

## ARTICLE

# *Unbundling the Regime Complex: The Effects of Private Authority*

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### Abstract

The work on ‘regime complexes’ – loosely coupled regimes linked through non-hierarchical relationships – provides a lens for understanding the increasing density of international rules and institutions. However, the role of private authority in the regime complex – situations where non-state actors set rules or standards that other actors adopt – has only recently received academic attention. In this article, we ‘unbundle’ the concept of the regime complex in two novel ways. Firstly, we argue that an accurate depiction of any regime complex must also include private authority. Secondly, using examples from environmental governance, we carefully elaborate four specific mechanisms through which public and private authority interact, demonstrating the ways in which private authority can improve the problem-solving capacity of regime complexes. In short, a full understanding of the contributions of private authority to solving environmental problems requires examining its interactions with public rules and institutions.

**Keywords:** Environmental governance, Regime complex, International cooperation, Private authority

## 1. INTRODUCTION

The growth in interdependence among states has produced a corresponding increase in governance activities to manage that interdependence. Observers of world politics have noted (and politicians have criticized) the increasing density and complexity of institutional arrangements.<sup>1</sup> This is particularly true in the area of global

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<sup>1</sup> See, e.g., M. Munoz, R. Thrasher & A. Najam, ‘Measuring the Negotiation Burden of Multilateral Environmental Agreements’ (2009) 9(4) *Global Environmental Politics*, pp. 1–14; T. Bartley,

environmental governance, which has experienced a proliferation of new types of institution and actor in the transnational arena. Work on ‘regime complexity’ seeks to understand the interactions among regimes in a given issue area which are loosely linked through non-hierarchical relationships.<sup>2</sup> This analytic focus has helped to identify and explain important patterns such as forum shifting, less visible in studies of single regimes. However, with few exceptions, which cluster in the area of climate change, research on regime complexity neglects the role of private authority.<sup>3</sup>

Private authority – situations where non-state actors set rules or standards that other actors in world politics adopt – occurs in an increasing diversity of issue areas, including the environment.<sup>4</sup> In this article, we begin from the well-accepted observation that private authority often emerges when there are gaps in public authority;<sup>5</sup> that is, where governments are unable or choose not to govern, ‘entrepreneurial’ private actors have an opportunity to create rules to fill the void. In the environmental arena, these include environmental certification schemes such as organic food or sustainable timber,<sup>6</sup> as well as the adoption of environmental standards or disclosure practices, such as the ISO 14001 standard of the Office for International Standardization (ISO) or the Global Reporting Initiative (GRI).

Despite fairly extensive study of the emergence of private authority,<sup>7</sup> research on interactions between public and private authority is still relatively new. Most work to date offers frameworks for studying interactions, or looks at specific cases.<sup>8</sup> Moreover, the few studies that do consider private initiatives include a wide range

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‘Transnational Governance as the Layering of Rules: Intersections of Public and Private Standards’ (2011) 12(2) *Theoretical Inquiries in Law*, pp. 517–42.

<sup>2</sup> We review this literature in detail in Section 3 below.

<sup>3</sup> J.F. Green, *Rethinking Private Authority* (Princeton University Press, 2014); H. Bulkeley et al., *Transnational Climate Change Governance* (Cambridge University Press, 2014).

<sup>4</sup> Green, *ibid.*, p. 6.

<sup>5</sup> See, e.g., B. Cashore, G. Auld & D. Newsom, *Governing Through Markets: Forest Certification and the Emergence of Non-State Authority* (Yale University Press, 2004); L.H. Gulbrandsen, ‘Overlapping Public and Private Governance: Can Forest Certification Fill the Gaps in the Global Forest Regime?’ (2004) 4(2) *Global Environmental Politics*, pp. 75–99; J.-C. Graz & A. Nölke (eds), *Transnational Private Governance and Its Limits* (Routledge, 2008).

<sup>6</sup> See, e.g., the ISEAL Alliance at: <http://www.isealalliance.org>, or the Forest Stewardship Council at: <https://ic.fsc.org/en>.

<sup>7</sup> A.C. Cutler, V. Haufler & T. Porter (eds), *Private Authority and International Affairs* (SUNY Press, 1999); R.B. Hall & T.J. Biersteker, *The Emergence of Private Authority in Global Governance* (Cambridge University Press, 2002); T. Büthe & W. Mattli, *The New Global Rulers: The Privatization of Regulation in the World Economy* (Princeton University Press, 2011); Green, n. 3 above.

<sup>8</sup> On frameworks, see B. Eberlein et al., ‘Transnational Business Governance Interactions: Conceptualization and Framework for Analysis’ (2014) 8(1) *Regulation & Governance*, pp. 1–21. On cases, see T. Porter, ‘Technical Systems and the Architecture of Transnational Business Governance Interactions’ (2014) 8(1) *Regulation & Governance*, pp. 110–25; L.H. Gulbrandsen, ‘Dynamic Governance Interactions: Evolutionary Effects of State Responses to Non-State Certification Programs’ (2014) 8(1) *Regulation & Governance*, pp. 74–92; B. Cashore & M.W. Stone, ‘Does California Need Delaware? Explaining Indonesian, Chinese, and United States Support for Legality Compliance of Internationally Traded Products’ (2014) 8(1) *Regulation & Governance*, pp. 49–73; T. Bartley, ‘Transnational Governance and the Re-Centered State: Sustainability or Legality?’ (2014) 8(1) *Regulation & Governance*, pp. 93–109; G. Auld et al., ‘The Emergence of Non-State Market Driven (NSMD) Global Environmental Governance: A Cross Sectoral Assessment’, in M.A. Delmas & O.R. Young (eds), *Governance for the Environment: New Perspectives* (Cambridge University Press, 2009), pp. 183–218.

