

Research on the Impact of Iceland's Bank Nationalization and Capital Flow Controls on Economic Recovery after the 2008 Global Financial Crisis

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Abstract: This paper examines Iceland's response to the 2008 global financial crisis, focusing on the critical roles of bank nationalization and capital controls in fostering economic recovery. Prior to the crisis, Iceland's rapid economic growth, driven by financial liberalization and the aggressive expansion of its banking sector, left the economy vulnerable to external shocks. To combat the crisis, Iceland adopted two key measures: bank nationalization and capital controls. Nationalizing banks enabled the government to manage operations, restructure assets, and provide essential liquidity to maintain stability. Capital controls curtailed significant outflows, stabilized currency markets, and preserved economic order. This analysis explores the effectiveness of these policies in stabilizing the financial system and alleviating the economic downturn. It highlights how Iceland's approach offers valuable lessons for nations facing systemic financial crises. The findings emphasize the necessity of government intervention during severe disruptions, particularly in cases of widespread financial instability. Specifically, this study demonstrates how these measures expedited Iceland's recovery, delivering significant short-term economic benefits. Bank nationalization restored confidence in financial institutions, while capital controls provided critical stability to the currency and economy. These actions underscore the importance of swift and decisive policy implementation in preserving financial stability and restoring economic resilience after a crisis.

Keywords: Nationalization, Capital control, Government, Financial Crisis, Bank system

1. Introduction

The 2008 financial crisis had a profound impact on the global economy, triggering widespread failures of banking systems, stock market crashes and sharp declines in economic activities across the whole world countries. Iceland, a small country located in the North Atlantic, is one of the countries most severely affected by the economic crisis. At the beginning of the 21st century, Iceland implemented a series of financial liberalization policies in order to achieve the goal of rapid economic growth and transit its economy growth model from a singular focus on agriculture and fishing to a diversified development. Therefore, under this circumstance, Iceland's banking industry has expanded rapidly. And due to Iceland being a relatively small island country with a relatively small population, its economic growth in banking industry is highly dependent on investments into

the international capital markets. According to the research done by Daniel Svaarsson, the international investment position of Iceland surges from 50% of GDP in 1998 to 140% of GDP in 2006. Therefore, when foreign markets are impacted, Iceland's banking industry will be severely affected. On the other hand, Icelandic banks accumulated substantial international debts to expand their bank assets and make profits. This leveraging strategy typically carries minimal risk during the periods of stable time, but it becomes considerably problematic during the financial crisis, when there is a sudden surge in the demand to reclaim liquidity. According to Icelandic statistical data, in 2007, the total assets of Iceland's banking industry exceeded 10 times the GDP of that year [1]. And according to statistics from the central bank, in 2007, Iceland's external debt was 9.553 trillion Icelandic kronur, which was seven times higher than Iceland's GDP in 2007.

This article aims to understand how the Icelandic government and central bank respond to the extreme economic downturns through macroeconomic policy measures by comparing and analyzing key Icelandic macroeconomic data. More specifically, this article will analyze the important role played by the government's intervention in the collapsed banking system and the implementation of capital controls in stabilizing the Icelandic economy and helping the economy quickly recover from the recession. Therefore, when banks claim bankruptcy or liquidity crisis, the government could take over the bank to stabilize the whole economy.

2. Methodology

The purpose of this study is to evaluate the positive impact of Iceland's bank nationalization and capital flow control measures on economic recovery after the 2008 global financial crisis, using time series data comparison and cross-country comparative analysis methods. This study primarily utilizes official economic data from the World Bank and the International Monetary Fund. The main analytical methods used in this article are descriptive statistics, comparative analysis, and logical reasoning. This research paper compares some significant economic indicators before and after the policies were implemented, like GDP, unemployment rate, inflation rate and etc., to illustrate how Iceland's economy was stimulated. The advantage of this method is that it can provide a more intuitive view of the actual effects of adopting these two measures through reasonable logical analysis and the direction of economic data.

3. Overview of Iceland before the Economic Crisis

Iceland, with a population of approximately 300,000 and a relatively small geographical area, experienced a period of remarkable economic transformation in the years leading up to the 2008 financial crisis. During this time, the Icelandic central government relaxed the regulation of the financial market in order to achieve rapid economic growth. On the other hand, before the 2008 financial crisis, Iceland's economy experienced not only rapid growth but also achieved internationalization. For an example, Iceland joined the European Economic Area in 2001. This membership allowed Iceland to expand its economic activities beyond traditional sectors like fisheries and agriculture.[2] And it also enabled Icelandic banks to access international capital markets more freely, as they can borrow foreign debt easily, which leads to an unprecedented expansion of the banking industry and high growth rate of national GDP.

