Regulation of financial institutions, financial crises and rescue packages in Europe: the Iceland case

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1. Introduction

In earth sciences and genetics, Iceland has become one of the world’s truly important laboratories. Geologists appreciate that studying seismic activity in Iceland can yield important information concerning seismic activity in other parts of the world, as well as key data relating to the origin and the future of the earth. Iceland’s small, historically isolated population also provides geneticists with an ideal environment in which to study the human genome and certain human conditions and diseases. Their findings may well influence the treatment and management of various illnesses on a global basis.

With the passage of each month, the financial and banking challenges facing economies throughout the developed world look increasingly like those encountered by Iceland and its financial institutions as early as mid-2008. These challenges have also created an opportunity to use the continuing Icelandic experience as a laboratory, this time for understanding and resolving what has now come to be referred to as the global financial crisis. In this chapter, we examine the developments in, or characteristics of, the Icelandic economy that may have served to magnify the effects of the global financial crisis within Iceland, as well as the responses to the crisis of the Icelandic government, the International Monetary Fund (IMF) and others.

2. Background on the Icelandic economy

The Icelandic economy grew significantly in the 20th century and has continued to grow in the 21st century, although this growth has been volatile. Before World War II, Iceland was one of the poorest nations in Northern Europe. Its recent prosperity is principally attributable to its comparative advantage in natural resources, both marine and land-based, although it also enjoys the advantage of a high labour force participation rate. In addition, the introduction of wide-ranging free market reforms fuelled the economy’s rapid growth beginning in the 1990s. The economy expanded by between 40% and 50% from 1994 to 2006, despite a mild slowdown during 2001 and 2002.1 In 2004 gross domestic product (GDP) per capita amounted to $32,600, well above the Organisation for Economic Cooperation and Development average. In a 2005 United Nations Human Development Report, Iceland ranked second in terms of standard of living among 177 countries surveyed.2 Although Iceland has not yet joined the European Union, its participation in the European Economic Area (EEA) has resulted in closer economic integration into the EEA and in economic globalisation.

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1 See Kaupthing Bank hf, *The Icelandic Economy* (March 2006), at 15.
2 Id.
Historically, the Icelandic economy has depended on the fishing industry for exports. For example, the fishing industry provided approximately 60% of export earnings in 2004. However, the importance of this industry has declined in recent years, accounting for between 56% and 60% of total exports and 8% of GDP in 2006. Power-intensive industries have been another area of focus, with aluminium and aluminium products accounting for approximately 18% of export earnings in 2004. It is only recently that the economy has expanded into other non-traditional, human capital intensive industries, such as biotechnology, information technology and financial services. The services, industrial production (non-aluminium), construction, commerce and catering, transportation and government sectors have contributed the most to economic growth from 1994 to 2003.

2.1 Deregulation in Iceland

The Icelandic government liberalised its financial markets quickly in order to bring itself in line with its EU counterparts. This process occurred in stages between 1985 and 2003. The government abolished interest rate controls between 1985 and 1990, opened the capital account in 1995 and privatised the banking sector between 1998 and 2003. In 1994 Iceland became a member of the EEA; and as a condition of membership it was required to adopt policies permitting the free movement of capital, labour, and goods and services among Iceland and EU members. Iceland also adopted regulations consistent with EU directives on banking, insurance and securities trading.

Privatisation began in 1991 as part of the adoption of free market principles. The process started with smaller industries, including travel agencies, fertiliser plants, fish processing plants and alcohol production. In 1990 the government facilitated the formation of the first privately held commercial bank in Iceland, Glitnir Banki hf, through the merger of two state-owned banks and one privately held bank. Glitnir obtained its formal listing on the Iceland Stock Exchange in 1993. In 1998, after directing the mergers of many privately held banks, the government commenced the privatisation process for two other state-owned commercial banks, Landsbanki Íslands hf and Kaupthing Bank, through public equity offerings (15% of total equity) in each bank. In December 1999 the government sold an additional 15% equity interest in both banks and completed the privatization in 2003. Together with Glitnir, these were the three largest commercial banks in Iceland.

2.2 Rapid growth of Icelandic banks

Privatisation and deregulation led to the rapid growth of the Icelandic banks. Iceland became an international banking centre, with banks performing financial intermediation mostly outside the country. The internationalisation of Icelandic banks affected the way in which these banks financed their activities. In early 2000 less than one-third of the banking sector’s financing originated from abroad, compared to two-thirds in 2006. In only five years the banking sector transformed itself from a system of local depository institutions to an international financial intermediary.

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3 Id at 12.
4 Id.
5 Id at 13.
6 Id at 11.
7 Id at 12.
8 Frederic S Mishkin and Tryggvi Thor Herbertsson, Financial Stability in Iceland (May 2006), at 27.
The banking sector’s expansion has been international in scope. Growth was achieved principally through an increase in mortgage origination activities and the acquisition of foreign financial companies. For example, in 2004 Kaupthing acquired the Danish bank FIH, thus becoming the largest banking group in Iceland. In 2005 Glitnir acquired BNbank of Norway and Kaupthing consolidated its leading position by acquiring the UK bank Singer & Friedlander. In 2006 and 2007, the Icelandic banks focused on consolidating their activities both in Iceland and abroad. At the end of 2007, 41% of the total assets of the largest commercial bank groups consisted of foreign subsidiaries.\(^9\)

This foreign expansion and lending by parent banks to non-residents broadened the banks’ income base and diversified their risk. The banking group’s income from outside Iceland increased, along with their foreign assets. In 2007 58% of group income originated outside of Iceland, compared to 48% in 2006. Credit to non-residents accounted for 59% of total lending at the end of 2007, compared to 61% at the end of 2006.\(^{10}\) Profitability among the largest commercial banks was also strong in 2007, with combined returns amounting to 23%, resulting from increased interest income following a rise in lending and significant income from fees and commissions, with moderate gains (compared to 2006) on securities portfolios.\(^{11}\) During 2007 the three major commercial banks made loans equivalent to about nine times the size of the Icelandic economy, an increase of approximately 200% since they were privatised in 2003.\(^{12}\)

Although the broader income base and resulting risk diversification left the banks less vulnerable to domestic shocks, they became more susceptible to foreign financial shocks.

