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Benjamin Hoffner YPFS, Yale School of Management

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Scandinavia: Central Bank Swaps to Iceland, 2008¹

Benjamin Hoffner²

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Abstract

By 2008, the Icelandic banking system had become so large and heavily exposed to foreign liabilities that the Central Bank of Iceland (CBI) lacked sufficient foreign reserves to serve as a credible lender of last resort. During the first quarter of 2008, the CBI, in an effort to bolster reserves, began soliciting other central banks for swap agreements, the first of which was Danmarks Nationalbank. On May 16, 2008, Danmarks Nationalbank, Norges Bank, and Sveriges Riksbank agreed to bilateral swap facilities in which the CBI could borrow euros against Icelandic krona for a maximum of EUR 1.5 billion (USD 2.3 billion), or EUR 500 million from each Scandinavian central bank. Though the arrangement was intended to be precautionary, the CBI could draw upon the swaps if necessary to preserve financial stability. On October 14, 2008, one week after Iceland's three largest banks failed, the CBI drew EUR 200 million from each of the swap lines with Danmarks Nationalbank and Norges Bank, using the proceeds to secure trade in essential goods. These drawings helped bridge to an eventual International Monetary Fund (IMF) support package for Iceland, which was finalized on November 19, 2008. On November 3, 2008, Norges Bank announced an extension of its bilateral swap line with the CBI, and on November 20, following the IMF agreement, Danmarks Nationalbank and Sveriges Riksbank also extended their swap lines with the CBI from the end of 2008 through the end of 2009. By the end of 2008, the CBI's drawings on the swap lines totaled EUR 450 million, split evenly among the three Scandinavian central banks. The CBI repaid these borrowings by the end of 2009.

Keywords: central bank currency swap lines, Central Bank of Iceland, Danmarks Nationalbank, Norges Bank, Sveriges Riksbank, swaps

¹ This case study is part of the Yale Program on Financial Stability (YPFS) selection of New Bagehot Project modules considering central bank swap line programs. Cases are available from the *Journal of Financial Crises* at https://elischolar.library.yale.edu/journal-of-financial-crises/.

² Research Associate, YPFS, Yale School of Management.

Overview

In the years leading up to the Global Financial Crisis (GFC), Icelandic banks rapidly expanded their balance sheets; as a percentage of GDP, the banking system's assets grew from 174% at the end of 2003 to 744% by the end of 2007. Initially, Icelandic banks maintained good credit ratings and financed much of this growth by issuing euro debt in the European bond market (Benediktsdóttir, Danielsson, and Zoega 2011). By mid-2007, as global funding pressures emerged, Icelandic out of banks were priced maior international bond markets and became more reliant on foreign retail deposits (Benediktsdóttir, Danielsson, and Zoega 2011; Benediktsdóttir, Eggertsson, and Þórarinsson 2017). Later in 2007, as concerns over the credit quality of Icelandic banks worsened, banks made greater use of liquidity facilities at the Central Bank of -Iceland (CBI) and the European Central Bank (ECB) (Benediktsdóttir, Danielsson, and Zoega 2011).

By 2008, Iceland's three largest banks (Glitnir, Kaupthing, and Landsbanki), which represented more than 95% of the country's banking system, faced heavy foreign currency exposures, in the form of runnable retail deposits and particularly foreign currency bond repayments (Baudino, Sturluson, and Svoronos 2020; Benediktsdóttir, Eggertsson, and Þórarinsson 2017; IMF 2008). Meanwhile, the CBI lacked sufficient foreign exchange reserves to act as a credible lender of last resort in the event of a crisis of confidence (Buiter and Sibert 2011). In a January 2008 report, the rating agency Moody's Investors Service highlighted this mismatch between banks' foreign currency liabilities and _

Key Terms

Purpose: "to strengthen confidence in the Icelandic economy in the short term, thereby providing a window for addressing fundamental issues" (SIC 2010b, 175)

Participating Parties	Danmarks Nationalbank, Norges Bank, Sveriges Riksbank, Central Bank of Iceland
Type of Swap	Series of bilateral, unidirectional swaps
Currencies Involved	ISK, EUR
Launch Date	May 16, 2008
End Date	December 31, 2008, extended to December 31, 2009
Date of First Usage	October 14, 2008
Interest Rate and Fees	3%
Amount Authorized	EUR 500 million for each bilateral Scandinavian swap (EUR 1.5 billion total)
Peak Usage Amount and Date	EUR 450 million total, at the end of 2008 (largest outstanding <i>reported</i>)
Downstream Use/Application of Swap Funds	"[T]o secure trade for essentials like medicine, oil and, if need be, food products" (Iceland Review 2008b)
Outcomes	The CBI paid off all swap borrowings by November 2009
Notable Features	As a precondition for the swaps, Icelandic fiscal authorities made several commitments

liquid foreign exchange reserves. In the report, Moody's recommended that Iceland look to the other Nordic countries (Denmark, Finland, Norway, and Sweden) to expand the country's

financial safety nets (Moody's 2008). There had been a history of political and economic cooperation among the governments of Nordic countries owing to the region's close geographic, cultural, and commercial ties (FSB 2016; Wajid et al. 2007).³