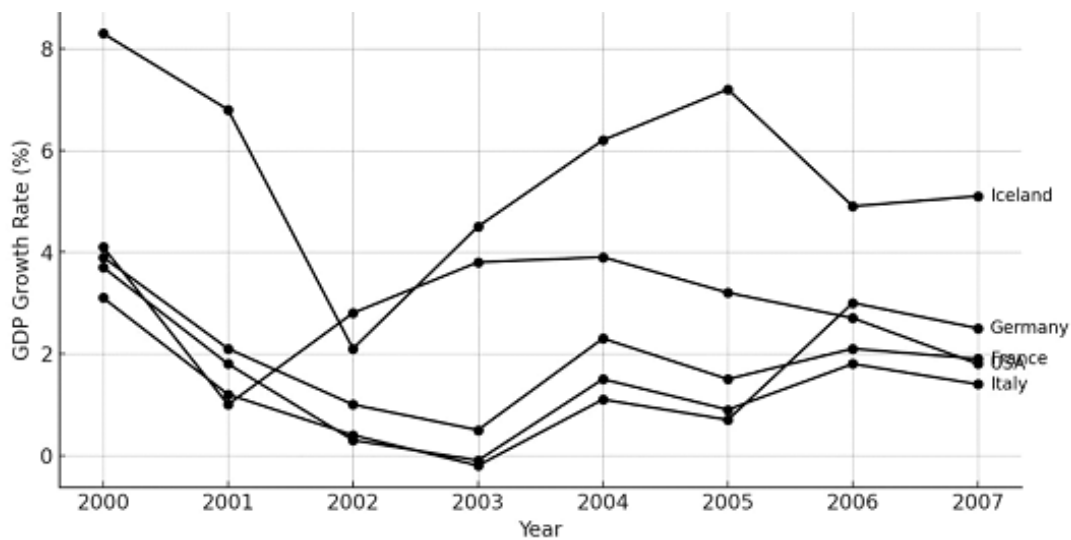


Figure 1: GDP growth rate before Crisis.

Between 2000 and 2007, Iceland's annual GDP growth rates often exceeded 5%, outpacing the economic growth of most European countries with similar economic structures and geographic constraints. This extraordinary economic performance was largely attributable to the aggressive expansion of Iceland's major banks—Kaupthing Bank, Landsbanki, and Glitnir. To be specific, these three institutions pursued an ambitious growth strategy, significantly increasing their asset bases through extensive international borrowing and refinancing activities. By 2007, the combined assets of Icelandic banks had grown to nearly ten times the Icelandic GDP, which reflects the scale of financial sector expansion and the country's deepening dependence on foreign capital markets.

According to data statistics, by 2008, Iceland's three major banks held over 50 billion euros in foreign debt, translating to approximately 160,000 euros per Icelandic citizen, while the per capita GDP at that time was only around 60,000 euros.[3] The strategy of leveraging international debt to fuel asset growth created a very vulnerable economic structure that was highly sensitive to fluctuations in global financial markets.

Additionally, the real estate market in Iceland saw significant growth during this period, fuelled by easy access to credit and a prevailing sense of optimism regarding the country's economic future. Consumer credit also expanded rapidly, further inflating the economic bubble. While these developments supported short-term growth, they also increased the economy's susceptibility to external shocks, as evidenced by the severe impact of the global financial crisis on Iceland's banking sector and the broader economy.

Speaking overall, although Iceland's pre-crisis economic environment was characterized by rapid growth and financial sector expansion, it was also marked by increasing vulnerabilities due to the reliance on international debt and the speculative expansion of real estate and consumer credit markets. These factors set the stage for the dramatic downturn that would follow when the global financial crisis struck, revealing the fragility of Iceland's economic model.

4. The Impact of the Financial Crisis on Iceland Compared to Other Countries

After the outbreak of the 2008 economic crisis, Iceland's economy, which was overly dependent on the international market, suffered an unprecedented devastating blow, manifested in the collapse of the overall financial system and rapid economic decline. Iceland's three major banks, Kaupthing Bank, Landsbanki, and Glitnir, announced bankruptcy in just a few months. The $Y=C+I+G+NX$

model predicts a sharp decrease in consumption (C) due to the large deposits these three banks held from Icelandic residents at the time of their bankruptcy, given the positive correlation between consumption and disposable income. Additionally, as these banks were major providers of credit, the cessation of lending activities led to a significant reduction in investment expenditures (I). Together, these factors contributed to a substantial contraction in Iceland's GDP.

