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Document Version

Final published version

Published in:

Journal of Governance and Regulation

DOI:

[10.22495/jgrv11i4siart16](https://doi.org/10.22495/jgrv11i4siart16)

Publication date:

2022

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Citation for published version (APA):

Bryant, M., & Sigurjonsson, O. (2022). Iceland's Financial Crisis 2008: Not a Normal Accident. *Journal of Governance and Regulation*, 11(4 (Special issue)), 354-364. <https://doi.org/10.22495/jgrv11i4siart16>

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ICELAND'S FINANCIAL CRISIS 2008: NOT A NORMAL ACCIDENT

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Abstract

How to cite this paper: Bryant, M., & Sigurjonsson, T. O. (2022). Iceland's financial crisis 2008: Not a normal accident [Special issue]. *Journal of Governance & Regulation*, 11(4), 354–364.
<https://doi.org/10.22495/jgrv11i4siart16>

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ISSN Print: 2220-9352
ISSN Online: 2306-6784

Received: 08.07.2022
Accepted: 14.12.2022

JEL Classification: M480, H1, M14, G30
DOI: 10.22495/jgrv11i4siart16

The failure of 97% of Iceland's financial system in October 2008, was not solely due to the tight coupling and complexity of the financial system but was the result of bankers and their owners, who took actions that violated system rules and regulations so that complete system failure was inevitable. Regulators were silent during such activities. Actions taken by bankers, and others, have been termed agentic behaviour — willful violation of system rules and regulations in a way that brings the entire system down (Perrow, 2010). This paper demonstrates via a case study that agentic behaviour was facilitated by a set of institutions, actors, Icelanders, and underlying context; which we term enablers. The role of enablers extends the concept of agentic behaviour. Such conduct examines bad behaviour, allows systemic analysis, and points to several factors that extend financial crises beyond Iceland. In a brief period, Iceland went from statism to neoliberalism with profound ill effects on its financial system, its public institutions along with its relationships with other nations.

Keywords: Agentic Behaviour, Enablers, Systemic Failure, Regulation

Authors' individual contribution: Conceptualization — M.B. and T.O.S.; Methodology — M.B.; Validation — T.O.S.; Formal Analysis — M.B.; Investigation — M.B. and T.O.S.; Resources — T.O.S.; Writing — Original Draft — M.B.; Writing — Review & Editing — M.B. and T.O.S.; Visualization — T.O.S.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest

1. INTRODUCTION

The US financial crisis of 2007–2009 was triggered by sub-prime mortgage origination and securitization. However, the trigger fails, to explain the crisis and its aftermath. This paper outlines the set of system conditions and behaviours in Iceland that led to systemic failure in October 2008. The scale of the collapse was: the third largest bankruptcy in history, eight times gross domestic product (GDP), and impacted every household. The banking failure had profound consequences — the currency declined by 50%, household and corporate debt levels rose dramatically as the debt was indexed to inflation, inflation grew dramatically, and unemployment increased spectacularly, pension funds lost > 20%, companies went bankrupt and a loss of trust by its citizens in its institutions. The government rescued the Central Bank of Iceland (CBI), the UK declared one bank a terrorist organisation, and actions taken by Iceland led to political isolation for some time.

Thus, Iceland exemplifies in every sense the definition of a financial crisis (De Bonis, Giustiniani, & Gomel, 1999; Allen & Snyder, 2009). Keynes (1936) introduced the term “casino capitalism”, the failure in Iceland appears to describe that phenomenon, but the paper demonstrates other forces, apart from “irrational psychology”, and a widespread credit boom, were at work, a system that encouraged wrongdoing, a sense of invincibility, as well as behavior that that many knew their actions were putting the entire system at risk — agentic behavior.

The consequences were stark. In a riot, where protesting was unacceptable (Sigmundsdóttir, 2013), the government fell, and a “truth and reconciliation commission” was established — the Special Investigation Commission (SIC). They reported to Iceland's parliament (*Alþingi*), with previously unimaginable powers of investigation. Use of international experts to assess problems, along with a special office to facilitate criminal prosecutions

against wrongdoers. There were 92 prison sentences against wrongdoers — largely bankers, consistent with Guénin-Paracini, Gendron, and Morales (2014), and Chabrak and Gendron (2015), but as those papers point out the actions of all involved were largely judicially ignored — consistent with neoliberalism. A new regulatory regime followed a bailout of the CBI but not a total bailout of individual banks, CBI governance changes, and a unique approach to support the financial system — endorsed by the IMF. A forex capital exchange freeze was introduced, and when controls were eliminated, a special tax on remitting profits, from debt resolution.

Perrow (1984), in the normal accident theory (NAT), notes, “if interactive complexity and tight coupling — system characteristics — inevitably will produce an accident, I believe we are justified in calling it a normal accident. The odd term normal accident is meant to signal that given system characteristics, multiple and unexpected interactions of failures are inevitable” (p. 5). Perrow (1994) extended the matrix — complexity, and coupling by introducing power but did not detail how it interacted with NAT. In 2010, he rejects NAT to explain the US mortgage meltdown in the US by introducing the term, agentic behavior — our lens to frame this study (Perrow, 2010). Perrow states: “When humans deliberately take actions that violate system rules and regulations in a way that could bring the system down, we are dealing with a different source of failures than complexity and coupling. Overly complex and coupled systems will increase the opportunity for such deliberate actions and quite possibly mask the actions, making attribution difficult so that these concepts are still useful” (Perrow, 1994, p. 310).

The objective of this study is to examine the rise, fall, and new beginnings of the financial system from 2000–2010. This paper outlines the factors behind the collapse. The choice of dates — 2000 neoliberalism, deregulation — allowing free flow of capital, and labour and privatisation of enterprises. 2010 represents the end of the beginning of the immediate consequences of bank failures in 2008.

The structure of this paper is as follows. Section 2 reviews the relevant literature and the theoretical background for the research is provided. Section 3 presents the research methodology while Section 4 details the findings of the study. Section 5 presents the findings, discussions, and implications of the study, and Section 6 provides the concluding remarks and limitations of the study, and directions for future research are provided.

2. LITERATURE REVIEW

2.1. Incomplete reason for failure

NAT was first advanced in the accounting/governance literature by Mezas (1994), who argued bad behaviour by leaders of savings and loan (S&L) institutions was inadequate as a cause for failure, notwithstanding prosecutions. Rather mismatching of assets and liabilities was the cause, a rationale for bank regulation. The explanation was advanced that tight coupling, between regulation and complexity, was preferable to “operator error”. The 1994

extension of NAT was employed by Guillén and Suarez (2010), increases in derivatives, global imbalances, and US securities held globally by banks — complexity and tight coupling explain well the mortgage crisis in the US. They highlighted, that “in the dramatic case of Iceland, the problems originated in bad financial investments and cross-border arbitrage bets” (Guillén & Suarez, 2010, p. 271). Poor asset quality and a rise in credit default swaps (CDSs) spread impacted bank borrowing, (Thorvaldsson, 2011, p. 169).

Palmer and Maher (2010) suggested the role of CDSs added complexity. They imply bad actors as factors in the US crisis, coupled with little regulation (Palmer & Maher, 2010, p. 226). It is noteworthy that both papers appear to be doing two things simultaneously; accepting a neoliberal environment of free markets but needing countervailing forces. Rather, paradoxically, steps to reduce tight coupling, though regulation, would thwart innovation, even though innovation adds complexity. Guillén (2015) employs NAT suggesting the global financial system, given its complexity and tight coupling is inherently unstable and the need is to reduce both complexity and coupling, but no plea for regulation.

