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Master program in Applied Economics

**“Economic crisis and the formation of a developmental model: the case of Iceland”**

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## Abstract

The economic crisis that burst in 2007 was one of the harshest-if not the harshest- in the recent history. Companies, households and whole economies were affected. Starting from the USA and later expanding to the western countries, the consequences of the crisis were severe for some countries even within the European Union. Iceland is one of first the countries in Europe that experienced the crisis and its consequences.

On October 2008, the country saw the financial system collapsing. Iceland experienced an economic bubble which can be related and compared to the one that took place in the USA. The great difference, though, was that the enormity of the Icelandic crisis could not be compared to its small size. In a short period of time, Icelanders, as well as British and Dutch, lost their money. No signs were taken seriously in the previous years, leading to a complete disaster of the economy.

The purpose of this article is to examine the factors that caused the 2007 crisis and why Iceland was so badly affected. Were there any signs of the forthcoming disaster? Could it all have been prevented and, if so, in what price? These are the questions that we would like to answer in order to understand this crisis and prevent a future one.

**Keywords:** financial crisis, economic crisis, banking crisis, Iceland, banking system, Icesave, Kaupthing Edge, IMF

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## **1. Introduction**

The economic crisis that appears in 2007 is considered by many as the worst economic crisis since the Great Depression of 1930. The crisis led to the collapse of large companies in both the US and Europe but at the same time brought about an unprecedented imbalance in the economy worldwide (Erkens et al, 2012). Firms, banks, corporations and whole countries were affected within a night. The European Union saw many of her members losing their monetary strength and stability.

### ***1.1 The purpose of this paper***

The purpose of this paper is to examine the case of Iceland since it was one of the countries within the European Union that was severely affected by the crisis and which saw her banking system collapse. After the research we made we tried to identify the reasons that provoked the Icelandic economic crisis, the consequences and the impact that it had on the nation and outside of it and whether it could have been prevented or forecasted. Having survived such a harsh crisis and in a short period of time, Iceland can be seen as an example of success story.

#### ***1.1.1 The added value of the paper***

The added value of this paper is to determine the reasons behind the crisis that hit Iceland and examine the way this country succeeded in overcoming its problems. Iceland could be an example for all the countries which face a similar situation and in this paper we have tried to analyze the factors behind the crisis, the impacts it had and the solutions that the Icelandic government found and used and which proved to be the right ones. In order to understand, examine and gather all the necessary information we used articles, papers and did further research in the web libraries and publishers.

### ***1.2 Text organization***

In the beginning of the paper, the second session, we present a theoretical background of the economic crisis and the factors responsible for it. The third session presents the beginning of the crisis, where it started from and the reasons that provoked it while the fourth session presents the financial crisis in Europe and in the fifth session we examine the European reaction. The sixth session of this paper is focusing on the case of Iceland and the reasons why this country was so vulnerable when the crisis hit the European area whilst in the

seventh session we try to analyze the consequences of this financial crisis on the country. The eighth session of this paper is about the ways that Iceland managed to get out of the crisis. In the ninth and tenth session we present the cases of the Nordic countries and Portugal respectively while the eleventh session shows a comparison between the case of Iceland and these of the Nordic countries and Portugal. Finally the twelfth session is the conclusions of this paper.

## 2. Defining economic crisis and responsible factors

Many definitions have been given to the term of the “economic crisis”. The classic definition of the term "economic crisis" is in fact the problems which are created in an economy by the 'monetary excesses' which lead to an inevitable rise and subsequent decline of the economy (Taylor, 2009). According to Mishkin (1991), there are five factors responsible for a financial crisis: a) increase in interest rates, b) stock market declines, c) unanticipated declines in price levels, d) increase in uncertainty and e) bank panics. More particularly:

**Increase in interest rates:** when a Central Bank decides to increase the interest rates it is because she is worried that inflation is about to increase. The consequences of an increase in the interest rates affect consumers as well as firms too. The higher the interest rates get the more expensive are the interest payments on credit cards and loans. Thus, people who already have loans to pay off will see their income becoming insufficient due to the higher interest payments they have to make. As a result, consumption will decline, affecting other factors of the economy too.

**Stock market declines:** a decline in the stock market actually means the decline of firms' net worth. A firm's net worth is essential as it has the role of a bail when it comes to lending. So, as the value of the firm declines lenders become more cautious towards them.

**Unanticipated declines in price levels:** the net worth of a firm can be declined by unanticipated declines of the prices. In other words, as debt payments of the firms are fixed, a decline in the prices will raise the firm's liabilities but will not raise the value of its assets.

**Increase in uncertainty:** as uncertainty in financial markets increases, lenders become more cautious and selective. This leads to less lending and, thus, a decline in investments and firms' activities.

**Bank panics:** a bank panic will occur when many banks suffer bank runs at the same time. This means that depositors decide to withdraw their money, from many banks and at the same time, causing suffocation to the whole system. Banks are unable to give loans since the deposits are reduced. Also, bank panics lead to increase in interest rates with all the consequences that follow and we have mentioned earlier.

### **3. The beginning of the crisis**

The financial crisis which we observed taking place and affecting Europe has its roots in the American banking sector. According to Bernanke (2005), in order to be able to examine the causes and the factors that affected the economic sector of the USA leading it to a recession, it would be useful to divide them in two categories: the first is related to the trade and the US trade deficit and the second is related to investments, savings and international financial flows.

In order for a country to grow and have healthy trades which will bring back profit, the revenues from exports should, at least, cover import costs. So when the US arrives at a point in which the profits from exports do not cover the cost of imports, this difference will be borne by the respective government, businesses and households. Specifically, according to data of 2004, the US imported goods worth US \$ 1.76 trillion while exported goods which brought them only \$ 1.15 trillion (Bernanke, 2005). Therefore, in order to cover this difference and the deficit in the economy and to meet their obligations, the US is forced to turn to international markets to borrow as much as the difference of imports- exports. The second category of causes and factors affecting the economy and which is also due to recession in an economy are investments and savings. In order for a country to be able to invest, whether these investments concern the banking sector or in manufacturing and business, a surplus is required which comes essentially from commercial transactions.

#### ***3.1 The crisis of 2007***

So, what caused this financial crisis? Analysts have concluded that these three factors that are responsible for the downturn of the US economy and, thus, the expansion to the Eurozone (Swedberg, 2010): a) Rapid growth and subsequent collapse of the real estate prices in the USA, b) Increase in the rate of administrating mortgage loans, c) The securitization and transfer risk from banks to the public and investors (Swedberg, 2010). At this point, the role of the banking systems in the economy is becoming clear and especially in an economy which starts showing problems, deficits and signs of recession. In order to boost investments, particularly in sectors such as constructions and new technologies, banks lend large amounts of high risk. What is now, however, foreseen is a pressure and an inability to pay back these debts to the banks, given the low financial liquidity (Eichengreen και Mitchener, 2004).

### ***3.2 Real estate prices in the USA***

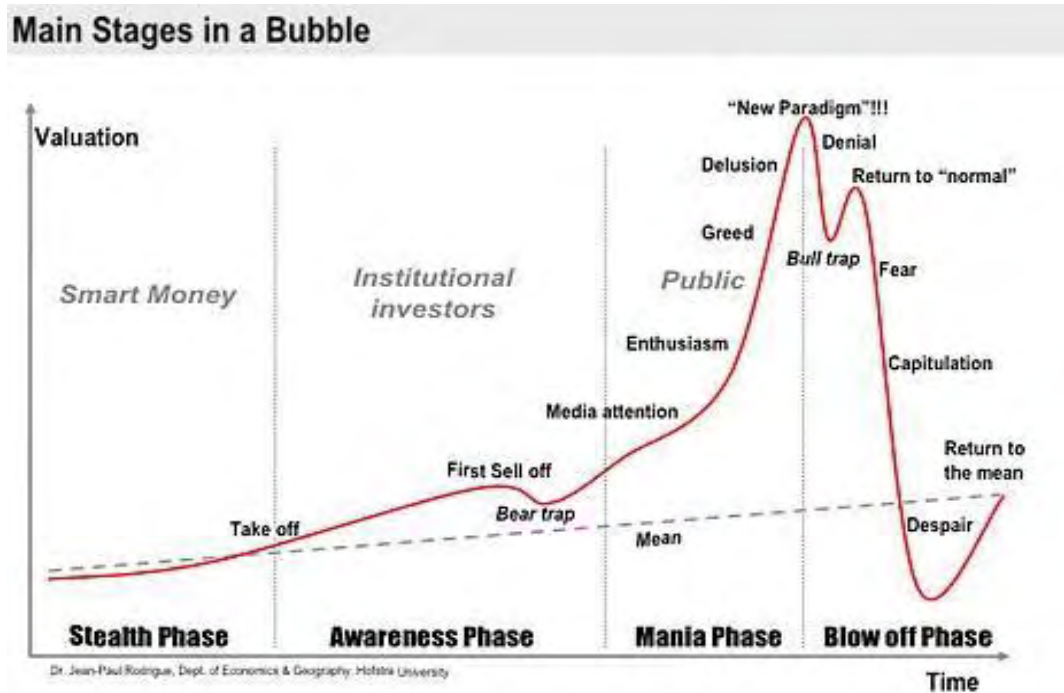
In recent decades, the capital market and property are the sectors in which economists pay particular attention. Especially after the great crisis of 1930s, economists are skeptical about the fluctuation of capital values, assets and real estate market. As shown by the most recent history, during the decades from 1970 to 1990, a sharp increase or decrease in capital values can lead to disastrous consequences, both at microeconomic level and up to macroeconomic level and an overall imbalance (Gerdesmeier, Reimers and Roffia, 2010).

It is, then, understood that watching and focusing on the prices of real estate is of the greatest importance for the banks. A bank's ability to understand and explain the reasons why a rise or a fall in the real estate prices- and particularly when this happens to a large extent and with great intensity- is a great advantage for it. The greatest benefit, however, for the banks is the ability to recognize when this variation in the real estate market is real and when it is of a "bubble". The "bubble" phenomenon was, in fact, the beginning of the economic crisis which affected the USA and expanded in the European zone later.

The housing "bubble" came together with the stock "bubble" which took place in the 1990s. The logic behind this is that people who watched their wealth increase when invested in the stock market would also, later, increase their consumption (figure 1). A great part of their wealth was spent in the real estate, with consumers searching and buying houses bigger and better (Baker, 2008). As a result of the increase in housing demand, the prices followed a proportionate increase which in turn led buyers into spending more for a house with the expectation of a further increase.



**Figure 1:** The stages of the housing bubble which were shown in the US economy

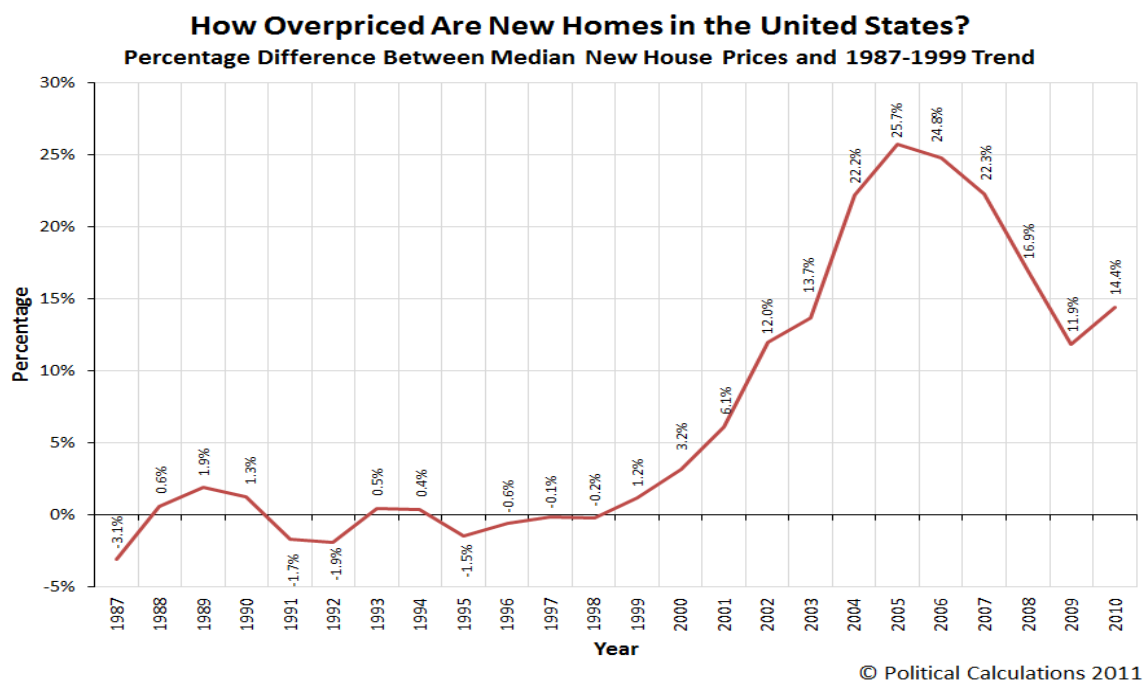


Source: <http://ygraph.com/chart/2135>

Another event which is responsible for the housing bubble is the collapse of the stock market. After the 2001 recession, people sought for alternative ways to invest their money and away from the falling stock market. Thus, the housing sector seemed as a more secure investment. In addition, the economy of the USA was still recovering from the recession which had previously been through. This led to interest rates being lowered as well as mortgage rates reaching a new low price.

