This Time It's Personal: The Individual Politics of Central Bank Cooperation in the Global Financial Crisis

Aditi Sahasrabuddhe
Wellesley College
as122@wellesley.edu

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Abstract

Why do central banks cooperate using bilateral currency swaps in some crises and not others? I develop a historically informed, relational framework to explain crisis-time central bank cooperation. I argue that when central bank leaders share relations of interpersonal trust and goodwill, this opens the possibility of ad hoc and bilateral cooperation. In the absence of these relationships, they must adopt costly unilateral or multilateral policies. I demonstrate that the emergence of bilateral swap lines during the Global Financial Crisis was rooted in central bankers' personal relations of trust and goodwill. I draw on evidence from elite interviews with former central banker leaders in office during the crisis, and other primary materials from central bank archives as well as meeting transcripts and minutes from the Federal Reserve. I show that international cooperation is rooted in interpersonal cooperation, thus drawing attention to the human interactions that make technocracy function.

1 Introduction

Upon the outbreak of the Global Financial Crisis (GFC) in 2007, '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.'[1] In other words, 'the system worked.'[2] Drezner argues that this time, international financial institutions such as the International Monetary Fund (IMF), the Group of 20 (G-20), and central banks were revitalized to respond in an effective and nimble fashion.[3] The role of this system, however, is exaggerated—the IMF's resources fell short and the G-20 did little to bolster the Fund's ability to meet the demands for its loans at the worst point of the crisis.[4] To the extent that this system worked, credit goes not to the traditional tools and policy instruments typically used by monetary authorities, but to the experimentation and governance innovation spearheaded by central banks.

The crisis was met with one of the most notable examples of central bank cooperation in history.'[5] Five major central banks led by the United States Federal Reserve (the Fed), under Bernanke's leadership, injected nearly half a trillion of dollars in emergency liquidity into the global economy through a network of central bank currency swaps. These liquidity lifelines were arranged bilaterally and in an ad hoc manner and proved essential to bolstering the rescue measures undertaken by central banks and governments at home and providing critical band-aids to patch up the inadequacies of the existing governance system. Central banks worked together to prevent another Great Depression.

Why and how were central banks able to avert a second Great Depression following the banking panics in 2007? After all, such cooperation and innovation, while not new, has been

[1]Drezner 2014a; Drezner 2014b.
[2]Drezner 2014b, p. 1.
[3]Eichengreen 1992; Drezner 2014b.
[4]Helleiner 2014; FOMC 2008b.
[5]Obstfeld, Shambaugh, and Taylor 2009.

rare. To explain this outcome, I advance a relational account of central bank cooperation, rooted in central bank leaders' differential personal ties with their foreign counterparts. I argue that two key relational dynamics among leaders—interpersonal trust and goodwill—increases the likelihood of bilateral cooperation. In the absence of these strong personal ties, monetary authorities will have to turn to costlier liquidity assurance strategies. They might pursue *unilateral* policy adjustments, liquefy reserves or isolationism as in the Great Depression. Or they may turn to *multilateral* reserve pooling or conditionality-laden international institutional assistance, such as IMF loans.

The politics of multilateral,[6] or unilateral[7] strategies has been thoroughly explored. While some studies investigate the economics and politics of bilateral currency swaps,[8] our understanding of the emergence of the swap network and the selection of swap recipients remains thin. Today, swaps are a central feature of the global financial safety net. They are used by the world's largest economies and outmatch IMF facilities in number and value.[9] In March 2020, existing Fed swaps were enhanced in precautionary measures taken to manage the financial fallout from the Covid-19 pandemic.[10] Despite their significance in safeguarding the financial system, we lack an explanation for when and why central bankers favor bilateral and ad hoc cooperation and among whom these agreements are most likely to emerge. So, why do these arrangements emerge when they do?

I identify the conditions under which central banks are most likely to cooperate using bilateral currency swaps to manage financial pressures. Using primary sources held in central bank archives, I offer a historically informed, relational account of the emergence of the Fed's swap lines during the GFC. The paper builds on and challenges materialist and ideational explanations for international cooperation to argue that such cooperation is *highly interpersonal*: in

[6] Copelovitch 2010; Li, Sy, and McMurray 2015; Nelson 2017; Vreeland 2003.

[7] Simmons 1994; Cheung and Qian 2009.

[8] Aizenman and Pasricha 2010; Broz 2015; McDowell 2012; Sahasrabuddhe 2019.

[9] Vaughn 2020.

[10] Press Release 2020.

a crisis, individual central bankers, and their personal relations with one another matter. Key relational attributes—*interpersonal trust* and *goodwill*—facilitate quick and effective crisis management through innovation and experimentation under conditions of crisis and uncertainty. The possibility for bilateral and ad hoc cooperation to occur can only emerge when central bankers enjoy the personal trust and goodwill of their foreign counterparts.

Swaps are easier to arrange when three additional conditions are met. First, individual leaders are influential in central banking circles, and thus able to sway their friends' and colleagues' decisions. Second, these often-controversial policy choices are most easily arrived in secret and outside the public view. Third, central bankers find little value in politics and view themselves as explicitly apolitical. When leaders do not share personal ties of trust and goodwill and when these conditions are not met, central banks must turn to costly unilateral or multilateral approaches.

What worked in 2007 was not the entire system, but a few governors within it, whose concerted efforts provided necessary band-aids to keep the money flowing. To fully understand crisis-time monetary interventions between 2007-2010, we need to account for the particular individuals involved. To address this gap in our understanding of crisis management, I explore the effects of the relational dynamics among central bank leaders during the GFC in shaping cooperation and crisis management with insights from the perspective of central bank leaders themselves.

I offer evidence from first-hand accounts of the crisis management effort collected from elite interviews that I conducted with central bank leaders in office during the Crisis, including Ben Bernanke, (Fed Chair), Mervyn King (Governor, Bank of England), Masaaki Shirakawa, (Governor, Bank of Japan), Duvvuri Subbarao (Governor, Reserve Bank of India, RBI), Jean-Claude-Trichet (President, European Central Bank, ECB), and fifteen central bank deputies, Federal Open Markets Committee (FOMC) officials, and other central bank staff.[11]

[11] IRB exemption was obtained from Cornell University on October 3, 2018 [1809008289.] See Appendix A

I also draw on evidence collected from the archives of the Bank of England, the Bank for International Settlements and the New York Fed, and from FOMC meeting transcripts during the crisis.

