

Domestic Politics and Transnational Climate Governance: A Research Agenda

Thomas Hale and Charles Roger¹

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Abstract: With multilateral climate negotiations in gridlock, increasing attention has been placed on the efforts of non- and sub-state actors to reduce greenhouse gas emissions. But if this emerging transnational climate governance (TCG) is to have a meaningful impact it will have to involve significant participation from the expanding economies of the Global South. Existing studies of transnational climate governance, however, tend to suffer two limitations that prevent scholars from assessing the extent to which TCG involves southern actors, and its potential to do so in the future. First, most studies focus on one or a few cases, making it difficult to draw general conclusions. Second, most studies have not considered how the domestic political context—particularly in the large emerging economies—affects actors’ participation in TCG. This paper introduces a research project that aims to make progress on these questions in two ways. First, it summarizes the state of research on TCG and posits several hypotheses regarding the ways in which domestic conditions affect TCG. Second, it presents some initial empirical findings—snapshots of work in progress—regarding these conjectures from a global database of TCG initiatives, and from case-study work on China.

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Introduction

After over two decades of negotiation, countries have yet to agree on a binding international treaty that would substantially restrict the emission of greenhouse gases (GHGs), the pollutants that cause climate change. At the most recent meeting of the parties to the United Nations Framework Convention on Climate Change (UNFCCC) in Doha, in December 2012, several countries agreed to extend the Kyoto Protocol until 2020. But even this modest achievement has been undermined by the

¹ Postdoctoral Research Fellow, Blavatnik School of Government, Oxford University; Ph.D. Candidate, The University of British Columbia.

rejection of the treaty by the United States, the non-compliance of member states like Canada, and the rapid growth of countries like China, India, Brazil, and South Africa, which, though exempt from reductions obligations, will contribute the vast majority of future emissions.

But while the multilateral talks have failed to deliver substantive reductions in emissions, and seem unlikely to in the near term, a host of projects and initiatives have arisen at the regional, national, and sub-national levels, and in the private and non-profit sectors, filling some of the “governance gap.” Examples include “unilateral” reductions at the municipal level, voluntary reductions from firms, and various methodologies for pricing and trading carbon credits. Many of these actions link across borders to form transnational governance, which we understand as “the processes and institutions, formal and informal, whereby rules are created, compliance is elicited, and goods are provided in the pursuit of collective goals” when the actors involved are sub- and non-state actors from different countries (Hale and Held 2011, p. 12, 15). In this way, climate change resembles other global issue areas in which transnational governance plays an important role, including global health, transborder commerce, global financial regulation, and policing. Like these other issues areas, many of the transnational governance arrangements in the domain of climate change have increasingly attracted scholarly attention (Backstrand 2007; Pattberg and Stripple 2008; Toly 2008; Andonova, Betsill et al. 2009; Abbott 2010; Bulkeley 2010; Hale and Roger 2011; Hoffmann 2011; Hale and Roger 2012).

In the face of continuing multilateral gridlock, some observers have suggested that transnational climate governance (hereafter TCG) might hold some promise of mitigating the worst consequences of climate change (Au, Conrad et al. 2011). Ultimately, however, whether these non-multilateral actions are able to provide a meaningful complement, or even alternative, to a “global deal” depends to a significant extent on whether or not they come to include a sizeable number of actors in the rapidly expanding countries of the Global South. Already, non-Annex 1 states currently account for just over half of all GHG emissions in absolute terms, with a few states like China, Brazil and India making up about half of that number in turn. In fact, emissions in the developing world are expected to grow so fast according to most “business-as-usual” scenarios that, even if the industrialized world managed to reduce its emissions to zero by 2040, total global emissions will still be higher than they are today if no changes are made. For this reason, no system of transnational climate governance that fails to include a substantial portion of actors from the Global South, and especially major emerging economies, can hope to mitigate climate change on a significant scale. And yet, our understanding of Southern actors’ engagement with TCG remains limited, both empirically and theoretically.

On the empirical front, we have little understanding of the prevalence of TCG initiatives in these countries. Existing studies have examined emerging markets’ involvement with individual TCG schemes (Zhang 2004; Heggelund and Buan 2009;

Hale and Roger 2012), but offer no comprehensive picture of the scale, scope and robustness of this participation. How many TCG initiatives are active in the emerging markets? How substantial is their presence? And how many actors from these countries have been involved in the initiation of TCG schemes? Further, it is unclear what kinds of TCG initiatives Southern actors participate in, and which actors have been involved. Without answers to these questions, our ability to gauge the prospects of TCG within the Global South—and, thus, to evaluate its potential generally—remains limited.

On the theoretical front, we have little understanding of the factors that shape participation in TCG outside of advanced economies. Much of the existing literature on transnational governance has been developed—often implicitly—in the context of Western liberal democracies, and in economies in which the state plays a less direct role in the economy than in emerging economies.² Relatively less attention has been given to the politics of transnational governance in other types of states, leaving unanswered the question of how variation in domestic political institutions, state-society relations, and levels of economic development condition actors' engagement with transnational governance. Given that domestic political institutions are widely considered to shape participation in global governance generally (Milner 1997; Moravcsik 1997), this lacuna must be filled if we are to explain existing patterns in transnational climate governance.

² Indeed, most transnational governance, in the climate realm and beyond, originates in North America and Europe Hale, T. and D. Held, Eds. (2011). Handbook of Transnational Governance: Institutions and Innovations. Cambridge, Polity.

In this paper, we attempt to outline a research agenda that promises to make progress on both fronts, representing the first step in a larger research project. Theoretically, the paper attempts to tease out the assumptions existing theories of TCG, and transnational governance, more generally, make regarding the impact of domestic conditions, and consider how these might vary systematically across cases. Several recent studies, such as Espach (2009), Bartley (2010) and Andonova (2012), have demonstrated that features of domestic contexts help to explain why some transnational schemes (corporate certification schemes and public private partnerships) become widely adopted in certain states but not others. Building on these efforts, we seek to state in more general terms how the emergence and spread of transnational governance is affected by domestic conditions.

With the exception of Andonova (2012), all of these studies examine such a small number of cases (usually one or two countries) that it makes it difficult to generalize beyond them. Here, therefore, we also outline a research design for empirically examining the systematic effects of domestic contexts across a wider range of cases. Scholars of transnational governance have recently pieced together a comprehensive picture of TCG at the global level. Bulkeley (2010), Hoffmann (2011) and Hale and Roger (2011) have each developed databases of TCG initiatives, which present a picture of the types of initiatives that exist and the different actors involved, as well as other data. Collectively, they push the study of transnational governance forward by identifying broader patterns and trends, and help to move

scholarly work beyond studying individual cases. In this paper, we have adapted our own database to examine engagement in TCG in four key emerging economies: China, India, Brazil, and South Africa. Future efforts will expand this work to create a country-by-country database of transnational governance suitable for quantitative testing. We also discuss some of the problems with this approach, and outline strategies for examining some of the variation that these databases are not able to capture.

The paper proceeds as follows. We first discuss the emergence of TCG as a political phenomenon, and summarize the existing literature. We then highlight some of the outstanding research questions, especially those related to how domestic contexts influence participation in TCG. In doing so, we also outline several hypotheses that have been put forward by the existing literature, as well as several of our own, which the larger research project is intended to evaluate. Third, we outline our research design, and we present some basic empirical results that illustrate the approach as well as some of the empirical challenges. Section four concludes.

1. The Emergence of Transnational Climate Governance

TCG is a relatively recent phenomenon, which has grown rapidly since efforts to govern climate change began in earnest in the late 1980s and early 1990s. Initially, attempts to address the problem focused on creating a “global deal” amongst states that would coordinate and support national level regulations. States signed the

UNFCCC at the 1992 United Nations Conference on Environment and Development, or “Earth Summit,” which provided a platform and principles for reaching such an agreement. Yet despite its promise this multilateral effort has faced numerous setbacks. While the UNFCCC process remains the focal point of the climate regime, and some progress has been made at the margins, including the establishment of the Kyoto Protocol (Harrison and Sundstrom 2010), the Clean Development Mechanism (Fuhr and Lederer 2009) and various intergovernmental financial mechanisms (Buchner et al 2011), persistent divisions among some of the most important states have ultimately blocked more substantial measures (Victor 2011). Some have even gone so far as to argue that the UNFCCC process is hopelessly inadequate as a response to climate change, suggesting that we have put on the “wrong trousers” for tackling the problem (Prins and Rayner 2007).

