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## THIS TIME IS DIFFERENT?

### Crisis and Cooperation in the Twenty-First Century

In 2008, the global economy faced its worst crisis since the Great Depression. The crisis began in 2007, and soon, global markets were on the brink of a repeat of the crisis of the 1930s. In response, the United States Federal Reserve (the Fed), stepped in as an international lender of last resort (ILLR), injecting nearly \$600 billion in emergency liquidity into the global economy through a selective series of central bank currency swaps with fourteen partners. The European Central Bank, the Bank of England, the Bank of Japan, the Swiss National Bank, and the People's Bank of China followed suit, albeit at a much smaller scale, and largely localized (with the exception of China). These efforts were critical in providing liquidity to prevent another Great Depression, a crisis that was “at its core a failure of central banking.”<sup>1</sup>

Swaps are bilateral currency exchanges between central banks; but implicitly, the Fed was providing dollars to partner banks. The Fed itself did not *need* euros, pounds, or any other currency; its counterparts needed dollars. Fed swaps were essentially the highest-quality loans available, at very favorable terms: no conditionality. These lines emerged rapidly, to bolster domestic rescue efforts, and provided critical fixes for the inadequacies of the global financial governance system.<sup>2</sup> The global swap network has since evolved into a key feature of the global financial safety net (GFSN), and five of the Fed's fourteen swap lines were made permanent in 2013. Fed swaps again proved to be a vital liquidity backstop in March 2020, to manage the financial fallout of the COVID-19 pandemic.

The series of banking failures that began in August 2007 emerged in a manner that threatened to emulate its 1930s predecessor. But unlike the Depression, this

crisis catalyzed a concerted response from central banks that some economists suggest “generated one of the most notable examples of central bank cooperation in history—the large swap lines set up between a number of central banks.”<sup>3</sup> As one financial journalist, Neil Irwin, described it, “Over two continents, five years, thousands of conference calls, and trillions of dollars, euros and pounds deployed to rescue the world’s financial system, central bankers would take the primary role in grappling with the global panic that began in earnest on August 9, 2007. They would act with a speed and on a scale that presidents and parliaments could never seem to muster. Over the next half decade, Jean-Claude Trichet, Ben Bernanke, and Mervyn King would create the world to come.”<sup>4</sup>

Why and how were central banks able to cooperate to avert a second Great Depression following the banking panics in 2007, a task that seemed out of reach in the 1930s? In this chapter, I explore the individual and interpersonal dynamics underlying this unprecedented central bank cooperation. Once again, interpersonal trust guided central bankers toward cooperative solutions to manage the crisis. The Fed swap network emerged alongside a slew of domestic unilateral rescue efforts, as well as multilateral interventions and coordinated policy adjustment. The emergence of the swap network within this broader realm of rescue packages, however, was seen as most surprising and unprecedented. It is this unexpected outcome that this chapter explains.

I examine central bank cooperation during the crisis and problematize the manner in which the Fed swap network emerged to manage liquidity pressures. I argue that key central bank leaders and their personal relationships played a central role in facilitating the creation of the Fed swap network, an outcome that was neither automatic nor obvious. Understanding how these arrangements emerged and evolved into critical crisis-management tools today is essential for deepening our understanding of the robustness and durability of the global financial safety net.

We meet a new cast of characters who found themselves at the center of the financial crisis. A key figure in this story is the chair of the Federal Reserve Board, Benjamin S. Bernanke, working alongside the vice chair Donald Kohn, and after 2009, the president of the New York Fed, Timothy Geithner. Their counterparts in Europe—Jean-Claude Trichet, president of the European Central Bank (ECB), and Mervyn King, governor of the Bank of England—as well as Masaaki Shirakawa, governor of the Bank of Japan, played central roles in the coordinated financial rescue efforts deployed by central banks. I also introduce Davíð Oddsson, governor of the Central Bank of Iceland, as well as central bank leaders in emerging market economies, such as Guillermo Ortiz Martínez of the Bank of Mexico, Duvvuri Subbarao at the Reserve Bank of India, and Henrique Meirelles at the Central Bank of Brazil, among other key players.

Because central bankers' communications today take place via the phone or email, I cannot rely on evidence from central bankers' personal and formal exchanges during this period. Instead, I offer new, firsthand insights on the crisis-management and cooperative effort from these leaders. I present evidence collected through elite interviews that I conducted with former leaders of major central banks during the global financial crisis (GFC), including Bernanke, King, Shirakawa, Trichet, and Subbarao, along with several deputies and central bank associates and staffers. I also provide interview evidence from central bank and finance ministry officials in Indonesia, Singapore, Brazil, and Iceland, who wish to remain anonymous. I triangulate this evidence with transcripts of Federal Open Market Committee (FOMC) meetings and journalistic reports during the crisis.

Using this novel empirical material, I join the extensive debates in economics and political science to explain patterns of cooperation during the crisis. As in the historical chapters, conventional accounts of interstate economic and financial ties, economic power and significance, cooperation through international institutions, and shared policy preferences and economic beliefs provide important baseline explanations for this outcome of crisis management. However, as I show, several questions around the Fed's selection of swap recipients remain unanswered.

Next, I describe the economic and political context of the GFC and provide a brief primer on the crisis from its outbreak and the domestic crisis management efforts in the United States that followed. I then turn to the relational dynamics underlying the creation of the Fed's swap network among a few advanced economies. Here, I show that bilateral cooperation among central bankers in the Global North, while less surprising, emerged through interpersonal and informal channels first, rather than through formal institutional channels, as they quickly but quietly arranged the earliest swap lines in December 2007. I also show that stronger and weaker personal ties in part explain variation in liquidity assistance available to countries that requested swaps from the Fed, with a focus on Mexico, with brief discussions on Brazil and Singapore. I also draw attention to Iceland, India, and very briefly Indonesia, whose swap requests were denied by the Fed.

## **Global Finance in the New Millennium**

The crisis emerged in an economic and political context very distinct to the interwar and midcentury years. This was not a world of postwar reconstruction and rehabilitation, although the United States was engaged in its own wars in

the Middle East, which shaped public spending, deficits, and debt. The means chosen to finance the US military buildup for the Iraq and Afghanistan wars fueled an economic boom and a housing bubble that eventually burst.<sup>5</sup> But the aughts were not marred by reparations battles and efforts to rebuild the global economy after a global war.

The collapse of the Bretton Woods gold-dollar system in 1971 brought on the current fiat money system of mostly floating exchange rates. The US dollar remained the key global reserve currency. Access to dollar liquidity therefore remained a primary concern for the rest of the world. The system's functioning is shaped primarily by the United States and a handful of Western European economies. But the world had changed in ways that distinguish the contemporary era from the past. First, the arrival of a unified Europe with a common currency, the euro, and the European Central Bank. And second, the rise of new major players—China, India, Mexico, Brazil—has brought about a consequential shift in the global balance of power. Financial globalization and market integration had increased both interdependence and vulnerability of national economies to pressures overseas.

The global economic governance system, the rules that regulate the global economy, and the institutions that enforce them had evolved and expanded. Today, the task of large international financial institutions (IFIs) is to coordinate global action.<sup>6</sup> Since the 1980s and 1990s, many central banks have gained *de jure* independence from governments to avoid short-term political interference in monetary policy decisions.

The central banking profession has also changed. John Singleton notes, "Central bankers in the early twentieth century knew little, if anything, about economics." This could not be less true today.<sup>7</sup> Central bankers today tend to be trained academic economists. How they engage with their counterparts, and how frequently they do so, has also evolved. They have moved away from the detailed and personal letter-writing of the past. However, technological advancements in travel and telecommunications mean that it no longer takes days or hours to communicate, but seconds. Central bankers are now in more frequent and instant contact than their predecessors.

Together, these changes make for a context very different to that of the gold standard or the Bretton Woods years, and were consequential for the outbreak, nature, and resolution of the GFC. Troubles in one part of the world, and especially in the United States, are even harder to contain to national borders today than in the past. International pressures called for an international response. Fortunately, the speed with which policymakers could communicate and the frequency with which they met facilitated rapid and coordinated responses from central banks as the crisis broke.

## The Crisis Unfolds

Early in 2007, New Century Financial Corp., a company specialized in mortgage lending to cash-poor homebuyers in the United States, disclosed that many of its borrowers had started defaulting on payments. By March, its stock price had collapsed to \$3.21 (from \$15 earlier that year, which was already down by half its value). The company had declared it would stop making new loans, and it was now in need of emergency financing. In April, New Century Financial filed for bankruptcy. In the following months, large numbers of private-label mortgage-backed securities were downgraded to high risk and several subprime lending companies closed up shop. Dropping demand for housing fueled speculation of further house-price declines. Many subprime borrowers could not sell their homes to pay off their mortgages.

On August 9, 2007, a large French bank, BNP Paribas, suspended withdrawals from three investment funds that it managed. These funds were deeply invested in US securities markets, especially in mortgage-backed securities. In the next month, German banks faced collapse and were rescued. Bank failures in Europe peaked when Northern Rock PLC, a mortgage issuer in England, faced a cash crunch, as mortgage securities markets had become toxic. These bank failures were also associated with investments tied to the US subprime mortgage market.

As troubles emerged, central banks, governments, and monetary authorities were once again faced with a host of policy options to resolve immediate, local pressures and bank failures unilaterally, as well as through multilateral policy coordination.

The ECB was quick to intervene as a lender of last resort in the euro area. The Fed, eager to signal that it was on the same page as the ECB, released a statement that it was prepared to provide the necessary “liquidity to facilitate the orderly functioning of financial markets.”<sup>8</sup> The central banks of Canada and Japan also intervened to manage liquidity pressures. The Fed cut interest rates just ten days after the BNP Paribas episode. On September 13, the Bank of England announced emergency support for Northern Rock, and the next day, depositors withdrew £1 billion, triggering the largest bank run in England in a century. Northern Rock was eventually nationalized, and the government took steps to guarantee depositors’ savings.

The problems faced by European banks soon returned to their place of origin. In Europe and the United States, large financial institutions such as UBS, Citigroup, and Merrill Lynch announced losses and exposure to bad debts, all associated with subprime mortgages. By the end of January 2008, a credit crunch had hit the world’s richest countries and global stock markets faced their largest falls since September 11, 2001.

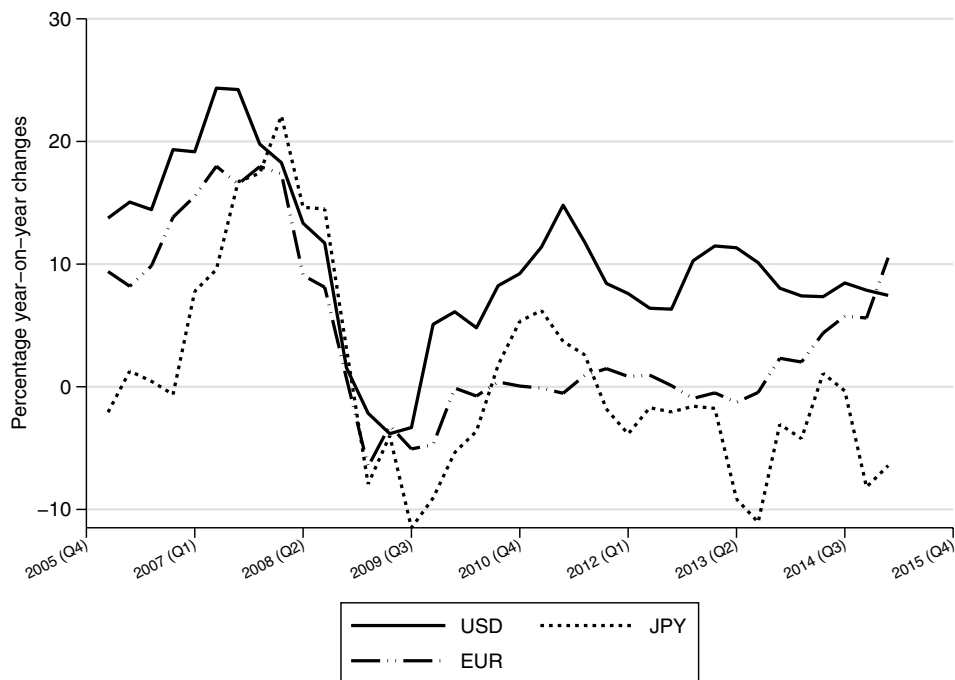
The crisis was punctuated with an onslaught of emergency financial packages and unilateral measures across national economies to rescue domestic banking sectors. These interventions came from central banks, with support from their governments.

Beginning in September 2007, the Fed and the ECB established a slew of bailout programs and began cutting interest rates dramatically. The Fed lowered the funds rate for its lending facilities by three-quarters of a percentage point to 3.5 percent, its largest rate cut in a quarter of a century. On March 7, 2008, it announced the release of \$30 billion in a twenty-eight-day credit facility on March 10 and 24 through the Term Auction Facility (TAF), a new method to help sound banks acquire funds that they could lend on to consumers and businesses, which had been established in December 2007 and lasted through March 2010.<sup>9</sup> This facility was established alongside the first round of central bank currency swaps with the ECB and the SNB.<sup>10</sup> Until March 2008, the Fed tried to keep liquidity in financial markets, lending \$200 billion to bail out bond dealers, who were stuck with toxic mortgage-backed securities and collateralized debt obligations.

The toppling of big banks culminated with Bear Stearns's collapse in the United States and was declared functionally bankrupt.<sup>11</sup> And although it was not regulated by the Fed and did not have access to the Fed's emergency assistance, its collapse would devastate financial markets. As a result, the Fed invoked its emergency authority under the Federal Reserve Act 13(3) to provide liquidity to "any individual, partnership, or corporation" in "unusual and exigent circumstances."<sup>12</sup> It then further lowered interest rates to 2.75 percent, halving the Fed funds rate within a six-month period.

After what seemed like a lull in the crisis, and signs suggesting that the worst was over, troubles hit Fannie Mae and Freddie Mac, two federally backed mortgage companies, in mid-2008. Both institutions continued to suffer large losses and were placed into conservatorship amid the subprime mortgage crisis. Large British banks such as HSBC and HBOS revealed sinking profits, and house prices across the United Kingdom fell rapidly. The financial system that had been breaking down slowly now crumbled all at once. By the autumn of 2008, Lehman Brothers felt the pressures that had got to Bear Stearns some months before; on September 15, 2008, when the Fed had no legal way to hand over money to save Lehman, Lehman filed for bankruptcy.<sup>13</sup> The same day, Merrill Lynch was purchased by Bank of America.