### 2.3 Currency issues

For most of Iceland’s modern history, the government has implemented a fixed or fixed/float exchange rate policy. However, in the mid-1990s, it eliminated foreign exchange controls and, in 1993, established a foreign exchange market. In March 2001 the Central Bank of Iceland started targeting inflation using a floating exchange rate policy, in which the foreign exchange market freely determines the exchange rate. Before the financial crisis, the three major commercial banks acted as market markers for Iceland’s currency, the krona, along with the Central Bank. With a floating exchange rate policy, the krona appreciated from 2002 to 2006. Thereafter it began steadily depreciating, as a result of a deteriorating current account and the effects of the international financial crisis.\(^{13}\) The global financial crisis, discussed below, steadily eroded investor appetite for risk and demand for high-interest currencies, such as krona. The increase in foreign-denominated household and corporate debt also resulted in further depreciation of the krona.

### 2.4 Borrowing/credit markets in Iceland

During the Icelandic economy’s recent expansion, the level of household, corporate and sovereign borrowing steadily increased. Household foreign-denominated debt increased significantly in the past four years, accounting for almost 13% of total household debt at the end of 2007, despite the fact that these loans were available to households for only a short time.\(^{14}\)

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10 See *id* at 43.
11 See *id* at 44.
12 See “Cracks in the Crust”, *The Economist* (December 11 2008).
14 See supra note 8, at 26.
addition, a large proportion of these loans - 23% in March 2008 - were foreign-currency
denominated, compared to 4.5% in January 2004.15 Households in Iceland rank among the most
indebted in the world, second only to Denmark and the Netherlands, according to a 2003 study
by the Organisation for Economic Cooperation and Development.16 By October 2008 household
debt amounted to 213% of disposable income, compared to 169% and 140% for UK and US
households, respectively.17 The increase in debt across the Icelandic economy resulted in part
from the krona’s appreciation from 2002 to 2006. Many households undertook major
improvements and purchases, including home purchases, which reached a record number in 2006.18

Icelandic corporate debt is also high compared to other countries. At the end of 2003, the debt of
non-financial corporations was the equivalent of 150% of GDP.19 At the end of 2007 corporate
debt rose to more than 300% of GDP.20 Over one-third of Icelandic corporate debt is
external, whether direct or intermediated by banks, although hedged by export revenues. With
the liberalisation of capital flows and the expansion of bank balance sheets, the debt of Icelandic
non-financial corporations increased from 80% of GDP in 1997 to 144% in 2002.21 Although
this was mostly due to acquisition activity and the formation of foreign subsidiaries, a significant
portion of the increase resulted from the government’s privatisation programme. In addition, the
acquisition activity was to a certain extent self-perpetuating, as banks and non-financial
corporations took advantage of the abundance of cheap borrowed money (due to the appreciation
of the krona) to purchase assets from each other, thus inflating those asset values (as well as the
balance sheets of the acquiring entities), and allowing the banks and non-financial corporations
to engage in further rounds of borrowing and asset purchases.22

Icelandic sovereign debt has also increased significantly in recent years, as a result of increased
Foreign participation in the bond market also grew. In March 2006 foreign investors owned
approximately one-third of all government-issued bonds. In addition, the market value of listed
bonds amounted to $7.3 billion in 1999 (at 2005 price levels), compared to $17.3 billion at the
end of 2005.

2.5 Sovereign ratings
Icelandic sovereign debt ratings steadily improved over the last decade. In 2002 Moody’s
Investors Service, Inc rated the government’s foreign-denominated debt AAA, its highest rating.
In 2006 the government’s long-term debt ratings, including foreign and domestic-denominated
liabilities, were relatively high, with a stable outlook provided by Moody’s and Standard &
Poor’s Ratings Services. Only Fitch Inc provided a negative outlook. Iceland’s high credit rating
contributed to increased borrowing. In January 2008, as it became clear that the Icelandic

15 See id.
16 See supra note 1, at 15.
17 See “Kreppanomics”, The Economist (October 9 2008).
18 See supra note 12, at 20.
19 See id at 29.
20 See id. at 33.
21 See id.
economy was slowing down as a result of the global financial crisis, all three ratings agencies downgraded Iceland’s long-term sovereign debt, as well as the long-term debt of the three major commercial banks. This downgrade limited the banks’ access to the credit markets, thus increasing their financing costs, which impaired their liquidity. Speculators then drove down the price of the krona and Icelandic stocks and bonds.

3. Overview of the financial crisis

The global financial crisis precipitated the Icelandic financial crisis. Few national economies have been shielded from the effects of the global financial crisis. However, a number of factors made the Icelandic economy, including the banks, more susceptible to, and less resilient in the face of, an economic downturn.

The Icelandic banks had expanded rapidly. As we note above, deregulation or liberalisation of regulations permitted the banks to expand their operations. Given the relatively small size of the Icelandic economy, the banks’ rapid growth relied principally on growth outside of Iceland. Icelandic banks financed most of their mortgage loan originations and other activities through short-term and other financing in foreign markets. Financing for the banks was relatively cheap given their own ratings and the Icelandic sovereign ratings. Also, from 2002 to 2006, the krona appreciated significantly. Cheap and accessible financing permitted the banks to extend credit; and borrowing levels by Icelandic households increased significantly. Most of the foreign debt accumulated by the banks was through US and European financial institutions and financial products. In addition, the expansion in bank balance sheets created a dependency on the short-term funding market to maintain liquidity, particularly as the banks began to experience difficulties beginning in early 2008. Their dependence on foreign financing made the banks more sensitive to external financial shocks, particularly volatility in the exchange rate and investor speculation.

Many commentators forget that the financial crisis began with the US sub-prime mortgage crisis in 2007. As US housing prices fell, the value of mortgage-related securities, including securitised products, declined. Financial institutions that had portfolios of mortgage-backed and asset-backed securities found that there was no longer a liquid market for these securities. Applicable fair value, or mark-to-market, accounting standards required institutions to write down the value of these securities. Quarterly writedowns of these portfolios depleted the capital of many large institutions and resulted in a loss of investor confidence and falling stock prices. Investors became wary about the value of other complex securities, including credit-linked securities. Following announcements by American International Group and various monoline insurers regarding their exposures to credit derivatives, shell-shocked investors were quick to blame credit derivatives, especially credit default swaps, for contributing to the financial crisis. Market participants and regulators alike were troubled by the fact that there was limited awareness regarding the actual size of the credit derivatives market. Regulators also became increasingly concerned as they detected a correlation between the prices of credit default swaps and

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23 For example, in February 2008 Moody’s credit ratings for the three major commercial banks were downgraded to A1 or A2 for long-term debt, P-1 for short-term debt and C- for financial strength, from AA3, P-1 and C, respectively. By September 2008, just before the onset of the financial crisis, Moody’s placed these credit ratings on review for a possible downgrade.
subsequent public announcements related to the failures of various financial institutions. All of these developments caused a liquidity and credit crunch.