of governance institutions (such as information and networking, capacity building, and rule making) which, we argue, do not all conform to the definition of private authority.<sup>9</sup> As such, this article advances extant literature in two ways. Firstly, we seek to add private authority (as defined below) to the study of regime complexity, just as early authors added it to the study of regimes.<sup>10</sup> We show that including private authority in the study of regime complexity elucidates previously overlooked types of interaction. These interactions suggest distinct ways in which private authority can affect the overall design of the regime complex and thereby improve its problem-solving capacity. Secondly, we identify four mechanisms through which private authority can affect the problem-solving ability of the regime complex. At different phases of the policy process, private authority can: (i) serve as an incubator for ideas; (ii) provide a reformulation of the problem; (iii) supply a new institutional avenue to diffuse public rules; and (iv) contribute to rule harmonization through ‘incorporation by reference’.

Our contribution focuses exclusively on the interaction between public authority and private *rule-making* activities. We do not include other forms of private governance – information and networking, for instance, which do not fall within our definition of private authority.

We also recognize that private authority is not always a positive influence on environmental governance. Its interaction with public authority does not necessarily produce beneficial outcomes.<sup>11</sup> However, by identifying and illustrating the ways in which private authority contributes to the problem-solving ability of regime complexes, we aim to advance the literature towards the development of a causal theory which can identify conditions under which we should expect benign or deleterious outcomes of public–private interactions.

Our contribution is two-fold. Firstly, we argue that private authority has been largely excluded from the regime complex literature to date, even though interactions between public and private authority have been discussed in other literatures, which we explore below; we aim to bring these literatures closer together. The omission from the regime complex literature is not just cosmetic, but has real consequences for understanding how regime complexes evolve and, ultimately, whether and how they solve collective action problems. We therefore argue that the work to date has paid insufficient attention to how the boundaries of a given regime complex are drawn. Redraw the boundaries to include private authority, and a very different picture emerges. Secondly, we add to a growing literature on public–private interactions<sup>12</sup> to

<sup>9</sup> See, e.g., K.W. Abbott, ‘The Transnational Regime Complex for Climate Change’ (2012) 30(4) *Environment and Planning C: Government and Policy*, pp. 571–90; A. Orsini, ‘Multi-Forum Non-State Actors: Navigating the Regime Complexes for Forestry and Genetic Resources’ (2013) 13(3) *Global Environmental Politics*, pp. 34–55; K.W. Abbott, ‘Strengthening the Transnational Regime Complex for Climate Change’ (2014) 3(1) *Transnational Environmental Law*, pp. 57–88.

<sup>10</sup> Cutler, Haufler & Porter, n. 7 above.

<sup>11</sup> D. Fuchs & A. Kalfagianni, ‘The Causes and Consequences of Private Food Governance’ (2010) 12(3) *Business and Politics*, available at: <http://www.degruyter.com/view/j/bap.2010.12.3/bap.2010.12.3.1319/bap.2010.12.3.1319.xml>; F. Mayer & G. Gereffi, ‘Regulation and Economic Globalization: Prospects and Limits of Private Governance’ (2010) 12(3) *Business & Politics*, pp. 1–25.

<sup>12</sup> Eberlein et al., n. 8 above.

show that private authority can enhance the problem-solving ability of regime complexes through four different mechanisms. If these dynamic effects are included, the potential influence of private authority on world politics changes considerably.

The article proceeds as follows. The next section considers the definition of ‘private authority’, followed by a review of the literature on regime complexes and their effects (Section 3). Building on the recent research on private authority, Section 4 carefully describes four mechanisms through which public and private authority interact. Section 5 is the core of the empirical analysis: we first describe our three cases – climate change, tropical commodities, and fisheries – and then trace the interaction of public and private authority in each to establish the microfoundations of our arguments. The final section draws broader lessons for work on regime complexes, which incorporate our insights about the role of private authority.

## 2. DEFINING PRIVATE AUTHORITY

Broadly speaking, private authority can be understood as situations in which non-state actors make rules or set standards, which other actors in world politics adopt.<sup>13</sup> This definition is consistent with the literature on transnational regulation, which highlights two central facets of private authority. Firstly, non-state actors must create the rules, which are designed to shape behaviour.<sup>14</sup> Non-state actors may include non-governmental organizations (NGOs), private firms, multinational corporations, and transnational networks comprising combinations of these actors. Secondly, actors in world politics must adopt and adhere to the rules; that is, they must alter their behaviour in some way as a result of private authority.<sup>15</sup> Because our study focuses on regime complexes, we focus exclusively on *transnational* forms of private authority – non-state actors that work across borders both above and below the level of the nation-state. Of course, private authority exists also at the national level, but we do not consider this aspect in this article.

Our definition encompasses rules for different game-theoretic structures. Private authority includes standards, where network externalities generate incentives to comply (that is, coordination games). It also encompasses situations where compliance requires ongoing incentives to overcome free-riding (that is, the prisoner’s dilemma).<sup>16</sup> Others are more restrictive in their definitions. Abbott and Snidal, for instance, focus only on those rules that seek to address prisoner’s

<sup>13</sup> Green, n. 3 above; R. Falkner, ‘Private Environmental Governance and International Relations: Exploring the Links’ (2003) 3(2) *Global Environmental Politics*, pp. 72–87.

