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Spinning out of control, Iceland in crisis

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Abstract

Within few days in October 2008 some 85% of the Icelandic bank-sector collapsed, as did the Icelandic króna. Many non-financial firms declared bankruptcy or decimated their workforce. Inflation skyrocketed as did unemployment, the other ingredient in the misery index. This paper records how well-intended policies aimed at making life easier for house-owners, people living in de-populating areas, and taxpayers turned into misfortune. The mixture of lax fiscal policy, tight monetary policy, inflation targeting, and running the smallest floating currency in the world with inadequate foreign reserves proved to be dangerous.

JEL classification: E32, E44, E52, E62

Keywords: Icelandic Bank Crisis 2008, Inflation targeting, Macroeconomic imbalance, Privatization, Overinvestment, Stock Market Collapse, Conflicting Economic Goals.

[1] The paper is based on notes for a lecture on the Icelandic crisis at the fall meeting of the Nordic Tax Research Council in Stockholm, October 31st, 2008. Thora Christiansen straightened out the use of the English language.

1. Introduction

The Icelandic economy collapsed in early October 2008. Within a few days the three major banks had collapsed, transfer of funds in and out of the country was difficult or impossible, and firms were busy sending notes to the Directory of Labour regarding mass layoffs (sending such notes is required by law when the number of layoffs is over a given limit). The value of the currency collapsed, the inflation rate soared, and the finances of ordinary people were in shatters, even for those that kept their jobs, as the repayment of foreign currency- as well as indexed króna- loans skyrocketed.

How could this happen? Were there no blinking warning lights ahead of the collapse? Or did the crisis hit out of the blue? Were Icelanders victims of uncontrollable, external events or do they only have themselves to blame? And if Icelanders are to blame, who is the main culprit and who played second and third fiddle? Could the scope of the crisis have been restricted or could it have been avoided altogether with proper governmental actions? Was the crisis due to flawed business models, faulty banking models, misbehaving businessmen and/or bankers, inadequate control institutions, poor policies, unscrupulous politicians or a mixture of all those ingredients? These questions have been asked, are being asked, and will be asked in Parliament, in the media, in public meetings, in private meetings and in the court of law in Iceland. It will take time to come to a full understanding of the events that brought the country into crisis. Here I present my attempt at making sense of the nonsense that we have witnessed. The paper is organized as follows: First I give a description of the goals that governed Icelandic economic policy during the past 15-20 years. These goals were either outspoken or can be inferred. Secondly, I ask if these goals were attainable all at once. Thirdly, I look at the development of major economic indicators, such as the accumulation of debt and the development of the size of the external deficit. Fourthly, I look at the size of the external reserves in relationship with short-term debt. Finally, I look at the development of asset prices before I conclude.

2. Ambitious goals

The economic history of Iceland is one of mixed achievements. Since World War II, Iceland has enjoyed rapid economic growth, bringing the living standards of the average citizen from being close to the bottom of the European scene up to the top of the rank world wide. But other indicators of good economic governance showed a less favourable picture. Thus, inflation has hovered around 20-40% for long periods at a time. Foreign financial transactions were restricted until Iceland joined the European Economic Area in the early 1990s. The Icelandic krona was hard to convert to foreign currency outside of Iceland until after 2000.

It was against this background that the Icelandic government and the Icelandic politicians took actions to get their act together. Inflation had been brought under a sort of control in the early 1990s by means of strict income policy orchestrated by associations of employers, employees and the government. The foundation of the monetary policy was shaky due to the lack of an anchor. A new law for the Central Bank, enacted in 2001, was supposed to provide such an anchor by abandoning a hard-to-keep fixed exchange rate regime in favour of a floating rate regime supported by an inflation target. The hope was that actors in the economy would take the monetary stance for granted and use the inflation target as estimate for future inflation. Hence, the goal that politicians in Iceland hoped to achieve by adopting inflation targeting was a noble one: To get rid of inflation once and for all!

Real interest rates were kept negative or substantially negative during the inflationary period of the 1970's and the 1980's as usury laws kept the nominal rate below a fixed ceiling. Loans were gifts and Icelandic banks had the role of deciding who was to receive those gifts. Running a banking system under these circumstances is almost impossible without massive governmental intervention, both on the financial side as well as on the operational side of the banks. As a consequence, the Icelandic banks were state owned. The exception was a few very small municipality-based savings-and–loan institutions. Major investment projects were financed by foreign loans, either directly or indirectly and frequently with governmental guarantees. Indexation of loans was made legal as a part of broad-based economic reforms in 1979 (Act of law, 13/1979). Indexation slowly changed the landscape of the credit market, encouraging savings and forcing debtors to pay back the real value of their loans. Thus, as capital was remunerated and recognized as a factor of production it became clear that relegating the power of its distribution to state run banks was inefficient. Hence, several attempts were made to privatize the state-run banks. The foundation was laid with the establishment of Íslandsbanki in 1990. Íslandsbanki was founded on the ruins of a collapsed state bank (Útvegsbankinn) and three minor "banks" serving small businesses. Íslandsbanki was merged with FBA, an investment bank built from privatized but formerly state-run investment funds. The merged Íslandsbanki and FBA later used the brand name Glitnir. The remaining state-run banks, Landsbanki and Búnaðarbanki were privatized during the period 1998 to 2003. The goal that the politicians in Iceland hoped to achieve by privatizing the state run banks was noble indeed: To make the distribution of capital more efficient, to reduce the interest-rate margin and thus provide the public with cheaper loans and better conditions for their savings as well as to induce growth of production of goods and services.

Privatizing the state run retail banks (and a few investment funds) did not exclude the state from the business of lending. Student loans were, and still are, managed by a governmental body. Housing loans are also managed by a governmental institution, the Icelandic Housing Financing Fund (HFF). Loans are indexed, the interest rate reflects the funding cost and the duration of loans is 25-40 years. The maximum loan amount for a property was restricted to 80% of its market value. Borrowers had to have 20% equity or find other forms of top financing. That had created a lucrative market for the retail banks that offered top financing at steep prices. The junior partner in government, Framsóknarflokkurinn (the Centrist Party) promised to increase the maximum loan amount for a property from 80% of the market value to 90% during the election campaign of 2003. The two parties forming the governing coalition before the election renewed their parliamentary majority. Continuation of the coalition implied that the new government accepted to make good on the promises to increase the maximum loan amount before the end of the election period. The retail banks were thus informed that a lucrative market would shrink. This happened at the same time as the newly privatized banks were each trying to increase their market share inside Iceland. Their response was as should have been anticipated: They entered the market for housing loans with full force by offering better terms than the HFF already in 2004. Thus they hoped to corner the HFF. How important the privatized banks saw this pre-emptive strike can be seen from the fact that they had not worked out how to finance this expansion of their balance sheet. But the effect on the market was as expected: Housing prices skyrocketed. The goal that the politicians hoped to achieve by offering better loans for housing was noble indeed: To make it easier for young people to enter the housing market.