Perrow (2010) further widens his extension to NAT by accepting power as a factor and domination by the elite. This extension through agentic behaviour, “but in my view, while wrongdoing can certainly cause accidents, these are not system accidents or “normal accidents” that are inevitable; wrongdoing can be prevented, the unexpected interactions of multiple failures cannot” (Perrow, 2010, p. 313). In this manner, Perrow indicates that increased regulation, such that elites power is minimized, but he does not account for the regulatory capture that frequently accompanies regulation (Stigler, 1971; Gendron & Smith-Lacroix, 2015) (see Table 1).

Our study is highly consistent with agentic behaviour on the part of bank executives and the owners of the banks but strongly indicates that other factors: institutions — notably regulators, government, media, public, and the legal and accounting professions, termed enablers, were present, and emboldened such behaviour to flourish. The factors begin with neoliberalism, the joining of the European Economic Area (EEA) in 1994, followed by inaction by the regulators. Media reports hailed as heroes — the New Business Vikings — the bankers, and their owners (largest borrowers) from 2000 until failure in October 2008 — leading to a myopic sense of infallibility by all citizens of the newly found business success that was favourable for most Icelanders.

We, therefore, suggest that the approach taken by Sprague (2000, p. 233), “the greed factor... remains the major — often the only — reason for a bank’s failure” is incomplete. Swedberg (2010) argues that references to greed and human nature fall quite flat when examining a financial system (p. 103). The malfeasance was manifested by offshore networks of companies, fraud, and collusion between the banks that began prior to privatisation and continued throughout the period from 2000 to 2008, along with wilful bad behaviour by bankers. Using agentic behaviour, as our lens, enables us to examine a systemic view of failure with dramatic consequences for all Icelanders.

Table 1. Agentic behaviour

<i>Enabling factors</i>	<i>Agentic behavior</i>	<i>Those directly affected</i>
<i>Political climate</i> <ul style="list-style-type: none"> • Deregulation • Privatization • Political cronyism • Government ministries not ready • Open to capital flows • European Union Passport System • Young libertarians—against statism 	<i>Viking entrepreneurs</i> <ul style="list-style-type: none"> • Rapid growth abroad • Borrowed extensively • Widespread use of holding companies often abroad 	<i>Households</i> <ul style="list-style-type: none"> • Borrowed on real estate • Widespread euphoria • Proud of world-class status • Loss of trust 2008
<i>Central Bank of Iceland (CBI)</i> <ul style="list-style-type: none"> • Inflation targeting • Flexible exchange rates • Bank of last resort but unable to act • bankrupt 	<i>Bank owners</i> <ul style="list-style-type: none"> • The largest borrowers • Borrowed their equity • Security shares no collateral • Acquired extensive assets abroad 	<i>Companies</i> <ul style="list-style-type: none"> • Rapid growth in debt
<i>Regulators</i> <ul style="list-style-type: none"> • Understaffed and out of their depth • Legalistic view, “If it’s legal it is ok” • Few on-site visits • No political support 	<i>Bank leaders/Bank boards of directors</i> <ul style="list-style-type: none"> • Expanded rapidly • Used foreign debt and foreign deposits to support growth • Cronyism • Market manipulation • Took risks on employee options that affected equity • Extensive paper profits and dividends 	

We highlight the existence of a credit boom: moral hazard, crony capitalism, close networks of personal and professional networks, failure of political leadership, regulatory failures, regulatory capture, Icelandic pride in expanding abroad, and the significance of extensive use of holding companies to convert debt into equity. No one factor to explain the systemic financial collapse. The paper has the objective of adding to the governance and regulatory literature by employing a theory — not NAT, agentic behaviour, by exploring the context within which financial institutions operate. The boundaries are set by the economic system adopted by Iceland after moving from statism to neoliberalism and its consequences resulting in collapse.

2.2. New insights

Perrow (1984) used the NAT to investigate nuclear power systems, theorizing accidents involve damage to subsystems and system accidents comprise unanticipated interactions of multiple failures. Systems, that are subject to normal accidents, possess high complexity and tight coupling. Using NAT, Palmer and Maher (2010), Guillén and Suarez (2010) outlined financial systems, notably in the US in 2008, were tightly coupled, more so since the trend towards deregulation began with the “Big Bang”, of deregulation in the UK, followed by the repeal of the separation of commercial banks and investment banks — The Graham-Leach-Bliley Act 1999, radically altered the financial system adopted after the 1929 crash.

Financial services are in fact complex and tightly coupled and why since the 1700s UK stock broking has been regulated (Gilligan, 1997). Bank regulation exercised through the Bank of England, Bagehot (1873), to lend freely, at high rates of interest, against good banking securities and in so doing restore calm and prevent bank runs. Bagehot is arguing for the importance of confidence by investors, and customers in banking and argues not only the need for regulation but also speedy responses by central bankers. The CBI, due to the size of the financial system along with poor asset quality, was economically unable to follow Bagehot.

Regulation lies at the heart of trust in the financial system simultaneously avoiding consumer harm while protecting the greater economy. An effective regulator has a dual obligation to stop things from going wrong and to safeguard the financial system if things do go wrong. Greenspan stated regulation needs, “Those of us who have looked to the self-interest of lending institutions to protect shareholders’ equity, myself included, are in a state of shocked disbelief” (“Greenspan Concedes Error on Regulation”, 2008).

Economic sociologists noted that “economic activity is embedded in and constituted by political rules and regulations — that are formal and informal political institutions including property rights” (Campbell, 2010, p. 368).

The US approach began with the Federal Reserve Act of 1913, was, and extended by the Glass-Steagall Act of 1933. Deregulation of banks, 1999, encouraged consolidation, increased complexity — innovation along with increased risk-taking.

Perrow (2010) rejects NAT for the US 2008 crisis. As indicated earlier, and in Table 1, we show agentic behaviour in Iceland. Perrow concludes greed was prevalent in the US. It is notable that the approach is consistent with Sprague (2000), but he does not have Perrow’s framework. Perrow’s agentic behavior theory emphasizes the conscious role of wrongdoing or willful negligence as causal factors. We see from the outset of 2000 in Iceland, with bank privatisation, wrongdoing was endemic — crony capitalism, explicit rules are overridden, moral hazard, and actively facilitated from 2000–2008 by various actors and institutions that we term, enablers.

Taken together, the research theme is whether agentic behaviour by bankers and their owners provides new insights into the Icelandic situation that other writers employ an economic lens. Or a philosophical/ethics lens? Or an institutional lens? Or a legalistic lens? Or a market failure lens? Or is the lens based on recollections by insiders? Or an anthropological lens? Or a political science/public policy lens? Or an accounting lens? Most approaches highlighted, except those for institutional and legal, are specific to Iceland. Each of the lenses provides a partial view of financial crises, applied to the rise, fall, and new beginnings of Iceland. This paper will

show by employing agentic behaviour, coupled with enablers — the conditions that were ripe for system failure. New insights are obtained, and insights will be compared with text from others, and comparisons made.

3. METHODOLOGY

The research methodology adopted in the paper follows the tradition of case study research (Yin, 2018). The data collected is archival, and accounts from both academic and other sources, interviews with representatives of the banks, together with a former chairman of the Financial Supervisory Authority (FSA) and a researcher from the Special Investigation Commission (SIC), and media accounts.

The research question posed, is *What fresh insights are gained by employing the agentic behaviour lens posed by Perrow (2010), substantially augmented by the enablers that were present in Iceland from 2000–2008?* The addition of enablers suggests examining the bankers and their owners alone fails to analyse the system and institutional factors that were present in the study. A financial system is complex; rules — both written and unwritten, are laws, public policy, political decisions, institutions, social context, incentives, and observed behaviours, therefore focusing on just behaviour or negligence is insufficient in explaining what happened.