It is in this context of minor successes and on-going frustration that TCG has emerged, becoming one of the most active, yet controversial, areas within the broader domain of climate change. Most often, it has been viewed as a helpful supplement to existing multilateral mechanisms - a “second-best” response that helps to galvanize action in the near term and potential lays stepping stones to a full multilateral agreement in the future (Au, Conrad et al. 2011; Hale 2011). Others have argued, in contrast, that TCG is an essential part of any “first-best” solution (Prins and Rayner 2007; Ostrom 2009). These advocates do not usually dispute the need for interstate action, as such, but they do suggest that it is fundamentally insufficient on its own. Finally, of course, some worry that TCG is, at best, a

distraction from the UNFCCC process, with disruptive effects upon prospects for multilateralism (McGee and Taplin 2006; Vihma 2009). Whatever the answer, the rise of TCG has quickly produced a much more complicated governance landscape, spawning numerous studies that attempt to document its dynamics. Scholarship now speaks of a transnational climate regime complex (Abbott 2010; Keohane and Victor 2010), polycentric climate governance (Ostrom 2009), multi-level climate governance (Betsill and Bulkeley 2006) as well as fragmented governance architectures (Biermann, Pattberg et al. 2009), and has sought to understand how their various elements interact in conflicting and complementary ways.

TCG initially emerged rather haltingly in the 1990s, with only a few initiatives appearing around the time of the Earth Summit, such as Energie Cities (created in 1990) and the E8 (created in the wake of the 1992 Rio Summit). More, and more diverse, schemes began to appear around the time of Kyoto. Then, as Hoffman (2011) has observed, TCG “took-off” in the 2000s. As the number of schemes grew, and as controversy began to arise regarding their nature and impact, TCG began to attract a considerable amount of attention from scholars in political science, sociology, law and economics. At least three broad groupings of TCG initiatives have become especially prominent as the total number of schemes has grown, each becoming the subject of intense investigation: voluntary carbon offsets (VCOs) and VCO standards (Lovell and Bulkeley 2009; Lovell 2010; Bushnell 2011; Green 2011; Salzman and Boyd 2011), transnational municipal and transgovernmental networks (Betsill and Bulkeley 2006; Toly 2008; Vihma 2009; Rabe 2010), and corporate

governance and reporting initiatives (Green 2011; Hale and Held 2011; MacLoed and Park 2011). While each of these groupings exhibit unique patterns and dynamics that scholars have sought to explain, the questions of when and why sub- and non-state actors choose participate in TCG initiatives have become increasingly important.

The literature on TCG identifies three principal mechanisms through which transnational governance is created and how it comes to exert authority over a range of actors in world politics. We term these mechanisms bottom-up cooperation, orchestration and delegation, and communities of practice. Consider each in turn.³

Bottom-up cooperation. This mechanism sees transnational governance as a strategy sub- and non-state actors employ to achieve their policy goals in world politics. Conventionally, we imagine such groups lobby national policymakers through formal or informal governmental channels, expecting states to then cooperate with each other to achieve a certain policy outcome favorable to the group. However, to the extent sub- and non-state actors possess the power to achieve that outcome through their own governance activities, they may substitute transnational governance for conventional lobbying. This incentive is likely to be particularly strong in issue areas like climate change where sub- and non-state actors possess significant capacity to address the problem and intergovernmental negotiations

³ This section draws on forthcoming work by the authors.

have stalled. Abbott and Snidal develop a theory of bargaining between transnational actors to explain institutional outcomes (Abbott and Snidal 2009). “Just as in their efforts to capture domestic state regulators, firms, NGOs and other actors operate in the transnational regulatory space not as neutrals seeking “good governance,” but as partisans pursuing their special interests and values with differential power and capabilities. Actors bargain implicitly – through individual actions including the strategic creation of single-actor schemes – and explicitly – over the creation, management and control of collaborative schemes.” Transnational governance requires a range of competencies, they argue, including independence, representativeness, expertise, and operational capacity. “In this complex bargaining game, competencies serve as power resources as well as regulatory attributes” (Abbot and Snidal 2009).

Delegation and Orchestration. While the growth of transnational governance entails a shift away from “traditional” state-led intergovernmental institutions, states remain powerful actors, and in fact invite and shape much of the transnational governance that sub- and non-state actors provide. We distinguish two forms: delegation and orchestration. Delegation occurs when states decide to transfer authority to transnational actors, choosing to defer to their expertise and decisions in certain circumscribed issue areas (Green 2010). States will rely on non-state actors when doing helps them to achieve certain agreed upon goals. The characteristics of non-state actors that may make delegation to them particularly desirable include their technical expertise, operational independence, and moral

authority. Given these features, has explained, delegation may allow states to solve certain cooperation and coordination problems by reducing transactions costs, increase the credibility of their commitments, facilitate first-mover advantages, and improve reputations. This is especially so when a public agent cannot provide the same kinds of benefits because they lack expertise, have a poor track record relative to a private agent, because public institutions overlap or compete with one another, or because a public agent has been unable to gain authority in a particular issue area. However, delegation is only likely to take place if states are able to agree on what governance functions should be delegated and whom they should be delegated to.

When states are unable to collectively agree upon a particular course of action, however, national governments or their agents, IOs, may still employ transnational governance by orchestrating the actions of sub- or non-state actors. Orchestration is “a strategy whereby states or international organizations bring new capacities and resources to the provision of global public goods by strengthening or catalyzing transnational governance schemes” (Abbott and Snidal 2009). As such, it is distinct from delegation in that it does not involve establishing hierarchical, principal-agent relationship between a state or IO and transnational actors. Orchestration, according to Hale and Roger (2011), takes place when a number of conditions are met. First, IOs or states must have both the capacity and motivation to engage in orchestration, having both sufficient autonomy to act independently and an interest in taking action in a particular domain where states have been unable to sustain

cooperation. Second, sub-state or non-state actors must have some interest and capacity to address the problem, but face certain collective action problems that hinders their ability to effectively provide TNG. Third, a state or IO must possess certain attributes that can help a TNG scheme to ameliorate this collective action problem. Such attributes include being a focal institution in a given issue area, possessing a unique level of convening power, having certain kinds of moral legitimacy not available to non-state actors acting independently, and, under certain conditions, controlling significant material resources. Finally, they also argue that certain ideational factors may be essential. An orchestrator must possess an organizational culture that sees advantages in engaging transnational actors, and experience, which enables them to skillfully do so.

Communities of Practice. A third approach offers an explanation for transnational climate governance that emphasizes not the agency of individual actors, but rather the relationships, norms, and practices that link them. These factors, or, more generally, “the collection of contextual factors or conditions affecting organization structures or processes” (Scott 2001), have been described as “organizational fields,” in institutionalist sociology. In this view, individual organizations are shaped by their peers, taking on similar roles and acquiring similar functional characteristics. The exact mechanisms that lead to this isomorphism are presumed to vary—the classic study in the genre suggests coercive, normative, and cognitive processes (DiMaggio and Powell 1983)—but all must be understood as social in nature, not atomistic. While the theory offers interesting perspectives on how

groups of institutions evolve and affect one another, it is less concerned with the origins of such institutions than rationalist perspectives.

Dingwerth and Pattberg (2009) apply this concept to the realm of transnational corporate labeling, standards, and disclosure schemes. Noting that transnational governance institutions for sustainability exhibit significant isomorphism, they argue that an organizational field—“a recognizable area of institutional life” (DiMaggio and Powell 1983)—exists, and that it has shaped emergence of new mechanisms and the form they take. Dingwerth and Pattberg argue that the organizational field developed in three phases. First, the “prototype” models were established in the early 1990s by organizations like the Forest Stewardship Council (FSC) or the Coalition of Environmentally Responsible Economies (CERES). These institutions were aware of each other, and actively studied one another during their design processes. Second, over time the prototype models become more expansive and institutionalized. CERES, for example, evolved into the more ambitious and institutionalized Global Report Initiative. New organizations were also created along the lines of the prototypes—for example, the Marine Stewardship Council—and cross-cutting institutions like the International Social and Environmental Accreditation and Labeling (ISEAL) Alliance began developing common norms for the field. Finally, third, the organizational models developed in the realm of sustainability labeling expanded to more and more domains, including diamonds (The Kimberly Process) and other extractive industries (The Extractive Industries Transparency Initiative).

Several studies have applied related methodologies to the realm of climate politics. Kolk and Pinske (2008) argue that low-carbon norms are emerging amongst some MNCS, particularly in Europe. They find that interest and acceptance of carbon disclosure policies amongst firms varies with the policies of their home countries. Another ongoing study has begun to trace the individuals and communities behind the concept of emission trading, showing how the idea has spread via a specific epistemic community of practitioners (Paterson 2011).