Amid the uncertainty, an excess of toxic assets and a systemic credit crunch, global dollar liquidity continued to collapse (see figure 4.1). Banks found it difficult to lend to one another. Worse, they could not lend to ordinary people.<sup>14</sup> Banks' assets were now considerably less valuable, if valuable at all, than when they had bought them. So, the Fed and US Treasury created a series of programs



**FIGURE 4.1.** Global Liquidity Indicators (Quarterly), 2006–2014. Percentage year-on-year changes, in Euro, Yen, and US dollars. Source: BIS Statistics.

to strengthen domestic market stability and enhance market liquidity. That December, the Fed announced it was to lower its benchmark interest rate further to zero for the first time since the Great Depression. But, as central banks exhausted their monetary policy discretion, they could no longer lean solely on their go-to unilateral tools.

This was no ordinary credit crunch. The collapse of money and credit was systemic and had made its way abroad. Dollar funding strains became significant problems in Europe, the United Kingdom, and Japan. Norway had moved to protect its domestic banking system, while the highly leveraged Icelandic banking sector was inches from collapse. The problem was a lack of capital. They all needed help. For governments, arranging large packages was politically difficult to justify. And even had that not been the case, they would have still taken weeks to arrange. Across the world, national economies needed money to free up lending.

As the crisis worsened, Daniel Drezner argues that “despite initial shocks that were more severe than the 1929 financial crisis,” the global financial governance system of formal and informal rules and institutions “responded quickly and

robustly.” In other words, the system worked.<sup>15</sup> International organizations such as the International Monetary Fund (IMF), the Group of 20 (G20), and central banks were revitalized to respond in an “effective and nimble fashion.”<sup>16</sup>

Others argue that the role of this system is exaggerated—the IMF’s resources fell short, and the G20 did little to bolster the Fund’s capacity to meet the global demand for loans at the worst point of the crisis.<sup>17</sup> Two of the most significant rescue measures emerged out of international cooperation between central banks. One is the first ever coordinated interest rate cut in October 2008. The Fed, the Bank of Canada, the ECB, the BoE, and the Sveriges Riksbank (in Sweden) all cut their primary lending rates by half a percentage point. The Swiss National Bank also cut rates. The Bank of Japan publicly endorsed the move. This coordinated rate cut gets the most attention as an act of unity among central bankers and made front-page news the day after it was announced. Despite this fanfare, the move had at best a modest effect on calming markets.

A more significant cooperative step was extension of liquidity swap lines by several major central bankers, led by the Fed. These steps were unprecedented in their amounts and their coordination.<sup>18</sup> This program was neither an automatic nor an obvious policy response but rather symbolized the adage that situations of such gravity called for “outside the box” thinking.<sup>19</sup>

The largest swap network was established by the Fed, which extended bilateral currency swaps to a select fourteen central banks and is the focus of this chapter. The Fed essentially expanded the size of its balance sheet to deploy this program, and it was the institution’s single largest crisis-fighting effort during the GFC.<sup>20</sup> The first lines were set up in December 2007 and continued through 2010, peaking with the largest swap amount of USD\$170.93 billion to the ECB on October 2008. The Fed alone injected over half a trillion dollars of liquidity using these instruments. The Bank of Japan also extended dollar swaps to a few partner economies such as India or Indonesia, who experienced dollar shortages but did not receive a swap line from the Fed. South Korea received dollar swaps from both the Fed and the Bank of Japan. A euro network and a Swiss franc network also emerged. Of course, euro-denominated loans outside of the euro area were far fewer than those denominated in US dollars. Euro-denominated reserves made up about a fourth of world reserve holdings as opposed to two-thirds of world holdings being denominated in dollars.<sup>21</sup> Poland, Hungary, and the ECB received SNB swaps.<sup>22</sup> The People’s Bank of China swap network emerged in 2009 and has since proliferated in its size and global reach. Using these swap lines, central banks injected trillions of dollars and euros into the global economy during the GFC between 2007 and 2010.

My study focuses on the swap network provided by the Fed, setting aside other central bank swap networks, such as those provided by the ECB or China. This is because, as was the case for the crises of the 1980s and 1990s, the kind of evidence



**TABLE 4.1** Federal Reserve bilateral swap agreements, 2007–2010

SWAP REQUEST	INITIAL SIGNING	TERMS
European Central Bank	December 2007	Unconditional
Switzerland	December 2007	Unconditional
Canada	September 2008	Unconditional
United Kingdom	September 2008	Unconditional
Japan	September 2008	Unconditional
Australia	September 2008	Unconditional
Denmark	September 2008	Unconditional
Norway	September 2008	Unconditional
Sweden	September 2008	Unconditional
New Zealand	October 2008	Unconditional
South Korea	October 2008	Limited
Singapore	October 2008	Limited
Mexico	October 2008	Limited
Brazil	October 2008	Limited
Chile	—	Denied
Dominican Republic	—	Denied
Iceland	—	Denied
India	—	Denied
Indonesia	—	Denied
Peru	—	Denied
Turkey	—	Denied

necessary to illustrate and support my argument—interview accounts from recipients of ECB swaps, or real-time transcripts of the ECB’s negotiations and decisions to extend these lines—as I provide in the Fed case, are unavailable.

At least seven central banks that requested a swap line from the Fed were denied one (see table 4.1). Even more, while these lines are largely viewed as unconditional, the terms of these arrangements vary between swap partners. A select few countries were given unconditional drawing authority, without further need for authorization from the Fed once a line was agreed to. For the four emerging market economies, limits were placed on the amounts and use of these instruments. Limits were presented as “additional safeguards,” and “lines could not be drawn on without further authorization, and individual drawings would be limited to \$5 billion.”<sup>23</sup>

These liquidity lifelines were arranged *bilaterally* between the swap-issuing central banks, here, with the Fed, and the recipient counterparty. Again, these lines emerged in an experimental and ad hoc manner and proved essential to

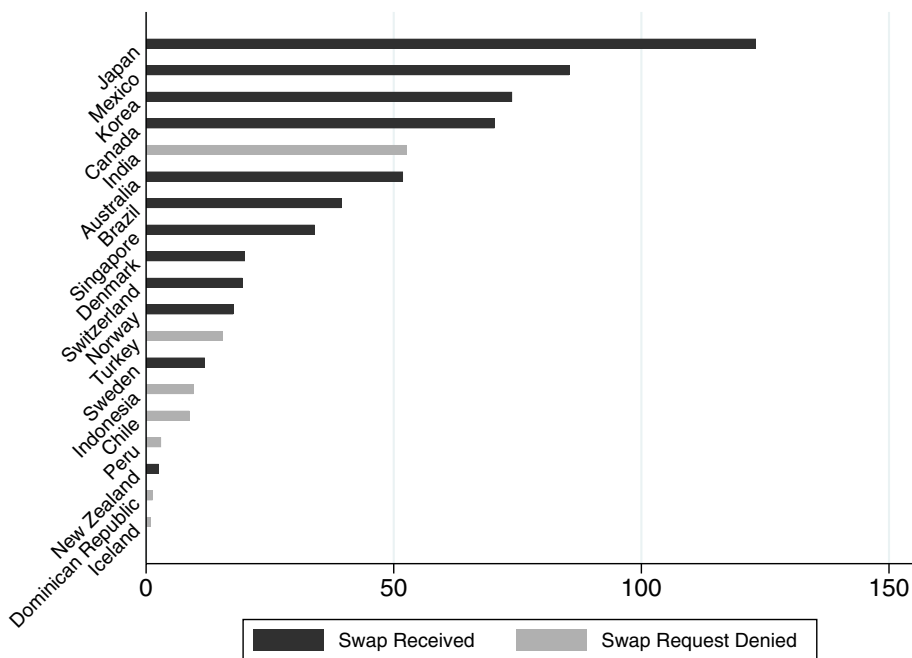
bolstering the rescue measures undertaken by central banks and governments, providing critical measures to patch up the inadequate governance system. To many central bankers at the time, it was not initially clear that they would succeed.

By extending these liquidity lifelines, the Fed played the critical stabilizing role of ILLR. However, per Walter Bagehot's principle of "lending freely against good collateral at a penalty rate," the Fed as an ILLR did not lend freely. Additionally, the collateral in a currency swap is the foreign currency being swapped, and the currency risk was assumed by the Fed's counterparty. But the risks of financial or currency collapse, and so the failure to honor the agreement, were systemic.<sup>24</sup> In other words, *there was no good collateral*. Now, central bankers' discretion was paramount, especially in providing liquidity sans good collateral under conditions of uncertainty, and not risk, where the "probable distribution of outcomes itself is unknown."<sup>25</sup> This is evident in the ambiguous, differentiated and arguably preferential application of the Fed's criteria in selecting swap recipients. Fed officials at the front line even recognized that the crisis was a period of radical uncertainty.

By mid-2007, before the worst of the crisis was upon them, FOMC officials cited concerns about unquantifiable uncertainty, not risk. In a June 2007 meeting, Jeffrey Lacker noted, "There is a vast range of uncertainty out there about which we can't help markets and they can't help us."<sup>26</sup> In the September meeting that year, Donald Kohn, the Fed vice chair, found that the range of outcomes were "just too wide, and there's very little central tendency in it. So, I'd be very uncomfortable with a statement saying that I kind of thought the risks were balanced."<sup>27</sup> By the end of the year, just as the Fed was about to extend its first swap lines, Kohn explicitly stated in a December FOMC conference call that financial institutions were protecting themselves "against a true Knightian uncertainty that they can't price and don't know how to protect themselves against."<sup>28</sup> Fed officials found themselves in an environment of radical uncertainty as they entered the new year. Conventional metrics were no longer reliable, and policy-makers had to rely on subjective reasoning as they worked to put out the fire.

Who had access to these swaps and who did not was certainly influenced in important ways by the structure and balance of economic power in the global financial system. Still, although these conventional accounts can explain our baseline expectations, the Fed made some puzzling choices as to who would or would not have access to these conditionality-free arrangements.

To explain the Fed's selection of swap recipients, the international political economy field turned to interstate and interest-group politics. Of course, interstate economic ties create an interdependence and thus credibility that actors will avoid defaulting on loans or cooperate to minimize mutual harm.



**FIGURE 4.2.** US Bank Exposure, 2007. This figure plots US bank exposure overseas for all countries who requested a swap, measured as the percentage of the consolidated claims of US banks in a foreign economy (in USD billions) as a proportion of total of the global consolidated claims of US banks as of December 2007. I exclude the UK and EU, which have the largest bank exposure, for space considerations.

And obviously, Fed officials had an incentive to assist foreign countries to protect the US banking sector and financial interests from overseas pressures; not doing so would imply that Fed leaders did not do their job.<sup>29</sup> Unsurprisingly, per our baseline expectations, a key predictor of receiving a Fed swap is the exposure of US banks to an overseas economy.<sup>30</sup>

Although US bank exposure and dollar shortages did motivate the Fed, a few cases stand out (see figure 4.2).<sup>31</sup> Bank exposure in India was far greater than in several swap recipient states, while New Zealand, whose banking ties with the United States are among the lowest of all swaps requested, received a \$25 billion swap. Among the fifteen economies facing the largest dollar shortages, such as Chile, Iceland, India, and Turkey, who requested swaps, were denied.<sup>32</sup> Emergent market economies (EMEs) were undoubtedly disadvantaged in their international competitiveness and faced higher barriers to accessing this conditionality-free safety net.

We also know much less about *how* these lines came about and who was present at discussions and negotiations. As this book has shown so far, understanding the origins of such governance arrangements allows us to assess their robustness and their durability in the global financial safety net. In the rest of this chapter, I explain these outcomes discussed above and identify and illustrate the manner in which the Fed swap network emerged to highlight the interpersonal dynamics underlying this international cooperative response to the crisis.

## The Inner Club

In 2007, a new cohort of central bank leaders found themselves at the front line—Bernanke, King, Trichet, and Shirakawa. In 2008, *Newsweek* ranked Bernanke, Trichet, and Shirakawa the fourth, fifth, and sixth most powerful people in the world who “could determine whether the global market avoids calamity.”<sup>33</sup> They entered the crisis with “different backgrounds, temperaments, and intellectual proclivities.” They did not agree on the causes of the crisis and held different views on how to resolve it.<sup>34</sup>

Armed with the backing of their institutions, they took extraordinary, innovative, and improvised measures to tackle the crisis. They played crucial roles in the negotiations over international liquidity arrangements and managing financial instability at home and internationally. In the broader professional community of central bankers, a handful of central bank leaders were deeply enmeshed in the central banking fraternity; some were more deeply embedded in interpersonal ties than others. These relationships were integral to managing relations within central banks that today are far more decentralized than they had been in the past.

A central figure in this story is Bernanke, who himself is an expert on the Great Depression. His work with Mark Gertler explored the “expertise, information, and relationships” based on which banks made decisions to lend. Along with Simon Gilchrist, they later developed the concept of the “financial accelerator” that identified how economic shocks were transmitted through credit channels from the economy into the financial system in the 1930s.

In my interview with Bernanke, he noted, as he has also written elsewhere, that on assuming the Fed chairmanship, “an early priority was forging cordial working relationships with international policymakers.”<sup>35</sup> He already knew King when he took up the post. Bernanke and King both began their careers as academic economists. They first met when they shared an office suite at MIT in the 1980s and had a reunion lunch soon after Bernanke took office. While scholars would argue that this shared educational background lends itself easily to consensus and cooperation based on shared beliefs and preferences, that was

not the case for Bernanke and King. Bernanke viewed the crisis as a “deeply intertwined set of risks to the banking system and the overall economy.”<sup>36</sup> King saw these problems and fault lines as less severe, viewing the crisis as a corrective for the long bout of banking excess.<sup>37</sup> Neither anticipated that they would be responsible for the world’s most important currencies during the worst crisis since the Depression.

