.

The potential problems of the CBI lender of last resort were dismissed as it was asserted that the CBI had international lines of credit, including those with the other Nordic countries. Unfortunately, these turned out to be inadequate and the SIC traces the growing isolation of the Iceland authorities from the other Central Banks. Nevertheless, in 2006 Mishkin felt confident to state that "the banks reliance on external financing poses the biggest risk to the system at the moment, we firmly believe that Iceland will not be the next credit event" (p.53).²¹

The report also considered that the likelihood of a self –fulfilling prophecy of a run on the Icelandic banks (the existence of multiple equilibria), was small, because the underlying fundamentals of the economy were strong.

With the benefit of hindsight, the crisis was the result of the rapid growth of the banking system with weak prudential regulation and supervision. Mishkin briefly touches on the first potential problem, the rapid (credit) growth of the banks and the report notes the legitimate concerns about the lack of transparency due to cross ownership, etc. and the increased investment activity by the banks. This potentially major problem is not assessed in any detail, and dismissed with the comment "the banks are beginning to deal with this criticism by selling (or planning to sell)

²¹ Mishkin points to the fact that in 2006 the CDS spread was only about 35 basis points. According to a regression analysis, this implied only a 7 percent chance of a financial crisis. Even allowing for the heroic assumptions underlying such a regression, what does it tell us? Simply that at that time, the financial markets did not fully appreciate the precariousness of the Icelandic banking system. The CDS spread rose to 100 basis points in the mini crisis before falling again. By January 2008 it had passed 500 basis points, where, according to Mishkin, the probability of a financial crisis becomes a 100 per cent. So what does it tell us? It only provides a good measure of the degree to which the financial markets perceived the risk at a specific point in time and how rapidly these perceptions can change.

shares in companies where cross-ownership seems to be a potential problem" (p.53). As we have noted above, they did not do nearly enough to reduce the systemic risk.

(ii) Severe fiscal imbalances

Severe fiscal imbalances were dismissed as a cause for concern. As the government was running a budget surplus over much of this period and government net debt fell from 31% of GDP in 2003 to a small net asset position of 0.8% in 2008. In retrospect, this was not the main cause of the banking crisis. Nevertheless, as the OECD (2009, p.41) points out, "the government should have gone further, thereby providing a greater counterweight to the unsustainable boom in private domestic demand".

(iii) Imprudent Monetary (and Fiscal) Policy

The Mishkin report does not find anything much to criticise about the macroeconomic policy However, prior to the mini crisis, the CBI had let, in the words of the OECD (2010, p.33) an "unsustainable, domestic-demand led boom" develop, although the growth rate of output was rapid. (It averaged over 6 per cent per annum in the four years up to 2007.) This was accompanied by a stock market and house price bubble and the CBI's monetary policy was not sufficiently restrictive. Taxes were lowered, against the advice of the CBI's economic experts, purely for political reasons. The economy was overheating and there were concerns of a hard landing, especially if the exchange rate fell precipitously. Even without the banking crisis, it was predicted by the OECD that the economy would have experienced a decline in its growth rate.

Mishkin also considered the current account deficit which by 2005 was 26 per cent of GDP. This is dismissed as a problem on two grounds. The first is that current account deficits could result from optimal behaviour on the part of households, firms, and governments. If the heroic assumptions are ignored, this statement, although conditional, could be reassuring. In other words, in much the same way as Lucas argues that theoretically there is no such thing as involuntary unemployment and employment fluctuations are simply due to agents intertemporally optimising their work-leisure trade-offs in the face of productivity shocks, so current account deficits are optimal as they are determined by the actions of rational optimising agents. Of course, as Mishkin points out, part of the deficit could be due to FDI in the aluminium industry, but as we have seen this cannot explain the whole of the deficit which was also driven by short-term capital flows. Moreover, this had the effect of driving up the exchange rate to about 25 per cent above its equilibrium value. The share of household savings as a percentage of GDP was negative for much of this period.