By 2007 prices had reached their peak in the housing sector and, inevitably, their downfall was about to start (figure 2). The decline of the prices made many homeowners face a foreclosure. The reason for these foreclosures is the fact that homeowners, now, owe more than the value of their houses and face a great difficulty in paying off their mortgages.

**Figure 2:** The percentage difference in housing prices from 1987 and until 2010, with its peak being in 2005 after when the decline starts to show.



Source: <http://politicalcalculations.blogspot.gr/2011/12/revisiting-us-housing-bubble.html>

### 3.3 The increase in mortgage loans

With the rise in the US real estate market, it was more than expected from the banks to react accordingly. The rapid growth seen in the construction and housing sector and the increase in the demand for real estate lead the American banks to come up with more risky lending practices. “New” categories of loans appear on the portfolio of the banks.

The first difference this time is that home- buyers would take loans with non- standard mortgages. Instead, adjustable rate mortgages held the biggest part of the majority of loans during the boom (Baker, 2008). Furthermore, the interest rates in which they lent started from low prices, in order for the banks to become more attractive to their clients-to-be and, later on, the same rates were adjusted. Here comes the point, then, at which banks grant loans even to those households which were excluded before (Barrell and Davis, 2008; Orłowski, 2008). These “2-28” subprime mortgages referred to homebuyers who had recurrent employment or who had poor credit history (Figure 3). The interest rates of these subprime mortgages were 2 to 4 points higher than the interest rates of the prime loans. Apart from the subprime mortgages, another category of loans which rose was the “Alt-A” loans. These loans referred

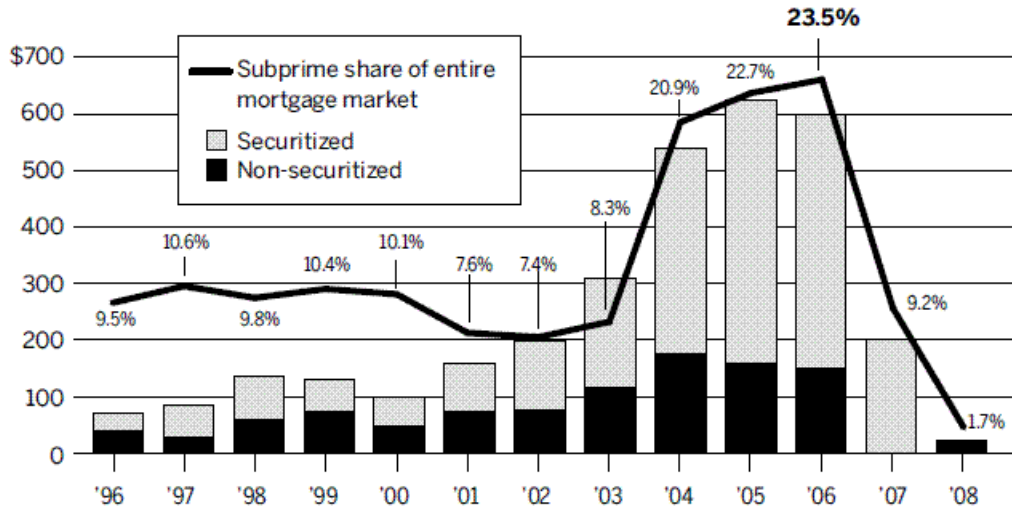
to homebuyers who had mixed credit history or who had shown incomplete or inadequate documentation of their incomes and assets. Because of their poor documentation, these loans earned the title “Liar loans” and were more questionable than the subprime loans (Baker, 2008).

**Figure 3:** Subprime loans granted from the US banks from 1996 to 2008

**Subprime Mortgage Originations**

*In 2006, \$600 billion of subprime loans were originated, most of which were securitized. That year, subprime lending accounted for 23.5% of all mortgage originations.*

IN BILLIONS OF DOLLARS



Source: [http://www.wikiwand.com/en/Subprime\\_mortgage\\_crisis](http://www.wikiwand.com/en/Subprime_mortgage_crisis)

The subprime loans along with the “Alt-A” loans consisted 40% of the loans issued by the banks. This should have been an early warning for the investors and the regulators. Given the fact that, between the years 2002-2004, the labor market had remained the same, the rise in these loans was irrational as they are addressed to specific clients of poor credibility. However, the increase in the real estate market reaches its peak and then the decline begins. A direct consequence of this is that this decline extends to the banking sector and an uprising crisis is on the verge. Decline in the housing prices is a serious issue for the banks; borrowers who face difficulties in paying their debts could, otherwise, sell or refinance their property when facing a financial problem. But at this point they do not have this opportunity ((Ellul and Yerramilli, 2010; Sanders, 2008).

This crisis in the banking sector is due to two reasons: firstly, many high- risk mortgage securities were kept in each bank whereas they could have been transferred, in time, to other financial institutions which would have had a greater ability to manage them. Secondly, the management of the banks which started to suffer felt that a good first move to remedy the situation would be a short-term customer lending (Kashyap, 2010).

### ***3.4 Securitization and risk transfer from banks to customers***

Securitization is a means of lending without keeping the insecurity of loans. In the securitization process, loans are converted into bonds; the lender has the ability to give away loans to home buyers and instead of keeping the mortgage in his own balance sheet, he gathers all the mortgages and passes them to new owners who receive the payments from the borrowers (Cecchetti, 2008). Once the mortgages were sold on the secondary market, the issuer fears low or no risk, so his main incentive was to grant as many mortgages as possible. The quality and reliability of these loans were poor as the issuer had to make sure that these mortgages would meet up just to the criteria given and nothing more. The next step is the banks that acquire these loans and gather them into mortgage bank securities (MBS). These banks, once they earned their money from the fees associated with the MBSs, had to sell them. An important aspect for the banks was a good credit rating in order to be able to find buyers for the MBSs which contained many questionable loans of the subprime and “Alt- A” categories mentioned before.

Thus, the lender (in this case the bank) has now a portfolio of loans rather than bonds which can be used to negotiate. Then, similar titles are securitized and sold to the European banks with the creation of Collateralized Debt Obligations (Collateralized Debt Obligations, CDOs). What, in fact, occurs during the securitization process is that each bank shows in its balance sheets the liabilities and obligations of the Collateralized Debt Obligations and the assets of the requirements of the loans which it has securitized. Therefore, the bank is able to pay its obligations once it has received the interest on loans. Along with the Alt- A loans and the CDOs, one more thing that rose at the same time was the Credit Default Swaps (CDS). CDSs were issued by banks and their role was to provide security to the lenders against the risky assets of the questionable mortgages and make it easier for the smaller firms to sell their bonds since they had the backup of the CDSs of the larger banks. Thus, the bank can now avoid holding a risky and costly capital and is able to sell its products to the investors who, in turn, bear the risk of these new bonds (Acharya and Richardson, 2009, p.5).

So what is that motivates investors? The answer is the fact that the greater the risk of having a title, the greater will be the profit when making the repayment. The great advantage that this technique offers to the banks is that they can lend even to non- creditworthy customers as the risk will be transferred to the other investors whereas the bank will be able to obtain additional liquidity. It is, therefore, understood that at a time in which the real estate sector is booming and the demand for property increases, banks lend large sums with the security offered by the technique of securitization.

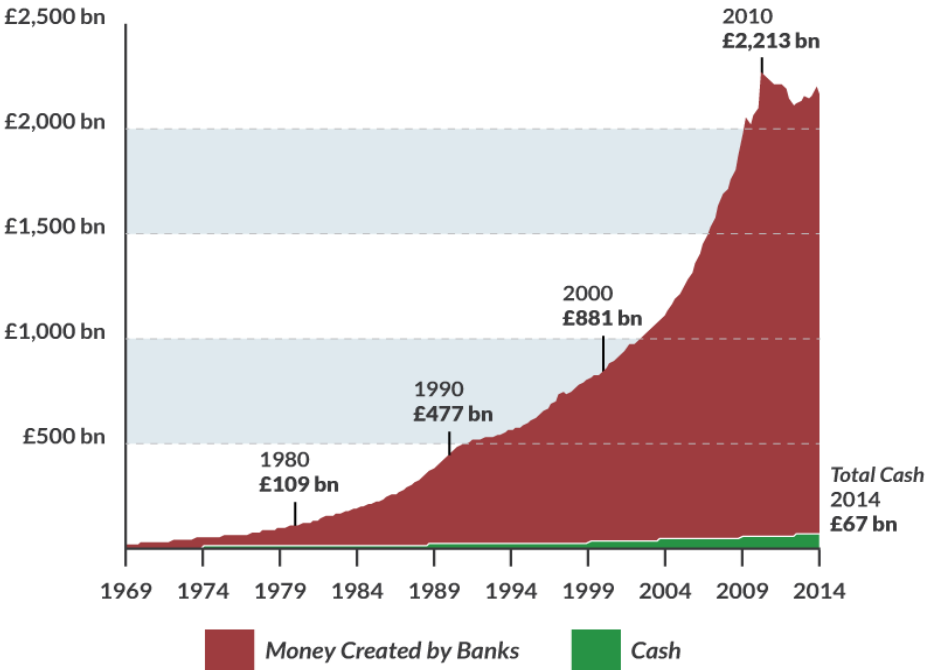
Behind the whole securitization process underlies the idea of a short- term profit instead of a long- term one. An important part of this idea is the executives and managers in the financial sector who are given great bonuses if they succeed in meeting the goals and profit targets of the companies and banks. The idea of bonuses made the managers look for ways to meet short- term profits even by sacrificing the long term survival of the firm that they worked for. That is the reason that they approved for the subprime and Alt- A loans and the selling of the CDSs.

#### 4. The economic crisis in Europe

As globalization of businesses is becoming more intense, the consequences of it are sometimes harsh and can affect a country or, even worse, a whole union. The intensity is mostly seen in finance where events that take place in one part of the world can instantly affect countries in the other side (Arnold and Sikka, 2001; Rotheli, 2010, p120). The closure of the banks, for instance the Lehman Brothers, affected the USA as much as Europe.

In early October of 2007, the harsh reality of the economic crisis hit Europe through the interbank market and its failure to function properly. The first country to respond was the UK, by guaranteeing all deposits in its banks and by providing massive liquidity (Bordo, 2008). The factors behind the European crisis are, in fact, the same as in the USA. First, banks create money. Whenever a bank is granting a new loan, new money is created. Until the financial crisis of 2007, banks created too much money by making loans and without asking for the proper guarantees. So, it can be understood that the money banks have created are not real money but fictitious (Figure 4). Most of the money that the banks created, especially between 2000-2007, stayed in the banking sector and with very little of them going to businesses outside the sector.

**Figure 4:** Money created by the banks compared to the real cash



Source: <http://positivemoney.org/issues/recessions-crisis/>

Real estate and financial markets are the sectors that most of the money was used, leaving only a small percent of the money to be used by businesses. Lending money for real estate purposes eventually lead to the rise of the housing prices. Along with the rise of the prices, though, personal debt will rise, too. We reach a point where households are unable to repay the interest of their loans and, even, stop their payments completely. Europe, now, faces its own price bubble with countries such as Ireland and Spain being hit most severely.