<sup>14</sup> *Ibid.*; Cutler, Hauffler & Porter, n. 7 above.

<sup>15</sup> Our definition is thus generally consistent with authority defined as ‘the ability to induce deference in others’ by D. Avant, M. Finnemore & S.K. Sell (eds), *Who Governs the Globe?* (Cambridge University Press, 2010), p. 9.

<sup>16</sup> For discussion of compliance processes, see O. Perez, ‘Private Environmental Governance as Ensemble Regulation: A Critical Exploration of Sustainability Indexes and the New Ensemble Politics’ (2011) 12(2) *Theoretical Inquiries in Law*, pp. 543–79; Bütthe & Mattli, n. 7 above; G. Auld, ‘Private Market-Based Regulations: What They Are, and What They Mean for Land-Use Governance’, in K. Seto & A. Reenberg (eds), *Rethinking Global Land Use in an Urban Era* (The MIT Press, 2014), pp. 217–38.

dilemmas, rather than simply coordination problems.<sup>17</sup> Cashore and colleagues offer a similar restriction.<sup>18</sup> Our broader interest in rules aims to reflect that private authority can be a source of rule making that addresses situations where externality incentives apply, where coordination incentives apply, or where both may occur.<sup>19</sup>

We emphasize that the targets of private rules need not be states; indeed, generally they are not. For instance, the targets of the Forest Stewardship Council (FSC), a well-studied private certification programme, are timber producers and companies which trade and sell forest products.<sup>20</sup> Private authority can also include instances in which states delegate governance roles or tasks to non-state actors in international treaties or through international organizations. Although this type of delegated private authority falls within our definition, it will not be considered in this article.<sup>21</sup> We omit delegated authority because it derives from states; thus, interactions are both inevitable *and* anticipated. Rather, we focus on instances when non-state actors create rules and persuade other actors to adopt those rules without the *ex ante* transfer of authority by states.

Other scholars who examine public and private interactions include governance activities beyond rule making. Abbott's delineation of the transnational regime complex for climate change includes initiatives that set standards and commitments (closest to our focus on rule making), perform operational functions like capacity building, share information and network, and provide finance.<sup>22</sup> The study by Andonova, Betsill and Bulkeley, also of climate change, examines initiatives that share information, perform capacity building and implementation, or undertake rule making.<sup>23</sup> Eberlein and colleagues focus on transnational business governance (with an illustration from the forest sector), where governance encompasses 'organized and sustained attempts to change the behaviour of target actors to further a collective end, through rules or norms and means of implementation and enforcement'.<sup>24</sup>

While we are sympathetic with the aims of these broader efforts to delineate the potential full extent of the public and private elements of climate governance

<sup>17</sup> K.W. Abbott & D. Snidal, 'Strengthening International Regulation Through Transnational New Governance: Overcoming the Orchestration Deficit' (2009) 42(2) *Vanderbilt Journal of Transnational Law*, pp. 501–78.

<sup>18</sup> B. Cashore, 'Legitimacy and the Privatization of Environmental Governance: How Non-State Market-Driven (NSMD) Governance Systems Gain Rule-Making Authority' (2002) 15(4) *Governance*, pp. 503–29; S. Bernstein & B. Cashore, 'Can Non-State Global Governance Be Legitimate? An Analytical Framework' (2007) 1(4) *Regulation & Governance*, pp. 347–71.

<sup>19</sup> See also Büthe & Mattli, n. 7 above.

<sup>20</sup> Cashore, Auld & Newsom, n. 5 above; G. Gereffi, J. Humphrey & T. Sturgeon, 'The Governance of Global Value Chains' (2005) 12(1) *Review of International Political Economy*, pp. 78–104.

<sup>21</sup> Green, n. 3 above; T. Büthe, 'The Globalization of Health and Safety Standards: Delegation of Regulatory Authority in the SPS Agreement of the 1994 Agreement Establishing the World Trade Organization' (2008) 71(1) *Law and Contemporary Problems*, pp. 219–56.

<sup>22</sup> Abbott, n. 9 above.

<sup>23</sup> L.B. Andonova, M.M. Betsill & H. Bulkeley, 'Transnational Climate Governance' (2009) 9(2) *Global Environmental Politics*, pp. 52–73. See also M. Hoffmann, *Climate Governance at the Crossroads: Experimenting with a Global Response after Kyoto* (Oxford University Press, 2011).

<sup>24</sup> Eberlein et al., n. 8 above, p. 3.

(or governance of other problems), our focus on private authority enables us to gain clearer analytic traction on specific interactions that may occur, and to map their consequences. We encourage more research, perhaps following the conceptual framework of Eberlein and colleagues for the study of interactions, to examine how, for instance, transnational governance initiatives that focus on information and networking may operate through certain additional mechanisms and have other kinds of effect. Indeed, drawing from work on epistemic communities<sup>25</sup> or boundary organizations<sup>26</sup> may be a fruitful avenue for such investigations.