In the first few months of 2008, as global credit conditions deteriorated, international markets grew increasingly wary of vulnerabilities in the Icelandic banking system and the stability of the Icelandic krona (ISK), as evidenced by rising credit default swap (CDS) spreads of large banks and a 30% depreciation of the krona against the euro between December 2007 and March 2008 (IMF 2008; Thorp, Townsend, and Edmonds 2009). Beginning in early March, the Central Bank of Iceland solicited foreign currency swap deals with other central banks to provide a more credible safety net for the large Icelandic banks (SIC 2010b, 1:167–69). The CBI first approached the central bank of Denmark, the Danmarks Nationalbank (DNB), which responded positively in the preliminary swap discussions (CBI 2008a).

At an International Monetary Fund (IMF) conference in April 2008, the CBI met with Danmarks Nationalbank and the central banks of two other Scandinavian countries,⁴ Sweden's Sveriges Riksbank and Norway's Norges Bank (SIC 2010b, 1:170).

Between March and April, the CBI also met with the Bank of England (BoE), the European Central Bank, and the Federal Reserve in hopes of reaching swap agreements (SIC 2010b, 1:168–69). These central banks expressed considerable apprehension in supporting Iceland's liquidity needs, given the size of its financial system relative to its domestic economy (SIC 2010b, 1:170–72).

On April 15, following the IMF meeting, then–CBI Governor David Oddsson sent formal swap requests to the BoE, ECB, and three Scandinavian central banks (Denmark, Norway, and Sweden) (SIC 2010b, 1:171). Around the same time, the CBI discussed a potential swap line with the Fed before sending an official request in June (FOMC 2008; SIC 2010b, 1:179). Sveriges Riksbank agreed to draft an agreement for a package of bilateral swap lines between the CBI and the Scandinavian central banks (DNB 2008a; SIC 2010c, 6:173).

To help address the concerns of the BoE and ECB about the requested swap lines, the CBI called on the IMF to produce a confidential Preliminary Assessment report, which was released on April 14, 2008 (CBI 2008a). The IMF report concluded that while Icelandic banks were sufficiently capitalized, they were prone to a liquidity crisis in which the CBI would be unable to act as lender of last resort based on its available funds. The report stated that although establishing swap lines could help fend off a liquidity crisis, Icelandic authorities needed to address the central problem by reducing the size of bank balance sheets (SIC

³ Recognizing the cross-border financial linkages throughout the region, the central banks of Denmark, Finland, Iceland, Norway, and Sweden signed a memorandum of understanding in 2003 establishing general principles of cooperation during financial crises (Suomen Pankki 2003). Owing to the severity of the Global Financial Crisis, the Nordic central banks found little use for the 2003 memorandum and its guidelines on information sharing and cooperation (FSB 2016).

⁴ The Scandinavian countries include Denmark, Norway, and Sweden. Finland was the only Nordic country in the eurozone and therefore not included in the CBI swap discussions (SIC 2010b, 1:169).

2010b, 1:171). The CBI described the primary purpose of the swap deals as an effort to build confidence in the Icelandic economy to signal to markets the availability of foreign currency liquidity (SIC 2010b, 1:173–75). Nevertheless, the BoE and ECB continued to express concerns that Icelandic authorities had no plan to reduce the size of banks' balance sheets (SIC 2010b, 1:172–74). By the conclusion of the Group of 10 (G-10) Summit in Basel on May 4, 2008, it appeared that the only central banks still willing to negotiate swap deals, albeit hesitantly, were those of the Scandinavian countries (SIC 2010a).

On May 14, 2008, CBI Governor Oddsson met in Oslo with the Scandinavian central bank governors, and, to negotiate a swap deal, phoned the Icelandic prime minister (SIC 2010b, 1:175). As preconditions for the swaps, the Icelandic prime minister pledged to pressure Icelandic banks to scale down their balance sheets. He also promised to reform the Housing Finance Fund and wage contracts (Benediktsdóttir, Danielsson, and Zoega 2011; SIC 2010a; SIC 2010b, 1:175). The CBI and the government also committed not to use the swap lines to intervene in markets or recapitalize banks. These and other preconditions were outlined in a confidential memorandum, signed on May 15, 2008, by the three CBI governors and Iceland's prime minister, foreign minister, and finance minister (SIC 2010b, 1:175–76).

