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Financial technocrats as competitive regime creators: The founding and design of the Network for Greening the Financial System

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Abstract

Why did a group of eight central bankers and financial supervisors from across the globe create a Network for Greening the Financial System in 2017? Why did they design this network as they did? The founders were an uncommon coalition, led by French financial authorities working closely with their Dutch, British, and Chinese counterparts, and backed by others from Germany, Mexico, Singapore, and Sweden. They were engaged in an unusual act of competitive regime creation at a moment when the United States was abandoning global leadership vis-a-vis climate change. This purpose led them to create a financial transgovernmental network that was distinctive in its roles, membership, and governance. Addressing these questions not only improves understanding of a body that has emerged as a leading voice in global discussions about the environmental aspects of financial policy. It also contributes to wider scholarship on financial transgovernmental networks and the greening of central banks.

Keywords: central bank, climate change, financial supervisor, green finance, NGFS.

1. Introduction

Scholars of international political economy and global governance have devoted much attention to the proliferation of financial transgovernmental networks (TGNs). Many networks of this kind have been studied, with particular attention devoted to influential bodies such as the Basel Committee on Banking Supervision (BCBS), the Financial Stability Board (FSB) and Group of 20 (G20) Finance Track. Despite the large literature on financial TGNs, we know much less about one of the newest ones—the Network for Greening the Financial System (NGFS). Founded in December 2017 by eight central banks and financial supervisors, the NGFS has quickly grown to have one of the largest memberships of any existing financial TGN, including 134 central banks and financial supervisors from all regions of the world by the end of 2023. It has also emerged as a leading voice in global discussions about the environmental aspects of financial policy, hosting influential gatherings and producing dozens of reports that are widely cited in both official and non-official circles. Indeed, in its short life, the NGFS is already credited with managing “to shift the discursive boundaries” in international policy debates on this topic, encouraging environmental topics to be considered more seriously by central banks, financial supervisors, and other official and private financial institutions (Thiemann et al., 2023, p. 21).

Why was the NGFS created? And why was it designed the way it was? The answers to these questions should be of interest to scholars of financial TGNs not just because of the new prominence of this network in global

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policy debates about “greening the financial system.” The NGFS’ creation and design were also unusual in some ways that we identify and seek to explain in this article. The initiative to create this institution came not from the United States, which had played a lead role in establishing the well-studied financial TGNs noted above. Instead, it came from French financial authorities working closely with their Dutch, British, and Chinese counterparts, and backed by others from Germany, Mexico, Singapore, and Sweden. This uncommon coalition of institutions shared a commitment to green finance and a frustration with US attitudes toward this issue after the election of the Trump administration in 2016. In this context, we demonstrate how they created the NGFS as a strategy of “competitive regime creation,” a motivation that is little discussed in existing literature on financial TGNs. In this way, the study of the NGFS’ founding calls attention not just to a distinctive origin story but also to the changing politics of financial TGNs in an era of declining US leadership.

The new network also has some unusual design features that are not commonly identified in scholarship about financial TGNs. We show how the founders assigned it a combination of “informational” and “normative” roles without adding the kinds of “harmonization” and “enforcement” roles that many other financial TGNs take on. In developing this argument, we introduce the concept of a “normative” role for financial TGNs, a role which we argue was quite central to the NGFS’ purpose. We also demonstrate how the founders of the NGFS showed atypical enthusiasm for encouraging a very open and diverse membership in the new network, while simultaneously maintaining control of the institution’s governance by creating a Steering Committee on which they had dominant and permanent influence. We argue that each of these unusual design features were directly related to the founders’ strategy of “competitive regime creation.” For scholars of financial TGNs, they show the need to understand the varied roles, membership arrangements, and governance structures of such networks, as well as the ways in which these design features can result from the motivations behind a network’s creation.

These arguments contribute not just to scholarship on financial TGNs, but also to growing literature analyzing the new engagement of central banks with environmental issues. Scholars working on this latter topic often note the NGFS’ activities, but the institution itself has not been the main focus of their analysis. Instead, this literature has concentrated on describing and explaining this policy shift among central banks through studies of individual institutions or comparative analyses across institutions. By shedding light on the founding and design of the NGFS, this analysis highlights how the transnational agency and institution-building of financial technocrats has also been an important part of process of the greening of central banks.

To develop these arguments, we begin by placing the issue briefly in the context of the existing literatures on financial TGNs and green central banking. In Section 3, we then analyze the unusual nature of the coalition of countries that created the NGFS and their motivations. In Sections 4 and 5, we identify and explain the distinctive features of its design. The paper concludes with a summary of the argument and its significance for the two literatures as well as a brief discussion of how influential this new institution has turned out to be.

2. Financial TGNs and the greening of central banks

Literature on the proliferation of financial TGNs has analyzed a number of institutions of this kind. Some are international standard-setting bodies with quite specific mandates, such as the BCBS, which was established in 1974 after a banking crisis in order to foster cooperation among bank supervisors. Others focus on promoting financial regulatory and supervisory cooperation more generally, such as the FSB which was created after the 2008 global financial crisis and brings together central banks, financial supervisors, finance ministries, international standard setting bodies (including the BCBS), and other international financial institutions. Still others have even wider mandates, such as the G20 Finance Track whose membership of central banks and finance ministries has addressed a very large range of issues since its birth in 1999 after the East Asian financial crisis (for this literature, see for example, Bach & Newman, 2014; Baker, 2006, 2013; Brummer, 2015; Drezner, 2007; Helleiner, 2014; Johnson, 2016; Kalyanpur & Newman, 2017; Kapstein, 1994; Lall, 2015; Moschella & Tsingou, 2013; Porter, 2014; Reisenbichler, 2015; Roger, 2020; Singer, 2007).

Despite their differences, these institutions share some common features with all TGNs. Abbott *et al.* (2018) have usefully highlighted how TGNs have three core features: (1) their members are specialized units of national governments, (2) they are established not by inter-state treaties but rather by voluntary agreements, and (3) their decisions and actions are not legally binding. The NGFS has not yet attracted the attention of scholars of financial

TGNs (or TGNs in general), but it fits all three dimensions of this definition: its members are central banks and financial supervisors; it was created by a voluntary agreement; and its charter emphasizes that the body is “not intended to create any legal rights or obligations” (NGFS, 2018a, p. 5).