### 3. THE EFFECTS OF REGIME COMPLEXITY

This section reviews the literature on regime complexity and other relevant works that describe interactions between public and private authority. A regime complex is defined as ‘an array of partially overlapping and non-hierarchical institutions governing a particular issue-area’.<sup>27</sup> It is an analytical unit that delimits areas of institutional density, exhibiting three key characteristics. Regime complexes comprise ‘elemental regimes’ which may functionally overlap. As Raustiala and Victor discuss,<sup>28</sup> the elemental regimes in the regime complex for plant genetic resources include entities such as the Food and Agriculture Organization (FAO) of the United Nations (UN), the UN Convention on Biological Diversity (CBD),<sup>29</sup> and the World Trade Organization’s (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).<sup>30</sup> Each of these elemental regimes is governed by a separate international agreement, with its own organizational structure. Secondly, there is no agreed hierarchy to resolve conflicts among regimes. Thirdly, because of the density of governance arrangements, regime complexes exhibit path dependence; current rules constrain and shape the creation of new rules.<sup>31</sup> Beyond plant genetic resources, several global problems have been studied explicitly as regime complexes, including energy, food security, and humanitarian relief.<sup>32</sup> In particular, there has been a flurry of recent work on regime complexity in the context of climate change, though these

<sup>25</sup> P.M. Haas, ‘Introduction: Epistemic Communities and International Policy Coordination’ (1992) 46(1) *International Organization*, pp. 1–35.

<sup>26</sup> J.-F. Morin et al., ‘Boundary Organizations in Regime Complexes: A Social Network Profile of IPBES’ (2016) *Journal of International Relations and Development* (forthcoming).

<sup>27</sup> K. Raustiala & D.G. Victor, ‘The Regime Complex for Plant Genetic Resources’ (2004) 58(2) *International Organization*, pp. 277–309.

<sup>28</sup> Ibid. Orsini and colleagues offer an alternative, much more complicated (and, we think, problematic) definition: A. Orsini, J.-F. Morin & O. Young, ‘Regime Complexes: A Buzz, a Boom or a Boost for Global Governance’ (2013) 19(1) *Global Governance*, pp. 27–39.

<sup>29</sup> Rio de Janeiro (Brazil), 5 June 1992, in force 29 Dec. 1993, available at: <http://www.cbd.int>.

<sup>30</sup> Marrakesh (Morocco), 15 Apr. 1994, in force 1 Jan. 1995, available at: [http://www.wto.org/english/docs\\_e/legal\\_e/27-trips.pdf](http://www.wto.org/english/docs_e/legal_e/27-trips.pdf).

<sup>31</sup> Raustiala & Victor, n. 27 above.

<sup>32</sup> R.O. Keohane & D.G. Victor, ‘The Regime Complex for Climate Change’ (2011) 9(1) *Perspectives on Politics*, pp. 7–23; J. Colgan, R.O. Keohane & T. Van de Graaf, ‘Punctuated Equilibrium in the Energy Regime Complex’ (2012) 7(2) *Review of International Organizations*, pp. 117–43; M.J. Struett, M.T. Nance & D. Armstrong, ‘Navigating the Maritime Piracy Regime Complex’ (2013) 19(1) *Global Governance*, pp. 93–104; A. Betts, ‘Regime Complexity and International Organizations: UNHCR as a Challenged Institution’ (2013) 19(1) *Global Governance*, pp. 69–81.

works do not explicitly invoke this terminology.<sup>33</sup> We acknowledge that they are useful contributions to an emerging literature. While recognizing that research in this area is relatively new and still developing, we point to two shortcomings of existing research that we aim to address in this article. These oversights, in our view, limit the conceptual ability of the regime complex to explain both governance arrangements and their outcomes.

Our first critique concerns the way in which the concept has been defined and operationalized. With few exceptions, the foundational literature focuses on *public* authority, leaving many, potentially important non-hierarchical and overlapping private rule-making institutions unattended. For example, Raustiala and Victor note that regime complexes are ‘marked by the existence of several legal agreements’.<sup>34</sup> In their description of the regime complex for climate change, Keohane and Victor focus on multilateral agreements and programmatic efforts by international organizations.<sup>35</sup> A special issue by Alter and Meunier similarly focuses on the institutional fora created by multilateral arrangements.<sup>36</sup> (The exception in that issue is Kelley’s work on election monitoring, which considers the role of non-state actors.)<sup>37</sup> Orsini and colleagues describe a network of three or more international regimes with potentially problematic interactions.<sup>38</sup> Similarly, earlier work by Aggarwal, which considers the nesting arrangements and parallel institutions under conditions of complexity, is limited to two institutional forms: bilateral and multilateral.<sup>39</sup>

More recent work acknowledges that private authority has been overlooked. It incorporates private authority into the broader governance landscape, but casts a wide net to include many types of institution.<sup>40</sup> Abbott, for instance, notes that standards and commitment initiatives (governance institutions that would fit our definition of private authority) are relatively rare on the transnational private governance triangle compared with their prevalence in the public regime complex for climate governance.<sup>41</sup> Including such diverse institutions vastly increases the types of

<sup>33</sup> M. Betsill et al., ‘Building Productive Links between the UNFCCC and the Broader Global Climate Governance Landscape’ (2015) 15(2) *Global Environmental Politics*, pp. 1–10; C.F. Sabel & D.G. Victor, ‘Governing Global Problems under Uncertainty: Making Bottom-up Climate Policy Work’ (2015) *Climatic Change*, pp. 1–13; A.J. Jordan et al., ‘Emergence of Polycentric Climate Governance and Its Future Prospects’ (2015) 5(11) *Nature Climate Change*, pp. 977–82.

<sup>34</sup> Raustiala & Victor, n. 27 above, p. 279.

<sup>35</sup> Keohane & Victor, n. 32 above.

<sup>36</sup> K.J. Alter & S. Meunier, ‘The Politics of International Regime Complexity’ (2009) 7(1) *Perspectives on Politics*, pp. 13–24.