2. Domestic conditions and engagement in Transnational Climate Governance

The theories of transnational governance laid out above often assume, implicitly, that sub- and non-state actors, when they act transnationally, are somehow transported out of the domestic political contexts in which they are embedded. Because transnational governance remains under-theorized, this assumption is often justified as it allows scholars to develop general and parsimonious explanations for this increasingly significant aspect of world politics.

In reality, of course, when sub- and non-state actors create and participate in transnational governance, they are doing so in a context shaped both by the intergovernmental regime (if any) that exists for a given issue, as well as domestic politics. In other words, there are at least three potential “sites” of political contestation and governance—domestic politics, interstate politics, and

transnational politics—and the strategies sub- and non-state actors pursue in one sphere will likely be shaped by what outcomes are given or possible in the other two. For example, gridlock at the intergovernmental level may provoke increasing reliance on transnational or domestic mechanisms (as is arguably the case for climate change), or blockage at the domestic level may provoke actors to seek help abroad (Keck and Sikkink 1998). Building on Putnam (1988), this tri-partite framework has been called “three-level games” (Hale 2012).

Green (2010) has examined how variation in intergovernmental outcomes affects the emergence of transnational governance. She argues, essentially, that “bottom up” transnational governance will be more likely when states fail to agree, and that delegated governance roles for transnational actors will be more likely when states do agree. For the present project, which looks only at the climate regime, intergovernmental outcomes are the same for all the transnational governance schemes we consider. In other words, one of the potential sites of political contestation is held constant. This allows us to focus, instead, on the variation across the domestic contexts in which TCG initiatives are embedded.

One of the chief developments in IR theory in the 1990s was the understanding that domestic politics “mattered” for explaining international cooperation (Milner 1997; Moravcsik 1997). Further, domestic political structures were found to be important for explaining patterns of transnational relations (Risse 1995). Based on these findings, we would therefore expect analogous relationships between domestic

political conditions and transnational governance. Indeed, though scholars have only recently begun to consider how domestic factors condition participation in transnational governance, they have found that domestic factors matter a great deal. Bartley (2010), for example, has studied how the implementation of corporate certification schemes for forestry and apparel in Indonesia are affected by local conditions. He concludes that quite specific factors, such as the nature of property rights over forests, as well as the government's dependence on the pulpwood industry, strongly reduced the efficacy of transnational governance programs. While the specific findings are not immediately generalizable to other cases, they provide evidence that domestic contexts can make a major difference for participation.

A number of studies have also investigated how particular countries engage in transnational governance. China (and Asia, more broadly) has been a significant topic of study, and, as elsewhere, certification schemes, such as ISO14000, an environmental management standard, have been the most thoroughly explored (Di 1999; Christmann and Taylor 2001; Drezner and Lu 2009). Most of this existing work has, furthermore, focused on firms, which, like firms in other developing countries, have been seen as under-participating in such voluntary programs.⁴ This literature highlights two chief factors to explain this general lack of participation: the weakness of civil society under China's authoritarian systems and the lack of

⁴ For an overview of this literature see Graham, D. and N. Woods (2006). "Making Corporate Self-Regulation Effective in Developing Countries." *World Development* 34(5): 868-883.; Pulver, S. (2007). "Introduction: Developing-Country Firms as Agents of Environmental Sustainability?" *Studies in International Comparative Development* 42: 191-207.

internalized environmental values within Chinese firms, as well as amongst their primary customers and investors. Only, it seems, where businesses are tied into certain globalized supply chains or where participation in transnational governance is required for market entry, do Chinese actors appear to participate more in transnational initiatives (Hale & Roger 2012).

Espach (2009) and Andonova (2011) have also considered how different domestic conditions affect the adoption of transnational governance.⁵ Espach (2009), for example, has examined how variation in the success of the FSC and Responsible Care in Brazil and Argentina has been influenced by the legacies of past industrial policies and environmental crises. In each case, he has shown how these have shaped on the dominant business cultures and mindsets of businesspeople in each country, in turn, affecting their receptiveness to foreign standards, and therefore regime adoption and development. Andonova's study, on the other hand, analyses the public-private partnerships that emerged from the 2002 World Summit on Sustainable Development (WSSD), and she argues that actors' engagement in transnational governance is affected by their domestic and international "opportunity structures." Instead of seeing transnational governance as merely compensating for weak states, or as simply an additional tool of strong states,

⁵ Related, a forthcoming study by Prakash and Potoski shows that domestic institutions affect the *impact* of transnational governance, showing that more stringent domestic environmental laws increased the effectiveness of ISO 14001 on corporate behaviour. Prakash, A. and M. Potoski (2011). *Global Private Regulation, Domestic Public Law: ISO 14001 and Pollution Reduction. Workshop on Research Frontiers in Comparative and International Environmental Politics*. Niehaus Center for Globalization and Governance, Princeton University.

Andonova presents it as evidence of the “re-articulated” state in which governments continue to shape international politics, but transform the nature of their interventions away from ‘traditional’ state-to-state diplomacy and toward a wider range of activities that take into account the wider range of actors now engaged in global governance (c.f. Slaughter 2004). Though Andonova notes that “considerable uncertainty remains...as to the mechanisms and conditions through which the re-articulation of the state takes place” (p. 10), her statistical analysis of participation in the WSSD partnerships supports the idea that pro-active environmental ministries and connections to international advocacy networks—which Andonova associates with the re-articulated state—are correlated with participation in transnational governance.

Looking across the literature on transnational governance that has developed thus far, we believe that we can distinguish a number of key hypotheses regarding domestic politics and engagement in transnational governance.

First, a set of mechanisms links the openness of the political system to the agency of sub- and non-state actors to engage in transnational governance. When transnational governance is created “bottom up,” it relies on the agency of sub- and non-state actors. Such agency is likely limited in authoritarian regimes in which the central government effectively sets the policy agenda and enforces a “party line” on the private sector, civil society, and other levels of government. Similarly, countries in which the state plays a large role in both the economy and civil affairs can be

expected, *ceteris paribus*, to engage less in transnational governance than countries in which more truly private and independent firms and social organizations exist (see Drezner & Lu 2009). If sub- and non-state actors do not hold policy preferences at odds with the state (because they are controlled by the central state itself), or if they cannot act on policy preferences that differ from those of the state (because the political system sanctions such actions), then these groups will have neither the desire or the capacity to supplement or circumvent official policy by creating their own governance schemes. Because closed political system are likely to restrict most strongly the agency of private actors, it is entrepreneurial forms of governance, and those targeting firms and consumers that will be most affected. Moreover, centralized political systems will tend to allow for less engagement than federal ones, in which regions and municipalities can act on independent goals.

A second set of mechanisms concerns the re-articulation of the state in transnational governance. When the state itself can achieve its goals via transnational mechanisms, we are likely to see increased participation by sub- and non-state actors in governance across borders. Several mechanisms can be identified. One, the state may require the technical expertise of firms or civil society organizations to achieve its goals. Transnational governance, in this case, allows it to tap capacities beyond its own bureaucracies. China's engagement in transnational carbon market governance (Hale and Roger 2012) is an example of this relationship. Two, when the state is unable to achieve its goals via intergovernmental agreement (e.g. other states will not adopt its preferred policy), it may choose transnational

forms of agreement as a substitute or stop-gap for, or building block toward, its preferred outcome. In this context we should be particularly likely to observe orchestrated forms of transnational governance (Hale and Roger 2012). Three, when different elements of the state are engaged in contestation over policy (e.g. between the executive and the legislature, as in the US, or between different ministries, as in China), we can expect increased reliance on transnational mechanisms by elements within the state.

This second set in fact qualifies the assumptions of the first set. States may possess closed, centralized political system and still find themselves engaged in transnational governance, though that governance is likely to take a specific form, as outlined by the second set of mechanisms.

A third set of mechanisms considers the state's enmeshment in various international networks. When intergovernmental, civil society, and market-based networks penetrate a state, sub- and non-state actors within that state will be more likely to join their peers, colleagues, and competitors abroad in governance. Various types of linkages have the potential to "spill over" into the creation of transnational governance. One, intergovernmental organizations often act as orchestrators of transnational governance. When countries are members of a certain IGO orchestrator, or host a country office of an IGO orchestrator, their sub- and non-state actors are more likely to engage in transnational governance. Along similar lines, Andonova (2012) has found that countries that host a UNFCCC summit are

more likely to be represented in public-private partnerships than those that do not. In other words, intergovernmental organizations and meetings serve as important focal points around which sub- and non-state actors can coordinate.