The three major commercial banks were financially sound, maintained adequate capital ratios, and did not invest in sub-prime mortgages or other toxic assets or securities. However, financial market uncertainty led to:

- assets and financial instruments related to sub-prime mortgages being devalued;
- a sharp increase in inter-bank borrowing rates; and
- a decreased supply of short-term credit for US financial institutions.

This quickly spread to non-US financial institutions. The deterioration in investor confidence in Icelandic banks was further magnified by the small size of the Icelandic economy and its small currency. Relatively small changes in financial flows had a dramatic impact on Icelandic asset prices, particularly on the exchange rate. Speculation then began in the international financial markets regarding a financial meltdown. This may not have been completely warranted by economic fundamentals, but it still resulted in widening spreads on credit derivatives related to Icelandic banks, including credit default swaps, and sharply decreasing access to short-term credit for Icelandic banks. This all resulted in a flight away from Icelandic assets. The banks then faced debt servicing issues.

If we step back and consider the events that led to the demise of Bear, Stearns & Co Inc (which ultimately resulted in the federal government negotiated merger with JPMorgan Chase) or of Lehman Brothers Holdings Inc (which ultimately resulted in a bankruptcy filing), we observe many similar patterns. There was public speculation regarding the financial health of these institutions, which both relied on significant leverage and, in the case of Bear Stearns, on short-term financing to fund their operations. Public speculation regarding liquidity led to rapid stock price declines and to widening credit default swap spreads for these entities. The relationship between shorting in these stocks and the credit default swap trading levels requires a closer analysis; however, it is clear that both institutions were negatively affected by trading in the equity and credit markets. Of course, Bear Stearns and Lehman were not deposit-taking institutions, but there are a number of useful bank run analogies and parallels to be studied more closely by economists in the future.

The Icelandic government and the Central Bank did not provide sufficient liquidity to the banking system as the lender of last resort before the collapse of the Icelandic banks. This was partly because the Central Bank did not have sufficient foreign currency reserves to lend to the troubled banks, which was a result of the Central Bank’s monetary policy. However, the fact that the banks’ foreign debt far exceeded the size of the Icelandic economy ensured that the Central Bank would not have had sufficient foreign currency reserves to service the banks’ foreign debt.

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24 The sub-prime mortgages were unsecured loans with initially favourable terms, including a high loan-to-value ratio, low interest rates, and no repayment of principal made to borrowers with a limited or unknown capacity for repayment. The original lenders generally sold sub-prime mortgages to financial institutions, which then typically repackaged the mortgages into more complex instruments (along with other underlying assets), commonly referred to as collateralised debt obligations, that were typically assigned high credit ratings.
The rapid depreciation of the krona also exacerbated the situation. The krona was particularly vulnerable to exchange rate volatility because it was a small currency, meaning it was less likely to be held by other central banks as a reserve currency or to hold its value over time as investor confidence in the Icelandic government and banks evaporated.25

Nationalisation of the three major commercial banks signalled to the international financial markets the existence of a full-fledged financial crisis. It also triggered further investor withdrawal and speculation. As a result, the krona rapidly depreciated (trading at 80% of its value in domestic markets), domestic interest rates rose sharply and the Iceland Stock Exchange quickly lost 90% of its value.26 By the time the government began discussions in late October 2008 with the IMF regarding a financial rescue package, the damage had already been done.

4. Timeline of events

The financial crisis evolved from a banking sector crisis that first surfaced in September 2008. The following timeline highlights the most significant developments, which we discuss below.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Late September 2008</td>
<td>Glitnir approaches the Central Bank for a loan, after failing to raise funds to service an upcoming debt payment of €600 million falling due on October 15 2008</td>
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<tr>
<td>September 29 2008</td>
<td>The Icelandic government announces that it has agreed to lend Glitnir €600 million in return for a 75% equity stake in the bank.</td>
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<tr>
<td>October 4 and 5 2008</td>
<td>UK depositors begin making withdrawals from their online savings accounts with Landsbanki, after discussions in the international press questioning the solvency of Icelandic banks.</td>
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<tr>
<td>October 6 2008</td>
<td>The Icelandic Supervisory Authority suspends trading in the Icelandic banks on the stock exchange. The Central Bank temporarily pegs the krona against the euro and imposes currency controls. The government issues an emergency law and states that domestic deposits will be fully guaranteed.</td>
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<tr>
<td>October 7 2008</td>
<td>In an effort to contain the banking crisis, the government authorises the Supervisory Authority to take over Glitnir and Landsbanki. The Central Bank announces that it is in negotiations to receive a €4 billion loan from Russia.</td>
</tr>
<tr>
<td>October 8 2008</td>
<td>The government agrees to provide Kaupthing with a €500 million emergency loan to help improve its liquidity. The Central Bank abandons the exchange rate peg. Landsbanki announces that it will not process any deposits or any withdrawal requests through</td>
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26 See “Cool Aid?”, The Economist (October 28 2008).
By this point, UK depositors have already withdrawn £200 million from their Landsbanki accounts.