King also had a similarly old connection with Trichet, when they met at the other Cambridge—Cambridge University—decades before. Trichet was a life-long bureaucrat who had studied Latin and the classics before beginning his civil service career. He “saw his profession as a central banker as being about something much bigger than economics.”<sup>38</sup> King and Trichet first met when Trichet was visiting Cambridge for his studies on the British tax system. Despite this old, academic connection, they too, like King and Bernanke, diverged on what caused the crisis and disagreed on the best approach to resolving it. Trichet initially viewed it as a one-off problem of banking panic and market uncertainty. And despite their divergent career and education backgrounds, Trichet and Bernanke saw it as essential to act quickly and assertively. King, on the other hand, saw regulating banks as messy and legalistic and found Trichet and Bernanke’s initial response as an overreaction.<sup>39</sup>

Certainly, international institutions, such as the Bank for International Settlements (BIS) or the IMF, provided central bankers a space in which they could meet and build their professional and personal relationships with their foreign counterparts. Bernanke first met Trichet in New York during an IMF meeting. This is also where he sought to forge relations with his counterpart in Mexico, Guillermo Ortiz Martínez, when he first assumed the chairmanship during his visit to New York for an IMF meeting.<sup>40</sup>

Shirakawa, governor of the Bank of Japan, had been a part of the central banking world for decades and had spent time representing the Bank of Japan in New York earlier in his career, acting as general manager for the Americas in New York City. When he took up the governorship, he made the move from a faculty position in public policy at Kyoto University. Shirakawa is known for his unconventional and innovative ideas. But he also preached cautionary monetary policy and, throughout his term, resisted governmental pressure to take a more aggressive stance. He believed that a loose monetary stance would encourage “unchecked government spending and runaway inflation” and believed that it was the government’s responsibility rather than the central banks’ to “encourage economic growth through structural reforms and other growth policies.”<sup>41</sup>

In interviews, several central bankers mentioned that they had developed close personal relationships of trust and goodwill with one another before the

crisis through both their private and formal meetings and frequent correspondence and had developed long-standing personal familiarity with one another.<sup>42</sup> Certainly, they did not share the intimate friendships of their interwar predecessors. But despite their different priorities and philosophies, they did share close relations of trust and goodwill, which helped them to converge on a plan to establish swap lines.<sup>43</sup> It was crucial that they could work together and have free and frank debates around their disagreements. It was also important that disagreement and criticism among central banks would only occur in private.<sup>44</sup> This was especially so for building trust that distinguished those central bankers who, like King or Bernanke, view themselves first and foremost as *not* politicians, from those with closer professional and personal ties to the political sphere.<sup>45</sup>

Kohn noted that bankers today work within stricter institutional and legal constraints and do not share the deep and detailed letter-writing traditions of their predecessors. However, regular contact and correspondence allow them to build similar personal and social relationships with one another that give them added insight to their personalities.<sup>46</sup> Shirakawa also noted that technological advancement in communication has allowed them to maintain very private and regular contact both formally and informally.<sup>47</sup>

Charlie Bean, then a deputy governor of the Bank of England, talked of the long-term personal relationships that some central bankers develop with one another over their careers.<sup>48</sup> But many central bankers noted that within the central banking club, there is an inner circle.<sup>49</sup> Others noted that institutions, especially the BIS, play a crucial part in fostering reciprocity and trust between central bankers.<sup>50</sup> The Global Economy Meeting and the BIS dinner allowed for a free and frank exchange of views over the goings-on in markets.<sup>51</sup> The dinner is particularly important. Its closed, exclusive, and informal setting facilitates free-flowing conversation. The strongest interpersonal relations are cultivated in this confidential environment. Several central bankers noted that the exclusiveness of these dinners also generated strong personal ties between those who were regularly invited than those who often remained outsiders.<sup>52</sup>

And although international financial institutions have routinized day-to-day cooperation and institutionalized intergovernmental credit facilities, once again, as in the past, the crisis decisively showed central bankers' preferences for bilateral and ad hoc strategies to meet liquidity needs.<sup>53</sup> Institutions mattered in the GFC, but primarily in their role in providing opportunities for face-to-face interactions and communication among monetary authorities, such as at the BIS. But rather than turning to these long-standing institutional liquidity facilities, a handful of central banks sidestepped traditional avenues for intergovernmental lending for ad hoc, bilateral alternatives.

## Unconditional Swaps

In a crisis, history counsels cooperation; its absence in the 1930s had disastrous consequences. During the GFC, advanced economies shed available strategies through the IMF or G7 accords to go their own way. Given that the crisis first erupted and spread across European and American banks, the ECB, the Bank of England, and the SNB were obvious recipients of Fed swaps. However, even among these more highly interconnected economies, the initial discussion and negotiations over swap lines were facilitated by favorable individuals and interpersonal ties that were conducive to early and rapid, ad hoc, and bilateral cooperation among these few banks.

In interviews, central bankers acknowledged and emphasized the importance of personal relationships and reciprocity among friends in facilitating such cooperation during the crisis, even though, as one interviewee said, “It’s not the traditional point of emphasis for most researchers.”<sup>54</sup> Unlike epistemic communities, where policymakers need not meet formally or informally, in the context of cooperation during crises, it is important that individuals tasked with crisis management know one another personally.<sup>55</sup> It was also vital that they had opportunities to interact and discuss problems in private outside the public view. Of course, many of these individuals were also part of a broader and more diffuse community of economists, or central bankers, sometimes trained in similar traditions, and may have crossed paths in previous academic professions too. But these central bankers were not all career technocrats, nor did many of them share educational credentials. Instead, in the uncertainty of the crisis, relations of personal trust and reciprocity were essential in order to facilitate cooperation around new and experimental approaches to crisis management.<sup>56</sup>

The origins of the Fed swap network were in a meaningful way grounded in relationships of trust and goodwill shared among a handful of leaders, which facilitated rapid bilateral cooperation early in the crisis. No doubt, most central bankers talked of the institutional and legal constraints on their discretion, the influence of domestic concerns, and the international economic and political climate on their foreign operations. But despite central banks’ large institutional apparatuses and operations within legal and institutional frameworks that outlive individuals, leaders’ influence increases in a crisis.<sup>57</sup>

Swaps were typically arranged following a request from one central bank to another, usually the Fed. Agreements were reached over bilateral phone calls or emails, with personal appeals from governor to governor.<sup>58</sup> Initial conversations and informal agreements were made primarily at the leader level. Leaders often discussed these arrangements with their foreign counterparts *prior* to seeking their own banks’ support and approval.<sup>59</sup>

Trichet referred to this cohort of central bankers as a “collective brain,” noting that the ties binding them together were not just professional but personal. He talked of how their easy and immediate personal relationships “of extraordinary confidence and intimate knowledge” were critical for generating collective solutions to the crisis, especially since they entered the crisis with differing views of both its causes and how best to resolve it. This is evident in that domestic crisis management policies varied across the world.<sup>60</sup> As central banks were exhausting their monetary policy discretion, one former central bank official suggested that in finding solutions to the crisis and making final decisions, leaders had the final word.<sup>61</sup>

Bean noted in an interview that while things do ultimately “get done,” under conditions of uncertainty, such facilities are difficult to rapidly get off the ground in the absence of personal relationships and trust.<sup>62</sup> Indeed, as Jonathan Mercer notes, “If observers attribute cooperation to the environment rather than the person, then trust cannot—and need not—develop.”<sup>63</sup> Despite the ease and low cost of assembling swap lines, central bankers faced with the same crises have not been guaranteed the same privileged access to ad hoc liquidity assistance through swap lines. It soon became apparent that emerging economies were disadvantaged in their international competitiveness and faced higher barriers to accessing this conditionality-free safety net.<sup>64</sup>

Generally, where central banks cooperated, it was not entirely surprising, but some cases can be identified where the necessary liquidity assistance did not occur. Requests from some central banks of systemically important or highly financialized economies, such as India and Iceland, were denied; others that did not unambiguously meet the Fed’s stated criteria, such as Brazil or Mexico, were granted one.<sup>65</sup> Lending central banks suggested that liquidity shortages determined swap access. However, four of the fifteen economies facing dollar shortages—Chile, Iceland, India, and Turkey—that requested a Fed swap were denied.<sup>66</sup> Swap requests from the Dominican Republic, Indonesia, and Peru, which were not facing as severe dollar shortages, were also denied.

That the core, Western economies received the first unconditional swaps is not entirely surprising. These economies shared close banking and financial ties, and many were G7 members and fixtures at the BIS meetings and exclusive dinners. They interact regularly to incrementally build trust, goodwill, and familiarity over their careers.

Some non-US central bankers noted that Bernanke strongly favored showing a unified front among major central banks.<sup>67</sup> In previous studies, scholars have similarly emphasized Bernanke’s pivotal role in pursuing the swap lines during the crisis in contrast to the nonaction or wrong action by central bankers in the 1930s.<sup>68</sup>

*How* these swaps were arranged, however, is intriguing. Central bankers initially disagreed on how to manage the crisis, and such cooperation was not



automatic. Before even getting to my questions, in an interview, the first thing that one former Fed official said was “You want to think about personal relationships. It is important that you can get your counterpart on the phone.”<sup>69</sup> They went on to say that, essentially, the earliest conversations and informal agreements were made privately at the leader level, often without knowledge of these discussions among their own central bank associates. Of course, they did indeed later consult with senior associates, who would be involved in executing these functions alongside partner banks.<sup>70</sup>

But initial cooperation occurred outside traditional institutional avenues, through leaders’ interpersonal exchanges. When a solution was found, it was crucial that central bankers trusted one another to honor these agreements. The risks associated with the swap lines were mitigated by only extending them to trusted counterparties.<sup>71</sup> When decisions had to be made quickly, institutional trust depended on interpersonal trust and reciprocity among leaders.<sup>72</sup>

Some European bankers noted that Bernanke strongly favored showing a unified front among major central banks. Bernanke, an expert on the Great Depression, said to me that he had taken two technical lessons from that crisis. First, to not let the money supply collapse; and second, to ensure the availability of credit in the system. Second, he had also learned that in a powerful position, with powerful tools, a central banker ought to be “cautious, conservative and careful” in normal times. In contrast, in a crisis, it is often necessary to be bold and innovative, in consultation with colleagues and within political and legal constraints.<sup>73</sup> Caution and conservatism had prevented central bankers from managing the collapse of credit and the money supply a century ago. As discussed in the introduction of this book, Bernanke recognized the role of central bankers in the Depression and assured the audience of preventing a repeat.<sup>74</sup> Several of Bernanke’s domestic and foreign colleagues who I interviewed suggested in interviews that this mantra undoubtedly informed his activist approach to the GFC.

Early on in the crisis, as discussed previously, central bankers were not unified in their agreement on how to manage it. So when a solution was found, as one central banker noted, it was crucial that central bankers knew and trusted one another to honor these agreements.<sup>75</sup> Much of the risk associated with these lines was mitigated by only extending them to trusted counterparties.<sup>76</sup> When decisions had to be made quickly, institutional trust depended on interpersonal trust and friendly relations among central bank leaders.<sup>77</sup> Early in the crisis, trust lay at the heart of the swap lines.

While some characterize the swap arrangements as *unilateral* defense mechanisms, motivated by the goal to protect US power and financial interests, they are *bilateral* arrangements.<sup>78</sup> Bernanke and his Fed associates depended as

much on the trust, goodwill, and support of their counterparties as they did on the Fed. In many cases, not unlike Coombs's experience in the 1960s, Bernanke's counterparts initiated swap agreements even as pressures had eased.

In the summer of 2007, dollar funding pressures were growing in Europe; as David Wessel notes, European banks "couldn't easily find [US dollars] in malfunctioning markets." At the time, "key players at the Fed and at the ECB, for different reasons, were reluctant to make what seemed the obvious move," which was extending swaps.<sup>79</sup>

As pressures increased later in the year, it seems the tone was shifting. Interviews and FOMC transcripts show that the swap lines with central banks in Europe had been discussed and prearranged privately and informally between central bank leaders, prior to seeking their own banks' approval.<sup>80</sup> In the FOMC meeting of September 18, 2007, on the question of dollar swaps and an auction facility, Bernanke shared that in "some conversations [he] had, in particular with President Trichet of the ECB, [they] came up with the possibility of combining these two things, essentially having auctions simultaneously in the United States and Europe, and then using the swap markets to provide the dollars to the extent that the ECB would like to have them." They had arrived at a similar plan with the Swiss National Bank.<sup>81</sup>

Across the Atlantic, European central bankers, initially resistant to the swap proposal, later expressed, as Adam Tooze writes, that they "didn't expect to have any difficulty getting hold of dollars" from the Fed.<sup>82</sup> ECB officials noted that Trichet and Bernanke had discussed these arrangements privately. Both leaders then had to gather the support of their banks, which they would generate in internal meetings to get consensus support, so as to not go back on their word. The internal deliberations over predetermined settlements were therefore essentially pro forma, as central bank leaders had already informally agreed to these arrangements, grounded in interpersonal trust and reciprocity.<sup>83</sup> By making these agreements informally, leaders had great discretion over their banks' decisions.

Unlike Bernanke and Trichet, King viewed the crisis as a corrective for banking excess and was eager to avoid a moral hazard problem from bailing out banks. Earlier in 2007, he strongly opposed any intervention for liquidity support as he believed it "encourages excessive risk-taking and sows the seeds of future financial crises," which explains why the Bank of England did not join its European counterparts in proposing swap lines with the Fed.<sup>84</sup>

But when talking about the lead-up to and decisions made to arrange a swap, King emphasized people and personal relationships between central bankers mattered. He was close with Kohn's predecessor, Roger Ferguson Jr., with whom he had arranged a dollar swap with the Fed on September 12 and 13, 2001, immediately following the attacks on the World Trade Center in New

York City. King suggested that the 2007–2008 swaps emerged in a similar manner. In an interview, when I asked King how these lines first came about, he said, “If you trust your counterpart, for temporary and emergency purposes, you can give the Fed a call.”<sup>85</sup>

Paul Tucker, who assumed the deputy governorship at the Bank of England in 2009, was close with Kohn at the Fed. He suggested that friendly and informal relations with Kohn, developed largely in Basel, helped facilitate discussions on how to collectively address liquidity pressures. Kohn similarly said that he and Tucker “had developed a close working relationship that was very useful when [their] economic and financial systems were under stress.”<sup>86</sup>

The possibility of coordinated action was broached in broad terms between Tucker and Kohn in South Africa when walking to a formal dinner. Tucker sensed an appetite in the Fed to take joint action. They had a very long, free, and frank conversation (“there’s something about a good walk and talk”), where they could discuss the need for coordination or cooperation in ways that would demonstrate “joinedupness” to the world while each central bank tailored its actions to its own particular circumstances. This personal, informal discussion between Tucker and Kohn helped lay the groundwork for official follow-up discussions between the Fed, Bank of England, and others. When, a few weeks later, a handful of central banks announced new measures, the *Financial Times*’s front-page headline focused on the coordination.<sup>87</sup>

The first lines were extended in December 2007. By September 2008, the Fed’s swap network encompassed the ECB, the Bank of England, the Swiss National Bank, and the Scandinavian central banks.<sup>88</sup> And in September 2008, when Japan sought out a swap, following an extraordinary meeting in the middle of the night, Shirakawa notes that “the arrangement was up and running in a matter of a few days, without any information leaks before its launch. It reflected a strong mutual trust among central banks.”<sup>89</sup> When recounting this cooperative effort in an interview, Trichet claimed that the collective brain was “equipped with the appropriate synapses,” opening the possibility for an early, quick, and cooperative response to the crisis.<sup>90</sup>

The crisis generated unusual circumstances for central bankers. With conference calls occurring at unusual hours, as Shirakawa writes, “to negotiate and hammer out practical solutions with overseas counterparts, sometimes without sleep,” knowing people well, and knowing how to talk to, negotiate, and reason with them was essential.<sup>91</sup> King talked of his extensive interaction with Kohn, with whom a US-UK swap had already been discussed informally. Interestingly, these plans for collective efforts between the United States and United Kingdom ran counter to King’s initial refusal to lend to the system.<sup>92</sup> But central banks could not rely on governments for large amounts of liquidity, nor

could they arrange swaps publicly. Confidentiality and trust were crucial, and reciprocity and personal relationships mattered fundamentally for cooperation and as traits that are a mark of central bankers who work closely together.<sup>93</sup>