However, this ignores the extensive empirical evidence that there is a limit to the size of the net overseas debt to GDP ratio before the international foreign markets become exceedingly nervous and there is a balance of payments crisis and a currency crisis. The most recent evidence by Catão and Milesi-Ferrtii (2013), which confirms numerous other studies, is that international financial markets become increasingly nervous if the net foreign debt to GDP ratio approaches a certain critical threshold, generally about 50 percent. Moreover, the *speed* of the increase of the net liabilities, which is determined by the size of the current account deficit, is also an important factor. The faster the rate of increase the more concerned the markets are. In 2005, the net overseas debt of Iceland had risen to just under 150 per cent, an increase of 40 per cent in three years. Consequently, while the growth rate of economy would have probably slowed in 2007 as a consequence of the poor macroeconomic policies, it was not the major cause of the banking crisis and so we shall not consider it further.

Mishkin defends his report in these terms: "My co-author and I did correctly identify several risks to Iceland, including rapid credit growth, a lack of transparency in the banking system and the possibility that banks could experience refinancing problems". This is not compelling. First, the report concludes unequivocally "The analysis in this study suggests that although Iceland's economy does have imbalances that will eventually be reversed, financial fragility is not high, and the likelihood of a financial meltdown is very low" (Mishkin, 2006, p.56). The only caveat expressed was the danger of a run on the banking system due to a self-fulfilling prophecy and, hence, the need to bolster confidence in the banks. The probability of a bank run was seen to be "small", but the possibility could not "be ruled out, as with any risk". ²² Secondly, as far as we are aware, given that the report was used uncritically to increase confidence in the Iceland banks; nowhere in the public debate did Mishkin, *inter alios*, emphasise any of the, admittedly minor, concerns arising from his report.

The Internationalisation of Iceland's Financial Sector. The Report of Portes and Badursson (2007)

The Portes report was published at the end of the mini crisis in November 2007, but just before the subprime crisis had its major impact. Like the Mishkin report, it concentrated mainly on published financial indicators which, apart from those relating to the current account, were uncritically accepted. This is especially true with regard to the published data on the banks, such

²² It is interesting to note that Herbertsson was reported by the *Financial Times* as late as March 2008 as considering that the situation was close to "becoming a self-fulfilling prophecy" (Ibison, 2008). In other words, implicitly he considered that the fundamentals, including the banking sector, were strong as set out in the Report. It was just the result of ill-informed opinions by the international financial of the state of the banks. Portes was also reported as expressing the same sentiments.

as the rate of returns on assets and equity and the capital ratios. The mini-crisis is dismissed primarily as a "informational crisis" (p.1). The implication is that while there were indeed problems in discourse and transparency, there were no fundamental problems with the banks' viability and the crisis was not due to shocks to the sector. This, according to the Report, is evidenced by the fact that there was no increase in debt default. Moreover, the "Icelandic financial sector responded quickly and decisively" (p.1) to the mini crisis. The resilience of the financial system "has proved excellent" (p.2). The deposit base was expanded and crossholdings were largely eliminated and there was greater disclosure in their banks accounts.

Certainly, the banks did change their strategy as they diversified away from the wholesale markets by expanding their deposit base by aggressive expansion in the retail banking sector in European countries. This was done by offering higher interest rates compared with other European banks. In fact "the February 2006 turbulence worked as an alarm bell putting the banks in a much stronger position to come through the current liquidity squeeze unscathed" (Portes , 2007, p.20).

However, there is no compelling evidence for this view. While the banks did make some attempt to adjust in response to the financial markets concerns, "some of the banks 'responses to the analyst's criticisms were more directed at style than substance" (Flannery, 2009, p. 99). While there was diversification into the European retail deposit market, this was essentially because the European securities were closed to the banks because of increasing concerns about their viability. Moreover, the retail deposits were also volatile depending upon the creditworthiness of the banks and the perception that the DGIF would guarantee them.²³

It addressed the *form* but not the *substance* of the markets concerns. Moody's in January 2008 placed Landsbanki on review for a potential downgrade because of its heavy reliance on internet deposit accounts (Icesave). Moreover, the increase in retail deposits did not offset the loss in the wholesale deposits. The banks continued to prop up their shares by issuing loans that were used for their purchase. And while they attempted to reduce the degree of cross-holdings, there was a rapid growth in loans to "holding companies" that were considered to be closely related to the banks and were therefore questionable creditors. Likewise there was a rapid growth in loans other institutions whose main activity was investing in shares or providing speculative venture capital. As Jännäri (2009, p.30) commented "Even if the number of large exposures in these banks was small, it is still very unusual that banks as large as these should have so many large exposures of this nature. *My judgement is that their behaviour in this regard has been very*

