Ireland's Too Big to Fail
vs.
Iceland's Too Big to Bail

Eva Vilhelmína Markúsdóttir

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Leiðbeinandi:
Ólafur Ísleifsson

Eva V. Markúsdóttir
Kt. 251088-2339
Alþjóðaviðskipti

Abstract

This thesis aims to compare Ireland's and Iceland's policy responses to the economic crisis as well as their post-crisis recovery. Both originated with an overextended banking sector, however, the countries responded unlike to the failure of their banks. Ireland bailed out its banks with financial guarantee being extended at the cost of its taxpayers whereas Iceland did not qualify for such a bailout. A specific focus is on the fact that Ireland is a member of the European Monetary Union and that Iceland has its own monetary policy.

Key words: Banking Crisis, Lender of Last Resort, Bailout, Common Currency Area, Monetary Policy

Preface

This thesis counts for 12 ECTS and is written under the instruction of assistant professor Ólafur Ísleifsson. I want to thank him for the cooperation and advice. I also want to thank my family for support and especially Halldór Örn Egilson and Egill Egilson for their useful comments.

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1 Introduction

The massive crisis that hit financial markets in 2008 came as a surprise for policymakers and economists around the world. Authorities tried to calm the situation down in their countries to soften the economy-wide impact of the crisis to their country. Now three years have passed since the financial crisis hit and the world has witnessed that some countries have suffered a large recession in economic activity - while others have come off relatively lightly. This is partly because authorities have responded differently to similar economic problems (Rosas, G., 2006). How to respond to a financial crisis has therefore become a fixture of global discussion.

There may be no better contrast of policy responses than to compare Ireland and Iceland. Both countries' were frequently cited economic miracles until the bubble burst. The countries faced similar economic challenges and their banking crisis came to the height of the financial crisis in September and October 2008. Despite these similarities, the countries respective authorities took different approaches in dealing with these difficulties. Ireland saved its banks from failure by guaranteeing their debt, turning private losses into public obligations. Krugman (2010), a Nobile Prize Winner in Economics, describes Ireland's method as orthodox since almost every government in the world has accepted the idea that it has to save its banks when they run into trouble. However, he describes the Icelandic method as unorthodox as the Icelandic response suggests that saving the banks isn't necessarily the only option. This thesis aims to answer the question: How did the countries respond to the failure of their banks and why did they respond so differently?

One crucial difference between Ireland and Iceland is that Ireland is a part of the European Monetary Union (EMU) as Iceland has its own currency. Obviously there are some benefits and costs to both exchange rate regimes. Nevertheless does the recent European sovereign debt crisis suggest that there might be some aspects of the currency union. The second question that the thesis seeks to answer is: In what degree has Ireland's membership of the European Union affected its economy in the crisis and the recovery? And respectively, how has Iceland's own monetary policy affected its crisis and recovery?

Both Ireland and Iceland have gone through a recession since the credit crunch. However Iceland's has been considered somewhat worse because its collapse was one of the worst that the world has ever witnessed. Accordingly, Ireland made clear that "it was not going to be another Iceland" ("Coming in from", 2010). This view is mainly due to Iceland's sudden collapse which almost bankrupted the entire country. Iceland does however, have the advantage of its own monetary policy which is an important tool to recover from a financial crisis. Ireland does not have the same advantage, but benefits from the membership of the European Union (EU). That is why this thesis aims to answer the question: Which country is doing better? How has their responses affected their economy? The thesis will attempt to analyze how the economies are recovering from a macroeconomic point of view. Several economic indicators will be presented as well as other important features which will give an idea of how the economies stand today.

The paper is organized as follows. Chapter 2 explains the problem of bank failure; it gives a theoretical framework of the financial system's inherent risk as well as the central bank's role as a lender of last resort. Chapter 3 will describe Ireland's and Iceland's economic environment before the financial crisis hit. It will explain some of the imbalances that built up during the boom years and it will describe how the systematic crisis started and what the authorities were dealing with. Chapter 4 will outline how the authorities responded to the crisis and compare the differences of the responses. Chapter 5 will explain how the fact that Ireland is a member of a common currency area has affected its economic environment, compared to Iceland's non-membership. Chapter 6 will analyze the countries' recovery. Several economic indicators will be presented and they will be analyzed. Finally, the concluding chapter will give a comprehensive overview of the findings that the thesis provides.

2 The Problem of Bank Failure

Financial institutions perform the vital role of bringing together economic agents as well as facilitating the flow of money through the economy. Deposit-taking institutions, such as commercial banks, match savers and borrowers. Developed countries are dependent on these institutions to finance their consumption and investment, which are among the main drivers of economic growth. Nikkanen (2009) asserts that provision of credit by banks to other banks is the foundation of trade and business.

If a bank has many customers or plays an important role in a nation’s financial system its failure may threaten other institutions that are financially connected to it and to each other. The balance sheets of the banks are so interconnected that the collapse of a large bank is contagious and contaminates the whole banking system. For instance, if a major bank fails, and other banks rely upon this bank and its creditors to fulfill their obligations to function, then these banks too, and potentially those institutions they are financially connected to, may collapse as well. The bank has then been deemed “too big to fail” when its eventual failure is considered liable to create a domino effect, threatening to cripple a nation’s economy. If the spillover effects generated via this process are large enough, the failure of a major bank could trigger an economy-wide recession (Stern, G. H. & Feldman, R. J., 2004).

The problem of bank failure also reflects the fact that if one bank fails, it might result in an overall loss of confidence to the financial system. If the depositors of the banks come to believe that their bank is insolvent (with assets worth less than the liabilities) then they are likely to withdraw the deposits, thus making a run on the banks. Banks hold only a fraction of their deposits as reserves and therefore cannot satisfy withdrawal requests from all their depositors. Even if the banks are in fact solvent, they will not have enough cash to let depositors access all of their holdings. When such a run occurs, a bank is forced to close its doors until some lender of last resort provides it with the liquidity it needs (Mankiw, N. G., & Taylor, M. P., 2006).

When a bank which is regarded as “too big to fail” is having trouble, some policymakers believe that the bank should receive beneficial economic policies by the government or the central bank to keep it alive. Some believe that such an action will rescue the financial system and the overall economy from a financial meltdown and prevent a rise in unemployment (International Monetary Fund, 2011).

2.1 Lender of Last Resort

A lender of last resort is an institution which is willing to extend credit to commercial banks when no one else will. Most central banks recognize their roles as a lender of last resort, whereby the central bank launches a lifeboat operation to save a commercial bank as the need arises (Mankiw, N., & Taylor, M., 2006). The classic view of the lender of last resort is that central banks should only lend to banks that are solvent, but not liquid, which means that the bank is in fact not bankrupt; its only problem is that it has run out of reserves due to a bank-run (Bagehot, W., 1873). However, with the development of complex financial markets, this view has by some been considered outdated (Parigi, B. M., & Freixas, X., 2008b).

Goodfriend and King (1988) argue that a central bank should only provide the banks with liquidity and leave the banks the task of allocating credit and to monitor debts. This view assumes that the financial market works perfectly. In reality, all banks are plagued by asymmetric information. The problem with asymmetric information is that the liquidity shocks affecting the banks might be difficult to distinguish from solvency shocks, thus making it impossible to distinguish between illiquid and insolvent banks (Parigi, B. M., & Freixas, X., 2008a). It is becoming clearer by the day that too many of Europe's banks were initially misdiagnosed as liquidity, rather than solvency, problems. For some countries the policies prescribed for that misdiagnosis have transformed banking crisis into sovereign-debt crises.

Many governments have accepted the idea that it has to save its banks with a blanket guarantee when such a systemic risk is exposed (Shiller, R., 2008). The ultimate benefit of such a blanket guarantee is that it restores public confidence. However, its major cost is that it comes with a sizable fiscal cost for the entire country, especially if it is revealed that the bank was in fact not only illiquid but also insolvent. It is believed that taxpayers worry that the costs of support programs outweigh their benefits (Contessi, S., & El-Ghazaly, H., 2011). Policy-making is hence a difficult task because decision-making needs to take several tradeoffs into consideration. Therefore, it can be stated that there is no consensus among policy makers or economists on the optimal response to banking crisis.

What does a blanket guarantee involve? A bank which is saved by the authorities can be resembled to a mischievous child; the child refused to sit down at the dinner table during dinner time and is later whining about being hungry, and the parent gives the child a late-night meal. The bank that gets rescued is one that has been irresponsible, failed to follow rules and regulation or take reasonable precautionary steps. Therefore, this kind of rescue has been called “bail-out”.

Bailouts of one sort or another have, for decades, been part of the underlying stabilization mechanism of economies. The Federal Reserve in the USA has been bailing out troubled banks since its establishment in 1914. The Bank of England has been doing the same for hundreds of years. It seems that policy makers believe that they have not been able to avoid bailouts in the past and they cannot do so today (Shiller, R., 2008).

Bailouts have been used for several decades and especially in the recent crisis. Many governments have accepted the idea that it has to bail out their banks if they run into trouble. Such policy responses by recapitalizing banks with public funds totaled 4 trillion dollars in the recent crisis (United Nations, 2009). The authorities face an important tradeoff while trying to choose a policy response, on whether taxpayers should pay the losses of a bank which is “too big to fail” or whether a decision can be made not to intervene which could eventually result in bankruptcy of the entire country. This difficult tradeoff, at least partly, explains why authorities around the world have chosen the bailout path.

The bailouts have been controversial due to the problem of moral hazard. In standard market economics, if a lender makes a bad loan, he bears the consequences. The borrower might go bankrupt and the laws in the respective country sort out the financial disposal of the situation. Instead, some governments decide to bail out the creditors. The creditors, anticipating the bailout, have weakened incentives to ensure that the borrowers will be able to repay. This is the moral hazard problem well known in the insurance industry and generally in economics. Insurance reduces individuals‘ incentive to take care, so the bailout acts like „free“ insurance. Lenders take less care in screening their applicants, being securely bailed out if the loans go sour. If borrowers in a country don‘t buy insurance to minimize their risk, or exposure, and know or believe that a bailout is likely, borrowers are being encouraged to incur higher risk without worrying about it (Stiglitz, J. E., 2002). Although bailing out a bank that is „too big to fail“ might save the economy from a domino-effect of financial collapse, it might be creating a fundamental problem for the future.

3 Preludes to the Recession

Before the recession hit in 2008, the world economy seemed to be thriving. Ireland and Iceland were both economies that grew sharply and became paradigms for other economies. How did the countries become so successful? And what made their success come to an end? This chapter aims to briefly answer these questions and explain some of the factors which subsequently affected the authorities' policy responses to the challenges.

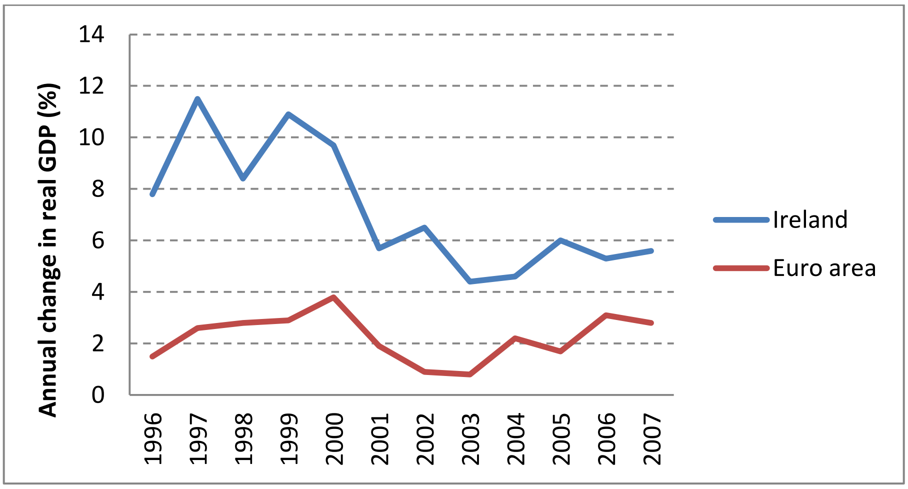
3.1 Ireland - "The Celtic Tiger"

Ireland has historically lagged behind its neighbouring countries in economic development. The country suffered from poverty and the authorities became determined to rise above the country's dismal reputation as an underdeveloped "Third World" outpost of Western Europe. The authorities changed Ireland's economic policy to one that advocated free trade and foreign investment as prime objectives of economic management (Eurostat, 2011). The country became a shining example of a small, underdeveloped country which transformed itself to become one of the fastest growing economies in the world. Following decades of emigration since the foundation of the state, Ireland became to represent an economy of full employment where jobs were plentiful.

In 1973 Ireland joined the European Union (EU), a decision that was to help open its economy (McGowan, P., 2001). The membership became a significant external influence on Ireland's economic growth. Some reforms were introduced during the 1980s, but in the 1990s Ireland went into a more dynamic phase. The Irish society that emerged from the 1980s was relatively well educated, increasingly eager for change and was able to offer an inexpensive labor force. In addition, in 1994 a decision was made to reduce the country's corporate tax rate to 12.5 percent, substantially lower than most of Europe at the time (MacDonald, S. B., & Novo, A. R., 2011). These developments attracted substantial foreign investment. Ireland became attractive to foreign investors seeking a platform from which to do business with the European Union.

During the 1990s, Ireland's economy grew at an annual average rate of around 7.5 percent and in some years towards the end of the decade surpassed ten percent growth. Not only was this more than three times the average of European countries at the time but it made Ireland one of the most successful economies in the world (Kirby, P., 2010). In one decade the real gross-domestic product (GDP) per person doubled, as unemployment went from 16 percent to almost full employment. GDP expanded by more than 90 percent during the last decade of the twentieth century at an annual rate of 6.6 percent, whereas a healthy annual GDP growth rate is considered to be 3 percent (Honohan, 2008). Figure 1 demonstrates the difference of Ireland's growth to the Euro area where it can be seen that Ireland's growth was considerably greater. Ireland got referred to as the "Celtic Tiger", a term taken from the legendary success of the East Asian Tigers in the 1980s and early 1990s, so denominated due to their fast-paced growth in the 1990s which saw their standard of living shoot up.