Moreover, the European zone is affected by the problematic US banking system, through the interbank market and by the securitization of subprime mortgages and other loans, European banks have added to their balance sheets assets and mortgages that had bought from banking- or non-banking- systems and which are too risky. Banks are now facing the possibility of a bankruptcy. And this is where the crisis begins. Banks are limiting their loans to households and businesses, causing a drop in the prices of the markets. For those who had borrowed a loan and are, now unable to pay it back, things are even worse: they have to sell their assets in order to repay their loan but the prices of the assets are much lower than the prices they had borrowed them with. Economy is now falling into a recession. The banks give less loans and lead to lack of money from the markets. Those who have loans have to pay them but the money used for these repayments don't flow into the markets but, instead, disappear.

## **5. Europe's response**

Europe's response to the economic crisis that affected the US, came somewhat belatedly and without, perhaps, being given the right attention. But, even when Europe got affected by the crisis, the issues that seemed more important to the competent members were a possible depreciation of the euro, the decline in exports from Europe to the US, a continues inflationary pressure and the downward route that the real estate market in Europe starts to show now, as well (Dabrowski, 2010).

In September 2008, however, Europe will understand the magnitude of the crisis. It is the month that the company of Lehman Brothers announces its bankruptcy. Before their bankruptcy, the company was one of the largest financial institutions in the US. The reason why such a great company reaches the point of bankruptcy is nothing else than the poor assessment of the market situation and of the real estate market in particular. As mentioned earlier, the uncontrolled granting of mortgage loans, especially subprime loans, led Lehman Brothers to dramatically reduce its credit rating.

This point is crucial for the subsequent course of both the US and the European economy. The bankruptcy of the Lehman Brothers bank instantly froze money markets all around the world. The first problem that the European banks have to deal with is the interbank lending. This means, in terms of real life facts, that the banks will see their cash reserve dropping dramatically. On the same month, Europe will be shocked by the bankruptcy of the Icelandic banks. Within a night, the three major banks of Iceland are going into bankruptcy leaving their depositors unable to react. Iceland, the United Kingdom and the Netherlands are the three countries that feared the most for the losses of their deposits in the Icelandic banks.

### ***5.1 The effects of the economic crisis in the EU***

In the beginning of the crisis, some of the European Union members considered the crisis to be a problem only for the USA. Soon they were proven wrong since the European economy started to decline, as well (Jackson, 2009, p. 1).

One of the primary consequences of the crisis is that many EU governments had to make use of their public resources in order to help the problematic banking system of some countries, to protect the depositors and also to improve and boost the markets. Soon, though, this policy would fail as the financial crisis becomes more intense, leading the governments to



seek for new ways to protect their economies. In order to secure the economies from a worse decline, the EU governments have to join forces and act as a Union.

In the months to follow, some EU leaders have decided that it was crucial to set some policies and rules that would be common for all the members of the Euro zone. Europe had to be protected from a possible worse consequence of the Icelandic faulty banking system. In February 2009, leaders and Finance Ministers from Germany, the Netherlands, the United Kingdom, Luxemburg, France, Italy and Spain met in Berlin in order to carefully examine the current situation and set some financial rules. From this meeting, a proposition paper was formed which set some goals for the European leaders. These goals were “a) transparency and accountability; b) enhancing sound regulation; c) promoting integrity in financial markets; d) strengthening international cooperation; and e) reforming international financial institutions” (Jackson, 2009, p. 4).

## ***5.2 The European reaction***

Once the problems of the crisis appeared in the European area it became clear that the European Authorities were not ready to deal with them nor had they any plans prepared (Begg, 2009). The policies that the European Union used in order to solve the economic problems that appeared can be described at least spasmodic and erratic. The reaction that the European Union had was rapid but, on the other hand, chaotic and not carefully organized. Since we are talking about a union, one thing that led to the spread of the crisis in most of the countries was “contagion”. The term contagion “refers to a situation whereby instability in a specific market or institution is transmitted to one or several other markets or institutions” (CONSTÂNCIO, 2012, p.110). This means that among the banks that constitute the interbank market, the problems affecting one institution will affect the others, as well and eventually disrupt the whole financial system (Allen and Carletti, 2008).

The results of the contagion among the countries of Euro zone was, in fact, the diffusion of the problems and the imbalances which caused consecutive shocks in the countries. Another significant point of contagion is that it affected the banks, as well.

According to Reisen (2008), contagion can occur through three channels:

- Foreign trade, or also known as “monsoon effect”, in which small economies are more vulnerable to being affected due to the trade.

- Financial contagion, which occurs when the money invested from one country return to it. This kind of contagion will cause problems to the countries when currency mismatches appear on the balance sheets of banks and corporations causing a malfunction.
- “Pure” contagion, which occurs when money and bank markets fail and break down. A contagion of this kind occurred in the crisis of 2008 and it was mostly detected in Iceland.

In order to maintain the strength of the monetary system in the Euro zone and to stabilize the credit flow, governments had to rescue the banks that were on the verge of collapsing. In order to achieve that the ECB had to make some new policies. ECB’s first concern was to prevent a further contagion of other European countries and, at the same time, along with the Federal Reserve and the Bank of Japan, to provide liquidity in longer and looser terms in order to help the most dysfunctional of the economies. Next thing which the ECB did was to join forces with other central banks, not only in the Euro zone but in an international level. Central banks rapidly lowered their interest rates, with Federal Reserve cutting a ½ % on the discount rate and with more banks- US and European- following on the same pattern (Hemmelgarn and Nicodeme, 2010).

The next thing the ECB did was to launch a policy of “enhanced credit support” and alternative funding. This new policy would provide some extra liquidity to the European banks that were weaker and in need for instant help and for a period of time which would be extended one more year. However, Europe is divided over the case of Iceland: since the country is a member of the EU the leaders have to offer her help. But along with Iceland, the UK and the Netherlands had lost money as we will explain later. So, the EU response had to be neutral and to help both sides.

Finally, on November 2008, the European Commission unveiled the European Economic Recovery Plan for Growths and Jobs. This plan included tax and expenditure measures to support and boost the economy. This plan is addressed to the Member States and, along with the European Commission, target to € 200 billion fiscal stimulus (Hemmelgarn and Nicodeme, 2010).

## 6. The case of Iceland

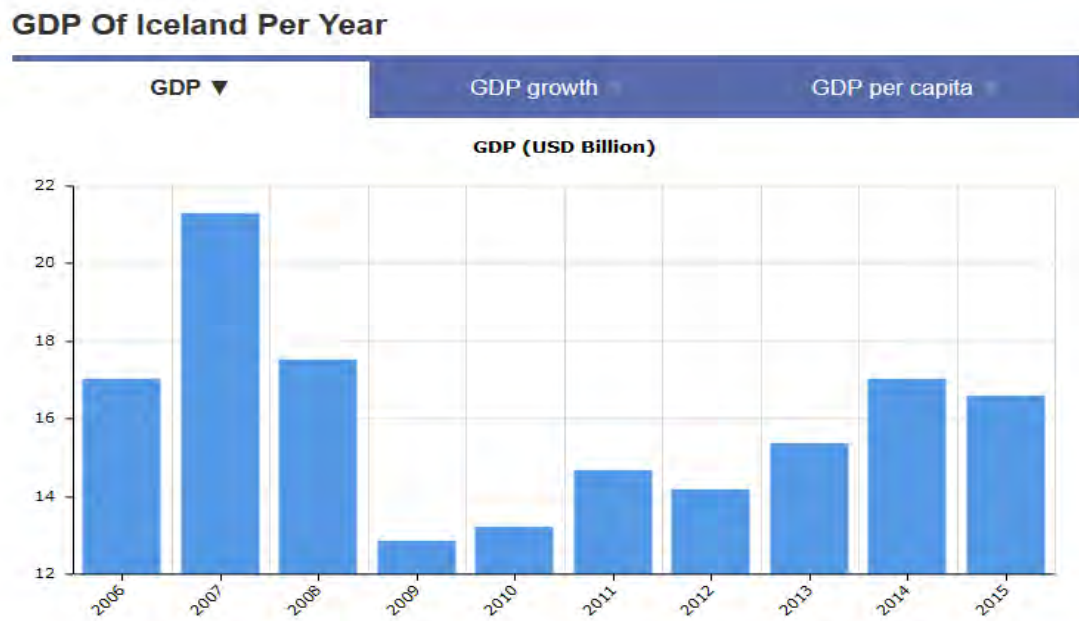
Iceland was one of the countries in Europe which was hit by the financial crisis. It was, in fact, the first country to face a banking crisis leading to a downfall of the economy. But how did it all start?

Icelandic economy is one of the youngest in Europe. It was only until one century ago that Iceland transformed from a farming country to an advanced economy (Vaiman et al., 2010, p. 260). The country of Iceland has been under the rule of other countries for centuries. First were the Norwegians that ruled Iceland from 1260 until 1380 when it became subject to the Danish crown. Icelanders started seeking for their independence in the mid 19<sup>th</sup> century and finally gained it in 1944. Iceland's economy was based on farming with the majority of the population working as farmers in 1900 (Wade and Sigurgeirsdottir, 2012, p 131). The economic growth started in the 1990s and especially after Iceland joined the European Union. A large part of Iceland's economy has been due to the fishing activities of the country. This changed in the early 20<sup>th</sup> century when the country transformed into an "international mini-capital of finance" (Loftsdóttir, 2010).

In 1970, a controversial decision was taken by the Icelandic government: to join the European Free Trade Area (EFTA) and liberalize foreign trade (now account transactions). This decision was taken in order to protect their major export markets- most importantly the fish market- as the World War II had left Iceland behind the other countries and unable to cope with the pace they recovered (Eggertsson and Herbertsson, 2009). When the European Economic Area (EEA) was formed by EFTA and the EU, Iceland- along with Norway and Lichtenstein- joined the EU countries. Being a member of the EEA means that Iceland has to liberalize its capital account and follow the EU financial and banking regulations.

Nowadays, Iceland follows the Scandinavian- type economy which forms of a capitalist structure and free market principles. Its average GDP in the last 10 years is 15.98%, with the highest GDP being recorded in 2007 (21.29%) (Figure 5). Iceland's economic growth is expanding in new sectors like biotechnology, software production and financial services. Also, tourism is another sector which is growing rapidly in the past years.

**Figure 5:** The Gross Domestic Product of Iceland from 2006- 2015



Source: <http://www.worldatlas.com/finance/iceland/gdp.html>

The country's economy is mostly export-oriented, with marine products, aluminum and metal, wool as well as equipment for the fishing industry being on top of the list of exported products. The fishing industry only provides 40% of the country's export income. The main destinations for Iceland's exports are the European Union and the European Free Trade Association countries, the USA and Japan. The imports of the country are mostly foodstuff, petroleum products, machinery, textiles and cement.

## **6.1 The banking sector of Iceland**

### **Currency**

The króna is the currency of Iceland, issued exclusively by the Central Bank of Iceland. The country faced a great shock in the 1970's during the 1979 energy crisis, in which it reached an inflation of up to 59% in 1980. It was only until 1994 that things changed for the country as the GDP kept growing until 2004. During these years, inflation was preserved in low levels but in 2006 it reached the level of 8.6%.

### **The Banking Sector**

The banking sector has had an important role in the country's economic bloom. Iceland has three major privately owned commercial banks: NBI (formerly Landsbanki), Arion Bank (formerly Kaupthing Bank) and Islandsbanki (formerly Glitnir). In the years preceding the crisis, these three banks- Landsbanki, Kaupthing and Glitnir- expanded and multiplied in size due to the banks' access to credit in international financial markets. Since the beginning of the privatization of the banking system and until 2003 when it was completed, the banks had increased their assets from being worth 100% up until 1400% the country's GDP (US \$ 182 billion) (Sigurthorsson, 2012). Icelandic banks expanded their operations outside Reykjavik by opening branches and acquiring financial companies in other countries (Fridriksson, 2009). According to Janari, former Director General of the Finnish Financial Supervision Authority (2009, p36), "the owners and managers of banks adopted an aggressive policy of rapid international growth based on high leverage and investments in growth areas that turned into bubbles". Nonetheless, when the international financial crisis broke out and started expanding, trust in these Icelandic banks was lost.

Since Iceland has been a small finance market, the only way the country's banks could have expanded would be through interbank lending. Also, one more reason for their expansion was the deposits from outside Iceland and, especially, the Netherlands and the United Kingdom. Iceland's major commercial banks were Kaupthing, Landsbanki and Glitnir and it is estimated that, by 2008, those three banks only held a foreign debt in excess of 50 billion € given that the country's GDP was 8.5 billion €.