Many of the scholars cited above who study financial TGNs have noted that these networks offer a form of governance that is faster and more flexible without the costs associated with negotiating formal agreements and institutions. They also often highlight how these kinds of benefits can be particularly significant for financial issues characterized by high uncertainty and dynamism as well as ones that risk raising sovereignty concerns. Literature on financial TGNs also emphasizes that cooperation among financial officials in TGNs is fostered by their common financial expertise as well as by the technical nature of many of the issues they are tasked to address. In the case of networks involving just central banks and financial supervisors, scholars also point to how their members are often legally independent from government, enabling them to create and maintain TGNs more easily than officials in other parts of government.

These points are very relevant to explaining the creation of the NGFS. Many issues associated with “greening the financial system” are characterized by a high degree of uncertainty and dynamism (Maechler & Graz, 2024). In this context, it was certainly attractive for the creators of the NGFS to address the topic through an informal TGN that could move quickly and flexibly. The NGFS’ establishment was also facilitated by the fact that officials from its founding central banks and financial supervisors shared a common financial expertise and were able to act quite independently. As the next section of this paper highlights, however, there were some aspects of NGFS’ creation that were more unusual in the context of existing literature on financial TGNs. Those aspects also helped to generate features of the NGFS’ design that were also quite distinctive, as noted in Sections 4 and 5 of this paper. In identifying and explaining these anomalies, this analysis contributes to wider literature on financial TGNs in a number of ways that are summarized in the conclusion.

This analysis also seeks to contribute to growing literature on the “greening” of central banking. Traditionally, central banks devoted little or no attention to climate change and other environmental issues. In the last decade or so, however, the situation has changed dramatically, with many central banks around the world highlighting the importance of these issues to their work. Political economists have begun to detail and explain this trend, with some focusing on the experiences of individual central banks (Deyris, 2023; DiLeo, 2023; Jackson & Bailey, 2024; Moschella, 2024; Siderius, 2022) while others examine multiple institutions in order to develop a more comparative political analysis of the trend (Blondeel et al., 2024; DiLeo et al., 2023; Jabko & Kupczok, 2024; Larsen, 2023; Quorning, 2024).

In contrast to the literature on financial TGNs, this scholarship shows more awareness of the NGFS. Indeed, NGFS reports are frequently referenced in this work and some authors have commented briefly on the institution’s influence. Thiemann et al. (2023), for example, link discursive shifts in central bank positions to documents published by the NGFS. We address the issue of the NGFS’ influence in the conclusion to this paper, but our main goal is instead to explain the initial founding and design of the NGFS. On this topic, there are fewer insights in the emerging literature on green central banking.

A few brief exceptions deserve to be highlighted, however. One is Deyris’ (2023, p. 723) analysis of the greening of ECB, which includes a sentence noting that the NGFS emerged from a request by the French Treasury to the Banque de France (BdF) to contribute to the *One Planet Summit* that French President Emmanuel Macron had organized for December 2017. In an examination of the greening of the De Nederlandsche Bank (DNB), Siderius (2022, p. 1598) also mentions in passing that the French initiative emerged in reaction to the new Trump administration’s withdrawal from the 2015 Paris Agreement and the refusal of US officials to continue to discuss climate change in various international financial bodies. On the subject of the NGFS’ design, Deyris also notes briefly that the BdF insisted on housing the secretariat of the NGFS, while Siderius (2022, p. 1600) reports that the NGFS founders included two design features aimed at mobilizing other central banks to support its mission: “low entrance requirements in terms of experience or expertise on climate goals” and “high commitment requirements” in the form of an expectation that “the highest level” of an institution would sign on to membership.

All of these points are important for our analysis. What is striking, however, is that they appear only in short passages and in a piecemeal fashion in the context of studies on the greening of specific central banks. What has been missing is a detailed analysis focused squarely on the founding and design of the NGFS itself. This paper takes up this task. In order to do so, it draws on extensive qualitative analysis of primary documents (including

56 reports published on the NGFS' website between 2018 and 2023, further supplemented by documents from other relevant organizations), media sources, and 13 interviews. The latter were selected to incorporate participants involved in the story, including from all eight of the countries which founded the NGFS (see [Appendix](#)).

3. Creating the NGFS

Why did the founders of the NGFS decide to create a new network? Here, we encounter the first unusual aspect of the NGFS's creation: the leadership that drove it. The literature on contemporary financial TGNs cited earlier in this paper usually highlights the lead role played by the United States in their creation, including in the case of prominent bodies such as the BCBS, FSB, and the G20 Finance Track (see especially Drezner, 2007; Helleiner, 2014; Kapstein, 1994; Reisenbichler, 2015). In the case of the NGFS, however, the United States was not involved in its creation. Indeed, the US Federal Reserve did not join the institution until November 2020, almost three years after the NGFS was established.

3.1. Who led the NGFS initiative?

As Deyris and Siderius noted, the country that led the initiative was instead France (Interviewee 1). One interviewee specifically credits the idea to Jean Boissinot, who was in the French Treasury at the time and would subsequently become head of the NGFS Secretariat in 2021 (Interviewee 3). After being approached by the French Treasury, the BdF then invited seven other institutions to join the group as founding members: the Bank of England (BoE), the DNB, the People's Bank of China (PBoC), the Banco de Mexico (BdM), the Monetary Authority of Singapore (MAS), Sweden's financial supervisor, and the Bundesbank. After all accepted, it was once again the BdF that sent out a formal statement announcing the new body on 12 December 2017, to coincide with Macron's summit (NGFS, 2017). The BdF also organized the NGFS' inaugural meeting on 24 January 2018, a meeting at which it acquired its current role as host of the secretariat of the new network.

Officials at the DNB and BoE also worked closely with the BdF in helping to get the new network up and running (Interviewee 3). Their important roles were evident in the press statement announcing the NGFS' creation which noted that its first major public event would be "a high-level conference focused on climate risk management and supervision on April 6th 2018 in Amsterdam" co-organized by the DNB, BoE, and the French financial supervisor (NGFS, 2017). At the NGFS' inaugural meeting in January 2018, the DNB's Frank Elderson was also selected as the first Chair of the NGFS, a decision described by one of our interviewees as "what made the success story of the NGFS" because he was "so committed, enthusiastic" and brought "so much energy" to the role (Interviewee 11). He would serve in this capacity for two terms until 2022. The BoE was also keen to play an important role in the new body and had initially hoped to share the secretariat with the BdF. When the latter resisted that idea, the BoE accepted the chairship of one of the three NGFS workstreams (on macrofinancial policy) that began work in May (Interviewee 3). That position was assumed by the BoE's executive director of international bank supervision, Sarah Breeden, who is described by one of our interviewees as having "made a huge contribution" (Interviewee 11).

