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Research Paper No. 15/2012

TBGI Project Subseries No. 3

Unbundling the Regime Complex: The Effects of Private Authority

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Osgoode CLPE Research Paper 15/2012

Vol. 08 No. 04 (2012)

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Unbundling the Regime Complex: The Effects of Private Authority

Abstract: There is a commonly held view that forms of private regulation and governance arise when intergovernmental cooperation fails. While we do not dispute that this is sometimes the case, this paper focuses on the longer-term effects of private authority—namely, the ways that public and private authority interact over time. We argue that a more complete understanding of regime complexity must include private authority, which we define as situations in which nonstate actors make rules or set standards that other actors in world politics adopt, and its interactions with public authority. Interactions among public and private actors occur in two ways – one static and one dynamic. We show how each of these interactions affects the overall "design" of the regime complex and its evolution over time. To explore these two arguments, we propose an "unbundling" of the regime complex, to trace the specific mechanisms through which public and private authority co-exist and interact. We argue that private authority is not merely a response to gaps in public authority; rather, we explore the possibility that private authority can address the political and institutional constraints present in public authority. We argue that private authority can provide functional improvements to existing regime complexes by helping to overcome path dependencies that public authority may face. We describe three specific mechanisms through which this might occur: by providing a redefinition of the problem, supplying a "repository" where different policy approaches can exist until their time becomes "ripe", or serving as an additional means through which to diffuse public authority.

Key words: regime complexity, private authority, private regulation, international institutions, environmental policy.

JEL Classification: F55, F59, K32, K33

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1. Introduction

The growth of interdependence has produced a corresponding increase in governance activities to manage that interdependence. Observers of world politics have rightly noted (and politicians have criticized) the increasing density and complexity of these institutional arrangements. Scholars of international relations have only begun to study the complex landscape of governance activities. Our paper aims to contribute to this new area of inquiry. We begin from two observations about the status of scholarship to date. First, the work on institutional complexity, which we describe in further detail in the following section, focuses almost exclusively on *public* forms of institutionalized cooperation. With relatively few exceptions, this work systematically excludes a key source of variation: private authority. Second, the work on private authority tends to focus on explanations of its emergence, rather than on its effects.

There is a commonly held view that forms of private regulation and governance arise when intergovernmental cooperation fails. While we do not dispute that this is sometimes the case, this paper focuses on the longer-term effects of private authority—namely, the ways that public and private authority interact over time. In so doing, we bring an historical perspective to the study of institutional complexity; we cannot understand the interaction among these myriad institutions without an examination of the events which gave rise to both their creation and evolution.

In sum, we argue that a more complete understanding of regime complexity must include private authority, which we define as situations in which non-state actors make rules or set standards that other actors in world politics adopt. Moreover, including private authority requires re-thinking the shape of private regimes, as well as the interaction between public and private regimes. This interaction occurs in two ways – one static and one dynamic. We show how each of these interactions affects the overall "design" of the regime complex and its evolution over time. To explore these two arguments, we propose an "unbundling" of the regime complex, to trace the specific mechanisms through which public and private authority co-exist and interact. We argue that private authority is not merely a response to gaps in public authority; rather, we explore the possibility that private authority can address the political and institutional constraints present in public authority. We argue that private authority can provide functional improvements to existing regime complexes by helping to overcome path dependencies that public authority may face. We describe three specific mechanisms through which this might occur: by providing a redefinition of the problem, supplying a "repository" where different policy approaches can exist until their time becomes "ripe", or serving as an additional means through which to diffuse public authority.

Our paper proceeds as follows. In the first section, we briefly review the literature on regime complexes and institutional interplay to identify shortcomings in the existing understandings, particularly with respect to the potential role of private authority. We then review the burgeoning literature on private authority to further explore two mechanisms for public / private interaction within the regime complex: competition and reverberation. This section closes by describing the three cases—climate change, tropical commodities, and fisheries—and justifying how we

delineate the boundaries of each regime complex. The second section develops hypotheses about how we expect public and private authority to interact via each of these mechanisms. The third section turns back to the cases and historically traces the interaction of public and private authority to determine the plausibility of our expectations. The closing section draws broader lessons for work on regime complexes which incorporate our insights about the role of private authority.

2. Literature Review

2.1 REGIME COMPLEXITY

Regimes exist as a unit of investigation in world politics to capture ordered patterns of behavior among states. Definitions range from ones confined to explicit state commitments or multilateral agreements² to the broader-ranging definitions about norms and expectations³ Since our analysis is focused on institutional configurations, we follow Levy, Young and Zürn's emphasis on two common regime characteristics; regimes are "social institutions in the sense of stable sets of rules, roles, and relationships," and they are "issue-area specific." In this way, we take an institutional perspective on regimes, not one that requires convergence of expectations.

A regime complex can be understood as: "an array of partially overlapping and nonhierarchical institutions governing a particular issue-area." They exhibit three key characteristics. First, regime complexes comprise "elemental regimes" which may functionally overlap. The elemental regimes in the regime complex for plant genetic resources include the Food and Agriculture Organization, the UN Convention on Biological Diversity, and the WTO's agreement on intellectual property rights, among others. Each of these elemental regimes is governed by a separate international agreement, and has its own organizational structure. Second, there is no agreed upon hierarchy to resolve conflicts among regimes. Hence, actors may choose from a variety of tactics to avoid inconvenient rules, including forum shopping, regime shifting, or capitalizing upon inconsistencies among rules. Third, because of the density of governance arrangements, regime complexes exhibit path dependence; present rules constrain and shape the creation of new ones.

The regime complex is an analytical unit that delimits areas of institutional density. A number of global problems have been studied explicitly as regime complexes, including plant genetic resources, climate change, energy, and emissions trading. However, there is a

⁴ Levy, Young, and Zürn 1994

² Haggard and Simmons 1987

³ Krasner 1983

⁵ Raustiala and Victor 2004, p279.

⁶ Hafner-Burton 2009

⁷ Helfer 2009, Betts 2009.

⁸ Raustiala and Victor 2004.

⁹ Raustiala and Victor 2004.

¹⁰ Keohane and Victor 2011. See also Michonski and Levi 2010.

considerably broader body of literature that addresses a very similar issue—how governance arrangements interact and conflict under conditions of rising density—that is not explicitly described as work on regime complexes. For example, a number of scholars point to a shifting mechanism in governance—a clear result of complexity. When there are multiple venues, sets of rules or governance processes, actors have the option of choosing between them. Goldstein and Steinberg describe a shift in trade rulemaking from rounds of negotiation to a judicial process. Helfer describes attempts by various actors to shift the governance of intellectual property both to and away from TRIPs. Mattli and Büthe describe a shift in the form of regulation—from domestic to international product standards. A number of scholars have identified situations in which states "forum shop", to find institutions most hospitable to their political goals. This too is a form of shifting, where states move cooperation from one venue to another.