Promising more favourable terms for housing loans was neither the first nor the only promise given during the election campaign. The base of the chairman of the Centrist Party, Halldór Ásgrímsson, was in Eastern Iceland. That part of the country had suffered from depopulation for a prolonged period. As a remedy, the State Power Company, the Ministry of Industry and other governmental and municipality bodies came up with plans for an aluminium smelter in Reyðarfjörður. The scope of the investment needed was such that it was the biggest investment project in Iceland since settlement. Economists, critical of the project, pointed out that the short term effect of the implementation of the project could be disruptive to other parts of the economy (crowding-out) during the investment period, while providing few jobs in the long run. To compound the scepticism of those economists a full cost-benefit analysis of the project was never presented. The goal that the politicians hoped to achieve by initiating the Reyðarfjörður project was noble enough: To strengthen the economic base of the country in general, and in Eastern Iceland in particular.

The senior party in the coalition government in power from 1995 was Sjálfstæðisflokkurinn (Independence Party). That party has had lower taxes on its agenda for a long time. Increased flow of revenue into the public coffers during the expansive period after 2001 pushed that goal higher on the agenda. A series of tax cuts followed: The tax on corporate income was lowered from 30% to 18% in 2002, the property tax was lowered from 1.2% to 0.6% in 2003 and abolished in 2006. The rate for the high income tax bracket was lowered in 2004 and for the general income tax bracket at the same time. General income tax was lowered in 2006 (but increased again in 2007). The value added tax on selected items was lowered from 14% to 7% March 1st, 2007. The goal that politicians hoped to achieve was once again a noble one: To reduce the share that government commanded of the production in the country and leave it to the individuals to decide how to spend the fruits of their effort.

3. Conflicting goals

Each of the goals that the successive Icelandic governments tried to achieve, were clearly achievable if pursued in isolation. That does not guarantee that they could be achieved all at the same time. The investment project in Eastern Iceland was a large, governmental project representing strong fiscal stimulus. Its implementation warranted the contraction of other governmentally induced investment projects and/or an increase in taxes. Lowering tax-rates was thus badly timed and contributed to further increasing the pressure in the economy. The same is true for the increase in the maximum amount for housing loans. That promise was given at a time when the state-run retail banks had just been privatized. One of the lessons form earlier privatizations [see (Duenwald, Gueorguiev, & Schaechter, 2005) p. 12] is that newly privatized banks seek to extend their market share. The proclamation by the government that the HFF would increase its penetration of the housing loan market seriously challenged the ability of the individual retail bank to increase its market share. Not surprisingly they responded by inducing a huge surge in supply of credit to the private sector. Thus the policy mix offered by the politicians and the government was that of expanding credit and expanding fiscal measures. This left the Central Bank, with its newly established inflation goal, with few choices. The bank had to increase the discount rate. And did so repeatedly – paving the way for unintended consequences of the expansionary policies. The interest rate offered in Iceland was among the highest attainable in the world. Iceland was thus entering the league of high interest-rate countries. Investors, ignoring the uncovered interest rate parity theorem, saw this as an opportunity for profit. Foreign issue of bonds nominated in Icelandic krónas as well as demand for Icelandic krónas skyrocketed. The value of the króna increased dramatically. The Icelandic banks had been in bitter fight over the market share and were well positioned to expand abroad: Foreign currency was cheap. It was their "luck" that foreign loans were also cheap. The world was awash in capital. The privatized banks of Iceland teamed up with private Icelandic investors for an investment trip to the outside world.

4. Lack of precautionary efforts

The Economist, in its February 7, 2009 issue (p.23) lists what a country should not be in a credit crunch: it should not be debt-ridden, it should not rely on foreign savings to finance its current account deficit, it should not be full of banks and estate agents and it should not be short on firms making tangibles. Most economists would add that it would be wise to avoid the items on this list even if credit is readily available internationally.

4.1 Debt and assets

Icelanders accumulated foreign assets at an accelerating rate during the last few years of the bubble years. Figure 1 shows the development of direct investment, portfolio assets and other investments abroad. As can be seen the activity takes off in 2004 and 2005.

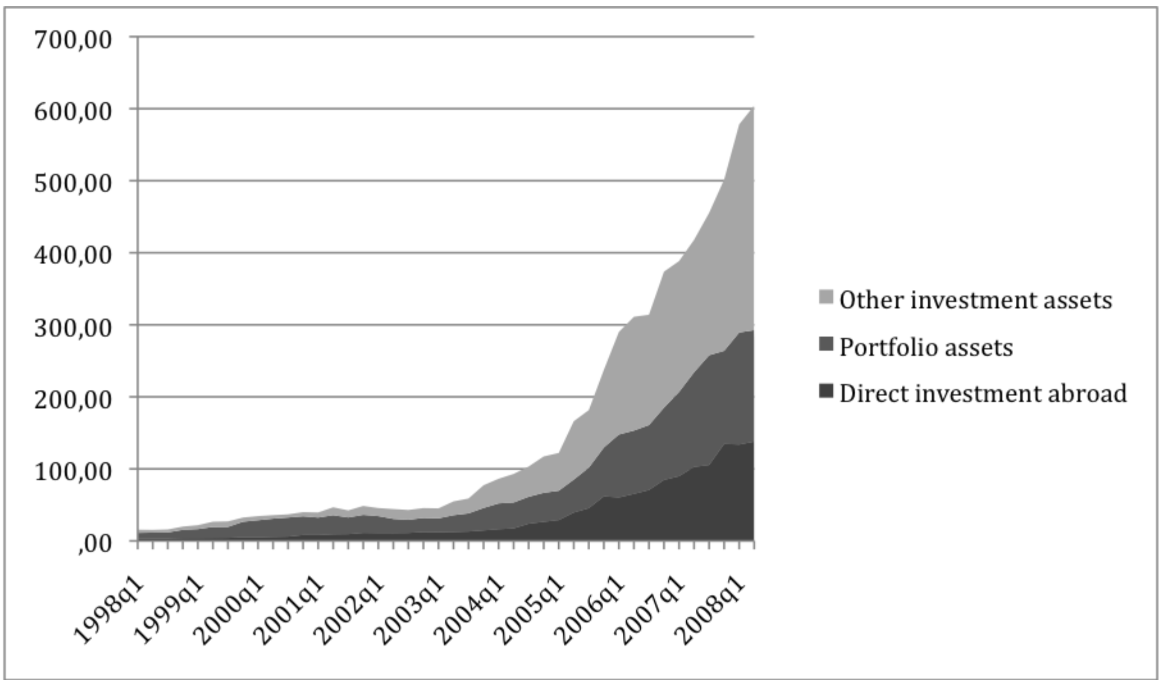

Figure 1: Accumulation of foreign assets as percentage of GDP, source: Central Bank of Iceland

It is obvious that the accumulation of assets was not financed out of internal savings. Figure 2 shows the development of foreign debt during the same period.