The swap arrangement between the CBI and the Scandinavian central banks of Denmark, Norway, and Sweden was signed and announced on May 16 (SIC 2010b, 1:176). The deal authorized the CBI to draw up to EUR 500 million (equivalent to USD 775 million)⁵ from each of the three central banks before the end of 2008 "if needed to ensure financial stability" (DNB 2008a). The confidential swap memo noted that the swap line was not intended to be drawn upon (SIC 2010b, 1:175).

At first, the announcement of the swap deal on May 16 had a positive impact on foreign exchange markets. The Icelandic krona appreciated 4% against the euro on the day of the announcement (New York Times 2008). However, in the following summer months, the krona continued to slide, as did Icelandic banks' CDS spreads amid deteriorating macroeconomic conditions (IMF 2008). The situation of Icelandic banks, already facing major liquidity constraints, deteriorated further following the collapse of Lehman Brothers in mid-September (SIC 2010a).

Oddsson continued to ask the Fed to extend a swap line to Iceland, without success (SIC 2010b, 1:179–80). In a closed meeting of the Fed's Federal Open Market Committee (FOMC) in late October 2008, Nathan Sheets, then director of the Fed's International Finance Division, explained that the Fed looked at three conditions for evaluating swap candidates:

- (1) "[E] conomies that are large and systemically important."
- (2) "[E]conomies in which their policies have been strong and it appears that they are largely being influenced by contagion."

⁵ Per Yahoo Finance, EUR 1.00 = USD 1.55 on May 16, 2008.

(3) "[C]ountries for which we believe that the swap line might actually make a difference." (FOMC 2008, 33)

Although Iceland did not clearly pass the first two conditions, Sheets specifically used Iceland as an example of a country that failed to meet the third condition. During the FOMC meeting, Sheets explained that in Iceland there was a clear loss in confidence in the disproportionately large banking system. Moreover, the CBI had requested a USD 1 billion to USD 2 billion swap line, which, Sheets said, would be "very little ammunition to use against a potential loss in confidence in [Iceland's] \$170 billion financial system" (FOMC 2008, 33).

The loss of confidence culminated in the weeks after the collapse of Lehman Brothers, and by October 9, all three of Iceland's largest banks failed and were taken over by Iceland's Financial Supervisory Authority (Benediktsdóttir, Eggertsson, and Þórarinsson 2017). Glitnir, the first of the three banks to go under, requested emergency assistance from the CBI on September 25, in an attempt to secure foreign currency liquidity to pay off a loan maturing the following month. On September 29, the Icelandic government announced it would acquire a 75% equity stake in the bank. The announcement precipitated margin calls and runs on foreign deposits of all three of Iceland's largest banks, as investors lost faith in the government's ability to rescue the outsized banking system (Benediktsdóttir, Eggertsson, and Þórarinsson 2017).

On October 14, 2008, the CBI drew on two of its bilateral Scandinavian swap lines, borrowing EUR 200 million each for a total of EUR 400 million total from Danmarks Nationalbank and Norges Bank (CBI 2008c). Sveriges Riksbank did not initially allow the CBI to draw under the agreement owing to the CBI and Icelandic government's failure to honor the commitments outlined in the swap memo; see Key Design Decision No. 14, Other Restrictions (Ingves 2022). Iceland's minister of industry said Iceland would use the swap drawing "to secure trade for essentials like medicine, oil and, if need be, food products" (Iceland Review 2008b). Economics professor Ólafur Ísleifsson at Reykjavík University noted that the usage of the swaps for trade represented a departure from the swaps' original purpose—to increase the CBI's foreign exchange reserves; he noted a severe shortage of foreign currency in Iceland (Iceland Review 2008b).

On October 24, the IMF agreed to provide USD 2.1 billion in foreign exchange, conditional upon Iceland's accepting an economic stability program (DNB 2009). On the basis of the IMF agreement formalized on November 19, the governments of Denmark, Finland, Norway, and Sweden made loan commitments for a total of USD 2.5 billion to Iceland (DNB 2009).⁶ On November 3, Norges Bank agreed to extend its bilateral CBI swap line—set to expire by the end of 2008—through the end of 2009 (Norges Bank 2008b). On November 20, Danmarks Nationalbank and Sveriges Riksbank, supported by the loan package, also agreed to extend the swap lines through the end of 2009 (Allen and Moessner 2010; DNB 2008b). After

⁶ Together with these commitments from the Nordic countries, the governments of Poland and the Faroe Islands provided loans to Iceland of USD 200 million and USD 50 million, respectively (CBI 2009; DNB 2009).

initially rejecting the CBI's request to draw on the swap line, Sveriges Riksbank permitted drawings on its swap line with Iceland's IMF program in place (Ingves 2022).