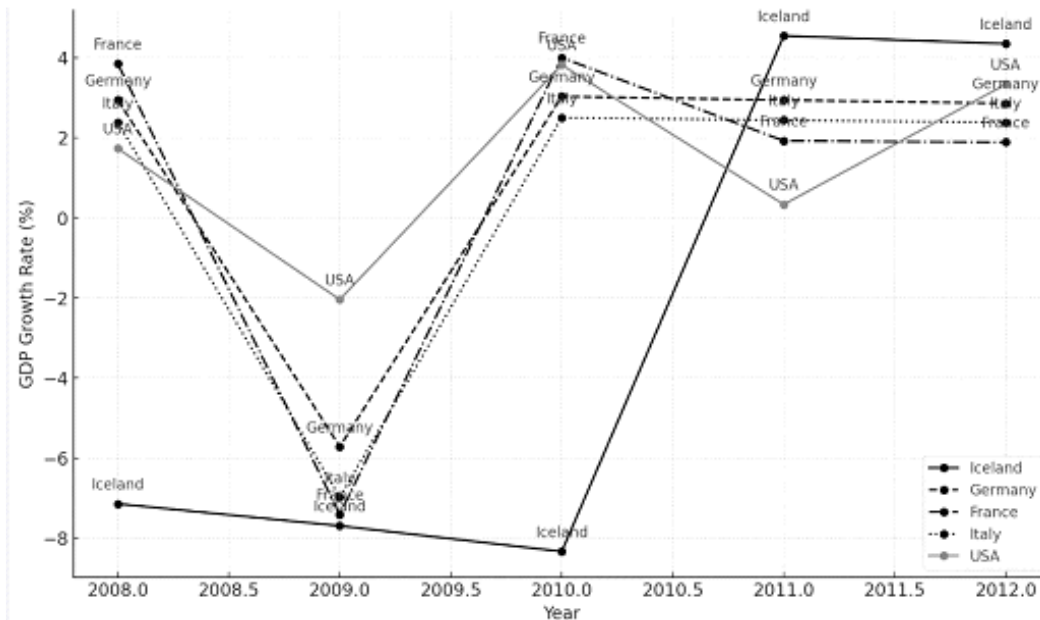


Figure 2: GDP growth rates across the different countries

In the above chart, we can see that Iceland's GDP experienced a significant decline, from 21.65 billion USD to 13.15 billion USD in 2009, after the outbreak of the financial crisis, while other countries in the same region also experienced a relatively mild decline. The volatility of Iceland's GDP during this period supports the argument that the country was one of the hardest hit by the global financial crisis. Furthermore, an analysis by economist David Carey in 2009 explored the transmission pathways of the Icelandic crisis, comparing it with economic data from other countries to highlight the severe and unique impact on Iceland's economy. Carey's findings suggest that the combination of high external debt levels, a small open economy, and the sudden withdrawal of international financing were critical factors that exacerbated the crisis's effect in Iceland. Moreover, the impact extended beyond the financial sector, affecting the real estate market and consumer spending significantly. Property values plummeted, and unemployment rates soared, leading to a prolonged economic recovery process that challenged policymakers and affected the lives of many Icelanders for years to come. According to the real data from the World Bank, the unemployment rate surged from 2.7% in 2007 to 7.2% in 2009.[4] These rapid increases in these economic indicators also signify the sharp economic recession in Iceland.

Speaking overall, Iceland's GDP has fluctuated more dramatically, supporting the argument that Iceland is a country that has been greatly affected by the financial crisis. In addition, David Carey's 2009 article also revealed the evolutionary transmission path of the Icelandic crisis and cited comparisons between Iceland's economic data and that of other countries to indicate Iceland's severe economic outlook.

5. The Implementation of Banking Nationalization and Effects

To prevent the further spread of the financial crisis, Iceland primarily employed measures such as bank nationalization reform and capital flow control to prevent systemic collapse and stabilize the currency market. These measures were implemented simultaneously. The bank nationalization in particular enabled the Icelandic government to intervene directly in the operations of banks. During this process, Iceland's Central Bank reevaluated and restructured the principal assets and liabilities of Kaupthing Bank, Landsbanki, and Glitnir. The Icelandic government divided these institutions into "new banks" and "old banks," transferring the main domestic business and assets to the new banks, while retaining the liabilities within the old banks. Concurrently, the Central Bank provided liquidity support to these new banks through direct capital injections, ensuring their operational continuity and the restoration of normal credit market functions.