²³As we have noted, as Icesave and the internet banks were branches of the Icelandic banks and not subsidiaries, the foreign deposits were guaranteed by the CBI and not the central banks of the originating countries.

imprudent". Moreover, some of the banks resorted to subterfuge claiming they had guaranteed lines of credit when they did not, in order to meet their liquidity requirements.

Nevertheless, the report notes that Iceland banks had lower ratings than the Nordic banks. "We see no justification for this in their risk exposure" (Portes, 2007, p.1) It occurred either because the international financial markets, unlike the Report, did not fully understand the sound position of the banks or for some reason there was a premium on Iceland simply because it was Iceland. In other words, for some undefined reason, the markets disliked Iceland.

The fact that the Icelandic banks did have a higher than average risk profile than the other Nordic countries is, according to the report, "compensated by unusually high capital ratios". Moreover, if the high returns from equities are stripped out of the Icelandic banks' profits, the other components of their operations are equally highly profitable. The return on equity is also seen as "even more impressive".

However, this overlooks the fact that the quality of the banks' assets was considerably weaker than the published figures suggest. Certainly, the reported return on equity was higher than the other Nordic banks. This was partly because the return on assets was twice as high as the other more experienced Nordic competitors. But it was also due to the high proportion of subordinate or hybrid loans, which counts as regulatory capital but not as equity when computing the return on equity. By June 2008 this was 33% of Tier I capital, the maximum allowed under the Icelandic regulations. 15% was the maximum allowed in the other Nordic countries (Flannery, 2009).

There are other factors that cast doubt on the strength of the Icelandic banks including the high degree of "weak equity", risky lending to, for example, construction companies, and dubious accounting practices. Flannery summarises it succinctly when he writes: "Although their [the Icelandic banks'] accounting standards showed high asset quality, high earnings and high capitalization, all three characteristics depended on an important *managerial judgement*: the accuracy of the banks' loan loss allowance". The allowance for loan losses (ALL) is an important indicator of a bank's profitability, but if it is understated it misleads investors about the quality of the loans, but produces artificially high returns on equity.

What is remarkable is even as the crisis deepened, the incident of delinquent loans reported by the banks barely altered. (Portes sees this as an indication of the strength of the banks, whereas Flannery suggests it should have sounded warning bells.) There is evidence reported in the SIC (2010) that the banks engaged in renegotiating delinquent loans rather than declare them as in default. There were other accounting methods used to prevent loans being written off. After all a

loan may eventually come good in the future even if it is with a very small probability. All this suggests the reported statistics for the banks should be treated with a great deal of caution.

So if this is correct, what did this imply about the effectiveness of financial regulation of the banks? Nothing, according to the report – "it has proven to be excellent" (p.2). Like the Mishkin report, the Portes report considered that the financial regulation, as it was determined by the international standards, was strong (p.14). The FME has "considerable enforcement powers" with which to monitor and enforce prudent behaviour of the banks. (p.14). Moreover, the FME "budget has recently been doubled to enable it to keep pace with the rapid growth of the financial sector."However, as we have seen above, the FME was markedly understaffed in 2007 and there was no evidence of any dramatic increase in resources to the FME during the rapid expansion of the banks until 2007.

According to the SIC, the FME had inadequate information of the position of the banks. The FME was concerned about the banks' behaviour, such as the treating of different loans to related parties as separate, thereby giving a misleading impression of the degree of diversification. Yet when the banks refused to comply with the order to reclassify the loans, the FME made no use of its legal powers. The banks employed the top lawyers and accountants who while keeping within the letter of the law, paid no heed to its spirit and ran rings around the FME. The mere fact that the FME operated within an internationally regulatory framework (Basle II) does not imply that it was necessarily effective.

The problem of the CBI acting as a lender of last resort is not seen as a major problem and is brushed aside. "Were all three banks to need funding of such magnitudes, the CBI would clearly have to resort to borrowing abroad – or guaranteeing the banks' borrowing. Given the sound financial situation of the Government of Iceland, this would also be feasible" (p.40).