In addition to shifting, the literature has also examined other effects of complexity. Mattli and Woods offer a theory of global regulatory outcomes that rests in part on institutional supply—that is, the landscape of regulatory institutions. When there is an "extensive supply"—which refers to both the number of venues, as well as the quality of the rulemaking processes—regulatory outcomes are more likely to be in the public interest. Jupille and Snidal discuss the conditions under which states will choose one institution over another, change an existing institution or create a new one in order to address a cooperation problem. Here, the effect of complexity is simply the ability to select one governance arrangement over others. Alter and Meunier point to two additional effects of complexity: competition and reverberation. In the former, the existence of multiple related institutions drives competition among them; in the latter, the acts of one institution "reverberate" on others, causing unanticipated consequences. ²⁰

In some cases, institutional density gives rise to fragmentation: numerous institutions working on similar issues without strong mechanisms of coordination.²¹ Although not explicitly a part of the regime complex literature, there is also a body of work that examines and prescribes solutions to regime fragmentation. Within the realm of environmental governance, works such as Biermann's argument for a World Environment Organization²² and the work of Gehring and Oberthür on interplay management,²³ are examples of efforts to understand and improve the functioning of dense arrangements of international institutions.

¹¹ Keohane et al 2011.

¹² Green 2008.

¹³ Much of this work builds from the discussion of interplay presented by Young 2002.

¹⁴ Goldstein and Steinberg 2009.

¹⁵ Helfer 2004 and 2009.

¹⁶ Mattli and Büthe 2003.

¹⁷ Davis 2005.

¹⁸ Mattli and Woods 2009.

¹⁹ Jupille and Snidal 2006.

²⁰ Alter and Meunier 2009, p19-21.

²¹ The debate about the creation and function of a World Environment Organization took up the question of whether fragmentation was desirable or impeded effective governance. See Whalley and Zissimos 2001, Najam 2002, Newell 2002.

²² Biermann 2002.

²³ Gehring and Oberthür 2008, 2009; Oberthür 2009; Oberthür and Gehring 2006.

To advance our collective understanding of the causes and effects of institutional complexity, we offer three critiques of existing work. We acknowledge that the work in this area is relatively new and still developing. With this caveat, we point to three shortcomings which we aim to address in this paper. In our view, these weaknesses limit the ability of the concept of the regime complex to explain both governance arrangements and their outcomes.

The first critique is related to the way that the concept has been both defined and operationalized. Victor and Raustiala note that regime complexes are "marked by the existence of several legal agreements." In their description of the regime complex for climate change, Keohane and Victor describe various multilateral agreements and "clubs," as well as programmatic efforts by international institutions. The special issue by Alter and Meunier similarly focuses almost exclusively on the institutional fora created by multilateral arrangements. (The exception is Kelley's work on election monitoring, which we return to and build from below.) Earlier work by Aggarwal, which considers the nesting arrangements and parallel institutions under conditions of complexity, is limited to two institutional forms: bilateral or multilateral. In short, none of these works explicitly considers the role of private authority in the regime complex.

In our view, to understand the effects of density, we must consider *all* of the institutions that foster increased institutional complexity. As such, we argue that "elemental" regimes need not be restricted to multilateral agreements, as Raustiala and Victor suggest. Rather they may include forms of private regulation as well. While some scholars have noted private authority features in an increasing array of regime complexes, ²⁸ attention to their unique qualities vis-à-vis intergovernmental processes has received very limited attention. We, therefore, examine this role explicitly and particularly whether and under what conditions private authority might provide a functional improvement to a regime complex's operation, overcoming long-understood path dependent processes affecting intergovernmental processes.²⁹

Our second critique focuses on Alter and Meunier's work on the feedback effects of regime complexity. Their special volume on international regime complexity provides a useful starting point for further investigation. The feedback effects they identify—competition and reverberation—are descriptively useful, but theoretically underspecified. They note that competition among institutions and actors can give rise to both positive and negative effects. Negative effects include turf battles, repetitive efforts or uncoordinated policy that is easily undone. Positive effects include productive experimentation, diffusion of risk and increased resources addressing the issue. However, the authors do not specify the conditions under which

²⁴ Raustiala and Victor 2004, p279.

²⁵ Keohane and Victor 2011; see especially Figure 1.

²⁶ Kelley 2009, p 61.

²⁷ Aggarwal 1998.

²⁸ Abbott and Snidal 2009 is the notable exception; their analysis of regulatory standard-setting includes public, hybrid and private initiatives. Biermann et al. 2009 also identifies the role of private institutions in what they call "global governance architecture", which is conceptually very similar to the idea of a regime complex.

²⁹ Keohane 1988.

³⁰ Alter and Meunier 2009, p19.

we should expect positive or negative competition. Their discussion of reverberation is similarly underspecified. The authors note that reverberation occurs when changes in one institution cause changes in another which are unintended and/or difficult to control. This observation provides little guidance on when this is likely to occur, or its effects. In our empirical discussion below, we offer preliminary hypotheses for these two outcomes. As such, we aim to offer a more theoretically oriented treatment of the effects of regime complexity.

Both of these feedback mechanisms include an implicit effect of time. Raustiala and Victor note that path dependence is an important feature of regime complexes; they do not evolve and change from a clean institutional slate.³¹ This important insight is further developed in our discussion below, where we hypothesize how private authority can help promote cooperation by providing additional and uniquely tooled venues within the regime complex. Many scholars have discussed how private is distinct from public authority. We build on these propositions by examining origins of private authority in specific regime complexes to determine whether and under what conditions they may provide functional improvements.

Our third critique deals with the difficult issue of defining boundaries. As noted above, the concept of the regime complex is a way to group institutions, delimiting areas of density. This, in turn, implies that boundaries are an important part of understanding the interactions among institutions: the interactions are necessarily constrained by the institutions included in (or excluded from) "the complex." In our view, no work on regime complexity has taken up this issue. Raustiala and Victor discuss the demarcation and blurring of boundaries of elemental regimes within a regime complex, but not the question of what elemental regimes should be included or excluded. Similarly, Keohane and Victor discuss the use of issue linkage to promote fragmentation or cohesion in regime complexes, but provide no guidance on how the analyst should draw the boundaries in the first place.³² For example, should governance activities focused on preserving biodiversity be part of the regime complex for climate change? What are the implications for including or excluding these institutions?

We feel that the issue of delimiting scope is an important one; without it, anything (and everything!) could be part of a regime complex. If this is the case, generating hypotheses becomes more difficult. For example, how can we predict the conditions under which reverberation occurs, if a change in any institution constitutes an instance of reverberation? Indeed, the issue of boundaries is essential to obtaining any analytical leverage from the concept of regime complexity.

2.2 PRIVATE AUTHORITY

The literature on private authority has evolved quickly. Scholars are no longer asking whether private actors matter for world politics, but instead are focused on the ways that they do. Earlier works identify the various forms of private authority, distinguishing between those which rely on state or intergovernmental processes for implicit or explicit sanction³³ and others which derive

Raustiala and Victor 2004, p. 296-99.Keohane and Victor 2011, p9.