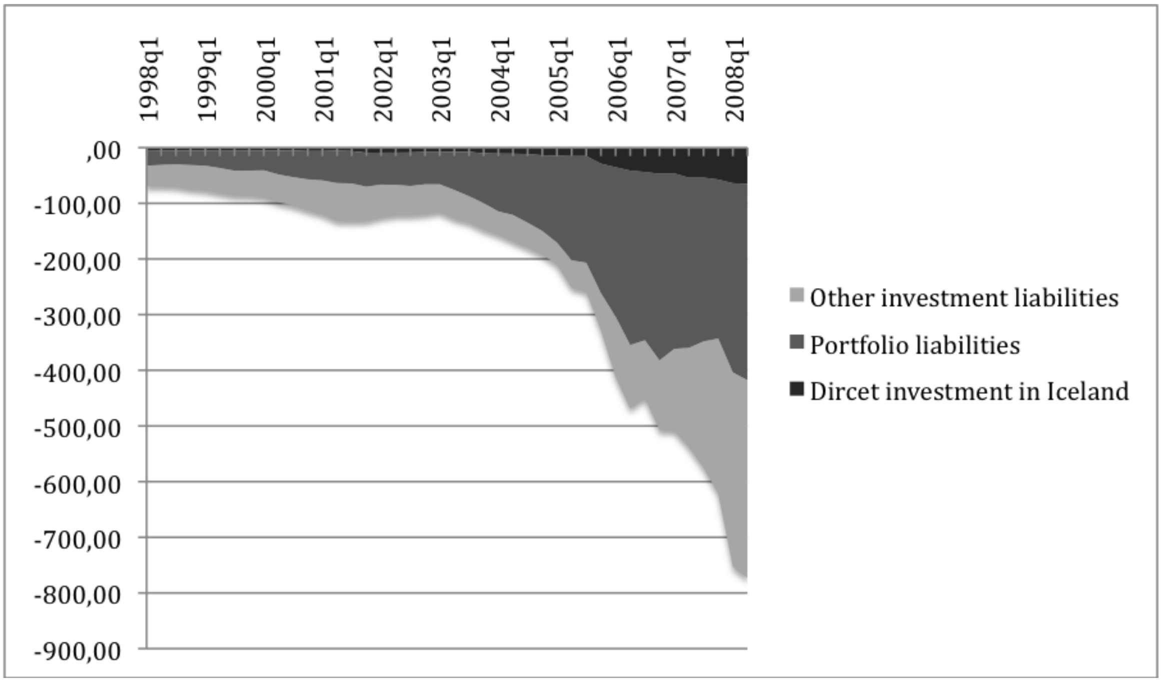

Figure 2: Foreign debt in percentage of GDP

The net position of the economy was (and is) negative as can be seen by comparing the development of assets and debts in Figure 1 and Figure 2. The exact development is drawn up in Figure 3.

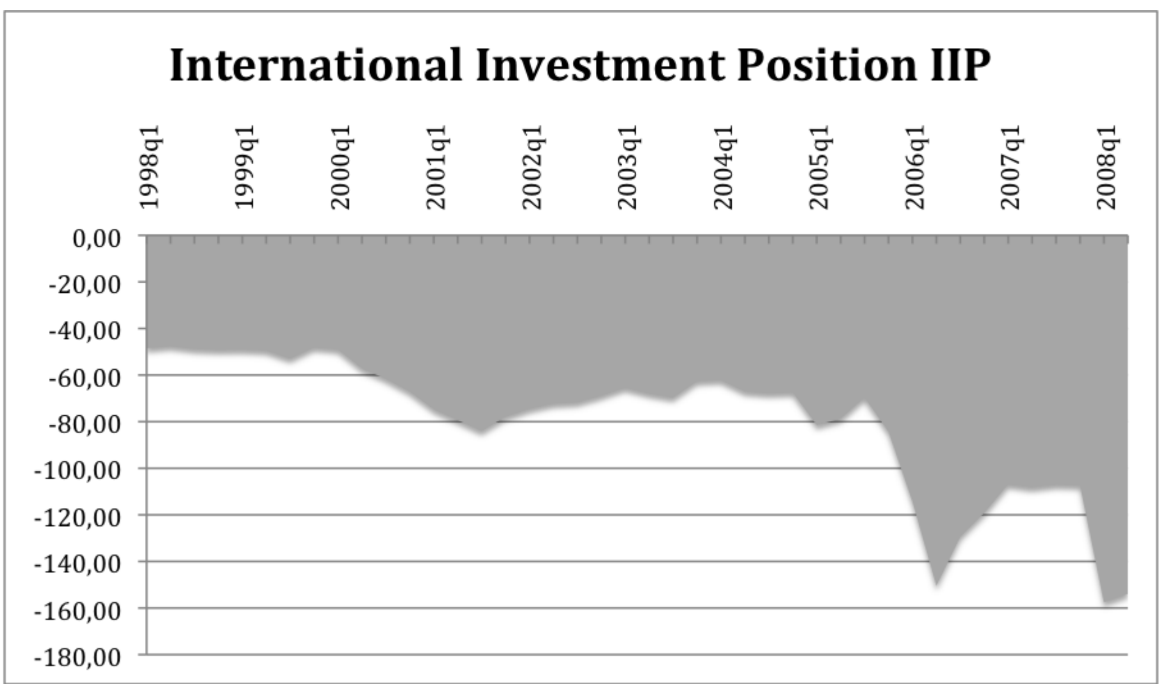

Figure 3: International Investment Position, percentage of GDP, Iceland

Reports on the deteriorating international position began to appear in 2006. There were two strands of reactions. Some were worried that the Icelandic public would be responsible for the repayment of the loans. Economists (the writer included) were quick to point out that the debt figures were related to private firms (banks, financial institutions, retailers and other businesses) in Iceland making deals with banks and other financial institutions in foreign countries. The Icelandic State was not, neither directly nor indirectly, a guarantor of these obligations. It should be stressed that the Icesave accounts and similar products were not developed fully until late 2007. Hence, if Icelandic private firms were overextending themselves, then it was at the expense of the grantors of the loans, not at the expense of the Icelandic public. The other strand of reaction was to question the way that the Central Bank conducted the calculation and the presentation of the debt figures. The Federation of Icelandic Employers pointed out that the Central Bank uses IMF conventions when compiling the figures, valuing assets at their historical price but pricing debt at its current value. A re-evaluation would show that the International Investment position was positive, not negative. The reaction of the Central Bank was rather mixed. In a paper in Monetary Bulletin in April 2008, Daníel Svavarsson re-evaluates the assets and finds out that the IIP is roughly zero at the end of 2007, if evaluated at estimated market value. He points out that as the gross position is seven times the GDP, and growing rapidly, then the net position may shift dramatically if the market value of assets and liabilities changes in an asymmetric manner. It is noteworthy that Daníel Svavarsson and Pétur Örn Sigurðsson had also written a paper in Monetary Bulletin in July 2007 on Iceland's International Investment Position and Balance of Income warning that the debt is growing faster than assets when calculated at book value, see (Svavarsson & Sigurdsson, 2007). They repeat their warnings in a newspaper interview on February 29, 2008, see (Juliusson, 2008). Thus, it is not quite clear if the Central Bank is worried due to the IIP or if the Bank did subscribe to the notion that Icelandic foreign assets were undervalued in the books of the bank.