<sup>37</sup> J. Kelley, ‘The More the Merrier? The Effects of Having Multiple International Election Monitoring Organizations’ (2009) 7(1) *Perspectives on Politics*, pp. 59–64.

<sup>38</sup> Orsini, Morin & Young, n. 28 above, p. 29.

<sup>39</sup> V.K. Aggarwal, ‘Reconciling Multiple Institutions: Bargaining, Linkages and Nesting’, in V.K. Aggarwal (ed.), *Institutional Designs for a Complex World: Bargaining, Linkages, and Nesting* (Cornell University Press, 1998), pp. 1–31.

<sup>40</sup> Andonova, Betsill & Bulkeley, n. 23 above; Hoffmann, n. 23 above; H. Bulkeley et al., *Transnational Climate Change Governance* (Cambridge University Press, 2014); K.W. Abbott & T. Hale, ‘Orchestrating Global Solutions Networks: A Guide for Organizational Entrepreneurs’ (2014) 9(1) *Innovations*, pp. 195–212.

<sup>41</sup> Abbott (2012), n. 9 above, p. 575.



interaction that might occur with public authority, and complicates the analysis. To keep our analysis focused, and to group together like institutions, we restrict our investigation to private rule-making activities, and their interactions with equivalent public institutions.

Our second critique builds on the first. We demonstrate how the effects of complexity change when one includes private authority in the regime complex. To date, the literature has identified several different effects of complexity; these describe what happens when a single regime no longer serves as the focal point for international cooperation. One set of effects resulting from complexity reflects what happens when actors can choose from a variety of tactics to avoid inconvenient rules. These include forum shopping, regime shifting, and capitalizing upon inconsistencies among rules.<sup>42</sup> Goldstein and Steinberg describe a shift in trade rule making from interstate negotiations to a judicial process for resolving interstate disputes.<sup>43</sup> Helfer describes attempts by various actors to shift the governance of intellectual property rights both to and away from the TRIPS Agreement.<sup>44</sup> Merry shows how a group of academics and the UN Development Programme (UNDP) developed and promulgated the Human Development Index (HDI) as an alternative metric to Gross Domestic Product (GDP) for development to bypass the interests of states and the resistance of the UN Statistical Division.<sup>45</sup> Mattli and Büthe demonstrate a shift in the form of regulation – from domestic to international product standards – and discuss how the degree of complementarity between national and international standard-setting institutions affects which countries have the most influence on the content of international standards.<sup>46</sup> Other scholars have identified situations in which states forum shop to find institutions most hospitable to their political goals.<sup>47</sup>

Another commonly identified effect of complexity, drawn from the literature on environmental governance, is fragmentation, which is often perceived to be a hindrance to effective governance. Fragmented governance is characterized by a patchwork of institutions which vary in their ‘constituencies, spatial scope, subject matter and objectives’.<sup>48</sup> Literature on the creation of a World Environment Organization (WEO) considers various strategies to minimize the ill effects of

<sup>42</sup> Raustiala & Victor, n. 27 above; Betts, n. 32 above; L. Helfer, ‘Regime Shifting in the International Intellectual Property System’ (2009) 7(1) *Perspectives on Politics*, pp. 39–44; E. Burton, ‘The Power Politics of Regime Complexity: Human Rights Trade Conditionality in Europe’ (2009) 7(1) *Perspectives on Politics*, pp. 33–7.

<sup>43</sup> J.L. Goldstein & R.H. Steinberg, ‘Regulatory Shift: The Rise of Judicial Liberalization at the WTO’, in W. Mattli & N. Woods (eds), *The Politics of Global Regulation* (Princeton University Press, 2009), pp. 211–41.

<sup>44</sup> N. 30 above. See Helfer, n. 42 above.

<sup>45</sup> S.E. Merry, ‘Global Legal Pluralism and the Temporality of Soft Law’ (2014) 46(1) *The Journal of Legal Pluralism and Unofficial Law*, pp. 108–22.

<sup>46</sup> W. Mattli & T. Büthe, ‘Setting International Standards: Technological Rationality or Primacy of Power’ (2003) 56(1) *World Politics*, pp. 1–42.

<sup>47</sup> C.L. Davis, ‘International Institutions and Issue Linkage: Building Support for Agricultural Trade Liberalization’ (2004) 98(1) *American Political Science Review*, pp. 153–69.

<sup>48</sup> F. Zelli, ‘The Fragmentation of the Global Climate Architecture’ (2011) 2(2) *Wiley Interdisciplinary Reviews: Climate Change*, pp. 255–70.



fragmentation through strategies such as centralization, greater coordination, and clustering.<sup>49</sup> However, as Biermann and colleagues point out, ‘fragmentation is a relative concept’<sup>50</sup> as all global governance architectures exhibit it to some degree. Without a transparent and replicable way to measure and compare degrees of fragmentation, we do not find this to be a compelling critique of governance structures.

There are other frameworks which seek to characterize the complex nature of global governance institutions. For example, work on institutional interplay emphasizes the interactions among institutions that occur for both functional and political reasons.<sup>51</sup> The growing body of work on orchestration – defined as ‘a wide range of directive and facilitative measures designed to convene, empower, support, and steer public and private actors engaged in regulatory activities’ – adopts a similar interest by examining how states and international organizations can and should intervene to improve the effectiveness of highly fragmented transnational governance.<sup>52</sup>

Finally, in their special issue on regime complexity Alter and Meunier identify a third set of ‘feedback effects’ resulting from institutional complexity, which they describe as competition and reverberation.<sup>53</sup> Competition among institutions and actors can give rise to both positive and negative effects. Negative effects include turf battles, repetitive efforts, and uncoordinated policy that is easily undone.<sup>54</sup> Positive effects include productive experimentation, diffusion of risk, a race to the top, and increased resources to address the issue. Reverberation occurs when changes in one institution cause changes in another, which are unintended and/or difficult to control.<sup>55</sup> We agree that changes in one part of a complex system can have unintended effects on other parts of the system; however, the notion of reverberation is underspecified.