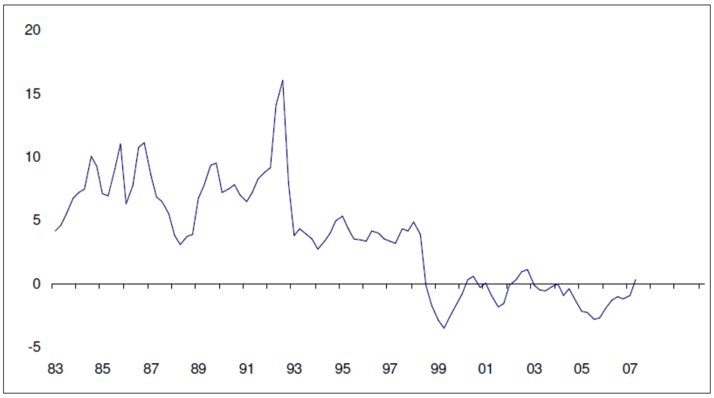
Figure 1 Growth rates in Ireland and the Euro area



Source: Eurostat (2011)

Ireland's economic growth can be divided into two periods. The first period in the nineties was when growth was real, based on exports and investment. The second period is where Ireland shifted from a growth model based on investment to a growth model based on borrowing and building. This change of growth model can be traced to the fact that Ireland became a member of the European Monetary Union (EMU) and adopted the euro as its currency (O'Rourke, K. H., 2011). It became easier for Ireland to fund private and public sector deficits across borders due to the absence of an exchange rate. The result was that the financial sector became ever more integrated with the rest of the euro area. The banks started seeking further competitiveness abroad due to the free flow of capital. Ireland's largest and most stabile banks, Allied Irish Bank, Bank of Ireland and Anglo Irish Bank, expanded tremendously resulting in a credit imbalance (Honohan, P. 2009).

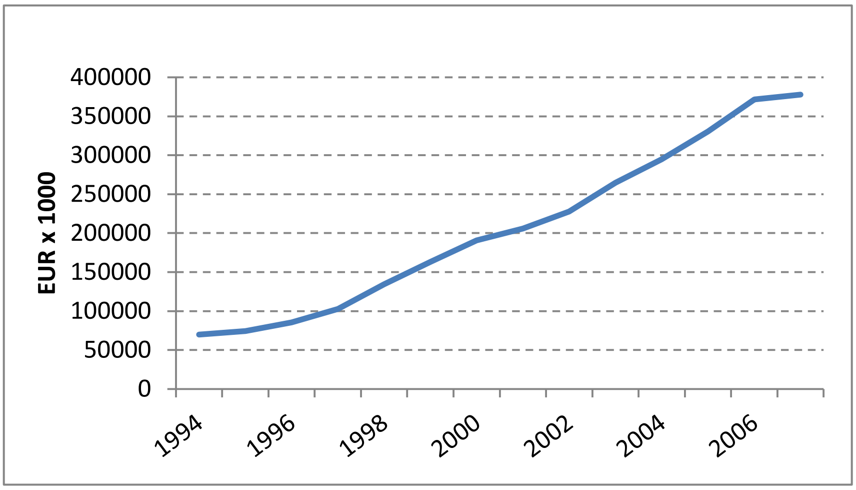
Figure 2 Ireland's real interest rates 1983-2007



Source: Honohan (2009a)

Figure 2 shows Ireland's interest rates on mortgages in the period 1999-2008. When Ireland joined the EMU interest rates were cut from seven percent to roughly three percent. This meant that the country had high competitiveness to start leveraging for economic growth (O'Rourke, K. H., 2011). The banks had easy access to capital due to low transaction costs as well as the absence of currency exchange risk. Instead of lowering taxes or taking other measures to cool the economy, the government encouraged investment and eased the access to mortgages (Kirby, P., 2010). Consequently, the financial sector became the main driver of the property bubble that followed.

Figure 3 Development of housing prices in Ireland



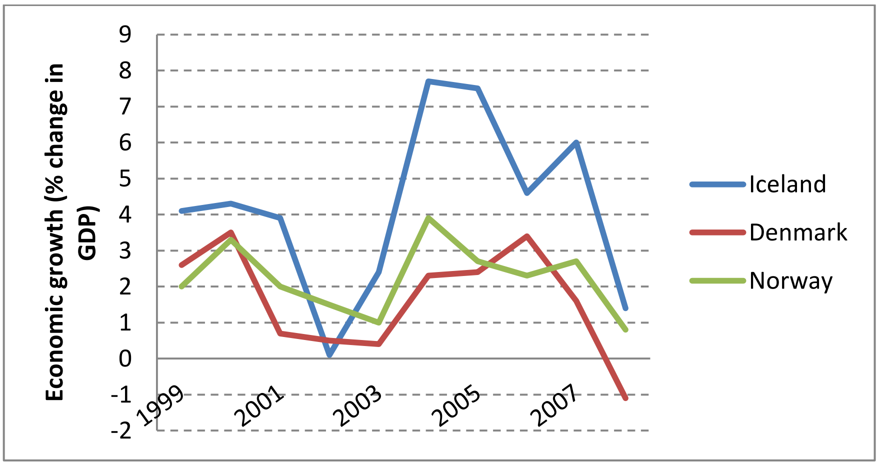
Source: Ireland's Department of the Environment, Heritage and Local Government (2011)

The property bubble that began in 2000 was an inherent part of Ireland's economic expansion and grew along with it. The demand for housing increased due to low interest rates, easy access to capital and high wages. Figure 3 shows the development of Ireland's property price where it can be seen that the property prices tripled between 2000 and 2006. At the time, Ireland‘s entire economy became to be driven by the property bubble. The property bubble was financed by the banks which brought in capital from international markets. In the period 2000 to 2004 the banks made available capital amounting to 50 percent of Ireland’s GDP (Honohan, P., 2009).

3.2 Iceland – “The Finance Vikings”

Iceland, an isolated island in the middle of the North Atlantic, is an unlikely candidate to provide its inhabitants a life of a higher degree of prosperity than other, presumably better endowed countries. Indeed, in 1904 Iceland’s income per capita was similar to that of Ghana today. In the beginning of the 21st century Iceland became one of the world’s leading countries in respect to income per capita. The country was in 2007 and 2008 ranked as the most developed country in the world by the United Nations’ Human Development Index (United Nations, 2007). Figure 4 shows Iceland’s economic growth compared to its Nordic neighbours where it can be seen that Iceland grew faster. Iceland’s success can largely be traced to the process of liberalization of its economy and increasingly freer trade conditions.

Figure 4 Growth rates of Iceland and its Nordic neighbours

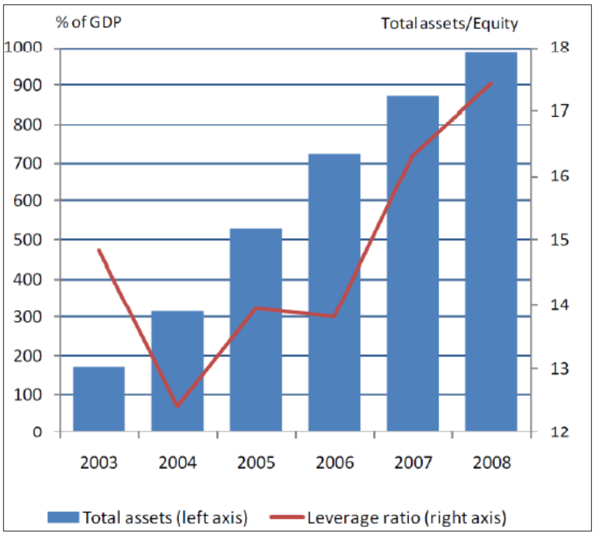


Source: Statistics Iceland (2011)

After Iceland joined the European Free Trade Association (EFTA) in 1970 and the European Economic Area (EEA) in 1994, the country experienced increased freedom in foreign trade and capital flows due to a legislation pertaining to the “four freedoms”, i.e. free movement of goods, capital, services and people (Nello, S. S., 2009). The membership opened many doors for Iceland‘s economy.

In the wake of the privatization of Iceland’s banking sector between 2001 and 2003, Iceland’s commercial banks grew at a fast speed. Icelandic financial institutions, which so far had almost exclusively operated domestically, now had the opportunity to start their operations within the countries of the EEA. Conditions in the international financial market were favorable, the banks had easy access to credit, liquidity was in high supply and interest rates were low. Subsequently the banks expanded their operations in domestic as well as foreign markets by buying foreign financial companies as well as opening branches overseas. The three main Icelandic commercial banks, Glitnir, Kaupthing Bank and Landsbanki, all started aggressively seeking growth and profits, thus earning the Icelandic financial entrepreneurs the denomination of "Finance Vikings" (Steingrímur J. Sigfússon, 2011).

Figure 5 Icelandic banks' balance sheet expansion



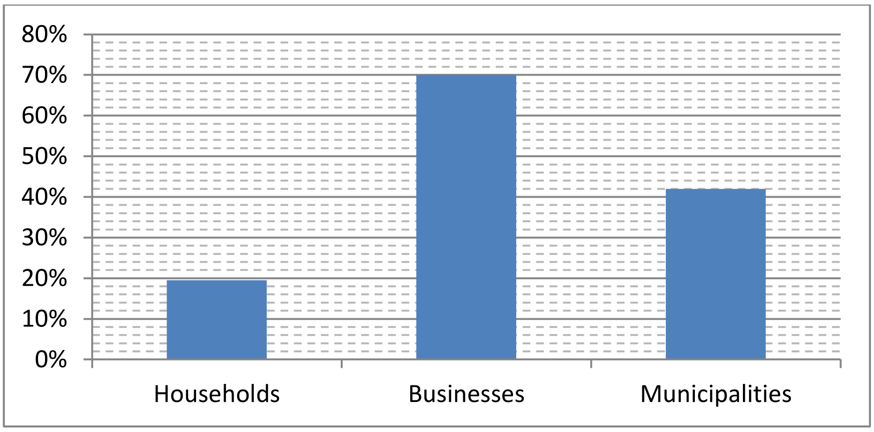
Source: Central Bank of Iceland (2010)

Figure 5 shows how the banks expanded. Between 1986 and 2003, the banks grew by 7.8 percent per annum, whereas between 2003 and 2007 the banks grew at a shocking speed of 22.6 percent per annum (Gylfi Magnússon, 2010). The banks accounted for around 85 percent of the countries' banking system. This bank expansion was fuelled by international operations, credit expansion and higher domestic consumption and investments. In 2006, the banks initiated financing by luring foreign savings by offering high interest rates, the Icesave and the Edge Savings accounts. The deposits were insured by the Icelandic government and followed Icelandic regulation and controls. The banks were nevertheless irresponsible by luring foreign deposits with high interest rates and taking operating at a risky manner (Vilhjálmur Árnason, Nordal, S., & Kristín Ástgeirsdóttir, 2010).

It was recognized that a failure of any one of the three large Icelandic banks would inevitably have repercussions for each of the others and prove extremely disruptive, financially and economically, for Iceland. In that sense, each of the banks were individually “too big to fail” (Friðrik Már Baldursson & Portes, R., 2007)

The Icelandic Central Bank’s monetary policy is assumed as an element that contributed to severe economic imbalances of Iceland (Gylfi Zoega & Jón Daníelsson, 2009). In the 2000s the Central Bank failed to combat inflation and the resulting rise of the interest rate both motivated borrowing by domestic households and firms in foreign currency as well as resulting in a huge inflow of foreign savers’ and investors’ funds diverted to Iceland in order to profit from its higher interest rates. Figure 6 shows the foreign-denominated debt in Iceland by the end of year 2008. It can be seen that relatively high amount of debt was kept in foreign currency.

Figure 6 Proportion of foreign-denominated debt in Iceland (year-end 2008)



Source: Central Bank of Iceland (2011b)

Iceland is the smallest sovereign state in the world having an independent monetary policy (Iceland’s Chamber of Commerce, 2010). A precarious situation as the unstable and fluctuating Icelandic króna makes the economy vulnerable to global economic fluctuations in the world market. The króna has even been referred to as a chronic problem due to its high volatility (Gylfi Magnússon, 2010). The Icelandic economy is consequently vulnerable to fluctuations in international markets as it is highly exposed to a currency crisis.

Law on The Central Bank of Iceland stipulates its role of promoting financial stability, including acting as a lender of last resort (Lög um Seðlabanka Íslands, 36/2001*)*. The law can be said to take account of the afore-mentioned Bagehot doctrine (1873), although it stipulates that the Central Bank will provide such assistance only to solvent banks experiencing liquidity problems. However, as the balance sheets of the Icelandic banks grew in size, the Central Bank failed to strengthen its foreign currency reserves, even as the króna appreciated

(Gylfi Zoega & Jón Daníelsson, 2009). The underdevelopment of the Icelandic foreign exchange reserves parallel to the growth of the banking sector affected the credibility of the Central Bank to act as a lender of last resort Iceland's financial system.

3.3 The Banking Crisis

The fall of 2008 will late be forgotten in the world of international finances. The global economy suffered mainly due to a slowdown in the United States. The U.S. housing downturn became serious in the third quarter of 2007 with the sub-prime mortgage meltdown, which triggered a full-scale credit crunch throughout the world financial system. Bankruptcies in the United States in the fall of 2008 led to a major loss of confidence. Chain of events led to collapse of the Lehman Brothers which had contagion effect on many financial institutions. The Lehman bankruptcy led to a major loss of confidence, where concerns over protecting one's own solvency and liquidity led financial institutions worldwide to take action that, although rational from the standpoint of individual institutions, was disastrous for the system as a whole.

The financial panic which hit the United States quickly spread to Europe. Both Ireland and Iceland had internationally integrated financial institutions that were highly exposed to disruptions in the international market. Studies show that smaller economies with a big size of cross-border transactions show a more pronounced risk of systemic repercussions (Parigi, B. M., & Freixas, X., 2008a). Both soon had a systemic banking crisis on their hands where financial entities were facing problems fulfilling financial contracts on time. As a consequence, the countries experienced a large increase in nonperforming loans and a large part of the capital in the banking system evaporated. Furthermore these events were followed by a fall in asset prices.