4.2 Debt position of Icelandic families

Figure 4 shows the development of gross debt of the household sector from 1980 until 2007 as percentage of disposable income.

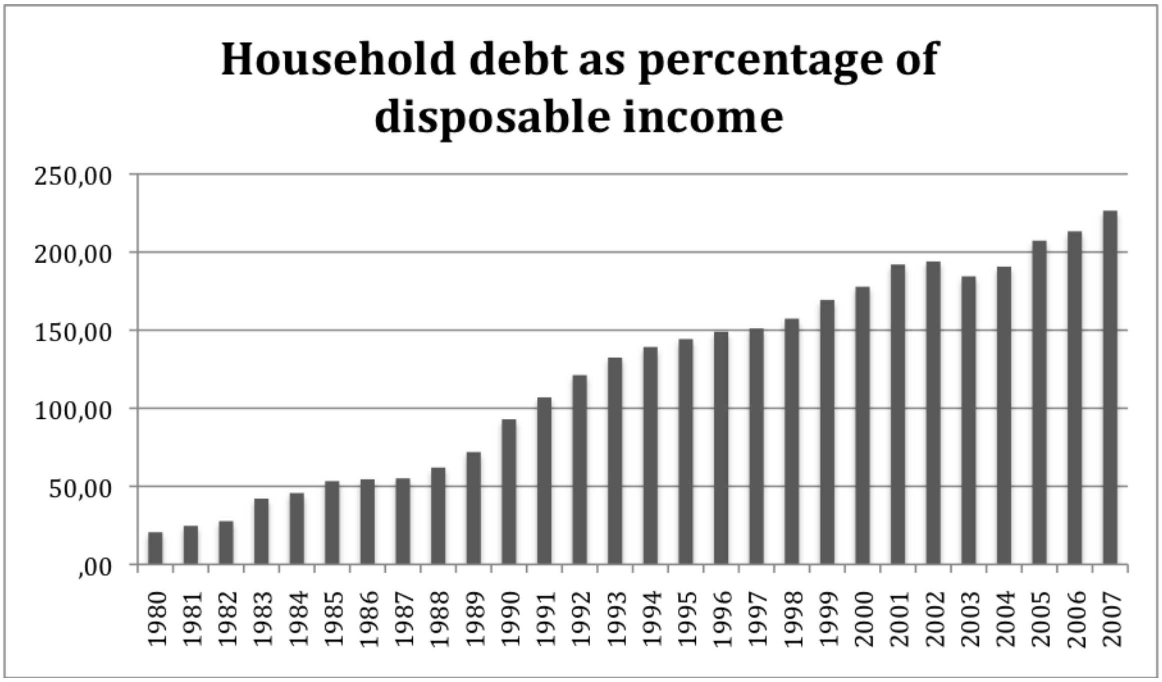

Figure 4: Household debt as percentage of disposable household income, source: Central Bank of Iceland

Note that households increase their debt exposure dramatically after 1990. This coincides with the slow-down of inflation in the wake of a well orchestrated income policy effort by federations of employers, employees and the government in 1990, usually referred to as the National Consensus. It is noteworthy that the households are increasing their debt at the same time as income is growing rapidly. There were few initiatives to increase savings. On the contrary, consecutive tax-reductions signalled to households that they were likely to control a bigger share of their income in the future and reduced the scope that the government had to force through a higher degree of national savings. Thus, both the corporate sector and the household sector increased their exposure, in effect tying down an increasing share of their future income as interest payments.

4.3 The housing market

Housing prices increased by almost 70% in real terms from 2000 till 2007. The real jump comes after the election in 2003 and the entrance of the newly privatized banks into the market for mortgage loans.

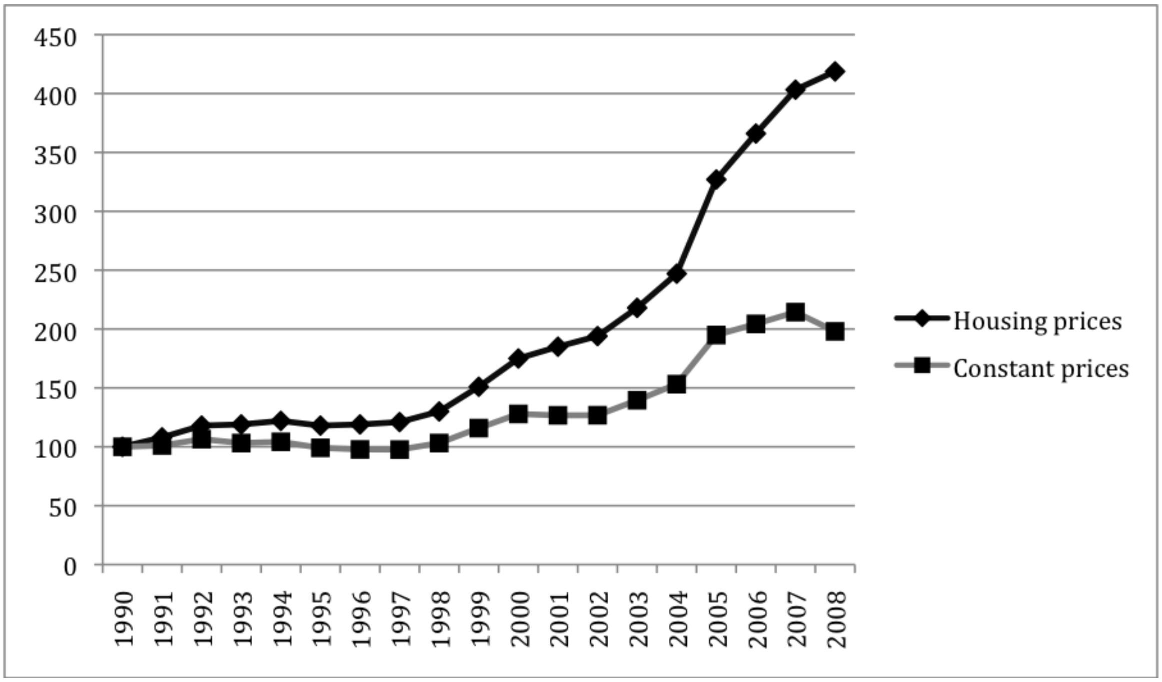

Figure 5: Development of housing prices in nominal and real terms. Source: Fasteignamat ríkisins, own calculation

Figure 5 traces how the cost per square meter in a private dwelling in the capital area develops. Note that in real terms the price does not increase throughout the period from 1990 to 2000. Real prices begin to pick up after 2000 and make the biggest jump between 2005 and 2006.