Some central bankers note that in the earliest days, these huge agreements that central bankers entered into, often overnight, were arranged solely on the word of central banks' leaders.<sup>94</sup> Given the uncertainty around the success of crisis management efforts, the earliest and largest swaps between major central banks were grounded in their governors' personal trust. Almost nothing about their outcomes was known ahead of time. In his memoir about the crisis and its aftermath, Bernanke recounts his worry that early swaps may not have sufficed in Europe: "This may not work. I don't want to oversell it," [Bernanke] told the FOMC. "If we do it, we are just going to have to give it a try and see what happens."<sup>95</sup> This worry and uncertainty around the success of these policies was echoed by several central bankers.<sup>96</sup> Through these swap lines, the Fed's lending to central banks reached almost USD\$600 billion between 2007 and 2010, peaking at \$170.93 billion in an overnight swap to the ECB on October 15, 2008.<sup>97</sup> When later asked by Alan Grayson, a Florida Democrat, during a congressional hearing, which foreign banks were lent the money by the Fed, Bernanke answered, "I don't know."<sup>98</sup>

Since the announcement of these lines, the use of these tools has been seen as extremely problematic in the public and political spheres. Gerald O'Driscoll, formally of the Dallas Fed, called out the New York Fed for undertaking this effort in a manner that is "troublesome in a democracy" and for using its authority "to bail out European banks."<sup>99</sup> Others have criticized the Fed for extending swap lines during the crisis that were issued without either approval or oversight from Congress and from the White House.<sup>100</sup> Even those who acknowledge the Fed's need to play the role of an international lender of last resort are concerned with the potential risks and public costs associated with these arrangements in their current form.<sup>101</sup> And, by 2010, the FOMC itself came to recognize the political risks associated with these measures, especially, as Michelle Smith, the Fed's communications director warned, anything that they were "keeping secret" that would fuel speculation in Congress.<sup>102</sup> But in its earliest days, keeping these efforts behind closed doors, between just a few, apolitical central bankers, was essential.

Neil Irwin writes that the Fed's extensive but "hidden liquidity support measures" were "a closely guarded secret even by the standards of the always secretive Fed." During the panic, "information about the Fed's lending was so closely held—and had it been known publicly, so potentially explosive—that only two people at each of the dozen reserve banks were allowed to access it."<sup>103</sup> The FOMC meetings in which swap lines and other programs were finalized were

followed by “closed meetings” with the Board, which published no transcript, only “very summary” minutes released two weeks after the meetings. The information provided was “very general—something like there was a discussion of means to address money market issues.”<sup>104</sup>

Throughout the crisis, central bankers had taken to innovation and improvisation, somewhat departing from convention of caution in favor of what Bernanke and others refer to as “blue sky thinking.”<sup>105</sup> Central bank staff had been working on a wide range of proposals that were circulated to Bernanke, Kohn, Geithner, and Kevin Warsh. Deliberations over these “pre-decisions” took place in closed meetings. Fed Board meetings are subject to “sunshine laws”: formally, a meeting is made public and informative, which Bernanke observed in his book, was “not a great venue for blue-sky thinking and strategizing.” And some interviewees noted that the Fed’s legal team could make exceptions as to what constituted a meeting.<sup>106</sup>

Smaller meetings of fewer than four Board members did not trigger this open-meeting law, and because Geithner was not a Board member at the time, these meetings were exempt from the sunshine requirement. Because such a setting was more suitable for blue-sky thinking, these group meetings were often kept exclusive to these four individuals, while Bernanke tried to keep other Board members not in attendance at these informal meetings “apprised of developments through one-on-one lunches and frequent email exchanges.”<sup>107</sup>

The Bank of England also chose not to announce major policy decisions and actions, not only to the public, but to politicians as well. Arranging swaps and the coordinated rate cut would have been “impossible to do publicly” given their immediate impact on markets and the widespread effects of interest rate changes.<sup>108</sup> Other central bankers also alluded to the ambiguity over what counted as a meeting in their banks—whether three people in an elevator or conference calls with foreign counterparts was a meeting was debatable.<sup>109</sup> But it was these private, closed door environments that created the space for sensitive decision-making, especially where expectations could impinge on the markets.

The first swap agreements expired in February 2010 just as liquidity pressures slowly began to ease. When pressures mounted in Greece early that year, the Fed did not have a swap line in place with the ECB despite the possibility of contagion via European banks.<sup>110</sup> But the Fed did not rush to reactivate or enhance them. The Eurozone crisis had not quite begun; problems of drying up liquidity in the United Kingdom and Japan eased. Still, Trichet, King, Shirakawa, and Bernanke sought to reopen their swap lines that had just expired. These steps could not have been taken in the absence of interpersonal connections between Bernanke and the rest.

In an impromptu conference call that interrupted FOMC officials' Mother's Day celebrations on May 9, 2010, Bernanke broached the idea of reopening these swaps with the ECB, the Bank of England, and the Bank of Japan: "Yesterday Jean-Claude Trichet called me and made what I would characterize as a *personal appeal* to reopen the swaps that we had before. This morning I have gotten, again, *personal calls* from Mervyn King, of the Bank of England, and Masaaki Shirakawa, of the Bank of Japan, also asking us to reopen the swaps."<sup>111</sup>

Bernanke went on to say that this exchange with Trichet followed an ECB Executive Board meeting where they came to "very significant decisions" that Trichet shared with Bernanke on "a highly confidential basis."<sup>112</sup> In acknowledging the extraordinariness of these steps, Bernanke reemphasized that Trichet's call was a "personal appeal" and that Trichet "feels it is very important for us to support him, and he understands [the Fed's] concerns."

King and Shirakawa's appeals carried a similar personal tone.<sup>113</sup> And in interviews, where I discussed this moment in the crisis with King and Shirakawa, they both echoed Trichet and Bernanke's sentiment. Shirakawa noted that at the time, the sentiment expressed by the Fed was that there was no need for a swap; on the ground, Japan was not affected by the emerging European crisis. To request this new swap from the Fed, it was helpful that Shirakawa had a close personal relationship with Bernanke, which made broaching the topic and agreeing to reopen the lines much simpler.<sup>114</sup> King's account of this decision was similar, adding that these central bank leaders' reciprocal and cooperative manner of working was facilitated by goodwill and interpersonal trust between himself and Bernanke.<sup>115</sup>

In sum, interpersonal ties of trust and reciprocity played a crucial role in facilitating bilateral and ad hoc cooperation, even among the core Western economies during the crisis. These relationships were especially important in renegotiating these lines when there was no longer a need for them. Moreover, the swap network emerged through private, informal, and personal discussions during the crisis, rather than formal, institutional channels.

## What Would Bair Do?

In interviews, a constant theme from central bankers from a range of countries was Bernanke's expertise on the Great Depression as vital to the Fed's global activism in the rescue effort. In that vein, many interviewees raised a hypothetical scenario of what the crisis response would look like had the Fed not been under Bernanke's watch, all indicating his distinct influence in the GFC. In a Federal Reserve Oral History interview, when asked how a "Volcker-Corrigan team, dealing with crises or their potential could have looked very different

from the Bernanke-Kohn team,” Kohn talked of Volcker’s skepticism toward financial innovation, especially that he would have been more skeptical of the innovation in the 1990s and 2000s. Another former central banker discussed the notion of a different Fed leader, say, someone who focused more on concerns of moral hazard. Some even proposed a provocative counterfactual of an alternative world in which Sheila Bair at the Federal Deposit Insurance Corporation (FDIC) was in Bernanke’s position as Fed chair during the crisis.

Entertaining this counterfactual raises the plausibility of alternative outcomes in the global crisis management effort under a different leader. Note that interview accounts specifically did not intend to criticize Bair in any way, and interviewees emphasized that they hold her in high regard. Rather, they simply suggested that she, and perhaps anyone else, may likely have approached the crisis with a different focus, such as minimizing moral hazard concerns, and so, would likely have adopted a different set of policy responses. Moreover, this is a *hypothetical* counterfactual inference to simply speculate what *might* have been, drawing on a combination of speculative interview discussions and character descriptions from published works, as an exercise in conjecture.

In *The Courage to Act*, Bernanke’s assessment of Bair gives us some insight on his perception of her and policymakers’ experiences of working with her. He describes Bair as “a prairie populist, [who] inherently distrusted the big Wall Street banks and the government agencies charged with overseeing them.” He goes on to write that Bair “could be turf-conscious and hard to work with,” but he also “grudgingly [admired] her energy, her political acumen in pursuing her goals, and her skill in playing to the press.”<sup>116</sup>

Given Bair’s concerns about moral hazard and distrust in big banks, one might conclude that a Bair Fed may not have adopted such an activist approach or experimental approach to the rescue effort. In interviews, other central bankers suggested that actions taken by Bair or someone else in Bernanke’s position would have been shaped by their philosophical bent in banking. In fact, Bair’s views were more akin to King’s beliefs and initial reluctance to take forceful action, as they both viewed the crisis as a corrective to banking excess. She found that the Fed’s domestic rescues had created too much moral hazard. King similarly had expressed, about the Fed’s early swap lines, that “the provision of such liquidity support . . . encourages excessive risk-taking, and sows the seeds of future financial crises.”<sup>117</sup> A Bair-King pairing leading the Fed and Bank of England may have approached the crisis from a different philosophical bent, which could easily have generated a very different global crisis management effort than the Fed swap program. Perhaps a Bair Fed would have gone to Congress sooner in the crisis than Bernanke and Paulson did, in orchestrating the domestic rescue.

Jean-Claude Trichet, on the other hand, had been critical of the Fed for letting Lehman fail and believed it could have been avoided. Presumably, a Bair-Trichet combination may have responded very differently to how Bernanke and Trichet approached the crisis effort, influenced by Bair and Trichet's limited combined appetite for extensive innovation and ad hoc liquidity provision.<sup>118</sup> Even looking to the past, while the need for experimentation was a closely held view by the Fed's leaders during the GFC, this belief was not shared by their Fed predecessors such as Volcker, suggesting that the Fed's own approach to the crisis may have significantly diverged under different leadership.<sup>119</sup> In other words, without Bernanke at the helm, this time *might* have been different.

## Differentiated Ties

In 2008, four EMEs also benefited from US liquidity assistance: Mexico, Brazil, Korea, and Singapore were granted a Fed swap in 2008. With the exception of Mexico, this was the first time that emerging markets were included among the Fed's swap recipients. Fed officials reasoned that these are four of the largest and systemically important emerging economies. Each of these central banks was offered up to \$30 billion for three months.<sup>120</sup> Studies show that the Fed's criteria in selecting swap recipients were not applied unambiguously to the emerging markets that requested a swap to access this conditionality-free option.<sup>121</sup> Instead, geopolitics and diplomatic ties facilitated this cooperation.

Although some suggest that these instruments are used to exert leverage against risky partners, I argue that these geopolitical motivations are not motivated by leverage but by *favoritism*: by assisting those with whom Fed leaders shared close interpersonal relations of trust and goodwill.<sup>122</sup> Fed leadership mitigated substantial risks incurred in these agreements by excluding those with whom they did not share strong personal ties of trust and goodwill and assisting only those central bank leaders they did trust, to show a united front.

By focusing on the case of Mexico, I show that arranging a swap agreement with EME central banks relied on central bankers' relationships of interpersonal trust, goodwill, and reciprocity. But where relational ties differed, so did access to dollar liquidity. Conversely, the absence of such personal affinities between bank leaders hindered India's chances at receiving a Fed swap. India matched Mexico and Brazil on the Fed's criteria for a swap, especially regarding the Fed's key justification for their swaps of having a GDP of over \$1 trillion. Yet it was unsuccessful in its bid to acquire a Fed swap during the crisis.



## Limited Cooperation: Mexico

Unlike advanced economy swaps, arrangements with Brazil, Mexico, Singapore, and South Korea were conditional and limited. The configurations of trust sources here are more mixed, as these countries varied in their financial centrality and systemic importance. Mexico and Brazil also performed less well on indicators of sound economic management, such as CBI, inflation, and reserves.<sup>123</sup> The risks that these measures of economic soundness signal suggest that material considerations and conditions of cooperation were less favorable for these countries.

I focus primarily on Mexico to show that close interpersonal relations could overcome concerns about institution- and country-level credibility to grant a swap. I show that the Fed used material as well as social and personal reasoning to grant Mexico a swap and signal support and trust in the governor of the Bank of Mexico (Banxico). However, these concerns were hedged with limits and conditions in how these could be used.

Although the exposure of US banks overseas undoubtedly influenced the Fed's selection of its swap recipients, this, and other objective economic criteria against which the Fed vetted swap requests, does not satisfactorily explain the selection of its swap partners.<sup>124</sup> As discussed in chapter 3, Mexico already had a standing swap with the United States through the North American Framework Agreement (NAFA).<sup>125</sup> Concerns of economic soundness and risk calculations were apparent in these discussions, citing fears that these banks may default on this dollar-denominated loan, not make whole on the swap, or face severe depreciation.

Within the FOMC, several officials were eager not to grant any EMEs a swap and preferred that they turned to the IMF for a credit line. Charles Plosser, then president of the Philadelphia Fed, said in a 2008 FOMC meeting, "I'm worried about other central banks ganging up on us as a group, saying that they have to have this. I would prefer that even large countries use some combination of the IMF facility plus their own reserves to meet these needs."<sup>126</sup> Plosser added that most major banks in Mexico, barring Banamex (belonging to Citi), "are foreign owned—EU banks, Spanish banks—those banks clearly have access to dollars through the ECB swap line."<sup>127</sup> Moreover, in contrast to the advanced economy swap recipients, Mexico, and indeed Brazil, experienced high inflation, even greater than India, Chile, or Peru, whose swap requests were denied.