³³ Cutler 1999; Börzel and Risse 2005.

their authority from the market supply chain.³⁴ This body of research has examined theoretical issues such as the conditions leading to the emergence of private governance institutions³⁵ and how and under what conditions they might gain authority and/or political legitimacy.³⁶ It has also taken up empirical questions concerning different levels of involvement across firms,³⁷ countries,³⁸ and economic sectors;³⁹ and the competition among private regulatory programs.⁴⁰ Though recognizing that businesses do often develop private self-regulation to fend-off or preempt government regulation,⁴¹ the basis for much of this work has been an implicit or explicit assumption that private authority might serve to improve global governance in a particular domain⁴² and at the very least that it should be seen as one important source of global business regulation.⁴³ In short, many posit that private authority can serve as a functional improvement to other governance arrangements.⁴⁴

Research attention has recently shifted to understanding how private authority interacts with public authority. Much of this work examines the conditions under which different kinds of interactions occur, ranging from synergistic to neutral to conflicting. In most cases, however, these studies do not retrospectively examine the manner in which private venues within regime complexes altered the governance dynamics, potentially creating functional improvements. Some scholars hint at this possibility, but careful elaboration of the mechanisms through which this occurs is largely absent.

2.3 THE CASES

To address this gap, we identify mechanisms—static and dynamic—by which private authority may serve to improve the functionality of public authority. We should note here that we do not think private authority is categorically a positive influence on global governance, but in this paper we focus on improvements to governance efforts rather than other potentially deleterious effects. We use three regime complexes—climate change, tropical commodities and fisheries—as cases to explore the plausibility of these mechanisms (Table 1). We begin, in this section, by describing the history and evolution of the public aspects of each of these three cases. In later sections, we turn to how private authority has featured in each regime complex at various points

³⁴ Cashore 2002.

³⁵ Bartley 2003; Pattberg 2007; Bartley 2007, Green 2010.

³⁶ Bernstein and Cashore 2007; Cashore 2002; Cashore, Auld, and Newsom 2004; Cutler 1999.

³⁷ Sasser et al. 2006

³⁸ Espach 2005, 2006; Gulbrandsen 2005b, 2005a; Cashore, Auld, and Newsom 2004; Cashore et al. 2007; Stringer 2006

³⁹ For coffee see e.g., Fridell 2007, for labor see e.g., Fransen 2010.

⁴⁰ Overdevest 2005; Fransen 2010.

⁴¹ Gunningham and Grabosky 1998

⁴² Gulbrandsen 2004.

⁴³ Braithwaite and Drahos 2000.

⁴⁴ Hall and Biersteker 2002 provide an alternative perspective by defining private authority to include crime families, which they note act in opposition to public authority.

⁴⁵ Auld et al. 2009 Levin, Cashore, and Koppell 2009

⁴⁶ Auld 2010a; Pattberg 2007, Green 2011.

in time. We focus here on the central public nodes of each regime complex to resolve the boundary issue: by delimiting our examination to the central public node in each case, we can restrict our analysis to the ways in which private authority interacts with each specific node, rather than the regime complex writ large. We recognize that boundaries could be defined otherwise and likely should be for other research questions. We are not claiming that this is the only or the best way to define the relationship, but contend that research on regime complexes must be clearer about definitions, no matter how defined, for research to advance. Below, we provide an overview of the key multilateral institutions that have served as hubs for our three regime complexes.

Table 1: Description of public and private dimensions of regime complexes

Regime Complex	Characteristics of Public Authority in Regime Complexes
Climate	Centered on the UN Framework Convention on Climate Change, with the UN Environment Programme and UN Development Programme undertaking related programmatic activities. The Global Environment Facility and World Bank serve as key financial institutions; the Intergovernmental Panel on Climate Change as main scientific body. Other major related multilateral agreements include ozone, biodiversity, wetlands. ⁴⁷
Tropical commodities	Led by the UN Conference on Trade and Development, with network of organizations and councils for specific commodities, including the International Tropical Timber Organization, the International Coffee Organization and others.
Fisheries	Centered on the UN Convention on Oceans and the Law of the Sea, with the Food and Agricultural Organization and Regional Fisheries Management Organizations serving implementation functions; the UN Convention on Biological Diversity and the Convention on the International Trade of Endangered Species of Wild Fauna and Flora provide attention to conservation.

a. Climate Change

The climate regime complex began to coalesce in the 1970s and now centers on the UN Framework Convention on Climate Change (UNFCCC). The first political event on climate change, the World Climate Conference, was convened by the World Meteorological Organization (WMO) in 1979, and focused primarily on scientific research. Almost a decade later, in 1988, the WMO and UNEP formed the Intergovernmental Panel on Climate Change as a body mandated to provide internationally coordinated scientific assessments of the magnitude,

⁴⁷ For a more expansion conceptualization of the regime complex for climate change, see Keohane and Victor 2011.

⁴⁸ Agrawala 1998.

timing and potential environmental and socio-economic impact of climate change and realistic response strategies". ⁴⁹ In the interim, the Vienna Convention for the Protection of the Ozone Layer was adopted in 1985, and was quickly followed by the negotiation of the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. It aimed to reduce, and eventually completely discontinue the production and use of chlorofluorocarbons (CFCs), which had been shown to serve as a catalyst for the destruction of the ozone layer. ⁵⁰ Both ozone agreements are relevant to climate change because CFCs and particularly, their substitutes, contribute to the greenhouse effect. For instance, some of the chemicals adopted as CFC substitutes, including HCFCs and HFCs have been shown to be potent greenhouse gases, which are now regulated under the Kyoto Protocol and covered by amendments to the Montreal Protocol.

The UNFCCC, signed at the Rio Earth Summit, provides the legal foundation for the climate regime that exists today. Parties agree to track and report their greenhouse gas emissions, and in the case of developed (or Annex I) nations, to create domestic policies to reduce emissions. Although it provides little in the way of specificity, and virtually nothing with respect to obligations, the UNFCCC did produce a very important outcome, laying the foundation for the negotiation of binding targets under the auspices of what would become the Kyoto Protocol, adopted in 1997. The Kyoto Protocol, which entered into force in 2005, requires developed countries to meet specific reduction targets, which they may do through three different market mechanisms. It is set to expire at the end of 2012.

The attempts to move the Kyoto process ahead have spawned two new key institutions: the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-LCA) and the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP). The AWG-LCA was created in 2007 with the stated goal of launching "a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012." The main areas of focus for the AWG-LCA as outlined in the Bali Plan of Action are mitigation, adaptation, finance and technology, and capacity building. The AWG-LCA missed its interim deadline, failing to present a final text for a future plan at COP-15 in Copenhagen. The Parties then extended the mandate of the group an additional year. A year later at COP-16 in Cancun, Parties adopted the lengthy "Cancun Agreements," which outlines a long-term vision for global efforts on mitigation and adaptation, including voluntary efforts by developing countries, promised funds for reducing deforestation in developing countries and a new Green Climate Fund to disburse funding to developing countries.