The implementation of bank nationalization in Iceland was significant in several ways. Firstly, this measure effectively restored market confidence in banks, preventing a scenario where people might desperately convert their bank deposits into cash. Economically speaking, restoring trust in the national financial system improved the propensity for consumer spending. Specifically, renewing confidence significantly raised the marginal propensity to consume (MPC), which in turn increased the Keynesian multiplier ($\text{Multiplier} = 1/(1-\text{MPC})$). This enhancement of the multiplier is crucial for economic recovery, as each unit increase in disposable income results in a larger increase in macroeconomic GDP. This effectively mitigated the impact of the crisis on consumer motivation. John G. Matsusaka, in his 1995 study "Consumer confidence and economic fluctuations," used econometric methods to demonstrate that consumer confidence influences GDP. "In all models, after controlling for economic fundamentals, we can reject the hypothesis that consumer sentiment does not cause GNP (in the Granger sense)."[5] Behavioral finance also discusses herding behavior, which explains the psychological and social dynamics of individuals mimicking others' actions in times of high uncertainty. This further underscores how effectively improving public confidence can reduce market volatility, thereby fostering price stability and increasing investment (I), which in turn stimulates GDP growth.

In summary, from an economic standpoint, crises typically trigger widespread panic, leading to a sharp decline in consumer spending. The market on its own often struggles to break out of this downward spiral fast. In such crucial times, proactive governmental intervention is necessary to implement a range of policies aimed at restoring normal market functions. Additionally, the implementation of capital controls played a pivotal role in aiding Iceland's economic recovery. As the financial crisis deepened, the Icelandic government acted swiftly to impose these controls, preventing a significant exodus of capital that could have exacerbated the economic downturn.

On the other hand, controlling capital movement also played a crucial role in helping economic recovery. When the financial crisis happened, the Icelandic government quickly implemented capital controls to prevent massive capital outflows that would further deteriorate the economy. The specific steps the Icelandic government took to control capital movement are as follows. In October 2008, the Icelandic government began to restrict large amounts of money from being transferred abroad, and in November, the Icelandic government reached an emergency loan agreement with the IMF and simultaneously strengthened the existing capital control measures, including stricter foreign exchange trading regulations and restrictions on foreign investment. In 2009, the Central Bank of Iceland established a foreign exchange market to control and manage all foreign exchange, restrict foreign exchange conversions, and rationally allocate foreign exchange resources through official channels, reducing market panic and effectively helping to stabilize exchange rates and prevent excessive declines. Prema-chandra Athukorala's discussion in his 2001 book how capital market control, as an unusual policy measure and as a viable alternative to the conventional market-

centered approach, helped Malaysia deliver a superior recovery outcome and outperform other countries' economic recovery.[6] The author explained in the article that controlling capital flow can provide protection during specific crisis periods. Because local businesses usually face capital shortages and debt pressures, preventing foreign competitors from acquiring important domestic businesses and assets at low prices during the crisis protects local businesses and employment. And it stabilized the exchange rate to prevent excessive fluctuations, making the government's macroeconomic policies more effective. From the data of the World Bank, The World Bank's data reveals that following the 2008 financial crisis in Iceland, the Icelandic LCU's exchange rate surged from 64 to 123, leading to the implementation of capital control in 2009. We can speculate that during this period, a large amount of foreign capital was fleeing Iceland, and after selling their assets, they exchanged them for US dollars. However, after the Icelandic government implemented the capital control policy, the exchange rate of the Icelandic LCU was freed from rapid declines and entered a fluctuating plateau period.[7] The exchange rate of Iceland fluctuated between about 115-125 after 2010. From this, we can see the positive impact of capital control on exchange rate stability and thus the positive impact on the economy.

From the perspective of actual data, we can also compare some of Iceland's economic performances after adopting these policy measures, and compare them horizontally with similar countries to see the important role of bank nationalization and capital movement control in recovering the economy from recession. The following is a line graph drawn from the data on the World Bank.