Two, transnational civil society networks can serve a similar purpose. Countries that allow international NGOs to operate within their borders, or who are more likely to be targeted by such groups, can expect more of their sub- and non-state actors to engage in transnational governance. The presence of foreign NGOs may have, for example, a direct effect upon participation in transnational governance by engaging directly with local businesses, either through public campaigning or through subtler capacity building and petitioning exercises. They may also have an indirect effect by shifting attitudes and ideas. As Drezner & Lu (2009) have noted, certain local, national or regional cultures or practices may deemphasize the kinds of oppositional tactics used by many civil society groups elsewhere to pressure firms to adopt standards without implicit or explicit approval from the state. However, where local civil societies have been integrated into transnational civil society networks, we might expect these attitudes to change over time, thereby making civil society groups more likely to put pressure on firms to participate in transnational initiatives.

Three, market-based linkages can also serve as vehicles for engagement in transnational governance. The extent to which a firm or product has been “branded,” for example, has been identified by scholars as potentially important for

participation in transnational governance (Mayer and Gereffi 2010). Easily recognizable firms and products are more likely to be subject to pressure from consumers and civil society groups. When exposed to these societal pressures via boycotts, “naming and shaming” or other oppositional tactics, or to avoid being publicly targeted, businesses may choose to participate in transnational initiatives or even create them on their own in order to burnish their reputations. This has been most prevalent among high-profile firms in developed states, where pressure from stakeholders and consumers has driven brand-names, from Nike, Starbucks, and Walmart to Tesco and Carrefour, to adopt and even create various labor, health and sustainability standards. In developing states, however, where fewer businesses are concerned with brand recognition due to their upstream positions within global supply chains, or due to the lack of “green values” amongst local consumers, firms are likely to care less about stakeholder praise and criticism (Drezner & Lu 2009). Their motivation to adopt voluntary standards will, therefore, be correspondingly reduced.

Several studies do show, however, that subsidiaries or suppliers of multinational firms that are particularly vulnerable to reputational pressures (from either consumers or investors) are more likely to engage in social or environmental transnational governance. Indeed, in some domains transnational initiatives have become almost essential to the profitability of firms, and can have considerable impacts upon market participants and societies, more broadly. A study of private food governance initiatives by (Fuchs and Kalfagianni 2010), for example, has

argued that certain voluntary environmental standards have become widely diffused throughout the developing world via giant retail corporations, with significant consequences upon environmental well-being and food security. This effect has also been hypothesized by scholars such as Bartley (2009) and by Dauvergne and Lister (2010). The extent of an economies vertical integration into global markets, especially in highly public “branded” sectors, would therefore be expected to have a significant effect upon participation.

Evaluating Causal Explanations

While the literature on transnational governance has developed a range of interesting, potentially testable hypotheses about the factors influencing participation in transnational initiatives, only a few studies have looked across countries to evaluate them. Indeed, research on transnational governance has tended to focus on case studies of just a few initiatives or countries. These have been especially valuable for generating hypothesis, as our discussion above indicates, and can be helpful for assessing particular causal mechanisms influencing participation. But they are relatively unhelpful when we want to assess which causal effects are relatively more important across a broader range of cases, and more general findings are crucial if we are to evaluate the prospects of TCG as a whole. Do Espach’s findings about Brazil and Argentina, and Bartley’s findings about Indonesia, for example, hold across a broader range of cases? Further, what do their findings imply for forms of TCG that involve other kinds of actors, such as cities or

businesses involved in carbon markets? Are the causes of participation similar in these cases? These are the kinds of questions that must be answered if the study of TCG, and transnational governance, more generally, is to move forward.

In this context, studies such as Andonova's move in the right direction. Her study attempts to develop a number of critical hypotheses about the factors underpinning variation in country-level participation in WSSD public-private partnerships. But, in sharp contrast with extant studies, she uses a large-n dataset to assess the different impact of the different variables shaping countries' levels of involvement. Her approach reflects a broader trend in the field of global environmental politics of building and using databases to better understand the phenomena of transnational governance. Slowly, researchers (including ourselves) in the field have begun to develop large-n databases, which can help to bring to light larger trends and patterns at the international level. This has been especially true in the arena of climate change, where there appears to be a notable concentration of transnational governance schemes ripe for comparative analysis. Yet, much of this research has shied away from using quantitative methods. Thus far, scholars have primarily used databases to provide illustrative descriptive statistics in otherwise qualitative analyses. This, we believe, represents a notable advance beyond the predominant case study-based approach. But it stops short of using the databases that have been developed to make broader claims about the causes, dynamics and consequences of transnational governance.

Here, we do not ourselves undertake a quantitative analysis of TCG. Instead, our aim is to set an agenda for future research in this direction and to discuss some of our preliminary efforts to adapt existing databases of TCG in order to examine the country-level participation. We argue that this can be done in two ways. First, we can measure the “breadth” of participation and the factors influencing the overall composition of TCG initiatives across countries. Doing so allows us to make claims about the phenomena of transnational governance in aggregate terms and the factors systematically influencing the major patterns that appear across a wide range of initiatives. This general approach is discussed in the next section (3). Second, we can measure what we refer to as the “depth” of participation. This approach, by contrast, disaggregates the phenomenon of TCG into distinct classes of initiatives, or even single initiatives, and seeks to determine why actors across different countries participate in them to different extents. This approach is discussed in section (4).

3. Measuring “Breadth” of Participation in TCG

As mentioned above, scholars of transnational governance have increasingly been developing databases in order to map larger trends in the global governance. However, they have stopped short of using these for quantitative analysis. There are a number of reasons for this. One, we argue, arises from the fact that existing databases of TCG initiatives do not allow us to assess country-level participation, since there is no comparable country-level data that could be paired with country-level independent variables. At best, they are able to illustrate regional trends. But

this is not useful for quantitative analysis due to the methodological problems involved. At present, therefore, extant databases cannot be used to undertake quantitative analysis of participation in TCG. In what follows, we discuss a database that we have used for the several projects on TCG, which suffers from this same defect, and how it is currently being adapted to allow us to evaluate the kinds of hypotheses outlined in the previous section. We also present some preliminary findings on participation by several major emerging economies.

Methods and Data

Our database amalgamates and builds upon two others. The first (Bulkeley 2010), developed by the Leverhulme Trust-sponsored Transnational Climate Change Governance Research Network, based at Durham University, identified a set of 60 transnational climate governance schemes and included observations on a number of their features, such as date of initiation, participants, issues addressed, regional scope, and so on. The second, created by Hoffmann (2009, 2011), is roughly similar in nature, identifying 58 climate governance “experiments” and quantifying their various features, but differs from the Leverhulme Trust dataset in that the initiatives are not necessarily “transnational” in nature; the main criteria for inclusion in Hoffmann’s dataset was the inventive or innovative character of various schemes rather than their geographical scope. Thus, a number are strictly local or domestic in nature.

Combining these two databases, supplementing it with many of our own observations, and eliminating any overlaps produced a total of over 130 potential TCG cases. We then developed and applied our own criteria for inclusion and exclusion to make the dataset useful for answering various questions we were interested in.

First, of course, initiatives needed to be addressing climate change. A broad criterion, initiatives could be intended to deal govern a variety of different aspects of the problem, from mitigation to adaption, from deforestation to energy efficiency, from regulating carbon offsets to channelling funding to carbon offset projects, and so on. In most cases, determining whether a project is intended to address climate change is an easy test. But, occasionally, initiatives appear to address a variety of issues non-climate change related issues as well. For example, ICLEI - Local Governments for Sustainability was established in order to govern a broad range of sustainable development problems; climate change is only one of its main concerns. Therefore, to determine whether an initiative meets this criteria, we relied primarily on the mission statements frequently included on websites, or some similar statement of purpose. If an initiative included climate change among its main goals, it was considered a candidate for inclusion.

Second, an initiative needed to qualify as an instance of governance. This is, admittedly, at times difficult to determine given that the term itself is subject to considerable interpretation. We argue - along the lines set out by Andonova et al

(2009) - that governance occurs when networks of actors explicitly seek to authoritatively steer constituents, be they individuals, firms, governments or otherwise, towards public goals. This may or may not occur through the explicit setting of regulations, standards or rules, whether voluntary or mandatory. A governance initiative may also seek to steer behaviour by providing collective goods such as capacity building services, knowledge dissemination, technical assistance, financing or specific kinds of information provision. Its primary purpose in doing so must, however, be explicitly public in nature and intended to change behaviour. Borderline cases exist, of course, and initiatives may or may not be effective in meeting their goals. Examples of potential candidates that we excluded as cases of “non-governance” were NGOs, private consulting firms, lobbying groups, specialized news services, networking forums, and memorandums of understanding.