The AWK-KP was created in 2005, shortly after the Kyoto Protocol entered into force. Its goal was to develop an agreement on future commitments for Annex I Parties after the end of the second commitment period of the Kyoto Protocol, from 2008-2012. The negotiations of the

⁴⁹ UN General Assembly 1988, Resolution 53.

⁵⁰ Rolands and Molina 1974.

⁵¹ This decision was taken in the "Bali Action Plan" FCCC/CP/2007/6/Add.1, Decision 1/CP.13.

⁵² FCCC/CP/2009/11/Add.1, Decision 1/CP.15.

⁵³ FCCC/CP/2010/7/Add.1, Decision 1/CP.16.

Working Group have yet to yield any definitive decisions. The Parties failed to come to an agreement in Copenhagen about individual and aggregate reduction targets.⁵⁴ A year later in Cancun, and despite interim meetings, little progress toward new targets had been made. The AWG-KP continues its work, now racing against the clock: it hopes to agree to a new set of targets before the expiry of the Protocol at the end of 2012.⁵⁵

In sum, the central public node in the climate regime complex is the UNFCCC. It has a number of associated bodies, including two that are struggling to advance the intergovernmental process. As has been well covered by scholars and press alike, the form of any future agreement is uncertain at best.

b. Tropical Commodities

The set of institutions arising to deal with terms of trade for basic commodities solidified after the Second World War. The first focal institution arose from the Havana Charter. Though the Charter was never adopted, its chapter on commodity agreements informed a 1947 decision of the UN Economic and Social Council to form an Interim Coordination Committee for International Commodity Agreements (ICCICA), which was charged with advancing agreements among producers and consumer countries for the management of commodity markets. 56 The ICCICA established four agreements (i.e., coffee, sugar, tin, and wheat). However, these advances fell short of expectations and led the UN General Assembly to adopt resolution 1995 (XIX) in 1964 setting up the UN Conference on Trade and Development (UNCTAD) and giving it responsibility for coordinating agreements for commodities exported by developing countries.⁵⁷ At its first session, UNCTAD's Secretary General, Raúl Prebisch provided an analysis of the problems facing developing countries that linked commodity export earnings with development, setting the stage for UNCTAD's work on commodities in the subsequent years.⁵⁸ This work was further advanced at UNCTAD's fourth session in 1976 where a resolution established the Integrated Programme for Commodities (IPC) that was to work on commodity agreements for 18 goods, including tropical timber. 59

Over the coming years, efforts to negotiate and maintain commodity agreements met varied success. Sugar and tin were adopted in 1954. A coffee agreement was adopted in 1962, and agreements for cocoa and natural rubber were adopted in 1980 and 1981 respectively. Tropical timber followed in 1983. But just as the International Tropical Timber Agreement emerged, the other agreements broke down or at the very least had their economic provisions terminated. Sugar lapsed in 1983, tin collapsed in 1985, and cocoa and coffee ended their market interventions in 1988 and 1989 respectively. The natural rubber agreement was terminated in 1999.

⁵⁴ ENB, Summary of the Copenhagen Climate Change Conference. Accessed at http://www.iisd.ca/vol12/enb12459e.html.

⁵⁵ FCCC/KP/CMP/2010/12/Add.1, Decision 1/CMP.6

⁵⁶ Mojarov and Arda 2004; UNCTAD 1985

⁵⁷ Mojarov and Arda 2004

⁵⁸ UNCTAD 1985, p57

⁵⁹ Khindaria 1982; Poore 2003; Humphreys 1996

⁶⁰ McDermott 1983: Khindaria 1982: Gilbert 1996

⁶¹ Gilbert 1996.

⁶² http://www.unctad.org/infocomm/anglais/rubber/ecopolicies.htm

activities meant to address problems associated with commodity production and trade, particularly for developing countries. With the inability to progress with commodity agreements addressing market regulation, its work has involved a number of connections with non-state actors. ⁶³

In sum, the public node for tropical commodities is UNCTAD, but the overall regime complex is fragmented, including a number of other institutions focused on the trade and management of individual commodities.

c. Fisheries

The regime complex for fisheries centers on the 1982 UN Convention on the Law of the Sea (UNCLOS). Emerging from a protracted negotiations process reaching back to the first Law of the Sea Conference in 1958, UNCLOS sets a broad framework for international cooperation on oceans. For fisheries, it reinforced the role of the FAO and pre-existing Regional Fisheries Management Organizations (RFMOs) such as the Asia-Pacific Fisheries Commission and the General Fisheries Council for the Mediterranean formed in the 1940s. ⁶⁴ These remain central to ocean governance; 18 such bodies hold management responsibilities and 24 play advisory roles. ⁶⁵

Within this broad framework and following the Rio Earth Summit, additional agreements and cooperative efforts have developed. Immediately after Rio, talks commenced in April 1993 and led to the approval of the UN Fish Stocks Agreement in August 1995, ⁶⁶ which addresses the management of straddling and highly migratory stocks (roughly 10% of the world's capture fisheries). It also bolstered the role of RFMOs: states fishing stocks covered by a RFMO were to become members and where a RFMO did not exist, states were required to establish one. ⁶⁷ In October of 1995, the FAO Code of Conduct for Responsible Fisheries Practices was adopted by the 28th Session of the FAO Conference. ⁶⁸ Although the UN Fish Stocks Agreement only entered force in November 2001, many of its provisions were inserted in domestic laws earlier through voluntary adoption of the FAO Code. ⁶⁹ Finally, the FAO Compliance Agreement was negotiated in 1993 and entered force in 2003. It requires that: flag states ensure recorded vessels meet conservation obligations in international and regional fisheries agreements, even if the state is not a member of a specific RFMO; high-seas fishing receive authorization from the flag state; and high-seas fishing rights only be granted if a state has capacity to control fishing activities on these waters.

⁶³ Moiarov and Arda 2004.

⁶⁴ http://www.fao.org/docrep/W3123E/W3123E07.htm

⁶⁵ DeSombre 2000, p. 109-110. http://www.fao.org/fishery/rfb/search

⁶⁶ deFontaubert 1995; Doulman 1995.

⁶⁷ Cochrane and Doulman 2005.

⁶⁸ Caddy 1999.

⁶⁹ Cochrane and Doulman 2005.

On the periphery, but still important to marine and fisheries regulation, the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the 1992 Convention on Biological Diversity (CBD) offered additional provisions increasingly relevant to fisheries management and production. These agreements will gain importance as ocean stocks further dwindled. 70 Already a few commercially significant species are on the CITES Appendix II, meaning that only trade not reducing the species survival is permitted.⁷¹

The fisheries regime complex shares characteristics with both the climate change and tropical commodities. Similar to UNFCCC, there is a clear central public node—the regime complex centers on UNCLOS. Like tropical commodities, it includes a number of other institutions which manage regional issues (RFMOs) or represent cooperation on specific fisheries issues (the compliance agreement).