Existing literature has explained well how the BdF, DNB, and BoE all became interested in green finance several years before the NGFS' creation (DiLeo, 2023; Quorning, 2024; Siderius, 2022). This interest had roots both in the work of think tanks who initially introduced the idea that climate change could generate financial risks, as well as in governments' support for central banks taking up these ideas. Particularly influential was the idea of a "carbon bubble" first popularized by the British non-governmental organization Carbon Tracker, which warned financial regulators of the consequences if large financial losses from "stranded" fossil fuel assets would eventually need to be written down (Campanale *et al.*, 2011). This warning resonated with financial authorities, politicians and the general public in all three countries given the new attention being devoted to financial stability and macroprudential financial regulation in the wake of the 2008 global financial crisis. In all three of these contexts, central banks were also the recipient of requests from various government agencies to begin to consider the impacts of climate change.

When considering other members for the NGFS, the BdF was keen that the network not to be "too Eurocentric" (Interviewee 1). The DNB and BoE agreed on this need for global representation (Interviewee 3). Because of

its leading role in G20 discussions of green finance, China was an obvious invitee (Interviewee 1). The PBoC's policy initiatives for greening the financial system, in fact, had the deepest roots of any of the eight founding institutions of the NGFS, dating back to 2007. It had also led a major initiative to develop "Guidelines for Establishing the Green Financial System" within China that were approved by the government in 2016 (Dikau & Volz, 2023; Larsen, 2023). When the Chinese government assumed the presidency of the G20 in late 2015, it established a G20 Green Finance Study Group (GFSG) that was co-chaired by the PBoC and BoE. The Chinese co-chair, Ma Jun, became China's representative to the NGFS, in which he played an important leadership role. At the time, he was a special advisor to the PBoC's governor and had helped drive the initiative to green the Chinese financial system (Klasa, 2019). Ma was chosen to head one of the three NGFS workstreams (on banking supervision) where one of our interviewees reported that he "had an enormous impact" (Interviewee 11). Reflecting on the NGFS' early history in June 2019, the head of the NGFS secretariat, Morgan Després, also described the PBoC as "one of the NGFS's most enthusiastic members" (quoted in Hardie, 2019; also Interviewee 9).

The four other founding members of the NGFS were supportive of the new network but played a less central role at the start. The BdM and MAS were chosen by the BdF to help round out the body's global representation and because each had already demonstrated their support for green finance issues by their participation within the G20's GFSG (Interviewees 1 and 5; G20 GFSG, 2016, p. 35). The Swedish financial authority had shown an interest in green finance issues since 2015, when it was directed by the Swedish government to investigate the link between climate risks and the financial sector (Interviewee 11). One of the Bundesbank's executive board members, Joachim Wuermeling, was chosen to chair the third NGFS workstream (on scaling up green finance), but French officials perceived the Bundesbank to have only a "very lukewarm commitment" to the NGFS initially. Because of this, they discussed whether the Bundesbank should be invited in the first place, but the pattern of longstanding French-German cooperation decided the issue (Interviewee 1). In April 2019, Wuermeling was replaced by Sabine Mauderer as chair of the workstream, who went on to become an important figure in the NGFS, serving as vice-chair in 2022–2024 and then chair in 2024.

3.2. The Trump catalyst and competitive regime creation

Although each of these founding members had some interest in greening the financial system, why did they feel the need to create a new TGN to promote this goal? After all, there were existing financial TGNs where the issue was already being discussed, notably the GFSG which had been mandated by the G20 (2016, pp. 1–2) to "identify institutional and market barriers to green finance and, based on country experiences and best practices, analyze options on how to enhance the ability of the financial system to mobilize private green investment, thereby facilitating the green transformation of the global economy." Throughout 2016, the GFSG had worked on topics such as "greening" the banking system, the bond market, and institutional investment as well as the incorporation of environmental considerations into risk management. Its activities helped to put green finance on the agenda of other financial TGNs (Klasa, 2019; Larsen, 2023). Before the GFSG's creation, the G20 Finance Ministers and Central Bank Governors (2015, p. 5) had also asked the FSB in April 2015 to "convene public- and private- sector participants to review how the financial sector can take account of climate-related issues."

The specific catalyst for creation of a new TGN in this policy space was the election of the Trump administration in the United States in November 2016 and its views toward climate change (cf Siderius, 2022, p. 1598). In addition to withdrawing from the Paris Agreement in June 2017, the Trump administration disrupted the work on green finance that had begun in these other financial TGNs. For example, the GFSG's work was slowed by new US officials who were no longer sympathetic to its goals (Interviewee 1 and 2). In response to the Trump administration's resistance, the 2018 Argentine presidency changed the GFSG's name to the Sustainable Finance Study Group (SFSG) and broadened its focus beyond environmental issues alone (G20 SFSG, 2018; Interviewee 8). The new US attitude was a source of frustration to those who had been enthusiastic participants in the GFSG. They also perceived the situation was unlikely to change under the upcoming G20 presidencies of Japan (planned for 2019) and, in particular Saudi Arabia (2020), which had already blocked progress at the GFSG (Interviewee 1, 5, and 8).

The new US intransigence triggered the NGFS' creation. Its withdrawal from the Paris Agreement was a driving force behind Macron's One Planet Summit in December 2017. In advance of that summit, Macron emphasized the need to build a coalition of the willing in support of the Paris goals, including through the creation of new and creative kinds of multistakeholder initiatives (Aykut et al., 2021). The proposal to create the NGFS fit Macron's goal very effectively. Its establishment provided an opportunity for like-minded authorities to continue to work cooperatively on issues relating to green finance in a manner that circumvented US opposition and put pressure on the gridlocked international bodies. When justifying the need for a new institution, Elderson highlighted this point diplomatically: "there are all kinds of existing structures—the Basel Committee, the Financial Stability Board—and there is always a very good reason not to start a new initiative if something is already working. The reason we have founded this network is we feel there is more to be done, and there is more urgency than we were seeing the existing structures taking on board" (quoted in Hay, 2018; see also Interviewee 5). Reflecting in July 2020 on the NGFS's creation, Deprés was blunter. The NGFS, he noted, was created "to fill a gap," adding that "our primary objective when we kicked off the NGFS was to encourage the Basel Committee and the other bodies to step in and do their job" (quoted in Thiruchelvam, 2020).