In the years between 2001-2007 Iceland's borrowing from the international credit markets was so big that it provoked a great expansion of the banking sector. A direct result of

this borrowing, as well as, from the deposits the banks had attracted, was the buy-out of foreign companies and assets, too (Zoega, 2008, p. 19). At this point starts the problem for Iceland and the country's banks. As the banks expanded more and more, the government of Iceland should have taken the right measures in order to restrict this expansion. The growth of the banking sector was so great that it transcended the central bank of Iceland and its ability of lending.

### **Icesave**

One of Iceland's private banks, Landsbanki, founded an online savings account brand, Icesave. It operated from 2006-2008 in two countries, the United Kingdom and the Netherlands, while the bank's initial purpose was to operate in more countries in the following years.

Icesave's operation in the UK, offered three types of saving accounts: an immediate-access savings account, Individuals Savings Account (ISA) and a range of fixed-rate bonds. At the time Landsbanki collapsed, Icesave already had 300.000 customers and over €5 billion deposits. The interest rates that Icesave offered were over 6% meaning that they were among the best rates that were offered to customers from online banks in the UK. In the Netherlands, Icesave operated only for five months. However, in this short period of time, it managed to attract more than 125.000 customers with deposits reaching to €1.7 billion. It offered only one type of account: an immediate-access savings account. The interest rate in Netherlands was 5% but it later increased in 5.25%.

### **Kaupthing Edge**

Like the case of Landsbanki's Icesave, Kaupthing Bank founded "Kaupthing Edge", an online savings brand, as well. It offered two types of accounts: a savings account and a fixed-term deposit account. Kaupthing Edge was available in ten countries: United Kingdom, Germany, Austria, Luxemburg, Norway, Sweden, Finland, Switzerland, Belgium and Isle of Man. Unlike Icesave, Kaupthing Edge accounts were under the responsibility of regulation from the host countries and not Iceland.

## ***6.2 The collapse***

Since 2001, Iceland saw a great boom as foreign capital was flowing into the country (Asgeirsdottir et al, 2015, p 92). The supply of money was tremendous and the interest rates were kept low. The Icelandic banks were highly rated by the international rating agencies and those high credit ratings eased the banks' entrance into the bond market. In 2005, the banks had been widely known in the international market and received high coverage of the media worldwide. However, those familiar with the banking systems were very skeptical on the case of Iceland and their criticism was hard, targeting the banks' lack of transparency, cross ownership and growth pace. The Icelandic banks tried in numerous ways to respond to those criticizing them and they did so by improving their transparency through a wider network of information, minimizing cross-ownership, improving liquidity position and increasing the share of deposits on their balance sheets.

But the frivolous behavior of the banking system and the loose management of the government led to a downturn of the economy. 2008 was a crucial year for Iceland as in October, the Icelandic banks collapsed. This came as a great shock to both Icelanders and many international groups of investors (Hilmarrsson, 2013). Apart from the global economic crisis, there are more to blame on the case of the banking collapse: the government of Iceland, the weak EU regulation on banks, the policies made by the regulators and the lack of supervision. There was some great concern on the matter of Iceland through 2007, mostly, due to the fact that the three major banks had a combined debt which was five times the Icelandic GDP. At that point, the debt of all three banks was estimated to be € 50 billion compared to the €8.5 billion of the Icelandic GDP. In terms of policy mistakes that have contributed to the financial crisis of the country, monetary policy is of great importance and is one of the factors to blame for the later country's situation. Icelandic economy and its banking sector appeared too expansionary and without paying attention to the symptoms that portended the upcoming disaster. The public were falsely given the sense of security of this expansion and were captivated by the economic growth they were observing. The media had a major role in this as they were in close terms with the banks and did not support transparency from the banks and informative reporting.

The months of September and October 2008 were of great importance for the country. Following the bankruptcy of Lehman Brothers, Iceland was then facing the fear of watching its banking system fail since interbank lending froze. The once "too-big-to-fail" system is now "too-big-to-save"; within a few days 85% of the banking system had collapsed as the

Central Bank was unable to provide any help (Growiec et al, 2012; Jonsson et al, 2016, pp 289). The worst fear of the government was happening: the CBI did not have sufficient currency to act as a last chance lender. In the first week of October, matters became worse when the foreign press started writing about the Icelandic banks, the lack of stability and the difficulty of paying off their debts (Wade and Sigurgeirsdottir, 2012, p 136). These rumors, combined with the depreciation of the ISK, the Icelandic króna, which took place earlier the same year (from January to September the value of the króna dropped 35%) led to a run on the deposits, first in the UK and later in Netherlands and the other markets.

The Icelandic government was left alone to find a solution for this great problem that was facing now. The British government made things even harder for Iceland and on 7 October, just a few days later of the British concerns on a possible failure of the Icelandic banks, Landsbanki was placed by the FME on a state of receivership. On 9 October, all the Icelandic assets and the liabilities of the bank were transferred to a new bank under the name Nýi Landsbanki (now Landsbankinn). The bank was established by the Icelandic government and until today it is state- owned.

### ***6.2.2 So what caused the crisis?***

Was Iceland just a victim of external events or do they have to blame themselves for the situation they got into? Could this crisis have been restricted by the right government policies? Are the banks the only to blame or were the policies of the government a cause of the crisis? It will take time to understand to full extent all the causes that brought Iceland into crisis but we can tell for sure that the most important factor of the crisis was the “bad behavior on the part of the financial system” (Stiglitz, 2010, p 322). The Icelandic government was somehow arrogant in the years prior to the crisis and stated that even though “Iceland does not have a long history as a financial center and is much better known for competitively priced sustainable energy and quality seafood. But extensive reforms, including liberalization and privatization, has changed the business environment dramatically during the last decade and Iceland is now recognized as one of Europe’s most competitive economies” (Invest in Iceland, 2006; Sigurjonsson. 2010).

One of the causes was the acquisition of deposits in foreign subsidiaries which means increase in the obligations of deposit insurance in the countries of operation. Also, another cause, are the high interest rates of the Icelandic banks which concerned specialists as they might hide a great weakness of the banking system.

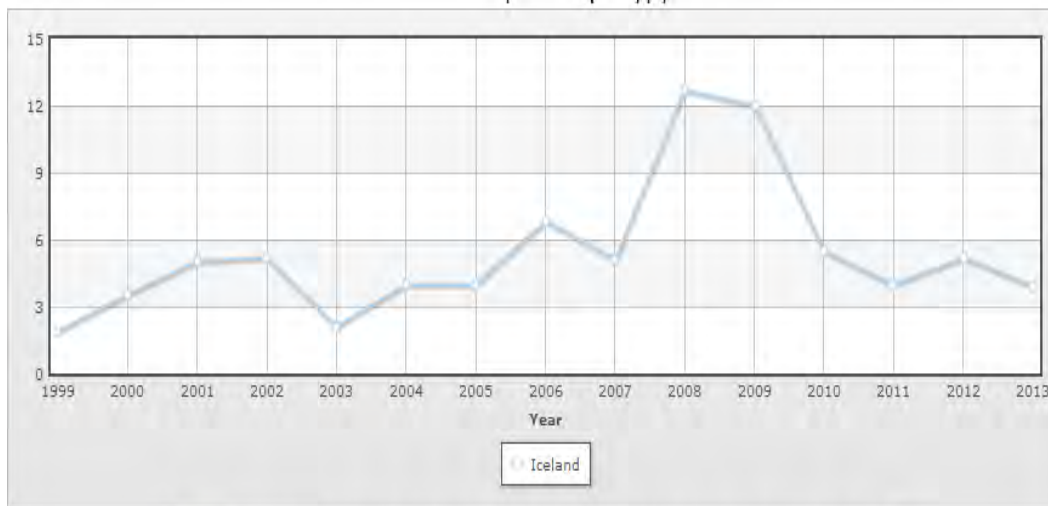


## **Inflation**

As Petursson and Olafsson (2010) explain, the bigger the macroeconomic imbalances are in an economy the greater will be the effects of financial changes in an economy. One measure of macroeconomic imbalance is the inflation rate. Being able to control the inflation and keeping its prices low are important for a country as it will help her through a possible global financial crisis and raise the quality of its policy institutions. A low inflation means that a country can have a bigger range in which it can work its monetary policy and be more aggressive and effective in changing the low policy rates.

Inflation is, actually, one of the causes of Iceland's crisis. As the Icelandic money supply increased up to 56% in just one year and with the increase of the deposits at the country's banks along with the high rates that were offered created the illusion of wealth the more depositors would choose Icelandic banks for their money the more these banks would keep rates high. Inflation in Iceland was rising with its peak being in 2008 as we can see in the figure below (figure 6).

**Figure 6: Inflation reached its higher price in 2008**



Country	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Iceland	1.9	3.5	5	5.2	2.1	4	4	6.8	5.1	12.7	12	5.5	4	5.2	3.9

Source: <http://www.indexmundi.com/g/g.aspx?c=ic&v=71>

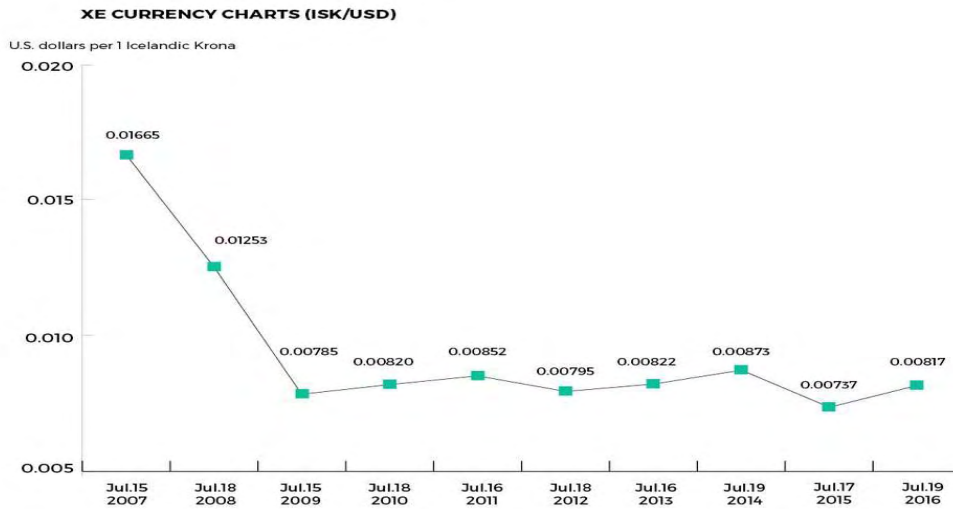
This currency inflow is what encouraged the economic growth and inflation (Danielsson, 2008, p. 10) [Figure 7].

**Figure 7: The inflation rate of the Icelandic economy between 2008- 2016**



As the number of foreign depositors increased so did the inflow of foreign- currency in Iceland. As a result of this, the exchange rate got higher. The foreign- currency became part of the country's economy and this lead to a depreciation of the local currency (Figure 8).

**Figure 8:** Exchange rate of the Icelandic Krona and the US Dollar between the years 2007- 2016.



Source: <https://skift.com/iceland-tourism/>

The interest rates that were held by the banks of Iceland were high. As figure 9 shows, the Central Bank of Iceland held interest rates up to 15% whereas, the UK ‘s interest rates were 5.5%, for example. This resulted in many depositors choosing the Icelandic banks and Icelandic króna for their deposits. The first assumption that one can make at this point is that all these deposits would lead to monetary inflation. And this is exactly what happened in the case of Iceland. Apart from the monetary inflation, the country will now face inflation in general. Consumers will see a rise in the prices of goods up to 14% within a year.