In response to concerns that Icelandic banks and the Icelandic government will not completely guarantee foreign deposits, the UK government invokes anti-terrorism legislation to freeze the UK deposits of Kaupthing and seize the UK assets of Landsbanki, resulting in the complete collapse of these two banks.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>October 9 2008</td>
<td>The Icelandic government nationalises Kaupthing.</td>
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<td></td>
<td>The Icelandic Supervisory Authority suspends all trading on the stock exchange for two days.</td>
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<tr>
<td>October 11 2008</td>
<td>The Supervisory Authority establishes a new banking entity to take over part of Landsbanki’s operations.</td>
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<tr>
<td>October 12 2008</td>
<td>The government announces that it is formally engaged in talks with the IMF regarding the stabilisation of the krona and interest rate targeting.</td>
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<td>October 14 2008</td>
<td>The three major commercial banks request delisting from the Iceland Stock Exchange, beginning with Landsbanki.</td>
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<tr>
<td>October 15 2008</td>
<td>The Supervisory Authority establishes a new banking entity for Glitnir.</td>
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<tr>
<td>October 22 2008</td>
<td>The Supervisory Authority establishes a new banking entity for Kaupthing.</td>
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<td>October 19 2008</td>
<td>The IMF tentatively agrees to an emergency loan of €1.58 billion.</td>
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<td>October 28 2008</td>
<td>The Central Bank raises interest rates from 12% to 18%, as trading resumes in the krona after a one-week suspension.</td>
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<tr>
<td>November 2008</td>
<td>The government grants temporary moratoria on payments to creditors for the three major commercial banks.</td>
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<td>The Central Bank imposes more stringent currency controls, including daily currency auctions for the importation of necessary goods.</td>
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<td>November 16 2008</td>
<td>As a condition to the approval of the IMF plan, Iceland commits to guarantee each online depositor a minimum payment of €20,887 (approximately $26,400).</td>
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<tr>
<td>November 19 2008</td>
<td>The IMF approves a two-year SDR1.4 billion (approximately $2.1 billion) standby arrangement for Iceland to support the country’s efforts to restore investor confidence and stabilise the economy.</td>
</tr>
<tr>
<td>November 20 2008</td>
<td>The United Kingdom agrees to loan to Iceland $3.3 billion to cover the estimated 300,000 UK depositors in online savings accounts with Landsbanki and Kaupthing.</td>
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<td></td>
<td>The Netherlands and Germany also agree to loan €1.3 billion and €1.1 billion, respectively, to cover Dutch and German online depositors.</td>
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<tr>
<td>Date</td>
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<tr>
<td>December 6 2008</td>
<td>The Central Bank introduces a new currency regime, which leads to the krona rising by 25% within three days.</td>
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<td>January 5 2009</td>
<td>The government supports the decision of the resolution committees of Kaupthing and Landsbanki to file suit against UK authorities regarding the seizure of Icesave accounts.</td>
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<td>January 13 2009</td>
<td>The government appoints a special prosecutor to investigate criminal activity in connection with and in the wake of the financial crisis.</td>
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<td>January 26 2009</td>
<td>The coalition government of the Independence Party and the Social Democratic Alliance collapses.</td>
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<td>February 1 2009</td>
<td>A new coalition government of the Social Democratic Alliance and the Left-Green Movement takes office.</td>
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<td>February 9 2009</td>
<td>The government appoints a new board of directors for the Supervisory Authority.</td>
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<td>February 26 2009</td>
<td>The government passes a bill amending the Central Bank Act, including changes to the Central Bank’s administrative structure, a reduction in the number of governors and the establishment of a monetary policy committee.</td>
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<tr>
<td>March 3 2009</td>
<td>The government hires international corporate advisory firm Hawkpoint to assist with the recapitalisation of Glitnir, Kaupthing and Landsbanki.</td>
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<tr>
<td>March 9 2009</td>
<td>The Supervisory Authority takes control of Straumur-Burdaras Investment Bank hf, the last significant financial institution to collapse.</td>
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<tr>
<td>March 10 2009</td>
<td>The government appoints Norwegian-French Magistrate Eva Joly as a special adviser for the investigation of cases linked to the financial crisis.</td>
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<tr>
<td>March 13 2009</td>
<td>The IMF conducts its first review of Iceland under the standby arrangement.</td>
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<td>April 8 2009</td>
<td>The Central Bank cuts interest rates for the second time that month, from 17% to 15.5%.</td>
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<td>April 25 2009</td>
<td>The president of Iceland dissolves the Icelandic Parliament and announces new elections.</td>
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<td>May 7 2009</td>
<td>The Central Bank cuts interest rates by 2.5% to 13%.</td>
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<tr>
<td>May 10 2009</td>
<td>A new coalition government takes office and the Social Democratic Alliance and the Left-Green Movement continue their cooperation.</td>
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<tr>
<td>May 25 2009</td>
<td>The government presents a proposal to the Parliament authorising it to begin talks on EU membership.</td>
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<tr>
<td>June 6 2009</td>
<td>Iceland agrees to reimburse the United Kingdom and the Netherlands for compensation paid out to UK and Dutch depositors in Icesave accounts of Landsbanki.</td>
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<tr>
<td>July 1 2009</td>
<td>Denmark, Finland, Sweden and Norway sign loan agreements with</td>
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<td>Date</td>
<td>Event Description</td>
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<tr>
<td>July 7 2009</td>
<td>The offices of Icelandic investment firms Sjova and Milestone are searched in a criminal investigation related to the collapse of the banking system.</td>
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<tr>
<td>July 16 2009</td>
<td>The Parliament approves Iceland’s application for EU membership.</td>
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<tr>
<td>July 20 2009</td>
<td>The government announces a plan to recapitalise Glitnir, Kaupthing and Landsbanki through the creation of new banks and cede control of them to creditors. The government and the creditors of the banks agree to inject a total of Ikr270 billion (approximately €1.5 billion or $2.1 billion) into the new banks to restore them to normal operations, with the government issuing bonds to the new banks.</td>
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<tr>
<td>August 1 2009</td>
<td>The IMF announces that it has reached an agreement with the government on policies underpinning the first review under the standby arrangement, but that the review, which would release the second instalment of the $2.1 billion loan, has been delayed.</td>
</tr>
<tr>
<td>August 4 2009</td>
<td>The Securities Fraud Office intensifies its investigations following a leak regarding Kaupthing’s loan book and begins examining the prior activities of Glitnir and Landsbanki.</td>
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</table>

### 4.1 Nationalisation and restructuring of the three main banks

Concerns about the stability of the banking sector surfaced throughout 2008, as the krona depreciated by 35% between January and September. Lehmans bankruptcy in mid-September 2008 further eroded investor confidence and made it increasingly difficult for Icelandic banks to obtain short-term credit and refinance their existing foreign debt. In late September 2008 Glitnir approached the Central Bank for a loan, after failing to raise funds to service an upcoming debt payment of €600 million falling due on October 15 2008. On September 29 2008 the Icelandic government announced that it had agreed to lend Glitnir €600 million in return for a 75% equity stake in the bank. Shortly thereafter, Glitnir’s share price collapsed, the ratings agencies downgraded Iceland, as well as the Icelandic banks, and the krona fell even further. On October 7 2008, in an effort to contain the crisis, the government authorised the Icelandic Supervisory Authority to take over Glitnir and Landsbanki, which faced a run on foreign deposits after Glitnir’s problems were disclosed. Although Kaupthing was in better financial health, it was not immune to investor and depositor concerns over its solvency. On October 8 2008 the government agreed to provide Kaupthing with a €500 million emergency loan to improve its liquidity. However, Kaupthing could not survive the defaults caused by the seizure of its online deposit accounts by the UK government. On October 9 2008 the Icelandic government nationalised Kaupthing.

On October 11 2008 the Supervisory Authority established a new banking entity to take over part of the operations of Landsbanki, including domestic assets, in order to ensure the provision of normal banking services and the safety of deposits in Iceland. It also ensured that all domestic

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branches, call centres, automated teller machines and internet accounts would remain open for business, and separated all of the international operations from the new entity, which were left in the old entity along with foreign and other riskier assets; similar entities were established for Glitnir on October 15 2008 and for Kaupthing on October 22 2008. The government supplied the new banks with equity (Ikr200 billion for Landsbanki, Ikr110 billion for Glitnir and Ikr75 billion for Kaupthing). The three major commercial banks also requested delisting from the Iceland Stock Exchange, beginning with Landsbanki on October 14 2008. Resolution committees for the banks were also established and began meeting with creditors in November 2008. The government also granted temporary moratoria on payments to creditors for the three major commercial banks in November 2008.