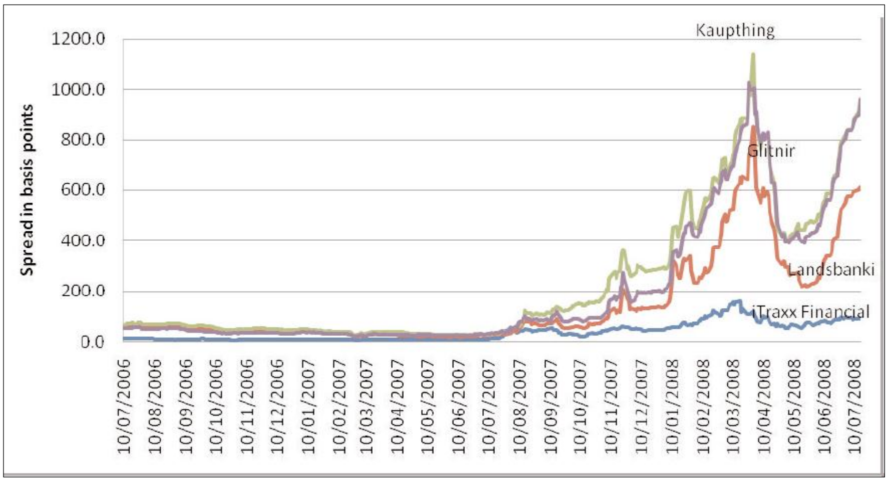
Ireland was already at great risk to be vulnerable to a global economic downturn, considering the exceptionally large contribution of exports to its GDP. Property prices peaked in 2006 and a strong reversal set in as regarding both property prices and activity. The collapse of the construction- and property bubble resulted in severe difficulties for the commercial banks. In October 2007, economists first questioned whether the Irish banks could withstand the fall in housing prices and the consequent recession (Honohan, P., 2009a). Accordingly, Ireland was poorly positioned already before the credit crunch in 2008.

As difficulties in the international financial market set in and particularly when interbank market operations gradually came to a halt, conditions for the Irish banks were aggravated. In response, the banks attempted to preserve the value of their equity. However, the efforts proved in vain and the stock prices of the banks fell sharply. It became impossible for the banks to operate normally in the financial environment that had formed. Anglo Irish Bank was the first bank to run into trouble, as of October 2008 it became clear that it could not honor its foreign debt (Kirby, P., 2010).

In contrast with Ireland, where conditions were already grave before the global credit crunch hit, Iceland was totally overwhelmed by the global crisis in October 2008. The Icelandic financial sector had made itself totally dependent on the whims of the global markets (Boyes, R., 2010).

The Icelandic banks were particularly vulnerable to credit default swaps (CDS), a contract through which the banks' bond buyers insure their possible default by specifically purchasing insurance to such an effect. The CDS was considered to extensively measure and demonstrate the financial riskiness of the Icelandic banks and therefore to constitute their likelihood to default (Buiter, W.H., & Siber, A., 2008). Figure 7 shows the Icelandic banks' credit default swap rate (CDS-rate) for the years 2007 and 2008. The figure indicates that in the beginning of 2007 the CDS-rates for Landsbanki, Kaupthing Bank and Glitnir were fairly low. However, they began rising thereafter, fairly slowly at first but accelerating in 2008. The trend highlights the fact that investors abroad were doubtful on whether the Icelandic Central Bank or the authorities would assist the financial sector against failure.

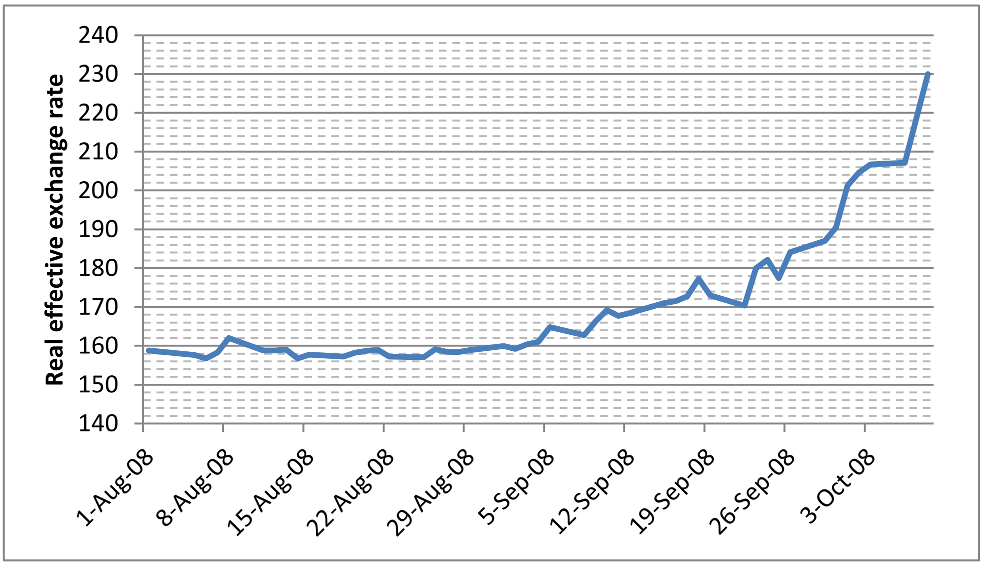
Figure 7 CDS spreads for the Icelandic banks 10/07/2006 - 16/07/2008



Source: Buiter and Siber (2008)

The Icelandic economy was highly vulnerable to a sudden stop of capital inflow due to balance sheet weaknesses of its commercial banks, the assumed risk of their credit book and macroeconomic imbalances (Central Bank of Iceland, 2008). The Icelandic banks were utterly unable to cope with the closing down of the wholesale money markets and the credit crunch. The sudden end to credit and the loss of general economic credibility led to the depreciation of the Icelandic króna. From September through October 2008 the króna lost tremendous value, 20 percent against the U.S. dollar and 7 percent to the euro (Bhaskar, R. R., & Gopalan, Y. K., 2009). Figure 8 shows the real effective exchange rate right before the collapse at which point, Iceland was already experiencing the beginning of a currency crisis. The banks had only about 21 percent of all assets and 15 percent of all liabilities in króna; most of their business was done in foreign currency (Bhaskar, R. R., & Gopalan, Y. K., 2009). Funding cost increased and it became more difficult for the banks to insure themselves against runs. The banks were facing not only a liquidity problem, but also insolvency problem (Buiter, W.H., & Siber, A., 2008).

Figure 8 Plummeting króna before the collapse



Source: Central Bank of Iceland (2011b)

Although the thesis has demonstrated that there are similarities between Ireland and Iceland, given that their growth can be traced to their overextended banking sectors, there is one important difference due to their different circumstances. Ireland's membership to the EMU played an important role as concerns its policy responses (Marinc, M., & Boot, A, 2008). Iceland, however, has its own monetary policy so it was totally in the hands of its Central Bank in line with the authorities to deal with distressed financial markets. Another important aspect is the fact that Ireland’s crises did not materialize suddenly, whereas Iceland totally collapsed by the blow of the crisis as they were unable to cope with the massive cash outflows and the sudden end to credit (Boyes, R., 2010).

4 Policy Responses

Governments all over the world have faced the situation of having to handle the economic crisis that hit in 2008. Although they faced somewhat different problems and used different institutions to deal with these problems, all responded with forceful action and major intervention to keep their financial systems from collapsing and also to ensure continued banking operations (Gopalan, Y. K., & Bhaskar, R.R., 2009).

Crisis management is defined as an effort undertaken to encounter a threat that has been exposed and take the appropriate action that is required to calm the situation down in order for it not to spread (Marinc, M., & Boot, A., 2008). When crisis occurs, the banks in trouble can be resembled to a spreading fire; to be able to efficiently stop an emerging fire from escalating, the firefighters seek to locate individual fires and stabilize the situation. The authorities seek to stop the crisis from escalating and try to improve the confidence to the system. The damage of the crisis is ultimately exposed to the financial sector, the real economy and on the ordinary taxpayers. Therefore, the authorities seek to contain the crisis timely and skillfully to minimize the damage that the crisis is liable to cause. Ideally, the policy responses aim to limit disruptions, stabilize the economy, and lay the groundwork for the resumption of long-term growth (Carstens, A., 2004)

4.1 Ireland‘s Policy Response

As mentioned, Ireland was already relatively poorly positioned at the dawn of the global recession. The Irish banks were extremely dependent on the property-related lending, which accounted for over 60 percent of their total lending. The perception was that household mortgages would continue to be serviced even if housing prices fell back by 20-30 percent. The growing international banking crisis cast doubt on such complacency and the liquidity position of the Anglo Irish Bank became increasingly strained (Honohan, P., 2009a).

The weeks in wake of the collapse of the Lehman Brothers in mid-September 2008 constituted a stressful outburst of a global financial crisis. The Irish banks' share prices fell sharply on September 29, the price per share of Anglo Irish Bank's stock falling almost 50 percent. Such a sharp decline of share prices had a knock-out effect on the willingness of depositors and debt holders to continue to finance the bank. It became apparent that the banks proved unable to roll over its foreign borrowings and had run out of collateral to refinance at the European Central Bank (Honohan, P., 2009a).

As the crisis unfolded, the Irish authorities announced their objectives as regards the containment of the Irish banking and financial crisis. The main goal was to restore investors' confidence. In second place was the restructuring the financial system to ensure capital flows to companies and individuals (Irish Finance Ministry, 2009).

4.1.1 Blanket Guarantee

It was absolutely essential for Ireland to restore its confidence on the international financial market. Furthermore, Ireland came under heavy pressure from its partners to request financial support because of the view that to allow the situation to worsen further would destabilize other countries. There was fear that there would be a Lehman-style contagion of the Irish banking crisis breaking out across the rest of Europe. There was an urgent need for this threat to be contained, given the potential damage that could be wrought across the region if left unchecked. European policymakers hoped the aid package would calm financial markets and prevent contagion in other countries.

Ireland's blanket guarantee was done in order to restore public confidence in order to not trigger the systemic risk that the financial institutions are exposed to. The membership of the European Union carried with it, rightfully or wrongfully, the idea that Ireland would be supported. Whether or not this was accurate however, it shielded the perception of the fact that Ireland might be heading into default. The perception of the support was what mattered. However, by April 2009 it became painfully evident that the Irish crisis was not just a passing storm, but a longer-term structural adjustment.

4.1.2 National Asset Management Agency

Again policy responses are apt to be resembled to a fire. In the wake of a fire inevitably arises the need for the follow-up task of rebuilding the fire damaged neighbourhood and estimating the losses due to the fire. In just the same way the financial sector needs restructuring. Restructurers of the financial market have the option to set up a so-called "bad bank". The bad bank is set up to buy the bad loans of a bank with significant nonperforming assets. This way the banks clear their balance sheet of "toxic" assets which frees them from being preoccupied with trying to recover from their largest delinquent borrowers. Thereby allowing the banks to focus on identifying the borrowing needs of healthy customers and replace loans of uncertain value in the banks' portfolio with sound assets that can be used to mobilize liquid resources for lending.

Restructurers use methods to estimate asset values and to shore up salvageable institutions' profitability and reputation. Their task is to analyze, clean up, and consolidate the portfolios of the insolvent banks and to insure that the capital position of the reconstituted firms is adequately restored by financial engineering. If a bad bank mistakenly pays too much for the loans it buys, it will entail an unwarranted gift to the shareholders and other unguaranteed providers of capital to the banks (Honohan, P., 2009c).

As a result of the collapse of the property market, Irish banks had as collateral property development loan assets secured by property having market value significantly below the amount owed. Many of the debtors were experiencing financial difficulties and accordingly the loans became nonperforming. The Irish government introduced the National Asset Management Agency (NAMA) in April 2009. NAMA functions as a bad bank, a financial institution created purposely in order to hold the nonperforming assets so that the banks could get back to some degree of functioning. The NAMA's role is to purchase property development loans from the Irish banks in return for government bonds (Kirby, P., 2010). Overall, the agency is expected to take over an €80 to €90 billion loan portfolio, or about 50 percent of Ireland's GDP (MacDonald, S. B., & Novo, A. R., 2011).

The NAMA has been a subject of criticism, particularly among academic economists. Following the agency's establishment, Ireland's leading academics wrote a joint article in the Irish Times arguing that the NAMA represents only a partial solution to Ireland's problems and one that is unlikely to protect the taxpayer. Central to their concern is the fear that the government may be seriously underestimating the losses facing the banks, which would represent a cost for the taxpayer not already properly accounted for. According to the argument, nationalizing the banks would better protect taxpayers' interests and produce a more efficient and longer lasting solution to the banking problems (Whelan, K. 2009). The Irish government argues, however, that the agency is an important and necessary part of restructuring the Irish banking system as well as the agency should generate more access to credit for Irish businesses at critical times (Carswell, S., 2010).

4.1.3 Assistance Programs and Austerity Measures

By September 2010 the Irish banks could not secure financing, consequently the blanket guarantee for the bank was renewed. This having negative impact on Irish government bonds and causing the guarantee to rise by as much as 32 percent of Ireland's GDP. Consequently, the Irish authorities decided to request financial assistance from the EU and International Monetary Fund (IMF).

The government agreed to accept the provision of €85 billion of financial support from EU Member States via the European Financial Stability Fund (EFSF) and the European Financial Stability Mechanism (EFSM) along with bilateral loans from the UK, Sweden, Denmark, and the IMF on the basis of specified conditions (The European Commission, e.d.). Bailing out the banks caused the doubling of Ireland‘s national debt and pushed the fiscal deficit over 10 percent of GDP in 2009 (MacDonald, S. B., & Novo, A. R., 2011).

The Irish have to submit to conditions promulgated by the European Union and the IMF, insisting on borrowers adopting austerity programs to shore up their economies and to put their muddled finances into order. Accordingly, Ireland passaged an austerity budget for 2010. Ireland‘s has by many economists been billed as the most painful budget in a generation, making €4 billion in spending cuts to curb the country‘s soaring debt. Among the cuts in the budget were €760 million from social-welfare programs and €1 billion from public-service payrolls. The austere budget has resulted in public demonstrations and understandably caused resentment as the blanket guarantee has been perceived as a bailout for the wealthy (MacDonald, S. B., & Novo, A. R., 2011).