<sup>49</sup> A. Najam, ‘The Case Against a New International Environmental Organization’ (2003) 9(3) *Global Governance*, pp. 367–84; J. Whalley & B. Zissimos, ‘What Could a World Environmental Organization Do?’ (2001) 1(1) *Global Environmental Politics*, pp. 29–34; W.B. Chambers & J.F. Green, *Reforming International Environmental Governance: From Institutional Limits to Innovative Reforms* (United Nations University Press, 2005).

<sup>50</sup> F. Biermann et al., ‘The Fragmentation of Global Governance Architectures: A Framework for Analysis’ (2009) 9(4) *Global Environmental Politics*, pp. 14–40, at 17.

<sup>51</sup> T. Gehring & S. Oberthur, ‘Interplay: Exploring Institutional Interaction’, in O.R. Young, L.A. King & H. Schroeder (eds), *Institutions and Environmental Change: Principal Findings, Applications, and Research Frontiers* (The MIT Press, 2008), pp. 187–224; O.R. Young, *The Institutional Dimensions of Environmental Change: Fit, Interplay, and Scale* (The MIT Press, 2002).

<sup>52</sup> Abbott & Snidal, n. 17 above; K.W. Abbott & D. Snidal, ‘International Regulation without International Government: Improving IO Performance through Orchestration’ (2010) 5(3) *The Review of International Organizations*, pp. 315–44.

<sup>53</sup> Although Alter & Meunier (n. 36 above, pp. 19–21) refer to these as ‘feedback effects’, this is accurate in the strict sense of systems theory. In systems theory, a feedback loop can be understood as instances in which a stock (in this case, institutions) affects a flow (in this case, rule-making activities) in or out of the stock. Alter and Meunier arguably fail to describe clearly how the flow affects the growth, diminution or change in the stock. On systems theory, see D.H. Meadows, *Thinking in Systems: A Primer* (Chelsea Green, 2008).

<sup>54</sup> Alter & Meunier, n. 36 above.

<sup>55</sup> *Ibid.*, pp. 19–21.

We argue that forum shopping, fragmentation, competition, and the underspecified ‘reverberation’ are the effects of complexity that result from interactions among *public* institutions. However, if private authority is included in the regime complex, then the types of observed effects of complexity expand. Specifically, we argue that private authority can improve the problem-solving capacity of regime complexes through the following four different mechanisms:

- to serve as an incubator for ideas;
- to provide a reformulation of the problem;
- to supply a new institutional avenue to diffuse public rules; and/or
- to contribute to rule harmonization through ‘incorporation by reference’.

#### 4. THE EFFECTS OF PRIVATE AUTHORITY ON REGIME COMPLEXES

We now turn to the mechanisms through which private authority can affect the larger regime complex. These mechanisms build on our knowledge about the processes of both public and private rule making to uncover the potential effects of private authority on the regime complex.

Before describing the mechanisms, we contrast various design and operational principles of public and private authority.

##### 4.1. *Differences between Public and Private Authority*

We know from existing research that certain institutional and organizational rigidities affect the operation of intergovernmental processes.<sup>56</sup> International institutions often present the challenge of path dependence. Keohane, for instance, notes that increasing returns and sunk costs help to explain the persistence of institutions that are not optimally efficient.<sup>57</sup> Similarly, Young explains inertia in regimes as a consequence of collective-choice rules that ossify regime requirements if some states stand to lose from a new arrangement.<sup>58</sup> Moreover, international organizations are prone to dysfunctions that direct efforts away from their core mandate. Barnett and Finnemore provide an extensive assessment of the causes of these challenges.<sup>59</sup> For example, material concerns can drive international organizations to pursue their own interests over the goals outlined by their mandate.

We suggest that, though public and private authority each face institutional inertia and organizational dysfunction, certain rigidities in public governance are less acute

<sup>56</sup> T.N. Hale, D. Held & K. Young, *Gridlock: Why Global Cooperation is Failing when We Need It Most* (Polity, 2013).

<sup>57</sup> R.O. Keohane, ‘International Institutions: Two Approaches’ (1988) 32(4) *International Studies Quarterly*, pp. 379–96.

<sup>58</sup> O. Young, ‘The Politics of International Regime Formation: Managing Natural Resources and the Environment’ (1989) 43(3) *International Organization*, pp. 349–75.

<sup>59</sup> M.N. Barnett & M. Finnemore, *Rules for the World: International Organizations in Global Politics* (Cornell University Press, 2004).

in private governance. Consequently, the inclusion of private authorities in a regime complex may be beneficial by tempering the ossification tendencies that plague public regime complexes.

In contrasting the characteristics of public authority with private authority, three key differences and their implications become clear. Firstly, whereas states are the key members of intergovernmental regimes with responsibilities for domestic implementation and enforcement, private authority generally targets those actors responsible for economic activities in a given sector. Most often, the targets of private transnational regulation are not sovereign states but non-state actors, who voluntarily accede to a private regulatory regime. For example, private authority projected by the FSC is directed at forest product producers and at companies that trade and sell forest products, rather than at governments.