Other FOMC officials strongly supported helping the Bank of Mexico. At the FOMC meeting in October 2008, Nathan Sheets justified this swap noting that Mexico, Brazil, and Korea were large, systemically important economies with a GDP of around \$1 trillion.<sup>128</sup> When the emerging market swaps were

voted on, Richard Fisher of the Dallas Fed noted that Mexico had “a sophisticated central bank” and that Guillermo Ortiz Martínez was a “very good central banker.” In fact, Ortiz Martínez “had been [in the United States] to visit and had already approached” Sheets about a swap in addition to what was in place through NAFA.<sup>129</sup> Before and during the crisis, Sheets had served as the director of the Division of International Finance and had worked closely with his central banking counterparts in Mexico and elsewhere. His FOMC associates noted in interviews that he had developed a close personal and professional relationship with Ortiz Martínez and other officials at the Bank of Mexico.<sup>130</sup>

Other FOMC and Fed officials also noted their preexisting friendships and trust in Ortiz Martínez before the crisis.<sup>131</sup> I talked to FOMC officials about the interpersonal and social considerations made by the Fed over the EME swaps that are evident in the FOMC meeting transcript. Bernanke noted the importance of trust and reciprocal relations with central bankers of these economies as important to instilling confidence in these transactions.<sup>132</sup> Several other interviewees stressed the importance of their friendships and trust in Ortiz Martínez as a necessary facilitator for cooperation with Mexico.<sup>133</sup>

One New York Fed ex-officio involved in the crisis management effort and the swap arrangements, and focused on the emerging market lines, explicitly noted that there is “absolutely no substitute to interpersonal trust in issues of cooperation, especially in times of stress.” Their experience of the crisis taught them that these lines in particular, as opposed to more costly or conditional assistance, would have been difficult to arrange in the absence of these strong personal relations among bankers in both institutions.<sup>134</sup> When I asked former central bankers in interviews why some central bankers at the Fed did not want to put Mexico through the stigma of IMF facilities, considering its financial position, a minimal need for a swap in 2008, and opposition to the line with the Fed, another former FOMC official said, “That’s what you get when you go to dinner parties,” highlighting how friendly ties can facilitate interpersonal cooperation.<sup>135</sup>

Similar language was also used around Singapore: FOMC officials thought it would be “beneath Lee Kwan Yew’s dignity” to go to the IMF. Meanwhile, Brazil was seen as “the dodgiest of the lot” with whom Fed officials had a unique negotiating history. A former leader of the Central Bank of Brazil, who was not involved in negotiating these lines, expressed some surprise that Brazil was awarded a swap line from the Fed in 2008, given its perennial problem of high inflation and recent crisis, and that its central bank was not formally independent. Moreover, Mereilles did not have an economics PhD like some of his counterparts. But he had spent a great deal of his career in US financial institutions and had been close to high-level financial and political elites in the United States prior to taking up the central bank presidency. They surmised that

Mereilles's connections in US financial circles must certainly have helped him form closer ties with Fed officials to open up a conversation about a swap in 2008.<sup>136</sup> Despite concerns around Brazil's financial position, Fisher and others emphasized in the 2008 FOMC meeting that it would be "an insult to these four parties" not to give them a swap as they had already negotiated these arrangements with some safeguards.<sup>137</sup>

Swap lines were granted to just four emerging market partners with fundamentally different policy preferences to the United States. But to hedge against risks, they were limited in their terms. These four swap partners were offered up to \$30 billion per central bank in 2008.<sup>138</sup> However, rather than using swaps to exert leverage over one another as other scholars suggest, reciprocity and goodwill, with the added goal of helping trusted friends, avoided the stigma and conditionality of going to the IMF. In extending these swaps, given the risks of the arrangement, Bernanke and others noted the importance of trust and reciprocal relations with central bankers in these economies as important to instilling confidence in these transactions.<sup>139</sup> Even though material considerations in Mexico did not unambiguously call for a swap, the FOMC discussion around granting Banxico any assistance showed a sense of obligation, sympathy, and trust toward the bank and its governor. FOMC officials employed social and personal considerations to balance against less clear material justifications for a swap. However, it was important that this swap came with additional safeguards attached in drawing limits and stipulations to seek authorization for any drawing.

## Noncooperation: Iceland

Unlike the rest of Europe, Iceland's multiple swap requests were unsuccessful. The Fed deemed the Icelandic economy too small and not systemically important to warrant a swap. New Zealand, also at the margins of the Fed's criteria, in terms of size and US banking ties, received a \$25 billion swap. As central bankers and economists highlight, although a "tiny country of 330,000 people in the middle of the Atlantic Ocean," Iceland was nonetheless systemically important. Its banking system had become "so large and heavily exposed to foreign liabilities" by 2008. It was an early victim of the financial crisis and a generator of systemic risk; several large European and US banks were heavily exposed to Iceland's crisis. To put the scale of the Icelandic financial crisis into perspective, scholars note that Iceland's bank failures would place third among the largest bankruptcies in US history, only behind Lehman Brothers and Washington Mutual in 2008.<sup>140</sup>

But the "wild ride" of dealing with Iceland, as Stefan Ingves, then governor of the Swedish National Bank, called it, was exacerbated by Davíð Oddsson,

governor of the Central Bank of Iceland. Oddsson entered office in 2005.<sup>141</sup> Before that, he had been Iceland's longest-serving prime minister and later foreign minister. Unlike many of his counterparts, he was not a trained economist and was seen as a central bank outsider.<sup>142</sup> Here, I illustrate why the loss of trust in Oddsson and his bank hindered Iceland's access to the Fed's liquidity assistance.

Early in the crisis, Oddsson made multiple unsuccessful Fed swap requests, writing to Geithner in New York that "the perception of strong allies" was important and a swap with the Fed would be of monumental significance.<sup>143</sup> But following several incidents both before and during the crisis, one former Icelandic public official suggested that Iceland's closest Nordic central bank allies, as well as King in Britain and Geithner in New York, had lost trust in Oddsson.<sup>144</sup> They further shared that Ingves wrote that they had lost trust in Iceland's central bank under Oddsson and thought that Oddsson and his bank did not appreciate the risks at hand. Although Iceland could access dollars from its long-term Scandinavian partners, Sweden initially rejected Iceland's request to draw on it. These lines were "designed as an IMF program without the IMF . . . because [Ingves] used to work at the IMF."<sup>145</sup> They required banking reform and could only be drawn with approval from their creditors. When the Swedish central bank approved Iceland's drawing soon after, Ingves notes, what "really upset us was that the whole thing was signed and the Icelandics delivered nothing, zero on it."<sup>146</sup>

An Icelandic official also mentioned that King declined Oddsson's request for help because he did not trust him. King was adamant that Oddsson clarified how any swap arrangement would be used and indicated his concerns of an imminent banking collapse during the 2008 IMF spring meetings. He would only help Oddsson collectively with other G10 bankers, which he had informally discussed with Ingves and "would request a discussion at [the BIS] dinner."<sup>147</sup> But it soon became known that Icelandic banks had been funding themselves through the ECB, off the books. On this revelation, Trichet called Oddsson, furious. Now, Oddsson's closest economic partners had lost his trust and his closest economic partners in Europe could not vouch for his trustworthiness.<sup>148</sup>

Simultaneous to these developments during the summer of 2008, Geithner had also been in contact with his European counterparts. He reportedly had doubts about the success of an Icelandic swap. One Icelandic official noted that it was hard to justify loaning Iceland billions of dollars on the word of a man whose role as prime minister and central bank governor sparked nationwide protests on revelations of fraud and negligence.<sup>149</sup> Trust between Oddsson and his counterparts was missing, with little else to facilitate cooperation. When the Fed announced its Nordic swap arrangements, Iceland was not included. Oddsson wrote to Geithner that he felt Iceland had been left in a lurch and

asked him to reconsider.<sup>150</sup> After his request was declined, Iceland's three largest banks collapsed in October 2008. The government was forced to sign an IMF agreement on October 24, 2008. Only then did Ingves in Sweden allow Iceland to draw on its swap line, as the IMF was now "involved in keeping an eye on things staying on track."<sup>151</sup>

## Noncooperation: India

In the October 2008 meeting, when the Committee was making its decision as to where to draw the line and which emerging markets they should assist, Sheets recognized at an FOMC meeting, "Wherever you draw the line, there is going to be somebody who is just a bit away from the line that says, 'I am very similar to those folks.' . . . In my mind the next one for which you could make a case would be India."<sup>152</sup> Sheets also argued, however, that India was not as integrated in the global financial system as the others. But like Brazil, Mexico, and Korea, India was also a large and systemically important economy with a GDP of over \$1 trillion, a criteria that was used to justify the EME swaps. Still, with the exceptions of these four EMEs, Kohn announced that he was "in favor of very strongly encouraging other countries to go to the IMF."<sup>153</sup> In the case of India, material considerations and economic necessity alone did not suffice to justify a Fed swap with the Reserve Bank of India (RBI). However, interpersonal trust between the RBI governor, Duvvuri Subbarao, and Shirakawa did facilitate a Bank of Japan-RBI dollar swap.

India matched and even outperformed Brazil on many of the Fed's criteria for a swap but failed to cross the Fed's boundary line to receive a swap.<sup>154</sup> In an interview, I asked how Fed officials adjudicated the distinction between these two economies, and why officials saw Brazil as warranting a swap but not India. One former Fed staffer who was involved in running these operations exclaimed, when I asked this question, "Who gives a shit about Brazil? They're corrupt, they were quite closed up at the time, and most of their banks are state owned. I don't know why they got a swap, and I doubt anyone on either side would be willing to say more on the matter."<sup>155</sup> But given the FOMC's concerns about lending to EMEs, it raises the question then of why they drew the boundary line where they did.

Why was India treated so differently to the other large EMEs who received a swap? For some central bankers outside the United States, this was surprising. In a recent book, Paul Tucker recalls learning about India's swap denial and proclaimed, "But India will be a power!"<sup>156</sup> Another former central bank governor outside the United States and India observed the absence of trust relations between Subbarao and Bernanke and other Fed officials. These relations were

not fraught, but they lacked the familiarity and personal bond that would otherwise facilitate friendly and open discussions around this possibility. Others suggested that this key trait of perceiving one's identity as above politics was not shared by Subbarao as he had previously held the position of finance secretary prior to assuming the central bank governorship, which kept him outside the inner central banking circles.

One US central banker talked of general negotiating difficulties in the absence of familiarity between interlocutors, which could hinder cooperation. Another interviewee found this to be the case between the United States and India. Several central bank officials emphasized in interviews the importance of personal relationships and the implications of their absence for accessing swaps. Some central bankers outside the United States suggested that the absence of a close relationship between Subbarao and Bernanke stacked the odds of getting liquidity assistance against India.<sup>157</sup>

In my interview with Subbarao, his very first comment on his time as governor of the RBI was that he was not a career central banker. He noted the distinct type of personal relationship among his colleagues that he saw as especially unique in their importance and influence in policymaking.<sup>158</sup> Being an outsider to the central banking world and more connected to the political arms of international finance hindered Subbarao's ability to develop closer personal relations with his foreign colleagues.<sup>159</sup>

Subbarao himself mentioned that the United States had been sheepish for being the epicenter of the crisis. Moreover, at the BIS, although there was a formal EME meeting, the advanced economy dinners were specifically informal, exclusive, and invite-only. This served to reinforce personal ties and hierarchies among those in the inner club, while those not invited did not have the opportunities to build friendships and trust with their counterparts. Often, prior to many international meetings, a handful of G7 leaders had usually met and preagreed on key decisions, which were presented to all participants as a *fait accompli*.<sup>160</sup> One central banker outside India and the United States even suggested to me that that a close read of Subbarao's memoir calmly and subtly shows his frustration for not being granted a swap during the crisis with no clear explanation for why.<sup>161</sup>

It was fortunate, however, that prior to and during Subbarao's tenure at the RBI in September 2008, monetary and economic relations between Japan and India were strong. Relations between Japanese and Indian central bankers were also strong, professionally and personally. Shirakawa spoke highly of Subbarao and his predecessor, Y. V. Reddy, and of his personal relationships with them, which they had developed through official and informal interactions. The personal trust and reciprocity that was missing among Subbarao and Fed central

bankers was strong between Subbarao and Shirakawa and helped India avoid having to turn to the IMF.

In an interview, Shirakawa said about Subbarao, “I like him, and he’s extremely intelligent.”<sup>162</sup> Subbarao said that he interacted with Shirakawa far more frequently and closely while at the RBI than with any Japanese representatives while he was finance secretary.<sup>163</sup> Both of them, and their foreign colleagues, acknowledged the mutual respect, trust, and reciprocal relationship that Shirakawa enjoyed with Reddy and Subbarao, which made establishing a Japan-India *dollar* swap an easy solution to arrive at.<sup>164</sup> In this agreement, the Bank of Japan took on an even greater risk in extending a line denominated in dollars and not yen, even though the rupee was not a convertible currency, which is a significant mark of Shirakawa’s trust in Subbarao. This swap also opened up the possibility for the RBI to avoid the costly policy adjustments tied to drawing on the RBI’s foreign exchange reserves or requesting IMF assistance and gave India access to a dollar swap from the Japanese. Subbarao and Shirakawa’s trusting relations were important to showing a united front and facilitated arranging the Japan-India swap in 2008.<sup>165</sup>

As a brief aside, similar interpersonal distance and the absence of personal relations with Fed officials similarly hindered Indonesia’s efforts to secure a swap. A former Indonesian policymaker talked briefly about approaching Geithner and Bernanke during the crisis, to seek a swap line.<sup>166</sup> They noted that they, alongside their central bank and finance ministry associates from Indonesia, approached Fed officials during IMF and G20 meetings during the crisis to open up a conversation about a swap line. These conversations were not fruitful. As some Indonesia policymakers saw it, their swap request was brusquely dismissed by Geithner, who told them to first get their house in order.<sup>167</sup> Of course, Indonesia’s case did not quite fit the material criteria for a swap, as they were not as large or systemically important as the other emerging markets in consideration for a Fed swap. As such, this policymaker was not entirely surprised their request was rejected, but they noted the dismissive nature of Geithner’s rejection of this request. They went on to say this was not a typical manner for central bankers to engage with one another and lacked the openness and frank discussions they were used to.

They also highlighted the interpersonal aspect of broaching these conversations with a comparison to their interactions with Janet Yellen a few years later, when she took the helm, after the 2013 taper tantrums that hurt many emerging markets. In particular, the leadership change at the Fed, with Yellen assuming the chair, changed the Fed’s engagement with its emerging market partners. They found that Yellen listened more attentively to their concerns during central bank and other official meetings. Yellen’s Fed was more receptive to

understanding the influence of Fed policies on emerging market positions and having open discussions about the Fed's relationship with various emerging market economies. Of course, this was not at a time when Indonesia needed or requested a Fed swap, and I do not claim that Yellen's Fed would have extended a swap to Indonesia during the GFC. But we see that leadership changes can help thaw cool relations and foster more collaborative environments for bilateral cooperation and exchange.

Material considerations alone did not guarantee cooperation around liquidity assistance between central bankers. Rather, interpersonal trust ties remain integral to greasing the wheels of this type of central bank cooperation, most crucially in moments of crisis and uncertainty. These case studies show that differentiated personal relations are marked by preferential access to less costly, conditionality-free liquidity assistance. Interpersonal trust made it possible for some central bank leaders to approach trusted colleagues and secure lower cost liquidity through swaps. Where interpersonal ties were absent, such arrangements could not get off the ground.