The development of the housing market should be compared to the debt of the household sector for two reasons. First, housing is a huge part of private debt. But, secondly, the rising value of households' biggest asset made it possible for households to increase their debt. The State-run HFF openly refused to extend credit for homeowners except when actually buying a house or a flat. The private banks openly encouraged people to take out a second mortgage on their property! Thus, the change of policy in the HFF (increasing loans) and the subsequent influx of money into the housing market as the private banks competed with the HFF for market share, compounded by the inflexibility of supply in that market created a housing price bubble that showed signs of contraction in 2008.

4.4 Investment

Investment was highly volatile during the first decade of the 21st century. Figure 6 shows the development.

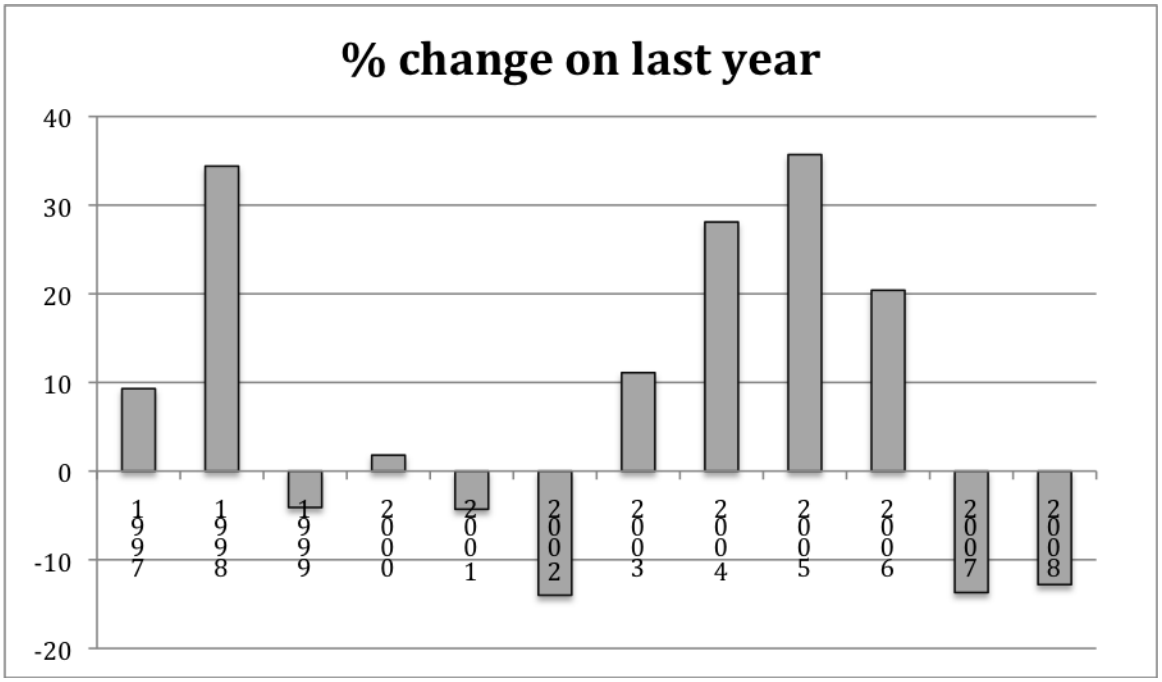

Figure 6: Investment, percentage change from last year, Source: Statistics Iceland.

There are several things that contribute to the volatility of the series. The unevenness of the development of the value of the króna has huge impact on the investment series. More valuable króna implies that the volume of the imported part of investment shrinks. The increase in housing prices sat on a boom in housing investment. Finally, investment in smelters and hydro-electricity also contributed significantly to the volatility. Figure 7 shows the development of investment in various sectors in real terms. The nominal figures are deflated by the price index for investment in the national account. That index is highly volatile.

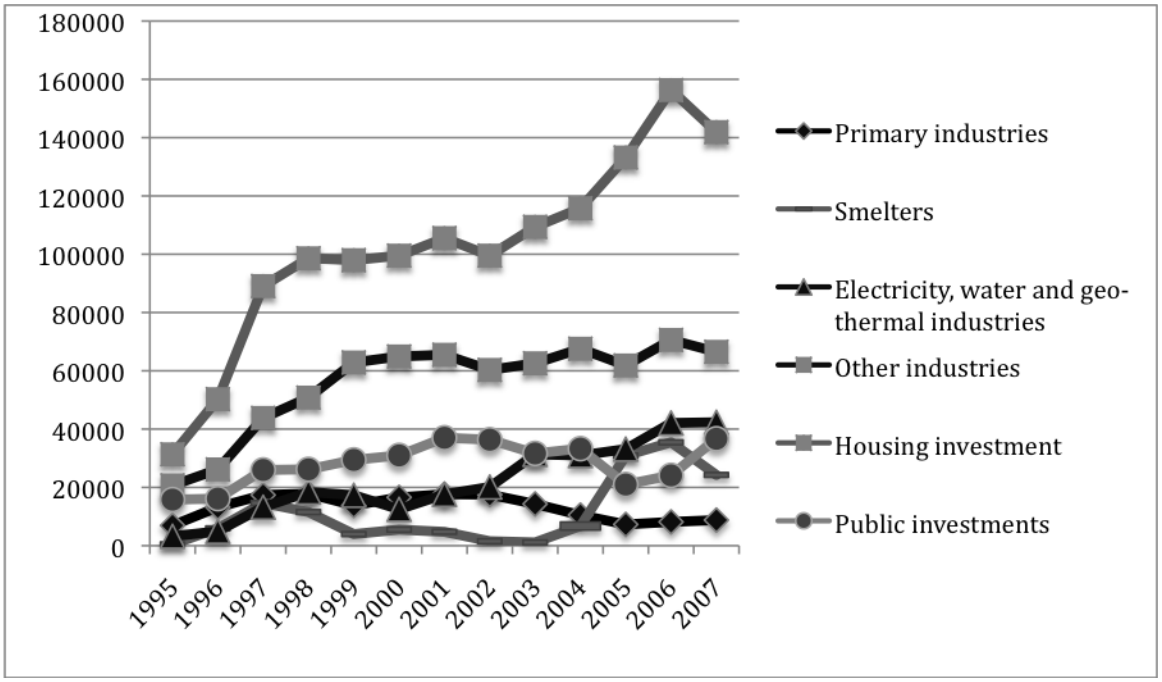

Figure 7: Investment activity in Iceland by industries. Source: Ministry of Finance, own calculations.