Using the language of Morse and Keohane (2014), the creation of the NGFS can be understood as an exercise in "competitive regime creation" where a coalition of states is dissatisfied with existing multilateral institutions' policies but is unable to change them through internal means. In this context, Morse and Keohane note that the coalition may create "a new institution more in line with the coalition's preferences" and then use it to challenge the institutional status quo, including by subtly changing "actor preferences, ideas, and values" (Morse & Keohane, 2014, p. 392, 390). In a narrow sense, the founders of the NGFS were "competing" with the G20's GFSG (subsequently SFSG) by continuing and accelerating much of what it had done before Trump was elected (Interviewee 5). Indeed, many of the key figures involved in its creation had participated together in that body, including the key figures of Boissinot and Deprés on the French side (Interviewee 1). As noted above, the NGFS was also seen by its founders as a vehicle to influence wider institutions, including standard-setting bodies such as the BCBS and FSB.

Scholars of financial TGNs make little reference to this strategy of "competitive regime creation," presumably because it has not been a common motivation for the establishment of a financial TGN at the global level. For example, well-studied networks such as the BCBS, FSB, and G20 Finance Track were each created for the quite different reason of bolstering global cooperation to mitigate global financial instability in the wake of financial crises. Morse and Keohane (2014, p. 392) themselves also make no reference to financial TGNs in their analysis of competitive regime creation. Indeed, they only note in passing that TGNs in general might serve as a vehicle for competitive regime creation. It is worth noting, however, that these networks are quite well suited for the role because they can be created quickly with low sovereignty costs. They are even cheap to build; in the case of the NGFS, the BdF simply assigned two staff members to its secretariat at the start (Interviewee 1).

4. Designing the NGFS' roles

If the NGFS was strategically created as a competitive regime, why was it designed the way it was? When the creation of the NGFS was first announced, its founders had not yet given much attention to its design (Interviewee 1). It was not until its first meeting in late January 2018 that they announced an agreement on its "governance framework" that was subsequently released as a formal charter for the new institution that came into effect in April (NGFS, 2018b). In this and the next section, we highlight several unusual features of its design in comparison with those highlighted in most literature on financial TGNs. We argue that each stems from the distinctive motivation that generated the initiative in the first place.

4.1. Informational and normative roles

Let us begin with its unusual mandate. In her influential book on TGNs, Slaughter (2004, pp. 51–61) outlined a typology of "informational," "harmonization," and "enforcement" roles that these networks can perform. Like all other financial TGNs, the NGFS was assigned the first informational role of fostering the "exchange of ideas, techniques, experiences, and problems" (Slaughter, 2004, p. 51). As Article 1 of its charter notes, the NGFS is

designed as a group of central banks and financial supervisors willing to “exchange experiences” and “share best practices” on “a voluntary basis.” In contrast to other well-studied financial TGNs, however, the NGFS was explicitly not assigned the second role of “harmonizing one nation’s laws and regulations with another’s” through initiatives such as the creation of international standards (Slaughter, 2004, p. 52). One interviewee emphasized the NGFS’ distinctiveness on this point: “The big difference is that the Basel Committee and FSB, they produce standards. And we were not supposed to produce standards, we didn’t ever produce standards.... What we wanted to do is be quick, produce documents and hand it over to the FSB, G20, Basel Committee and say look, this is what we produced. We think it makes sense for you to work further on this and then they would be charged to do so” (Interviewee 1). In this respect, the NGFS had a similar mandate to the GFSG, which had been instructed by the G20 (2016, p. 2) that it should “not seek to propose global regulations.”

Unlike the G20, FSB, BCBS and other international standard setting bodies, the NGFS was also not seen as a body taking on the third role of “helping nations enforce law they have individually or collectively determined to serve the public good” (Slaughter, 2004, p. 167). Its charter makes no reference to these kinds of enforcement activities. Membership in the NGFS also does not require adherence to any specific international laws or standards. Instead, in the words of its 2018 charter, members are simply asked to commit to “contribute to the work of the NGFS,” “appoint relevant expert(s) in at least one NGFS Workstream,” “raise the awareness on the work of the NGFS,” and “participate when appropriate in the outreach exercises conducted by the NGFS vis a vis external stakeholders” (NGFS 2018a, p. 2). Even after issuing some loose “recommendations” in April 2019 (see below), the NGFS did not link membership to their implementation. The July 2020 revision of the NGFS charter simply noted that institutions seeking membership in the network might demonstrate willingness to contribute to “the implementation of its recommendations” as one of five possible commitments they could make to be accepted (NGFS, 2020a, p. 2). No other reference to the recommendations appeared in the charter (a situation that continued in the 2023 revision of the charter).

In addition to being assigned a relatively narrow mandate with respect to Slaughter’s three roles, the NGFS was also given another role that her typology does not capture well. Alongside its informational role, the NGFS was meant to help develop and promote norms associated with “greening the financial system.” We propose the term “normative” to describe this dimension of the NGFS’ activities. Before describing this role, we need to highlight that a “normative” role was not unique to the NGFS. The BCBS, for example, helps to develop and promote norms relating to its overall mandate “to strengthen the regulation, supervision, and practices of banks with the purpose of enhancing financial stability” (BCBS, 2018). But the BCBS translates these norms into formal international standards which it then works to enforce. Slaughter may have chosen not to separate out the normative role of TGNs in her typology because it is often so closely linked to “harmonization” and “enforcement” roles in this way. Perhaps for the same reason, the normative role is also not isolated in literature on financial TGNs. In the case of the NGFS, however, that link between its normative role and roles of a harmonization and enforcement kind does not exist. As a result, its distinct normative role needs to be identified on its own. Interestingly, another financial TGN that was designed with a similarly unusual combination of only informational and normative roles was the GFSG, the network against which NGFS was set up to “compete.”

The normative role of the NGFS is particularly important because of the crucial role that norms play in the transnational community of central banks and financial supervisors. The mandates of these institutions are often vague and, in a context where they usually also have a level of political independence, they face substantial ambiguity in translating such mandates to action in the face of changing circumstances (Conti-Brown, 2015; Dikau & Volz, 2021; Menand, 2023; van ’t Klooster, 2020). For this reason, the activities of central banking and financial supervision constantly require interpretation. Those interpretations are informed by dominant norms whose content has historically been heavily shaped by TGNs in which they participate. Juliet Johnson (2016, p. 5) describes these networks as “wormholes” that entail “constant transnational interaction, socialization, and ideological reinforcement” among officials who usually share similar educational backgrounds, work experiences, and worldviews. The norms developed in these networks provide not only a template for action for central banks and financial supervisors, but also a form of legitimacy to these institutions’ domestic audiences.