4.2 Iceland’s Policy Response

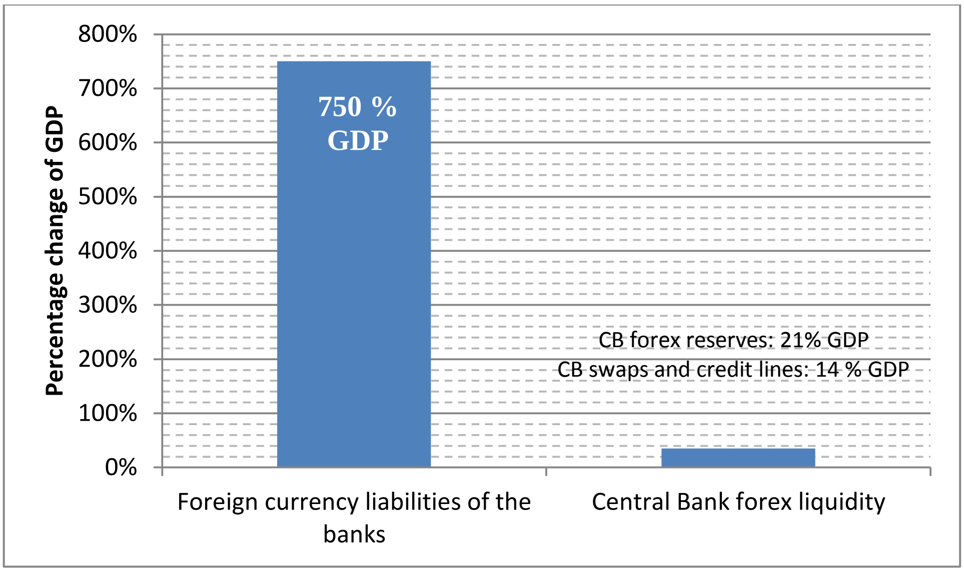
As mentioned earlier, Iceland’s banks had difficulties paying their short-term debt as well as refinancing, boiling down to severe lack of credibility as reflected in the afore-mentioned CDS-spread. More important however, is the fact that The Central Bank of Iceland suffered from a lack of credibility to act as a lender of last resort.

4.2.1 Absence of a Lender of Last Resort

In the case of a small open economy with its own currency and an international banking system, the mechanism behind the actions of a lender of last resort is complex. If the country’s currency has no international creditworthiness the credibility of the central bank to act as a lender of last resort is seriously impaired. Such is the Icelandic scenario. The króna constitutes a small currency and the Icelandic banking system had in essence developed to be an international one and constitute a huge share of its GDP. The ability of a lender of last resort in small open economies is therefore restricted to the size of the foreign reserves liquidity of the central bank (Central Bank of Iceland, 2011b).

Figure 9 shows the foreign liabilities of the banks in September 2008 which amounted to 750 percent of Iceland's GDP, whereas the foreign reserves of the Central Bank of Iceland amounted to only 25 percent of the GDP. According to the Central Bank currency reserves were 374.8 billion krónas in the end of September. At the same time, foreign debt of the commercial banks amounted to 10,365 billion krónas (Central Bank of Iceland, 2009). The Icelandic authorities were therefore in no position to save the banks, as opposed to the Irish authorities. The Central Bank of Iceland was thus hardly a credible lender of last resort for the Icelandic banking system.

Figure 9 Foreign liabilities of the Iceland banks and CB forex reserves September 2008



Source: Central Bank of Iceland (2010c)

Buiter and Sibert (2008) were the authors of a report which was published at the beginning of the summer before the collapse. The report emphasizes that due to the fact that the Icelandic banks' were financed mostly by foreign currency, the Icelandic economy severely needed a foreign lender of last resort in order to prevent a bank run as the commercial banks had no credible lender of last resort in foreign currency. The authors emphasized the importance for the authorities to choose whether to risk taxpayer's money in order to support the banks stating that the Icelandic authorities should make sure to collect enough reserves whereas an incredible support could result in a bank run either way. According to Buiter's and Sibert's calculations, the banks should guarantee only the banks' domestic operations as well as their subsidiaries. The conclusion of their report reveals that the Icelandic authorities needed roughly 10 billion US dollars to support the banks' operations for the short-term.

The problems of the financial system were far too great to add to the government's balance sheet. The IMF stated that the banking system significantly outstripped the authorities' ability to act as a lender of last resort when the system ran into trouble (Andersen, C., 2008). Simply stated, the debts and liabilities run up by the Icelandic banks were well beyond what the country's central bank had in terms of foreign exchange reserves. The Icelandic banks did not have access to the liquidity they required unlike Ireland's situation in view of financial backup by the European Central Bank. In Iceland, the question of whether the banks were too big to fail was practically irrelevant. The banks were too big to save, or more appropriately, too big to bail. The relative size of the Icelandic banking system meant that the government was in no position to bail out the banks.

4.2.2 Nationalization

As mentioned earlier, Glitnir the smallest of the three banks discussed, first faced problems paying its short-term debt. Because of lack of confidence in Glitnir's collateral the Central Bank of Iceland refused the request for help. On September 29th 2008, a plan was announced for the bank to be nationalized by the Icelandic authorities with taking over of a 75 percent stake for 600 million euros.

The announcement of the nationalization of Glitnir attracted widespread attention. The British, Dutch and Germans who had invested so much of their savings in accounts controlled by the Icelandic banks' affiliates and branches, were nervous. British newspapers published many articles on the nationalization of Glitnir and outlined the high leverage of Iceland's other banks (Goodman, M., 2008). In the UK, these articles spooked investors and savers alike, the latter having succumbed to advertisements of the Icesave accounts, promising high interest rates. Many felt uncomfortable enough to start transferring their savings out of the bank. The bank thus suffered from the textbook example of a bank-run in which the depositors desperately wanted to withdraw their holdings.

4.2.3 Emergency Legislation

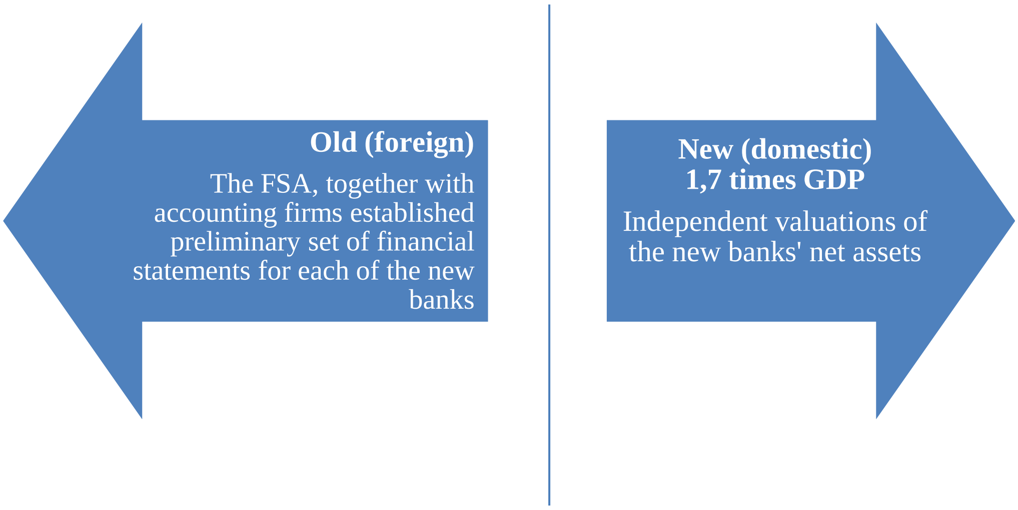
Given the extraordinary situation in the Icelandic banking sector at this point, an emergency legislation was passed by the Parliament of Iceland on October 6, 2008. The law athorised the Icelandic Treasure to provide capital for establishing new banks. Landsbanki went into administration following the emergency legislation in Iceland. The emergency legislation also gave powers to the Icelandic Financial Supervisory Athority (FSA) to intervene in the affairs of ailing banks under the prevailing extraordinary circumstances.

People generally believed that Kaupthing, Iceland's largest bank and the most liquid, could withstand the systemic risk. The case was however, that the British authorities invoked anti-terror laws to freeze Kaupthing foreign assets in which closed subsidiaries of Kaupthing in London. (Zoega, G., 2010).

4.2.4 Banking sector restructuring

The provisions of the emergency law were quickly put in use. The essence of the authorities' decision as concerns the banks' disposal was to separate the foreign operations of the "old banks" from newly established banks where domestic deposits and loans were kept. The foreign operations were left in the "old banks" which were left to bankruptcy (Jón Daníelsson & Gylfi Zoega, 2009). The FSA decided to secure the continuation of vitally important domestic banking services and to safeguard the public's bank deposits. It was also seen as important to down-size the banking sector to a level more in line with the size of the economy (FSA, 2008). Figure 10 displays how the banks' operations were separated.

Figure 10 Icelandic banks' domestic operations established within new banks



Source: Central Bank of Iceland (2010a)

The banks were not split according to the "good/bad bank" methodology, like Ireland via the NAMA. Rather, each of the three banks was split into a "new bank" and an "old bank". The new banks consisted of domestic operations, the banks' domestic assets (loans) and liabilities (deposits) as well as the authorities' additional direct funding of the new banks to different degree. The old banks consisted of what was left in the previously privately owned banking companies after the new banks had been split from them. The actions allowed the domestic operations of the Icelandic banking system to continue to function.

4.2.5 Financial Assistance Programs

The Icelandic government decided to seek assistance from the International Monetary Fund (IMF) after the start of the financial crisis. Iceland was the first developed country to request assistance from the IMF in 30 years. The IMF approved upon a request a two-year stand-by arrangement.

The Icelandic authorities eventually requested IMF assistance. Cooperating with the IMF and its creditors to be, the Icelandic authorities developed an economic plan. Its goals, as stated by the exact words of the Letter of Intent, are first and foremost to regain both domestic and international trust in Icelandic economy and to stabilize the króna. The plan lays out how monetary policy, fiscal policy and rebuilding will be reestablished with the aim of strengthening public finances. The IMF credit extended to Iceland due to the collapse of its banking sector amounted to 2.1 billion U.S. dollars.

In November 2008 the IMF published its analysis of the crisis as well as its conditional plan as to how to respond to it. The plan in effect dictates monetary policy, fiscal policy and the restructuring process for the banking sector. The IMF program aims at stabilizing the exchange rate by a combination of high interest rates and severe capital controls that are planned to be gradually lifted; the fostering of a banking system and protection of relations with foreign financial institutions by the adoption of a strategy that is nondiscriminatory and collaborative; and, finally, to organize fiscal consolidation in light of the much greater anticipated level of public indebtedness. With the program came a rescue package from the IMF and along with bilateral loans from Norway, Sweden, Poland, with total worth around $5.2 billion in total (Gylfi Zoega & Jón Danielsson, 2010).

4.2.6 Capital Controls

A common response to economic disruptions is capital flight, which implies that assets and money rapidly flow out of a country as foreign investors have lost confidence in a country's economic strength (Mankiw, N., & Taylor, M., 2006). This is exactly the situation Iceland faced after its crash; the authorities expected that foreign investors of the so-called Glacier Bonds, which are estimated to amount to 50 percent of Iceland's GDP, would withdraw their funds (Gylfi Zoega & Jón Danielson, 2009). With such a substantial amount of funds flowing out of the country, an even larger and more sustained fall in the exchange rate would be liable to take place, having further damaging effects on the balance sheets of firms and households.

The capital controls were originally intended by the IMF to be in effect for 2-3 years, indicating that they should by now for the most part, if not completely, have been lifted. The reality has turned out different, the Icelandic authorities have decided to keep the controls in place until the year 2015 (Thorvaldur Gylfason, 2011). Although the IMF recognizes the short term benefits of capital controls, the long term benefits are not applicable. In its outlook for Iceland the IMF stresses that the capital controls should ultimately be removed. The IMF stresses that it's under priority of Iceland's program to eliminate all the restrictions so that Iceland can return to a freely convertible currency (IMF, 2009).

The decision by the authorities to keep the capital controls in place for four more years has been widely criticized. Critics have pointed out that capital controls have a negative effect on operations for companies, affecting exports as well as imports. It its argued that there will always be a way past the capital controls, and accordingly a black-market exchange regime will set in, with the effect of taking longer for the króna to achieve its real value and stabilize. A book prepared by Iceland's Chamber of Commerce (2009) under the heading "*Rebuilding Iceland's Economy*", points out that research demonstrates that a closure of the economy is the most consequential mistake that authorities make in the wake of a financial- and currency crisis. The chamber argues that not only do capital controls diminish economic activity; they create constraints due to a persistent lack of capital in the economy. The chamber also stresses how exports will need to be stimulated in order to rebuild the economy; in short the controls should be lifted.

4.3 Comparison of the responses

The current chapter has explained how the authorities of each of the countries, Ireland and Iceland, responded to the economic crisis. Although Ireland and Iceland faced similar economic imbalances prior to the crisis, they chose different paths in response to it. The chapter indicates that there is hardly a better contrast of policy responses than to compare Ireland and Iceland. Ireland's choice being the classic path of a bailout and Iceland's simply letting its banks fail, defaulting on their obligations. Ireland's is indeed the orthodox way of bailing out the banks, which has been previously done in the past decades. Iceland however, chose a different path and only guaranteed some of the banks' liabilities and started new banks from scratch.

Ireland's blanket guarantee resulted in higher government debt, and which the austerity for 2010 was one of the worst the world has ever witnessed. Iceland however managed to keep the banks going with sparing Iceland's taxpayers and depositors to be left with the bill of the creditors. So why did Ireland choose to bail out its banks?

The bailout of the Irish banks has been argued, was primarily to prevent a contagion like with Lehman-brothers of the Irish banking crisis breaking out across the rest of Europe. There was an urgent need for this threat to be contained, given the potential damage that could be brought across the region if failure would materialize. The immediate fiscal cost of the emergency measures will be huge for Ireland's economy, and it is uncertain how much of these can eventually be recovered from market agents or through the economic recovery. This poses an additional macroeconomic challenge for the Irish economy (United Nations, 2009).

Due to the fact that Europe feared that Irish banks' failure would trigger a contagion effect on the rest of Europe's financial institutions, essentially Spanish and Portuguese, ultimately being liable to result in an uncontrollable systemic international financial crisis. The financial assistance program already initiated for Ireland has as its aim to provide the authorities with a viable option of preparing a blanket guarantee for the banks, making the Irish believe that the financial assistance program was from the outset intended to assist international financial institutions and the economic interests of other countries rather than the Irish economy alone as Irish taxpayers are ultimately left with the bill (MacDonald, S. B., & Novo, A. R., 2011).