4.2 Government announcements
Nationalising the three major commercial banks failed to shore up investor confidence and both the krona and the Iceland Stock Exchange continued to fall sharply. On October 6 2008 the Supervisory Authority suspended trading in the Icelandic banks on the stock exchange; and on October 9 2008 it suspended all trading on the stock exchange for two days in an attempt to prevent a contagion effect in the financial market. Nevertheless, share prices continued to decline by 30% since the beginning of the month and the Supervisory Authority extended the trading suspension through October 13 2008.28

The Icelandic government and the Central Bank also took measures to stabilise the krona. On October 6 2008 the Central Bank temporarily pegged the krona against the euro and imposed currency controls, but was forced to abandon the exchange rate peg two days later. The Central Bank imposed more stringent currency controls in November 2008, including daily currency auctions for the importation of necessary goods. These controls prevented the krona from falling further. On December 6 2008 the Central Bank introduced a new currency regime, which led to the krona rising by 25% within three days.29 In order to stabilise the krona, the government and the Central Bank abandoned inflation targeting, which had been the traditional focus of Iceland’s monetary policy. On October 28 2008 the Central Bank raised interest rates from 12% to 18%, as trading resumed in the krona after a one-week suspension. The Central Bank also indicated that it was prepared to raise interest rates even further, although the IMF plan (which we discuss below) contemplates that the Central Bank will return to inflation targeting within a floating exchange rate regime by the end of 2010.

On October 7 2008 the Central Bank announced that it was in negotiations to receive a €4 billion loan from Russia in order to strengthen its foreign currency reserves. Although no formal agreement was reached, these discussions created concern in the Nordic countries and brought further international attention to the financial crisis. On October 12 2008 the Icelandic government announced that it was formally engaged in talks with the IMF regarding the stabilisation of the krona and interest rate targeting. On October 19 2008 the IMF tentatively agreed to an emergency loan to the Central Bank of €1.58 billion.

4.3 UK government freeze and seizure of bank deposits
After discussions in the international press questioning the solvency of the Icelandic banks on

29 See “Iceland Faces the Worst of Times”, The Economist (January 9 2009).
October 4 and 5 2008, UK depositors tried to make withdrawals from their online savings accounts with Landsbanki. On October 6 2008 the Icelandic government issued an emergency law stating that domestic deposits would be fully guaranteed. On October 8 2008 Landsbanki announced that it would not process any deposit or withdrawal requests through online accounts. By that point, UK depositors had already withdrawn £200 million from their Landsbanki accounts. In response to concerns that the banks and the Icelandic government might not completely guarantee foreign deposits, the UK government invoked anti-terrorism legislation to freeze the UK deposits of Kaupthing (Edge) and seize the UK assets of Landsbanki (Icesave), thus ensuring the complete collapse of these two banks. The deposits with Kaupthing were guaranteed by UK deposit insurance, in contrast to the deposits with Landsbanki which were covered by EEA legislation. After the collapse of the three major commercial banks, the Icelandic government owed $8.2 billion to foreign online depositors, almost 50% of Iceland’s GDP.30

On November 16 2008, as a condition to approval of the IMF plan, Iceland committed to guarantee each online depositor a minimum payment of €20,887 (approximately $26,400). The EEA legislation that permitted Icelandic banks to operate in the European Union mandated this minimal level of deposit insurance. Also, as part of the IMF plan, IMF loans could not be used to repay depositors. The UK then agreed to loan $3.3 billion to Iceland to cover the estimated 300,000 UK depositors with online savings accounts with Landsbanki and Kaupthing. The Netherlands and Germany also agreed to loan €1.3 billion and €1.1 billion, respectively, to Iceland to cover Dutch and German online depositors.

The seizure of Icesave accounts enraged the Icelandic public and soured relations between Iceland and the United Kingdom. On December 20 2008 the Icelandic government authorised financial support in connection with legal proceedings in foreign courts against the United Kingdom relating to the seizure of Icesave accounts. On January 5 2009 the Icelandic government announced its support of the decision to bring formal suit against the UK authorities, and on January 6 2009 the Icelandic government announced its intention to seek redress before the European Court of Human Rights regarding the United Kingdom’s application of anti-terrorism legislation against Landsbanki. However, relations have improved in recent months. On March 31 2009 foreign ministers from the two countries met to discuss matters related to the financial crisis, and on June 6 2009 the Icelandic government agreed to reimburse the United Kingdom and the Netherlands for compensation paid out to UK and Dutch depositors with Icesave accounts.

4.4 IMF discussions and plan
On November 19 2008, in response to the Icelandic government’s request for assistance, the IMF approved a two-year SDR1.4 billion (approximately $2.1 billion) standby arrangement for Iceland to support the country’s efforts to restore investor confidence and stabilise the economy.31 Under the IMF plan, SDR560 million (approximately $827 million) is immediately available for use by the Icelandic government and the remainder will be available in eight equal

30 See “Cracks in the Crust”, The Economist (December 11, 2008).
31 The special drawing right (SDR) is an international reserve asset, first created by the IMF in 1969, in order to supplement the existing official reserves of member countries. The SDR also serves as the unit of account of the IMF and other international organisations, and its value is based on a basket of key international currencies.
instalments of SDR105 million (approximately $155 million), subject to quarterly reviews. The plan also provides for access to IMF resources, amounting to 1,190% of Iceland’s IMF quota. The IMF approved the plan under its fast-track Emergency Financing Mechanism procedures.

The three main objectives of the plan are to:

- contain the negative impact of the banking crisis on the economy by restoring confidence and stabilising the exchange rate in the short term;
- promote a viable domestic banking sector and protect international financial relations by implementing a sound banking system strategy; and
- safeguard medium-term fiscal viability by limiting the socialisation of losses in the collapsed banks and implementing a multi-year fiscal consolidation programme.

In order to prevent further krona depreciation, the plan focuses on maintaining a tight monetary policy in the context of a flexible exchange rate policy, with restrictions on near-term capital outflows. With respect to the restructuring of the collapsed banks, the plan emphasises:

- implementing an efficient organisational structure to facilitate restructuring;
- proceeding promptly with the valuation of bank assets;
- maximising asset recovery in the old banks;
- ensuring the fair and equitable treatment of the depositors and creditors of the old banks; and
- strengthening supervisory practices and the insolvency framework.