Next, I elaborate on the puzzle around the episodic use of swaps to manage financial crises and the gaps in the existing literature of cooperation during the GFC. In then develop a theoretical framework of relational cooperation and how leaders matter in central banking. In part 4, I discuss my interview strategy and data limitations. In part 5, I introduce a few key central bankers and their distinct relational dynamics. In part 6, I demonstrate the relational dynamics underlying the creation of the Fed's swap network among a few advanced economics. Using case studies, I then show how interpersonal trust and goodwill facilitated the US-Mexico swap agreement. I also demonstrate the converse: the absence of interpersonal trust and goodwill among central bankers in the US with those in Iceland and India hindered their ability to secure a Fed swap. I conclude with insights for understanding the interpersonal underpinnings of international cooperation.

2 Central Bank Swaps and International Cooperation

The ease and speed with which central banks can act as lenders of last resort presents a puzzle for why swaps are not used more frequently to manage liquidity shortages. Similar instruments were briefly used to patch up the interwar 1920s economy and later to patch up the flailing Bretton Woods System. The infrequency with which they are used also raises the question of why they are deployed in some crises but not others.

The risks associated with such transactions—that a central bank may refuse or fail to honor the agreement—are real and large. However, central bankers hold that swaps carry little risk. I argue that this is because they mitigate this risk by only extending them to their

for ethical standards declaration and Appendix B for information on interviews (including sampling, citations, and consent).

most trusted counterparties; a swap agreement is a meaningful signal of trust. Swaps offer a rapid means to inject massive amounts of liquidity into the financial system at no cost to the lender. They do not involve a dramatic policy change and recipient central banks lend these dollars on to domestic banks in their jurisdictions on their own terms.[12] Still, establishing these lines has not been an automatic response. So, why do these arrangements emerge when they do?

To address the liquidity shortages and augment domestic and multilateral rescue packages, major central banks collectively injected trillions of dollars, euros, and pounds into the global economy between 2007-2010. The largest network emerged between the Fed, and fourteen central banks; the largest swap peaked at $170.93 billion between the Fed and the ECB. The Bank of Japan extended dollar swaps to India, Indonesia, and South Korea who were experiencing dollar shortages. Euro and Swiss franc networks also emerged.[13] But as history shows, this response was neither automatic nor obvious. Nor was it widely available. The Fed's swap network was highly selective.[14]

As Park notes, it was apparent that emerging economies were disadvantaged in their international competitiveness and faced higher barriers to accessing this conditionality-free safety net.[15] Generally, where central banks cooperated, it was not entirely surprising, but some puzzling cases can be identified where the necessary cooperation 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, Mexico, were granted one.[16] Lending central banks suggested that liquidity shortages determined swap access. However, among the fifteen economies facing dollar shortages, six Fed swap requests—Chile, Hungary, Iceland, India, Russia, and

[12] Council on Foreign Relations n.d.

[13] Bertuch-Samuels and Ramlogan 2007.

[14] Prasad 2014.

[15] Park 2011.

[16] Sahasrabuddhe 2019.

Turkey—were denied.[17]

States' economic and financial ties also shape cooperation. The Fed had an incentive to assist foreign countries to protect the US banking sector from pressures overseas.[18] Broz and McDowell both suggest that these lines, which McDowell characterizes as *unilateral* defense mechanisms, were motivated to protect US power and financial interests. However, others argue that although US bank exposure overseas did motivate the Fed's selection, it's objective economic criteria for choosing swap recipients does not satisfactorily explain its selection.[19] The importance of these factors varies across recipients and is indeterminate. For example, as noted at the FOMC, most large Mexican banks, barring Banamex, were European-owned, and could access ECB dollar funding. Mexico also already had a standing swap with the US through NAFTA.[20]

And although international financial institutions have routinized day-to-day cooperation and institutionalized intergovernmental credit facilities,[21] the crisis decisively showed central bankers' preferences for bilateral strategies to meet liquidity needs. Institutions mattered in 2007, but primarily in their role in providing opportunities for face-to-face interactions and communication among monetary authorities, such as at the Bank for International Settlements (BIS). But rather than turning to these long-standing institutional facilities, a handful of central banks side-stepped traditional avenues for intergovernmental lending for ad hoc, bilateral cooperation.

Shared beliefs among policymakers rooted in similar training, or within epistemic communities also facilitates cooperation and creates stability.[22] However, many influential central bankers participating in the swap network did not share similar educational credentials or

[17] Prasad 2014.
[18] Aizenman and Pasricha 2010; McDowell 2012; Broz 2015.
[19] Sahasrabuddhe 2019.
[20] FOMC 2008b.
[21] Keohane 1984; Oye 1986; Simmons 1994.
[22] Goldstein and Keohane 1993; Haas 1992; McNamara 1998; Nelson 2017.

worldviews with their foreign colleagues. They came from diverse backgrounds in their training and their careers. I show that within this larger professional and knowledge community of transnational central banking, some leaders are drawn more closely, by their personal ties and shared identity of what it means to be a central banker. But even within these smaller circles, there was no shared consensus around the causes of the crisis, nor collectively held causal beliefs over best practices and policy strategy for its resolution.

So, why did central bankers opt for ad hoc governance innovation and experimentation in the early days of the crisis and side-step already-available policy tools and international institutions designed to address this problem? Vaughn suggests that the Fed's selections were mediated by larger geopolitical considerations and argues that these instruments are used to exert leverage against risky partners.[23] In contrast, I contend that these geopolitical motivations are not motivated by leverage, but *favoritism*: by assisting those with whom Fed leaders shared close interpersonal relations of trust and goodwill. Fed leadership mitigated substantial risks incurred in these agreements by excluding those with whom they did not shared strong personal ties of trust and goodwill, and assisting central bank leaders whom they did trust, to show a united front.

The geopolitics of the swap network is thus less a question of strategy and leverage than about honoring close institutional, professional, *and personal* relations among bankers. In creating these bilateral instruments, I show that the Fed depended as much on the trust, goodwill, and support of its counterparties, as they did on the Fed. My argument lies at intersection of epistemic communities and individual-level analyses, drawing on insights from relational economic sociology, to highlight the relational side of policymaking within professional communities, where agents rely and act on shared professional identities and close interpersonal relations.

[23]Vaughn 2020.