Third, in keeping with the literature on transnational actors in world politics (Risse-Kappen 1995), an initiative needed to include at least one sub-state or non-state actor, either as a member, participant, user or partner. This was determined, typically, by analysis of the content (membership lists, participant registries, etc.) of initiative websites. The C40, whose membership list is found on its website and is comprised entirely of municipal governments, was therefore included in our database, for instance. The Climate Action Reserve, a carbon offset standard orchestrated by the State of California and adopted by a variety of non-state actors, was also included. Although sometimes unconventional, intergovernmental treaties and organizations that did not include such participants, such as several bilateral

and multilateral climate change memorandums of understanding (for example, the US-China Memorandum of Understanding to Enhance Cooperation on Climate Change, Energy and the Environment), were excluded.

Fourth, to be included in our dataset, we required that initiatives be genuinely transborder in nature. Thus, an initiative needed to have members, participants, users or partners from at least two different states. Again, this was determined by analysing the content of initiative websites. The Western Climate Initiative, which includes participants (provinces and states) from the United States and Canada, is transnational. Refrigerants, Naturally!, which includes participants such as Coca-Cola, an American multinational corporation (MNC), and Unilever, a British-Dutch MNC, among others, also qualified. By contrast, the Regional Greenhouse Gas Initiative and the National Association of Counties' Climate Protection Program, whose governance activities are entirely confined to the United States territory, were excluded.

Fifth, we removed single organizations and corporations. Although they may sometimes engage in governance-like activities (providing information, awareness-raising, etc.) and/or may be directly involved in a number of TCG initiatives, organizations such as PointCarbon, the World Business Council for Sustainable Development, the Red Cross/Red Crescent Climate Centre, which were included in other databases, were excluded. Similarly, although a case can be made for regarding corporate social responsibility schemes (CSR) as a powerful form of

global governance, we did not include single MNC CSR schemes within our database. In each case, we did not consider these to be our primary unit of analysis, which is the “initiative,” “scheme” or “standard,” involving a network of actors.

After disqualifying cases that did not meet our criteria, the resulting database contains 76 TCG initiatives (see Appendix for a list). It comprises all the major TCG initiatives, but we are unable to claim it exhausts the total universe of TCG. With cases identified through a process of “searching and asking” - a large-N variant of Fenno’s “soaking and poking” methodology - a researcher can be confident that the most prominent examples have been identified, but that the sample is non-exhaustive and non-representative in several ways. For example, successful initiatives will be overrepresented in the sample, since they are likely to last longer and attract more attention. Initiatives involving less prominent actors, or actors on the periphery of central climate governance networks, are likely to be underrepresented. This will possibly lead to a bias in the sample towards initiatives created by actors in the global North. Finally, the sample will likely be biased towards initiatives that have been studied and cited before in academic literature, resulting in some degree of path dependence in the selection of cases.

To assess country-level participation in the larger TCG regime, we have begun to modify our original dataset to identify the TCG initiatives that are active in

individual countries.⁶ We code an initiative as being “active” in country when at least one public or private actor from that state becomes a member or participant in a particular scheme, partners with other actors to create one, or begins to use a standard. Thus, for example, if a website displays a Chinese firm, or NGO, or municipality, etc. as a member, or shows that they have adopted a particular standard, we count it as active (it receives a score of 1). If an initiative does not include members or users from a particular country, by contrast, we count it as “inactive” or non-active” (it receives as score of 0) in that country. An alternative measure that could be used is to assess how many initiatives involve at least two actors from a country. This would be useful for checking the robustness of a country’s participation, and ensuring that membership is substantive rather than purely symbolic. Nonetheless, by using either measure, we are able to identify the set of initiatives that are active in each country. Further, when combined with the data already in our database, we are able to identify each country’s TCG “profile,” as illustrated below.

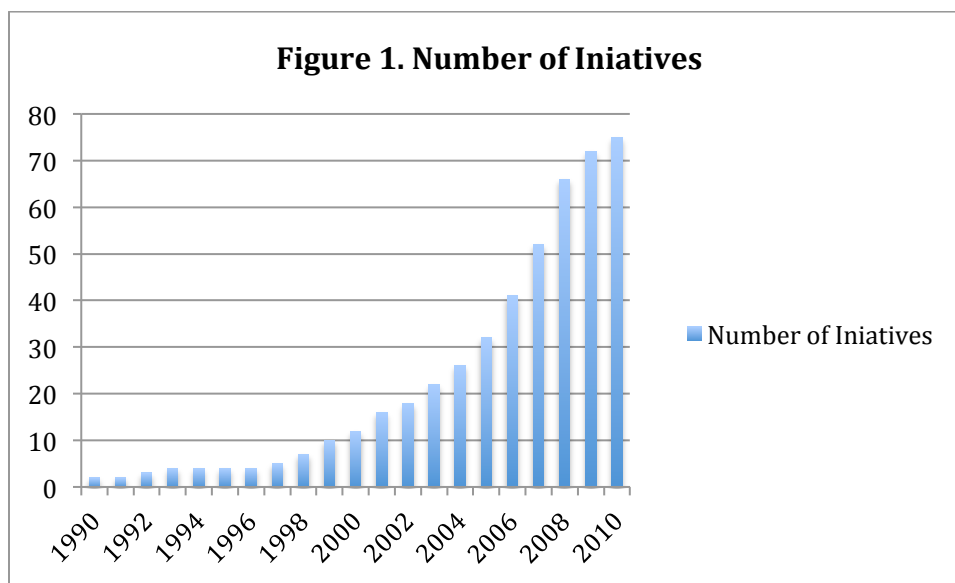
Descriptive statistics

In general, TCG is a growing phenomenon (see figure 1). Our database identifies 76 initiatives that bring non- and sub-state actors together to govern across national

⁶ Note that we have also coded various characteristics of the TCG schemes, as well. In particular, we code for the “form” (public, private, hybrid), “type” (entrepreneurial, orchestrated, partnered, transgovernmental), “function” (operational, information sharing and networking, standards and commitments, and financing), and “target participants” (local government, national/subnational governments, carbon market participants, businesses, and consumers) of TCG. However, since we have discussed the coding of these variables elsewhere, we do not do so here (see Hale & Roger 2012).

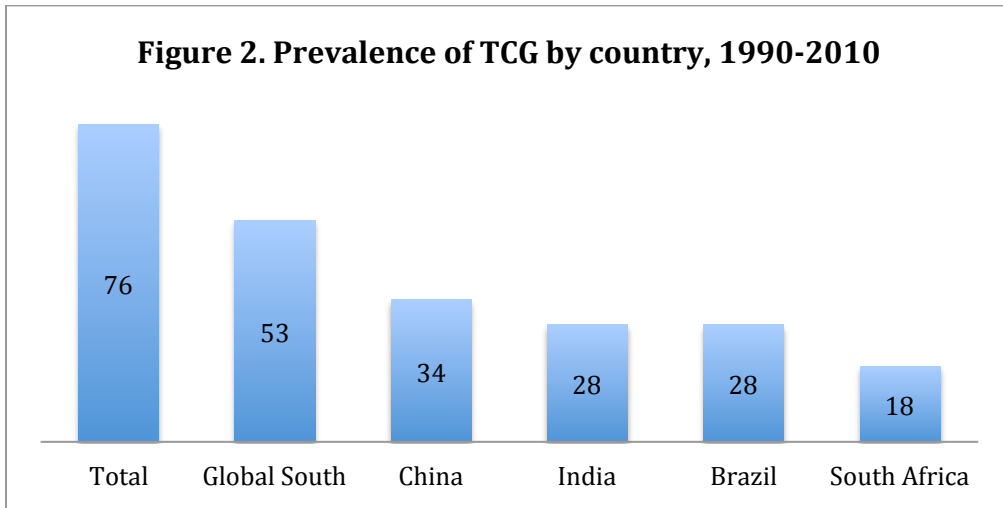
borders (for a complete list of initiatives by country, see the appendix).