The government fully controlled public investments, electricity investments and the investment in smelters. Furthermore, governmental decisions were instrumental in inducing the onset of the investment boom in housing.

4.4 Inflation, the discount rate and other actions of the Central Bank

In 1990 Iceland joined the European Economic Area (EEA) together with several other European Free Trade Association (EFTA) members. One of the obligations that Iceland had to fulfil was to abandon restrictions on movement of capital in and out of the country. The income policy efforts of the National Consensus calmed inflation and opened up the opportunity to peg the Icelandic króna to a basket of currencies. That system came under stress and was abandoned in favour of a floating exchange rate anchored by an inflation target in 2001. The target was set as 2.5% inflation with a floor and a ceiling at the 4% and the 1% marks. Figure 8 gives the development of the annual average inflation.

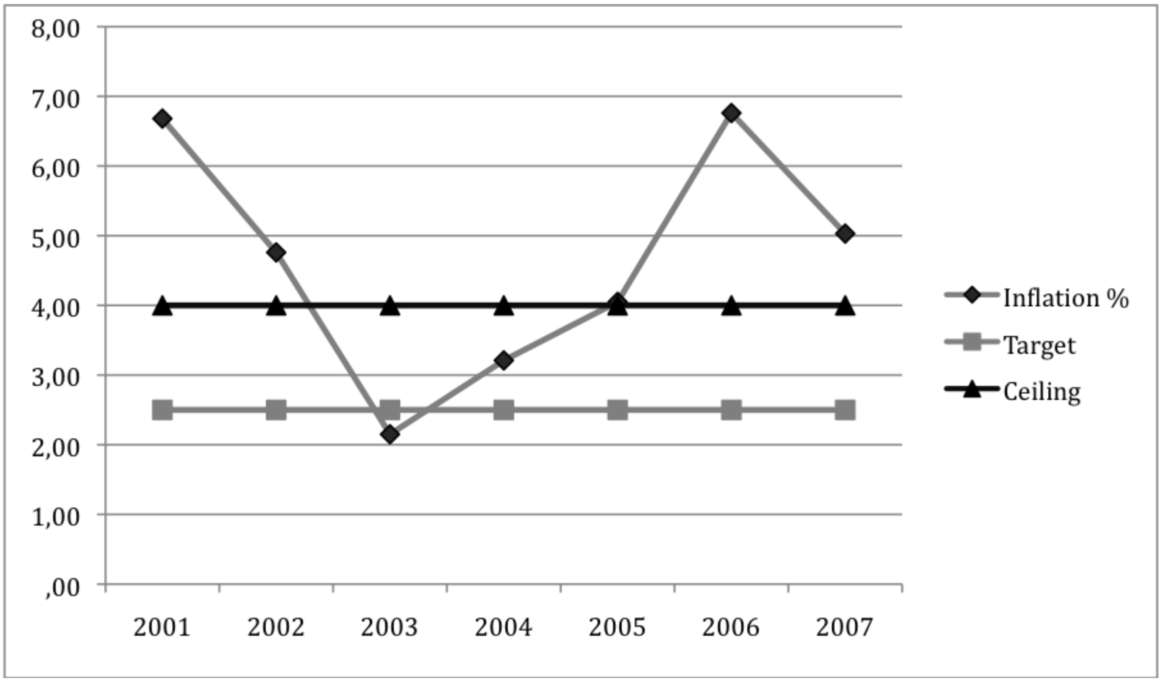

Figure 8: Inflation, the inflation target and the maximum value acceptable, Source: Statistics Iceland

The goal of stabilizing inflation between 1 and 4% can hardly be seen as a success when judged by Figure 8. That does not mean that the Central Bank did not try. Figure 9 shows the development of the discount rate during the period of inflation targeting. Hence, it is clear that the Central Bank's response to the pressure in the economy was in line with theory and also in line with actions taken by larger central banks in similar situations. The criticism aimed at the bank was of two types. First, the bank was criticized for not being bold enough when increasing the discount rate. It was also criticized for not acting fast enough when signs of pressure were sighted on the horizon. Many of the rank and file in the economics division of the bank accepted this criticism and may well have expressed similar views internally. The other type of criticism that the bank was less receptive of was that discount rate increases were ineffective as policy measures. The proponents of this view pointed out that higher Icelandic discount rate translated quickly into increased demand for krónas and an increase in the value of the króna. So instead of depressing consumption and investment demand, the higher discount rate only shifted demand from Icelandic sources to foreign sources. And as credit was readily available an increase in the discount rate induced larger external deficit (see Figure 10) and higher debt (see figure 2). The bank, understandably, did not accept this view. Its position was that the exchange rate channel would depress demand, sooner or later, as diversion of production to foreign suppliers would eventually depress domestic income. Events may well have proved them right in somewhat more dramatic manner than warranted.