The CBI paid approximately 3% interest on the Scandinavian swap line drawings (CBI 2009). By the end of 2008, the CBI drew EUR 450 million (EUR 150 million from each Scandinavian central bank) out of the EUR 1.5 billion total swap line (CBI 2009). In November 2009, the CBI repaid the outstanding balance of the swap lines, which amounted to EUR 100 million for each Nordic central bank (CBI 2010).

Summary Evaluation

The statements surrounding the Scandinavian swap lines suggest that the facility served more as a signaling mechanism than a practical lifeline during a financial crisis (SIC 2010b, 1:175). The CBI and Icelandic government described the facility as precautionary, not intended to be drawn upon, serving to "strengthen confidence in the Icelandic economy in the short-term, thereby providing a window for addressing fundamental issues" (SIC 2010b, 175). Such fundamental issues concerned the Icelandic banks' unbridled growth, their large foreign exposures to foreign debt, and the absence of a credible lender of last resort (Benediktsdóttir, Eggertsson, and Þórarinsson 2017).

In a June 2008 letter to the Federal Reserve Bank of New York, CBI Governor Oddsson requested a swap line on the following grounds:

Also, as demonstrated by the [Scandinavian swap lines], the size of the arrangement is not necessarily a decisive issue at this juncture. In my view, the perception of strong allies is more important. An arrangement with the Fed would therefore be of monumental significance. (SIC 2010b, 175)

From the perspective of the several central banks from whom Iceland had requested swap lines, Iceland needed first and foremost to scale down its banking system. In April 2008, then–BoE Governor Mervyn King responded to Oddsson's request for a swap line, saying that "only a serious attempt to reduce the size of the banking system would constitute a solution to the current problem" and that a swap line, small in size, "might look rather like a political gesture rather than a credible financial strategy" (SIC 2010b, 172–173). King also offered to coordinate an international effort to help Icelandic authorities reduce the size of the banks. Oddsson's rejection of this proposal negatively impacted Iceland's reputation in the subsequent months as authorities sought international assistance (Benediktsdóttir, Danielsson, and Zoega 2011).

In December 2008, the Icelandic Parliament established the Special Investigation Commission (SIC), a commission of three members—Páll Hreinsson, Tryggvi Gunnarsson, and Sigríður Benediktsdóttir—tasked with investigating the collapse of the Icelandic banking system (SIC 2010e). The SIC's report reviewed the Scandinavian swap deals, including the preconditions signed by the Icelandic government and the CBI in the confidential memorandum of May 15, 2008. Between the signing of that memorandum and CBI's draws on the swap lines in the fall of 2008, the Icelandic government had not followed through on the preconditions in the memorandum. The SIC report notes that these failed

promises further affected the reputation of Icelandic authorities amongst other central banks; once the Icelandic banking system collapsed in October 2008, Iceland had few options for foreign assistance (SIC 2010a).

\$18.1 billion in 2008 \$13.2 billion in 2009 \$56,943 in 2008 \$41,301 in 2009 Moody's: Baa1
\$56,943 in 2008 \$41,301 in 2009
\$41,301 in 2009
Moody's: Baa1
S&P: BBB+
Fitch: A- *-
Moody's: Baa3
S&P: BBB+
Fitch: A-
\$35.9 billion in 2008
\$25.1 billion in 2009
198.4% in 2008
190.6% in 2009
Data not available in 2008
Data not available in 2009
Data not available in 2008
Data not available in 2009
0% in 2008
0% in 2009
Yes in 2008
Yes in 2009
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Key Design Decisions

1. Purpose and Type: The central banks of Denmark, Norway, and Sweden each provided bilateral euro swaps to the CBI for financial stability.

In the lead-up to the Global Financial Crisis, Icelandic banks rapidly expanded their balance sheets, largely financed through foreign currency bonds as well as wholesale funding markets in Europe (Benediktsdóttir, Danielsson, and Zoega 2011). In comparison to the Guidotti-Greenspan rule—which recommends that a country's reserves should equal its short-term external debt—Iceland's reserves were just 7% of its short-term debt (Benediktsdóttir, Danielsson, and Zoega 2011; SIC 2010b, 1:167). In a January 2008 report, the rating agency Moody's recommended that Iceland increase its foreign reserves to build up a larger safety net in the event of a banking crisis (Moody's 2008). In March, the Central Bank of Iceland began soliciting currency swaps agreements with major central banks (SIC 2010b, 1:167). The CBI first approached the central banks of Denmark (Danmarks Nationalbank) and shortly thereafter approached the central banks of Sweden (Sveriges Riksbank) and Norway (Norges Bank) to discuss establishing bilateral Scandinavian swap lines. The CBI entered into similar swap discussions with the BoE, the ECB, and the Fed (CBI 2008a).