3 Relational Cooperation

International security scholarship has seen a 'revival in interest in the role of leaders' in world politics.[24] Horowitz suggests that leader attributes and experiences are 'complementary and intertwined' with structural and institutional variables in determining why states initiate interstate military conflict.[25] In international political economy, individual-level studies are largely focused on the ideas, experiences, and careers of intellectuals.[26]

I contend that the influence of the individual-level in world politics also plays out in a relational setting. This is no more evident than in Morrison's work on the personal clash between Keynes and Churchill in the ill-fated implementation of the gold standard in Britain.[27] And because both cooperation and finance necessarily entail interactions between multiple parties, central bank cooperation is an especially fertile area to study the influence of relational dynamics: in 1921, Benjamin Strong, Governor of the New York Fed, wrote to the Bank of England Governor, Montagu Norman: 'I suppose it is a fact that in none of our business relations has the personal relation played so large a part as in banking.'[28]

I argue that central banking is highly interpersonal: leaders are influenced by their international colleagues and relationships. For instance, the Norman-Strong partnership transformed interwar cooperation and central bank autonomy into a formal agenda. Indeed, Eichengreen suggests that following Strong's untimely death in 1928, his successor, Harrison, did not enjoy similar relationships with his counterparts, which limited the possibility of cooperation during the Great Depression.[29] Personalities and personal relations also shape the institutions in which actors operate. In the 1960s, Karl Otto Pöhl, a former President of the Bundesbank

[24] Byman and Pollack 2001; Yarhi-Milo 2014; Saunders 2009; Horowitz 2015; Krcmaric, Nelson, and Roberts 2020.
[25] Horowitz 2015, p. 185.
[26] Adolph 2013; Morrison 2012.
[27] Morrison 2021.
[28] Federal Reserve Bank of New York (hereafter FRBNY), 1116.2.1, Strong to Norman, November 17, 1921.
[29] Eichengreen 1992.

said, it is the close friendships, not financial resources, that are the real strength of this institution. *Different personalities could mean a different BIS.*'[30]

My argument is grounded in relational economic sociology, prioritizing social relations between actors over individuals or macro-level institutions. Granovetter argues that economic actors are embedded in social relations and that networks of social relations can produce trust and discourage malfeasance in economic exchange.[31] However, Zelizer suggests that social embeddedness alone 'is often erroneously treated as an explanatory mechanism.'[32] Instead, she investigates the intersection between intimate relations and monetary transfers among individuals in various physical, familial, and social relations, arguing that in all economic activity, 'people engage in the process of differentiating meaningful social relations.'[33] This *"differentiated ties"* approach allows us to understand how people routinely differentiate meaningful social relations by erecting boundaries, marking and distinguishing relationships with different names and practices, and designating specific economic transactions as appropriate to the relationship. Interpersonal interactions become the starting point for social processes.

Certainly, central bankers occupy a world far outside the intimate relations that Zelizer evaluates. However, the interpersonal level at which the central banking community interacts, is distinct to the profession.[34] As Volcker and Gyohten observed, central bankers are 'uniquely able to deal with each other on a basis of close understanding and frankness.'[35] I show, however, that this level of understanding and frankness is not uniformly available to all central bankers. The relational framework allows us to observe how central bankers' differential personal relations shape patterns of cooperation through differential economic transactions. Variation in the strength of personal ties among central bank leaders influences the types of

[30] Bank for International Settlements, CH-000583-8 A.BISA.7.18.16.HAL.10 (F02), Edward Jay Epstein, 'A Brave New Role for the BIS'; emphasis added.
[31] Granovetter 1985, p. 491.
[32] Zelizer 2012, p. 148.
[33] Ibid., p. 145.
[34] Johnson 2016.
[35] Volcker and Gyohten 1992.

liquidity assurance and cooperation—bilateral and ad hoc, versus costly unilateral or multilateral approaches—available to their central banks. Specifically, relationships of interpersonal trust and goodwill among leaders opens the possibility of bilateral cooperation.

Trust is one of three emotions at the base of social life: 'confidence is the affective basis of agency; *trust, of cooperation*; and loyalty, of organization.'[36] Trust as a social construct is based on the expectation that others will do what is right. Interpersonal trust is greater than predictability and mutual reliability, it is a personal bond that implies ideas of risk-taking and of obligation.[37] In trusting another 'we act as if another will under no condition harm us or slight our welfare ... without the support of third-party supervision.'[38] This sort of trust is especially important under conditions of uncertainty, when actors have little information to form expectations of others' actions; trust precedes cooperation.[39]

Although the question of whether trust fosters stability and cooperation is debated in international relations,[40] McGillivray and Smith argue that agent-specific policies can help maintain trust within the confines of international cooperation, via threats of punishing miscreant leaders: with a change in leadership, cooperation can be restored.[41]

I argue that when central banker leaders trust their counterparts, these relations create the possibility to engage in bilateral and ad hoc cooperation with these trusted partners. Central bankers established such a dynamic in the 1920s, as described Strong in a letter to Norman:[42]

> The point he makes about cooperation is, of course, of the greatest significance, but raises the question which you and I have discussed so frequently and fully.

[36] Barbalet 1996, p. 89.
[37] Hoffman 2002.
[38] Silver 1989, p. 276.
[39] Held 1968; Gambetta 1990.
[40] Kydd 2001; Kydd 2018; Jervis 1976; Mearsheimer 1994.
[41] McGillivray and Smith 2000.
[42] FRBNY, 1116.7.1, Strong to Norman, October 19, 1927; emphasis added.

> How can such a situation as the present one be met by any scheme or device, automatic or mechanical? Must it not be dealt with by this species of management and cooperation such as we have been attempting to give it, and if so, must not people generally trust someone, and therefore, does it not resolve itself to the simple question, "Do they trust us?"

Conversely, in the 1960s, a swap line between the New York Fed and the Bank of England stalled because Roy Bridge, in charge of international currencies of the Bank of England 'had not yet come to trust' Coombs, his counterpart in New York.[43]

From an individual psychological perspective, Mercer suggests that trust is a 'feeling of optimism in another's goodwill and competence.'[44] Goodwill, made up by the structure and the content of the actor's social relations, can strengthen relationships of interpersonal trust. It is rooted in sentiments of friendship, and a sense of obligation among individuals, where actors can rely on the approval and support of those with whom they share such relations.[45] Goodwill and trust allow individuals to establish norms of support and reciprocity where one can expect to benefit from these relational attributes and be able to make personal appeals to one another in times of stress.[46] They facilitate cooperation, exchange, and innovation among those who enjoy these bonds. In the 1920s, Hjalmar Schacht of the Reichsbank benefitted from such a relationship with Strong and Norman. On securing a large loan from Strong in 1927, Schacht wrote:[47]

> . . . May people more and more realize how largely personal contact[,] knowledge[,] and friendship are bound to foster such a development of the good of all[.] I hope we shall continue along these lines on many other occasions to come[.]