**Figure 9:** The interest rates of the Icelandic banks from 2008- 2016

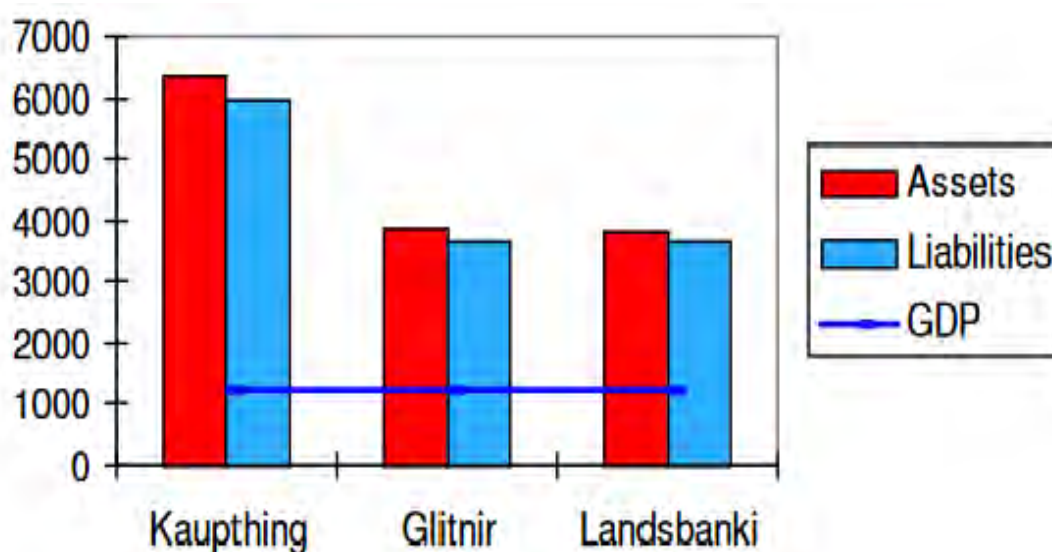


## **The expansion of the banking sector**

In the years before the crisis, the Icelandic banks showed some great expansion and rapid growth (Flannery, 2009, p 95). The low tax rates of the country, the economic liberalization and banking privatization as well as the positive business environment made Iceland seem as the new perfect finance center. With the buy-outs of foreign companies and assets, the banks had tremendous assets on their balance sheets. For a country whose economy is properly administrated and the necessary safeguards are offered by the government, this wouldn't be a reason to worry. But in the case of Iceland, this great banking expansion should have been stopped by the government on time. As it turns out, the supervision of the banks was weak and, until today, many are the experts who question the privatization of the banks which were then under the control of managers with insufficient experience.

The banks reached a point at which the worth of the assets they had on their possession was much bigger than the Icelandic GDP (Danielsson, 2008, p. 11) [Figure 10]. In fact, until the first half of 2007, the worth of the assets of the three major Icelandic banks was 14,069,370 million krónur which means eleven times the GDP of the country (1,319,200 million krónur) (Buiter and Sibert, 2008, p. 4). In the aftermath of the 2008 crisis, we can tell that this financial crisis was incubated and driven by the Western Economies and especially the USA which motivated economies at taking more risks through financial instruments (derivatives, CDOs) (Sikka, 2009, p 868).

**Figure 10:** The size of the three major Icelandic banks compared to the GDP



Source: Buitert and Sibert, 2008, p. 4

So why would that be a problem for a country? A country's relation with its banking system means that the state offers guarantee for the banks' assets, as well as liquidity. In Iceland's case, it didn't follow this pattern. In fact, the banking sector became too big for the country's size and ability to offer guarantees. During the years of their expansion, the Icelandic banks relied on interbank market for their funding. However, when things in the global economy deteriorated things got really tough for the Icelandic banks too. Neither the Central Bank of Iceland nor the National Treasury had kept up with the banks' growth and, now, they don't have the means to support them. The capacity of the Central Bank of Iceland was much smaller than this of the three commercial banks combined and, thus, the CBI could no longer operate and be used as "a lender of last resort" (Zoega, 2008). It is already obvious that the decisions taken by individual banks can put entire economies at risk. The growth strategies that the three banks pursued made them much greater than the whole economy of the island and leading, eventually, to their downfall and to the great banking crisis that the country faced.

Here, we should try to define what a banking crisis is even though it is not an easy thing because they vary in the way they evolve. Some crises appear abruptly and develop really quickly whereas others develop gradually and are triggered by events that result one from the other. Also, there are crisis that begin from a banking system which suffers from poor liquidation while others have to do with insufficient demand. The outcomes can also be

different for every crisis. We can see banks suffering but eventually being saved due to regulation and government intervene whilst in other cases, there are whole banking systems failing (such is the case of Iceland). As Laeven and Valencia (2013, p 228) describe there are two conditions that help us define a banking crisis: “

- Significant signs of financial distress in the banking system (as indicated by significant bank runs, losses in the banking system, and/or bank liquidations).
- Significant banking policy intervention measures in response to significant losses in the banking system”.

In Table 1 we can see countries that faced banking crisis and met those criteria as well as some more significant criteria. Iceland’s banking crisis started at 2008 and went systemic at the same year.

**Table 1:** List of countries that experienced a banking crisis and list of countries on the borderline of banking crisis

Country	Start of Crisis	Date when Systemic	Extensive Liquidity Support	Significant Guarantees on Liabilities	Significant Restructuring Costs	Significant Asset Purchases	Significant Nationalizations
<b>Systemic cases</b>							
Austria	2008	2008	✓	✓	✓		✓
Belgium	2008	2008	✓	✓	✓		✓
Denmark	2008	2009	✓	✓			✓
Germany	2008	2009	✓	✓			✓
Greece	2008	2009	✓	✓	✓		✓
Iceland	2008	2008	✓	✓	✓		✓
Ireland	2008	2009	✓	✓	✓	✓	✓
Kazakhstan	2008	2010	✓	✓	✓		✓
Latvia	2008	2008	✓	✓	✓		✓
Luxembourg	2008	2008	✓	✓	✓		✓
Mongolia	2008	2009	✓	✓	✓		✓
Netherlands	2008	2008	✓	✓	✓		✓
Nigeria	2009	2011	✓	✓	✓	✓	✓
Spain	2008	2011	✓	✓	✓		✓
Ukraine	2008	2009	✓	✓	✓		✓
United Kingdom	2007	2008	✓	✓	✓	✓	✓
United States	2007	2008	✓	✓	✓	✓	✓
<b>Borderline cases</b>							
France	2008		✓	✓			
Hungary	2008		✓	✓			
Italy	2008		✓	✓			
Portugal	2008		✓	✓			
Russia	2008		✓	✓			
Slovenia	2008		✓	✓			
Sweden	2008		✓	✓			
Switzerland	2008		✓			✓	

Source: Laeven and Valencia (2013, p232)

One more thing that made matters on the banking system worse was Icesave and the fact that it operated as a branch of Landsbanki. At this point, the Central Bank gives the banks some serious warning signals. The executives of the CBI expressed their opinion on the case

of the branches that the banks had in other countries. According to their opinion, the operation of the banks should be under subsidiaries rather than branches and, specifically, Landsbanki's operation in London should be transferred to a subsidiary bank.

In order to continue, we have to clarify the difference between branches and subsidiaries. A branch is a legal part of a bank of one country whereas the subsidiary is a legal entity of its own in the host country from where it receives the banking license. For the countries that are members of the European Union, things are much easier for the banking systems as they operate under centralized policies and liquidity without any particular significance if they are branches or subsidiaries. However, there is an important point that needs to be taken into consideration. When we are talking about subsidiaries, the legal rights and supervision belong to the host country, whereas, branches are under the authority of the home country. So, if a host country wishes to supervise the liquidity of a branch it can only do it together with the home country.

The discussion among the executives of both banks had begun and the seniors of Landsbanki were informed on what was needed for the transfer and how long it would last. Until that moment, it was assumed by the CBI that Landsbanki had started all the necessary procedures but in July of 2008 it was revealed that it was all a misbelief. Landsbanki had no intention on transferring their operations to a subsidiary and no one had the right to force them to.

One more problem which was causing headaches to the CBI executives was the case of Glitnir. As the Central Bank was watching closely the liquidity of all three banks the whole year, they had noticed that Glitnir, unlike the other two, had not been active in the asset selling for its refinancing. However, the repayment of a big loan it had was approaching. On the discussions that the senior executives of the CBI and the ones of Glitnir had, it was seen that the bank had the ability to meet up with its obligation of paying the loan in October by selling an asset. However, an unexpected turn changed that: the collapse of Lehman Brothers. From this point on, things would be really hard, not just for Glitnir but for the financial system worldwide.

As its last chance for liquidity, Glitnir turned to the Central Bank but it was unsuccessful. Another policy mistake that the Icelandic government made was the decision to nationalize Glitnir. The government intended to take a 75% share of the bank for €600 million. This acquisition of the government could have an unfortunate turn for Iceland by turning a financial crisis into sovereign crisis (Beirut and Sibert, 2008). Fortunately, this

acquisition was never completed as the Financial Supervisory Authority takes control of the bank.

The arrangements between the three banks failed due to risk management and faulty internal control systems that were not taken into consideration by executives. Boards and stakeholders of the banks were either ignorant of the risks taken or they decided to ignore them as they expected greater returns and higher share prices. In the case of Kaupthing, a search in its lists of loans has shown that the bank has lent large amounts of money to companies or individuals whose intention was to buy shares of the bank. Prior to the crisis, supervisors did not pay enough attention to such details, leading to a gigantism of the problems later. The new shareholders weren't experienced enough nor had they been familiar with the financial products that the banks had. Because of the complication of the banking system, deregulation had given the chance to banks to separate their services into related activities (e.g. insurance services and mortgages) and in off balance sheet activities. Also, shareholders in most cases were lacking the appropriate knowledge in order to cope with all the banking activities so they could only rely on corporate governance mechanisms to protect their interests. Finally, one more faulty mechanism of the banking system was that executives did not fear for their reputation if banks failed but, on the contrary, they acted as if the only concern was their personal profit and no regulation could restrict that. So, it is understood how important governance issues are for the well-being of banking systems.

## **Central Bank of Iceland**

### ***Governance structure***

Apart from the size of the banking sector, one more thing that proved to cause problem to the economy of the country was the banking governance. The governance structure of the Central Bank consists of 3 governors, from whom one or even more are former politicians. Until 2009, the three Governors of the Central Bank were elected by the Prime Minister of the country and one of them was appointed as the Chairman of the Board. All three governors were responsible for the monetary policy that would be followed and the decisions were taken by majority vote. One more executive body of the Bank was a seven- member Supervisory Board which was elected by the parliament and its role was mostly supervisory. The Supervisory Board is directly connected with the Parliament as it is elected every time there are Parliamentary elections. It can be assumed, thus, that no specific requirements-



professional or educational- are required in order for someone to be part of this board or even be governor of the bank.

It would be expected from someone, then, to draw the conclusion that the Central Bank has always been, somehow, connected to the central government of the country. This relation between the government and the Bank reduces the reliability of the bank, as it isn't totally independent from the political part of the country. In order to raise the reliability of the Bank, its governor/s should be chosen according to their knowledge and experience and they should be politically impartial.

However, in February 2009, the management of the Bank changed: the Board of Governors was replaced by one Governor and one Deputy Governor, both of whom require professional expertise. Also, the Supervisory Board ceases to exist and it is replaced by a Monetary Policy Committee responsible for the monetary policies and exchange rate policies. This Committee consists of five members: the Governor of the CBI, the Deputy Governor, a senior CBI official who is appointed by the Governor and two more members appointed by the Prime Minister of the country who have the required qualifications for these positions (Jannari, 2009).

### ***The pre- crisis attempt of the CBI to save the banks***

Prior to the events of October 2008, the CBI made some desperate attempts in order to avoid the imminent banking crisis. Responsible for the negotiations was the governor of the CBI, David Oddsson. First was approached the Bank of England in March 2008 due to the Icelandic cross border bank operations in the UK and the purpose was to request a bilateral currency swap arrangement with the Bank of England (Hilmarsson, 2015). However the Bank of England did not give a specific answer but, instead, asked for further information from the CBI on the purpose of this funding. During the IMF Spring Meetings of 2008, the governor of the Bank of England, Mervyn King, insisted on the CBI explaining the reason this swap arrangements were requested. Furthermore, Mr. King imposed the question on what the Icelandic government would do in a case of bank run. From this, we can assume that the Bank of England was suspicious of the Icelandic banking system and, probably, saw a forthcoming crisis. Nonetheless, Mr. King offered to help Iceland and he would do so at the G10 Central Bank Governors along with Mr. Igves (Nordic central banks) by raising the subject and discussing it with the international community.