The IMF plan is expected to fill approximately 42% of Iceland’s financing gap for the years 2008 to 2010. Agreements with bilateral creditors will fill in the remainder of the financing gap. These agreements include funding support from Iceland’s Nordic neighbours Finland, Sweden, Norway, and Denmark, in the amount of $2.5 billion, as well as $200 million from Poland and $50 million from the Faroe Islands. The IMF package, combined with additional funding support, will be worth $10.2 billion in total, which is more than half of Iceland’s GDP. Although Iceland initially engaged in discussions with Russia for funding support, no agreement was reached.

On March 13 2009 the IMF conducted its first review of the Icelandic economy under the standby arrangement. The IMF indicated that the macroeconomic outlook for Iceland was broadly in line with programme expectations, with the financial crisis leading to a sharp decrease

33 See id.
34 See id.
36 See supra note 12.
in economic activity, but suggested that a late-year turnaround is within reach.\(^{37}\) The IMF also noted that the krona had stabilised and inflation appeared to have peaked, suggesting that the programme was having a positive macroeconomic effect.\(^{38}\) However, the IMF noted that Iceland’s monetary and fiscal policies are still in transition and emphasised that the financial sector restructuring needed to move forward.\(^{39}\) On August 1 2009 the IMF announced that it had reached an agreement with the Icelandic government on policies underpinning the first review under the standby arrangement, but that the review, which would release the second instalment of the $2.1 billion loan, had been delayed until late August or September 2009.\(^{40}\)

5. Factors contributing to the financial crisis

Various factors contributed to the financial crisis, including:

- the Central Bank’s inability to support the banking sector with adequate foreign currency reserves;
- the banking sector’s dependence on US and European financial institutions and financial products;
- the banking sector’s dependence on short-term funding; and
- investor speculation in derivatives (including credit default swaps), bonds and stocks.

We examine each of these factors below.

5.1 Inadequate foreign currency reserves

As we discuss above, the Central Bank’s inability to act as the lender of last resort for the banking sector contributed to the financial crisis. Its concern with inflation manifested itself through interest rate targeting. For example, as late as September 2008, the interest rate was maintained at 15.5%, the highest level in Iceland’s history, in the face of inflation of 14.5%, also a record level.\(^{41}\) However, high interest rates in Iceland made foreign borrowing less expensive for Icelandic banks, resulting in rising levels of foreign-denominated debt. With the banking sector expanding at a rate faster than the economy, the Central Bank would find it increasingly difficult to accumulate adequate foreign currency reserves to cover the rising foreign-denominated debt. The increase in foreign-denominated debt also neutralised the appreciation of the krona from increasing foreign capital inflows, which would have made the krona more expensive and foreign currencies less expensive, and thus have enabled the Central Bank to eliminate the foreign currency reserve shortfall with cheaper foreign currency.

By the middle of 2008, the Central Bank held only €2 billion in foreign currency reserves, while the Icelandic banks had accumulated more than €49.9 billion ($70 billion) in foreign-


\(^{38}\) Id.

\(^{39}\) Id.

\(^{40}\) See Resident Mission in Reykjavik, International Monetary Fund, Iceland Press Release 2009/1 (August 1 2009).

\(^{41}\) See Glitnir Banki hf, The Icelandic Economy 2008-2011 (September 2008), at 12.
denominated debt. The Central Bank had in fact tried to increase its foreign currency reserves. For example, the Central Bank secured swap lines worth €1.5 billion ($2.3 billion) from three Nordic banks in May 2008 and approached the US Federal Reserve, the European Central Bank and the Bank of England for additional swap lines. Unfortunately, they all rejected the proposals, arguing that such lines would not prove effective given the size of the banking sector. Another problem the Central Bank faced with maintaining sufficient foreign currency reserves was the krona’s status as a small currency that could not hold its value compared to reserve currencies, such as the dollar and the euro.

One might argue that the Central Bank should have implemented a fixed or floating/fixed exchange rate policy, imposed foreign currency controls and reduced interest rates in light of the krona’s decline and the weakening Icelandic economy beginning in mid-2007. In addition, the Icelandic government might have developed liquidity monitoring for banks in the same manner as capital adequacy monitoring. However, the confluence of various factors, including an outsized banking sector, massive levels of foreign-denominated debt and a weak currency, created a perfect economic storm.

5.2 Dependence on US and European financial institutions and financial products
As we discuss above, the Icelandic banks relied on financing from US and European financial institutions. The liberalisation of the financial market and the goal of transforming Iceland into an international financial centre meant that the banking sector needed to expand rapidly. With high interest rates in Iceland and lower borrowing rates in the United States and Europe, Icelandic banks increasingly turned to US and European financial institutions to access foreign financial markets and investors. As foreign financial markets and investors were more sophisticated than their Icelandic counterparts, the Icelandic banks turned to more complex financial instruments to meet their funding needs. The expansion of the banking sector also coincided with the global economic housing boom, which created investor appetite for more complex and riskier financial instruments with higher returns.

5.3 Dependence on the short-term funding market
Expansion of the banking sector resulted in large bank balance sheets. The Icelandic banks turned principally to the short-term funding market in order to manage their larger balance sheets. They relied in particular on foreign wholesale funding; and funding costs increased as the credit markets tightened. As the Icelandic economy’s leverage reached unprecedented levels, the banks’ higher funding costs, combined with the steady depreciation of the krona, resulted in speculation that the economy would experience a prolonged contraction. Excessive dependence on short-term funding can also be attributed to the government’s failure to share the burden of financing the banking sector’s expansion and to provide the banks with sufficient liquidity to cover their funding needs. The government could have absorbed the cost of this external financing for the banks as it had been maintaining current account surpluses through this expansionary period. By mid-2008, the three major commercial banks started reducing their dependence on market financing by focusing on other funding sources.

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5.4 Speculation in derivatives/credit derivatives, bonds and stocks
Speculation in derivatives, including credit derivatives, bonds and stocks, contributed to the financial crisis. Speculation by investors through the issuance of complex derivatives and other financial products impacted on bank margins and premiums on debt issuances and credit lines negotiated with foreign lenders. As the economy grew weaker, credit default swap spreads, in particular, rose sharply, which reinforced the market’s perceptions regarding the riskiness of Icelandic bonds and stocks. For example, credit default swap spreads on five-year senior notes of the three major commercial banks rose exponentially from June 2007 to the end of March 2008, from less than 50 basis points to as high as 1,000 basis points.