[43] Bank of England, C43/742, Letter from Bridge to Parsons, 5 April 1972; See also McCauley and Schenk 2020

[44] Mercer 2005, p. 95.

[45] Dore 1983.

[46] Silver 1990.

[47] FRBNY, 1135.0, Telegram Schacht to Strong, July 13, 1927.

This paper does not aim to identify what *causes* interpersonal trust and goodwill, but their *consequences* in international monetary affairs. However, it is important to identify their sources. The social structures and relations in which actors are embedded certainly make room for trust and goodwill to emerge. Conventional explanations for cooperation offer valuable insights here. State relations and economic ties determine the frequency and intensity of correspondence and meetings; international institutions such as the BIS bring leaders together regularly, where they get to know one another better. Often, central bankers may have gone through similar careers or academic programs together, prior to joining these banks. Opportunities to develop close relationships emerge through these various institutional channels. The sources of bankers' personal relations between any two central bankers, while rooted in these structures, may not necessarily be the same. Indeed, they are not even guaranteed to develop. But when these personal ties develop, they are consequential in shaping cooperation in international monetary affairs.

Three additional background conditions can enable and strengthen these interpersonal relationships: First, *influential individuals* can cultivate close relationships, persuade and negotiate with their counterparts, and shape their foreign colleagues' actions.[48] As such, central banking is also highly personal and central bank leader's influence is significantly heightened in a crisis.[49] They can set the tone and policy stance of their banks per their views on crisis management, bailouts and moral hazard, and inclination to experiment and cooperate. Their reputations, and personalities also influence their relationships within the community.

Second, cooperation around such issues is thus easier when done in *secret*: policy decisions may have significant economic and political implications and can be highly politically controversial. Behind closed doors, bankers can avoid constraints on their negotiating positions and can have open and frank conversations.[50] Third, as unelected policymakers, central bankers

[48] Adler and Adler 1998.
[49] Friedman 1962; Siklos 2002; Singleton 2011, pp. 21–26.
[50] Goodfriend 1986; Carnegie and Carson 2020.

find little value in politics, do not identify with it, and view themselves as explicitly *apolitical* authorities.[51] It is not only important that central banks are politically independent institutions. Perceiving oneself as apolitical and independent can instill trust among those central bankers that share this identity. When these conditions are met, this opens the possibility of bilateral and interpersonal cooperation to avoid more costly alternatives.

In an interview, one central banker said that these relations and practices tend to be more pronounced among longer-serving central bankers. It is harder, but not impossible, to get that between people parachuted in from other walks of life. In a crisis, one is desperate to talk to a trusted counterpart and cooperate with the individual as well as the institution. One thus needs to not only understand the substance, but the interpersonal etiquette that is very particular to central bankers.[52]

4 Interview Methods, Data, and Limitations

The paper offers unique insight into the influence of individual and relational attributes on international financial cooperation. Employing Beckmann and Hall's advice that 'those who study Washington ... go and (effectively) interview those who work there,'[53] I conducted 20 semi-structured elite interviews with current and former central bankers in the US, UK, Japan, Europe, and India, between the fall of 2018 to the summer of 2020. All pre-March 2020 interviews bar one, were conducted in person in New York City, Washington, DC or London. Interviews conducted after March 2020 were conducted via Skype, Zoom or by phone. I used a purposive sampling method, identifying and contacting former heads and deputies of major central banks by email. I then used a snowball sampling method to widen my pool to include the former governor of the Reserve Bank of India (Subbarao) as well

[51]Singleton 2011, p. 74.
[52]Interview.
[53]Beckmann and Hall 2013, p. 196.

as former central bank officials in the US and UK, to talk to the 'point people' doing the groundwork of implementing policy.

Although I elaborate on the interview structure, questions, ethics and consent in Appendices A and B, I will briefly summarize them here. I adopted conventional semi-structured interview practices and norms as described by and collaborators.[54] Prior to diving into specific questions, I asked each central banker to recount their experience of the crisis, their approach to crisis management and their primary concerns. Questions then probed into specifics of central bankers' own philosophies of financial management, their relations with their domestic advisors, colleagues and staff, and the role of economic position, power and international institutions in cross-border central bank relations. I then asked more direct questions about their relationships and interactions with their foreign counterparts and how they influenced crisis management efforts across central banks. Where relevant, I drew on indications of these dynamics from central bankers' own memoirs and other writings to ask them to elaborate on their interpersonal relations and perceptions of their foreign colleagues, and whether and how they influence crisis management and cooperation.

These data also have important limitations that would be remiss to ignore. While I attempt to provide as wide a sample to represent multiple countries', central banks', and central bankers' views on the same question, the sample is limited in its representativeness. Indeed, several potential respondents, in the US, Mexico, Iceland and elsewhere did not respond to or declined my interview requests. The insights offered here are thus limited to 20 interviews. Most respondents represent advanced economies, except for Subbarao who spoke of his experience as a central banker from the Global South. Apart from Subbarao and one Icelandic public official, interviews predominantly represent the experiences of those countries that received a Fed swap and their views on why other request were not successful. Moreover, it was more difficult to facilitate extemporaneous conversation in the interviews

[54] Mosley 2013.

conducted remotely, specifically over the phone, with stricter time limits and a little chance to develop a rapport with interviewees.

Still, these data provide important insights that make them suitable for tracing out the dynamics and processes of central bank cooperation in creating the Fed swap network during the crisis. The data offer details of central bankers' concerns with certain foreign counterparts and those factors that facilitated cooperation among them and represent varying accounts not only from the lending central bank, the Fed, but recipients of swaps who played an equally important role in formulating these arrangements. Still, I limit my conclusions to what can be drawn from this sample and do not extrapolate them to other populations.