This is directly contradicted by the views of Buiter and Sibert (2008) who argue that because of the exposures to foreign deposits and loans, Iceland needed a foreign currency as well as a normal lender of last resort and the CBI is simply incapable of playing this role. Hence, *pace* Portes, Iceland's "business model' is not viable" (Buiter and Sibert, 2008, p.1). The short-term solution, they argue, is to seek foreign currency from the foreign central banks. But as the crisis began, because of concerns about the reckless expansion of the banking sector the central banks of the UK, US and Europe, other than the Nordic ones with their special relationship with Iceland, were simply not prepared to help. One other solution that was tried unsuccessfully, and far too late, was to move some of the banks assets offshore. In other words, one way would be to change the status of the banks' branches to subsidiaries. Finally the long-run solution, according to Buiter and Sibert, was for Iceland to become a member of the eurozone. However, as they admit, if the banks were insolvent, then even this would not help.

It is interesting to note though that that Buiter and Sibert considered that that "if, however, the authorities think that the Icelandic banks are fundamentally sound, and most knowledgeable economists, including the authors of two recent reports on Ireland's economy and financial system (Mishkin and Herbertsson (2006) and Portes *et al.* (2007)) believe this to be true, then it is likely to be worth the risk to attempt to avert a crisis that could result in the insolvency of one or more of the banks." (p. 2). Two comments are apposite at this stage. The first is not only did the authorities, broadly defined, know the banks were bordering on insolvency, but they were part of the cause of the problem. The second emphasises the influence of the Mishkin and Portes reports. Of course, the term "most knowledgeable economists" rather begs the question.

So to what extent is the conclusion of the report justified. "Our view, which appears to be shared by the regulatory authorities (the [FME] and the CBI) is that these are in fact very well run banks. Their management is indeed entrepreneurial, but they are wary of becoming involved in anything they do not understand, and they are very focused on risk managements".

Indeed all the detailed evidence based on how the banking system worked in practice and critical examination of their accounts gives no support for this conclusion. Arguments about the effectiveness of the FME are merely an assertion in the report backed up by no compelling evidence. Even as late as 12 October 2008, Portes argued that Glitnir "was solvent" and the banks "had managed well since their 'mini-crisis' in early 2006. Their nationalisation was just simply due to the ill-informed actions governor of the CBI, the former prime minister of Iceland.

But as we have seen, the SIC report clearly demonstrated that the banks' books were far from healthy. After the nationalisation Deloitte was brought in by the FME to provide an external scrutiny of the banks' book assets that had been used to provide glowing reports of the bank's financial position. Deloitte was specifically asked not to value the assets at "fire-sale values" but as if the banks were going concerns. The market analysts' fears were proved right: all three banks were insolvent at the time of their nationalization, unless for some reason the overseas assets were worth considerably more than the value that they had been booked at (Flannery, 2009, p.105).

Ironically, Baldursson and Portes (2014), building on the data of the SIC, confirm the report's findings about the behaviour of the bankers of Kaupthing in using the banks own funds in an attempt to maintain its share price. Yet curiously they consider this to be case of what is known as "gambling for resurrection". This is the case where a bank or financial institution gets into serious financial difficulties and takes high risk investment or loan decisions but which will, if successful, bring a high return, albeit it with a low probability. The bank may well try to conceal the true state of affairs from the regulator. The implication is that because the banks had such

large exposures to the international financial markets, the freezing of international liquidity caused the banks to crash (as Buiter and Sibert (2008), but not Baldursson and Portes (2007) warned about). Thus, the banks supposedly were sound in November 2007, but were caught out by the generally unforeseen subprime crisis and its contagion effect.