This was significant because before the US sub-prime mortgage crisis and the subsequent global economic crisis, the credit default swap market was one of the most efficient and liquid credit markets. The Icelandic banks were affected mainly by the negative impact that the widening credit default swap spreads had on access to short-term funding, rather than the payments actually owed due to the widening credit default swap spreads. The spreads for Icelandic banks rose in comparison to other banks, including US financial institutions, without the Icelandic banks necessarily reporting more negative operating performance or being exposed to sub-prime loans or complex structured derivatives. In other words, the credit default swap spreads were based not necessarily on fundamentals, but rather on:

- investor perceptions about the Icelandic economy and banks that resulted in an 'Icelandic premium'; and
- inefficiencies in the credit default swap market itself.

These inefficiencies included the following:

- the small size of the credit derivatives market, reflected in the discrepancy between the notional amount of credit derivatives and the underlying securities;

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43 A credit default swaps is a bilateral agreement in which the purchaser pays the seller a fixed premium (credit default swaps spread) for a given period of time. The traditional objective of the purchaser is to protect its holding in the underlying third-party bond issue, since the issuer of the bond is not a party to the credit default swap. Upon the occurrence of a contractually agreed upon credit event (eg, interest or principal payment in arrears), the seller must pay the purchaser a predetermined amount. Credit default swaps were originally marketed as a method for investors to reduce capital requirements related to issuer default risk, with the assumption that the underlying securities would be delivered upon the occurrence of a credit event. However, the requirement to deliver the underlying securities was eliminated as a result of the overleveraging of bond issues and the wave of financial deregulation that occurred in the late 1990s, thus severing the direct connection between credit default swaps and bond issues.

44 See supra note 9, at 69.

45 In addition to the various macroeconomic factors contributing to the financial crisis that we discuss above, investors’ risk assessment of Icelandic banks also focused on the banks’ business model, their low proportion of deposit funding, the increase in leveraged buyouts and credit rating downgrades.

46 The pricing of credit default swaps depends not only on underlying risk factors, but the depth of the market and the reasons for the transaction. Credit default swap spreads are a measure of risk, which explains the difference in credit default swap spreads among various issuers. Typically, there is a strong correlation between credit default swap spreads and credit ratings, which is another measure of market risk. As we note above, as the Icelandic economy and banks declined, the ratings agencies downgraded the Icelandic ratings, which negatively impacted credit default swap spreads.
the lack of transparency in the credit derivatives market, as most transactions were over the counter;

the definition of ‘credit event’ being broader under the terms of credit default swaps than the corresponding bond issues;

a thin credit market for the underlying securities or credit default swaps, which generated higher premiums; and

exposure to unwindings by large financial institutions of related collateralised debt obligations due to the repricing of risk and losses on the related sub-prime loans.

In addition, the lag between the credit rating downgrades and the credit default swap spreads also created an arbitrage opportunity for shorting credit default swaps, which further exacerbated the situation.

The unwinding of collateralised debt obligations significantly impacted on the credit default swap market, as Icelandic bonds were increasingly used to structure such obligations. From the beginning of 2006 until mid-2007, Icelandic bonds had higher yields than bonds from other comparable financial institutions with similar credit ratings, which made them particularly attractive for senior tranches of collateralised debt obligations. However, with the supply of actual bonds limited, credit default swaps were used instead to simulate the payment flows of Icelandic bonds. As delinquencies on sub-prime mortgages and broad-based reassessments of risk increased, the credit rating agencies downgraded the collateralised debt obligations, resulting in enormous losses and the unwinding of such obligations along with the related credit default swaps.

6. Response to the financial crisis

6.1 Current government measures

Government measures have focused on the stabilisation of the krona, fiscal policy adjustments and the recapitalisation of the banking sector. As we discuss above, the Central Bank has allowed the krona to float since its inability to support an exchange rate peg to the euro in mid-October 2008. The krona appreciated briefly after the Central Bank implemented a new currency regime in early December 2008. However, since then, it has fallen in value. The Central Bank has also adopted new legislation restricting all currency flows related to capital account transactions and requiring all exporters to deposit foreign currency with domestic banks. In addition, foreign investors that hold more than Ikr500 billion of krona-denominated assets will be prohibited from exporting such assets for up to two years.

In addition, the Icelandic government has taken steps towards improving financial regulation by appointing a new board of directors for the Icelandic Supervisory Authority on February 9 2009 and passing legislation to amend the Central Bank Act on February 26 2009 in order to reduce bureaucratic inefficiencies and establish a monetary policy committee.
The adjustments to fiscal policy have included:

- expenditure cuts;
- reduction of foreign debt;
- tax increases; and
- planned interest rate decreases.

The Icelandic government presented its 2009 budget in mid-December 2009. This provided for substantial expenditure cuts on both current and capital spending, as well as a 1% increase in personal income tax rates. Assuming a 20% decrease in domestic demand, the government is targeting a public finance deficit of just over 10% of GDP, although the IMF has required further fiscal consolidation measures in order to reduce the deficit starting in 2010. In addition, despite initially maintaining interest rates at 18%, the Central Bank announced that it would gradually lower interest rates, without disrupting exchange rate stability, once the IMF changes its fiscal policy recommendations. For example, the Central Bank reduced interest rates to 15.5% on April 8 2009 and to 13% on May 7 2009.

The Icelandic government also plans to issue large amounts of government guaranteed bonds in order to refinance the banking system and recapitalise the Central Bank. In January 2009 the Icelandic government indicated that the net capital requirement in 2009 is estimated at Ikr145 billion, which some have noted is conservative, and will be financed by the issuance of marketable non-indexed debt instruments amounting to Ikr45 billion net of maturities and Ikr 100 billion taken from the Icelandic government’s balance with the Central Bank. Net treasury note issuances will amount to a total of Ikr74 billion, including new two-year treasury notes that were issued in July 2009. While new three-month treasury bills will also be issued monthly, the government’s intention is to reduce the overall treasury bill balance by Ikr29 billion in 2009.

The Icelandic government has been actively involved in ascertaining commitments to depositors in the failed Icelandic banks and other creditors and agreeing with the countries whose citizens have been exposed (mainly the United Kingdom, the Netherlands and Germany). The government has completed this process for the most part, with the liabilities estimated at $8 billion or almost 50% of GDP, as we note above. The valuation of the assets of the failed Icelandic banks has been completed and the resolution committees for the failed banks have considered selling such assets to maximise receipts, as well other restructuring options, such as the exchange of old bank debt for bank debt in the new banking entities that will not be tainted by any foreign or toxic assets. The new banking entities will also have smaller balance sheets and will concentrate on domestic rather than foreign markets.