Others may also be concerned that self-reported data may be biased or unreliable.[55] Certainly, memories fade, and even where they do not, few people would portray themselves in a poor light and might exaggerate their influence or role in crisis management during the GFC. Given the public position of several respondents, the data may also be vulnerable to self-censorship. However, it is also not entirely in their interest to highlight some of the details they shared regarding how they were able to side-step institutional norms and precedents, and collaborate on such a personal level, to achieve their goals. Especially given the growing public and political backlash against the inordinate power of central banks and central bank leaders, and the arguably undemocratic and opaque nature of the swap arrangements, it is more in their interest to *understate* their own personal influence and the influence of their personal ties overseas. Still, to mitigate these biases, I adopt two strategies to manage the biases of self-reporting and self-censorship:

First, with the permission of each respondent to call on their interview with subsequent interviewees (by name or otherwise, per their preference), I sought to corroborate the accounts of central bankers on opposite sides of a negotiation by asking them how they experienced

[55] Nisbett and Wilson 1977.

and viewed these interactions vis-à-vis their opposite numbers. Furthermore, because most interviewees are no longer in public office, they were more open about otherwise sensitive details of their time as central bankers. Those who remain associated with their banks remain anonymous and de-identified. This makes these data more rather than less reliable.

Second, I triangulate these data with evidence from transcripts of central bank meetings in which swap agreements were discussed and voted on, which are now publicly available, reports from the media during the crisis, and Congressional hearings where central bank leaders were questioned about their crisis policies in the years that followed. I found no consequential discrepancies between the interview accounts and central bank transcripts and reports.

5 Central Bankers in the Global Financial Crisis

Central bank leaders entered the crisis with 'different backgrounds, temperaments, and intellectual proclivities,' and did not agree on the causes of the crisis nor its resolution.[56] Although he had an old connection with King, when they met at Cambridge University decades before, Trichet's background diverged significantly from his counterparts'. He was a life-long bureaucrat who had studied Latin and the classics before beginning his civil service career and 'saw his profession as a central banker as being about something much bigger than economics.'[57] He initially viewed it as a one-off problem of banking panic and market uncertainty.

Bernanke and King both began their careers as academic economists before entering central banking. They first met when they shared an office suite at MIT in the 1980s. Bernanke, an expert on the Great Depression, viewed the crisis as a 'deeply intertwined set of risks to the banking system and the overall economy.'[58] King saw it as less severe, viewing the crisis as a corrective for the long bout of banking excess.[59] He saw regulating

[56] Irwin 2013, p. 12.
[57] Ibid., p. 112.
[58] Ibid., p. 112.
[59] King 2004.

banks as messy and legalistic and viewed Trichet and Bernanke's initial response as an over-reaction.[60] Masaaki Shirakawa 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. None of them anticipated that they would be responsible for the world's most important currencies during the worst crisis since the Great Depression.

Several central bankers mentioned that they had developed close personal relationships of trust and goodwill with one another before the crisis through private and institutional meetings, frequent contact and long-standing familiarity with one another. Despite their different priorities and philosophies, their close relations of trust and goodwill helped them to converge on a plan to establish swap lines.[61] 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.[62] 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.[63]

Donald Kohn, Vice Chair of the Fed during the crisis, noted that while bankers today do not share the deep and detailed letter-writing traditions of their predecessors, regular contact and correspondence allow them to build similar personal and social relationships with one another that give them added insight to their personalities.[64] Shirakawa also noted that technological advancement in communication has allowed them to maintain very private and regular contact both formally and informally.[65]

[60] Irwin 2013.

[61] Interviews; see also ibid.

[62] Interview with Benjamin S. Bernanke, Chair of the Board of Governors of the Federal Reserve System (2006-2014) Brookings Institute, Washington DC, August 29, 2019.

[63] Interview with Mervyn King, Governor of the Bank of England (2003-2013). NYU Law School, New York, December 17, 2018.

[64] Interview with Donald Kohn, Vice Chairman of the Board of Governors of the Federal Reserve System (2006-2010). Phone call, May 30, 2018.

[65] Interview with Masaaki Shirakawa, Governor of the Bank of Japan (2008-2013). The Millennium Hilton,

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.[66] But many central bankers noted that within the central banking club, there is an inner circle.[67] Others noted that institutions, especially the BIS, play a crucial part in fostering reciprocity and trust between central bankers.[68] The Global Economy Meeting and the BIS dinners allowed for a free and frank exchange of views over the goings on in markets.[69] The dinner is particularly important. It's closed, exclusive, informal, and intimate setting facilitates free-flowing conversation. The strongest interpersonal relations are cultivated in this informal, confidential, and exclusive environment.[70]

6 Cooperation in the Global Financial Crisis

The origins of the Fed swap network lay in the favorable relationships of trust and goodwill shared among a handful of leaders, which facilitated rapid international cooperation early in the crisis. 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.[71] Leaders often discussed these arrangements with their foreign counterparts prior to seeking their own banks' support and approval.[72] 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. Their easy and immediate personal relationships 'of extraordinary confidence and intimate knowledge' were critical for

New York City, December 5th, 2019.

[66] Interview with Charlie Bean, Deputy Governor of the Bank of England for Monetary Policy (2008-2014). 32 Lincoln's Inn Fields, London School of Economics, October 18, 2018.

[67] Interviews.

[68] Bean; Bernanke; King; Shirakawa; Trichet.

[69] Bernanke.

[70] Interviews.

[71] FOMC 2007b; FOMC 2008b; FOMC 2010.

[72] Bean.

generating collective solutions to the crisis.[73] And while things do ultimately 'get done,' under conditions of uncertainty, such facilities are difficult to rapidly get off the ground in the absence personal relationships and trust.[74]

Mercer notes, 'if observers attribute cooperation to the environment rather than the person, then trust cannot-and need not-develop.'[75] Crucially, all central bankers faced with the same crises have not been guaranteed the same privileged access to ad hoc liquidity assistance through swap lines. In the rest of the paper, demonstrate the interpersonal origins of the swap network among a few advanced economies in 2007. I also show the differential personal ties are distinguished by different monetary exchanges for liquidity assurance, first in a brief discussion on how the absence of trust and goodwill hindered Iceland's access to a Fed swap. I then show how varying relations of interpersonal trust and goodwill among central bankers in Mexico and India with central bankers at the Fed and Japan influenced their ability to secure dollar swaps.