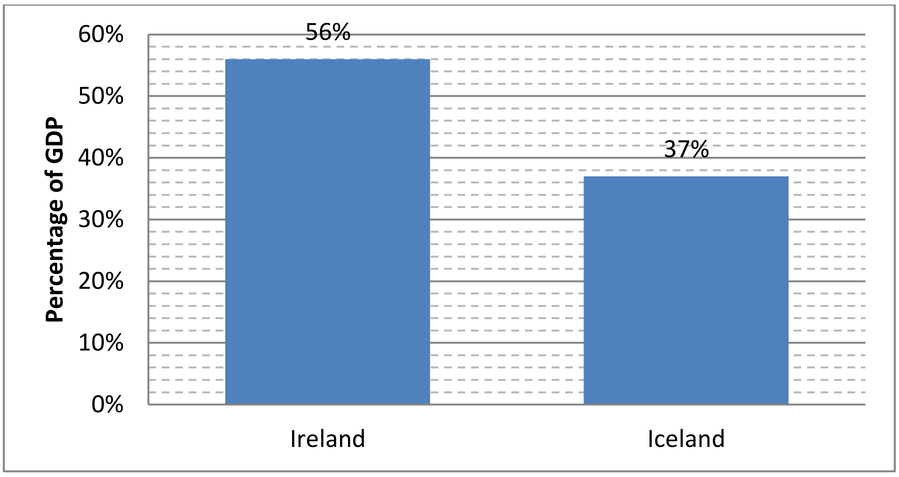
Ireland's authorities are generally aware of having taken a major gamble with the NAMA. The public recognizes that the NAMA does not achieve any of the goals which policy responses should, to minimize taxpayers' cost and risk, and get the credit flowing to business and homebuyers (Varadkar, L., 2009). No wonder the agency has been the subject of criticism in both politics and academia. Among the critics is Joseph Stiglitz, winner of the Nobel Prize in economics and former chief economist of the World Bank. His commentary describes how he, as the chief economist of the World Bank, has witnessed this type of wealth transfer from taxpayers to bondholders taking place in so-called "banana republics" all over the world. He expresses his disappointment at witnessing this happening in an advanced industrialized country like Ireland (McWilliams, D., 2009).

Iceland's policy response objectives contrary to those of Ireland, aimed at keeping a commercial banking system up and running rather than opting for a strategy sympathetic to the concerns of the creditors of the Icelandic banks. The path chosen is considered to be the best alternative to lower costs internal to the country implying that creditors had to take the financial blow.

To shed light on taxpayers' view of such a blanket guarantee, it deserves to be mentioned that in Iceland referenda were held in order to elicit the population's view toward fulfillment of the financial obligations believed to be inherent to the Icesave accounts. The citizens voted not to use taxpayer funds to settle the accounts for the failed Landsbanki. Taxpayers thus considered it high time to refuse deals implying turning private debt into public debt. The benefits of future tax receipts should belong to those upon who taxes fall and it should be those individuals' decision how to use them on welfare issues.

Although it seems a difficult task to compare such contracting responses, there is one factor in which they have in common. Both countries got financial assistance to help to recover from the recession. Figure 11 compares the financial support to Ireland and Iceland respectively, as a percentage of their GDP.

Figure 11 Ireland‘s and Iceland‘s financial support as percentage of their GDP



Source: Hagsýn (2010)

Ireland received support both from the EU and the IMF, totaling 56 percent of its GDP, 90 billion euros. Iceland received financial assistance from the IMF and other countries amounting to 37 percent of its GDP (Hagsýn, 2010). Although Iceland suffered from a collapse of its financial system as well of its currency, it seems as if its financial assistance program was not in the size of Ireland's. Ireland's large financial assistance program might indicate that Ireland needs more assistance to recover from the recession.

Krugman (2011) compares the conditions of the Ireland's and Iceland's for the IMF assistance in order to get their finances together. There difference is quite harsh; where the IMF recommends Ireland's authorities to cut minimum wages and reduce unemployment benefits. These are measures to tackle the high Ireland's high unemployment rate. IMF's recommendations for Iceland are not as harsh, in which the mission praises that Iceland should preserve Iceland's valued Nordic social welfare program.

5 Single Currency vs. Own Currency

It has been demonstrated that the economies of Ireland and Iceland had many similarities at the outset of the financial crisis. Both enjoyed high economic growth during the boom years, both had a property bubble and both imported labour due to their overextended economies. Furthermore, the financial sector of both countries expanded tremendously in proportion to their GDP. Despite all these similarities, they have one important difference, Ireland’s membership of the European Union and concurrently the European Monetary Union (EMU). Ireland constitutes an inherent part of the EU and shares monetary policy with the Eurozone, using the euro as currency, whereas Iceland has its own currency.

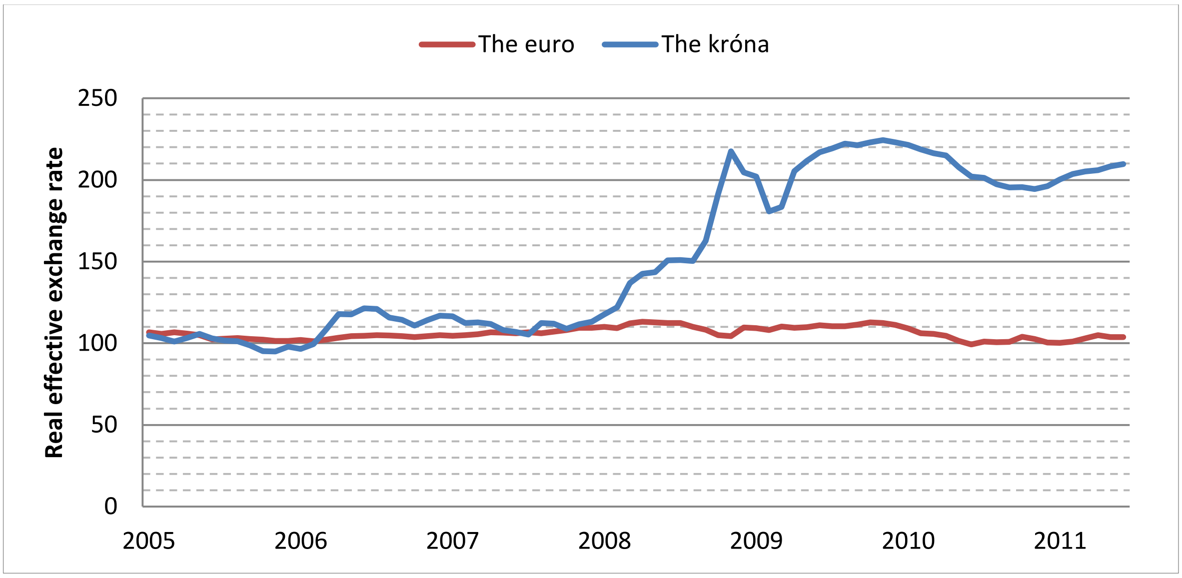
The differences of being a member and non-member of a common currency area have had a major influence on the development of the economies. Indeed, many academics have argued that the different exchange rate regimes have played a key role in the current crisis (Thorvaldur Tjörvi Ólafsson & Thórarinn G. Pétursson, 2010). Due to the fact that Ireland and Iceland had many similarities prior to the crises, Ireland enjoyed the several advantages of membership before the credit crunch, the main one being associated with being part of a common currency area which eases trade between the partners while minimizing transaction costs, reducing price discrimination and removing exchange rate risk. However, since Ireland was considered an emerging economy at the time, it enjoyed even more benefits due to its membership such as low interest rates, low inflation, higher average economic growth and lower unemployment. Furthermore, the membership also represented the continuation of Ireland’s integration into mainland Europe and reduced dependence on the United Kingdom (Jones, E., Frieden, J. & Torres, F., 1998).

Although Ireland enjoyed many of the benefits of the membership, the euro also contributed to the property boom and to the drift in wage competitiveness. Low interest rates and removal of exchange rate risk facilitated the boom, as discussed in an earlier chapter. The enlargement of the EU area also meant that the boom could continue longer than otherwise, fuelled by strong inward migration (Honohan, P., 2009).

Another important advantage that Ireland benefited from during the crisis was that the financial sector was under the protection of the European Central Bank. It provided Irish policy makers with a sense of security in view of Ireland’s access to financial assistance programs in order to recover from an eventual crisis. Moreover, due to the absence of exchange rate risk, Irish households and companies did not have to deal with exchange rate losses or inflation on indexed loans. The Irish financial sector had full access to the international financial market during the crisis as well as the country benefited from the confidence that the membership of the EU inspires.

For Iceland, the story is quite different. When the crisis hit, not only did the Iceland's financial sector collapse, the currency collapsed with it. Iceland suffered not only from a banking crisis, but also a currency crisis, a so-called twin-crisis. Figure 12 shows the real effective exchange of the króna. It can be observed that the imminent days in wake of the collapse the króna plummeted. The króna fell to 340 against the euro, whereas the rate at the start of 2008 was about 90 krónas to the euro (Icelandic Central bank, 2009). The figure also demonstrates the euros exchange rate, indicating a much more stable currency.

Figure 12 The euro‘s and the króna‘s real effective exchange rate 2005 - 2011



Source: Central Bank of Iceland (2011b) and European Central Bank (2011)

The collapse of the króna has caused a major damage to Iceland's economy. It has resulted in higher inflation and a massive increase in foreign debt for households, companies and municipalities. Payment difficulties and bankruptcies can be directly traced to the currency collapse, consequently leading to a higher unemployment rate. The depreciation of the króna also contributed to a sharp fall in purchasing power of the public, especially on imported goods.

Another important weakness of the Icelandic króna is the fact that the Icelandic Central Bank was not able to act as a lender of last resort for its financial sector. While Ireland enjoyed full confidence of the European Central Bank and its financial system remained fully functional with full access to international markets, the landing was not as easy for Iceland. Right after the collapse of the financial banks, international transfer systems closed, dealing a severe blow to Icelandic foreign trade. Importers could not pay their suppliers, and exporters could not move capital into the country. This affected the whole economy as liquidity was limited and it was difficult, if not almost impossible, to get hold of foreign currency.

Another aspect is the fact that the Icelandic króna has lost much of its confidence. Its lack of confidence has resulted in companies not enjoying creditworthiness in the international financial market making the business environment difficult for Icelandic companies. This in turn has led companies to consider moving their headquarters to the more stable financial environment of many other countries. Possible departures of thriving companies are of major concern, considering that the domestic presence of those firms is vital for rebuilding the economy.

Having its own currency certainly resulted in major difficulties for Iceland. It can be argued that the large banking collapse could have been in some extent contained had Iceland been a member of the EMU with stronger institutional support, then especially through the greater ability of the ECB to provide liquidity support (Thorvaldur Tjörvi Ólafsson & Thórarinn G. Pétursson, 2010). Also would it have prevented the currency crisis and ensured full access to the international financial markets during the credit crunch.

However, the Icelandic króna has not only contributed to the problem of the Icelandic crisis, it has also believed to be a part of the solution (Ministry of Finance, 2009). Figure 13 sums up the advantages and disadvantages of a weak currency. The main advantage of the depreciation of the Icelandic currency is the increased competitiveness of Iceland’s exports due to the fact that Icelandic products become cheaper than those of foreign competitors. Currently Icelandic exporters are thus having a field day. A second advantage implies that, since imported goods in Iceland are more expensive than before the currency’s depreciation, the consumption has shifted noticeably towards domestic goods, providing a boost for Icelandic producers. (Gylfi Magnússon, 2010).

Figure 13 Advantages and disadvantages in the wake of the depreciation of the króna

Advantages

1. Icelandic exporting firms find it easier to sell goods in foreign markets
2. Firms in Iceland have less competitive pressure to keep prices low
3. More foreign tourists can afford to visit Iceland
4. Icelandic capital markets become more attractive to foreign investors

Disadvantages

1. Icelandic consumers face higher prices on foreign goods
2. Higher prices on foreign goods contribute to higher inflation in Iceland
3. Icelandic consumers find traveling abroad more costly
4. It is more difficult for Icelandic companies and investors to expand to foreign markets

Source: Carbaugh (2008)

Ireland does not have the same source of competitiveness for its export as it uses the euro. It shares monetary policy with other countries within the Eurozone. The mentioned features of the Icelandic króna, both advantages and disadvantages, cannot exist in a common currency area, as the participants are not able to devalue their currency at their own discretion as by design they all have to use the same nominal exchange rate. If one country is experiencing a more severe recession than other member countries of the common currency area, that country cannot relax its monetary policy by devaluing its currency or allowing it to depreciate to stimulate its economy (Carbaugh, R. J., 2008).

This means that to achieve a needed depreciation of the real exchange rate, Ireland needs to carry out a fall in prices and the wage level relative to the other countries in the union. Although this may eventually happen, it is considerably harder and more time consuming to pull off than a devaluation of an independent currency (Gylfi Magnússon, 2010). Milton Friedman came with the analogy of describing the exchange rate adjustment as analogy of changing to daylight and saving time; it is easier to change one price, the exchange rate, than to change the prices of everything an economy produces, just as it is easier for everyone's clocks to be set back an hour than for everyone to change his or her schedule (Krugman, P., 1992).

It can be stated that Ireland has benefited from advantages that the EMU membership provides; however, it can also be safely maintained that Ireland has suffered from the currency unions' disadvantages, there among a lack of adjustment to asymmetric shocks. For a currency area, such as the Eurozone to be viable, the participants in the single currency zone need to meet certain criteria in order to maximize its economic efficiency, a so-called optimum currency area (OCA) pioneered by Mundell (1961). The Eurozone, at this point does not meet the criteria for an OCA, as the 17 countries' financial power and stability differ significantly.

Ireland needs to recover from its crisis without the two main tools for stabilizing the economy, interest rates and exchange rates. It does not have the adjustment mechanisms of asymmetric shocks. Furthermore has it been observed that alternative mechanisms such as substantial federal budget or labour mobility do not exist in Europe to the extent they do in an optimum currency area such as the United States (Amati, S., & Patterson, B., 1998).

Another factor that Ireland struggles with is reflected by the fact that as the euro remains stable; the British pound has depreciated vis-à-vis it. The Irish economy relies heavily on exports to and imports from the United Kingdom, its export sector thus having become less profitable. Exports, which are an important contributor to economic growth, are therefore turned heavily inefficient, at least vis-à-vis the United Kingdom.

Although the Irish have been major proponents of the Euro area, they have recognized that the single currency arrangement has suffered a serious setback in its current condition due to Ireland and other European countries struggling with sovereign debt. The only way that Ireland could gain Iceland's inherent export competitiveness of its own currency is to abandon the Eurozone and enter its former British pound regime. However, that could trigger the mother of all financial crises, as confidence in the euro would be challenged. Few economists believe that the benefits of abandoning the euro would outweigh the costs (Nikkanen, L., 2009).