On July 20 2009 the government formally announced a restructuring plan for the failed banks, including the injection of $2 billion of capital into the new banks, leaving their solvency ratios at healthy levels. Despite the delay in bringing forward the restructuring plan, the approach of taking over only domestic operations and refraining from issuing blanket bailouts to the old banks (by letting parts of the old banks simply fail) may in fact have reduced the overall costs of the restructuring plan.\(^{47}\) Although most creditors of the failed banks will retain some of their holdings in the failed banks, they may be able to receive debt or equity in the new banks if there

\(^{47}\) See “Pelt Tigh tening”, The Economist (July 23 2009).
is any surplus value beyond the new capital. The cost of the restructuring plan will include not only the capital injected, but also the loans made during the financial crisis by the Central Bank and the government’s guarantee of Icesave deposits, which could total 90% of GDP. As a creditor of the new banks, the Icelandic government will also have a large claim on the assets of the old banks as they are restructured or wound down. As a result of the restructuring plan, gross debt is expected to rise to approximately 180% of GDP next year, but after including the financial assets of the new banks, net debt will rise to only 40%, compared to 0% prior to the financial crisis.

The Icelandic government, with support from the Icelandic people, has also taken steps to seek EU membership in order to protect the country from future financial crises. The government approved the application for EU membership on July 16 2009. Although the hope is that the application will be fast-tracked, given that Iceland as been an associate member of the European Economic Area since 1994 and already meets most EU requirements, membership may not be granted until late 2012 or 2013 at the earliest. Obstacles to EU membership include:

- Iceland accepting the European Union’s common fisheries policy;
- the ailing economy, with a budget deficit of 13% of GDP;
- public debt of over 100% and the krona losing half of its value against the euro since January 2008; and
- the necessary public referendum, which may be a challenge as public support has recently waned in the aftermath of the economy’s contraction.

The government has also taken measures to investigate suspicious or criminal activity relating to or in the wake of the financial crisis, appointing a special prosecutor to oversee criminal investigations on January 13 2009 and a foreign magistrate as special adviser to assist in such investigations on March 10 2009. On July 7 2009 the offices of Icelandic investment firms Sjova and Milestone were searched by authorities investigating activities related to the collapse of the banking system. In addition, the Securities Fraud Office has intensified its investigation regarding the loan book of Kaupthing and has started examining the activities of Glitnir and Landsbanki prior to the financial crisis. Such measures are intended in part to prevent suspicious or criminal activity from precipitating future financial crises.

6.2 Current effect of government measures
The measures undertaken by the Icelandic government have helped to stabilise the economy. However, the fiscal contraction resulting from the financial crisis in the last few months has created political instability. The government fell in January 2009 amid public dissatisfaction with its handling of the financial crisis and a dispute by the ruling parties, the Social Democrats and the Independence Party, as to who would serve as the country’s prime minister until elections were held in the spring of 2009. A provisional government was quickly established, and early

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48 Id.
49 Id.
50 See id.
51 See “Pelt Tightening”, The Economist (July 23 2009).
52 See “All Things to Althingi”, The Economist (July 23 2009).
53 See id.
parliamentary elections were held in May 2009, with a coalition of Social Democrats and the Left-Green Movement taking office.

Public dissatisfaction with the response to the financial crisis has resulted from the economy’s sharp contraction in the past few months. The government forecasted a steep 9.6% decline in GDP for 2009 and expects GDP to remain flat in 2010. The imposition of a fixed exchange rate policy, with strict capital and currency controls, resulted in a modest appreciation (6%) of the krona between November and December 2008.\(^54\) However, the new capital and currency controls have made it difficult for residents to purchase foreign goods and for exporters to receive payments for goods that have been shipped. Despite the modest appreciation of the krona, the government has still forecasted a current account surplus of 6.1% in 2009, due to an expected 5% rise in the export of goods and services, offset by a 2.9% decrease in public expenditures, and a slightly larger decrease in both private consumption and gross investment as imports are expected to contract by 23%. The current account also will benefit from the recent slowdown in private consumption, as consumers are reducing large expenditures, including home and automobile purchases, and consumer confidence continues to fall.\(^55\)

Unemployment and real wages have also stabilised to some extent. The wage index in December 2008 rose 0.7% month over month after falling by as much as 0.6% in November 2008, due to a new collective labour agreement for the public sector.\(^56\) Unemployment levels in the fourth quarter of 2008 also reached a five-year high, amounting to 4%, compared to 1.9% in the previous year.\(^57\) Real wages also fell by 0.9% month over month in December 2008 and have now fallen by 8.2% year over year.\(^58\) Purchasing power has recently been on a downward trend, which is expected to continue in the short term as the labour market weakens further and inflation remains high. The government expects unemployment to average 7.8% for 2009 and 8.6% in 2010 before gradually decreasing thereafter.

7. Conclusion

The fundamental lesson of the recent financial crisis in Iceland is that operating internationally in the financial markets with high leverage ultimately is not compatible with maintaining a floating exchange rate using a small currency. In the case of Iceland, the short-term solution to the financial crisis has been to seek funding from abroad (e.g., other central banks, the market, and the IMF), and concurrently to implement more austere fiscal and monetary policies. By securing foreign funding and adopting tight fiscal and monetary policies, the Icelandic government has temporarily stabilised the economy, although it will undergo a necessary contraction in the near term. However, Iceland will need to find a better long-term solution. Whether the krona will be the Icelandic currency of the future remains to be determined. If so, whether it will be pegged to another currency also remains to be seen. Another lesson for both emerging and developed

\(^54\) See supra note 26.
\(^55\) The consumer confidence index measured 19.5 points in January 2009, lower than the 23.2 points measured in November 2008, with 100 points indicating that an equal number of people are positive and negative towards the economy.
\(^57\) See Landsbanki Íslands hf, Daily Economic Briefing, Further Signs of Weakening Labour Market (January 14 2009).
\(^58\) See supra note 44.
economies may lie in part in increased regulation of banking activities within a framework of free market principles. In addition, monetary policy should be carefully tailored to the size of the banking sector, and must be supported by compatible fiscal policies.

The Icelandic financial crisis provides some important lessons that are likely to be relevant to certain other economies. Commentators have noted that both the United Kingdom and Ireland should be closely examining the Icelandic financial crisis in order to anticipate challenges that they may face. They reason that the United Kingdom may be in danger of a banking sector collapse, given the disproportionate size of its banking sector compared to the rest of its economy and the poor financial health of its banks in the wake of the US sub-prime mortgage crisis and the subsequent global economic crisis. However, the United Kingdom enjoys the advantage of a strong reserve currency, the pound sterling, and a substantially larger central bank to act as a lender of last resort if investors lose confidence in UK banks.