6.1 Relational Cooperation

Domestic crisis management policies varied across the world. And most central bankers also recognized the institutional and legal constraints on their own discretion and the influence of domestic concerns and the international economic and political climate on their foreign operations. But although central banks have large institutional apparatuses and operate within legal and institutional frameworks that outlive individuals, central bank leaders' influence increases in a crisis.[76] 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 ultimate word say.[77]

[73] Trichet.
[74] Bean.
[75] Mercer 2005, p. 95.
[76] Bernanke; Kohn
[77] Interview.

Some bankers noted that Bernanke strongly favored showing a unified front among major central banks. Bernanke, an expert on the Great Depression, 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. He had also learnt 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. Caution and conservatism prevented central bankers from managing the collapse of credit and the money supply a century ago.[78] In fact, Bernanke even once said, of central bankers' roles in the Depression, 'we did it. We're very sorry. We won't do it again.'[79] This significantly informed his approach to the GFC.

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 towards financial innovation, especially that he would have been more skeptical of the innovation in the 1990s and 2000s.[80] The need for experimentation when central bankers were themselves coming to grips with the crisis was a closely held view by the Fed's leaders.[81]

Early in the crisis, trust lay at the heart of the swap lines. Central bankers did not all agree on how to manage the crisis, and 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. Much of the risk associated with these lines was mitigated by only extending them to trusted counterparties.[82] When decisions had to be made quickly, institutional trust depended on interpersonal trust and friendly relations among central bank leaders.[83]

[78] Bernanke.

[79] Bernanke 2002.

[80] Federal Reserve Oral History Project, Interview with Donald L. Kohn, Former Vice Chairman, Board of Governors of the Federal Reserve System. Interviewers: David H. Small, David E. Lindsey and James Clouse, May 27, 2010, and August 5, 2010, Washington D.C. Available: https://www.federalreserve.gov/aboutthefed/files/donald-l-kohn-interview-20100527.pdf

[81] Bernanke, Geithner, and Paulson 2019.

[82] Interviews.

[83] Shirakawa.

Swap lines with banks in Europe had been discussed and pre-arranged privately and informally between central bank leaders.[84] 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, 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' and had arrived at a similar plan with the Swiss National Bank.[85] Across the Atlantic, European central bankers 'didn't expect to have any difficulty getting hold of dollars' from the Fed.[86] These leaders then had to gather the support of their banks. The internal deliberations over predetermined settlements were pro forma, as central bank leaders had already informally agreed to these arrangements, grounded in interpersonal trust and reciprocity. By making these agreements informally, leaders had great discretion over their banks' decisions.[87]

Unlike Bernanke, Mervyn King viewed the crisis as a corrective for banking excess and was eager to avoid a moral hazard problem from bailing out banks. But when talking about the lead-up to and decisions made to arrange a swap, King emphatically noted that the role of individuals 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 the 12th and 13th, 2001. King suggested that the 2007/8 swaps emerged in a similar manner; noting that 'if you trust your counterpart, for temporary and emergency purposes, you can give the Fed a call.'[88]

Paul Tucker, who assumed the Deputy Governorship at the Bank of England in 2009, was close with Kohn. He suggested that friendly and informal relations with Kohn, developed

[84] FOMC 2007a; FOMC 2008b.
[85] FOMC 2007b, p. 128.
[86] Tooze 2018, p. 90.
[87] Interview.
[88] King.

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 our economic and financial systems were under stress.'[89]

The possibility of coordinated action was broached in broad terms between Tucker and Kohn in South Africa, when walking to a formal dinner. Tucker noted that he 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 helped lay the ground 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 FT's front-page headline focused on the coordination.[90]

The first lines were extended in December 2007. By September 2008, the Fed had extended swaps to the ECB, the Bank of England, the Swiss National Bank, and the Scandinavian central banks.[91] And in September 2008, when Japan sought out a swap, following an extraordinary meeting in the middle of the night, Shirakawa recalls that 'the arrangement was up and running in a matter of a few days, without any information leaks before its launch.[92] It reflected a strong mutual trust among central banks.' When recounting this cooperative effort, 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.[93]

The crisis generated unusual circumstances for central bankers. With conference calls occurring at unusual hours 'to negotiate and hammer out practical solutions with overseas

[89] Kohn.

[90] Interview with Paul Tucker, Deputy Governor of the Bank of England for Financial Stability (2009-2013). The Delaunay, Aldwych, London, December 18, 2018.

[91] FOMC 2008c; FOMC 2008a.

[92] Shirakawa 2021, p. 155.

[93] Trichet.

counterparts, sometimes without sleep,' knowing people well, and knowing how to talk to, negotiate, and reason with them was essential.[94] 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 US and UK went counter to King's initial refusal to lend to the system.[95] But central banks could not rely on governments for large amounts of liquidity, nor could they arrange swaps publicly. For King, 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.[96]

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 prior. 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."'[97] This worry and uncertainty around the success of these policies was echoed by several central bankers.[98] Through these swap lines, the Fed's lending to central banks reached almost 600 billion US dollars during, peaking at 170.93 billion dollars in an overnight swap to the ECB on October 15, 2008.[99] Some central bankers note that in the earliest days, these huge agreements that central bankers entered into, often overnight, were arranged solely on their word.[100] And when later asked by Alan Grayson, a Florida Democrat, during a congressional hearing, which foreign banks got the money lent by the Fed, Bernanke answered, 'I don't know.'[101]

[94] Shirakawa 2021, p. 155; also Kohn; Shirakawa.
[95] Irwin 2013.
[96] King.
[97] Bernanke 2015, p. 183.
[98] Interviews.
[99] These data are retrieved from the Federal Reserve's disclosures starting in December 1, 2007, to February 1, 2010. Available: https://www.federalreserve.gov/regreform/reform-swaplines.htm; Interviews.
[100] Interview.
[101] Grim 2009.

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.[102] But the Fed did not rush to re-activate or enhance them. The Eurozone crisis had not quite begun; problems of drying up liquidity in the UK and Japan eased up. 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' Mothers' Day celebrations on May 9th, 2010, Bernanke broached the idea of reopening these swaps with the ECB, the Bank of England, and the Bank of Japan:[103]

> 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.

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.' In acknowledging the extraordinariness of these steps, Bernanke re-emphasized 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.[104]

In interviews, King and Shirakawa echoed this sentiment, citing this same example. 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.