To sum up, Ireland was saved from an economic collapse which Iceland had to go through. However, Iceland has followed an adjustment path of a depreciating currency which boosts its competitiveness. But the Icelandic króna suffers from a lack of confidence. Ireland, on the other hand, has not been as lucky as Iceland in being able to devalue its own currency or experience its deprecation. However, Ireland benefits from general confidence because of the European Union's backup and also due to the fact that its membership also facilitates trade between the member states. In conclusion, both exchange rate regimes have their important advantages and disadvantages. The next chapter will examine to what degree these differences have had an impact on the respective countries' economic recovery.

6 Too big to Fail vs. Too big to Bail

It is clear that Ireland and Iceland experienced similar economic conditions prior to their recession, as well as they responded differently to similar economic problems. The thesis has shown that the main difference between Ireland's and Iceland's situation is the membership and non-membership of the Economic Monetary Union (EMU). That factor has resulted in a different impact on their respective economies. Ireland has benefited from its participation in the European Union; however, the negative effect is that the blanket guarantee has been taken on by the public finances resulting in austerity at a high cost to the taxpaying public. Icelandic taxpayers did not have to directly take on the banks' losses, however Iceland suffered from a currency collapse. Iceland does, in contrast with Ireland, have the advantage of its own monetary policy which acts as an important stimulator for economic growth,

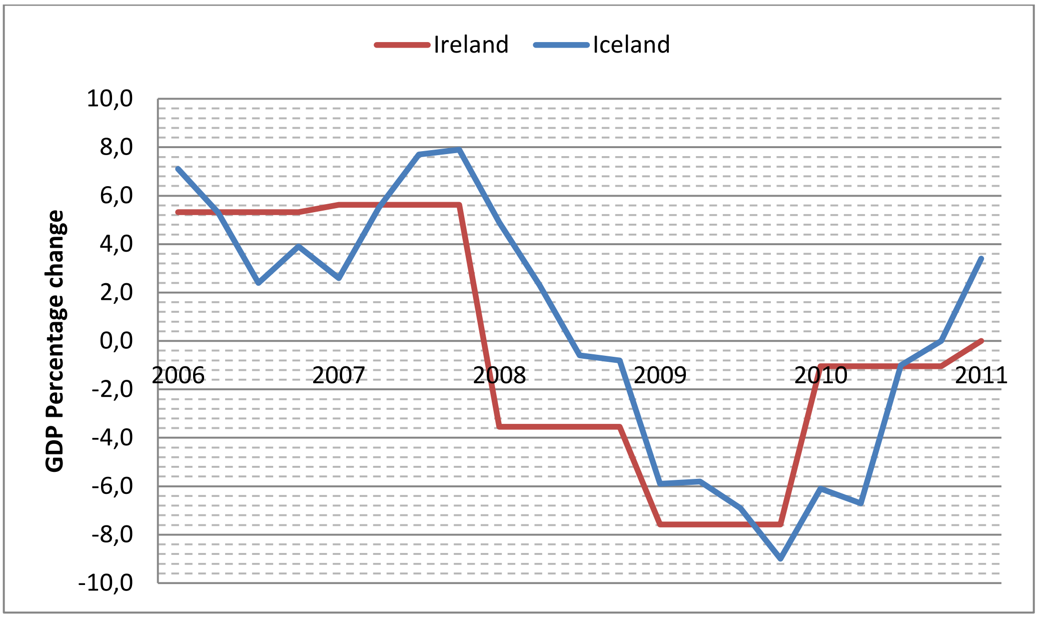
Accordingly, the essential question remains, which country is doing better? This chapter will outline some macroeconomic indicators to analyze the economic performance of the countries. It's clear that both countries have gone through a recession. The main symptoms of recession is a contraction in GDP, increased unemployment, eventual inflation and accordingly less purchasing power of the public (Mankiw, N. G., & Taylor, M. P., 2006). A study made by Reinhart and Rogoff (2009) on the aftermath of a financial crisis shows that output (GDP) decline last about two years on average, however when recessions do eventually end, there is a massive increase in government debt. This chapter will examine these economic indicators as concerns Ireland and Iceland in order to elicit their current situation. It will further examine other indicators, such as credibility, investment and business confidence, all of which are important for further recovery.

The analysis aims to give a best possible idea of how the policy responses and exchange regimes of Ireland and Iceland have affected their economy prior to and after the recession started. However, account has to be taken of the fact that it is fundamentally difficult to compare the success of crisis resolution policies given the differences across the countries and time of the initial shock. Other differences are the size of the financial systems, the quality of a nation's institutions and the intensity and scope of the policy interventions (Laeven, L. and Valencia F., 2010).

6.1 Gross Domestic Product

Gross-domestic-product (GDP) is the market value of all the goods and services produced within a country during a determined time period, most often taken to be a year. An increase in GDP suggests that the economy has increased its capacity to produce goods and services. Accordingly a change in GDP from year to year indicates economic growth (Carbaugh, R. J., 2008). One of the consequences of a financial crisis is a contraction in the GDP, due to a slowdown in economic activity (Reinhart, C. and Rogoff, K., 2009). Figure 14 shows the percentage change in GDP for Ireland and Iceland for the years 2005-2011.

Figure 14 Ireland's and Iceland's GDP percentage change 2005-2011



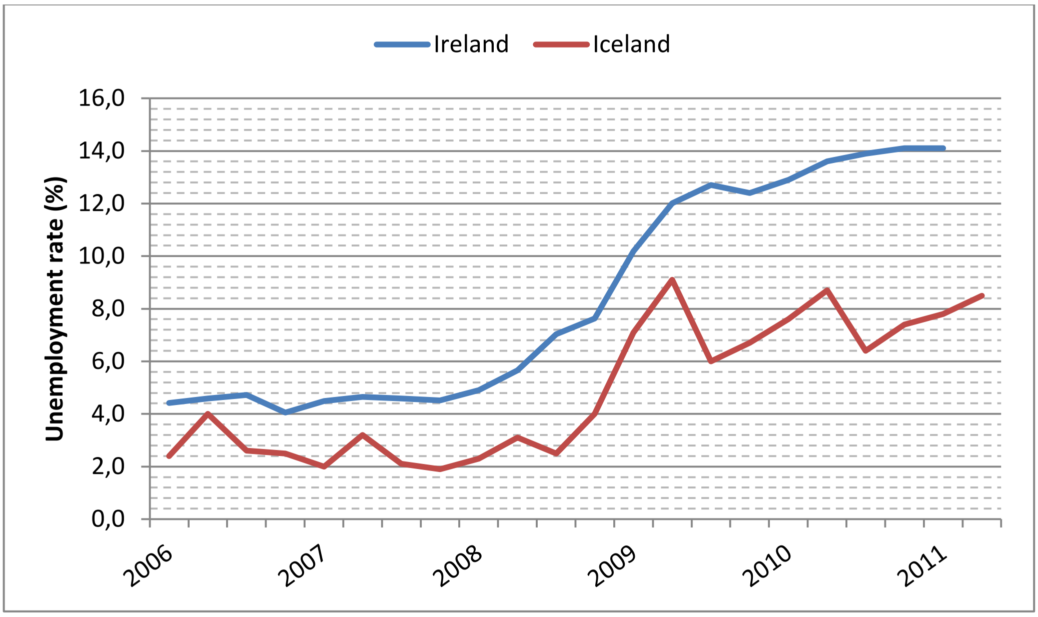
Source: Central Statistics Office Ireland (2011b)

The figure demonstrates that both Ireland and Iceland experienced fast economic growth prior to the recession. Iceland's growth was at its fastest in the fourth quarter of 2007, as it reached as high as 7.9 percent. At that time, Ireland's growth was 5.6 percent. The figure shows that both countries' recession reached its peak in 2009 and 2010. Iceland's contraction went down to 9 percent in the fourth quarter of 2009, and Ireland's to 7.6 percent. Iceland has finally experienced economic growth in the first quarter of 2011, of 3.4 percent, and Ireland as well of 0.5 percent. The economic growth shows that the countries might be getting back on track after having experienced a difficult recession.

6.2 Unemployment

The unemployment rate is a key indicator of the state of the labor market. Joseph Stiglitz (2002) argues that to truly measure recovery from a crisis then one needs to measure employment and that there is no true recovery until workers return to their jobs. Changes in the unemployment rate can give a good idea of how deep a recession is to countries. Figure 15 shows the unemployment rate in Iceland and Ireland during the years 2005-2010.

Figure 15 Ireland's and Iceland's unemployment rates during 2006-2011



Source: Statistics Iceland (2011) and Central Statistics Office Ireland (2011b)

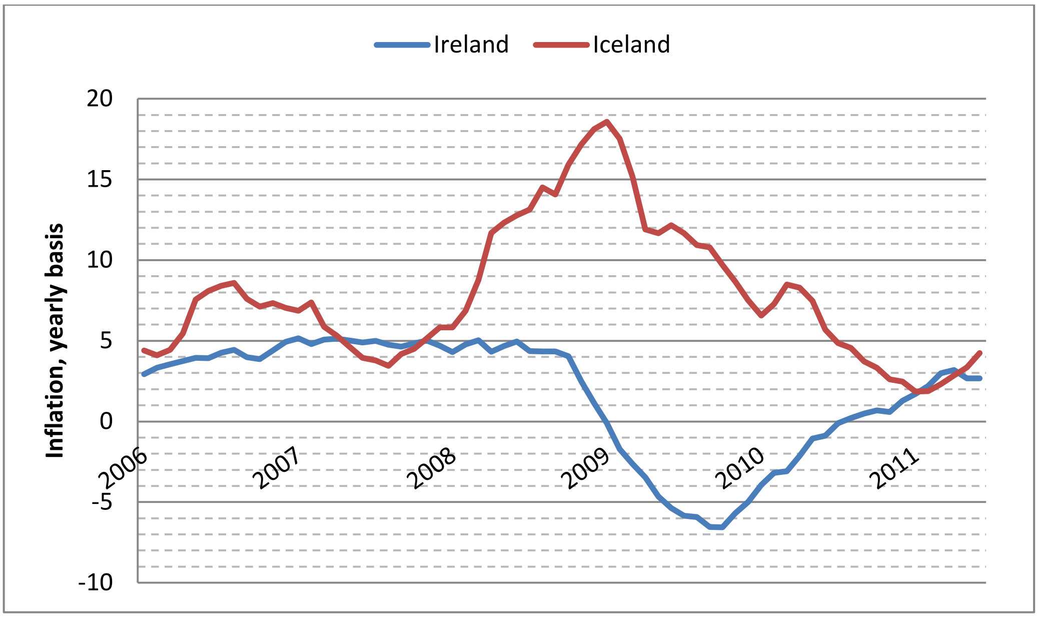
The figure demonstrates that Ireland's unemployment rate was generally high before its recession began, whereas Iceland's was relatively low. When the financial sector collapsed, Iceland's the unemployment increased at a fast speed and it peaked its highest of 9.1 percent in the second quarter of 2009. Ireland's unemployment rate has increased at a fast speed through the years and is now on its highest of 14.1 percent.

6.3 Inflation

The rate of inflation is the rate at which prices in general are increasing on average over time. Inflation therefore represents costs to the economy as well as it reduces its efficiency. When the general price level rises, each unit of currency buys fewer goods and services. Consequently, inflation also reflects erosion in the purchasing power of money – a loss of real value of the medium of exchange and unit of account of the economy (Mankiw, N. G., &

Taylor, M. P., 2006). Figure 16 depicts the Iceland's and Ireland's inflation rates during the years 2005-2011.

Figure 16 Ireland's and Iceland's inflation rates (yearly basis) during 2006-2011



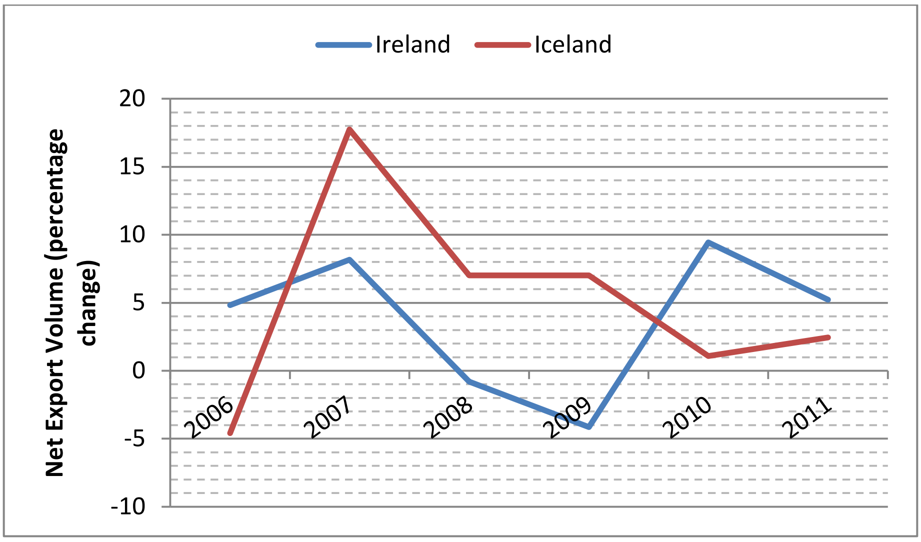
Source: Worldwide Inflation Data (2011)

The figure demonstrates a huge difference between the countries in question. Iceland has experienced high inflation subsequent to its collapse. The reason is the collapse of the currency. Iceland's inflation went high above the Icelandic Central Bank's inflation target of 2.5 percent. Ireland has however experienced deflation where the average level of prices is falling rather than rising. Ireland's deflation is due to its lack of own monetary policy, in which the deflation is an adjustment mechanism of being in a common currency area. The prices need to decrease to keep domestic consumption going as well as maintaining in some degree an efficient export sector. In 2009 and 2010 Iceland faced the challenge of both negative economic growth and inflation, which is a situation of stagflation. It raises a dilemma for economic policy because actions designed to lower inflation may worsen economic growth and vice versa.

6.4 Imports and exports

Exports are considered important contributor to economic growth (Carbaugh, R. J., 2008). Figure 17 depicts the percentage change in Ireland's and Iceland's export volumes during the years 2006-2011.