On May 16, 2008, after the BoE, ECB, and Fed rejected swap deals, the CBI signed bilateral swap line agreements with three Scandinavian central banks (Danmarks Nationalbank, Norges Bank, and Sveriges Riksbank) (SIC 2010b, 1:173–75). Under the agreements, the CBI could draw euros against Icelandic krona from each of the three central banks "if needed to ensure financial stability" (CBI 2008b; DNB 2008a). Each bilateral agreement provided a maximum of EUR 500 million, giving the CBI access to EUR 1.5 billion total (CBI 2008b).

As part of the agreement, the Icelandic government produced a confidential memo for the lending Scandinavian central banks, which described the intended purpose of the swap lines as follows:

The purpose of the swap facility is to strengthen confidence in the Icelandic economy in the short term, thereby providing a window for addressing fundamental issues. The swap facility is not intended to be drawn upon. (SIC 2010b, 175)

2. Part of a Package (A): The Scandinavian-CBI swap lines served as a bridge to a USD 2.1 billion IMF loan facility. The same three Scandinavian central banks, joined by Finland, also agreed to lend Iceland a total of USD 2.5 billion to support the IMF package.

On October 24, 2008, the IMF agreed to lend Iceland USD 2.1 billion, conditional upon Iceland adhering to an economic stability program. The IMF formalized the agreement on November 19, and by then, the governments of Denmark, Norway, Sweden, and Finland pledged additional loans totaling USD 2.5 billion to support the IMF relief for Iceland (DNB 2009). On the basis of the IMF loan package, Denmark, Norway, and Sweden agreed to extend the swap

lines, initially expiring in 2008, through the end of 2009 (Allen and Moessner 2010; DNB 2008b; Norges Bank 2008a).

Part of a Package (B): Outside of the swaps with the CBI, the Scandinavian central banks also established swaps with the Fed and ECB.

The central banks of Denmark, Norway, and Sweden established additional swap lines with the Fed and ECB in late September and October 2008. In December 2007, the ECB extended a EUR 10 billion swap line to Sveriges Riksbank. In October 2008, Danmarks Nationalbank received a EUR 12 billion ECB swap line, which would "remain in place as long as needed" (DNB 2009). On September 24, 2008, the three Nordic central banks established temporary reciprocal swap lines with the Fed "to address elevated pressures in U.S. dollar short-term funding markets" (DNB 2009, 101–102). Under the agreements, Danmarks Nationalbank and Norges Bank each received swap lines of USD 5 billion, while Sveriges Riksbank received a line of USD 10 billion, all set to expire January 30, 2009 (Allen and Moessner 2010; Fed 2008). Days later, on September 29, the Fed expanded these swap lines, tripling the size of each of the lines and extending the expiration date to April 30, 2009 (Allen and Moessner 2010; DNB 2009).

On December 16, 2008, in addition to the Scandinavian-CBI swap lines, Danmarks Nationalbank and Sveriges Riksbank established swap lines with the Bank of Latvia totaling EUR 500 million, which served as a bridge loan for an expected IMF relief program for that country (Allen and Moessner 2010).

3. Legal Authority: The participating central banks did not cite legal authority when establishing the Scandinavian-CBI swaps.

With the exception of Norges Bank, research has not been able to locate relevant legal documents authorizing the Scandinavian central banks to establish swaps with the CBI. Norges Bank's 2008 annual report notes that before formalizing the swap line with the CBI in May 2008, Norges Bank received approval from Norway's minister of finance (Norges Bank 2009). Section 26 of the contemporary Norges Bank Act, as amended in 2007, classified swap lines as international agreements, which were subject to the approval of the King of Norway (Norwegian Government 2007).

4. Governance: The governors of the Scandinavian central banks and the CBI dictated the terms of the swap lines, including several concessions by the Icelandic government. The Icelandic government agreed to report to the Scandinavian central banks on its progress in meeting these concessions.

The central bank governors of Denmark, Norway, Sweden, and Iceland negotiated the swap lines. In order to reach swap agreements with the Scandinavian central banks, CBI Governor Oddsson also included the Icelandic prime minister in the negotiations. On May 15, 2008, the three CBI governors together with the Icelandic prime minister, foreign minister, and finance minister signed off on several concessions aimed at financial and economic reforms. This memo served as a precondition for the swap arrangements established the following day, May 16 (SIC 2010b, 1:175–76).