Traditionally, most central bankers and financial supervisors did not see environmental issues as part of their work. The NGFS emerged when both outside pressures and internal advocates of change were challenging that traditional view. But the range of ideas on this topic was large, leaving what one Danish central banker called “a

big grey zone where central banks are not sure what fits in the mandate” (quoted in Tett, 2019). There were also many uncertainties and complexities associated with linking climate and environmental issues to the monetary and financial issues on which central banks and financial supervisors are focused. This situation provided a ripe environment for a normative challenge to the traditional policy consensus. Supported by technical work that connected environmental issues to the toolkits of central banks and financial supervisors, the NGFS could link those issues to these institutions’ objectives and, in the process, rethink what those objectives were. Discussions and work within the NGFS could also shape how central bankers and financial supervisors acted both within their institutions and within the broader financial TGNs and other settings in which they participated. That was particularly important at a time when the United States was trying to shut down the discussions about green finance that had begun to emerge in GFSG and other financial bodies. The normative role of the NGFS was, in other words, central to the “competitive” goal of the network.

4.2. Which norms?

What were the norms that the NGFS sought to develop and/or promote? Finnemore and Sikkink (1998, p. 891) usefully describe norms as indicating what constitutes “appropriate behavior for actors with a given identity” and they highlight different types of norms. Using their terminology, the most important for the NGFS was a general “prescriptive” norm about the importance of accelerating the task of “greening the financial system.” Soon after its creation, Elderson (2018, p. 1) emphasized this point, noting that the new body was not a network “ON greening the financial system” that “merely speaks about” or “shares opinions on” the issue, but rather one that was “FOR” this process with an “ambition to facilitate that the entire financial system can become green” (emphasis in original). This ambition was also outlined in NGFS’ charter which highlighted the founding members’ will “to contribute to the development of environment and climate risk management in the financial sector, and to mobilize mainstream finance to support the transition toward a sustainable economy.” It added that the core purpose of the network was “to define and promote best practices to be implemented within and outside of the Membership of the NGFS and to conduct or commission analytical work on green finance.” (NGFS, 2018a, p. 1).¹

The reference to “within and outside” of the NGFS membership signaled that the network had a wide audience in mind for its prescriptive norm (see also Interviewees 3, 4, 5). This was also evident in the NGFS’ charter which required members to “raise awareness on the work of the NGFS” not just “in their jurisdiction” but also in “their geographic area and within the international or regional standard setting, regulatory, supervisory and central bank bodies they are involved in” (NGFS, 2018a, p. 2). In addition, the network’s first comprehensive report in April 2019 outlined six “recommendations,” two of which were aimed government “policymakers” and the “private sector” rather than central banks and financial supervisors. It further emphasized how its work “could feed into the work of international regulatory bodies” (NGFS, 2019a, p. 9). That first report was also important in highlighting the normative orientation of the network around the goal of accelerating the greening of the financial system. It was centered around a “call to action” that was “aimed at inspiring all central banks and supervisors and relevant stakeholders to take the necessary measures to foster a greener financial system” (NGFS, 2019a, p. 7). At the start of the report, Elderson (2019b, p. 1) emphasized the importance of this goal in strikingly normative language: “A transition to a green and low-carbon economy is not a niche nor is it a ‘nice to have’ for the happy few. It is crucial for our own survival. There is no alternative. Therefore, we need to come together and take action to create a bright, sustainable future.”

Drawing again on Finnemore and Sikkink’s terminology, there were also a number of more specific “regulative” norms that the NGFS developed and/or promoted to support the general prescriptive norm of accelerating the greening of the financial system. Its top priority at the start was to normalize the idea that central banks and financial supervisors should see climate-related financial risks as falling within their mandate. This idea had already been developed and promoted by figures such as Bank of England Governor Mark Carney (2015), but it was not yet universally accepted at the time. NGFS members made a point of endorsing it collectively in their first “progress report” released in October 2018 (NGFS, 2018c). The endorsement was influential in central bank and financial supervisor circles. As one interviewee explained, “The NGFS has had enormous importance in creating a kind of normalcy that of course climate-related financial risks exist” (Interviewee 11).

Six months later, Elderson (2019b, p. 1) described how the NGFS was able to build on that “significant breakthrough” to develop its six recommendations. The two aimed at government “policymakers” and the “private sector” called on them to commit more fully to “achieving robust and internationally consistent climate and environment-related disclosure” and “supporting the development of a taxonomy of economic activities” (NGFS, 2019a, pp. 5–6). For central banks and financial supervisors, the NGFS also called for: “integrating climate-related risks into financial stability monitoring and micro-supervision”; “integrating sustainability factors into own-portfolio management”; “bridging the data gaps”; “building awareness and intellectual capacity and encouraging technical assistance and knowledge sharing” (NGFS, 2019a, pp. 4–5). These recommendations were followed up with specific NGFS initiatives to develop and promote new specific regulative norms relating to some of these issues, such as the publication of two *Guides* relating to central banks’ portfolio management (NGFS, 2019b) and financial supervision (NGFS, 2020b) as well as of a series of climate scenarios for central bankers to use in their own scenario analysis exercises (e.g., NGFS, 2020c). In March 2021, the NGFS (2021a) went further to releasing a “technical document” that sought to legitimize the idea that climate change was also relevant to the monetary policy operations of central banks. When outlining a “menu of options” for central banks to consider on this topic, this work challenged the prominent norm in Western central banking circles that central banks can be and should be neutral in their monetary policy operations (Thiemann et al., 2023). Whether or not central banks were willing to actively scale up green finance using their monetary policy operations, the NGFS pushed central banks to no longer view themselves as mere market participants.

5. Designing the NGFS’ membership and governance

The NGFS’ informational and normative focus was not the only unusual feature of its design in the context of existing literature on financial TGNs. Another was its open and diverse membership. The scholarship on financial TGNs often highlights how their creators favored small club-like networks whose members have either resisted new members entirely or included only a limited number of them incrementally over time. This preference for relatively closed and exclusive clubs is consistent with the broader predictions in TGN literature. Eilstrup-Sangiovanni (2016, p. 134), for example, suggests that small membership is a precondition for the success of TGNs because, in that context, “actions can be easily coordinated, mutual behavior can be effectively monitored, and direct reciprocity can be relied on as a primary mechanism of enforcement” (see also Abbott et al., 2018; Koremenos et al., 2001, pp. 783–784).