Secondly, because private rules are voluntary – firms and other non-state actors decide whether or not to adopt them – there is generally greater turnover of regulatory targets than in the case of public authority. States do emerge and fail, and they may enter into and exit from intergovernmental agreements; however, the level of volatility among corporations is, without doubt, orders of magnitude higher. If compliance with private regulation becomes too costly or otherwise undesirable, firms can simply exit from the regime either by ending compliance or divesting from the business operation targeted by the rules. The changing landscape of regulatory targets means that regulatory gridlock is less likely to occur in private authority. Interests can change more regularly with entry and exit, and private governance institutions form, collapse, and restructure with greater ease. Without the external constraints imposed by states, private rule makers are freer than their public counterparts to make organizational and regulatory changes as needed.<sup>60</sup> For example, private regulatory institutions faced with competition from similar organizations can shift the focus of their activities, or even their mandate, with relative ease. Certain initiatives are constrained by influential stakeholders – which include funders and members – but most have considerable decision-making discretion.<sup>61</sup> By contrast, an equivalent change by an international organization would require the approval of all member states.<sup>62</sup> Of course, state preferences are not immutable; they are subject to change for any number of reasons. However, these changes do not necessarily translate to a change in state participation in international law and organizations. The greater level of decision-making discretion held by private rule-making initiatives means they are able to change direction and react more quickly than an equivalent intergovernmental process, and when they are not able to effect such changes, they can simply form a new private initiative.

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<sup>60</sup> G. Auld, *Constructing Private Governance: The Rise and Evolution of Forest, Coffee, and Fisheries Certification* (Yale University Press, 2014).

<sup>61</sup> Differences in the governance of the Marine Stewardship Council (MSC) and the FSC are illustrative. Broader reviews have also shown that many private regulatory institutions have highly varied stakeholder participation or engagement: see <http://www.standardsmap.org>.

<sup>62</sup> K.W. Abbott, J.F. Green & R.O. Keohane, 'Organizational Ecology and Institutional Change in Global Governance' (2016) 70(Spring) *International Organization*, pp. 1–31.

Thirdly, forms of private authority are often less highly legalized and therefore are more easily changed or reversed.<sup>63</sup> The administrative procedures governing private regulators dictate how rules are created and revised; they are the equivalent to collective-choice rules in public authority.<sup>64</sup> However, private governance regulators have considerable discretion in creating and amending these procedures. Thus, the consensus rules that apply in some international conventions are rare in private authority, and very few private rule makers have procedures that allow stakeholders to challenge how they make decisions. The lack of administrative review, or stakeholder standing, is a sign of the weak legalization of accountability mechanisms for enforcing procedural obligations.<sup>65</sup> One consequence of this limited legalization is that private regulators can more easily change the rules in response to new information or circumstances than can public regulators. Because private authority is generally less legalized, we posit that it is actually more flexible in terms of the kinds of institutional structure it can create at the outset. It has greater flexibility to design institutions that can respond to difficulties encountered among public institutions in the regime complex. In this sense, we can think of private authority as politically similar to soft law, where actors have preferences for more flexible arrangements.<sup>66</sup> It may also mean less opposition to private governance arrangements, since the targets of private regulation know that rules can be amended.

What do these three characteristics mean for interactions between public and private authority within a regime complex? We identify four mechanisms of interaction that roughly correspond to different phases of the policy-making process.<sup>67</sup> In the first mechanism, private authority serves as an incubator in which different policy approaches can exist until their time becomes ripe. The second mechanism is problem reformulation, where private actors reframe the issue in a way that overcomes extant political obstacles. This happens most frequently at the agenda-setting phase, but can also happen during policy formulation and negotiation phases, so that approaches are viewed as vetted and appropriate once implementation begins. In the third mechanism, private authority serves as an additional means through which to diffuse public authority, generally in the implementation phase. Finally, private authority may provide rules that are eventually incorporated into public regulations. We describe each of these mechanisms below.

<sup>63</sup> K.W. Abbott et al., 'The Concept of Legalization' (2000) 54(3) *International Organization*, pp. 401–20.

<sup>64</sup> Young, n. 58 above; E. Ostrom, *Governing the Commons* (Cambridge University Press, 1992).

<sup>65</sup> See L.H. Gulbrandsen, 'Accountability Arrangements in Non-State Standards Organizations: Instrumental Design and Imitation' (2008) 15(4) *Organization*, pp. 563–83; L.H. Gulbrandsen & G. Auld, 'Contested Accountability Logics in Evolving Nonstate Certification for Fisheries Sustainability' (2016) 16(2) *Global Environmental Politics* (forthcoming).

<sup>66</sup> K.W. Abbott & D. Snidal, 'Hard and Soft Law in International Governance' (2000) 54(3) *International Organization*, pp. 421–56; A.T. Guzman & T.L. Meyer, 'International Soft Law' (2010) 2(1) *Journal of Legal Analysis*, pp. 171–225.

<sup>67</sup> Abbott and Snidal refer to agenda setting, negotiation, implementation, monitoring and enforcement stages of the policy-making process: K.W. Abbott & D. Snidal, 'The Governance Triangle: Regulatory Standards Institutions and the Shadow of the State', in W. Mattli & N. Woods (eds), *The Politics of Global Regulation* (Princeton University Press, 2009), pp. 44–88.