Employing the frame of agentic behavior, we permit a cross-disciplinary approach to analyzing a complex financial system and how the players and the enablers were able to ensure the inevitable systemic failure. The single-cause analysis fails in this respect.

Table 2. Alternative models of Iceland's financial crisis 2008

No.	Key points of the model	Summary statement	Source
1.	Sociology & wealth changes from 2000–2008. Role of power, institutions.	"It is obvious that the banking collapse was not solely the work of one, or even a few, individuals. It was a systematic failure, related to policy, institutions, power, and interests. There were many more who gained than the most prominent Viking business raiders or the individual bankers, even though they played a particularly important role" (p. 67).	Olafsson (2016)
2.	Prosperity, growth; how did the bankers do it? Blame the bankers. Failure of regulation.	"The SIC described how elected officials, in testimony to the SIC, continuously pointed a finger at one another...the ministers and directors of public agencies repeatedly claimed that the subject at hand had been the responsibility of another government agency, not their own. None of them ever admitted responsibility for what happened". "In Iceland, the ubiquitous and almost inbuilt recklessness of bankers..." (p. 193)	Johnsen (2014)
3.	Role of individual actors, small state-mentality, psychology & attitudes. Failure of morality.	"When the dust had settled, we saw it was an evil mix of greed, incompetence, nepotism, nationalism, youthful risk addiction and a kind of collective superiority complex which led to the fall of the whole Icelandic financial sector in October 2008" (p. 7).	Bergmann (2014)
4.	Nationalism. Role of public policy.	"The first lesson we draw from the crisis has to do with the role of politics in a financial crisis, where the Icelandic authorities as a matter of policy, encouraged the creation of an international banking center" (p. 186).	Benediktsdóttir, Danielsson, and Zoega, (2014)
5.	Close political and financial networks in Iceland.	"A story of reckless expansion after financial deregulation, totally inadequate regulatory control and regulatory capture, opaque financial accounting and bank reports, serious conflicts of interest and fraud" (p. 326).	McCombie and Spreafico (2016), Wade and Sigurdottir (2011)
6.	Icelandic business model — flawed, the opacity of corporations and their ownership.	"The whole Icelandic business model involved converting firms into investment funds, where productive assets were used as collateral to support (foreign) borrowing used for the purposes of speculation or prestige" (p. 21).	Wade (2009)
7.	Role of politics.	"The factors ... were inexperience in banking, political favoritism when the banks were privatized, and strong ties between economy and politics" (p. 326).	Danielsson and Zoega, (2009)
8.	Philosophy, morality, and social psychology — who was to blame?	"Explanations of social psychology are primarily aimed at exploring whether the barrel was rotten and how many apples rotted. The emphasis is not on finding a few rotten apples which causes the entire barrel to rot" (p. 297).	Thorisdottir (2010)
9.	A game of dominoes; how to keep the band playing.	"The banks believed they could not allow any large investment company to fail, for fear of toppling all the rest" (p. 75).	Jonsson and Sigurgeirsson (2016)
10.	Failure of regulation and rapid growth, notably to related parties.	"The saga connects well ... credit erosion and dangers at too-rapid expansion in loan books It is also a vivid example of the moral hazard and risk seeking triggered by explicit and implicit safety nets, along with highlighting the dangers of bank runs in the absence of a viable lender of last resort ... highlights the importance of a robust supervisory authority and of having strong rules against large exposure Singularly the banks' financing in foreign bond markets of ... regulatory and ratings arbitrage" (p. 195).	Benediktsdóttir, Eggertson, and Thorarinnsson (2017)
11.	Asset quality and interconnected loans.	"Holding companies ... were essentially used as a vehicle to transform leverage into equity" (p. 55).	Oygard (2020)
12.	The growth of the banks gave Iceland a place in the world — new colonialists.	"The idea of the Icelandic 'Business Viking' commonly celebrated in Iceland evoked not only a particular link with Iceland's past associations with "Viking" or Iceland's first settlers, but also colonialism. The term "útrás" or outward expansion used during the Icelandic global economic expansion implied raid" (p. 10).	Loftsdóttir (2015)

The methodology — a case study (Yin, 2018) employing archival data, reports of regulatory agencies, annual reports of the banks, reports of judicial cases, SIC Report, expert reports, and interviews with some participants affected by the crisis who were directly involved in the preceding's before the and after the crash. The framing device for the qualitative research was agentic behavior and we appreciate that we needed both confirmatory information and sometimes unique information to gain a depth of understanding. The framing allowed us to gain new insights (see Table 2).

4. RESULTS

4.1. Bank privatisation

Privatisation of the banks was a political deal made by the two parties in the government, *Bunadarbanki* to interests supporting the Progressive Party, and *Landsbanki* to Independence Party supporters, none of the owners had banking experience in banking, and the equity “invested” by the owners was borrowed from other Icelandic banks (the prices received were not the highest bid). In one instance, technically a discharged bankrupt could not be a bank owner (a co-owner of *Landsbanki*) — rules were bypassed.

The implications that can be drawn from the various sources — privatisation was to ensure Icelandic interests; the lack of personal equity was tantamount to evidence of extreme risk-taking — evidence of systemic risk. Gylfason, Holmström, Korkman, Söderström, and Vihrtiälä (2010) suggest in strong terms that the privatisation had much in common with Russian “quasi capitalism” rewarding one's friends, “It programmed the entire political class and civil service it was not a good idea to get in the way of the banks” (p. 148). The implication is the civil service, politicians, and that the banks were virtually untouchable even by regulators from the FSA or the CBI. It implies evidence of regulatory capture at the initiation.

Wade and Sigurgeirsdottir (2011), “They made generous loans to selected politicians; and bought controlling shares in media companies. The governing elite became their cheer leaders, boosting them internationally as ‘our go-getting Vikings.’ In gratitude for their support, the government shifted the tax burden from the very top to the bottom half of the income scale, in order to strengthen incentives for risk-taking” (p. 687).

McCombie and Spreafico (2016), “The privatization of the Icelandic banking system in 2002 led to its explosive growth. A risky banking strategy was followed in the face of ineffective regulation, either directly by the regulatory body (the Financial Supervisory Body or FME) or indirectly by the financial markets, per se” (p. 226).

International ratings assumed, incorrectly, that the state would bail out the banks in the event of failure, infeasible, given the scale of the banks. From the foregoing it appears both sophisticated lenders, chasing after abnormal returns, and the rating agencies themselves acted as enablers of wilful malfeasance.

4.2. The civil service

The thrust of the changes in Iceland from 1994–2003, the joining of the EEA to the completion of bank privatisation, neoliberalism. The term includes a single market — the European Union (EU), plus Norway and Liechtenstein — free flow of goods, services, capital and labour, adoption of EU laws and regulations; but paradoxically less regulation or effective regulation (the EU passport system allowed Icelandic banks to borrow from ECB and Central Bank of Luxembourg, notwithstanding their regulatory regimes were weak (Benediktsdóttir et al., 2017)), financial institutions a means to globalisation; reduction in taxation notably for financial institutions and increasing taxes for the middle; and reduction of union power.

The changes were profound and as a result purchasing power measures increased dramatically from 2000–2007, along with substantial increases in personal and corporate debt, and a credit boom. With the rapid economic change, there is a necessity for civil servants to act in a manner consistent with changes but also provide policy advice to inform policy development, “frank and fearless” policy advice (Organisation for Economic Co-operation and Development [OECD], 2016, p. 2). Given the hegemony of two major parties from 1944–2000, it is unclear whether the civil service possessed the skill sets necessary to provide informed policy advice. Partly was due to the small talent pool available talent, and the dramatic public policy changes. Nor that the civil servants, because of political and personal networks could even provide such frank advice. If civil servants got the message that the banks were untouchable so too were government ministers.