But, as Black (2014a and 2014b) has, rather polemically, emphasised, this is a misreading of the evidence. The banks engaged in reckless behaviour from their privatisation acting solely in the interests of the few large shareholders, as shown by the SIC (2010). During this time, the regulators in the form of the FME were ineffective and even in the rare case when they did encounter unacceptable banking practices, the banks just brushed them aside. The FME refused to use its legal powers even in the most blatant of cases. The bank's behaviour was not "gambling for resurrection", but rather "looting" in Ackerlof's and Romer's (1993) sense of the term. (Black terms it "accounting control fraud".) Given the close political networks, the absence of an effective regulatory body, perceived freedom from prosecution, and the implicit guarantee from the government of a bailout, it becomes optimal to make high risk and indeed fraudulent decisions if they are to the direct benefit of the owners, even if there is a high probability of bankruptcy. Ackerlof and Romer (1993) produce a simple model illustrating how this can occur²⁴.

THE CRISIS IN RETROSPECT

Gissurarson (2013) attempts to place the blame for the collapse of the Icelandic Banking system on the general collapse of the international banking system in the wake of the subprime crisis, conveniently overlooking the evidence that the Icelandic banks would probably have collapsed irrespective if the crisis.²⁵ While it is not possible to be definitive, Flannery (2009, p.106)) concludes that "one is left with the strong suspicion that some or all of the banks were insolvent [by October 2008] – and hence the market's unwillingness to lend was rational". The Icelandic mini crisis occurred before the subprime crisis occurred. While he points out that a large

²⁴ Akerlof and Romer (1993) give four examples from the 1980s where looting occurred; namely the Chilean currency crisis of 1982, the US Savings and Loan crises, the Dallas-Fort Worth housing boom and bust and the junk bond and debt financed form takeovers.

²⁵Gissurarson is at pains to dispute the assertion by Wade and Sigurgeirsdottir (2010) and Ha-Joon (2010) that one of the fundamental causes was the neo-liberal experiment and the belief that financial markets were efficient. But ironically he provides further confirmation of the large degree of crony capitalism that the privatisation led to in the form of the retail magnate Johannesson. Whether one terms the rapid privatisation and the way it was done as a neoliberal ism does not seem to be an important issue.

banking system is not unsustainable, vide Switzerland and Luxembourg, he overlooks the fact that these countries have a long experience of international banking and did not have an explosive growth over two years for which the regulatory institutions were unprepared and did nothing to counter. It was "overbanked and undersized" as Sibert (2011) notes and which Gissurarson disputes.

It also seems a strange argument that because other banks behaved recklessly, such as the Royal Bank of Scotland, Barclays Bank (the Libor scandal) and HSBC (the money laundering in Mexico), this somehow means the collapse of the Icelandic banks was not due to the reckless behaviour of the three big banks.

It is not convincing to lay the blame on "the systematic error in the legal and regulatory framework for the European financial common market" (p 7). The problem lay with the failure of the Icelandic institutions such as the FME, the CBI and the government. Moreover, it is disingenuous to blame the customers. "If the Icelandic banks were reckless, were their foreign customers not reckless". However, the whole point of the banking regularity framework is to overcome the problem of asymmetric information. The banks are far more able to apply due diligence to the issuance of loans (whether or not they actually do so is another matter). Individual investors do not have the resources or information to undertake a detailed assessment of a financial institution's financial stability. That is the whole purpose of the regulatory framework. To ensure that banks act prudentially on behalf of the investors and the government who ultimately provides the depositors guarantees. It was here that the FME and the CBI proved totally inadequate to the task, and the credit rating agencies got it (nearly right). Moreover, Gissurarson attributes much of the blame for the collapse to the fact that "the Icelandic banking sector was only unsustainable because in its hour of need nobody was willing to help" whereas other countries received help from the US Federal Reserve Bank. It is sufficient to quote the SIC on this:

After the G10 Summit of the central bank governors in Basel on 4 May 2008, it became clear that neither a currency swap with the agreement with the bank of England nor the other central banks, with the exception of the Danish, Norwegian and Swedish ones was on offer to the CBI. In a letter to the Investigation Committee , Stefan Ingves, Governor of the Central Bank of Sweden, makes it clear that unclear ownership, along with the banks' rapid balance sheet growth had led to a dangerous situation and that the Icelandic government did neither seem fully to grasp nor understand how to deal with it.

So Gissurarson's argument that the whole crisis primarily was due to the lack of diligence of the largely foreign investors in the banks and the inexcusable failure of the other central banks to rescue the Icelandic banks is unsubstantiated. It may not be coincidental that he was a member

of the Central Bank's supervisory board at the time of the collapse (Wade, 2014, p. 991) and which was not disclosed in his 2013 article.