3. Analytical Framework: Static and Dynamic Effects of Private Authority

Now that we have briefly outlined the contours of public authority in each regime complex, we turn to the static and dynamic mechanisms for understanding the role of private authority. Our point of departure is the simple premise that private authority may help overcome some of the obstacles that inhibit cooperation in the intergovernmental processes. This is not a controversial starting point. Indeed, much of the work discussed above embeds this premise implicitly in their analyses of private authority.

We posit that private authority may be a "functional improvement" in the sense that it is not constrained by the same degree of path dependence as public authority within the regime complex. Path dependence can be understood as an institutional outcome which is seen to defy some theoretical model. The idea of a competitive market, for instance, leads economists to wonder why sub-optimal technologies come to persist and even dominate markets (e.g., QWERTY versus DVORAK typesets). In other social sciences, Mahoney explains, functionalism, legitimacy and power may also serve as theoretical models for defining path dependence. 73 As we describe in the following sections, the dynamic and static effects of private authority are different types of responses to obstacles to cooperation in public authority. To the extent that it seeks to overcome the sub-optimal outcomes that result from path dependence, we consider private authority to be a functional improvement.

The key difference that promotes cooperation in cases where public authority may be unsuccessful is the regulatory target. Whereas states are the key members of intergovernmental regimes, having responsibilities for domestic implementation and enforcement, private authority generally targets those actors responsible for economic activities in a given sector. While states can be major buyers and sellers of goods and services via state-owned operations or through procurement practices, this role is an economic rather than regulatory role.⁷⁴

⁷⁰ Kura et al. 2004.

⁷¹ Caddy 1999; Cochrane and Doulman 2005 Richards and Maguire 1998.

⁷² David 1985. ⁷³ Mahoney 2000.

⁷⁴ Cashore 2002.

This difference alone implies a number of features consistent with the "functional improvement" ability of private authority. First, there will be a greater turnover of the regulatory targets for private authority than for public authority. Although states come and go—the recent successful referendum for the succession of Southern Sudan for instance—the level of volatility among corporations is without doubt orders of magnitude higher. This changing landscape of regulatory targets means that gridlock is less likely to occur, both because it can mean interests change more regularly and because collective institutions set up by private interests form and collapse with greater ease. Second, we posit that private authority is inherently more flexible in terms of the kinds of institutional structures it can create. It may have greater flexibility in re-conceiving institutional responses, tailoring a programmatic response that seeks to overcome difficulties encountered among public institutions in the regime complex. Third, forms of private authority are often less highly legalized, and therefore more easily reversed. Because of this, there may be less opposition to private governance arrangements, since the targets of private regulation know that rules can be amended.

Does the absence of strong institutional legacies, combined with the fluidity of relevant actors provide an opportunity for private authority to innovate? Can private authority create functional improvements to public governance arrangements? There are at least two ways we foresee this potentially occurring, one static and one dynamic.

3.1 STATIC EFFECTS

Given private authority has greater autonomy from the strictures of intergovernmental processes, it is plausible to expect that when faced with a problem that has reached the international agenda, private authority will be able to better fit an institutional response to the problem. This is in part because private authority can respond to, and therefore benefit from, earlier intergovernmental efforts. In other words, private actors learn from others' actions, sizing up the political landscape as well as the political constraints. They also act opportunistically, waiting for a window in which they may be able to insert themselves and successfully project authority. One way that private authority can accomplish this is through problem definition. When intergovernmental efforts stall, private actors may redefine the problem to alter the types of institutional responses and the political winners and losers. Thus, problem definition is likely a product of both the nature of the problem itself and the institutional approach taken by public institutions to address the problem. From this we offer the following hypothesis.

Hypothesis 1: Public institutions will condition private responses to collective action problems in ways that promote a different framing / construction of the perceived problem.

⁷⁵ Abbott et al. 2000.

⁷⁶ Fit can be loosely understood as the degree of congruence between the ecosystem and the institutional arrangement Young 2002, p. 20.

⁷⁷ On strategic approaches to problem definition in the policy process, see Rochefort and Cobb 1994 and Stone 2002.

If this proves valid, we expect to see progenitors of private authority constructing governance arrangements in ways that explicitly seek to operate synergistically with public authority or to address failures or difficulties in intergovernmental or state processes. Although, as Alter and Meunier and others have noted, competition may serve as a mechanism that facilitates governance improvements in the longer term, we argue that this should be separated from a static analysis of whether or not private authority, at the moment of emergence (i.e. t_0), is seen as a complementary contribution to a regime complex. Hence, for this hypothesis to prove valid, we expect to observe private institutions emerging to address aspects of a problem that public institutions at that given time struggle, or are unable, to address.

3.2 DYNAMIC EFFECTS

Over time, private authority has the potential of functionally improving cooperation within a regime complex via a number of different specific mechanisms. First, the procedural requirements of state and intergovernmental processes mean private authority may be more adroit, changing quickly to integrate new knowledge about problems or adapting due to experiences gained via learning by doing. Research on private authority highlights the capacity of these institutions to serve as learning mechanisms.⁷⁸

Second, building on Alter and Meunier, private authority can serve as an arena of experimentation, able to undertake projects which would not be feasible within intergovernmental for a. As noted above, there is a greater potential fluidity in private institutions. Hence, one can expect that private authority may provide an opportunity to experiment with alternative governance solutions. Hoffmann broadens this argument to look at a wide range of climate experiments being undertaken at different governance levels and both by public and private institutions. One of the underlying ideas here is that eventually the experiments may feedback to shape the regulatory interventions by the state, possibly improving this eventual cooperative response. Thus, the dynamic effects of private authority on the regime complex serve to shape and change future public cooperative efforts.

Third, and beyond these direct interactive effects, private authority may also provide an alternative solution to cooperation problems by providing a competing, alternative view of the problem and institutional response. In this view, private authority exists within the regime complex, but has a dynamic interaction effect by serving as a repository in which a different conception of a problem can persist. This institutional alternative co-exists with other public formulations of the problem. This ensures that this conception is not systematically excluded from the agenda of a given regime complex, potentially ensuring functionally improved cooperative action on a problem in the longer-term. When thinking about overcoming path dependence, such a latent idea can serve as the starting point for a broader regime transformation. It is this third mechanism that our analysis focuses on, as specified in the following hypothesis.

⁷⁸ Levin, Cashore, and Koppell 2009; Bozzi et al. Forthcoming; Auld 2010a.

⁷⁹ Newell and Paterson 2010, p.127. The experimentalist literature, as embodied by Sabel and Zeitlin 2008, also points to this learning approach; however, they do not apply it specifically to private actors. ⁸⁰ Hoffmann 2011.