During the IMF Spring Meetings, the CBI representatives also approached the Nordic counterparts. Responsible representative was Stefan Igves, governor of the Swedish Central Bank. According to the discussions between the counterparts it became clear that there was not much trust on Iceland. The Nordic countries (Denmark, Norway, Sweden and Finland) had already faced a financial crisis in the period between 1987- 1995 so they were better prepared when this crisis started and expected the same thing from Iceland too (Mayes, 2009). Having observed how the four countries had suffered during the previous crisis, Icelandic government should have taken the right measures to prevent a similar situation. However it did not. Mr. Igves commented that “My impression was that the Icelandic representatives were stressed, not particularly well- prepared and not fully appreciated the risks at hand” (SIC, 2010). However, despite the low trust on Iceland, the Nordic banks decide to offer some help. On May, a currency swap arrangement between the CBI and the Nordic central banks was signed and 1.5 billion euro was offered to the first.

The final representative that the CBI approached was the president of the Federal Reserve Bank of New York, Timothy Geithner. By the time the CBI governors approached Mr. Geinther, he was already informed by other central bank governors and explained how doubtful he was on the assistance of Iceland because he considered that the amount needed for the saving of the country was big, more than US\$ 10 billion. After the arrangement between the CBI and the Nordic banks, Mr. Oddsson informed Mr. Geithner and expressed his opinion of how important it was. According to his opinion, it was not the amount of money that made it so important but the fact that Iceland considered gaining some allies in this difficult time it faced. He, also, suggested that a further help from the Federal would be of great importance and assistance to Iceland.

Despite all the effort and talking that Mr. Oddsson had with his counterparts the result was not in favor of Iceland. On September 2008, a currency swap arrangement between the United States and the Nordic banks was signed. Denmark, Norway and Sweden were the countries that were involved in the agreement- Iceland was not included. Mr. Oddsson asked Mr. Geithner to reconsider including Iceland in the currency swap arrangement but the final answer that he received was negative. At this point, the negotiations that the CBI had started with the International Community seemed to fail leaving Iceland unable to save its banks. On October 2008 the three largest banks of Iceland collapsed. The only option left for the Icelandic government was the IMF. An arrangement between the government of Iceland and the IMF was signed.

## **7. Consequences of the Crisis**

### ***7.1 Depreciation of the Króna***

One of the first impacts of the crisis was on the Icelandic currency. As soon as the banking crisis hit Iceland and the three most important commercial banks went on bankruptcy, the first sector that was affected was the currency –króna- which was instantly depreciated. The reason why the króna lost its value was the fact that investors in the Icelandic banks- during the banking crisis- would convert their Icelandic assets into foreign currencies.

Consequently, the currency depreciation affects households and, thus, consumption. Households are the first to be affected leading to a reduction in their consumption since their balance sheets are now changing. As a result of the household reduction in demand, corporate profits will be reduced.

One more problem for the firms, which is created due to the depreciation, is the uncertainty in most sectors of the economy. According to IMF, investment is also expected to be reduced “by 30% points below the baseline”. However, in the paper that the IMF published in 2015, it is issued that the situation of the country in 2015 is better and less uncertain compared to the crisis of 2008.

### ***7.2 Capital controls***

According to Forbes et al (2015), capital controls are “measures that limit or restrict international capital transactions or that affect the transfers and payments associated with these transactions”. By the term “capital controls”, we refer to measures such as taxes on cross-border transactions and flows or outright limits that a government can impose in order to control flows into and out of a country’s capital account. Before the crisis of 2008, the liberalization of the banking systems and the free flow of assets in a country were considered to be beneficial and were supported by all means. The financial support along with the transfer of the “know- how” helped the development of the financial market of countries, especially the middle- income, as was Iceland.

However, in the early 2000s, some countries began to (re-) introduce capital controls and have a “more eclectic approach to capital liberalization” (Klein, 2012). Many developing countries keep capital controls while advanced countries turn to them under specific circumstances like macroeconomic fluctuations or as a response to financial risks

(Eichengreen et al., 2014). Iceland is familiar with capital controls, as for the most of the twentieth century international capital movements were strictly restricted. This changed when the country became a member of the European Union in 1994 and capital liberalization started between Iceland and the other members of the EU. As the crisis was becoming more intense, many investors decided to exit the króna, leading to its depreciation. When the banks went down and the króna was even more depreciated, “capital- flow management” measures were necessary in order to avoid the negative consequences and promote financial stability (Forbes et al, 2013). In 2008 capital controls were imposed to Iceland in order to obstruct further loss of money from the country and a collapse of the exchange rate (Baldursson and Portes, 2013, p.42). Capital controls were imposed with a prospect of being removed shortly after. In 2011, the Central Bank of Iceland suggested a plan for lifting them but until today they have not succeeded in overcoming the boundaries in order to get monetary liberalization. According to the central bank governor, Mar Gudmundsson, and an interview he gave to Reuters on October 2016, capital controls and all the remaining restrictions could be fully gone by the end of 2017.

### ***7.3 Foreign demands from the Icelandic government and the IMF***

With the beginning of the 2008 crisis, Iceland had to fight legal dispute with the governments of the United Kingdom and the Netherlands. The reason was the responsibilities over the deposits of the fallen Icesave Bank. According to the claims of the British and Dutch governments, Iceland had the legal obligation- as the EU regulations on Depositors Guaranties stated- to guarantee for the deposits of Icesave as it was a branch of Landsbanki. The Icelandic government, however, refused those claims by stating that the EU laws were ambiguous.

As mentioned before, Icelandic banks had deposits from foreign countries, with the greatest depositors coming from the UK and the Netherlands. When the banking crisis started in 2008, the foreign deposits, as well as the Icelandic ones, were no longer secured by the banks and thus, UK and Netherlands depositors lost access to their money.

The Icelandic banks faced a major difficulty when their creditors insisted and asked for their payment. The British and Dutch authorities demanded from the Icelandic state a guarantee of €20.887 per account. The situation faced by Iceland is much worse than they could previously ever believe. The interbank market is of no help for Iceland at this point

since the loans the banks own are worthless and no bank is willing to offer new loans to the Icelandic banks. In any other healthy economy, the solution would be given by the Central bank of the country which would lend to the privately owned banks. But in the case of Iceland, the government can't offer any help since the banking sector is much larger than the economy of the country. Thus, the government and the Central Bank of Iceland cannot guarantee for the banks' debts.

Iceland's failure to reassure the British people on the security of their deposits leads the British government to resort to anti- terrorism legislation against Iceland. The purpose of this was to freeze all the Icelandic assets in the UK. With this move of the British government starts the downturn of Kaupthing, which by that time, was the largest and most important commercial bank of Iceland. The position that the British government had against Iceland caused one more problem for the latter: the so- wanted support of the IMF would not be signed if the dispute was not settled. The UK and the Netherlands had persuaded the ECB on their position on the case of Icesave and Iceland was left on its own, with its last savior being the IMF. However, the IMF was clear: the help would be given to Iceland only after it had settled its dispute with the other two governments. The negotiations on the matter were many and involved an economic program of \$2.1 billion from the IMF and \$3 billion from the Central Banks of Sweden, Norway, Denmark and Finland. Despite all disagreements, the Icelandic government decided to give up and sign the IMF program causing serious disappointment in the country and further strikes from the Icelanders. The solution was, finally, given by the EFTA Court which ruled in favor of Iceland, causing disappointment to the other two countries (Bergmann, 2014).

## **8. Getting out of the crisis**

Once the Iceland's economy was severely hit by the crisis, Icelandic authorities had to find solutions to deal with the failing banks. At this point, Iceland is on its own facing a great unwillingness for help or co-operation from other countries. Nevertheless, Iceland has to come up with the ways to protect the country from generalized consequences of the banking crisis.

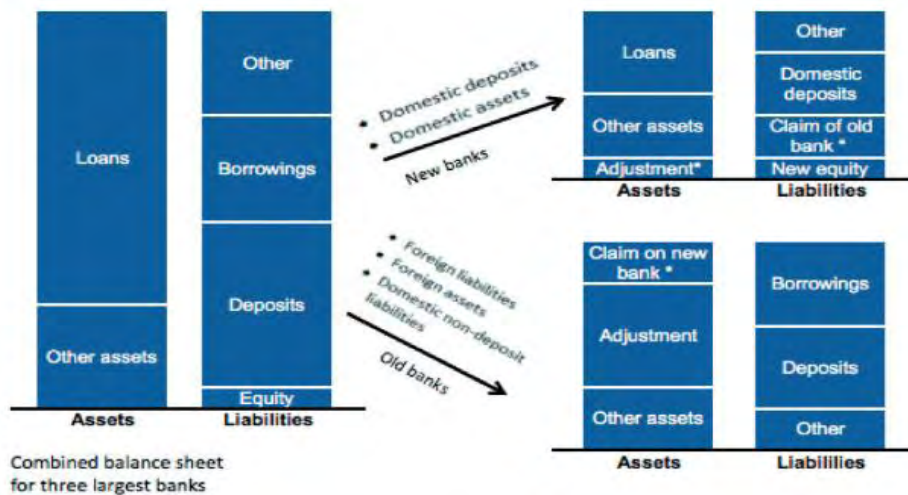
The solution was given by the government of Geir H. Haarde and passed by the parliament on October 6 2008. It was called Emergency Act. Through this emergency legislation the Icelandic government managed to minimize the impact of the crisis on the country by giving permission to the Financial Supervisory Authority of Iceland to undertake the operations of the three major commercial Banks. One more factor that helped in the recovery of the country was the IMF and the economic aid it offered through the IMF Stand-By-Arrangement.

### ***8.1 Restructure of the banking sector***

Due to the liquidity problems that the three banks faced, their control was passed to the Icelandic regulator (FME). The result was the separation of the banks into “Old” and “New” Banks with assets being transferred from one to another. Both foreign assets as well as debt obligations remained to the “Old” bank whereas domestic assets and deposits were transferred from the old to the new banks. The deposits of the Icelandic branches were now in the property of the New banks whereas the deposits of foreign branches remained in the Old banks but with high priority (Figure 11). Following the deposits were the bondholders of the banks. Figure 11 shows the separation of the banks. The reason behind this split of the three banks was the improvement of the recovery rates, as it would be an outcome of the residual value of the remaining assets in the “Old” banks and the realizable value of the bonds issued by the “New” Bank (J.P.Morgan, 2009, p.2).

The issue of the “Old” and the “New” banks was questioned and doubted a lot. Many rushed and claimed that the “New” banks were nationalized. The truth is that these “New” banks belonged to the private sector as did the “Old” banks. The Icelandic government proceeded and fully recapitalized only one of the banks, Glitnir. The rest two banks remained as a property of the old banks.

**Figure 11:** The separation on the banks into “New” and “Old” and the sharing of assets and liabilities



Source: Baldursson and Portes, 2013, p. 46

In addition, it is important that new policies and governance measures are established for the banks. First of all, the organizational structure of the banks must be changed in order to operate better. There should be a legal separation on the entities of the banks. The Icelandic banks, prior to their separation and prior to the crisis, had all their entities (commercial banking, investment banking, and insurance activities) in one balance sheet. In the new structure, the activities are better organized and the risk of contagion is avoided. Also, it is easier for shareholders to observe on the activities without the complexity the structure had before. The transparency that is created this way can lead to one more change that would benefit the banks. New types of investors can be interested in the new financial system that is created. The government’s aim should be to attract foreign investors rather than the existing institutions in order for new capital to be brought into the country. Given the fact that the banking market faced such a big crisis, the government should be cautious and give the market the needed time to show the signs of when it is safe for the new banks to be on sale again and on what criteria the new investors should be chosen. Thus, the government should, also, participate in the formation of the new policies and regulations in order to have better financial supervisory. One more matter that should be given the needed attention is this of liquidity management. Increased level of capital is required in order to surpass the risk taken and always keeping in mind the great problems that liquidity caused to the banks when they financed themselves through banking market. Also, the quality of assets and securities should be examined thoroughly.

The role of the Icelandic Financial Supervisory Authority should be increased. As I mentioned before, the executives and CEOs proved to be inadequate and the decisions they too- whether they came out of ignorance or arrogance- caused the failure of the banks. Thus, a supervisory team of policymakers is an important element if the government wants to avoid a new crisis in the future. The FSA should keep a closer look on the banking regulations and the boards of the banks by running frequent tests on them. Also, it should be given a more crucial role and the freedom to intervene when needed and not be just guidance for the boards.

Finally, the role of the media should be restricted. We can't overlook the role that the media had prior to the crisis and how it misled the public. Either by hiding the truth or not trying hard enough to be accurate on the information about the banks, the blame is partly on them for the crisis that emerged. The individuals that had shares on the banks could have been better informed and, thus, react more efficiently. At the same time, the continuously developing list of financial products addressed to the public has made it harder for them to understand the suitable ones for each case and made them victims of inappropriate ones. It is proposed, then, that media should be under strict legislation in order to be more informative, analytic and neutral.