We posit the civil service was an enabler of agentic behaviour due to a combination of; its history as a highly regulated society (statism), the size of the talent pool, the recognition that the government was committed to radical change, and that getting in the way of such change would be unwelcome, as well as the personal costs of not being aligned to change. It is surprising that the civil service does not explicitly come to the attention of the SIC.

4.3. The role of government from 2000–2008

Governments play a significant role in ensuring that their citizens and other stakeholders believe that not only will the government do what they said that they will do, but equally through conscious actions ensure that property rights, security of persons, security of their health and livelihood are maintained. They achieve this through laws and regulations, resource allocation decisions, tax systems, support mechanisms, and the like. Using these requirements as a set of criteria it strongly appears that the Icelandic government failed in key respects. They allowed the banks to grow to unsustainable levels. The SIC (2010) records the growth of the banks in 7 years, in GDP terms, which took Switzerland, a major banking center that was tightly integrated with the international financial system, 100 years to achieve.

Government ministers frequently attended road shows with the banks and observers could infer that government support was probable should any and

all the banks fail. Governments can play a critical role in assessing whether the regulatory systems, already in place are appropriately funded. In Iceland, these included the Depositors Guarantee Fund, the FSA, the CBI, the Housing Financial Fund, and a well-funded and motivated judicial system. Aliber and Zoega (2011), highlight the in-and-out process of the EEA, so that regulatory regimes mirrored the EU, but were not equipped with adequate resources.

Buiter and Sibert (2008) reporting to Landsbanki (earlier than 2008), described by Aliber and Zoega (2011) "Iceland's banking system was not viable because even if the banks were solvent, the configuration of a very small country having its own currency and an internationally and exposed financial sector, which is very large relative to its GDP and the fiscal capacity of the state makes it extremely unlikely that the central bank can act as a lender of last resort" (p. 22).

The FSA was described by Benediktssdóttir, Eggertsson, and Þórarinnsson (2017) as significantly underfunded and data collected from FSA reports reflects high staff turnover in one year as much as 16% when the staff count was in the low 30s. The FSA was described by one interviewee as good at describing what was going on but failed to act with prosecutions and onsite random inspections. Worse, the chief economist of the CBI, suggests that taking a legalistic viewpoint, meant reliance was placed on extremely strict, legal perspectives that totally ignored economic reality.

In 2006 there were several reports, notably two downgrades by rating agencies, and more importantly, a report by the Royal Bank of Scotland (2005) indicating that Kaupthing alone was growing beyond the capacity of the CBI to back it in the event of a crisis (Bergmann, 2014). Danske Bank (2006) sent jitters through Iceland and its political leaders. Johnsen (2014), "the first thing that comes to mind is a missed opportunity — the opportunity for Icelandic politicians and regulators to step on the brakes..." (p. 83). In contrast, several government ministers took the events of the 2006 crisis to ignore the message and scorn the messenger — the Minister of Commerce, the CBI chair, the Minister of Education, and the Prime Minister, among others. What senior members of the government were choosing to ignore, was Bagehot's (1873) advice when trust begins to erode, the actions of the government and the Central Bank are vital to prevent a wave from becoming a tsunami. Therefore, in hindsight, wilfulness meant an opportunity to arrest the demise was ignored.

The role of the media, owned by the Vikings, echoed the call for Icelandic pride and new-found international status as paramount, not a careful examination of the facts. Icelandic pride in its status as a financial power (Loftsdóttir, 2015; Sigurjonsson, 2011).

4.4. The financial standards authority

Baldursson and Portes (2013), "The story can be read because of the bankers' dishonesty or the authorities' ignorance. We stress the importance of information transparency and disclosure — but it may be that no regulation or supervision seeking to enforce transparency can succeed against a determined strategy of concealment by very clever

bankers. The great complexity of the story admits either interpretation, most likely both" (p. 6). As they outline employing the title *Gambling for Resurrection*, it is far from clear whether the banks started their gambling for resurrection not as cited in 2006 but were gambling from privatisation in the early 2000s.

Baldursson and Portes (2013) highlighted the challenges of related party loans, "The FSA clearly had a very imperfect idea of large, single exposures and related party lending, although they strongly maintained otherwise in Autumn 2007. And the CBI — responsible for financial stability — apparently had little insight into the systemic risks created by such lending" (p. 7). Thus, the risks of the financial system were unknown by the two very agencies charged with its regulation and monitoring. It is notable that the extensive use of offshore companies in a web of opacity meant that appreciating the web of interconnectedness was challenging, but even a father and son (owners of Landsbanki) were treated as independent borrowers, which defies reasonableness. They were in debt to the bank by €1.3 billion.

What stands out in examining each annual report of the FSA (n.d.), is a clear recognition of challenges in the financial system: the rapid growth of the banks; expansion internationally, along with loans extended to their largely Icelandic clients for international acquisitions and after 2006 the use of high-yield-internet-based savings accounts based largely in the Netherlands and the UK. Great problem description, but failure to act. Until 2006, no recognition of related party loans. A hint though through offshore dividends flowing to bank owners and their families, available to the taxation authorities, was unfortunately not employed.

As noted in Landsbanki's Annual Report 2007 "The last five years have been by far the most successful in Landsbanki's 121-year history... Landsbanki has taken advantage of the winds in its sails to grow steadily and rapidly" (Landsbanki, 2008, p. 3). An examination of the financials should have given real concern to regulators, loans grew from 2005 to 2006 by 46%, and 2006–2007 — by 41%. Such growth rates are impressive perhaps but not reassuring for a regulator when loan provisions have been reduced — should they be? Surely yes! Benediktssdóttir et al. (2017) using data from the SIC, "we find that about 20 per cent of the banks' €85 billion loan book at the time of failure went to only six groups of related parties" (p. 196).

The FSA was unaware of the complex network of related party loans and did not examine the tightening of international credit in 2006. An examination of the new loan book 2005–2007 should have alerted the FSA to impending problems. An investigation of the exposure would necessitate on-site investigations, something eschewed by the regulators. Recall too the comment by the CBI economist, Thorarinnsson (SIC, 2010) that taking a legalistic view together with an attitude of "do not rock the boat", appears to indicate that the FSA was not fit for purpose. In an interview with a later FSA Chair, staff had no zeal for prosecution and insufficient numbers of skilled forensic investigators.

The CBI's Chief Economist, Thorarinnsson: "I think there is a fundamental misunderstanding of what financial supervision is all about in Iceland, ... ,

they thought the role of these institutions was to follow up on whether the letter of the law was met by those under supervision. So long as you are watching the entire financial system falling off a cliff, and you follow the law, you're fine" (SIC, 2010, p. 186).

Arnason (2014) stated the negligence of the FSA and by implication the CBI, "it is unrealistic of the Icelandic financial regulators to place trust in bankers who had no roots in a trustworthy banking culture" (p. 49). Oygard, CBI Chair in 2009, when reviewing his experience, noted, "If you don't investigate, you ask for the chaos of criminality. It isn't just the cases brought forward that matter" (2000, p. 260). Trust underlies banking (Campbell, 2010), but regulators have a duty to society, assuming complete trust by regulation means no regulation.

Regulatory agencies will always face the risk of regulatory capture (Stigler, 1971), here the problem was even more acute; the frequent movement from the regulator to regulate, the FSA was to facilitate the competitiveness of the financial system in a single market, to make Iceland a global financial center as core government policy, the agency had little political support, was underfunded, and a narrow viewpoint in that they described the effects of the rapid growth of financial services in Iceland but were unwilling or unable to draw the link that it was likely to fail — evidence of an agentic behaviour enabler.