Figure 17 Ireland‘s and Iceland‘s export volume, percentage change during 2006-2011

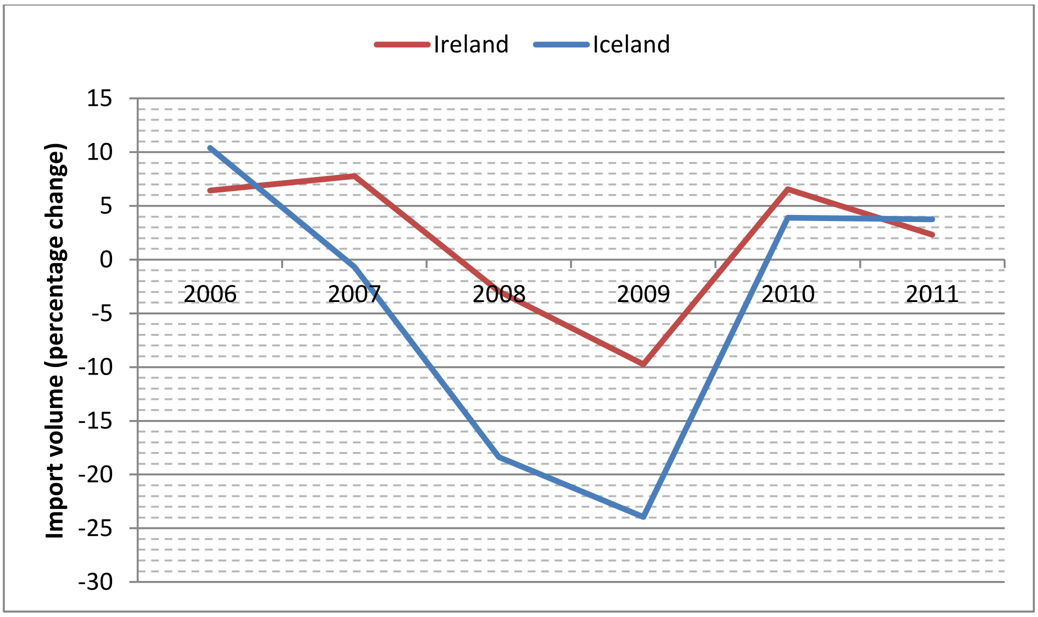


Source: International Monetary Fund (2011)

The figure demonstrates that Ireland’s exports have contracted whereas Iceland’s exports have increased throughout the recession period. Ireland’s exports contracted by 4.13 percent in 2009 and Iceland’s export grew by 7 percent.

When recovering from a recession, higher exports are favorable because it produces economic growth and lowers unemployment within the country. In contrast, in order to make domestic producers more competitive, fewer imports are generally favorable. Figure 18 shows Ireland’s and Iceland’s percentage change during 2006-2011.

Figure 18 Ireland‘s and Iceland‘s net imports, percentage change during 2006-2011



Source: International Monetary Fund (2011)

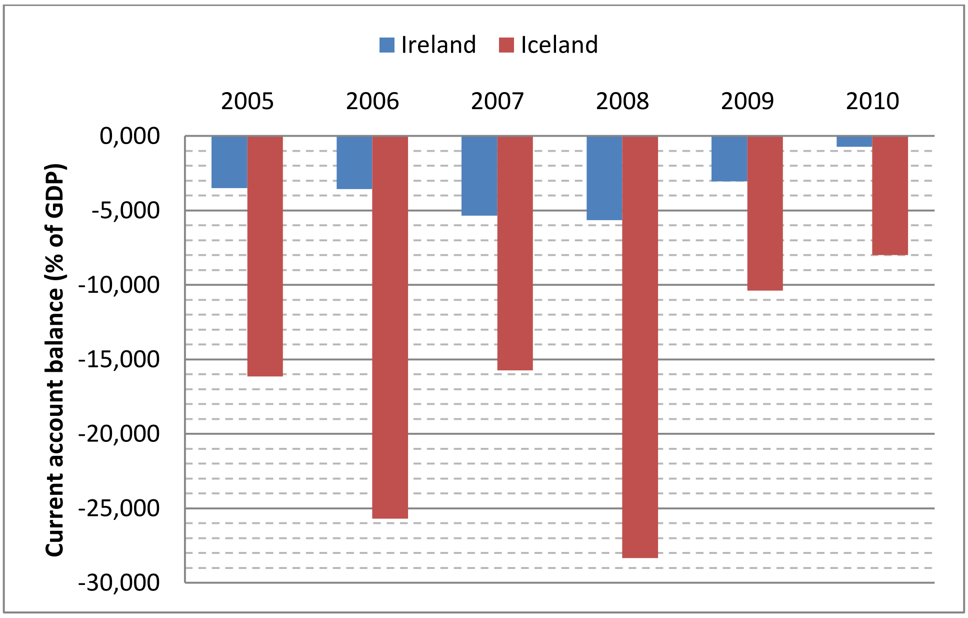
The figure demonstrates that both Ireland and Iceland imports contracted during the recession, however, Iceland's contraction was greater. Iceland's imports contracted by 18 percent in 2008 and by a further 24 percent in 2009. Ireland's imports contracted by only 2.9 percent in 2008 and 9.7 percent in 2010.

The collapse of domestic demand and significant weakening of Icelandic króna has led to a sharp drop in imports and spurred export growth. The depreciation of the króna has resulted in increase in the value of imports and a decrease in the value of exports. Icelandic exports are thus currently less expensive in terms of foreign currency. Due to this fact, Iceland's exports as a percentage of GDP have increased and accordingly, Icelandic export companies are thriving. The exchange rate of the euro, as mentioned earlier, has been stable and accordingly not as such substantially affected Ireland's exports and imports vis-à-vis the EU's internal market.

6.5 Public Finances

The current account balance (CAB) is the difference between a nation's exports of goods and services and its imports of goods and services. A negative current account balance is considered a sign of imbalances in the national economy, at least in a long term perspective. Figure 19 shows Ireland's and Iceland's current account balances as a percentage of GDP.

Figure 19 Ireland's and Iceland's CABs as a percentage of GDP during 2005-2010

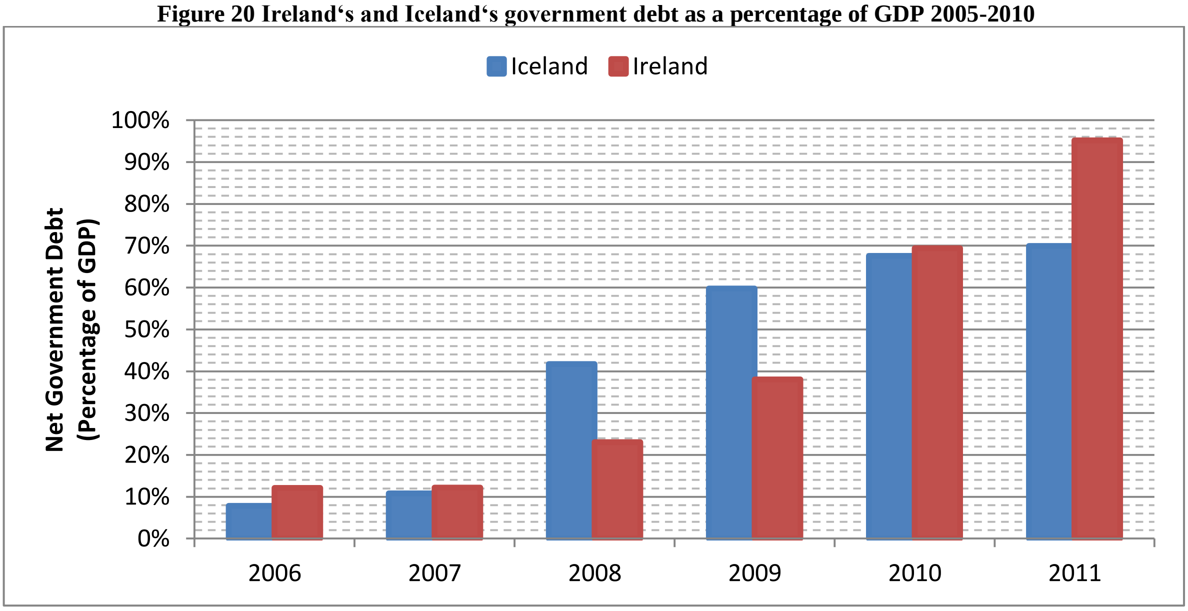


Source: International Monetary Fund (2011)

It is to be noticed that Iceland's current account balance has decreased between the years 2008-2010. Ireland's has decreased to a smaller degree. Iceland's significant improvement in the trade balance has led to significant reduction in the current account deficit.

Another measure of public finances is government debt. The government debt is indirect debt of the taxpayers. Figure 20 shows Ireland's and Iceland's government debt as a percentage of GDP during 2005-2010.

Figure 20 Ireland's and Iceland's government debt as a percentage of GDP 2005-2010



Source: International Monetary Fund (2011)

It can be seen that both Ireland's and Iceland's government debt have increased as percentage of GDP during the recession period. Ireland's debt is however expected to be larger percentage than Iceland's for the year 2011, reaching up to 95 percent of the GDP. These developments reflect the fact that blanket guarantees have been taken on the public finances, resulting in higher government debt for Ireland's economy.

6.6 The Stock Index

The price of a company's single share of a stock is its share price. A stock index is an index indicating the share prices of companies registered on the stock market. As crisis erupts, it inevitably triggers companies' decline in profits and even losses that are liable to spread rapidly throughout the financial system, putting downward pressures on asset prices and interconnectedness among financial institutions (Reinhart, C. and Rogoff, K., 2009). Figures 21 and 22 show the development of the stock indexes in Ireland and Iceland.

Figure 21 Ireland's stock prices during 2000-2010

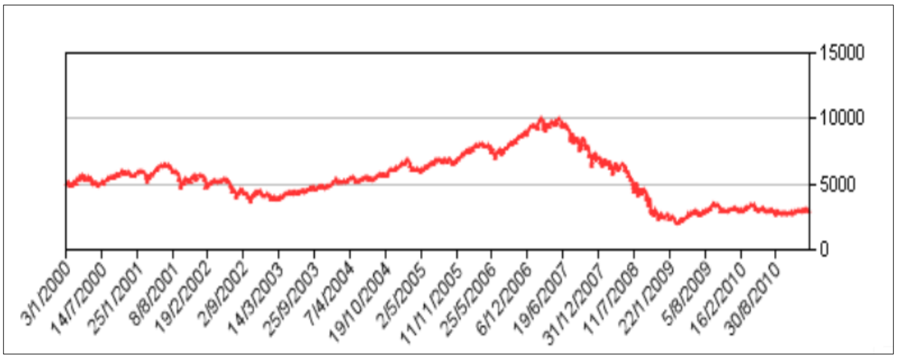
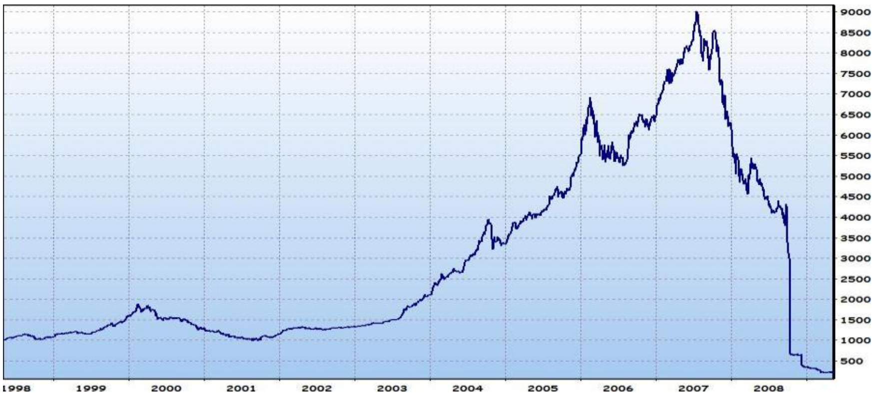


Figure 22 Iceland's stock prices during 1998-20098-2009



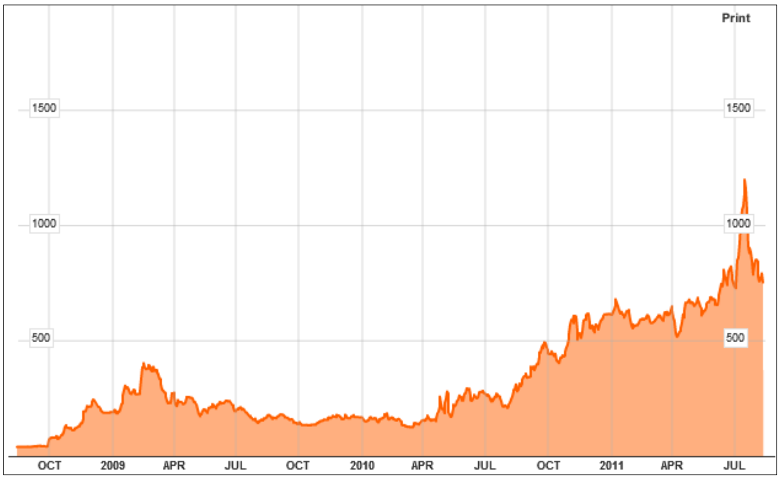
Source: OMX Iceland (2011)

The figures depict how the stock indexes increased in both countries during the boom years. Although taking precaution to the fact that Ireland's and Iceland's stock indexes are different. It can be seen that Ireland's stock prices decreased to some degree, however Iceland's was an absolute collapse. The Icelandic stock market was closed during the turmoil of October 2008. When it opened, 94 percent of the value of the listed stocks had vanished in 15 months.

6.7 Credibility

When rebuilding the economy it is important to gain back confidence in the international financial market. Credibility is by some viewed as particularly important for small open economies, which rely on trade, and typically foreign direct investment. The credibility leads to greater investments in the country which leads to economic growth. Figures 23 shows Ireland's sovereign CDS-spreads.