[102] FOMC 2010, p. 1.
[103] Ibid., p. 3.
[104] Ibid., pp. 4–5.

To request this new swap from the Fed, it was helpful that Shirakawa had a close personal relationship with Bernanke, which made agreeing to reopen the lines much simpler.[105] 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.[106]

6.1.1 Iceland

Unlike the rest of Europe, Iceland's multiple swap requests were unsuccessful because the Fed deemed Iceland too small economy and not systemically important to warrant a Fed swap. But nor were New Zealand or Sweden, who did receive one.[107] Iceland was an early victim of the financial crisis and source of rapid contagion. Its banking sector was deeply enmeshed in the international financial system, and several large European and US banks were heavily exposed to the Icelandic recession.

But differential personal relations meant differential access to liquidity assistance. The governor of Iceland's central bank, Daví Oddsson had made multiple, unsuccessful, requests for a Fed swap. Oddsson had governed the Bank since 2005, but he was a career politician. He occupied the position of Iceland's longest-serving Prime Minister and later Foreign Minister. Like many of his counterparts, he was not a trained economist; more importantly, he was very much a central bank outsider.[108]

During the crisis, several incidents dissolved European central bankers' relationships with Oddsson and the Icelandic central bank. One Icelandic public official suggested to me in an interview that Stefan Ingves, then Governor of the Swedish National Bank wrote that they had lost trust in Iceland's central bank under Oddsson. They also mentioned that King declined

[105] Shirakawa.
[106] King.
[107] Sahasrabuddhe 2019.
[108] Freeman 2009.

Oddsson's request for help because he did not trust him, and that Trichet called Oddsson, furious, on learning that Icelandic banks were finding themselves through the ECB.[109] Oddsson's closest economic partners in Europe could not vouch for his trustworthiness. It was then hard to justify loaning Iceland billions of dollars on the word of a man whose role as Prime Minister and Central Bank Governor sparked nation-wide protests. Trust and goodwill between Oddsson and his counterparts, foundational to the swap network, were missing, leaving little to else to facilitate cooperation.

6.2 Differential Ties with Emerging Markets

In 2008, for the first time, apart from Mexico, four emerging market economies (EMEs) also benefited from US liquidity assistance: Mexico, Brazil, Korea, and Singapore, were granted a Fed swap in 2008. The Fed reasoned that these are four of the largest and systemically important emerging economies. They were offered up to $30billion per central bank, for three-months.[110] Sahasrabuddhe shows that the Fed's criteria in selecting swap recipients were not applied unambiguously for EME requests to acquire this conditionality-free option and that diplomatic relations facilitated this cooperation.[111] By focusing on the case of Mexico, that need not meet the Fed's primary criteria for a swap—bank exposure, among others—I build on this work to show that arranging a swap agreements with EME relied on central bankers' relationships of interpersonal trust, goodwill, and reciprocity. However, where relational ties differed, so did access to dollar liquidity. To illustrate this, I show that due to the absence of such personal affinities, India—which matched Mexico and Brazil in the Fed's key justification for their swaps—was unable to acquire a Fed swap during the crisis.

[109] Interviews.

[110] FOMC 2008b.

[111] Sahasrabuddhe 2019. I elaborate further on this point in part 6.2.2, in discussing the case of India, which matched Brazil on many of the Fed's criteria.

6.2.1 Mexico

Some FOMC officials were eager not to grant any EMEs a swap. Charles Plosser said, in a meeting in 2008, '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.'[112] Plosser also noted that most major banks in Mexico 'are foreign owned—EU banks, Spanish banks—those banks clearly have access to dollars through the ECB swap line.'[113]

Others made a strong case to help the Bank of Mexico. At the FOMC meeting in October 2008 Sheets justified this swap noting that Mexico, as well as Brazil and Korea, were large, systemically important economies with a GDP 'of around 1 trillion' dollars.[114] When the EME swaps were voted on, Richard Fisher noted that Mexico had 'a sophisticated central bank' and that Guillermo Ortiz was a 'very good central banker;' in fact, Ortiz 'had been [in the US] to visit' and had already approached Sheets about a swap in addition to what was in place through NAFTA.[115] Before the crisis, Sheets had served as the Directory of the Division of International Finance and had worked closely with his central banking counterparts in Mexico and other emerging markets.

Other FOMC and Fed officials also noted their pre-existing friendships and trust in Ortiz, before the crisis.[116] When I asked 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 and minimal need for a swap in 2008 and despite internal opposition to this proposition within the FOMC, one former FOMC official said, 'that's what you get when you go to dinner parties,' highlighting how friendly ties can facilitate interpersonal cooperation.[117]

[112] FOMC 2008b, p. 42.
[113] Ibid., p. 39.
[114] Ibid., p. 10.
[115] Ibid., pp. 17, 39.
[116] Interviews.
[117] Interview.

Even these swap lines with emerging market partners with fundamentally different policy preferences to the US did not have any conditionality attached to. Rather than using swaps to exert leverage over one another, the Fed entered these agreements out of goodwill to avoid putting trusted friends through the stigma and conditionality of going to the IMF. In extending these swaps, Bernanke noted the importance of trust and reciprocal relations with central bankers of these economies as important to instilling confidence in these transactions.[118]

6.2.2 India

Like Mexico and Brazil, India is a large, and systemically important emerging market, with a GDP of over $1 trillion. On the question of assisting emerging markets, Nathan Sheets said 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.'[119]

India matched and in fact even out-performed Brazil on many of the Fed's criteria for a swap, but nonetheless failed to cross the boundary line drawn by the Fed to receive one.[120] In the FOMC meeting of October 2008, when the Committee was making its decision as to where to draw the line and which emerging markets they should assist, Kohn echoed Plosser's view, saying that except for Singapore, Korea, Mexico and Brazil, he was 'in favor of very strongly encouraging other countries to go to the IMF.'[121]

Nathan Sheets justified this citing that India was not as integrated in the global financial system as the others. However, in 2008, along with Brazil, Mexico and Korea, India was also a large and systemically important economy with a GDP of over $1 trillion. Notably, having a GDP of around 1 trillion dollars was cited as a reason to help Brazil, Korea and Mexico, a

[118] Bernanke.
[119] FOMC 2008b, p. 29.
[120] Sahasrabuddhe 2019.
[121] FOMC 2008b, p. 42.

cut-off that although India also met, it still failed to qualify for a Fed swap.