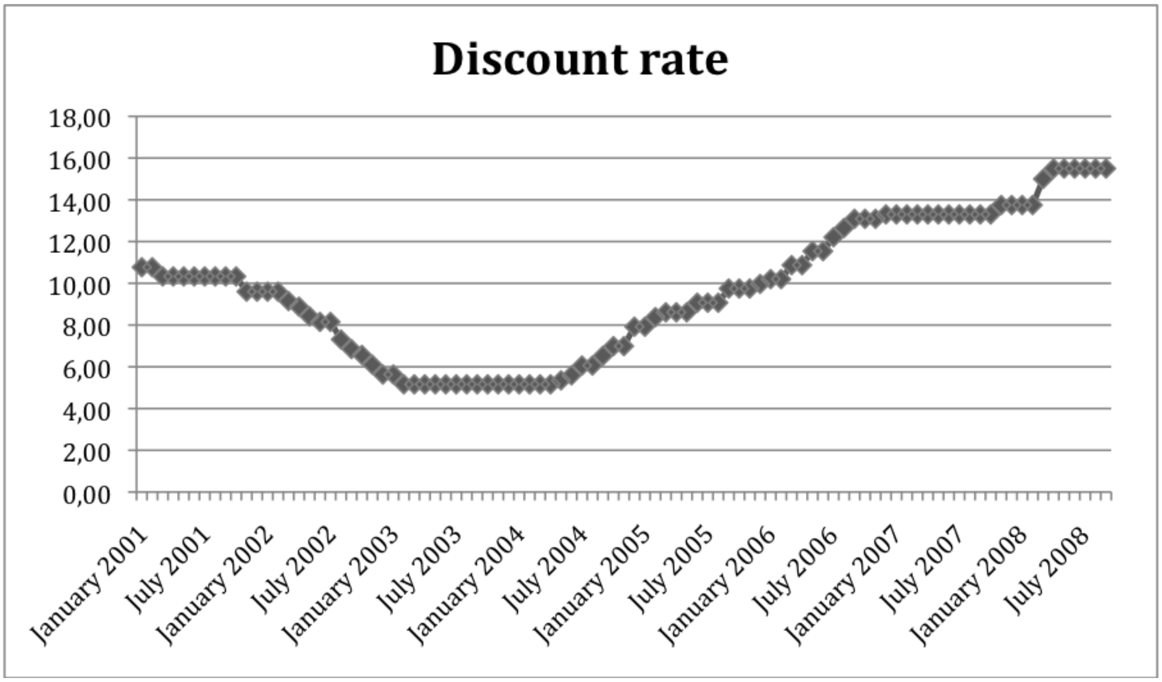

Figure 9: The Discount rate set by Central Bank of Iceland. Source: Central Bank of Iceland.

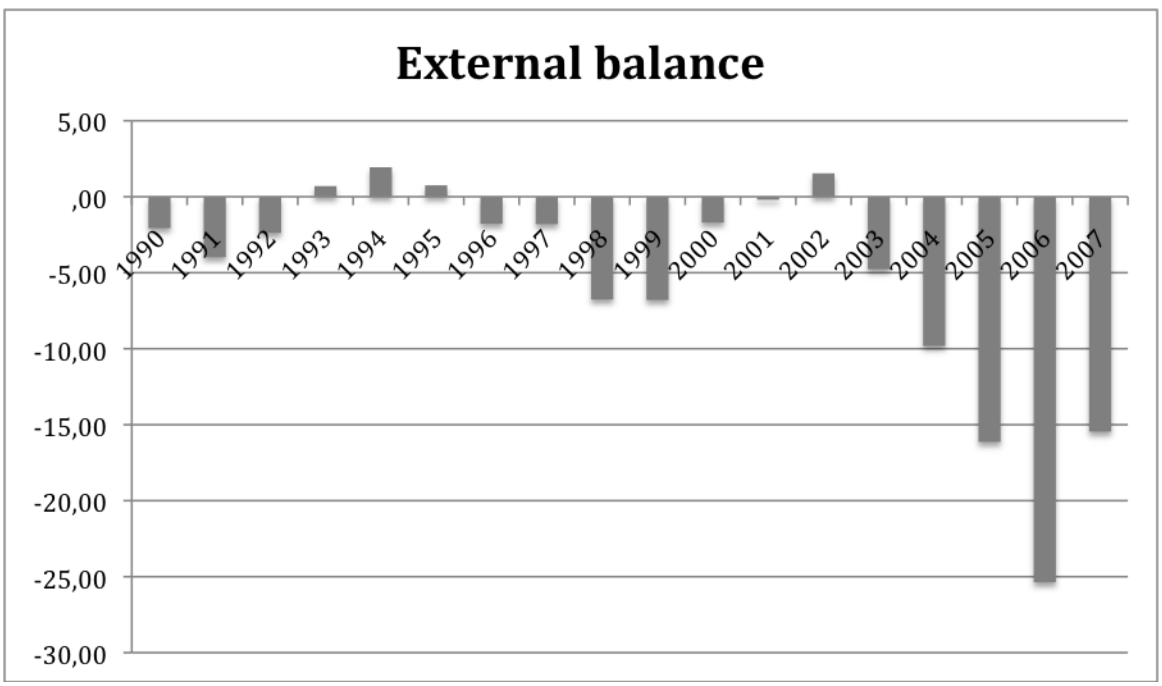

Figure 10: External balance of the Icelandic economy in percentage of GDP. Source: Central Bank of Iceland and Statistics Iceland.

The Central Bank responded to the pressure created by sloppy fiscal policy by increasing the discount rate. But the discount rate is not the only weapon in the bank's arsenal. It can restrict credit by increasing the reserve requirement and it can counter demand in the foreign exchange market by extending its own holding of foreign assets.

It took many economists by surprise when the bank *reduced* the reserve requirement in 2003. The bank also abandoned the reserve requirement that had been mandated for deposits in foreign subsidiaries as late as the spring 2008. It is therefore safe to say that the bank could have coordinated its actions with respect to restraining credit growth somewhat better.

Regarding holdings of foreign reserves, the banks adhered to the rule of keeping enough reserves to serve 4 months of imports [see (Aizenman, Forthcoming)]. The rule was conceived during the Bretton Woods years of fixed exchange rates and restrictions on movements of capital between countries. The purpose of reserves was to straighten out mismatches between the flow of payments for imports and the flow of payments for exports. Many countries experienced sudden changes in flows of short term capital during the late 1990s. Thus the Guidotti-Greenspan rule of thumb was conceived, stating that foreign reserves should be in line with short term debt of the country maturing within the next 12 months.

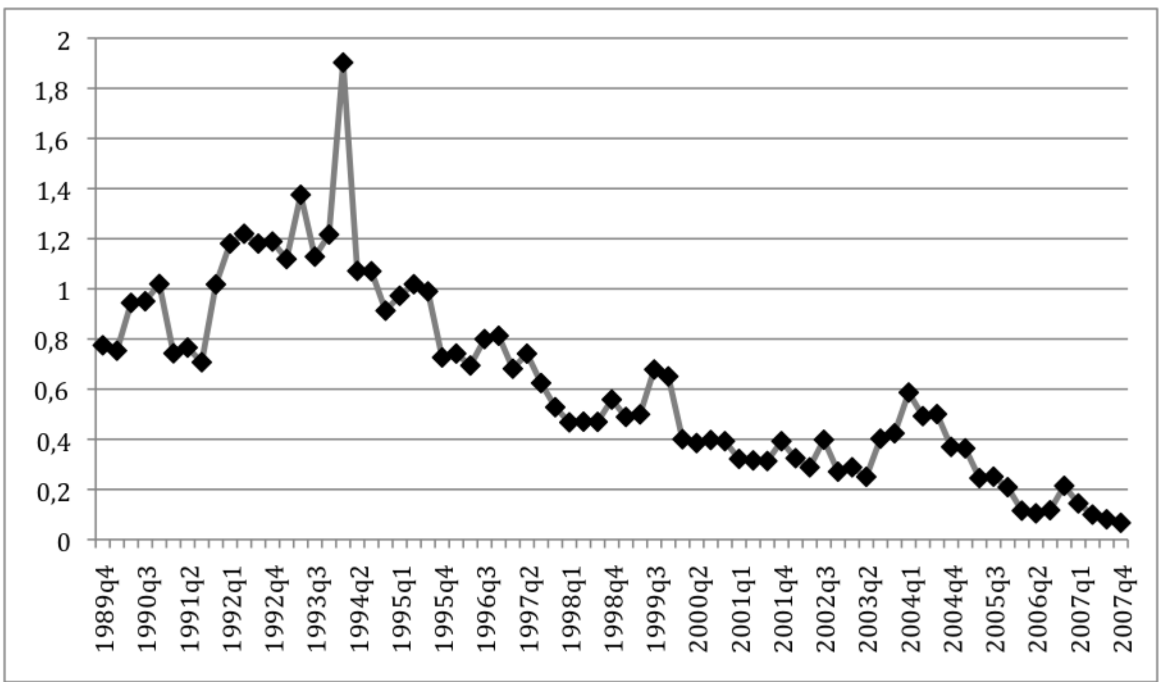

Figure 11: Reserves as percentage of short term foreign debt, source: Central Bank of Iceland, own calculation.