As part of the concessions, the CBI could not use the swap lines for exchange market intervention or bank recapitalizations. The CBI also had to report to the Scandinavian central banks on developments related to the concessions (SIC 2010b, 1:175–76). See Key Design Decision No. 14, Other Restrictions, for the list of concessions made by the Icelandic authorities.

5. Administration: Though intended as a precautionary facility, the CBI drew on the bilateral swap lines following authorization from the lending Scandinavian central banks.

Sveriges Riksbank staff prepared the preliminary draft of the Scandinavian-CBI swap agreements in April 2008 (SIC 2010c, 6:173).

The agreement permitted the CBI to draw on the three swap lines, if necessary, but required approval by the lending Scandinavian central banks. This is evidenced by Sveriges Riksbank rejecting the CBI's request to draw on the swap lines in October 2008 (Ingves 2022). At the same time, the CBI successfully drew on the swap lines with Danmarks Nationalbank and Norges Bank by providing ISK as collateral (CBI 2008c). According to the May 15 concessions, if the CBI drew on the swap lines, the government (fiscal authorities) had to borrow an amount equivalent to the drawings on the market; research has not been able to identify whether the government honored this commitment (SIC 2010b, 1:175).

6. Communication: Each participating Scandinavian central bank published press releases following the introduction and extension of the Scandinavian-CBI swap line.

In the months prior to the signing of the Scandinavian-CBI swap deal on May 16, 2008, the CBI asked several central banks for swap arrangements. Danmarks Nationalbank, the first central bank the CBI approached, responded positively to the initial proposal (CBI 2008a). In April 2008, Sveriges Riksbank staff began drafting the Scandinavian-CBI swap agreement (SIC 2010c, 6:173). While the ECB, BoE, and Fed also discussed swaps with the CBI, by early May, it seemed these deals would not materialize. As a result, the Scandinavian central banks became reluctant to finalize the swap lines (SIC 2010a; SIC 2010b, 1:174–75). On May 16, 2008, following confidential concessions from the Icelandic prime minister and the CBI to implement banking system reforms, the Danish, Norwegian, and Swedish central banks signed off on the swap lines (SIC 2010b, 1:175–76).

Immediately after the announcement of the swap deal with the CBI on May 16, 2008, the krona appreciated by 4% against the euro (Iceland Review 2008a; New York Times 2008).

In its *Monetary Review* for the second quarter of 2008, Danmarks Nationalbank summarized the modest effects of the swap facility announcement:

The Icelandic krona has stabilized after the announcement of the agreement, and the credit default swap (CDS) spread (the price of insurance against credit risk in Icelandic banks) has narrowed, but remains high. (DNB 2008c, 12)

7. Eligible Institutions: The CBI was the only party eligible to draw on the Scandinavian bilateral swap lines.

Although Danmarks Nationalbank, Norges Bank, and Sveriges Riksbank established additional swap lines with other central banks during the Global Financial Crisis, the CBI was the only borrowing central bank in the bilateral Scandinavian swap lines established in May 2008 (CBI 2008b).

8. Size: The Scandinavian swaps offered the CBI a maximum of EUR 1.5 billion, EUR 500 million from each Scandinavian central bank.

Prior to securing the EUR 1.5 billion Scandinavian swap lines (divided evenly among the three Scandinavian central banks), the CBI had requested and hoped for swaps of similar sizes from the BoE and ECB, and later the Fed (SIC 2010b, 1:173–76). In rejecting the CBI's request, BoE Governor King stated that "the amount of money is very small relative to the potential need for funds should a problem arise with one or more of your banks" and that "the swap might look rather like a political gesture rather than a credible financial strategy" (SIC 2010b, 173).

After entering into the Scandinavian swap deal, the CBI attempted to petition the Fed for a similar arrangement. On June 6, 2008, in a letter to then–Federal Reserve Bank of New York (FRBNY) President Tim Geithner, CBI Governor Oddsson argued that the Scandinavian deals demonstrated that the size of the swap line was not the only important characteristic:

Also, as demonstrated by the Nordic facility, the size of the arrangement is not necessarily a decisive issue at this juncture. In my view the perception of strong allies is more important. An arrangement with the Fed would therefore be of monumental significance. (SIC 2010b, 179)

The Fed viewed the size of swaps as an important factor in determining whether or not to extend swaps to Iceland or other requesting countries. On October 3, 2008, following further swap requests from the CBI, the Fed sent a memo to the CBI explaining its decision not to extend a swap line. According to the memo, the size of Iceland's banking system, compared to the country's GDP, necessitated a much larger swap line than what the Fed was ready to make (CBI 2008a; SIC 2010b, 1:180).