Figure 23 Ireland's sovereign CDS-spread 2009-2011



Source: Bloomberg (2011)

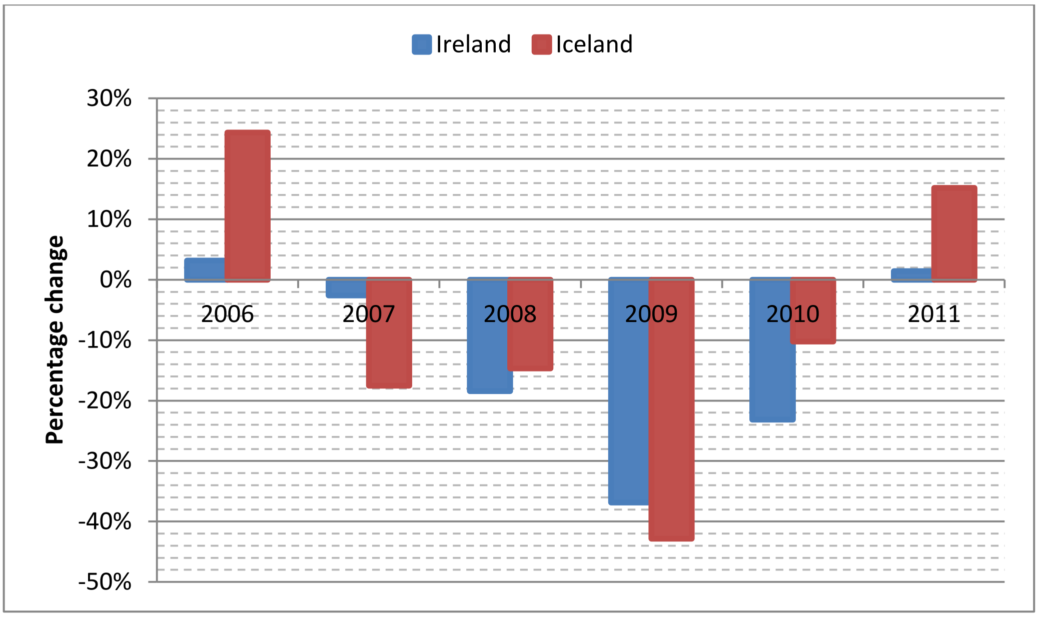
It can be seen that Ireland's CDS-spread started increasing in the year of 2009 but have been increasing at a fast speed in 2010. All of this, despite the fact that Ireland benefits from a stabilized institution as the European Union in which strengthens public's confidence.

It is also important for the countries to keep high credit rating in order to force investment. Investors are generally risk averse and therefore prefer safer investments. Fitch's newest rating on Iceland's sovereign rating on long-term debt is BBB+ with stable outlook. Ireland's rating is also BBB+ however with negative outlook. These ratings indicate to what degree their respective or potential investors will invest. It deserves to be mentioned that the Icelandic government successfully raised 1$ billion with a bond issue indicating that international investors approves the authorities' handling of the financial crisis and think the country is on the road to recovery.

6.8 Investment

Investment is a component of the GDP. As income increases it encourages investment. Accordingly, the investment proportion to GDP is an indicator of the depth of countries' recession. Figure 24 shows Iceland's and Ireland's investment during 2005-2010.

Figure 24 Ireland's and Iceland's investment, percentage change during 2006-2011



Source: International Monetary Fund (2011)

The figure indicates that Iceland's investment slowed more drastically than Ireland's, it experienced a contraction of 43 percent in 2009, as Ireland experienced an investment contraction of 37 percent. Iceland's investment during 2011 is estimated to be growing of 15 percent from the previous year.

6.9 Results and analysis

The chapter outlined the main economic indicators to give an idea of how Ireland's and Iceland's economies stand today. It has been demonstrated that both countries experienced recession, but both seem to be getting back on track with economic growth for the year 2011. The countries' unemployment rate are relatively high, however Ireland's are at higher levels than Iceland's. Furthermore, Ireland is experiencing deflation which is the adjustment mechanism that Ireland needs to recover from the crisis, due to the membership of the EMU. It is a situation where price decreases lower production which leads to lower wages and demand, which further leads to more unemployment.

The chapter further demonstrated that Ireland's exports have been decreasing, whereas Iceland's are increasing. Iceland's depreciation of the króna has led to that exports are more efficient, in which exports stimulate economic growth as well as employment. Iceland's imports have been decreasing which is also a positive impact on the economy. As a consequence, Iceland's currency account balance has lowered significantly.

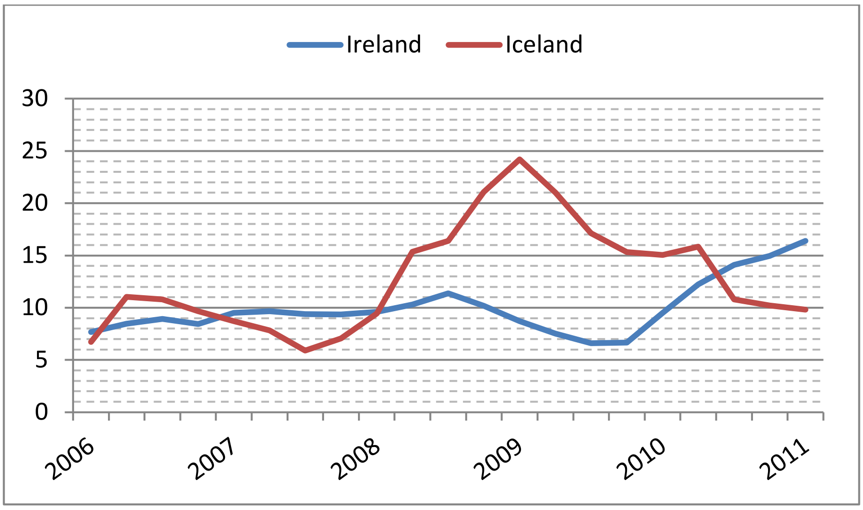
To further compare the countries' post-crisis recovery, one can look at the estimates of their main economic indicators. Figure 25 shows the main indicators for Ireland's and Iceland's for 2011 and 2012. The figure demonstrates that both countries' unemployment rate is expected to decrease. The economic growth of Iceland is expected to grow faster than Ireland's, reaching 2.5 percent in 2012. The both countries' inflation rates will also stabilize.

Figure 25 Main indicators Ireland's and Iceland's future outlook

Source: International Monetary Fund (2011)

In order to further analyze the post-crisis recovery of Ireland and Iceland one can demonstrate the so-called Misery Index. The Misery Index is used to measure the welfare of countries, or more correctly put, the misery of the countries. The Misery Index is found by adding the countries' unemployment rate to its inflation rate, both are represent cost to the economy. Figure 16 shows the Misery Index for Ireland and Iceland.

Figure 26 Ireland's and Iceland‘s Misery Index



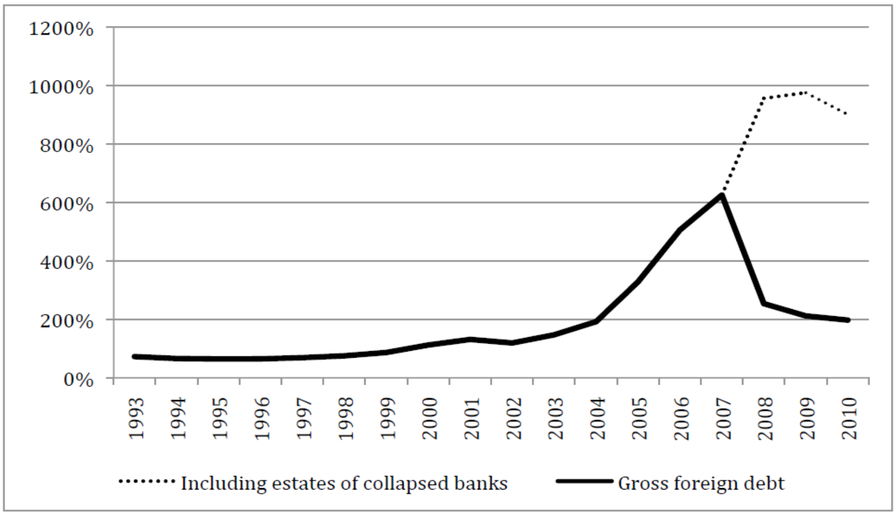
Source: International Monetary Fund (2011)

The figure shows that Iceland’s misery was at high levels after the collapse. However, it has decreased at a fast speed. Ireland’s misery has been at low levels due to its deflation; however, it has reached higher than Iceland’s misery. The misery index for Iceland gives an idea of how Iceland’s collapse has been a brutal shock for the economy. It has, however, also been relatively short. Ireland’s situation in contrast, has been described by the International Monetary Fund as the deepest slump in economic activity any country has experienced since the Second World War and that Ireland is in the grip of one of the biggest economic and social challenges any country has faced in modern history (Mulholland, J. & Bradley F., 2010).

Iceland’s fast recovery has surprised some scholars and specialists. Some claim to be surprised of how small the financial damage to the Icelandic economy seems to be when comparing the post-crisis economy to the pre-bubble economy (Gylfi Magnússon, 2009). Furthermore, the IMF states that the progress of Iceland’s recovery program as extraordinary. In addition, Paul Krugman (2010) refers to Iceland’s collapse as the great economic disaster stories of all time, and refers to Iceland as the “post-crisis miracle”, in which he demonstrates that if a country is going into a crisis it might as well be a brutal one in order to get back on track.

Iceland‘s policy response was sympathetic to the concerns of the debtors, where as Ireland‘s was more focused on the interests of the creditors. Iceland‘s response imposed lower costs and risks to those inside the country whereas Ireland‘s cost of the blanket guarentee has been major to the taxpayer. Non of the orthodox methods were available for Iceland since Iceland did not qualify for a bailout. However, in order to shed a light on if Iceland would (and could have) bailed out its banks, figure 27 demonstrates a comparison of Iceland‘s gross foreign debt including and excluding the estates of the collapsed banks.

Figure 27 Iceland's gross foreign debt as a percentage of GDP



Source: Central bank of Iceland (2010)

Realistically speaking, the Icelandic experience raises an alarming possibility for the rest of the developed world. Although Iceland has experienced a brutal shock, it has also been relatively short one. Iceland is posed to be on a road to recovery, while Ireland is still grappling with banking system that is going to be in intensive care for years to come.

Iceland’s referenda on the Icesave-issue clearly demonstrate that taxpayers are not prepared to pay for the banks’ failure. The case proves that it is easy to defer the bill to those that are not in the room, which are also the future generations. Ireland’s taxpayers didn’t have an option of referendum on how the authorities were to handle the crisis, which also explains the protests around the current European Sovereign Debt crisis. The concerns of the taxpayers should be balanced with the concerns of creditors, the impacts of policy responses on domestic capital flight have to balance the excessive attiontion paid to outside investors.

The European countries that have designed bail out packages to make creditors whole can learn from Iceland’s example that when it comes to the fact that taxpayers cannot bear the entire cost of a banks’ misdeeds. It is becoming clearer by the day that too many of Europe's banking crises were initially misdiagnosed as liquidity, rather than solvency, problems. For some countries, most notably Ireland, the policies prescribed for that misdiagnosis has transformed banking crises into sovereign-debt crises. The unique currency monetary system has suffered a serious failure in its current condition.

Choosing not to bail out banks might be better financially. Bad debts would get written off immediately, rather than remaining a millstone around the neck of the country for years to come. More importantly, it would be better morally due to the problem of moral hazard. Paul Krugman (2010) asserts that since Ireland is now in third year of austerity, its confidence just keeps draining away. Where he states that letting the public take the cost of the bankers' misdeeds is worse than a crime, it is a mistake. When authorities respond of policy measure the way is not to convert private debt into public debt.

7 Conclusion

The thesis aim is to compare Ireland's and Iceland's policy responses and their respective countries' economic post-crisis recovery from the international financial crisis that set in 2008. First, the thesis outlined how the economies of Ireland and Iceland grew and how they incurred their imbalances as well as a diagnosis was made of what the authorities were dealing with before the recession. The similarities were striking, both originated in the banking sector which had overextended itself, in the Irish case mostly through loans to property developers, in the Icelandic case mostly through diversifying abroad and drawing in capital by offering high interest rates. Both countries had built up imbalances in their economies which left them vulnerable to disruptions in the international market.

Second, the thesis outlined how the respective authorities responded to the crisis. Ireland chose to bail out its banks believing that it would save its economy from a collapse and a rise in unemployment; Iceland proved that bailing out troubled banks isn't necessarily the only option that authorities have as policy responses. Ireland's response can however be traced to believe that if one bank failed, it would have a domino-effect on financial institutions in the whole Euro area. Iceland, however, had a banking system which dwarfed the Iceland Central Bank's capacity to act as a lender of last resort. Iceland had no other choice than to let the banks fail. The two policy responses were compared indicating that Ireland needed more financial assistance relative to its GDP than Iceland did. The Irish blanket guarantee has been taken on by public finances, making Irish taxpayers worse off and causing Ireland to face a macroeconomic challenge.

Third, the thesis stated that due to Ireland's membership of the EU and EMU, it was able to bail out its banks, even at a tremendous cost. The European Central Bank and financial assistance programs shielded Ireland from an economic collapse. Iceland was not as fortunate in that matter; the economy suffered a complete collapse as well as a currency crisis. Its twin-crisis has been at a major cost to the economy. It has been demonstrated that Iceland does control an important tool for economic recovery represented by its own monetary policy, implying its currency to depreciate thus making exporting companies more competitive. Ireland does not have the same tool at hand, as the EMU does not constitute an optimal currency area and does not have the adjustment mechanisms for asymmetric shocks. Accordingly, Ireland is required to seek other recovery mechanisms, such as deflation and lower wages.

It has been concluded that as both Ireland and Iceland have experienced recession, Iceland did somewhat go through more difficult times due to its total economic collapse. But Iceland has had a fast recovery, however its recovery has been and therefore the Icelandic taxpayers did not get stuck with the bill.

Iceland chose a path that the taxpayers favor. Ireland, in contrast, chose a path more in favor of the banks' creditors, resulting in moral hazard risk and greater macroeconomic challenges. Iceland's challenge is however to restore its confidence in the international market. The thesis also shed a light on the fact that saving the banks elicits a difficult moral hazard. As bankers do not need to take the consequence of their mistakes they have the incentive to behave even more recklessly in the future, which could result as a problem to another financial crisis.

We have seen that Iceland's objective with its policy was to keep the commercial banks going rather than choosing a strategy that is sympathetic to the concerns of the creditors. It chose a path which is in favor to lower cost inside the country even if they are imposed on the creditors. Making foreign creditors pick up the bill for the banks' excesses in this way has spared Iceland's taxpayers and depositors. The Icelandic experience raises an alarming possibility for the rest of the developed world. Although the interconnected financial institutions are exposed to systemic risk, perhaps athorities do not need to bail out the banks quite so expensively.

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