⁸¹ Crouch and Farrell 2004.

Hypothesis 2: Private institutions within a regime complex can contribute to functional improvements to public authority by:

H2(a): providing a competing formulation of the problem that shapes future governance arrangements, or

H2(b): providing an additional venue through which to diffuse public authority.

Both of these dynamic mechanisms can be understood as forms of reverberation, as described by Alter and Meunier, where changes in one institution cause unanticipated changes in another. Here the "causal" change is the failure (or relative failure) of cooperation among public institutions. The result is reverberating effects in private institutions within the regime complex. Kelley's work on election monitors, including non-governmental monitors, highlights this as a possible benefit of complexity as "the existence of choice of regimes can open up alternatives that might not otherwise have been politically feasible to implement."⁸²

Unlike the first static hypothesis, this dynamic mechanism means that public authority can reverberate through private authority within the regime complex through these two mechanisms, potentially providing functional improvements to public authority over time or at some point in the future.

4. Analysis

In the final step of our analysis, we trace the development of private authority in the respective regime complexes to explore the plausibility of the static and dynamic interactions. Building from the descriptions of the three regime complexes provided above, we offer a brief assessment of the extent to which they are achieving their desired goals. This is not meant to be a rigorous analysis of institutional effectiveness; our aim is to identify whether there might be opportunities for private authority to solve cooperation problems not adequately addressed by the public nodes in each regime complex. We do not consider the other (myriad) multilateral initiatives or the interactions among public institutions since other parts of the complexity literature address this dimension of interaction. We focus on our contribution to the literature—the interaction between public and private authority.

4.1 Hypothesis One: Static Effects

The climate regime complex provides an instructive example of the static effects of private authority. Although the UNFCCC appeared it might follow the model of the Vienna Convention—framework convention followed by binding and stronger protocols—the negotiations up to and after Kyoto followed a different course. As is well-known, the Kyoto Protocol has a long and storied history. The critiques are numerous: the required reductions are too small to have any measurable effect on climate change, the compliance mechanism is arcane and counterintuitive, the Clean Development Mechanism (CDM) fundamentally unworkable,

⁸² Kelley 2009, p. 61

⁸³ For an in depth survey of the provisions and their negotiating history, see Grubb et al 1999.

and so on. 84 The US, the largest per-capital producer of GHGs, has not ratified. A realistic evaluation of countries' progress suggests that many will miss their targets, some by miles. 85 It is not necessary to pronounce the Kyoto Protocol "dead" to recognize that it has failed to achieve even its own modest goals. Thus, we see that the first multilateral efforts at even "moderately deep" cooperation on climate change have missed the mark.

Private authority outside of intergovernmental arrangements first emerges around 2001—the year that the US announced that the Kyoto Protocol was "fatally flawed" and that it would not pursue ratification. At the time, the US was the world's largest emitter of greenhouse gases; its failure to participate undercut the environmental effectiveness of the treaty, and threatened to completely unravel international cooperation. At the same time, private actors began to create rules governing greenhouse gas emissions. 86 Thus, the timing of the emergence of private authority is the first important datum to note. Although the climate regime complex had been developing for some twenty years, private authority does not assume a position of prominence until efforts at intergovernmental cooperation hit their first sizeable obstacle.

The private authority that began to emerge can be divided into four different types of rulemaking processes: those that deal with offsets, procedures for accounting, and rules for transparency and trading. 87 Offset standards provide rules for measuring avoided emissions. Accounting standards provide a protocol for actors to measure and report their emissions. Transparency standards provide a centralized repository for users to report their emissions to others. Trading platforms create a system for quantifying, buying and selling carbon emissions.

These categories of private authority respond to the shortcomings of Kyoto in a variety of ways. First, they all target different actors than the Protocol. Whereas the participants in Kyoto are necessarily states, these private standards target non-state actors of all stripes: firms, NGOs, and sub-national actors. All private governance arrangements are of course, voluntary; thus those who adopt them choose to opt in. Second, the accounting and transparency standards are focused on emissions measurement and reporting rather than reductions. These forms of private authority purposefully sidestep the contentious issue of mitigating emissions, and focus on understanding their sources. As one person involved with the creation of accounting standards noted, "you cannot manage what you don't measure." The strategy then, is to build awareness and capacity around emissions measurement, with the hope (but not the explicit design) that this will lead to future reductions. Third, virtually all private standards emphasize the reputational benefits of adopting voluntary measures, framing the problem as one of image management rather than mitigating climate change. Finally, a number of the private offset standards emphasize the environmental "co-benefits" of their rules. Buying offsets certified under the Gold Standard or Climate Community and Biodiversity will not only address the problem of climate change, but also provide public goods such as biodiversity or social development. These

http://unfccc.int/files/press/backgrounders/application/pdf/fact sheet the kyoto protocol.pdf.

⁸⁴ See, for example, Malakoff 1997, Victor 2001, Depledge 2006, Wara 2007.

⁸⁵ UNFCCC 2011. Accessed at

⁸⁶ There were earlier private efforts, such as internal trading programs created by BP and Shell, yet both were short lived pilot programs.

⁸⁷ Green 2011.

⁸⁸ Author interview with Janet Rangathan, World Resources Institute, 19 May 2009.

offset standards are addressing an additional environmental problem—the preservation of diverse ecosystems—thus changing the frame of the cooperation problem to be addressed.

It is beyond the scope of this paper to evaluate the effectiveness of these private governance arrangements. However, their relative durability and the growing number of users of the many standards suggest that private authority is coordinating action on climate change in ways that the Kyoto Protocol has not. Moreover, in the area of offset standards, private authority is promoting mitigation above and beyond that which is occurring under the auspices of the market mechanisms of Kyoto. Almost half of the credits purchased in 2010 on the voluntary market were purchased voluntarily by for-profit firms, not under obligation by any regulatory requirements. The total value of the voluntary market is approaching half a billion dollars. These static effects provide preliminary evidence for our first hypothesis: private authority has conditioned private responses to climate change which respond to different conceptualizations of the problem.

The other cases also provide evidence to support our first hypothesis. In the case of the tropical commodity coffee, Max Havelaar—the world's first fair-trade labeling initiative—formed before the suspension of the International Coffee Agreement's (ICA) market regulations. The ICA rules maintained coffee prices above a floor price, but were suspended in 1989. That Max Havelaar took form before the floor price ended allowed it to concentrate on problems other than terms of trade, which we noted above were integral to how UNCTAD's Secretary General, Raúl Prebisch, defined the commodity problem. Indeed, one of the specific challenges Max Havelaar sought to address was market access. It emerged to give UCIRI—a Mexican coffee cooperative—an alternative market channel that cut out intermediaries and that ensured more coffee could be exported under "fair trade" terms than was possible through existing alternative trade organizations. 91 As an agreement among states, the ICA did not address distributional issues within countries, allowing elites in coffee-growing countries to benefit from the increased revenue flows. 92 Thus, Max Havelaar can be seen as a functional addition to this regime. It served to provide some—even if small at first—offset to the distributional issue. However, after 1989, the floor price became as important, or even more important, than the market access concerns. It has remained a significant focal point for fair trade since then, a point to which we return in discussing the dynamic effects. Hence, in relation to our first hypothesis, the timing of private authority in the regime complex is important: it meant Max Havelaar could seek to help coffee farmers in ways that built from the ICA's floor price. It added market access, prefinancing and long-term contracts as provisions to further enhance the welfare of participating coffee farmers.