Internally, during an FOMC meeting in late October 2008, Sheets, then director of the International Finance Division at the Fed, noted that one of the Fed's main criteria for evaluating swap requests was whether or not the swap line might make a difference to the borrowing country. Sheets explained that Iceland did not meet this condition, saying that a "\$1 billion to \$2 billion swap line was very little ammunition to use against a potential loss in confidence in [Iceland's] \$170 billion financial system" (FOMC 2008, 33).

On October 14, 2008, in the first activation of the Scandinavian-CBI swap lines, the CBI drew EUR 400 million total, split evenly between Danmarks Nationalbank and Norges Bank (CBI 2008c). At the time, Sveriges Riksbank did not permit the CBI to draw on its bilateral swap line (Ingves 2022). Sweden later allowed the CBI to draw on the line; the CBI had EUR 450

million (EUR 150 million from each Scandinavian central bank) outstanding at the end of 2008 (CBI 2009).

9. Process for Utilizing the Swap Agreement: To draw on each bilateral Scandinavian swap line, the CBI required authorization from the respective Scandinavian central bank.

Research has discovered little public information about the procedure for drawing on the Scandinavian-CBI swap lines. The initial swap agreement stipulated that if the CBI drew on the swap line, the Icelandic government (fiscal authority) would need to borrow from the market an amount equivalent to the swap drawings (SIC 2010b, 1:175–76). The CBI's initial utilization of the Scandinavian swap lines on October 14, 2008, provides evidence that the drawings on the facility required approval from the lending Scandinavian central banks. At first, the CBI drew only on the swap lines of Danmarks Nationalbank and Norges Bank since Sveriges Riksbank did not authorize the CBI to draw on its bilateral swap line (Ingves 2022). However, in the November 20 press release announcing the extension of the Scandinavian-CBI swap lines, Danmarks Nationalbank noted that the CBI's swap line drawings would be "equally distributed on the three central banks" (DNB 2009, 81).

10. Downstream Use of Borrowed Funds: The Scandinavian swap lines were intended as precautionary but were ultimately used to secure trade in essential goods.

As stated in the confidential memo produced by the CBI and the Icelandic government, the Scandinavian swap lines were not intended to be drawn upon but rather to generate confidence in the Icelandic economy. Icelandic authorities noted in the confidential memo that if the facility were drawn upon, the proceeds would "be used to increase available liquid foreign exchange reserves . . . and not for exchange market intervention" (SIC 2010b, 175).

In early October 2008, Iceland's banking system collapsed and foreign exchange markets froze (Benediktsdóttir, Danielsson, and Zoega 2011). On October 14, 2008, the CBI drew on two of its Scandinavian swap lines, borrowing EUR 200 million each from Danmarks Nationalbank and Norges Bank. Iceland's minister of industry said that the euro drawings were used "to secure trade for essentials like medicine, oil and, if need be, food products" (Iceland Review 2008b).

11. Duration of Swap Draws: The Scandinavian-CBI swap contracts had one-month maturities, which required them to be continuously renewed.

The CBI's 2008 annual report notes that the Scandinavian swap contracts had one-month maturities and were "renewed on a monthly basis" (CBI 2009, 52).⁷

⁷ It is unclear if the swap contracts "renewed on a monthly basis" refers exclusively to swap drawings or the includes the standby agreement as well (CBI 2009).

12. Rates and Fees: The CBI paid 3% interest for euro drawings on the Scandinavian-CBI swaps.

The CBI, according to its annual report, paid roughly 3% interest on drawings under the Scandinavian swap lines (CBI 2009).

13. Balance Sheet Protection: The CBI and Icelandic fiscal authorities made several financial commitments designed to partially limit the risks to the lending Scandinavian central banks.

See Key Design Decision No. 14, Other Restrictions, for the list of concessions.

14. Other Restrictions: The swap agreements included several commitments by the CBI and the Icelandic government.

As part of the precautionary swap arrangements, the CBI and the Icelandic government agreed to several additional measures outlined in a confidential memorandum, addressed to the three Scandinavian central banks. The memorandum was signed on May 15, 2008, by the three CBI governors and Iceland's prime minister, foreign minister, and finance minister:

1. To increase available foreign exchange reserves, the Government will, with urgency raise EUR 1–2 bn. If the swap facility is drawn on, the Government will borrow an amount commensurate to the total amount of swap transactions.

2. The Central Bank and the Supervisory Authority will use their powers to pressure the banks to reduce the overall size of their balance sheets, in line with the measures suggested by the IMF.