## ***8.2 The IMF Stand-By-Arrangement***

The IMF Stand-By-Arrangement (SBA) was applied in November 2008 and managed to restrain a wider spread of the crisis in Iceland.

According to the plan made by the IMF executives, the first step of the SBA was the adoption of a program which would offer fiscal consolidation. The way to do that was through austerity measures and increase in taxes, leading, though, to the stability of the Central Government debts. The second step of the SBA was the protection of a banking system which would be much smaller but viable. As mentioned before, the existing banking system was too large for the size of the country, making it impossible to save when needed. Downsizing the banks and creating a new system out of the ruins of the old, proved to be salutary for the country. The third step of the SBA was the re-establishment of the capital controls. I have already mentioned that the Icelandic economy was under capital controls for most of the twentieth century and in the recent history, since the October of 2008, they were imposed again on the banking system.

However, as mentioned earlier, in order to offer the rescue package, the IMF asked from the Icelandic government to find a solution to its dispute with the British and the Dutch. Once



the dispute between Iceland and the British/ Dutch was over, the IMF offered its rescue package. The amount offered to Iceland was \$5.1 billion- \$2.1 billion was from the IMF while the rest was from the Nordic countries with the cooperation of Poland. Apart from the funding, the IMF was looser with the measures it asked from the Icelandic government. Instead of asking for austerity measures, as the IMF plan usually does and had decided to so and in this case, the government was free to act according to their plan and deal with the crisis.

### ***8.3 Icelandic EU Accession bid***

On 16 July 2009, the government of Johanna Sigurdardottir applied for membership in the EU. Formal negotiations started on 27 July 2010 and continued until September of 2013, when Iceland suspended the application for membership. Even before the decision of the former Prime Minister to apply for European membership, Buitert and Sibert had stated:

The only way for a small country like Iceland to have a large internationally active banking sector that is immune to the risk of insolvency triggered by illiquidity caused by either traditional or modern bank runs, is for Iceland to join the EU and become a full member of the euro area. If Iceland had a global reserve currency as its national currency, and with the full liquidity facilities of the Eurosystem at its disposal, no Icelandic bank could be brought down by illiquidity alone (Buitert and Sibert, 2008a).

Also, according to Petursson and Olafsson (2011), if Iceland was a member of the European Monetary Union it is possible that the banking crisis would have been of smaller range and intensity. The timing when the application was made couldn't have been more appropriate as it gave Iceland some more help with the resolution of the crisis. With this action Iceland has succeeded in gaining trust and enhancing the credibility of the country on the international financial markets. Even though applying for the membership was important for the course of the country, the governments that followed suspended the negotiations. On 12 March 2015, Foreign Minister of Iceland Gunnar Bragi Sveinsson stated that he had withdrawn the application for membership, whereas the EU stated that no formal withdrawal of application had been made.

## **9. The crisis of the Nordic countries compared to the Icelandic**

The Nordic countries- consisting of Sweden, Norway, Finland, Denmark and Iceland- were victims of a severe financial crisis in late 1980's, much earlier than this of 2008. It was expected, therefore, that they were better prepared when the 2008- crisis hit. However, it is not easy for governments to neither prepare a country constantly for a case like this nor do all countries use previous cases as examples for possible future crises and, thus, there were victims in this crisis too.

### ***9.1 The history of the Nordic crisis***

The main reason behind the crises in the Nordic countries was the deregulation of the financial system and the way the banks responded to it. What made things worse was the unsustainable macroeconomic policies that tried to maintain the exchange rate prices. The period in which all these took place was from 1987 to 1995 and the countries that experienced a crisis were Denmark, Norway, Sweden and Finland.

The first country that was hit by the crisis was Denmark which saw 102 financial institutions collapsing. The solution that was decided was government support for the most of the remaining organizations and not letting them into bankruptcy, except for 8 banks. However, the support did not include any form government ownership and guarantees were not issued. Besides the bad situation of the financial system, economy did not fall into recession and the fall in the GDP was small only a few times between these years. The case of Denmark is considered the least difficult of all four.

The next country to face a crisis was Norway. In this case things were a little more difficult as the country had 13 of her banks failing in the years 1988- 1990. The biggest problem, however, came when two of her largest banks lost all their capital in the years 1991- 1992. The government was able to support the two banks with the capital needed for their saving and in the next years sold the stakes of the lost shareholders and even made a surplus out of it. In the first half on 1989 the country faced a recession.

Sweden was the next country which was affected by the economic crisis and things were a little more difficult in this case. The Swedish banking crisis actually occurred from a housing bubble during 1991- 1992 and resulted in bank insolvency, similar to the subprime mortgage crisis of 2007- 2008. In order to save the banking system the government announced that it would guarantee all (114) bank deposits. In 1991, two of the country's largest banks, Nordbanken and Götabanken, needed bailing out. The two banks were granted

financial support and nationalized at 64 billion krona. The bad debts of the two banks were transferred to Securum and Retriva, two asset- management companies that sold the assets that the banks kept as guarantee for the debts. In order to be able to examine which institutions needed support and recapitalization the Swedish government formed the Bank Support Authority. Between 1991- 1992 the country had a severe recession.

The last country which was hit by the crisis was Finland and it was the most severe of all. The cause of the crisis was the deregulation of the financial market that, until the early 1980's, was strictly regulated by the Bank of Finland which controlled interest rates, import and export of currency and foreign exchange rates. After the deregulation there was a massive credit expansion. Investors- individuals and companies- were attracted by the real estate prices and, thus, banks expanded their lending and took part in high- risk operations, something in which they lacked the experience and led them to their final collapse.

The fifth of the Nordic countries, Iceland, did not follow the others in the crisis of 1980's and that's because its banks were nationalized and their operations small and limited.

## ***9.2 The present crisis and Iceland's role***

The changes of the Icelandic banking system came even with some delay. In 1998, Iceland decided to privatize its banks and restructure the sector with the bigger banks taking over the smaller ones. As mentioned earlier, in order to be able to survive from this competition, banks had to find a way to finance their expansion and turned to foreign lending. And this is the major difference between the present crisis and the crisis of the Nordic countries 20 years ago: the cross- border operations of the banks. While the crisis of 1980's/ 1990's was severe as well it was easier for the countries to find solutions as the banking operations were restricted within the national borders. Even between the Nordic countries the operations were limited.

In the case of Iceland, the banking operations were expanded outside the small borders of the country or even the other Nordic countries. Most operations of the Icelandic banks were with the UK and the Netherlands through subsidiaries or branches. And this is one more thing that is different from the previous crisis. Having control over subsidiaries and branches is not easy neither for the home country nor for the host even though all operations are under the EU legislation. This made matters worse for Iceland when the crisis hit the country.

### ***9.3 Iceland vs. Nordic countries***

However, these factors were the same for the other Nordic countries too. Which was the difference, then, that caused such a harsh crisis in Iceland and not in the other countries? The answer to this is the fact that the other four countries were prepared for such a case and familiar with a similar situation. Even though it is difficult for a country to operate under a constant thinking of a failing banking system, it appears that those four countries actually did it and had taken all the precautions needed. The other Nordic countries were well aware of the risks of an expanding banking system and had developed their crisis management. On the contrary, Iceland was enticed by the easy funding and the expansion in the other countries and did not pay much attention on the warning signs of the countries which had already experienced this. In the case of Iceland it was the lack of the experience, after all, that led the country to its downfall whilst the other countries of the region- even the still-weak Finland- overcame it without significant losses.

## **10. The Portuguese economic crisis compared to the Icelandic**

Portugal was one of the European countries which were severely affected by the economic crisis. It was affected after Iceland and the beginning of its crisis was firstly noted in 2010. It was a major economic and political crisis related with the sovereign crisis of Europe and the country's most severe recession since the 1970's.

### ***10.1 The factors of the Portuguese crisis***

As Portugal joined the Eurozone in the 1990s, the interest rates reached really low rates. This resulted in a decrease in private savings and an increase in investment and consumption and consequently in low unemployment and economic growth. However, investments were made to sectors such as telecommunications, electricity and healthcare which were non-tradable (Gurnani, 2016). Until the 2000s the economy of the country seemed stable. From this point, the turn that the economy took was not so good anymore and the problems started to show, especially because of the competition from Central and Eastern European countries. Between 2006- 2010, the exports of the country were growing but this didn't overcome the expenses in the constantly-rising prices of energy and the falling income.

In 2009, the government saw its revenues declining whilst the public spending was increasing. Since the 1970's the Portuguese governments have encouraged investment bubbles by creating and supporting partnerships of the public and private sector by funding external consultancy/advising committees and firms. This resulted in the mismanagement of the public works that were actually state- managed and in numerous public servants being awarded with huge salaries and bonuses. The biggest budget slippage was with Public-Private Partnerships (PPPs) that were responsible for the road concessions. In fact, between 2008- 2010, the government paid 425.5 million Euros more than were budgeted to the firms who were constructing the road constructions. The amount rose even more in 2011, by 28% and, in total, the government spent 896.6 million Euros in rents to the road concessions in the years 2008-2011 (figure 12). A similarly important slippage was happening with PPPs in the sectors of rail and health. Portugal's budget deficit went from 2.7% of the GDP in 2008 to 9.3% of the GDP in 2009. As Gaspar (2012) mentioned, "The trigger for the crisis in Portugal was the decision of the Portuguese government in 2008 to expand the budget quite aggressively in response to the global crisis". On top of Portugal's economic difficulties was the deteriorating economic environment in Europe and the negative shocks throughout Europe.

**Figure 12:** General government expenditure as % of total expenditure, compared to the Eurozone and EU averages

Function	Portugal	Eurozone	EU
Social Protection	36.7%	40.7%	39.9%
General Public Services	17.1%	13.8%	13.5%
Health	13.8%	14.9%	14.8%
Education	12.9%	10.1%	10.9%
Economic affairs	8.2%	8.4%	8.2%
Public order and safety	4.0%	3.7%	3.9%
Defence	2.7%	2.7%	3.0%
Recreation, culture and religion	2.2%	2.2%	2.2%
Housing and community amenities	1.3%	1.8%	1.7%
Environmental protection	1.1%	1.8%	1.7%

Source: [https://en.wikipedia.org/wiki/Economy\\_of\\_Portugal](https://en.wikipedia.org/wiki/Economy_of_Portugal)

One more thing that contributed in worsening the Portuguese economy was the bad management of the European funds and the public debt creation. In 2013, the government reserved 898 million euros in the Amending Government Budget in order to fund State-owned businesses in the settlement of the SWAPS they had contracted with other financial institutions.

Another factor that contributed to the financial crisis was the collapse of two major banks: the Banco Português de Negócios (BPN) and the Banco Privado Português (BPP). The first bank (BPN) collapsed due to big amount of toxic credits it had gathered from illegal agreements with the administrators. In 2008, the government decided to nationalize the Bank with a great cost for the State- until 2012 the cost of the nationalization was 3405 million Euros. The bankruptcy of the second bank (BPP) caused serious costs to the country and the taxpayers- in 2010 BPP cost 450 million Euros in guarantees driven by the State.

## ***10.2 Portugal's economic adjustment program***

On April 5 2011, under the pressure from the European Central Bank, Portugal requested for financial assistance from the IMF and the European Union. Part of the rescue program demanded from Portugal to adopt austerity measures, unlike the case of Iceland where this was not necessary after all. The program's measures presented fiscal consolidation from 9.1% in 2010 to 3.0% in 2013. In order to achieve this target, the government was forced to imply some strict measures like cutting government wages, reducing the number of government employees, cutting back on healthcare and education funds and unemployment benefits. At the same time, taxes were raised on goods and income and the privatization of state-owned assets started. The privatization aimed to save and support state-owned enterprises which hadn't been profitable for the country as the private sector and the public-private partnerships had been mostly supported from the government.

Moreover, various structural reforms were asked in order for the government to reduce its deficit, improve the business environment and reform labor. The reform of the labor market included a reduction in the amount and duration of unemployment benefits and easing employee protection.

## ***10.3 Consequences of the program***

The austerity program that Portugal signed with the IMF- EU was painful, if someone looks at it short term. However, the economic adjustment program had two great benefits for Portugal: it helped the country's reputation in international markets and gave her the chance to make some structural reforms.