## **A Standing Bazooka**

In 2008, Bernanke was keen to get temporary authorization to use swap lines during the crisis, "so I know I've got my own bazooka here." And the crisis demonstrated that this bazooka had proved vital to the global crisis-fighting efforts. And so, in a 2009 FOMC meeting, Sheets presented a memo proposing the establishment of standing swap lines with the Bank of England, ECB, Bank of Japan, and the Swiss National Bank. These standing lines essentially now provided these partner central banks with a more permanent backstop to dollar markets abroad. Technically, the Fed could still prevent the use of these lines, but now, these large financial centers would be less reliant on ad hoc arrangements than they had been in 2007 and 2008, without having to go through the difficulty of renegotiating these lines in the event of a crisis.

Here, I provide new details on how the Fed deliberated and came to establish five standing swap lines with the United Kingdom, Canada, Japan, Switzerland, and the ECB. The focus here is less on the interpersonal aspects of this decision-making, as the FOMC transcripts suggest that the push for these permanent lines largely came from the Fed itself and not from a partner's request. However, deliberations in the Fed's initial conversations in 2009, and the eventual authorization of these permanent lines in 2013, highlight two important political- and individual-level dynamics: First, the Fed recognized that where it drew its line was a sensitive, political question, which had implications for its relations



with partner banks. Second, Sheets was no longer at the Fed in 2013 when the FOMC established these standing lines, and the considerations of who ought to be included in this group changed, with the notable absence of Mexico.

The “standing” swap lines proposed by Sheets in 2009 would be limited in their amounts and in partner banks’ abilities to draw on them. These lines would effectively be reauthorized annually when the FOMC is reconstituted each year.<sup>168</sup> Sheets proposed including Canada and Mexico’s lines through NAFA in this group, as “not enhancing the lines might strain [the Fed’s] relationships with them.”<sup>169</sup> In response, James Bullard, then president of the St. Louis Fed, asked about the “difficulty of having to, as you say, renegotiate and set up the details, as you did this time,” for discontinued lines, and the implicit likelihood that these partners may not get a swap in the future.

Sheets’s response to Bullard shows that central bankers thought about the individuals involved in negotiating these lines making decisions, and consequently about how personnel changes could affect crisis management in the next crisis. Sheets was less worried about scaling up a program than of the difficulty of going “from zero to four” lines, and not from four to fourteen “if the world blows up . . . eight or ten years out.” Why? Because “ten years from now, the folks in New York who did all the work may be onto other things or in other positions, and just as was the case in this last episode, we had to run around and pretty much figure these things out from scratch.”

Sheets also questioned the assumption that countries that had received a swap in the GFC ought to get a temporary swap again, saying, “Now, the flip side of this is that we gave them a swap line once, and if things get bad, we’re going to give them a swap line again. I think that is a very reasonable presumption if a crisis erupts in a year or two years. But if the next crisis is eight or ten years out, there is a lot of water under the bridge. The world looks a lot different, and it’s not clear to me that there is the same presumption.” It may end up that the FOMC, in the event of this later crisis, may choose to give the same partners another swap line, but he did “not think there would be as strong a presumption *as if* they actually had a swap line with us.”

Sheets wanted to arrange standing lines only with the United Kingdom, Europe, Switzerland, Japan, and potentially Canada and Mexico. To him, there was a qualitative difference among these six parties, in terms of their economic size, and in the case of Mexico and Canada, their proximity to the United States. On that point, Bernanke joked, “The North American location is hard to change.” Janet Yellen, then president of the San Francisco Fed, and later Fed chair, and Eric Rosengren, then president of the Boston Fed, pushed for a larger set of standing swaps.

The FOMC debate illustrates the committee’s concerns about managing their relations with partner banks, stigmatizing those that were not granted

standing swaps, and geopolitics. Rosengren worried about the unintended consequences and the risk that the Fed's reasons for limiting these standing lines might be misinterpreted. A swap line with Mexico would imply that the Fed was "comfortable having them as a counterparty." By not expanding the network, Rosengren was concerned "about stigmatizing the countries like Mexico and Korea and other countries that want potentially to be a counterparty in part for the signalling benefit." Yellen agreed and was concerned about the economic consequence of excluded parties' potential reactions if the Fed then told, say, "Korea . . . well, we are not putting you in the same category as before."

FOMC members found it was necessary to delineate those in and outside this standing network by some clear metric. But what that metric would be was a sensitive question. "Size" would pose problems for justifying these limits to exclude Asia, as Bullard observed: "When I say Swiss, 'It's a small country, come on. This is an old club that you guys have been fostering for years.' And 'You just don't like us because we're in Asia.' I can imagine that that is sort of the attitude."

No decisions were made in 2009. But the FOMC recognized the utility of having standing lines, that "coordinating policy decisions with foreign central banks has the potential to be complicated and time consuming, so it's preferable to have as many as possible of these decisions negotiated in advance." They also noted that "the swap lines have been a powerful symbol of central bank cooperation." This proposal was discussed occasionally in the years that followed and five standing lines were established in 2013, with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank.

There is little evidence of how the Fed's negotiations with its counterparts went in 2013, but the FOMC discussion to create these permanent lines that year was quick and notably different to the previous one. Specifically, Sheets, who had been a key architect of the GFC swap lines, especially in emerging market lines, had left his position at the Fed. Relatedly, the current discussion was whether to convert temporary lines with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank, into permanent ones. Mexico, whose 2008 swap had expired, was no longer included in conversations alongside Canada. In 2013, FOMC members were more willing to differentiate between Mexico and Canada without including the NAFTA lines that both countries had.

Some FOMC members wanted to at least inform their Mexican counterparts ahead of time about the Fed's decision to establish its standing lines. Fisher expressed concern that Mexico was not included and not given advanced notice of this decision. Some other FOMC officials, however, noted that it was not

typical to provide counterparty banks any advance notice about these decisions, in the October 2013 FOMC meeting. Fisher noted, “They’re highly sensitive, and, again, it is part of NAFTA, and with any differentiation between Canada and Mexico, I would suggest politely that we let them know at the earliest opportunity, and before others, if possible.”<sup>170</sup> But barring that minor debate, the discussion around this standing facility was short. Five permanent lines with the Fed were unanimously approved in October 2013, without including Mexico, as Sheets had initially proposed in 2009. These lines proved vital in 2020 with the outbreak of the COVID-19 pandemic, as I will discuss in the conclusion.

## What’s Past Is Prologue

Even though central bankers today do not operate with the same free rein of their 1920s counterparts, when the worst crises emerge, the discretion and decision-making power of individual leaders and high-level personnel is substantially heightened to facilitate quick action to arrest emerging troubles. Bernanke, King, Shirakawa, Trichet, and their international and domestic associates walked in the shoes of Strong, Norman, and their international colleagues by responding to the GFC with extensive intervention to provide liquidity in the drying up global economy. In periods of crisis and uncertainty, especially when time is short, and the trajectory of current problems is unknown, central bank leaders lean on a range of heuristics and personal judgments in their decision-making. These assessments are shaped not only by institutional relations and economic signals but also by individuals’ personal relations of trust, goodwill, and familiarity with their counterparts.

With each passing decade, central banks, governments, and other policy-makers have invested endless resources and countless hours in creating, building, and strengthening the rules and institutions that govern the global economy with the goal of establishing a robust and reliable global financial safety net. And still, when the global economy faced an imminent crisis in 2007, monetary authorities and central banks sidestepped this system to take the ad hoc route.

Insofar as monetary authorities avoided a second Great Depression in 2008, yes, the system worked. But as the crises emerged and escalated from 2007, just like their predecessors experienced in the 1920s and the 1960s, central bankers once again took to ad hocery and governance innovation to stem liquidity pressures around the globe. While these tools had been used before, it was still unclear whether they would work at all this time or how far they would go to mitigate the crisis.

Once again, the crisis was resolved by a handful of central bankers who decidedly sidestepped this system of preexisting and institutional forms of intergovernmental lending and opted for a more ad hoc approach to crisis management. In the absence of this trust, the personal appeals that central bankers made to their friends in the United States may not have had the same sway. Many of their initial discussions around arranging swaps, and agreements over these decisions that were made informally, over dinners or on long walks, may not have been possible.

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## CONCLUSION

**A system of this kind . . . is really a system of rule by men and not by law and is extraordinarily dependent on the particular personalities involved.**

—Milton Friedman (1962)

The conclusions of this book are simple but consequential: in managing the global financial system, individual central bank leaders and their personal ties with one another matter. In short, in a crisis, interpersonal cooperation greases the wheels of international cooperation. This is especially the case with bilateral and ad hoc liquidity assistance among central banks.

In March 2020, as the world went into COVID-19 lockdown, businesses shut up shop, and governments imposed travel bans, it was clear that financial troubles would follow close behind. As states, markets, and businesses braced for the economic shocks brought on by the health crisis, people everywhere wanted governments and policymakers to deploy their crisis management toolkits and do something, anything, to ease the blow of the oncoming economic downturn. The global crisis called for an international response. To manage the economic shocks brought on by the pandemic, financial experts and journalists called on the Fed to “to dust off an old, 2008 crisis-era tool of dollar liquidity management” and “bring back dollar swap lines.”<sup>1</sup>

In response to these calls for the Fed to re-up and expand these lines, others asked whether Jerome Powell, at the time the chair of the US Fed, had the capacity and clout among his international counterparts to carry out this task. The central bankers who helped forge the global financial crisis (GFC) swaps had by now left the offices they occupied over a decade prior. While Powell had been “forging collaborative relations” with his international colleagues, those relations had not been “battle tested—yet.”<sup>2</sup> Unlike most of his Fed colleagues, Powell was somewhat an outsider in the central banking

world when he first joined the Board in 2012. He was trained as a lawyer, not as an economist, and “spent his career toggling between two worlds: government service and private-equity dealmaking.”<sup>3</sup> Since his arrival at the Fed, Powell had been wary of the distorting effects of Fed interventions on credit markets.

The concern that these lines would be difficult to negotiate in the future had been considered by the Fed. In a Federal Open Market Committee (FOMC) meeting in November 2009, Nathan Sheets proposed establishing standing swaps with the Bank of England, the European Central Bank (ECB), the Bank of Japan, the Swiss National Bank, as well as with Canada and Mexico. Standing lines would essentially provide these partner central banks with a more permanent backstop to dollar markets abroad without having to go through the difficulty of renegotiating these lines. Sheets was less worried about scaling up a program than the difficulty of renegotiating them from scratch in a future crisis. As discussed in chapter 4, a large part of this apprehension was rooted in the effect of changing personnel at the Fed, as those who had done the work during the GFC would likely no longer be in office during the next crisis.

In 2013, five standing lines were established with the ECB and the central banks of Canada, the United Kingdom, Japan, and Switzerland. So, in 2020, it mattered much less whether Powell was an “insider” or not. It also mattered less whether he shared collaborative relations with his counterparts abroad. That was the purpose of the Fed’s standing swaps: to mitigate any obstacles to using these crisis-era tools under different leadership. Sheets had been right that it would be easier to scale up these arrangements than to start negotiations from scratch. In addition to the standing swaps, on March 19, 2020, the Fed announced temporary swap lines with the remaining nine central banks that it had assisted in the GFC.

Fed swaps have become a central pillar of the global financial safety net since the GFC. However, historical experience cautions against betting that swaps are here to stay, as some have suggested.<sup>4</sup> The use and endurance of the Fed’s standing swap network is not a certainty, as technically they are reinstated every year when the FOMC is annually reconstituted.<sup>5</sup> The reasoning for this comes down to central bank leaders’ preferences: the role and existence of Fed swap lines in the global financial safety net relies on the Fed chair’s discretion. In 2020, Powell’s Fed made the choice to preserve and utilize the Fed’s standing swap network. In 1996, Greenspan’s Fed dissolved the standing swap lines that Coombs had created.

Even though these lines have repeatedly proved effective in managing systemic financial pressures, their central role in global financial governance

brings with it a host of political conundrums. On recapping the key takeaways of the analysis and argument presented in this book, I return to discuss the implications highlighted in the book's introduction.

## Key Findings

*Bankers' Trust* was motivated by the question of why some crises are arrested through ad hoc and bilateral central bank cooperation while others are allowed to escalate. It addressed the related problem of access to the global financial safety net by highlighting a channel through which inequalities emerged between national economies over who benefits from access to easier, flexible, and lower-cost foreign exchange liquidity, and who is excluded: bilateral central bank cooperation. To understand why outcomes of cooperation vary in their form and scope over time, it is essential, first and foremost, to understand how these outcomes come about and who creates them. The patchy and inequitable record of monetary cooperation in times of systemic crises calls for a better understanding of why central banks are more willing to cooperate with some than with others to create ad hoc and innovative methods of crisis management.

To explain these patterns, this book closely explored the decisions and discretion of the principal providers of global liquidity: central banks and those who run them. In a crisis, central bank leaders have a distinct and significantly increased influence and are the ultimate authority over their banks' crisis management policies. Whether and how they exert their heightened influence is less well understood.

The central claim of this book is that central bank leaders' personal relations matter. They can influence the types of liquidity assurance strategies available to their banks when they face financial pressures. I provided a framework that helps us distinguish the influence of individuals and interpersonal relations in international monetary affairs from structural and material factors. I found that leaders can and do influence their banks' willingness to enter experimental crisis responses, such as ad hoc credits or swap arrangements. This willingness and ability to enter these cooperative arrangements is influenced by leaders' personal relations with their counterparts.

At important moments, leaders could determine the choices and approaches of their banks. In many cases, they went against their institutions' preferences or changed the way they operated. For instance, Norman's approach to returning sterling to prewar parity in 1925 went against the preferences of the British government and Treasury. In the 1960s, Coombs and Iklé similarly circumvented institutional constraints and preferences of their central banks in the

arrangement of the earliest swap lines. In moments of uncertainty, leaders and high-level officials tasked with important crisis management goals can determine how their bank pursues various policy options.

More importantly, individual leaders, through their personal relations, are crucial to filling the gaps of the global financial governance system in times of crisis. In the absence of a robust financial governance framework, where monetary authorities and policymakers cannot rely on means that are automatic or mechanic, or even adequate to meet current needs, they often resort to ad hoc measures for liquidity provision. But to come to these arrangements, it is essential that leaders, in participating in the agreement, trust one another. Central bank leaders' personal ties can influence the types of monetary transactions available to them to manage liquidity and financial pressures. When central bankers enjoy favorable personal relations of trust and goodwill, they are more likely to engage in ad hoc, bilateral cooperation to manage financial pressures. In the absence of these ties, central banks will have to turn to more costly measures.