CONCLUDING COMMENTS

In this chapter we have contrasted two diametrically opposed views on the state of the Icelandic economy and its banking system. These were the views of Wade and Sigurgeirsdóttir and Mishkin and Portes. The importance of these views is that entered into the public arena as they were debated in the media and may well have influenced investors' decisions about whether or not to make deposits with the Icelandic banking system. Indeed, it seems to have been the major aim of the Icelandic Chamber of Commerce, who commissioned the reports of Mishkin and Portes, and the Icelandic government to convince the financial markets that there was nothing fundamentally wrong with the Icelandic banking system. The causes of the banking crash were exhaustively examined by the Special Investigation Commission and it is clear that the reports of Mishkin and Portes were far too sanguine and the concerns of Wade were largely vindicated.

The question arises as to why there was such a divergence of opinions. The answer involves a consideration of the methodologies involved. The Mishkin and Portes reports drew largely on published data together and made the erroneous assumption that the regulatory body (the FME) was effective and all the banks were well managed. In the case of the Mishkin report, this was largely based on the fact that Iceland was an advanced country and a number of aggregate indices pointing to lack of corruption etc. The Portes report drew uncritically on a number of banking indices such as the rate of return on equity and the capital ratios, without any explicit consideration as to whether these reflected the correct financial health of the banking system: they didn't. Of course, it could be argued that only after the nationalization did the full extent of the degree of cross-holdings, poor quality loans to the owners, weak equity, and the misleading values of the capital ratios became apparent. However, it was these precise concerns that the rating agencies and others raised and which led to the mini-crisis.

Implicit in both reports is an erroneous assumption that regulation was effective. This assumption receives support from the *a prori* belief in the efficient market hypothesis and that banks always behave largely in an ethical manner. Self-regulation by the financial sector itself and the fear of reputational damage is assumed to be sufficient to ensure the financial markets operate efficiently, with only the need for light government regulation. This was also at the heart of the approach of Greenspan and is one of the reasons why the subprime crisis was unanticipated by the Federal Reserve and the Federal Open Market Committee.

Yet even a cursory knowledge of, for example, the US Savings and Loans debacle in the early 1990s (Black, 2009) and the partial failure of the regulatory bodies (in that crisis caused by lack of resources and political lobbying), and the bankruptcy of Enron and the complicity of the internal auditors (Arthur Andersen) should have raised severe doubts. Alternatively, one need look no further than an obvious likely parallel, namely the Nordic banking crisis of the early 1990s.

Drawing inferences from merely a series of macroeconomic indicators and the mere existence of a regulatory body, supposedly following accepted international banking standards, produced an erroneous and misleading picture of the soundness of Iceland's banking system. It was only from a detailed knowledge of the political and economic history and the complex political and financial interlinkages, including widespread political patronage, that a more sceptical and accurate picture, presented by Wade emerged. In other words, it is an approach that emphasises the need for a detailed case study of the various institutions and the pressures exerted by them. In other words, the antithesis of the deductive approach inherent in neoclassical economics In the wake of the crisis, the SIC (2010a) also contained a working group on ethics. It is worth citing their contusions at length.

The Working group sees the primary problem resides in the fact that in the wake of a flawed process of privatization, where inexperienced owners gained large shares, the banks were allowed to grow far beyond the ability to supervise them properly. The policy to trust the bankers to largely regulate themselves proved fatal and the culture within financial institutions severely neglected professionalism and good working practices. The supervisory institutions did not put any real pressure on the banks to downsize and public administrators and politicians were as lamed in the face of a far too powerful banking system and failed to respect their primary obligations. The prevailing social discourse about the unique success of the Icelandic bankers also facilitated the events.

The main conclusion of the Working group are that although several individuals, in the financial, administrative, political and the public sphere, showed negligence and sometimes reprehensible action, the most important lessons to draw from these events are about weak social structures, political culture and public institutions. (emphasis added)

This emphases the need for what be best termed a political economy approach to understanding financial crises that emphasis more than macroeconomic variables and relationships.

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