4.5. The Central Bank of Iceland (CBI)

The CBI chair, Oddsson, neoliberalism initiator, "A spate of negative reports about the Icelandic economy was published in early 2006... The banks responded with improved communication about their activities and reforms in various areas that had come under criticism, as well as slowing down their expansion" (Central Bank of Iceland [CBI], 2006, p. 12). The expansion refers to acquisitions by the banks only, as assets grew by 56% from the beginning to the end of 2006. The report indicates that lending outside Iceland grew and accounted for 61% of total lending at year-end. What is unfortunate was the monitoring systems at CBI and FSA, did not reflect that lending growth was to companies outside Iceland, but controlled by Vikings.

As a result, CBI ignored margin calls, as they considered if they toppled one investment holding company, all investment holding companies would fail and so to the banks themselves — hope is not the answer for a Central Bank. Love letters and loans between the banks that could be realized by borrowing from central banks meant the CBI and the ECB and Luxembourg CB were ignorant about how the Icelandic banks were generating liquidity (Johnsen, 2014, p. 104). Benediktsdóttir et al. (2017), "Nobody in a position of power *knew*, or in any event had the *full* picture of, what the banks were doing. Firm ownership in most Western democracies is opaque. The only reason we know... *because* Althingi appointed the SIC" (p. 271). The CBI failed to appreciate carry trade implications, the dramatic growth of the banks as a red flag, and was not cognizant of the extent of the love letters. They were a lender of last resort but failed to act when

the foreign debt held by the banks was unsustainable, but reports highlighted it. Thus, failing to fulfill their monetary and regulatory implicit and explicit roles — enablers.

4.6. Accountants

The complex web of interconnected enterprises, many of which were not consolidated due to complex structures, was enabled by both international and Icelandic lawyers and accountants who ignored an implicit not explicit requirement to act not only on behalf of their client but also society at large. The accountants were at fault, for not examining in detail in their audit examinations of the banks, related party transactions, and particularly since 2006 with the refinancing of loans for the Vikings. The complex network of offshore subsidiaries would require special diligence to assess the cross-holdings, difficult but possible.

Just as significantly there was little attempt on the part of the auditors to examine the borrowing love letters. The extent was substantial, €3.5 billion on October 1, 2008 (Johnsen, 2014, p. 133; Benediktsdóttir et al., 2017, p. 209). Given the pervasive use of such love letters, it behooved auditors to examine the pattern of funding (Sikka, 2009; Humphrey, Loft, & Woods, 2009).

4.7. The business Vikings

Prior to deregulation, the non-state economy was dominated by a few families, the Octopus. They were closely aligned with the independence party (IP) (Bergmann, 2014). With neoliberalism new entrepreneurs, the Business Vikings challenged the status quo — acquired companies, and concentrated industries, e.g., Johannesson, acquired FBA bank (Glitnir), and via Baugur Group consolidated retail and media. FL Group, Smarason, acquired a controlling stake in AMR, Icelandair, DeCode, and interests in Nordics, and the UK. Notable is that not only were they linked, but quickly operated internationally, and were highly levered in Iceland and elsewhere.

Treated as heroes, who put Iceland on the international stage: Björgolfsson, Landsbanki co-owner, "Business deals are my fix. I have been addicted to them for most of my life and as I became increasingly hooked, the temptation to borrow way over my head to fund them became too much to resist" (Oygard, 2020, p. 45).

4.8. The bankers

Unlike other jurisdictions, Iceland, handled some 806 cases, employing EU law plus Icelandic law (Gunnarsson & Stefánsson, 2020). Noteworthy is that reckless lending, characteristic of the lending practices of all three banks was largely not prosecuted. Leaders and senior managers were prosecuted, some 36 bankers were charged, and jail sentences were imposed. A common charge was that of market manipulation that involved systematic manipulation of the share price. Was it criminal behaviour? Confirmed by the courts.

Oddsson (as cited in Arnason, 2009), "Perhaps it can be said that in many ways we were very unlucky with the crew that came aboard these

banks. They were competent men in every regard, but they were seized by enthusiasm ... for an enormous profit” (p. 48). The words chosen are self-serving, “blame the bankers”. Blaming the bankers became a hallmark of the anger after the crash, ignoring that most Icelanders had been indirect recipients of the massive credit boom and the lack of checks and balances in the financial system.

Wade and Sigurgeirsdottir (2011) and SIC (2010) highlight the magic, as bankers had

discovered the alchemy of cheap borrowing, and lending to friends, government ministers, themselves, owners, and employees. They ignored related party loans, non-consolidated due to a network of often shell companies offshore, and interbank lending is designed to avoid accountability (SIC, 2010; Vaiman, Sigurjonsson, & Davidsson, 2011). Table 3 indicates the extent of related party loans to owners.

Table 3. The extent of related party loans

<i>Bank</i>	<i>Shareholder's equity in 2007</i>	<i>Loan exposure to the largest clients</i>	<i>Relationship with the corporation</i>
Kaupthing	€3771 million	Tchengui, €2,317.9 million	Significant shareholder in Exista, itself the largest shareholder of Kaupthing.
		Olafsson, €1177.3 million	The second largest shareholder in Kaupthing.
		Exista, €1250.0 million	A holding company employed to keep shares of Kaupthing high, by funneling savings banks' monies into Kaupthing, so Exista held a 25% share
Glitnir	€1854.54 million*	Johannesson, €875.8 million	Large shareholder, 2007, part of Baugur Group
		Palmadottir, €390.7 million	Spouse of Johannesson
		Smarason, €410.6 million	FL Group
		Asgeirsdottir, €430.6 million	Mother of Johannesson
Landsbanki**	€1964.0 million	Bjorgulfur Gudmundsson, €533.8 million	The largest shareholder of the bank, on September 29, 2008, one week before the collapse, the bank loaned him €153 million to meet a margin call from Deutsche Bank, making the problems of foreign currency, given the grave uncertainty about Landsbanki, even more acute.
		Bjorgolfsson, €786.7 million	Son of Gudmundsson, a shareholder in Landsbanki, and investment bank Straumur Burdaras.

Sources: SIC (2010), Johnsen (2014), and Benediktsdóttir et al. (2017).

Note: * Glitnir's Annual Report 2007 discloses related party loans of €429.2 million. There was likely obfuscation about the extent of loans to related parties, through creative means. ** Landsbanki's Annual Report 2007, appears at variance with facts (SIC, 2010, p. 6).

Sikka and Wilmott (2010) addressed transfer pricing for tax avoidance, the offshore complex structures in Iceland, were more than tax avoidance; it was designed for legal complexity to enable opaqueness. Through complexity ownership was difficult to assess, as well as equity, in fact through such means debt could be converted magically into equity. Who owned what, and where it was, was hidden from bankers, regulators, and taxation authorities — the largest dividend recipient was the mother of Johannesson (SIC 2010).

Benediktsdóttir et al. (2017), “We find that about 20% of the banks' €85 billion loan book at the time of the failure went to only six groups of related parties, through a complex cobweb of holding companies that were largely unknown to supervisors at the time” (pp. 196–197). After 2006 the banks were forced to find alternate funding sources — high-yield-internet savings accounts (*Icesave*), then passed through with loans to their owners, or not guilty at law, but nevertheless willful malfeasance. The SIC (2010) first exposed, even to the regulators, the extent of the complex interweaving between the banks, their owners as borrowers, and insiders. The state criminally charged largely bank executives and insiders but not the largest borrowers. The prosecution's objective was to go after the “big fish” not the minnows, confirmed by Oygard (2020, p. 260).