By contrast, the creators of the NGFS actively sought out a different kind of membership from the start. Its charter encouraged the growth of its membership by setting a very low bar for entry, noting that “any supervisory authority or central bank committed to contribute to the objectives and work of the NGFS is eligible to be a NGFS member.” To demonstrate the latter commitment, applications for membership had to be made by “the Governor or Head of Supervision” who had to describe their motivation for joining as well as “some examples of proven commitments.” The latter requirement was very easy to meet because the examples had to be in just one of five very general areas: “(i) the design and integration in the regulation framework and/or supervisory practices of climate and environmental risk analysis tools, (ii) the adoption of policy measures aiming at mobilizing capital for green and low-carbon investments in the broader context of environmentally sustainable development; (iii) the production of analysis and/or research on topic (i) or (ii); (iv) a track-record of active involvement in regional or international fora on green finance and willingness to openly share best practices with the other NGFS Members; and/or (v) otherwise demonstrated a willingness to contribute to the objectives of the NGFS” (NGFS, 2018a, p. 1).

The NGFS charter also set a low bar for entry to the institution by noting that membership was “free of charge” (NGFS, 2018a, p. 4). This provision left the institution dependent on the financial support of the host of its secretariat, the BdF, and voluntary contributions from its members “to finance specific projects” (NGFS, 2018a, p. 4). When the NGFS began work on costly climate scenarios, there was discussion of giving it a more formal legal structure under French law to enable it to fund the work with a regular budget (to which members could contribute), but this idea did not gain support (Interviewee 1). Instead, the NGFS ended up developing the scenarios “in partnership with an academic consortium” whose “work was made possible thanks to grants from Bloomberg Philanthropies and ClimateWorks Foundation” (NGFS, 2021b). The NGFS has also

subsequently worked with the INSPIRE network, which is supported by philanthropists. Some within the NGFS initially opposed this kind of outsourcing of its work because it could pose “a big reputational risk” (Interviewee 1). When the NGFS charter was updated in 2023, however, the practice was regularized with the inclusion of a new provision allowing that “external funding can also be provided to support projects commissioned for the benefit of the NGFS” but with a stipulation that “financial and in-kind contributions do not confer the contributor any right to define the priorities of the NGFS work programme or influence the outcome of the work or the proceedings” (NGFS, 2023, p. 7).

The NGFS founders encouraged the growth of its membership not just through low bars to entry, but also by enthusiastically welcoming new applicants. Even when requests to join exceeded the expectations of the founders (see Elderson, 2019a; Figure 1), the NGFS did not relent from this commitment to an open membership. This commitment to membership growth was not entirely unique. Two standard-setting bodies that receive less attention in literature on financial TGNs—the International Organization of Securities Commissions (IOSCO) and the International Association of Insurance Supervisors (IAIS)—have wide memberships. But even those bodies have stiffer membership requirements than the NGFS. In addition to requiring membership fees, both demand more commitments to the institution’s goals because they are standard-setting bodies with harmonization and enforcement roles. In the case of the IAIS (2018, p. 5), its by-laws note that members must commit to “implement IAIS supervisory material” and “undergo periodic self-assessments and peer reviews.” In the case of IOSCO (n.d., p. 4), all members must be signatories to its Multilateral Memorandum of Understanding concerning consultation, cooperation and the exchange of information.

The NGFS’ charter was also unusual in explicitly highlighting that it “aims to achieve a diverse representation of institutions in terms of geographic areas as well as between developed and emerging countries” (NGFS, 2018a, p. 1). Other financial TGNs—including the two with wide membership—do not make formal reference to the need for this kind of diverse representation in their overall membership. As noted earlier, however, the BdF prioritized global representation when issuing their initial invitations to create the group, invitations that went to institutions in Europe, Asia, and the Americas, as well as both developed and emerging countries. The founding members also quickly moved to boost Africa’s regional representation by inviting Morocco’s central bank (with which the BdF had a good relationship) to join (Interviewee 1 and 5). It became one of four institutions that were admitted in May 2018 as the first new members of the group.²

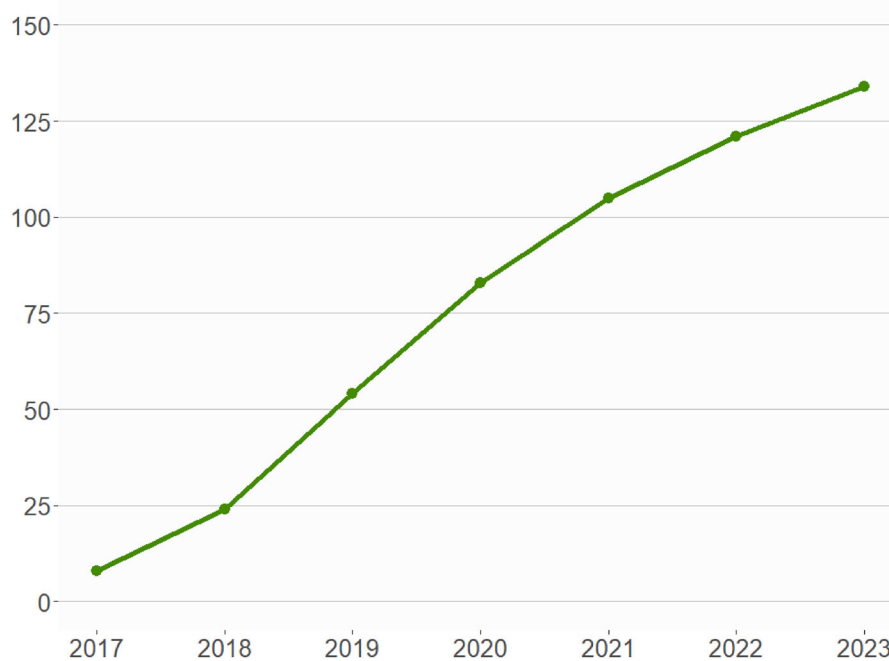


FIGURE 1 NGFS membership. Data from NGFS annual reports.