Central bank leaders' ability to engage in extensive bilateral cooperation relies on and is indeed facilitated by leaders' independence from their governments. While this autonomy is protected for many central banks around the world today, statutory political independence is a relatively recent development in much of the world. The case of the 1920s highlighted the deeper historical origins of this idea and institution, as championed by Montagu Norman and Benjamin Strong in the 1920s. They secured their *de facto* independence through secretive and opaque policymaking, especially in the context of international policy. Moreover, they proselytized this idea to their foreign counterparts through their international lending practices, favoring independent banks and bankers in liquidity assistance programs and often requiring autonomy as a condition for bilateral credits. As such, central bank cooperation has evolved in an interpersonal, secretive and opaque manner, which has persisted since the days of Norman and Strong, and continues to the present day.

This dynamic of interpersonal cooperation was crucial in the interwar 1920s. The Norman-Strong partnership functioned primarily on this personal and relational level, where the two regularly went out of their way to help one another in managing their financial troubles. They also extended such graces to their friends elsewhere: Hjalmar Schacht in Germany, and Junnosuke Inoue in Japan, benefited similarly from bilateral and ad hoc assistance in the mid-1920s to finance their debts and stabilize their currencies.

One might suggest that this practice of central banking was only possible and unique to the institutional, political, and economic climate of the early interwar years. However, I have shown that despite changing and increasing institutional and legal constraints on central banks after 1945, the relational side of central



banking has remained alive and well. In the 1960s, Charles Coombs's personal relations, friendship, and shared trust with Max Iklé, Johannes Tüngeler, and Guido Carli, underpinned Coombs's European efforts that led to the New York Fed's swap arrangement. These themes reemerge in the creation of the Federal Reserve's swap network with the outbreak of the GFC in 2007. When central bankers had little idea of the trajectory of the crisis, or the likelihood of success of these policies, they swapped hundreds of billions of dollars, overnight, to partner banks. The initial lines were made in no small part on the word of central bank leaders participating in these agreements. Strong's observation that "in none of our business relations has the personal relation played so large a part as in banking" still echoes in the corridors of central banks today.

Differential personal ties also shape access to foreign exchange liquidity programs and outcomes of crisis management. Central bankers implicitly or explicitly distinguish among their foreign colleagues. When leaders do not enjoy the personal trust and goodwill of their counterparts abroad, they must turn to more costly and conditional crisis management and liquidity policies. For instance, in chapter 1, loans to the Polish central bank extended for the purpose of currency stabilization were extended not through bilateral credits but instead multilaterally. These loans came with limits and political conditions attached to protect creditor banks who were engaging with colleagues some of them had never even met.

The effects of a lack of trust and close personal relations among central bankers were most prominent early in the Depression, following the sudden death of Strong, and leadership changes elsewhere in Europe. As bank runs engulfed Central Europe, Hans Luther was not found to be the "right" type by Norman and was disliked by influential figures in the Bank of France. As a result, the Reichsbank had to resort to politically charged governmental assistance from France, which required large political and economic concessions and multilateral, conditional assistance from central banks through the Bank for International Settlements (BIS). The dismantling of the tight personal networks that Norman and Strong had cultivated hindered the international central bank response to the 1930s bank runs and the Great Depression.

Once again, this pattern of differential ties leading to differential monetary transactions is not limited to the interwar period but has persisted through the decades after. In the 1960s, due to the absence of personal trust among British central bankers in Coombs, in New York, Britain initially had to resort to central bank assistance through the BIS, as well as International Monetary Fund (IMF) loans, to manage sterling pressures. It was only when the governor of the Bank, Lord Cromer, and his European associates could vouch for Coombs to Roy Bridge that Bridge settled on a scaled-down swap line with the Fed.

Differential personal ties also helped determine the dividing line among the largest emerging markets as to who got a swap during the GFC. We see that some emerging economies—Mexico and Brazil—were able to secure a Fed swap, while India, which outmatched Brazil on the Fed’s swap criteria, was unsuccessful. Where Duvvuri Subbarao (in India) did enjoy the trust and goodwill of Masaaki Shirakawa in Japan, they arranged a bilateral dollar swap between their two banks, and India could avoid the costly conditionality of multilateral assistance.

The close personal connections, and the confident and friendly environments that they generated, allowed central bankers to act on the trust of their colleagues in an atmosphere of grave uncertainty. Close personal ties were especially crucial in facilitating experimentation and innovation in the tools that they could deploy. Leaders who enjoyed the trust and goodwill of their partner bankers could more easily circumvent costly forms of liquidity assurance and adopt more rapid, flexible, and ad hoc solutions for their financial troubles.

## **Extensions and Limitations**

This book has shed light on the distinct role of leaders and their interpersonal relations in the context of international finance and crisis management. My findings suggest that in issues of crisis management and cooperation more broadly, interpersonal relations among individuals can help us better understand decisions and policy choices in areas outside of international monetary relations. This book thus calls for further exploration of the role of relational dynamics such as interpersonal trust, in questions of cooperation, bilateral and otherwise, in crisis and uncertainty. The crises of the 1980s and 1990s, mentioned in chapter 3, present important test cases for my argument and also highlight a key scope condition that interpersonal trust facilitates cooperation among states within material and economic boundaries and can sway decisions on the margins. Trust alone will not carry countries not meeting key economic criteria over the boundary line.

Because central banking is a unique policy arena in several important ways, there are additional scope conditions for my argument. These aspects suggest that the theoretical framework would need to be adjusted to suit a broader set of policy areas outside of money and international finance.

First, central banks are unlike most independent agencies in that they are domestic institutions with a large international reach. The deeply interconnected nature of global finance makes states and national markets vulnerable and exposed to fluctuations and volatility overseas. Central banks’ mandates,

to secure domestic financial stability, imply an interest in supporting financial stability in markets to which they are most closely connected. As such, the actual jurisdiction of central bank mandates is far less clear. Any other policy arena in which such dynamics may play a similar role would have to be similarly situated on the domestic-international boundary. One issue area that might fit this scope condition is that of climate governance. Climate crises do not emerge only or correspondingly in locations, say, where carbon emissions are the highest. One state's choices and problems can and have quickly become everyone's problem. As such, the climate policy space similarly negotiates this tension of local problems wanting global, cooperative solutions.

A second scope condition is the level of technical expertise that central banking and financial policy demands. The arena of international finance is especially technical, and esoteric, and maintains a high barrier around those in the know and those outside, pushing the activities of central banks into what Culpepper calls "quiet politics."<sup>6</sup> Much of central banks' outsized power is sourced in this feature. Other policy areas in which individual and interpersonal dynamics are strongest would be those that share similar qualities to those of central banks. Again, climate cooperation and especially innovation to find solutions to the climate crisis require a high level of technical expertise in climate science. Cooperation over nuclear proliferation, deterrence in the security space, or nuclear energy policy also share a similarly high barrier to entry that can keep policymaking exclusive to a relatively small and insulated set of decision-makers, which is similarly undertaken in secret and behind closed doors. Given that conflicts of interests among parties in the security space are more severe than among central banks, this may limit the scope of affective ties in influencing cooperation relative to costly signals. These policy areas may provide fertile ground to further test the scope of the framework.

A third scope condition is that this theoretical framework is particular to the context of crisis and uncertainty. In more certain times, routine cooperation through traditional institutional or intergovernmental channels generally suffices. The need for interpersonal trust is especially heightened in situations of radical uncertainty, when conventional metrics and signals are less informative and system trust is compromised. Moreover, decisions in crises need to be made quickly and agents will not have the time to undertake long and arduous negotiations and deliberations. So, leaders and policymakers will instead rely on subjective reason, informal channels of cooperation, and interpersonal trust.

That is not to say that the argument will seamlessly travel outside of the monetary realm without adjustment. Many of the early-twenty-first-century crises are not limited to one issue or policy area alone. As we move into unfamiliar territory, such as the recent pandemic, and escalating climate crises, the

unknowns will be far greater. What about when financial crises emerge from nonfinance sources? The COVID-19 health crisis once again reminded us that nonfinancial crises can have grave financial repercussions. Fortunately, central bankers during the GFC had put into place precautionary backstops to protect against this possibility.

Even when out of the central banking world, in situations of war and uncertainty, these interpersonal ties, and the unique frankness and openness among central bankers, have proved effective in addressing financial pressures. When the war in Ukraine began early in 2022, European policymakers were initially worried that Russia might get wind of looming US sanctions, anxious to put them in place, while Janet Yellen, a former Fed chair, and at the time US Treasury Secretary, “pored over the fine print.” But at this time, Yellen found herself working alongside Mario Draghi, former ECB head, then the prime minister of Italy. While sanctions agreements were slow to come about, the president of the European Commission, Ursula von der Leyen, asked Draghi to work out the details with Yellen: “We were all waiting around, asking, ‘What’s taking so long?’” recalls an EU official. “Then the answer came: Draghi has to work his magic on Yellen.” By the evening, agreement had been reached.<sup>7</sup>

While these outcomes bode well for the prospect of future crisis management, it is not guaranteed that the right instruments or people will be in place in future crisis, especially those with nonmarket roots. To better understand the prospects for crisis management warrants further exploration of the role of leaders and relational dynamics among policymakers in crisis-prone, technical issue areas outside of the monetary realm.

## Implications

My findings illustrated how monetary leaders negotiate structural, material, and institutional variables in shaping world politics. The narratives and analyses in this book highlighted the sensitivity of financial governance, crisis management, and policy innovation for navigating crises. But historical experience, namely the Great Depression, suggests a cause for concern when thinking of the prospects for the future of financial governance. The lasting personal connections that central bankers built were crucial in facilitating a collaborative crisis response from central banks in times of stress. But when these relationships fail to emerge or leaders are replaced, collectively navigating crises has been a more tortured effort, with devastating consequences. My study thus highlights the implications of the concentration of power in global financial governance.

Two broad theoretical implications emerge from my argument. The first is the need for further individual-level and relational analyses into the role of interpersonal trust in international politics to better understand the origins of important governance institutions and instruments. The second is to further our understanding of how political agents can and do shape and reinforce global hierarchies through their personal relations with their foreign counterparts.

## Leaders in International Monetary Affairs

A key theoretical implication of this book is that monetary leaders matter, especially in conditions of crisis and uncertainty. Leaders matter in two meaningful ways: first, their own individual discretion and influence in international monetary affairs is apparent in their ability to influence the policy disposition and preferences of their bank. Second, they can influence patterns and outcomes of crisis management and bilateral cooperation through their interpersonal relations with their foreign counterparts.

In addition to leaders' influence in shaping domestic policy, leaders also influence how their banks engage with foreign entities and in their disposition toward risk-taking and experimentation. The power and influence of Norman and Strong in shaping the trajectory of the monetary system, through the 1920s and for decades after, is indisputable. Strong's singular influence in US banking circles and his ability to maintain the New York Fed's independence is evident not only in his lifetime but also in his death. Coombs, Iklé, and Cromer were central players in shaping their banks' practices and policy choices, willing to go off message from their institutions' traditional practices or their home governments' interests. Bernanke and Jean-Claude Trichet's leadership and persuasive negotiating capabilities were integral in fostering a united front among some of the world's largest central banks to manage the crisis.

The unique influence of central bank leaders is also evident in how leadership changes were followed by policy changes and a change in access to liquidity assistance from partner banks. Leaders' individual influence thus cannot be overstated, especially in the relational context. We therefore cannot be sure that every next leader will adopt the same policies, share the same personal ties with foreign partners, or enjoy access to the same types of liquidity assistance.

A deeper understanding of global economic and financial governance would result from exploring individual-level influences, not only in the management of financial crises but in the specific conditions and contexts in which leaders have shaped governance innovation and cooperation in other areas of the international political economy. After all, the first ideas for the BIS emerged in Norman's personal conversations and correspondence with Strong and Schacht.

The origins of this most crucial institution for financial management are as much rooted in very particular personalities and personal relations as in structural determinants or a convergence of ideas among policymakers. The swap network created in 1961 has a similar origin story. Informal and personal interactions between friends influenced the liquidity provision strategies that central banks adopted to meet their foreign exchange funding pressures in the 1960s.

Historians have suggested that “such a climate of trust, a blessing as far as cooperation is concerned, is a curse as far the historian’s work is concerned.”<sup>8</sup> I could not agree more. Disentangling the role of trust from broader material and ideational variables is murky and complicated. But understanding the importance of trust in cooperation underscores a need to identify it and better incorporate it into our explanations of various types of cooperation. Understanding the origins of these crucial financial governance innovations can deepen our understanding of the past, present, and future of the global governance system. There is therefore much value in further exploring the individual and relational dynamics among leaders, not only in financial crisis management but also in governance and policy frameworks in all areas of the international economy and in global governance more broadly.

This book made a case for further exploring the role of leaders in a broader range of issue areas. Leaders’ influence and interpersonal relations may also play a crucial role in crisis management in conditions of uncertainty outside finance. It also highlights the need to understand the conduct of international monetary affairs from the perspective of leaders themselves. The firsthand insights demonstrate that we cannot understand outcomes and decisions in international politics as distinct from the policymakers who shape them.

## Hierarchy in International Relations

The patterns of crisis and cooperation discussed in this book highlight a second theoretical implication: financial crises and international crisis management can create and reinforce hierarchies and inequities in the international monetary system. The GFC once again brought the Fed into the position of an international lender of last resort. This significantly expanded the reach of the Fed’s powers, responsibilities, and influence far outside its borders, in a way that it could impinge on economies and publics to whom it does not answer. The crisis illustrated that the Fed’s role, capacity, and power in financial governance today far exceeds that of the international financial institutions that comprise the governance system. Even many central bankers acknowledge these problems and their own discomfort with how the system operates. Donald Kohn, who was vice chair of the Fed during the GFC, recalled that the Fed’s swap program

“put the FOMC in the ‘uncomfortable’ position of being an ‘arbiter of the soundness of other countries’ policies, the liquidity requirements of their banks, and their systemic importance.’”<sup>9</sup>

As scholars have argued, in determining crisis management policies to save the world, central bankers are saving some more than others.<sup>10</sup> I have shown that this is not only in the case of protecting private finance domestically but also in terms of international central bank assistance and international crisis management: crisis resolution efforts can also perpetuate the existing hierarchy and inequities in the global economy. As illustrated in chapter 4, frustration over these powers of the Fed was felt by foreign central banks, especially those in emerging markets who undoubtedly faced a higher bar to accessing swap lines but depended on the Fed for assistance. Most emerging and developing economies lacked the international clout and competitiveness to give them access to lower-cost, conditionality-free liquidity through the Fed swap network.<sup>11</sup> Instead, they were forced to turn to the IMF and other costly channels.

Similar patterns emerged in the twentieth-century crises. Through their close personal relations with Schacht and Inoue, Norman and Strong solidified banking connections and Germany and Japan’s positions in the core of the global economy. Of course, these ties were further supported by broader economic and political relations, reinforced over time. But as the 1920s show, central banking and monetary relations offered another channel to construct and cement these hierarchies.