5. DISCUSSION

The financial crisis in Iceland was unique but provides insights into the Global Financial Crisis (GFC). Frankel (2010) suggests the following leading indicators are statistically significant in some 83 studies from 1950–2009: level of international reserves, real exchange rate, GDP, credit, current account, and money supply. As events showed in Iceland all these factors were present in 2006–2008 and even during 2003–2007, in the world's smallest currency. Thus, macroeconomic indicators were all trending adversely for Iceland, and yet CBI and FSA seemed ignorant of signals. Beltratti and Stulz (2012) highlight banks: operating in countries with high GDP per capita; with a lower current account; and higher bank concentration — all present in Iceland, fared badly in the GFC. A single-minded CBI pursuit of inflation targeting exacerbated this phenomenon as long-term debt i.e., mortgages held by households were indexed to inflation, inflationary increases were added to the principal, and thus Icelanders were focused on short-term inflation and not wealth changes.

What makes Iceland unique and worthy of study are five overriding factors. First, the size and scale of the crisis. Second, the rapid growth of the financial system from 2000–2008. Third, government and its regulatory agencies were not fit for purpose. The objective of regulation was to make the financial system competitive in a single market

not to protect lenders or its customers. Fourth, the Viking entrepreneurs were viewed as a source of pride, until October 2008. Fifth, and significantly the efforts of the SIC to find out what happened and were public officials responsible for mistakes or negligence. What was remarkable was the SIC was given previously unknown — investigatory powers, including government documents and government officials, corporate records, and subpoena authority. Employing powers judiciously to search for truth.

The GFC had many losers and some winners. Unlike other jurisdictions, Iceland prosecuted those deemed of committing crimes of market manipulation, incautious lending that was wilful and legally wrong, and dissemination of wrong or misleading information. The efforts to hold some, to account, represented an attempt to prosecute wrongdoers (compare Coffee, 2020). Perhaps Iceland was able to undertake such action due to the smallness of the society, and the need to rebuild trust in its institutions.

The framing device employed in this case study that of agentic behaviour yielded some extensions of Perrow's (2010) agentic theory. Thus, not just reckless behaviour driven by bankers and the Viking entrepreneurs, but also the roles played by enabling institutions who failed in their public duty of care. Regulation, no matter whether principle or rule-based, is necessary for an industry that, as Bagehot (1873) and Campbell (2010) indicate, relies on trust. Regulation is a key element of ensuring that trust as, without it, financial institutions cannot succeed long-term.

Iceland's enablers acted within a context and the result was a systemic failure. The government by a single-minded neoliberalist focus, with no history of "free markets", replaced one set of winners — the Vikings and their complicit bankers, with a new set of losers — Icelandic people. But they too were complicit in good times. The people were saved through deleveraging the economy, a special tax on non-Icelanders remitting profits made by buying toxic instruments and after resolution — after the currency controls were relaxed, a radical approach to restructuring the financial system and support from both experts and the international community.

6. CONCLUSION

It is currently some fourteen years since the global financial crisis and the systemic crash in Iceland, and some readers of this journal may at first blush think that there is nothing new to be added to that saga — the field has been ploughed, however, that is mistaken. The Icelandic story has been clouded in myths, e.g., "letting the banks fail was costless", "little money was expended by the Icelandic

government in the crisis", "all the bad actors were punished", and that "the crisis did not impact on most Icelanders". All are incorrect. All Icelanders felt impacts due to onerous debt, the CBI was refinanced, and Iceland's image took a punishing blow, and other citizens in Europe through bailouts of Icelandic bank subsidiaries and the resolution of Icesave (the internet-based deposit accounts) paid substantially as well.

At one level the systemic financial crisis was described as overexuberance due to a credit boom, but this is incomplete. The circumstances of the crash were profound, it exposed ordinary Icelanders to the realization that they had been an integral part of that crash, and the blaming of bad actors is incomplete. The enablers were the context, many poor decisions made, fraud and malfeasance, and the realization that without a thoughtful and proactive regulatory regime, in a neoliberal expansion of the economy, market forces alone are insufficient as a mechanism of control. That lesson is not unique. For every action, there is a reaction and in Iceland's case, the reaction was immense.

The use of agentic behavior indicates that although multiple frameworks have been applied to the GFC and Iceland. The actions of people who either through wilful negligence, greed, or malfeasance, affect not just immediate outcomes and an inevitable failure, but have consequences beyond immediate results.

Iceland was after 2008 a pariah nation, a place for hedge funds to make money from creditors, a nation required to address the debt overhang, and work collaboratively to find solutions under extreme time and external pressure, notwithstanding support from the IMF, other Nordic nations, and Poland, and find new ways of addressing the problem without sacrificing a welfare economy. New approaches were tried and have become part of the toolkit of the IMF in the future.

Icelandic governance and regulatory processes were inadequate before the crisis. There was a need for new political decision-making processes. The consequences of reform and the adequacy of such reform are needed to assess, whether changes that were enacted during the crisis were appropriate and what future changes are necessary. The changes wrought in Iceland are consistent with the plea of Gendron and Smith-Lacroix (2015) that the Global Financial Crisis was an opportunity for regulation and governance to change, and perhaps Iceland and the changes made there are more reflective of their plea than the US or the UK. An analysis of the effectiveness of the changes made in regulation and governance is required in Iceland for public policy and political economy reasons.

REFERENCES

1. Aliber, R. Z., & Zoega, G. (Eds.). (2011). *Preludes to the Icelandic financial crisis*. <https://doi.org/10.1057/9780230307148>
2. Allen, R. E., & Snyder, D. (2009). New thinking on the financial crisis. *Critical Perspectives in International Business*, 5(1-2), 36-55. <https://doi.org/10.1108/17422040910938677>
3. Arnason, V. (2014). Something rotten in the state of Iceland: "The production of truth' about the Icelandic banks". In E. P. Durrenberger, & G. Pálsson (Eds.), *Gambling debt: Iceland's rise and fall in the global economy* (pp. 47-59). Boulder, US: University Press of Colorado. Retrieved from https://www.researchgate.net/publication/299254871_Something_Rotten_in_the_State_of_Iceland_The_Production_of_Truth_about_the_Icelandic_Banks
4. Bagehot, W. (1873). *Lombard street: A description of the money market*. NY: Scribner, Armstrong & Co.