What explains the fundamentally different treatment of a country that looked so alike the other large EMEs? One US central banker talked of the difficulties of negotiating liquidity programs due to the lack of familiarity between interlocuters could hinder cooperation. This was the case between the US and India. In interviews, central bankers in the US and in Europe alluded to the importance of personal relationships and the implications of their absence for accessing swaps. Some suggested that the absence of a close relationship between India's central bank governor, Duvvuri Subbarao, and Bernanke, stacked the odds of getting liquidity assistance against India.[122] Another central banker 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.

In fact, in my interview with Subbarao, his very first comment on his time as Governor of the Reserve Bank of India 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.[123] 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.[124]

One former central bank governor outside the US and India talked of the absence of a close relationship between Subbarao and Bernanke and its consequences for cooperation between their banks. These relations were not fraught, but they missed the familiarity and personal bond that other central bankers enjoyed. They suggested that a close read of Subbarao's memoir from his days at the RBI calmly and subtly shows his frustration for not being granted

[122] Interviews. While the central bankers who shared these views do not want to associate their identity with them publicly, these views were not expressed by of either Subbarao or Bernanke.
[123] Interview with Duvvuri Subbarao, Governor of the Reserve Bank of India (2008-2013), WhatsApp Call, May 13, 2020.
[124] Interview.

a swap during the crisis with no clear explanation for why.[125] Subbarao himself mentioned that the US had been sheepish for being the epicenter of the crisis. Moreover, at the BIS, although there was a formal EME meeting, the advanced economies' dinners were specifically informal, exclusive, and invite-only. And often, prior to many international meetings, a handful of usually G-7 leaders had usually met and pre-agreed on key decisions, which were presented to all participants as a *fait accompli*.[126]

At the same time, another central banker noted 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. Essentially, the personal trust and goodwill that was missing among Subbarao and Fed central bankers was strong between Subbarao and Shirakawa. Of Subbarao, Shirakawa said, 'I like him, and he's extremely intelligent.'[127]

Subbarao said that he interacted with Shirakawa far more frequently and closely in his time at the RBI than with any Japanese representatives while he was Finance Secretary despite close political ties between India and Japan.[128] 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 BoJ-RBI swap an easy solution to arrive at, even though the rupee was not a convertible currency.[129] This 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, allowing India to access a dollar swap from their Japanese friends. Subbarao and Shirakawa's trusting relations were important to

[125] Interview.
[126] Subbarao.
[127] Shirakawa.
[128] Subbarao.
[129] Shirakawa; Subbarao; and other interviews.

showing a united front and facilitated arranging the Japan-India swap in 2008.[130]

Overall, the politics around swap lines show that sheer economic need and resources alone did not guarantee cooperation between central bankers. Rather, interpersonal relations remain a part of the modus operandi of central bankers, and differential personal relations are distinguished by different access to more or less costly liquidity assurance strategies. Trust, goodwill, and norms of reciprocity made it possible for some central bank leaders to approach trusted colleagues and secure lower cost liquidity through swaps. Where interpersonal ties were weak or absent, international cooperation was not as easy to get off the ground.

7 Conclusion

In March 2020, as governments imposed travel bans and braced for the economic shocks brought by Covid-19, experts called for the Fed to dust off its crisis playbook to bring back dollar swaps.[131] Those central bankers who helped forge the GFC swaps had left these offices. Although Jerome Powell, the current Fed chair had been forging collaborative relations,' they had not been 'battle tested—yet.'[132] Fortunately, six standing swap lines had been institutionalized in 2013. Why? Because Fed leaders feared prospects for crisis management with new leaders in charge. In an FOMC meeting in 2009, Nathan Sheets noted that the difficulty of establishing swaps would be of going 'from zero to four,' and not from four to fourteen 'if the world blows up ... eight or ten years out.' Moreover, 'ten years from [2009], the folks in New York who did all the work may be onto other things or in other positions.'[133]

Milton Friedman once wrote, a system of this kind [i.e., of independent central banks] is really a system of rule by men and not by law and is extraordinarily dependent of the

[130] Shirakawa.
[131] Ortlieb 2020.
[132] Tett 2020.
[133] FOMC 2009, pp. 30–31.

particular personalities involved.'[134] This paper shows that the global financial governance system is dependent not only on these personalities, but their relationships with one another, of trust and goodwill. In central banking and crisis management, international cooperation is rooted in interpersonal cooperation. Central bank leaders' personal relations with their colleagues overseas influence their access to various types of liquidity assurance strategies. When leaders are familiar with one another's personalities, preferences, and temperaments, they can approach their trusted colleagues to engage in more extensive cooperation. As such leaders who share strong personal ties of trust and goodwill are more likely to benefit from privileged access to bilateral swaps. Where such ties are weaker or absent, leaders must turn to costlier unilateral or multilateral alternatives.

When the global economy faced an imminent crisis in 2007, monetary authorities had several policy options available to them through conventional policy frameworks and international institutions, which are long-standing features of the global financial governance system. Insofar as monetary authorities avoided a second Great Depression in 2008, yes, the system worked. However, I have shown that central bankers, acting on their share trust and goodwill decidedly side-stepped this system of pre-existing and institutional forms of intergovernmental lending and opted for a more ad hoc approach to crisis management. Together, a handful of central bankers cooperated over experimentation and governance innovation to arrange a series of bilateral central bank swaps to manage dollar funding pressures across the global economy.

The paper highlights the inordinate influence of just a few leaders on the management not only of domestic economies, but the international system, and the relational origins of a key feature of the global financial governance framework. In other words, the system working is neither automatic, nor mechanical, nor guaranteed. Rather, it is contingent on the individuals charge of the most important institutions within it, in this case, central bankers,

[134] In Yeager 1962, p. 235.

and the relational dynamics that they share, of interpersonal trust and goodwill.

The article draws attention to the need to explore the relational dynamics among leaders in international political economy and makes a case for a further exploration of the role of leaders in making and managing global markets. I show that technocratic global governance is not immune to policymakers' personal preferences. Rather, the project highlights the informal and human side of technocracy, that is often lauded to be above the messiness of everyday politics. I consequently draw attention to the sensitivity of financial management and policymaking and the 'who' of global governance. In hard times, good relations between leaders can rescue a failing global economy. But this also raises the alarming prospect of who will take charge, and how much they can act when the 'right' people are not in charge.

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