3. In order to increase the effectiveness of monetary policy and to remove distortions, a credible plan for the restructuring and reform of the Housing Finance Fund system will, with urgency, be formulated and made public.

4. To maintain fiscal prudence and to avoid further net-borrowing our intention is to keep the public debt level at its current low level as well as to strengthen the fiscal framework along the line suggested by the IMF. We will consider how to address the concerns on real wage clauses in the wage settlements.

5. Given the vulnerabilities of the financial system, an IMF [Financial Sector Assessment Program] update is welcome to assess the situation in more detail. The forthcoming Article IV consultation discussions also provide a welcome opportunity to assess the overall situation.

6. The Central Bank of Iceland will keep participating central banks fully and promptly informed of the measures listed above. (SIC 2010b, 175–176)

Between the signing of the swap agreement, in May 2008, and the first swap draws in October 2008, the CBI sent two memos (in July and September) to the Scandinavian central

banks, updating them on developments to the commitment from the confidential memo (SIC 2010b, 1:177–78). In keeping with the first commitment in the confidential swaps memo, the Icelandic Parliament passed a law on June 7, 2008, authorizing the Treasury of Iceland to raise up to ISK 500 billion (USD 6.6 billion or EUR 4.2 billion) for the year.⁸ Due to the worsening terms of Icelandic credit markets, the CBI raised a total of only EUR 1 billion. The CBI and the Icelandic government also failed to deliver on the commitment to exert pressure to downsize the Icelandic banks. The commitment to restructure the Housing Finance Fund also fell through (SIC 2010b, 1:177–78).

Then–Governor of Sveriges Riksbank Stefan Ingves, who was present at the negotiations over the Scandinavian swap lines, likened these swap conditions to that of an IMF program, atypical for conventional swap lines. Ingves pointed to the CBI and Icelandic government's failure to deliver on the commitments as a reason for Sveriges Riksbank's initial rejection of the CBI's swap draw request in October 2008 (Ingves 2022). Ingves noted that once the IMF program went into effect, "we felt that somebody was keeping track of what they were doing and we could step back in" and permit swap draws (Ingves 2022, 10).

15. Other Options: Prior to the signing of the Scandinavian-CBI swap lines, Icelandic authorities sought credit lines from the IMF and Bank for International Settlements (BIS).

In late March 2008, the CBI secured a credit line with the BIS for USD 500 million. However, the CBI forgot to file an extension for the credit line before the deadline in late April. After discovering the error, the CBI requested an extension, which the BIS rejected (SIC 2010d, 7:21).

In April, the CBI discussed with the ECB potential swap agreements. The ECB, however, insisted the Iceland enter into a program with the IMF as a precondition for an ECB swap line (SIC 2010c, 6:161). Shortly thereafter, CBI Governor Oddsson met with FRBNY President Geithner and described the precondition as a "Kiss of Death," warning that the announcement of IMF assistance may exacerbate concerns over the health of Icelandic banks and prompt runs (SIC 2010c, 161). Iceland ultimately did not enter into an IMF program until after the collapse of the banking system in October 2008.

16. Exit Strategy: The Scandinavian-CBI swap lines were initially set to expire by the end of 2008, but after the IMF signed a standby agreement with Iceland, the Scandinavian central banks agreed to extend the swap lines through the end of 2009.

Although most documentation on the Scandinavian swap facility did not specify an initial expiration date, Norges Bank later revealed that the arrangement was set to expire on December 31, 2008 (Norges Bank 2008b).

On October 14, 2008, the CBI activated the Scandinavian swap lines, borrowing EUR 200 million each from Danmarks Nationalbank and Norges Bank (CBI 2008c). According to

⁸ Per Yahoo Finance, USD 1.00 = ISK 75.96 and EUR 1.00 = ISK 117.91 on June 6, 2008.

Iceland's minister of industry, the proceeds were used "to secure trade for essentials like medicine, oil and, if need be, food products" (Iceland Review 2008b). Shortly thereafter, on October 24, the IMF reached an agreement with Iceland to provide a USD 2.1 billion conditional loan in exchange for Iceland adhering to a set of economic stability measures (DNB 2009). On November 3, Norges Bank announced an extension of its bilateral CBI swap line through the end of 2009, under the assumption that the IMF agreement would be approved (Norges Bank 2008a). On November 19, the IMF finalized the loan, and on November 20, Danmarks Nationalbank and Sveriges Riksbank agreed to extend the CBI swap lines through the end of 2009 (DNB 2009; Sveriges Riksbank 2008).

In November 2009, the CBI repaid EUR 100 million to each Scandinavian central bank, eliminating the outstanding swap drawings on the facility (CBI 2010).

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