The differentiated nature of central bank assistance between the core central banks and those outside this community served to further distinguish states within the hierarchical order. Specifically, currency stabilization in Eastern Europe was decidedly multilateral, contingent on political conditions, and ultimately sought by France. Distrust and personal differences between Norman in Britain and Émile Moreau at the Bank of France hindered Norman’s participation and willingness to lead multilateral credit support for Poland. France, which eventually took the lead, took on a more politically charged effort in Poland. Indeed, a similar pattern emerged in these stabilization efforts in Romania and Bulgaria, and elsewhere in Eastern Europe, separating these states from those that received extensive, bilateral support from Norman and Strong alone.<sup>12</sup>

These hierarchies have been entrenched since the GFC, with the establishment of the standing swap lines, and the Fed’s response to the emerging pandemic. Powell’s Fed went even further in its domestic and global crisis interventions in 2020. On the international side, in addition to re-upping GFC-era swap lines, on March 31, the Fed also announced a temporary repurchase facility (repos) for foreign and international monetary authorities (FIMA),

which was also more widely accessible than the swap network. Through these lines, FIMA account holders could borrow US dollars in exchange for their US Treasuries holdings in the New York Fed. These more expansive lines gave a larger number of emerging markets access to dollar liquidity and were likely created because the pandemic was far more global and generated an economic environment very different to that of the GFC.<sup>13</sup>

However, the Fed's broader-ranging liquidity arrangements once again reinforced hierarchies in the global financial system. Major central banks' ability to access larger amounts of dollar funding dwarfed that of smaller central banks using the FIMA repos. The Fed's varying foreign facilities, the standing swaps, the temporary swaps, and the FIMA repos, each less attractive than the previous, represent the same concerns that the Fed had discussed in 2009—that by excluding, say, Mexico or Korea from the standing arrangements, or continuing to exclude other large emerging markets from the swap network at all, the Fed signaled to these economies that they were not seen in the same category as those that could access the larger and unlimited dollar liquidity arrangements, as discussed in chapter 4. Parallel to the Fed's GFC interventions, its pandemic interventions, although broader, once again reinforced global hierarchies and perpetuated inequities in the existing global finance governance system.

Differential personal ties have worked to differentiate between states in the core and the periphery in international monetary relations. Through their personal, informal channels, bolstered by preexisting institutional and resource-based hierarchies in global finance, central bankers can shape and reinforce system-level hierarchies and inequities among states.

These theoretical implications highlight two key political and policy implications. First, the management of systemic financial crises inevitably relies on ad hoc and experimental efforts, and monetary leaders regularly seek to sidestep the existing governance system. This pattern of cooperation calls into question the legitimacy of independent central banks at the domestic and international levels. Second, the global financial safety net is riddled with gaping holes. This suggests the institutional setup of central bank independence should be rethought while protecting their necessary emergency powers for crisis management.

## The Politics of Central Banking

The post-GFC years have highlighted the extent to which central banks and central bankers influence our daily lives. These crises remind us of the outsized power held by unelected policymakers in politically independent agencies. From this realization has emerged widespread and even bipartisan backlash against central banks across the world. At the heart of the influence of these powerful



individuals lies a tension between central banking and the core principles of democratic governance—accountability, representation, and transparency.<sup>14</sup>

In the last century, if not longer, central bank cooperation has been shrouded in secrecy, and leaders have relied on closed door conversations and substantial opacity in undertaking these operations. This practice of secrecy took hold in central bank practices under Norman and Strong. Central bankers regularly met in private and often did not publicize their travels to see one another; they even travelled in disguise and under false names, and to all in these circles, this was not unusual. Norman even kept his dealings quiet within his own bank.

Undoubtedly, this ability to arrange liquidity support in the face of shortages and financial pressures, quickly and without any political interference, is essential for crisis management. Even more, in undertaking experimental and innovative policies, as tends to be the case in the gravest circumstances, a confidential environment, proved to be necessary. Crucial conversations took place in private, informal settings, in a “walk and talk,” a “fortuitous happenstance” or a gathering in an elevator. This allowed for productive brainstorming, sharing of ideas and proposals, and keeping one another informed of important developments, without causing market reactions. However, this secrecy in central banking has generated a transparency deficit for central banks, who are now facing increased pushback for their policies and opacity.

The crisis also drew attention to the international layer of the contradictions between central banks and democratic governance. Central banks’ foreign lending practices are yet another mechanism (in addition to domestic policies) through which they protect the interests of private finance: they can choose who to rescue in a crisis, both domestically and internationally. In doing so, they delegate more powers to foreign central banks to decide who will benefit from these liquidity lifelines overseas. These cooperative liquidity programs can also serve to influence the policy decisions and preferences of foreign partners who participate in them.<sup>15</sup>

This is not a new concern. These practices of independence and cooperation are rooted in a longer history, dating back until at least as early as the interwar period. The institution of central bank independence was declared in Norman’s 1921 central bank manifesto, where he wrote that “autonomy and freedom from political control are desirable for all central and reserve banks” and that it was upon conforming to this principle that cooperation was also a desirable policy.<sup>16</sup> Moreover, central bank autonomy strengthened the personal ties among central bankers internationally, which allowed banks to access liquidity assistance from partner banks. Creditor central banks privileged more independent banks, creating an incentive for this institutional setup to be widely adopted.

The nature of such policymaking is at odds with key democratic norms. The case study of interwar financial governance identified the origins of such practices, the personal and interpersonal dynamics of central banking, and how they influenced and institutionalized central bank independence and cooperation. In the 1920s, these practices were developed in a context of little political accountability, limited political representation, and outsized amounts of autonomy for leaders to shape the way their banks evolved and the activities they undertook.

After 1945, when central banks became answerable to governments, these practices became increasingly embedded in the normal operations and institutional structures of central banks. International organizations, especially the BIS, and the technical knowledge required for their work, offered them a safe haven outside political influence. Through their foreign operations, central banks in the 1960s could expand their jurisdictions and shape policy choices overseas through their personal encounters, conversations, and agreements. And because central banks now operated as agents to their finance ministries, secrecy was a crucial tool for their activities.

While this was largely accepted (or perhaps ignored) in the past, today, central banks have come under fire for bailing out foreign economies, widening their jurisdictional reach, and expanding their mandates to take on new activities and responsibilities.<sup>17</sup> In the GFC, while economic considerations certainly influenced decision-making, the interpersonal dynamics underlying cooperation shaped the crisis effort. Central banks took unprecedented risks in their crisis management approach, and although they did ultimately work, that they would work was unknown when these policies were first adopted.

At the same time, we cannot disregard the role that central banks can and have played in arresting financial crises and the need for them to act quickly in the guaranteed event of a future financial meltdown. When given the room and independence to take unprecedented actions, central banks have also proved that they are indispensable institutions. In many instances, their autonomy from governmental interference has been essential for monetary policymaking, allowing central banks to set appropriate targets and goals. And the confidence and privacy of their meetings has been an essential element to facilitating their actions, allowing for open debate, and for catalyzing experimentative governance when it is needed the most. In turn, as chapter 2 showed, the implications of central banks' failure to act can be ghastly.

But central banks today find themselves facing a legitimacy crisis across the world and on all points of the political spectrum. It is clear that this institutional setup needs a fundamental rethink. Their favoring of wealth and those who hold it shows that central bank neutrality is a myth.<sup>18</sup> As unelected powers,

their lack of representation, accountability, and transparency has hindered public trust in the institution. But public support and trust is critical to affording central banks their authority and their independence.<sup>19</sup> This concern is even more pronounced when we factor in the expansion of central banks' tool-kits, the increasingly broad interpretation of their mandates, and the new powers and responsibilities that central banks have assumed since the GFC.

The tensions between independent central banking and democratic principles pervade central banks' activities at the domestic and the international levels. The consequences of central bank policies do not only affect domestic publics but also those abroad, especially through these ad hoc governance frameworks and in the context of systemic crises.

## A Global Financial Safety Net?

*Bankers' Trust* showed how, with a global governance system that time and again proves to be ill-equipped to deal with the most severe financial crises, central bankers' ad hocery, innovation, and experimentation have repeatedly saved the day. Indeed, when they have been unwilling or unable to pursue drastic firefighting strategies, as in the 1930s, disaster has ensued. We thus need these agencies and these agents—central bank leaders—to step up to the task, as both first- and last-resort responders, to any future crisis.

But while these ad hoc solutions have effectively managed financial pressures, they raise questions about the robustness and durability of the existing system of global financial governance and highlight serious inefficiencies in the use of time and resources outside of crisis conditions. Since the 1920s, and even more after 1945, states have invested tremendous amounts of time and resources toward building a more robust framework for global financial governance. The IMF was created for the very purpose of providing financial assistance to struggling economies and playing the role of international lender of last resort in the face of liquidity shortages.

However, as shown in chapters 3 and 4, these institutions have been ill equipped to play this role in the face of systemic pressures. During the 1960s sterling crises, there was a real risk that if the IMF stepped in to rescue Britain, it would no longer have the resources to arrest the inevitable dollar crises that did indeed follow. During the GFC, once again the Fund did not possess adequate resources to assist struggling states as the crisis spread across the world. Even more concerning was that in both periods, states actively sought to avoid going to these large international organizations for help and instead pursued alternative, quick, and low-cost financing from creditor central banks to avoid the costs of multilateral liquidity strategies.

This recurring pattern shines a light on the deep underlying fault lines of the current governance system in international monetary and financial affairs. Despite the huge amount of investment in creating international financial institutions, and systems and mechanisms to deal with financial crises, central bankers and monetary authorities regularly and decidedly opt to circumvent this system to go for ad hoc arrangements instead. This eagerness to shy away from the existing system, to avoid its costs, and because of its inadequacies, poses at least two significant problems for global financial governance moving forward.

First, the availability of ad hoc assurances at least for a few of the largest and richest, systemically important economies in global finance may serve to generate and reinforce a deeper underlying inertia preventing an *effective* reform of the system. Indeed, the GFC spurred a few important governance reforms in the Bretton Woods institutions in the last decade, but as scholars have argued, these reforms remain wanting.<sup>20</sup> Moreover, the scope of any sufficient and inequitable efforts remains at the mercy of the United States, on whom the world has come to rely, both in the institutional system as well as for ad hoc alternatives, such as the Fed swap program.<sup>21</sup>

A related and even more worrying problem is that this reliance on ad hoc policies in the absence of a robust governance system heightens the discretionary power of a few leaders in times of crisis. This leaves the stability and prosperity of national economies and the international financial system critically reliant on central bank leaders' personal preferences and personal relations when it is at its most vulnerable. As I showed in chapter 2, most frequently during the early years of the Great Depression, but also at other times in the earlier interwar years, and in the Bretton Woods era, the management of financial crises is not immune to the fickleness of human temperament.

The global financial governance system is always going to need a reliable and robust financial safety net that can be made available in times of need. But the record of the system working effectively in the face of financial crises is at best patchy. Instead, time and again, such a system is almost never adequate and therefore inherently unreliable. Even in the worst crises that were still resolved successfully enough, the most powerful central banks take the lead in playing the part of a global lender of last resort.

The standing swap lines were established precisely to remedy the stopgap nature of financial crisis management and may provide a more reliable, long-standing alternative that the Fed can scale up with ease, in the next crisis. As the rapid use and expansion of this program in March 2020 illustrates, the Fed's expansive liquidity arrangements once again proved to be an efficient response to the global health and accompanying financial crisis. For that reason, many scholars and experts on the topic posit that these instruments are

likely to see continued use. However, historical experience suggests caution in making these bets, and the reasoning for this comes down to the particular preferences of central bank leaders.

The 1962 Fed swap network also evolved into a series of standing arrangements. While they were in place for several decades, they quickly fell out of use by the early 1970s, even during grave crises such as those of the 1970s. A few decades later, in a 1996 FOMC meeting, these lines were discontinued. During that meeting, Yellen observed that the Fed's swap network represented an "important symbol of [the Fed's] commitment to international cooperation." Her remarks during that meeting intimated that Alan Greenspan, then Fed chair, found them to be "by and large a legacy of times past and may have become something of an anachronism." During that meeting, William Joseph McDonough, then vice chair of the Fed, essentially articulated and illustrated the central themes of the argument made in this book:

If we were to assume a world in which the swap network no longer existed, would any formal mechanism have to be created to replace it? My own working hypothesis on that would be "no." In my view, what would replace it is what in a way already replaces it. A good many of us spend a fair amount of our time—I spend essentially 10 percent of my time—attending BIS meetings. I don't do that because I like the Basle Hilton, I can assure you, but rather because of the close personal relationships that come from that activity. What that means is that if we have a problem with any of the people that the Chairman sees, say, at four meetings a year and I see at ten meetings a year, we are talking with someone we know very well. So what replaces the swap network is that personal relationship. It does not mean that we do them a favor or they do us a favor. What it does is to make it possible for two individuals representing their central banks to agree on what is in the mutual interest of their central banks and more importantly their countries.<sup>22</sup>

Yellen also suggested that Greenspan "look for an opportunity in Basle or elsewhere to discuss the future of these arrangements quietly with [the Fed's] central bank partners."<sup>23</sup> Greenspan, known for his free-market, anti-interventionist preferences, was not eager to keep these going, and under his Fed chairmanship, the midcentury RCAs were unilaterally dissolved. Even though ad hoc bilateral agreements that are reconstituted into standing arrangements ought to fill in some of the gaps in the financial governance framework, one cannot guarantee that they will remain standing lines. While today's standing arrangements seem more widely accepted, future Fed leaders may choose to follow in Greenspan's steps, if they too find them unfavorable.

## Personality Is Policy

For long, technocratic governance has been praised and preferred for being purely scientific, and based in technical knowledge, science, and data, and consequently immune to the influences of messy politics and human temperament. But central bankers themselves are concerned about the impact on policymaking and cooperation when those who forged the last arrangements would have moved on to other things. Some even fear that a change of guard might hinder the ability of central banks to create them anew in the event of a future crisis, which raises alarm bells for the future of global finance and its governance. *Bankers' Trust* highlights the sensitivity of the financial system not only to the structures, interests, and ideas that frame policymaking but also to the people in charge.

The stories told in this book have mostly been success stories of how certain leaders were able to carry national economies through crises. But the experience of the Great Depression shows that this cannot be guaranteed if the “right” people are not in charge. This feeling is shared among bankers throughout the twentieth and twenty-first centuries, as I’ve shown in this book.

While this presents a sobering conclusion, it need not necessarily be that way, as this project demonstrates. But success stories abound, we know of no one formula for a successful and equitable response to systemic financial crises. For at least the last century, financial governance has relied far less on the financial governance system as we know it. Rather, the management of finance and the prevention of cataclysmic crises has taken the form, time and again, of ad hoc, stopgap arrangements created to manage the pressures that financial systems generate. The provision of these fixes ultimately lies in the hands of a few powerful people.