5. Baldursson, F. M., & Portes, R. (2013, September 23). *Gambling for resurrection in Iceland: The rise and fall of the Banks*. <https://doi.org/10.2139/ssrn.2361098>
6. Beltratti, A., & Stulz, R. M. (2012). The credit crisis around the globe: Why did some banks perform better? *Journal of Financial Economics*, 105(1), 1-17. <https://doi.org/10.1016/j.jfineco.2011.12.005>
7. Benediktssdóttir, S., Danielsson J., & Zoega, G. (2014). Lessons from a collapse of a financial system. *Economic Policy*, 26(66), 183-235. <https://doi.org/10.1111/j.1468-0327.2011.00260.x>
8. Benediktssdóttir, S., Eggertsson G. B., & Þórarinnsson, E. (2017). *The rise, the fall, and resurrection of Iceland*. (NBER Working Paper No. 24005). <https://doi.org/10.3386/w24005>
9. Bergmann, E. (2014). *Iceland and the international financial crisis: Boom, bust and recovery*. Basingstoke, UK: Palgrave Macmillan. <https://doi.org/10.1057/9781137332004>
10. Bryant, M., Sigurjonsson, T. O., & Mixa, W. M. (2015). Restoring trust in public institutions and the financial system. *International Journal of Economics and Accounting*, 5(4), 306-319. <https://doi.org/10.1504/IJEA.2014.067423>
11. Buiter, W. H., & Sibert, A. C. (2011). The Icelandic banking crisis and what to do about it: The lender of last resort theory of optimal currency areas. In R. Z. Aliber & G. Zoega (Eds.), *Preludes to the Icelandic Financial Crisis* (pp. 241-275). https://doi.org/10.1057/9780230307148_11
12. Campbell, J. L. (2010). Neoliberalism in crisis: Regulatory roots of the US financial meltdown. In M. Lounsbury & P. M. Hirsch (Eds.), *Markets on trial: The economic sociology of the US financial crisis* (pp. 367-404). [https://doi.org/10.1108/S0733-558X\(2010\)000030B007](https://doi.org/10.1108/S0733-558X(2010)000030B007)
13. Central Bank of Iceland (CBI). (2007). *Annual report 2006*. Retrieved from: https://www.sedlabanki.is/library/Skraarsafn/Arsskyrsla/AS_Innmatur06.pdf
14. Chabrak, N., & Gendron, Y. (2015). Promoting research from the “periphery”: Engaging critically with the global financial crisis. *Critical Perspectives on Accounting*, 30, 1-8. <https://doi.org/10.1016/j.cpa.2015.01.002>
15. Coffee, J. R., Jr. (2020). *Corporate crime and punishment: The crisis of underenforcement*. Oakland, CA: Berrett-Koehler Publishers.
16. Danielsson, J., & Zoega, G. (2009). *Collapse of a country* (2nd ed.). Retrieved from <https://www.riskresearch.org/files/DanielssonZoega2009.pdf>
17. Danske Bank. (2006). *Report of Iceland: Geyser crisis*. Retrieved from [https://notendur.hi.is/ajonsson/kennsla2006/Danske%20Bank%20-%20Geyser%20Crises%20\(Mars%202006\).pdf](https://notendur.hi.is/ajonsson/kennsla2006/Danske%20Bank%20-%20Geyser%20Crises%20(Mars%202006).pdf)
18. De Bonis, R., Giustiniani, A., & Gomel, G. (1999). Crises and bail-outs of banks and countries: Linkages, analogies and differences. *The World Economy*, 22(1), 55-86. <https://doi.org/10.1111/1467-9701.00193>
19. Durrenberger, E. P., & Pálsson, G. (Eds.). (2014). *Gambling debt: Iceland's rise and fall in the global economy*. Boulder, US: University Press of Colorado. Retrieved from <https://library.oapen.org/bitstream/handle/20.500.12657/31060/1/639858.pdf>
20. Frankel, J. (2010, July 1). *Reserves and other early warning indicators work in a crisis after all*. Retrieved from <https://cepr.org/voxeu/columns/reserves-and-other-early-warning-indicators-work-crisis-after-all>
21. Gendron, Y., & Smith-Lacroix, J-H. (2015). The global financial crisis: Essay on the possibility of substantive change in the discipline of finance. *Critical Perspectives on Accounting*, 30, 83-101. <https://doi.org/10.1016/j.cpa.2013.09.002>
22. Gilligan, G. (1997). The Origins of UK Financial Services Regulation. *The Company Lawyer*, 18(6), 167-176. Retrieved from <https://ssrn.com/abstract=2213218>
23. Greenspan concedes error on regulation. (2008, October 23). *The New York Times*. Retrieved from <https://www.nytimes.com/2008/10/24/business/economy/24panel.html>
24. Hirsch, P., & Lounsbury, M. (2015). Toward a more critical and “powerful” institutionalism. *Journal of Management Inquiry*, 24(1), 96-99. <https://doi.org/10.1177/1056492614545297>
25. Guénin-Paracini, H., Gendron, Y., & Morales, J. (2014). Neoliberalism, crises and accusations of fraud: A vicious circle of reinforcing influences? *Qualitative Research in Accounting and Management*, 11(4), 317-356. <https://doi.org/10.1108/QRAM-05-2013-0020>
26. Guillén, M. F. (2015). *The architecture of collapse: The global system in the 21st century*. <https://doi.org/10.1093/acprof:oso/9780199683604.003.0001>
27. Guillén, M. F., & Suárez, S. L. (2010). The global crisis of 2007-2009: Markets, politics and organizations. In M. Lounsbury, & P. M. Hirsch (Eds.). *Markets on trial: The economic sociology of the US financial crisis: Part A (Research in the Sociology of Organizations*, 30(A), (pp. 257-279). [https://doi.org/10.1108/S0733-558X\(2010\)000030A012](https://doi.org/10.1108/S0733-558X(2010)000030A012)
28. Gunnarsson, E. G., & Stefánsson, S. M. (2020). Criminal proceedings in the wake of the Icelandic banking crisis. *European Business Organization Law Review*, 21, 415-451. <https://doi.org/10.1007/s40804-019-00144-0>
29. Gylfason, T., Holmström, B., Korkman, S., Söderström, H. T., & Vihrtiälä, V. (2010). *Nordics in global crisis: Vulnerability and resilience*. Retrieved from <https://www.etla.fi/wp-content/uploads/2012/09/B242.pdf>
30. Humphrey, C., Loft, A., & Woods, M. (2009). The global audit profession and the international architecture: understanding regulatory relationships at a time of financial crisis. *Accounting, Organizations and Society*, 34(6-7), 810-825. <https://doi.org/10.1016/j.aos.2009.06.003>
31. Helgi Magnus Gunnarsson v. Carly Emil Wernersson et al., C 74/2015 (Iceland Supreme Court, 2016, April 28). Retrieved from <https://www.haestirettur.is/default.aspx?pageid=347c3bb1-8926-11e5-80c6-005056bc6a40&id=da43cc51-d44a-4e94-a036-200a3a4893da>
32. International Monetary Fund. (2003). *Iceland: Financial system stability assessment update, including report on the observation and standards and codes on the following topics: Banking supervision, insurance regulation, securities regulation, payment systems, and monetary and financial policy transparency*. (IMF Country Report No. 03/271). Retrieved from <https://www.imf.org/external/pubs/ft/scr/2003/cr03271.pdf>
33. Jännäri, K. (2009). *Report on banking regulation and supervision in Iceland, past, present, and future*. Retrieved from https://blog.dv.is/wp-content/uploads/sites/97/2010/03/KaarloJannari_2009.pdf
34. Johnsen, G. (2014). *Bringing down the banking system: Lessons from Iceland*. <https://doi.org/10.1057/9781137347350>
35. Jonsson, A. (2009). *Why Iceland?: How one of the world's smallest countries became the meltdown's biggest casualty*. New York, NY: McGraw Hill.
36. Jonsson, A., & Sigurgeirsson, H. (2016). *The Icelandic financial crisis: A study of the world's smallest currency area and its recovery from total banking collapse. (Palgrave Macmillan studies in banking and financial institutions)*. London, UK: Palgrave Macmillan.