⁸⁹ Peters-Stanley et al. 2011, pp. 45-47.

⁹⁰ Ibid.

⁹¹ Jaffee 2007, p. 13.

⁹² Subsequent research has documented rent seeking behavior in both Indonesia (Bohman, Jarvis, and Barichello 1996) and Brazil (Jarvis 2005). In both cases, considerable waste was incurred due to efforts taken to capture ICA quotas. See Ullman 1978.

Tropical timber also represents a case where private certification emerged to address a gap that intergovernmental processes were unable or unwilling to address. In the late 1980s, tropical deforestation was recognized as a large problem, both for maintaining biodiversity and preventing climate change. Producer countries within the ITTO had vested economic interests in maintaining their export markets, and thus were instrumental in stopping an effort to introduce a tropical timber labeling program through the ITTO.⁹³ In addition, the threat of a challenge by these same tropical countries via the General Agreement on Tariffs and Trade of the legality of efforts by countries to ban the importation of unsustainable tropical timber helped amplify interest in a private option.⁹⁴ It was clear that current intergovernmental arrangements were not adequately addressing the problem of tropical deforestation, and not making much progress toward improvement.

The Forest Stewardship Council (FSC) was established by some of the same groups that had tried to lobby for an intergovernmental response both via the ITTO and a global forest convention, but were rebuffed. One goal of the FSC was to promote the certification of responsible forest management. The standards it crafted reflect its attempt to fill gaps left by the intergovernmental process. For instance, forest management, rather than the processing side of the forest products trade, was deemed the most substantial regulatory "gap". 95 Similarly, the FSC standards included a ban on the use of genetically modified organisms in certified forests, a provision which reflected heightened concerns about this technology in agriculture and the wariness in North America with governments' unwillingness to impose regulatory restrictions sought by environmental groups.

For other commodities, the pattern of problem re-definition is less clear. One of the major reasons for this is the sequence of events. Whereas labeling fair trade coffee emerged with the intergovernmental regulatory regime as the reference point, once the certification model appeared, the motivation for certification spreading to other commodities appeared to differ in ways that reflect isomorphic processes. These patterns highlight how such emulation alters the relationship between private and public authority. We will return to some implications of this in discussing the dynamic effects.

As noted above, private authority does not always create functional improvements within a regime complex. Evidence from tea and fisheries demonstrate how private authority can potentially undercut domestic regulation. Besky's analysis of tea underscores that while fair trade may fill a "gap" in an international regime complex, it may simultaneously circumvent domestic regulations, in this case, colonial-inspired institutions set up to regulate the operation of Darjeeling tea plantations. 97 "These regulations", Besky explains, "unlike those of fair trade, account for the power of individual owners to manipulate the system to maximize profits. In Darjeeling, fair trade standards from the Fair Trade Labeling Organization International (FLO)

⁹³ Humphreys 1996.

⁹⁴ Bartley 2003.

⁹⁵ Auld 2009, 2010b. 96 Auld and Bull 2003.

⁹⁷ Besky 2011.

have undermined what local laws and government labor officers have done to promote social justice in Darjeeling."98

With fisheries, we observe a similar differentiation between the domestic and international levels. At the international level, programs such as the Marine Stewardship Council (MSC) emerged to facilitate the implementation of the various international agreements. Although there was an impression that the fisheries regime was advancing cooperation through the early 1990s, discussion of the shortcomings on the implementation side did serve as a "gap" the MSC sought to fill. However, since most fisheries policy is overseen by national governments, in countries with extensive and stringent requirements, fears emerged much like those with tea. There were worries that the MSC either deflected attention away from the enforcement of these laws or preempted other conservation actions, such as the enactment of marine protected areas. As another example, Ponte argues MSC certification in South Africa was used to consolidate power among a handful of processors, to fend off efforts to reallocate quotas away from incumbent fishing operations, and to protect interests of trawlers over long-line segments of the hake fishery.

The examples from tea and fisheries demonstrate that private authority may have unintended consequences which hinder, rather than help, institutional efforts already in place within the regime complex. Private authority may become, as others have argued, solutions looking for problems, which do not therefore necessarily match the static gaps in a particular public regime. In other words, in some cases private actors may successfully project authority because they are making substantive contributions to the issue at hand; in others, they may simply be finding a way to insert themselves into the governing process. In the latter case, the addition of private institutional arrangements within the regime complex is likely to be driven by powerful actors who see opportunities to leverage complexity in their favor – such as businesses looking for cover from potential regulations or larger, international NGOs advancing their perception of a given problem over those of smaller, localized groups. We return to this issue further in considering the dynamic effects of private authority.

4.2 Hypothesis Two: Dynamic Effects

The dynamic, or reverberation, effects of private authority are evident in the climate regime complex in two different areas: in the interaction between public and private markets for offsets and in the developing discourse around REDD and REDD+. Recall that the dynamic effects of private authority affect public authority in two ways: by providing a competing formulation of the problem and by providing an additional venue through which to diffuse public authority.

⁹⁸ Besky 2011, p. 99.

⁹⁹ Auld 2009.

¹⁰⁰ Auld 2009.

¹⁰¹ Ponte 2008

¹⁰² Auld et al. 2007; Gulbrandsen 2010

Starting with the Bali Action Plan in 2007, Parties to the Kyoto Protocol have identified an additional mechanism for combating climate change: Reduced Emissions from Deforestation and Forest Degradation, or REDD. Put simply, REDD provides financial incentives for developing countries to conserve forests. REDD is a clear example of a reformulation of the climate change problem: in addition to being a problem about emissions (and emissions reductions), climate change is now about forest management. As the UN-REDD website notes: "Deforestation and forest degradation, through agricultural expansion, conversion to pastureland, infrastructure development, destructive logging, fires etc., account for nearly 20% of global greenhouse gas emissions, more than the entire global transportation sector and second only to the energy sector." The implication is clear: our carbon problem is partly a forest problem. Moreover, the solution to this forest problem turns on private authority; much like carbon markets now, financial rewards for REDD will depend on third-party measurement and verification of carbon stocks.