What explains these unusual features of the NGFS' membership design? As Kalyanpur and Newman (2017) note, the design features of financial TGNs sometimes have complicated roots. The wide membership of IOSCO, for example, partly reflected its evolution from an inter-American body that served as a "development instrument" (Kalyanpur & Newman, 2017, p. 376). In the case of the NGFS, however, the unusual features of its membership are easily explained by considering the distinctive motivation of the founders. A large and diverse membership would support their "competitive regime" mission by strengthening the international legitimacy of the new body (Interviewee 5) and encouraging the spread of its norms worldwide (Interviewee 1). In these ways, it would boost the influence and size of the "coalition of the willing" that was challenging the institutional status quo. Indeed, the larger and more diverse the membership in their network, the greater was the chance of a kind of "norm cascade" (Finnemore & Sikkink, 1998, p. 896). For these same reasons, the NGFS also encouraged other international financial institutions to join the network as "observers" (a status that required the institution to prove its commitment to NGFS goals in the same basic way as applicants). As of mid-2024, the NGFS had accepted a large number (21) of such "observers." The benefits of a club-like setting were also diminished for a network such as the NGFS which did not have the kinds of harmonization and enforcement roles that are the focus of so much scholarship on financial TGNs. Without those roles, there was no need to restrict membership to ease the negotiation and enforcement of standards.

In order to keep control of the NGFS' normative role, however, its founders also retained a privileged position for themselves. Morse and Keohane (2014, p. 398) note very briefly that the coalition creating a competing regime may seek to keep control of its innovation: "To ensure that the new forum has a more favorable policy orientation, the coalition may opt for direct control strategies, such as limiting membership to like-minded states, establishing informal channels of control, or structuring voting in a favorable manner." The founders of the NGFS did indeed fit this pattern, but through a strategy different from those mentioned by Morse and Keohane. For the reasons already mentioned, they did not limit membership. They also did not establish informal channels of control or structure voting in a favorable manner. Instead, the eight founding institutions included a provision in the NGFS' charter that created a powerful "Steering Committee" whose members included only themselves and two others: Morocco's central bank and Germany's financial supervisor.

This Steering Committee served as the NGFS' executive body with powers that were particularly relevant to its normative role, such as preparing its "strategy and work programme," conducting its "operational work," "fulfilling the work programme," approving its "deliverables" and new workstreams, and selecting the network's Chair from among its members (NGFS, 2018a, p. 3). Operating on a consensus basis, the larger Plenary's decision-making powers were restricted to approving the Steering Committee's strategy and work program, its Chair selection, deciding on new members and observers, and agreeing to amendments to the charter. It could decide on other matters only if proposed by the Chair or Steering Committee. In this way, the NGFS founders preserved their privileged position within the network as its membership began to grow, enabling them to continue "steering the show" (Interviewee 1).

This arrangement was also different from the governance arrangements in the other two financial TGNs with large membership, IOSCO and IAIS, each of which have executive bodies with *elected* members. The contrast highlights the importance that the NGFS' creators placed on controlling the direction of their body and particularly its normative role that was so central to the strategy of competitive regime creation. Interestingly, however, in the NGFS' early days, it was not clear whether this distinctive governance arrangement was intended to be permanent. The network's initial charter required that its content be reviewed within two years, thereby opening the door to reconsidering the dominance of the founding members via their control of the Steering Committee. But when the charter was revised in July 2020, that dominance endured. Indeed, the original members of the Steering Committee were now classified as "permanent members" with only one new institution—the ECB—added to their group. To address criticism about their control, there was a new provision allowing representatives from up to five additional jurisdictions to be appointed to two-year terms on the Steering Committee (Interviewee 1; see also NGFS 2023). But only the permanent members were given the power of those appointments. The revised charter also clarified that amendments to the charter could only be proposed to the Plenary by the Steering Committee. When the charter was revised again in April 2023, these provisions were left unchanged. In the words of Interviewee 1, this governance arrangement was "not super democratic" but for "those who took the risk of

creating the NGFS at the beginning, it makes sense that they get the sense of reward in a way, that they are permanent members.”

6. Conclusion

Why did a group of eight central banks and financial supervisors from across the globe come together in December 2017 to create a network for “greening the financial system”? Why did they design the network as they did? We have argued that the establishment of the NGFS was a daring act of competitive regime creation at a moment when the US government was abandoning any global leadership role on the issue of climate change. This initiative was led by the BdF working closely with DNB, the BoE, and the PBoC, and supported by financial authorities from Germany, Mexico, Singapore, and Sweden, each of which shared the general commitment to “greening the financial system.” These founding members created an institution with a distinctive design with respect to its roles, its membership and its governance. Each of these design features was rooted in their strategy of competitive regime creation: the NGFS’ focus on informational and normative roles supported that strategy directly (particularly the normative focus); its unusually open and deliberately diverse membership rules promised to boost the international legitimacy and size of the coalition of the willing; and the founders’ permanent dominance of the powerful Steering Committee enabled them to maintain control of the network’s direction (and particularly its normative role).

These arguments contribute to scholarship on financial TGNs not just by explaining the creation and design of an important network that has yet to receive attention in that literature. Three other mid-level theoretical contributions can also be underlined. First, the analysis introduces the concept of competitive regime creation to this literature. This concept has received little attention from scholars of financial TGNs and it was not applied to this realm of world politics by Morse and Keohane themselves. But its relevance to the politics of financial TGNs is very evident in the NGFS case. In an era of declining US financial leadership, it may become even more relevant if the strategy pursued by the NGFS creators is replicated in other financial issue areas, perhaps even under the leadership of a similar axis of like-minded European and Chinese officials.

Second, we have suggested the need to widen the typology of the roles of financial TGNs beyond Slaughter’s influential three categories. In addition to enforcement, harmonization, and information roles, financial TGNs (and TGNs in general) can be assigned the role of helping to develop and/or promote norms. The intended audience for these norms can include central bankers and financial supervisors (for whom norms are particularly important in shaping policy), other financial officials, and/or wider actors domestically and internationally. While this normative role of financial TGNs is often closely tied to their better-studied harmonization and enforcement roles, the case of the NGFS (and GFSG) highlights how it need not be.

Finally, the NGFS case highlights the importance of widening the range of membership and governance arrangements that scholars associate with financial TGNs. The NGFS’ commitment to very open and diverse membership was distinctive, as was the control its founders insisted on maintaining in the body via their permanent membership in the powerful Steering Committee. These unusual arrangements may be unique to the NGFS case, but they were associated with the strategy of competitive regime creation. If that strategy reappears in other areas of financial governance in an era of declining US leadership, scholars of financial TGNs need to be prepared to recognize more design arrangements of this unusual kind in the future.

This analysis also contributes to the growing literature on the greening of central banks. It highlights how this process cannot be understood only through a domestic or comparative politics lens that has been the focus of many existing studies. Scholars also need to analyze the creative transnational agency and institution-building of the technocrats who have constructed the NGFS and sustained its growth. We have offered insights about the agency associated with the initial creation and design of this institution. More analysis is also needed of subsequent influence and evolution of this emerging green transnational network.