International reputation is crucial for a country, firstly, because it gives her the chance to have access to the capital markets for further funding and borrowing. Furthermore, stabilizing the economic environment can help the investment on the country from foreign investors, as well as the relations that Portugal forms with the other countries. Accepting the program gave Portugal the opportunity to regain its credibility and that can be proved by the 10-year bond yields of the country and the fact that they dropped from 18.3% that they were in 2012 to 3.4% in 2014, when the country exited the program.

The other benefit of the program was the structural reform of Portugal. The government had the opportunity to focus on the macroeconomic imbalances that the

country faced and perform some meaningful reforms instead of searching for funding to the international capital market. In other words, the program offered protection to the country and, after the reforms were over, gave it the chance to successfully return to the long-term debt market with sales of 5-year bonds in January 2013 and 10-year bonds in May 2013. Besides the short-term advantages of the structural reform, Portugal was benefited even more by having its competitiveness improved as well as the macroeconomic imbalances. Finally, the economic adjustment program helped Portugal with its more tangible problems apart from the improvement of its market perception. It helped the country improve its labor market and strengthen its investment environment, two sectors that led Portugal to its financial crisis.

#### ***10.4 Conclusion***

Portugal faced a severe financial and political crisis that had major consequences on the country- financial and fiscal. Prior to Portugal's crisis was the Icelandic crisis which, also, had a harsh impact. Both countries adopted economic adjustment programs signed between the countries and the IMF/EU. However, things were much more difficult for Portugal compared to Iceland because of the austerity measures it had to adopt whilst Iceland was free of them. It was the political environment of Portugal and the corruption it showed the previous years that forced the IMF to be more careful and strict towards Portugal. Iceland's governments were not saints neither. The difference that, probably, made things easier for Iceland was the EFTA Court which ruled in favor of the country in its dispute with the UK and the Netherlands and which formed a better image and reputation for Iceland and, thus, helped her with the economic program it adopted.

To sum up, both countries succeeded in overcoming the crises they faced- in shorter or longer term. Both countries adopted economic adjustment programs and fulfilled all the goals imposed on them. Both Portugal and Iceland gained their reputation back and their positions in the international capital market. Foreign investors did not turn their backs but instead invested in those countries again, once the economic environments were more stable. The economic programs, the structural reforms in the countries and the hard work of governments did pay back after all.



## 11. Comparison of Iceland, Portugal and the Nordic countries

In Table 2, I represent all the factors that led all three countries to their economic crises, either this were in the recent years (Iceland and Portugal) or in the decades before (Nordic countries).

**Table 2:** the factors behind the economic crises and how each country was affected

	<i>Iceland</i>	<i>Portugal</i>	<i>Nordic countries</i> <i>(Sweden, Norway, Denmark, Finland)</i>
<b><i>Housing bubble</i></b>	Even though it was one of the reasons that caused the worldwide crisis, Iceland did not face a major problem with housing bubbles.	Part of the country's economic crisis is the housing bubble. In the years before the crisis, Portuguese were encouraged to invest on real estate whilst their economy was not able to support it properly.	The housing bubble affected only one of the Nordic countries: Sweden. The rest of the Nordic countries experienced crises which started and affected only the banking sector.
<b><i>Banking crisis</i></b>	The "too-big-to-save" banking system of Iceland is the reason behind the country's harsh crisis. The expansion of the private banking system was so big that the government was unable to offer any help when the private banks needed it.	The collapse of the two major Portuguese banks was an important reason that led to the collapse of the country and with serious consequences on the government and the taxpayers.	The deregulation of the banking systems was the reason for the crisis of each country. The weakness of the system and its boards of executives to be prepared for such a change was the reason that caused the crisis in all four countries.
<b><i>IMF and austerity measures</i></b>	Iceland requested the IMF help when its Central Bank was unable to offer help to the falling banking system.	Portuguese economy was severely hit by the crisis and the solution that the government wanted could only be given	Unlike Iceland and Portugal, the Nordic countries succeeded in overcoming their crises with no help from the IMF. The governments of the countries were able to help their banks and

	The IMF gave the country the economic support it needed and no austerity measures were requested, besides the dispute that Iceland had with the UK and the Netherlands.	by the IMF, in cooperation with the EU. Along with the economic help, however, the IMF demanded from Portugal to adopt some austerity measures in order to overcome its crisis.	with the right decisions and measures they took, the banking systems were able to overcome their problems and regain their reliability.
<b><i>Governments' policies</i></b>	Iceland's government was too ambitious and seemed to pay little attention on the warnings given by executives and experts of other countries	Portugal's government can be described as corrupted, the years prior to the crisis. Funds that were given to private firms, budge slippage and public debt creation were things that the governments did and doomed the Portuguese economy.	The problem of the governments of all four countries was the fact that they hadn't prepared properly the banking systems of their countries when the deregulation started. However, they were actually supportive and offered the help that the countries needed when the crisis hit each one of them.

A major factor for the economic crises and which affected economies worldwide is the ***housing bubbles*** that were created. When the economies of the countries had prosperity and the banks were capable of lending money more easily, people were encouraged to invest their money on property. For the case of Iceland, this was not the major problem for the crisis but did, however, play a role on it. Had the Icelandic banks given loans and with the expansion they had, things would have been even more difficult for the country and the government would have lost complete control. The CBI would, probably, be unable to negotiate for a solution to the problems of the banking system which would, then, be in a worse position with its debt being even bigger. In that case, the help that Iceland was given would have been different and stricter. Unlike Iceland, Portugal's case was different as people were, indeed, encouraged to invest on property. Banks were granting loans without considering a possible failure and with the government not warning them for the difficulties when they started appearing and affecting the economy. The Portuguese government was misusing the funds that the EU had approved for it and created an economic imbalance which, later, had an impact on the whole economy. When some Portuguese Banks started collapsing, the

government could not offer solutions and the real estate sector was, now, collapsing and people who had invested on it were losing their money. The prices were dropping and the value of their investments, as well. Even though the crisis in the Nordic countries was a couple of decades prior to this of 2008, things were quite similar for some of them. Specifically, Sweden was the country that had to deal with a housing bubble and which worsened its economy in the years 1991-1992. This housing bubble led to bank insolvency and eventually, to the collapse of the banking system. Even though the government was able to save the banking system, a recession struck the country.

The *banking crisis* was the most crucial factor for the crises of all three cases. For Iceland, it was the factor that pulled the trigger and doomed the economy of the country. An uncontrollable expansion of the banking system and an arrogant behavior of the executives of the banks caused a situation that was out of control even of the government. The whole country of Iceland, as well as the UK and the Netherlands were affected by the Icelandic banking crisis. The matter became so much more serious that the EU had to intervene in order to calm the dispute between the two parts and find a solution for Iceland. For Portugal, things were as serious as in Iceland. A collapse of the two banks made the economy of the country take a disastrous turn. Unable to provide a solution that would prevent a further downfall of the economy, the government raised the hands and turned for help to organizations outside the country. Portuguese governments had lost their reliability and the trust from the EU the previous years and that is why strict measures were imposed along with the help for their failing banking system. The Nordic countries, even though a few years earlier, had suffered from an equivalent severe banking crisis. The deregulation of the banking system is the reason for its malfunction in all four countries. However, the difference between the Nordic countries and Iceland along with Portugal is that the governments of the first were in a position that could provide the help needed to their failing banking systems without any “external” help provided to them.

The *IMF* gave the solution to both Iceland and Portugal when no other solution could be found to a falling economy. For Iceland the help was given only after the dispute with the UK and the Netherlands was settled. It was an economic package that helped the banks when not even the Central Bank was able to offer any help and the banks were in need of instant liquidity. In Portugal the IMF-with the cooperation of the EU- offered an economic package that helped boost the economy of the country when the government was unable to. However, in the case of Portugal things were a little different as austerity measures were asked by the

government and imposed on the Portuguese people. This was due to the government's misuse of funds the previous years and the lost reliability from the IMF and the EU. Unlike Iceland and Portugal, the Nordic countries were able to overcome their crises without the intervention of neither the IMF nor the EU. The governments were able and had the means to solve the crisis each country faced and no austerity measures were imposed on the people of the four countries. Besides the recession that the countries faced at some time of their crisis, the economy was stabilized and the banking system regained its liability and became trustworthy for investors from inside or outside the countries.

In all three cases, the *governments* of the countries and the *policies* they followed played a major role. More or less, it was the governments and the policies they followed that caused the crises and at the same time they were the factor on how easy a solution was given either by them or from the EU and the IMF. The Icelandic government had shown an arrogant behavior when warnings were given to them for the route of the banking system. It was the government's behavior and the refusal to pay their obligations towards the British and Dutch that made things worse among them and deteriorated their relations leading to the British declaring them and even using an anti-terrorist law against them. The EFTA Court had to intervene to settle things in order to help Iceland in this difficult situation. Even though Iceland is one of the Nordic countries, the government did not use their previous crises as examples in order to be prepared for a similar situation, if not to avoid one. When the governor of the CBI approached his counterparts of the Nordic countries in order to seek for economic help, it was obvious that the trust to Iceland was lost. Nonetheless, the four countries did offer some help to Iceland (1.5 billion Euros) but not a sufficient one. The governments of the Nordic countries were all following policies that helped them through their crises and solved the problems that the failing banking systems had created. The Portuguese government, thus, was not prepared for such a severe economic crisis even though it was who created it. The policies that the governments were following were not in favor of the country but they rather worked in favor of personal benefit. This is the reason the country lost its reliability and an image of "non-trustworthy" was created for Portugal.

## 12. Conclusions

### *12.1 Summary and Conclusions*

The crisis of 2007 was a worldwide phenomenon which affected countries that previously showed no signs of recession. Compared to the Great Depression of 1930, no other financial crisis had caused such severe problems that spread throughout economies and putting whole countries and economies under the risk of complete destruction. Such was the case of Iceland which, within a night, got caught in the middle of a financial storm and with its government unable to offer a solution.

The idea of Iceland becoming an international financial center was alluring and tempting to the Icelandic government who promoted it without considering whether the country was ready to support it. The government had strong faith in its banking system and supported its expansion as well as private investments. However, they did not take into consideration the warnings they received from experts looking and studying the peculiar case of Iceland. And if they did so but decided to move on, overlooking those warnings and pretending that the reality was other than this, we could even talk about dishonesty, corruption and betrayal to both Icelanders and other investors who chose the Icelandic banks. Nonetheless, this is something we are not responsible to answer or put the blames for but should be investigated thoroughly by the appropriate experts. A possible further research on the subject of government honesty and the consequences could be conducted.

In this paper we examined how Iceland can be an example of how a whole country becomes a victim to a financial trap. Icelanders were made to believe that they were in place to support such a huge banking system, investing on it more and demising the other parts of the economy. But Iceland did something unexpected that no other country would have: let the banks fail. Coming as a surprise, this actually worked and helped the country develop again.

Choosing to let the banking system of a country fail is against the normal but it was a decision that Iceland took and proved to be the right one. Bankruptcy, capital controls and austerity measures didn't stop Iceland from regaining the status it had before all these. The country was left to find the way out of the crisis and this is exactly what happened. Beating the odds, Iceland's model of economy seemed to work.

Here lies a great advantage that the country had: its currency. Having its own currency and not euro, made the economy more competitive, while reducing the wages was necessary and to help the country to improve its place. Instead of cutting on the wages and payments,

Iceland decided to devalue the króna. Through the devaluation, export revenues increased, with fish being the top exports. Also, tourism was another sector that benefited from the situation. Iceland is, now, seen as a cheap travel destination and creating some really promising revenues.

Right now, Iceland is growing at fast rate and is even paying back the huge loans it had. The country of Iceland can become an example of how it can rise from the ashes, going against the norms and finding revolutionary solutions in order to save an economy. Predictions that wanted the country out of the international markets for decades- for not agreeing to guarantee Icesave and not bailing out its banks- were proven wrong. Iceland has made its way to the top with the proper policies the government and the CBI and with the only help of the omnipresent IMF, doing the things on her way getting itself out of the destruction, creating the infrastructure for a promising future and proving everyone wrong.

### ***12.2 Future research***

Even though Iceland has succeeded in overcoming the deep crisis it faced it is still in the road to reach the end of it. Future research can be conducted to analyze how other sectors of the economy were affected (i.e. tourism) and also how other sectors were affected (i.e. health, education) by the crisis.

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