37. Keynes, J. M. (1936). *The general theory of employment, interest, and money*. Retrieved from https://www.files.ethz.ch/isn/125515/1366_KeynesTheoryofEmployment.pdf
38. Landsbanki (2008, April 23). *Annual Report 2007*. Retrieved from <https://www.globenewswire.com/news-release/2008/04/23/55380/0/en/Landsbanki-Annual-Report-2007-and-AGM-Presentation.html>
39. Loftsdóttir, K. (2016). 'The Danes don't get this': The economic crash and Icelandic postcolonial engagements. *National Identities*, 18(1), 35–51. <https://doi.org/10.1080/14608944.2016.1095491>
40. Lounsbury, M., & Hirsch, P. M. (Eds.). (2010). *Markets on trial — The economic sociology of the US financial crisis* Bingley, UK: Emerald Publishing Limited.
41. McCombie, J. S. L., & Spreafico, M. R. M. (2016). Capital controls and the Icelandic banking collapse: An assessment. In P. Arestis, & M. Sawyer (Eds.), *Financial Liberalisation. International Papers in Political Economy*, (pp. 225–264). https://doi.org/10.1007/978-3-319-41219-1_6
42. Mezias, S. J. (1994). Financial meltdown as normal accident: The case of the American savings and loan industry. *Accounting, Organizations and Society*, 19(2), 181–192. [https://doi.org/10.1016/0361-3682\(94\)90017-5](https://doi.org/10.1016/0361-3682(94)90017-5)
43. Mischkin, F. S., & Herbertsson, T. V. (2011). Financial stability in Iceland. In R. Z. Aliber, & G. Zoega (Eds.), *Preludes to the Icelandic Financial Crisis*, (pp. 107–159). https://doi.org/10.1057/9780230307148_9
44. Organisation for Economic Co-operation and Development (OECD). (2016). *Skills for a high performing civil service* [OECD Public Governance Reviews]. Retrieved from <https://www.oecd.org/gov/pem/Skills-Highlights.pdf>
45. Organisation for Economic Co-operation and Development (OECD). (2017). *The political economy of biodiversity policy reform*. <https://doi.org/10.1787/9789264269545-en>
46. Ólafsson, S. (2016). The political economy of Iceland's boom and bust. In V. Ingimundarson, P. Urfalino, & I. Erlingsdóttir (Eds.), *Iceland's financial crisis: The politics of blame, protest and reconstruction* (pp. 57–78). <https://doi.org/10.4324/9781315618036>
47. Ólafsson, S. (2017). From political advocacy to 'Alternative facts': A comment on Hannes Gissurarson's Method. *Econ. Journal Watch*, 14(3), 399–429. Retrieved from <https://econjwatch.org/File+download/1034/OlafssonSept2017.pdf?mimetype=pdf>
48. Oygard, H. S. (2020). *In the combat zone of finance: An insiders account of the financial crisis*. London, the UK: LID Publishing.
49. Palmer, D., & Maher, M. (2010). A normal accident analysis of the mortgage meltdown. In M. Lounsbury & P. M. Hirsch (Eds.), *Markets on trial: The economic sociology of the US financial crisis, Financial Crisis: Part A (Research in the Sociology of Organizations*, 30(A), (pp. 219–256). [https://doi.org/10.1108/S0733-558X\(2010\)000030A011](https://doi.org/10.1108/S0733-558X(2010)000030A011)
50. Pálsson, T. (2010). *Coping with a banking crisis — Rise, fall and rebirth of the Icelandic banking system*. [PowerPoint Slides]. Retrieved from <https://www.cb.is/lisalib/getfile.aspx?itemid=8169>
51. Perrow, C. (1984). *Normal accidents: Living with high risk technologies*. Princeton University Books. <https://www.theism.org/public-library/Charles%20Perrow%20-%20Normal%20Accidents.pdf>
52. Perrow, C. (1994). The limits of safety: An enhancement of a theory of accidents. *Journal of Contingencies and Crisis Management*, 4(2), 212–220. <https://doi.org/10.1111/j.1468-5973.1994.tb00046.x>
53. Perrow, C. (2010). The meltdown was not an accident. In M. Lounsbury, & P. M. Hirsch (Eds.), *Markets on trial: The economic sociology of the US financial crisis: Part A (Research in the Sociology of Organizations*, 30(A), (pp. 307–328). [https://doi.org/10.1108/S0733-558X\(2010\)000030A014](https://doi.org/10.1108/S0733-558X(2010)000030A014)
54. Royal Bank of Scotland (2005). *Annual Report and Accounts 2005*. Retrieved from https://www.annualreports.com/HostedData/AnnualReportArchive/r/NYSE_RBS_2005.pdf
55. Sibert, A. C. (2011). Overbanked and undersized: Lessons from Iceland. In R. Z. Aliber & G. Zoega (Eds.), *Preludes to the Icelandic financial crisis* (pp. 329–340). https://doi.org/10.1057/9780230307148_16
56. Sigmundsdóttir, A. (2013). *Living inside the meltdown*. Enska textasmiðjan. Retrieved from <https://icelandweatherreport.com/wp-content/uploads/2010/05/Living-Inside-Meltdown-Sample.pdf>
57. Sigurjonsson, T. O. (2011). Privatisation and deregulation: A chronology of events. In R. Aliber & G. Zoega, (Eds.), *Preludes to the Icelandic financial crisis* (pp. 26–40). https://doi.org/10.1057/9780230307148_3
58. Sikka, P., & Wilmott, H. (2010). The dark side of transfer pricing: Its role in tax avoidance and wealth retentiveness. *Critical Perspectives on Accounting*, 21(4), 342–356. <https://doi.org/10.1016/j.cpa.2010.02.004>
59. Sprague, I. H. (2000). *Bailout: An insider's account of bank failures and rescues*. Washington, D.C.: Beard Books.
60. Stigler, G. J. (1971). The theory of economic regulation. *The Bell Journal of Economics and Management Science*, 2(1), 3–21. <https://doi.org/10.2307/3003160>
61. Swedberg, R. (2010). The structure of confidence and the collapse of Lehman brothers. In M. Lounsbury & P. M. Hirsch (Eds.), *Markets on trial: The economic sociology of the US financial crisis: Part A (Research in the Sociology of Organizations*, 30(A), (pp. 69–112). [https://doi.org/10.1108/S0733-558X\(2010\)000030A007](https://doi.org/10.1108/S0733-558X(2010)000030A007)
62. The Financial Supervisory Authority in Iceland (FSA). (n.d.). *Annual reports*. Retrieved from <https://en.fme.is/published-material/annual-reports/>
63. The Special Investigation Commission (SIC). (2010, April 12). *Report of the Special Investigation Commission to the Althingi*. Retrieved from <https://www.rna.is/eldri-nefndir/addragandi-og-orsakir-falls-islensku-bankanna-2008/skyrsla-nefndarinnar/english/>
64. Thorisdóttir, H. (2010). Hamingja, stjórnmálaafstaða og efnahagshrunið [Happiness, political attitudes and the economic collapse]. In G. Jóhannesson & H. Björnsdóttir (Eds.), *Rannsóknir í félagsvísindum XI* (pp. 42–50). Institute of Social Sciences, University of Iceland. Retrieved from https://skemman.is/bitstream/1946/6797/1/42-50_HuldaThorisdottir_STJbok.pdf
65. Thorvaldsson, A. (2011). *Frozen assets: How I lived Iceland's boom and bust*. Chichester, the UK: John Wiley & Sons, Ltd.
66. Vaiman, V., Sigurjonsson, T. O., & Davidsson, P. Á. (2011). Weak business culture as an antecedent of economic crisis: The case of Iceland. *Journal of Business Ethics*, 98(2), 259–272. <https://doi.org/10.1007/s10551-010-0546-6>
67. Wade, R. H. (2009). Iceland as Icarus. *Challenge*, 52(3), 5–33. <https://doi.org/10.2753/0577-5132520301>
68. Wade, R. H., & Sigurgeirsdóttir, S. (2011). Iceland's meltdown: The rise and fall of international banking in the North Atlantic. *Brazilian Journal of Political Economy*, 31(5(125), 684–697. <https://doi.org/10.1590/S0101-31572011000500001>
69. Yin, R. K. (2018). *Case study research and applications* (6th ed.). Thousand Oaks, CA: Sage Publications.