Interestingly, these initiatives have not grown continuously, but rather cluster around major treaty negotiations: the 1992 Earth Summit, the 1997 conference of the parties that led to the Kyoto Protocol, and the 2008 Copenhagen conference that marked a high point of political mobilization but failed to achieve the treaty outcome many sought. Between 1990 and 2000, therefore, the number of TCG schemes in the database grew by a factor of six, with the total rising from two to twelve schemes, respectively. After 2000, the number of schemes rose another six fold to a total of 76 by 2010.

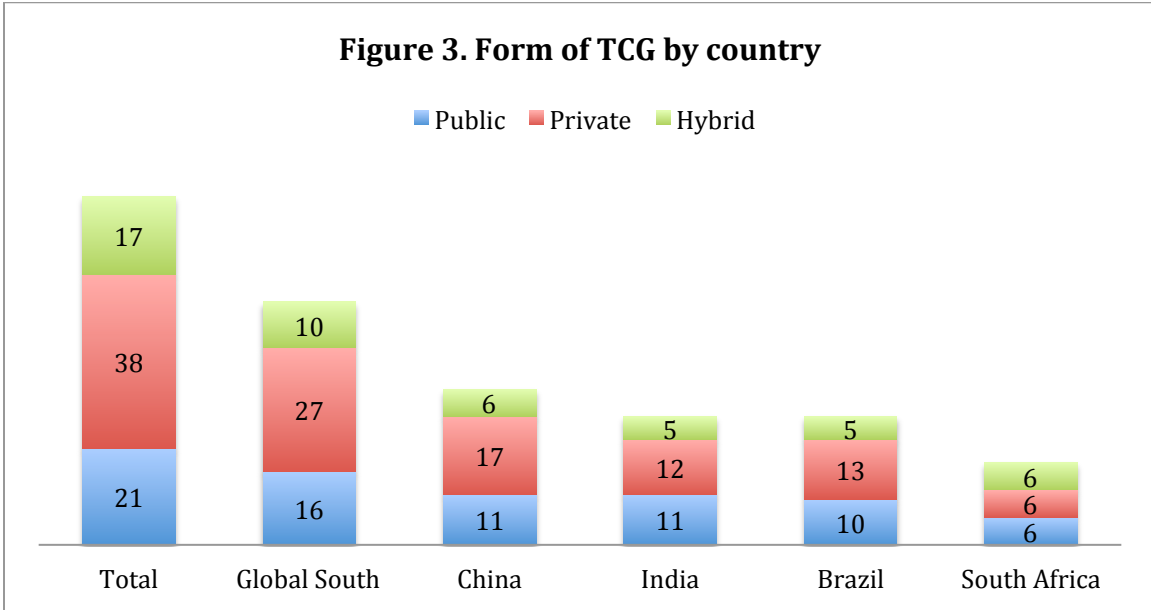


Equally interesting, these initiatives are active across a fairly wide array of countries (see figure 2). Of the 76 initiatives, a total of 54 (71 percent) have some presence in the Global South; 34 are active in China, 28 in both Brazil and India, and 18 in South Africa. There is, therefore, a great deal of variance in terms of the total number of initiatives that are active in a country. But, interestingly, at least among these four

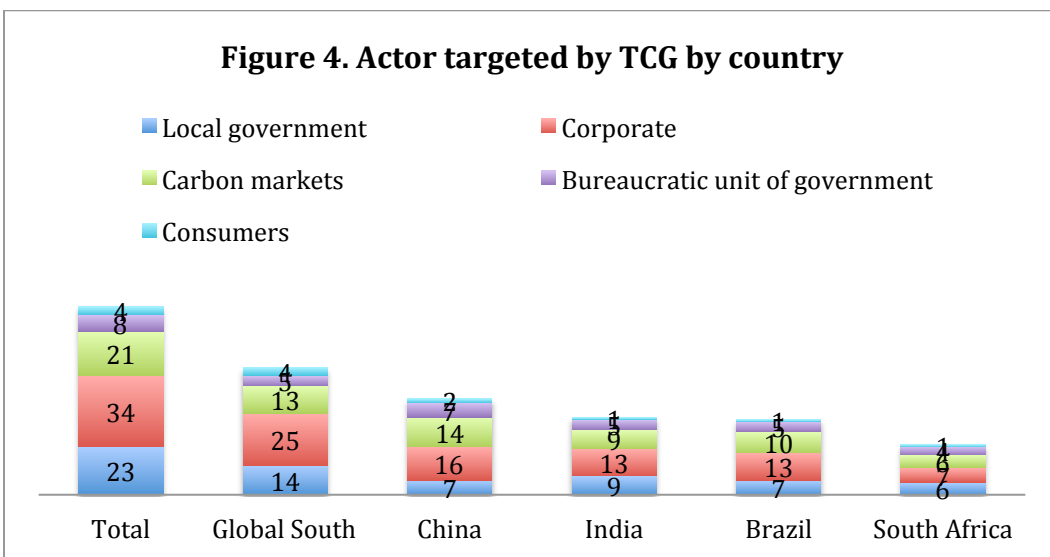
for which we have scores, the numbers are not necessarily in the direction that theory would predict. China, for example, is by far the least democratic and is likely to place the heaviest restrictions on civil society, and yet it is the most active of the four, at least according to this measure.



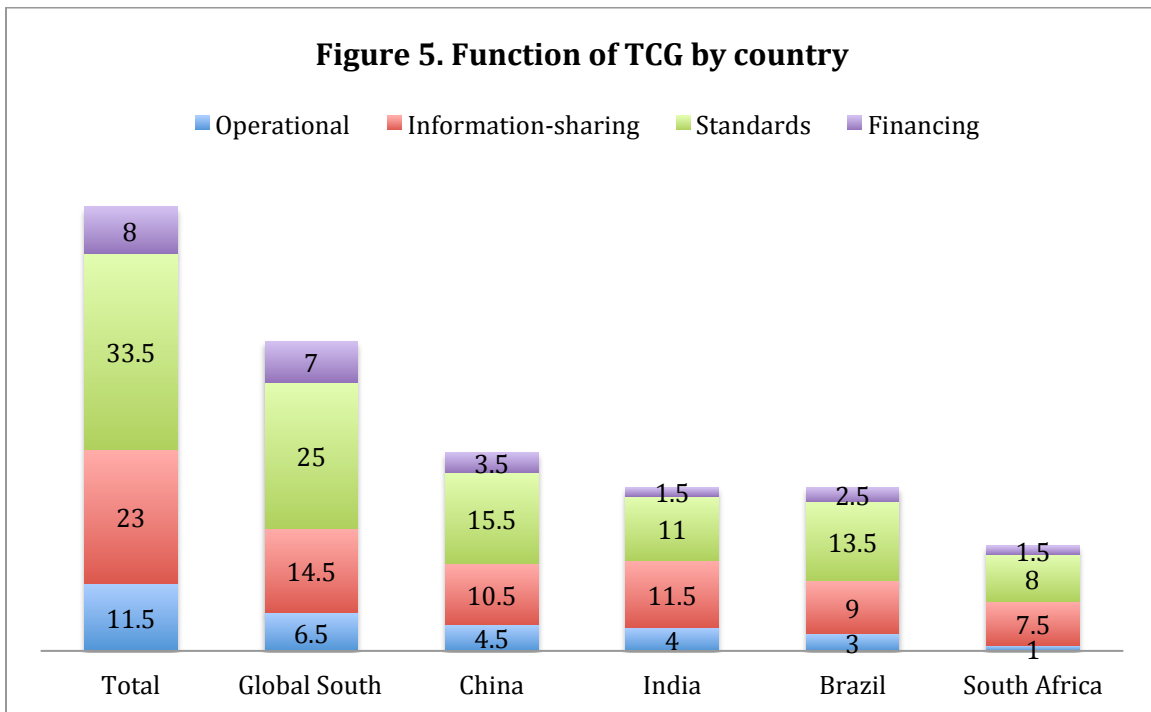
However, if we move to consider the composition of the initiatives that are active in this sample of countries, perhaps what is most striking at first a first glance is the *consistency* we find. In our database, as described above, we consider several ways in which TCG initiatives may vary. First, we look at the “form” of TCG; that is, whether a scheme is public, private, or involves a mix of public and private actors. And, if we considering this potential source of variation, we find that public and private actors participate in TCG in roughly the same ratios globally as in the South and in the four-country sample, as can be seen in figure 3.



Second, we consider not just the actors forming TCG, but also the “targets” that these initiatives seek to govern (figure 4). Here, again, the differences are marginal. According to this measure, roughly the same participants are targeted across this sample.