Due to low short-term foreign debt, the foreign reserves of the Icelandic Central Bank were more than large enough to fulfil the Guidotti-Greenspan rule of thumb until 1995. Short-term foreign debt increases rapidly in line with the Icelandic gross debt and in line with the growth of the Icelandic banking sector. Reserves do not increase to keep up with that pace.[2]

In conclusion, it seems safe to suggest that the Central Bank narrowly considered the discount rate as the only weapon in its arsenal suitable to counteract pressure in the economy. There is little, if any, evidence to suggest that the Bank did try to curb the growth of the banking sector.

5. Development of asset prices and the exchange rate of the kroná

The development of prices of a real asset, housing, has already been discussed. That price development is moderate when compared to the development of the stock market index. It should be noted that during the latter part of the first decade of the 21st century about 80% of the stock market capitalization consisted of shares in financial institutions.

The nominal value of stocks in Iceland increased nine-fold from the beginning of the privatization of the Icelandic banks until they peak in 2007 and 2008. There are short periods of hiccups. The so-called mini-crisis hit in 2006. Rating agencies and analysts with foreign banks (Danish and Scottish banks in particular) voiced concerns that the Icelandic banks relied too heavily on the whole-sale market for loans for meeting their financial needs. Furthermore, many commentators pointed out that the Icelandic banks might be too big to fail while at the same time they might be too big relative to the capacity of the Icelandic government to come to their rescue. "Too big to fail and too big to rescue" was the slogan. The Icelandic reaction was along two lines. The banks changed their financial model, opened up for retail banking in the UK and elsewhere (Icesave and Kaupthing Edge) and reduced their exposure to whole-sale banking. Furthermore, the Icelandic Chamber of Commerce commissioned Frederic Mishkin and Tryggvi Thór Herbertsson to write a report on the financial health of the Icelandic banks. See, (Mishkin & Herbertsson, 2006). They concluded that the operation of the Icelandic banks was more or less sound. A second report commissioned by the Chamber of Commerce with the same agenda but written by Richard Portes and Fridrik Már Baldursson (see (Portes & Baldursson, 2007) was published in late 2007. They concluded

[2] One of the governors of the Central Bank of Iceland stated in a radio interview that to his knowledge there was no such thing as the rule of thumb that reserves should match short term debt, see http://www.ruv.is/heim/frettir/frett/store64/item209034/, retrieved February 23, 2009, from Rúv. Other employees of the Central Bank were probably better informed. The Bank's Chief Economist, Arnór Sighvatsson, used arguments suggested by Rodrik, D. (2006). *The Social Cost of Foreign Exchange Reserves.* CEPR. London: CEPR. to argue against an increase in reserves at a public meeting at the University of Iceland, May 5th, 2008.

much in the same manner as Mishkin and Herbertsson. There was a second hick-up in spring of 2008. The Chamber of Commerce, among others, pointed to the Portes and Baldursson report and to the fact that Icelandic banks did not have the toxic subprime loan bundles on their books. The market seemed to buy those explanations. Evidence unearthed after the collapse in October 2008 suggests that attempts were made on behalf of some of the biggest stock-holders to manipulate the market and keep the stock prices at artificially high levels during the last months before the collapse.

Figure 12: Development of the Icelandic Stock Market, Monthly Data, Source: Central Bank of Iceland

Conclusions

The purpose of this paper is to give background information for the very dramatic events that unfolded during the first week of October 2008. Three banks, accounting for the bulk of bank trade in Iceland and with large overseas operations, collapsed in a matter of days leaving the people of Iceland in disbelief and shock. Do we have answers to the serious questions asked at the outset of this paper? The answer is no. Information is still being unearthed by various institutions, governmental and non-governmental. Foreigners have, by Icelandic standards, an unusually high level of interest in learning the true story. That fact has given life to a hope that the usual whitewashing of those responsible will not be tolerated. Nonetheless, as this author reads the facts, there is no question in his mind that the policymakers are first in line when blame is allocated. They wanted to do too many things in too short a time. Is that a crime? The answer may well be no if the criminal code is used as a yardstick. But, the main function of politicians is to rank and prioritize so as to avoid economic chaos and collapse. Running an economy with current account deficit up to 25% of GDP is a bigger offence than many of those listed in the book of law. Second in line are the institutions responsible for keeping track of the expansion of bank credit and the value of the currency and the financial stability. These institutions received early warnings but did not react properly. That is inexcusable.

Lastly: History did not stop in October 2008. The story is still unfolding. There are still papers to be written.

References

Aizenman, J. (Forthcoming). Financial Crises. In P. U. Press, *Princeton Encyclopedia of the World Economy* (p. Unknown). New York, New York, USA: Princeton University Press.

Duenwald, C., Gueorguiev, N., & Schaechter, A. (2005). *Too Much of a Good Thing? Credit Booms in Trnasition Economies. the Cases of Bulgaria, Romania, and Ukraine.* International Monetary Fund, Economics Department. New York: IMF.

Juliusson, T. S. (2008, Februar 29). Útrás tekin að láni. *24 stundir* , p. 4.

Mishkin, F., & Herbertsson, T. T. (2006). *Financial Stability in Iceland.* Iceland Chamber of Commerce. Reykjavik: Iceland Chamber of Commerce.

Portes, R., & Baldursson, F. M. (2007). *The Internationalisation of Iceland's Financial Sector.* Iceland Chamber of Commerce. Reykjavik: Iceland Chamber of Commerce.

RÚV. (2008, May 26). *Fréttir*. Retrieved February 23, 2009, from Rúv: http://www.ruv.is/heim/frettir/frett/store64/item209034/

Rodrik, D. (2006). *The Social Cost of Foreign Exchange Reserves.* CEPR. London: CEPR.

Svavarsson, D., & Sigurdsson, P. Ö. (2007, July). Iceland's internatinal investment position and balance on income. *Monetary Bulletin* .