A few scholars have touched on the question of its influence already, such as Thiemann *et al.* (2023) whose views about its role in shifting “discursive boundaries” were cited in the introduction to this paper. When analyzing the ECB’s green shift, Deyris (2023, p. 723) also notes briefly that the NGFS initially “helped climate change turn into a legitimate central banking issue” and then “broadened the realm of acceptable green policies by showing that, besides its prudential implications on financial stability, climate change also impacted monetary policy

portfolios and inflation dynamics.” These points are echoed by Blondeel et al. (2024, p. 22) who cite a NGFS insider’s argument that the network has “wielded a ‘flywheel effect’ on the international diffusion of emerging prudential ideas and best practices” (see also DiLeo et al., 2023). These arguments suggest that the NGFS’ informational and normative roles have been quite successful to date, particularly within the central bank and financial supervisor community. Our interviews confirm these points with one noting that the NGFS “has definitely had a huge impact within central banks and supervisors” (Interviewee 11; also Interviewees 1, 3, 4, 5, 10). Interviewees also went further to observe that mere participation in the network would shape how central bankers came to view their role in relationship to climate and environmental topics:

We found out, which was very surprising, people progressively were converted when they joined the NGFS. At the beginning, some of them were like look, I’m here, but I’ve been appointed, it’s not my thing. But they would attend meetings. They would go to workshops. They would talk, they would chat with scientists. And after a while, they would really become convinced and converted. (Interviewee 1)

Our research also suggests that participation in the NGFS shaped how participants would position themselves in other TGNs. Agreement reached on a given norm at the NGFS came to serve as a shared premise for conversation at bodies with decision-making power such as the BCBS and the ECB’s Governing Council (Interviewee 3).

Our interviewees also highlighted how NGFS norms were influential even in the United States, playing a role—along with Trump’s electoral defeat in November 2020—in encouraging the Fed and other US financial authorities to join the institution (Interviewee 2, 5, 6, 7; see also Blondeel et al., 2024, p. 26; DiLeo et al., 2023). Some of the financial TGNs where stalemates existed at the time of the establishment of the NGFS also began to shift their ground in ways that suggested the success of the competitive regime strategy. For example, after joining the NGFS as an observer in June 2019, the BCBS created a Task Force on Climate-related Financial Risks (TCFR) in February 2020, co-chaired by Elderson and Kevin Stiroh of the Federal Reserve Bank of New York. One interviewee reflected that “without the NGFS, I don’t think Basel would have set up the TFCR in 2020 as it did” (Interviewee 11). In early 2021, the G20 Finance Ministers and Central Bank Governors also revived and upgraded the SFSG to become the Sustainable Finance Working Group. Co-chaired by the United States and Chinese officials, this body was assigned the mandate of “developing, in a collaborative manner, an initial evidence-based and climate-focused G20 sustainable finance roadmap, improving sustainability reporting, identifying sustainable investments, and aligning International Financial Institutions’ efforts with the Paris Agreement” (G20, 2021, p. 2).

More research is needed into the NGFS’ role in these various developments. The political backlash it has begun to attract also deserves more attention. In late 2023, for example, prominent Republican members of US Congress highlighted their concerns to the Fed and other US financial authorities about the “growing influence of global governance bodies on US bank regulation,” singling out the NGFS for particular criticism as a body “increasingly controlled by climate activists, partisan goals, and opaque funding developed by climate activist organizations.” They also asked the Fed whether it had “reservations about China’s leadership of NGFS workstreams” (McHenry & Barr, 2023, p. 1, 9). This backlash highlights the legitimacy challenges that all financial TGNs face as they grow in influence (e.g., Johnson, 2016). These challenges may be particularly pronounced for the NGFS because of some of the design features we have highlighted, such as its normative role, its wide membership (which strengthens its international legitimacy, but risks undermining its legitimacy with domestic actors), its limited finances (and consequent resort to external partnerships), and permanent membership of its powerful Steering Committee.

At the same time, it is important to remember that the NGFS emerged as an effort to support the internationally negotiated Paris Agreement and that its climate objectives are grounded in the latter’s objective of making “finance flows consistent with a pathway toward low greenhouse gas emissions and climate-resilient development” (Article 2.1(c)). More fundamentally, critiques of the NGFS’ lack of accountability do not always acknowledge the precarious but necessary role of policy change at unelected institutions. Central bankers and financial supervisors in many countries, for better or worse, act in insulation from the conventional processes of democratic deliberation and will-formation. If they did not regularly reconsider the policy norms that guide their actions, they would get stuck in outdated and dysfunctional approaches, ultimately making independence

untenable. In this sense, the NGFS can be understood as a network that helped central banks and financial supervisors update their financial and monetary stability objectives to the reality of the Anthropocene.

Seeing the NGFS in this light also brings out its limitations. It is not a global “Ministry for the Future,” a *deus ex machina* to save the world from catastrophic climate change (Robinson, 2020). Despite the NGFS’ achievements, there are clear limits to how much an international body with only informational and normative roles can contribute to the process of greening finance and addressing climate change. There are also clear limits to what central banks and financial supervisors can do alone to address the epochal environmental challenges we face. Financial policy can have a supportive role in the decarbonization of the economy and other environmental objectives, but it cannot by itself enact a global sustainability transition. The narrow objectives currently assigned to central banks and financial supervisors do not provide them with tools to change the basic structure of the economy and the scope for their international leadership is also closely connected to their domestic basis for action. In the words of one interviewee, “We are willing to do our part, but we can only do so much. The real influence lies with policymakers, which is our way of saying governments” (Interviewee 11). A more profoundly transformative role will require more robust coalitions of the willing that extend to other financial and environmental policymakers, far beyond the central banking and financial supervisory community.

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Data availability statement

Interview data are not shared.

ENDNOTES

- ¹ When the charter was updated in 2020, this purpose was changed slightly to be “to define, promote *and contribute to the development of* best practices to be implemented within and outside of the Membership of the NGFS” (emphasis added) (NGFS, 2020a, p. 1).
- ² The others were the ECB, and the central banks of Spain and Austria (and the OECD as an observer).

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APPENDIX

Interviewee	Region	Institution
1	France	Central bank, treasury
2	France	Think tank, treasury
3	Netherlands	Central bank
4	Germany	Central bank
5	Mexico	Central bank
6	United States	Central bank
7	United Kingdom	Central bank
8	China	Central bank
9	China	Think tank
10	Japan	Central bank
11	Sweden	Financial regulator
12	Singapore	Central bank
13	United Kingdom	Think tank