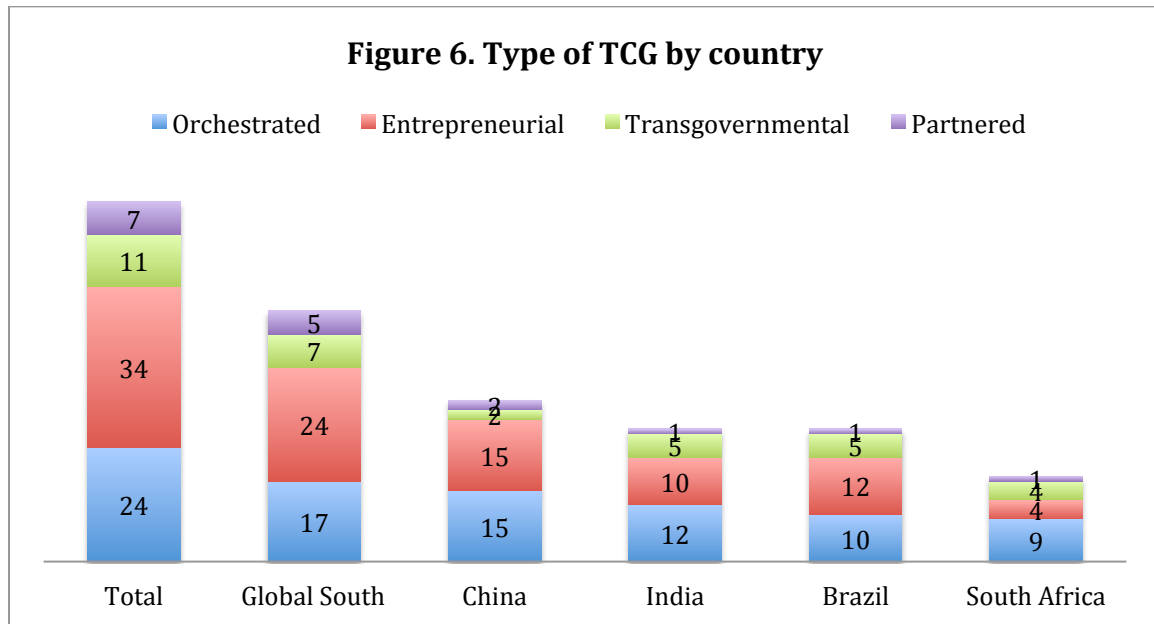


Third, we turn to the functions that TCG performs. Does an initiative operate specific projects, share information, set standards, or channel finance (Figure 5)? Yet, interestingly, again, there do not seem to be any significant difference in the composition of functions across this sample of countries. Indeed, it seems that, at least among these major emerging economies, TCG initiatives are engaged in roughly the same kinds of activities. The only major difference, as noted above, is related to the total number of schemes that are active.



Last, we look at how TCG is created (figure 6). Is it orchestrated by states or IGOs, built by entrepreneurial firms or NGOs, derived from networks of bureaucrats, or does it arise from partnerships between different actors (see above for precise definitions of these terms)? Here, again, we might expect to see differences arising

as a result of the way in which TCG schemes are created. Yet, interestingly, again, the differences turn out to be marginal. Across the four-country sample, it seems that the way in which a TCG scheme is initiated makes no major difference, overall.



From these very preliminary and partial results it is not possible to draw significant conclusions regarding the relationship between domestic factors and engagement in transnational governance, of course. At best, we might conclude that the consistency of TCG across countries suggests that such factors do not matter, since there is little variation along this dimension. However, it is clear that there are, at least, major differences in the total number of schemes active across countries, and, perhaps most interestingly, that the scores (at least in this sample) do not accord with what some studies might predict (for instance, those that point to the “cooling” effect of authoritarian regimes on transnational governance). A second probable interpretation is that the general categories we have utilized so far are not

sufficiently rich or detailed to capture the true variation that exists. For example, further work is needed to measure the depth of countries' engagement in TCG, which we discuss below.

4 Measuring “Depth” of Participation in TCG

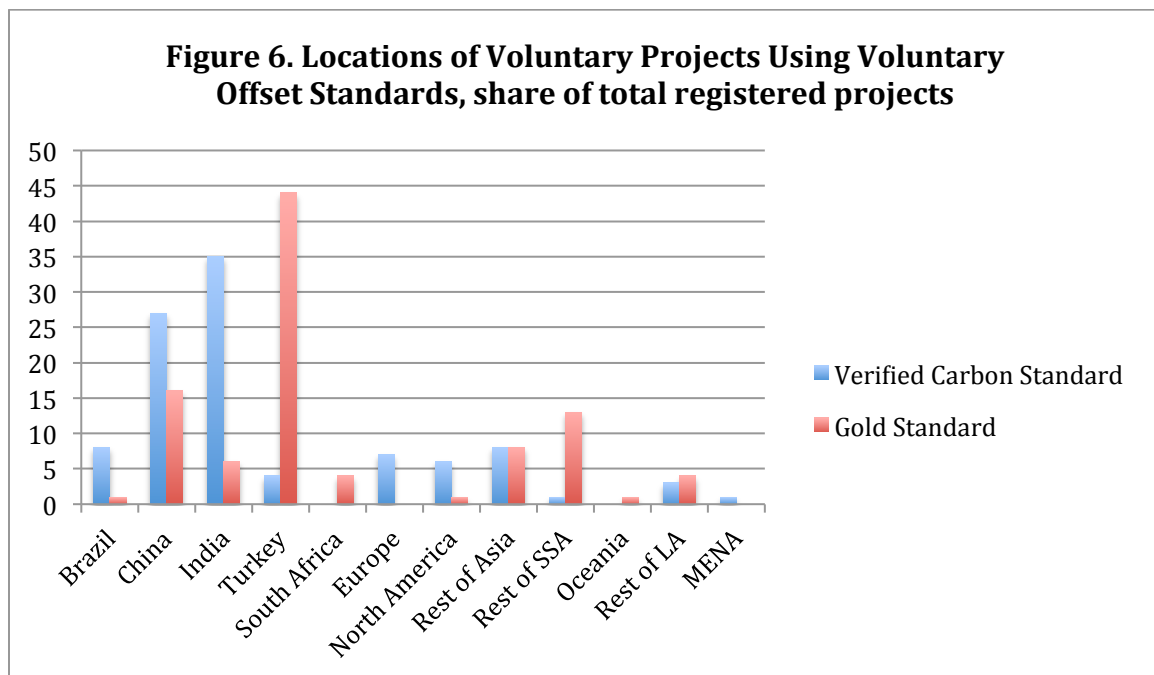
Admittedly, the data presented thus far only measure one dimension of TCG: what we have referred to above as the “breadth” of participation. Measuring breadth is critical since it captures several important features of the phenomena that we may be interested in, such as the total number of initiatives that are active in different countries as well as the overall composition of initiatives, as described above. It does not, however, tell us much about the quality or “depth” of participation, which is precisely where we might expect domestic structures to matter a great deal. Since much TCG focuses on mitigation, we might therefore reasonably expect that it is likely to be “targeted” at emerging economies, and, especially, major emitters. This may, in turn, help to explain why the variation in terms of the composition of those schemes is relative limited. However, as our research on China (Hale and Roger 2012) demonstrates, this may actually “cover up” considerable variation in the depth of participation.

Though TCG has grown rapidly in China (indeed, China is likely be the host to the largest number of “active” TCG schemes in our database), actual Chinese participation remains shallow and uneven. Carbon markets are by far the most successful area. China occupies a dominant position in both voluntary and

compliance markets. China is, for example, the largest source of emissions credits for the CDM, accounting for 60 percent of the total CERs issued, and 46 percent of all projects registered by the end of 2011 (UNFCCC 2012). It is also a significant source of the CDM credits used under the EU-ETS (since EU-ETS accepts CDM-certified credits; although restrictions on this linkage will increase after 2013). China is relatively less dominant in voluntary carbon offset markets yet still plays a major role, and there is evidence of a nascent voluntary market emerging in China. A number of carbon exchange market platforms have emerged in anticipation of future carbon markets. The leading entity, the China Beijing Environmental Exchange (CBEEEX), held a sale in June 2011 for 210,000 tons of carbon to an “honor roll” of customers including Baidu, Air China, Merchants Bank, and China Everbright Bank. Though largely symbolic (the amount of credits was equivalent to 0.002 percent of China’s emission in that year), the sale represented an important step toward testing and building a domestic carbon market (SSCCC 2011).