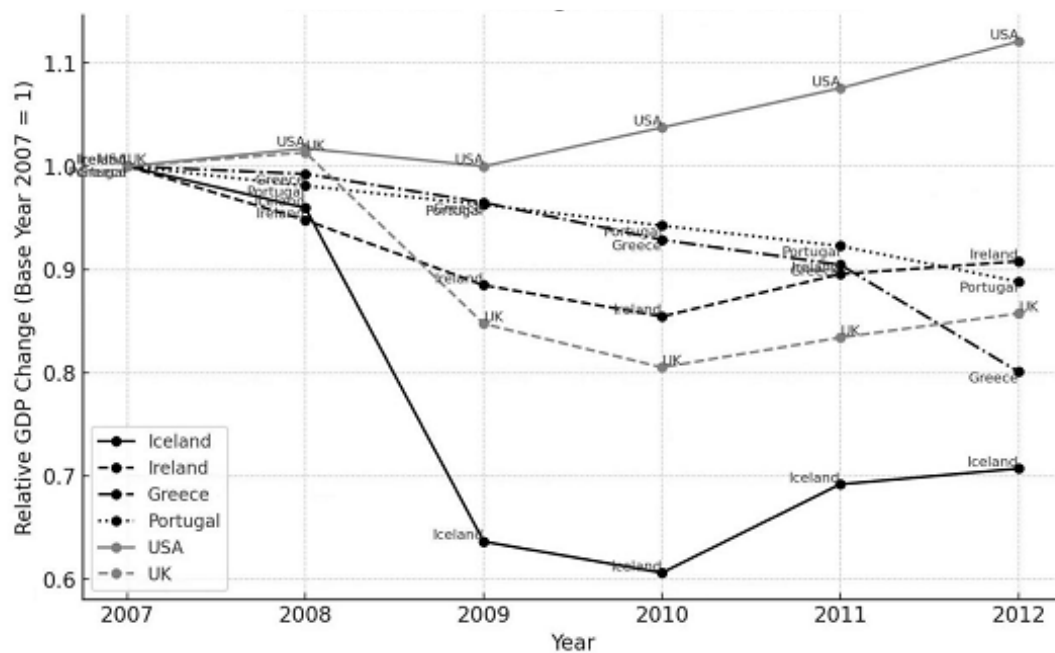


Figure 3: Relative GDP change

We can see that during the period from 2007 to 2009, Iceland's GDP decline was the most severe among these countries. However, after implementing bank nationalization and controlling capital movement, Iceland's economy achieved positive growth again during the period from 2010 to 2012, and the growth rate was one of the fastest countries. In comparison, Greece and Portugal also implemented loose monetary and fiscal policies after experiencing the financial crisis in 2009, but they still did not reverse the further decline of the economy. In contrast, Iceland not only implemented loose monetary policy but also saved the bankrupt three major banks and implemented bank nationalization and capital movement control to enhance market confidence, thus Iceland's

economy was able to recover quickly from the recession. In addition, from the perspective of the unemployment rate and inflation, Iceland's unemployment rate dropped gradually to 6.0 in 2012 after reaching 7.2 in 2009, and inflation also quickly dropped from 12% in 2009 to 5.4% within a year. In comparison, Greece's unemployment rate continued to rise during the financial crisis, rising from 8.35% in 07 to 24.61% in 2012. Ireland's unemployment rate rose from 4.7% in 07 to 15.1% in 2012.[8] From these two data, we can conclude that Iceland's policies in response to the financial crisis are very correct and effective. To be precise, it is very effective to implement bank nationalization and control capital movement.

6. Conclusion

The financial crisis in Iceland in 2008 provides a profound lesson on the critical role of government intervention during severe economic downturns. Iceland's decisive actions, including the nationalization of major banks and the implementation of strict capital controls, played a significant role in mitigating the crisis. These measures not only stabilized the financial sector but also prevented a total economic collapse by maintaining essential banking operations and limiting destabilizing capital outflows.

To be specific, the short-term impact of these interventions was obvious. We can see that Iceland's economy achieved positive growth again within a few years. The restoration of economic activities, a decline in unemployment rates, and a reduction in inflation served as evidence of this. However, the long-term outcomes of these policies still need to be considered. The nationalization of banks and the capital controls reshaped Iceland's economic structure, fostering a greater reliance on Iceland's government. This highly concentrated financial environment may result in inefficient operations, potentially leading to a deadweight loss for the entire market.

Moreover, the Icelandic government's response to the crisis has influenced subsequent policy-making. The experience of the crisis has led to a greater emphasis on prudential regulation and risk management within the financial sector. This shift towards a more cautious approach to financial liberalization serves as a lesson for other countries seeking to balance rapid economic growth with financial stability.

Iceland's strategy offers valuable insights for other countries facing similar financial challenges, demonstrating that timely and specific policy interventions can effectively counteract the impacts of a financial crisis. This case underscores the necessity of government leadership in crisis management and the potential of regulatory and policy measures to lay a foundation for sustainable economic recovery and stability.

The width and comparison years of the data used in this study may be limited, as well as differences in policy implementation environments in different countries, which may affect the generalizability of the final conclusions. In the future, the study should be focused on whether these policies play a similar role in recovering economy.

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