The relationship between public and private offset standards provides an additional example of the dynamic effects of private authority. The CDM of the Kyoto Protocol allows developed countries to meet their emissions reductions requirements by purchasing carbon "offsets" in the developing world. These offsets include a variety of activities that remove greenhouse gases from the atmosphere, and at the same time, are deemed to promote development in the host country. The governing body of the CDM has created an equally diverse set of rules to measure the amount of GHG removed in each category of project. Offsets in the voluntary market work in the same fashion, save for the fact that removals are not credited against some larger target (because there is no binding regulation).

As noted above, the political slowdown surrounding Kyoto gave rise to a host of new voluntary private standards, including nineteen different offset standards. Despite this proliferation of private institutional arrangements, closer analysis demonstrates that these private arrangements are not independent of public authority; rather, public authority reverberates through them. Upon careful inspection of the rules set forth by each standard, we see that fully 79% of the private standards recognize public rules created under the CDM. In this sense, private authority shapes public authority by providing another venue for its diffusion. Although we cannot predict the future, it is clear that even if the Kyoto Protocol expires, the offset rules it creates will persist through the voluntary markets. (And indeed, any future regulatory market will likely consider this in its design.) In other words, the full effects of this dynamic interaction will not be known for some time. Indeed, this is demonstrative of our larger message: many of the effects of private authority can only be understood when considering multiple time periods.

This reverberation of public rules through private authority is also demonstrated by the coffee case. The floor price for coffee was initially taken from the ICA, but has since become an embedded component of fair trade. And the fair trade premium has indeed become an important benchmark by which other programs are often measured. FLO's practice of requiring a particular price persists as a conception of the commodity problem that differs significantly from most other extant public and private governance initiatives. There has been a general move

¹⁰³ http://www.un-redd.org/AboutREDD/tabid/582/Default.aspx.
¹⁰⁴ As of August 2011, see Green 2011.

¹⁰⁵ Daviron and Ponte 2005.

away from price supports as the appropriate instrument, with greater attention to market intelligence, information sharing, enhancing quality, and spurring further demand as means to address the specific market conditions of individual commodities. Thus, even though FLO has been limited to capturing a small segment of the markets for which it certifies goods (usually under 1% of the world market), ¹⁰⁶ its attention to market prices as a component of the problem requiring attention reinforces how private authority can, as a dynamic effect, provide a competing formulation of the problem that may shape future governance.

Tropical timber provides an example of how private authority can help reformulate the shape of the regime complex in the long term by providing a repository where ideas can "wait" until the time to deploy them is ripe. The ITTO considered and subsequently rejected the idea of labeling in the late 1980s. However, the labeling approach did not wholly disappear from the organization's agenda. Rather, the ITTO commissioned the London Environmental Economics Council, an environmental think tank, to write a report on the feasibility of incentives for improved forest management. The report concluded that trade was actually a relatively insignificant concern since very limited quantities of tropical timber were exported. It also promoted country-level certification schemes, rather than a global approach of the type being discussed and pursued by FSC supporters. The important point here is that the FSC consider tropical timber trade a critical lever point for improving the management of tropical forests, whereas those resistant to this approach felt this was not the best way to understand the problem. The persistence of this framing has been important. Arguably, it has helped reinforce more recent attention to forest law enforcement and governance.

Finally, for fisheries the reverberation effect appears less pronounced, which may reflect both that the MSC formed in part through emulation of the FSC and that the intergovernmental processes for fisheries were advancing in way not true for forestry.

5. Conclusions

In this paper, we have attempted to "unbundle" the regime complex in three ways. First, we maintain that a full understanding of institutional density and complexity is impossible when a key source of variation—private authority—is omitted. Thus, we have inserted private authority into our analyses of the three cases of climate, tropical commodities and fisheries. Second, we suggest that no rigorous analysis of regime complexes can occur without a careful definition of its boundaries. We have offered one approach to defining boundaries: identifying the central public nodes of the regime complex and their interactions with private authority. Third, we have argued that private authority can potentially provide functional improvements to a regime complex through both static and dynamic effects.

¹⁰⁶ Auld 2011, p. 75.

¹⁰⁷ Kingdon 2002 describes this key moment—when idea is finally considered viable—the opening of the "policy window."

¹⁰⁸ Gale 1998, p.171.

Our analysis leads to four conclusions we feel are important to consider if the concept of regime complexity is to underpin a robust research agenda. First, the theoretical construct of the regime has multiple meanings, some of which are at odds with the notion of regime complexity. Drezner rightly argues that regime complexity can undermine the institutionalist's view of regimes as providing focal points for cooperation. By multiplying the number of possible focal points, weakening "actors' sense of legal obligation," and increasing "transaction costs of compliance," regime complexity potentially conflicts with definitions of regimes that emphasize shared norms or convergence of expectations. 109

Second, and related to the previous point, regime complexity can promote fragmentation, conflict and watering down of rules just as easily as it can promote functional improvements. We have argued that under certain circumstances, private authority can fill gaps within the regime complex, and potentially provide functional improvements to existing institutions. It can do this by providing alternative formulations of the problem, by providing a space where other solutions can "reside" until a policy window opens, or by serving as a mechanism to diffuse public rules. However, these positive outcomes are not necessarily a given. Although we have not explored them in this paper, there are certainly conditions under which private authority stymies cooperation rather than enhances it. The arrival of Max Haavelar in the coffee regime is an example of the "gap-filling" function of private authority. The initiative addressed issues of market access and distribution of benefits that ICA did not. However, in the case of tea, fair trade rules served to undermine important gains in social justice achieved through public regulation. Similar problems were seen with fisheries: the MSC has been controversial in countries where it has been seen to fend off government regulations for fisheries and marine conservation. In other words, private authority can be an instrument of powerful actors, and can provide additional for in which those actors can pursue their interests. We fully acknowledge that this is the case; an explanation of the conditions under which these negative outcomes arise should be an area of future research

Third, though beyond the scope of this article to explore, it is also clear that private authority has reverberations through to other private institutions. Just as the FLO's price requirement served to highlight another understanding of the commodity problem and solution to it, the price premium has also been a comparative benchmark for other private certification programs. Similarly, the FSC and IFOAM group certification systems have been referenced as programs to emulate by other systems. This highlights additional ways whereby effects may reverberate among public and private institutions in longer reaction chains, rather than simply a single interaction. Reverberation among private authority in the climate regime complex is also evident; many voluntary carbon standards recognize each other.

Fourth and finally, our analysis of regime complexity has emphasized the importance of time: in order to understand fully the effects of private authority, we must include dynamic effects—the ways in which private authority "reverberates," shaping and conditioning future public authority—as well as static ones. We call attention to the fact that although we are among the first to extend the time horizon in considering the effects of private authority, that even this extension is incomplete. In future research, we hope to consider the ways that private authority

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¹⁰⁹ Drezner 2009, p. 66

¹¹⁰ See UNCTAD 2007 for discussion of group system being promoted for EurepGAP.

may experience path dependence of its own. In sum, serious investigations of the reverberation effects of complexity must look not only across institutions, but also over time.

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