Carbon offset standards have grown in step as an essential dimension of such markets. In the case of compliance markets, the adoption of voluntary carbon standards such as the Gold Standard generally has a positive effect upon the price of carbon credit. Gold Standard certified carbon credits are sold at a premium of 5-25 percent over basic compliance credits, dependent upon project type, location and characteristics of the sale (Kollmuss, Zink et al. 2008). In the case of voluntary carbon markets, offset standards play an even more important constitutive role by providing credible information to buyers about the quality of voluntary offsets and

by establishing procedures for quantifying and, ultimately, pricing the emissions saved. Different carbon offset standards also allow buyers to purchase credits with additional “co-benefits,” which can also favourably affect their price. Given these positive effects, it should not be entirely surprising that, as China has become more involved in each of these markets as a producer of both compliance and voluntary emissions credits, China has turned into a major adopter of carbon offset standards. Today, around 27 percent of the voluntary carbon offset projects certified by the Verified Carbon Standard and 16 percent of those certified by the Gold Standard – two of the most prominent offset standards - are located in China (see Figure 6). Further, China ranks as the second most significant user of both standards, behind only India (with respect to the Verified Carbon Standard) and Turkey (with respect to the Gold Standard).



By contrast, when we take a closer look at other major kinds of TCG initiatives that scholars have investigated - transnational municipal networks and transnational corporate governance schemes, which are both central facets of TCG, globally, as discussed in section 2 - it is clear that they have encountered some major challenges in China. Consider first the role of local governments. Transnational municipal networks have been a major area of TCG worldwide (Betsill and Bulkeley 2006), and, as our database shows, 17 percent of the TCG initiatives currently active in China target local governments as participants. However, it is notable that this figure is much lower than the world average, which suggests that such initiatives have confronted some barriers in China. The experience of ICLEI, the oldest sustainability network of local governments, is exemplary. Its Cities for Climate Protection (CCP) program has had considerable success over the years, particularly in Australia and the United States (Betsill and Bulkeley 2006). It has made numerous inroads across the developing world as well. However, while it is nominally active in China, ICLEI records only one Chinese member (Shenyang), a rate of participation that is far below many other developing countries. In Brazil, for example, 20 members are recorded; in India there are 36. Further, while ICLEI has numerous regional offices positioned throughout Asia, there is none for China. Local officials in China, therefore, have so far had little incentive to join networks like ICLEI.

Transnational initiatives focusing on corporate actors - such as the UN Global Compact - Caring for Climate, the Carbon Neutral Network, the Carbon Disclosure

Project (CDP) and the Global Reporting Initiative (GRI) - have encountered similar difficulties in China. In terms of uptake, the GRI may be the most successful of the corporate reporting initiatives in China. A total of 278 CSR reports have been submitted by Chinese firms since the GRI's engagement in China first began in 2007, including a few of China's larger private and state-owned businesses. However, the quality of reporting has been highly uneven in China, with only 29 reports above an "A" application level and only 42 have been certified by GRI or a third party. Further, these raw figures actually overstate the real number of corporations involved, since many of the same firms have submitted reports in different years. The majority of the reports that received higher application levels also all came from the same small group of firms, largely with the service sector. All these figures are much lower than the world average (GRI 2010).

The Carbon Disclosure Project has also faced challenges in China. In 2011, of 100 Chinese companies invited to participate, only 11 opted to answer the CDP's annual questionnaire, a number that is substantially below the average response levels elsewhere (CDP 2011; Kim and Lyon 2011). Those that did were mainly from the banking industry. Trading and distribution companies, and firms from the hotel, restaurant, leisure, metals and mining, financial, construction, chemical, airline, and industrial sectors uniformly did not respond. The distribution of participants in the most recent CDP questionnaire and in the GRI towards service sector firms and away from sectors such as construction, mining and chemicals is a trend plaguing other carbon reporting initiatives active in China. One effort to develop a common

energy and emissions reporting framework specifically for China, the Energy and Climate Registry, which is based upon the Climate Registry and Greenhouse Gas Protocol, has so far found it difficult to attract participants in heavy industry. Only five Chinese companies (mainly in the information and telecommunication industries) have been recruited in nearly three years of operation, and they have largely proven to be unwilling to publicly disclose their involvement (Li 2011).

These three vignettes illustrate the extent to which measures of “breadth” may often cover up as much as they reveal. They are particularly useful for assessing which countries TCG tends to be concentrated in, and can indicate the TCG “profile” of each. This helps us to explain broad country-level trends, and it can point us to areas where more qualitative research may be useful by identifying outliers and “crucial cases.” But it may also cover up variation in the quality of that participation, an areas where we may expect domestic politics to matter greatly. Hence, advancing our understanding of the factors influencing country-level participation also requires disaggregating the phenomena of TCG into individual component parts, which can be investigated in greater detail. Yet, we argue, this does not mean that we should also, at the same time, shift away from comparative analysis of the kind undertaken by Andonova. Rather, future work in this area should focus on building databases of the number of participants across individual countries involved in particular classes of initiatives (cities, carbon markets, businesses) or even single initiatives, and systematically examining the influence of country-level variables while holding the initiatives themselves constant. In this regard, we believe that

there is much promise in using the methodologies that have been developed for measuring “breadth” to assess the “depth” of participation in individual schemes. Once adequate databases have been developed, then we should be in a good position to assess this dimension of participation in TCG as well.

Conclusion

From a policy perspective, it remains a very open question whether TCG represents a valuable tool for climate mitigation. Large initiatives certainly have the potential to achieve significant impacts. For the example, the C40, the global network of megacities acting to reduce emissions, claims that its efforts between 2010 and 2020 will take significantly more carbon out of the atmosphere than the Kyoto Protocol. The aggregate impact of TCG may be far greater still, or it may culminate, like the multilateral process has thus far, in simply another arena for disappointment.

Ultimately, however, this question will be answered in the countries that will contribute the majority of future emissions. Our very preliminary findings suggest that there is no reason, *prima facie*, to think that transnational governance initiatives will *not* form part of an effective response to climate change. But, we argue, it is crucial to understand better the ways in which domestic political contexts will shape TCG. Advocates of TCG sometimes portray “bottom up” initiatives as a route around “politics as usual.” But, in truth, political process shape outcomes even for initiatives self-consciously aimed at circumventing the state. This

is not necessarily an impediment to successful TCG, but it does imply that we must understand the ways in which domestic contexts shape also these more innovative forms of global governance.

Appendix I: TCG Initiatives in China, South Africa, Brazil, and India

Initiative	China	South Africa	Brazil	India
Asian Cities Climate Change Resilience Network				1
BioCarbon Fund	1			
Carbon Finance Capacity Building Programme			1	
Carbon Rationing Action Groups	1			
Climate Savers Computing Initiative	1			
Delta Alliance	1			
Eco-Partnerships	1			
Quality Assurance Scheme for Carbon Offsetting		1		
Forest Disclosure Initiative			1	
Green-e (Climate Standards)	1			
International Emissions Trading Association	1			
ISO 14064/14065	1			
SOCIALCARBON			1	
WWF Climate Savers			1	
Asia-Pacific Partnership on Clean Development and Climate	1			1
Clean Air Initiative	1			1
Collaborative Labeling and Appliance Standards Program	1			1
Community Development Carbon Fund	1			1
R20			1	1
The Climate Group (Member Principles)	1			1
CCX (Chicago Climate Exchange Offset Program)	1		1	1
Climate Action Initiative	1		1	1
Climate, Community and Biodiversity Alliance	1		1	1
Global Sustainable Electricity Partnership (formerly E8)	1	1	1	
Global Methane Initiative	1		1	1
Greenhouse Gas Protocol	1		1	1
Prototype Carbon Fund	1	1	1	
The Roundtable on Sustainable Biofuels (RSB Standard)	1		1	1
Transition Towns		1	1	1
World Mayors' Council on Climate Change		1	1	1
C40 cities	1	1	1	1
Carbon Disclosure Project (CDP)	1	1	1	1
Carbon Sequestration Leadership Forum	1	1	1	1
Climate Champions	1	1	1	1
UN Climate Neutral Network	1	1	1	1
Global Reporting Initiative	1	1	1	1
ICLEI - Local Governments for Sustainability	1	1	1	1
Ren. Energy and Energy Efficiency Partnership (REEEP)	1	1	1	1
The Gold Standard	1	1	1	1
UN Global Compact Caring for Climate	1	1	1	1
UNEP Finance Initiative (UNEP FI)	1	1	1	1
VER+	1	1	1	1
Verified Carbon Standard	1	1	1	1

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