#### 4.2. *Idea Incubator*

The first way in which private authority may interact with public authority is by providing an ‘incubator’ for ideas, which may be drawn on by public actors at some point in the future. Much like Kingdon’s primordial soup of policy ideas,<sup>68</sup> private authority serves as a space in which ideas can sit dormant until their time is right. As others have argued, private authority can serve as an arena of experimentation and learning, open to projects which may not be feasible within intergovernmental fora.<sup>69</sup> As noted above, there is greater potential fluidity in private institutions. Hence, private authority may provide an opportunity to experiment with alternative governance solutions outside the intergovernmental arena.<sup>70</sup> According to this view, private authority serves as a space for experimenting with the implementation of different policies, which can coexist with other public responses. This ensures that the alternative private conceptualization is not systematically excluded from the agenda of a given regime complex; rather, it can remain ‘dormant’ until the demand for a new solution arises.<sup>71</sup> When thinking about addressing some of the dysfunctions of intergovernmental processes, such a latent idea can serve as the starting point for a broader regime transformation.<sup>72</sup> In essence, private authority creates an alternative approach which operates alongside existing public responses, to be reinserted if and when public institutions are more inclined.

Idea incubation implies that individual approaches are taken from private authority to public authority in a piecemeal way. Unlike problem reformulation – which we define to include an articulation of a problem and a proposed set of institutionalized solutions (in the form of rules) – idea incubation can be about smaller, discrete programmes and policies such as implementation of transparency measures or a particular approach to monitoring or accounting. In this respect, there are several observable implications of this causal mechanism. Firstly, private regulators involved with idea incubation should have long-standing activity and expertise in the issue area. Secondly, since incubation requires some trial and error, we should expect gradual uptake by public actors to ensure that the new idea works before wholesale implementation. Finally, we should expect the uptake of incubated ideas through processes of ‘bricolage’,<sup>73</sup> where the ideas are adapted to fit the purpose of the public authority.

<sup>68</sup> J. Kingdon, *Agendas, Alternatives, and Public Policies* (HarperCollins College, 1995), Ch. 6.

<sup>69</sup> C. Overdevest & J. Zeitlin, ‘Assembling an Experimentalist Regime: Transnational Governance Interactions in the Forest Sector’ (2014) 8(1) *Regulation & Governance*, pp. 22–48.

<sup>70</sup> Hoffmann (n. 23 above) broadens this argument to look at a wide range of climate experiments being undertaken at different governance levels by both public and private institutions. See also P. Newell & M. Paterson, *Climate Capitalism: Global Warming and the Transformation of the Global Economy* (Cambridge University Press, 2010). The experimentalist literature also points to this learning approach; however, it is not applied specifically to private actors: C.F. Sabel & J. Zeitlin, *Experimentalist Governance in the European Union: Towards a New Architecture* (Oxford University Press, 2008).

<sup>71</sup> Kingdon (n. 68 above, pp. 172–5) describes this as the process through which solutions become coupled with problems.

<sup>72</sup> C. Crouch & H. Farrell, ‘Breaking the Path of Institutional Development? Alternatives to the New Determinism’ (2004) 16(1) *Rationality and Society*, pp. 5–43.

<sup>73</sup> See J.L. Campbell, *Institutional Change and Globalization* (Princeton University Press, 2004).

### 4.3. *Problem Reformulation*

Given our supposition that private authority has greater autonomy from the strictures of intergovernmental processes, we posit that when faced with a problem that has reached the international agenda, private authority will search for ways in which to frame the problem that will garner political support. Private actors learn from the actions of others, sizing up the political landscape as well as the political constraints. When intergovernmental efforts stall, private actors may reframe the problem to alter the types of institutional response and the political winners and losers.<sup>74</sup> In this context, we expect to see sources of private authority constructing governance arrangements in ways that explicitly seek to respond to public authority and/or to address rigidities or other perceived failures in intergovernmental processes. Moreover, in contrast to idea incubation, reformulation of a problem allows for the use of different rules, modes of implementation, and approaches for monitoring and enforcement to address a problem.

We note that reframing need not be the result of public governance failures; private authority may offer an alternative frame for a problem in the absence of political gridlock. However, following Stone, we believe that alternative presentations of a problem are a baseline condition of all politics.<sup>75</sup> Since distribution of gains and losses depends on how the problem is defined, framing is a persistent condition of politics. This means that reframing is *always* possible. Nonetheless, we focus on problem reformulation here as a result of previous failures of public governance.

This mechanism has two observable implications. Firstly, in cases where failure in public governance occurs, we should expect to see the emergence of alternative rules and practices promulgated by private institutions to provide solutions to the same problem that was unsuccessfully addressed by public governance. The private alternative rules and practices should differ in content and approach from their publicly developed predecessors. Secondly, since a public governance failure of some sort has already occurred, we should expect to see reformulation occur in the rule-making and implementation stages of the public policy-making process, rather than in agenda setting.

### 4.4. *Diffusion of Public Authority*

The third mechanism through which private authority may affect the evolution of the regime complex is by serving as a means to diffuse public authority. According to this view, private authority actors provide additional venues for the use and adoption of public rules. Private rule makers may voluntarily adopt public rules, and apply them to their own targets of regulation, thus indirectly expanding the scope of public authority. Alternatively, they may build on public authority by coupling their rules with public rules, and expanding the overall scope of authority in the regime complex.

<sup>74</sup> On strategic approaches to problem definition in the policy process, see D.A. Rochefort & R.W. Cobb, *The Politics of Problem Definition: Shaping the Policy Agenda* (University Press of Kansas, 1994); D.A. Stone, *Policy Paradox and Political Reason* (Scott Foresman and HarperCollins, 1988).

<sup>75</sup> Stone, *ibid.*



Through this re-appropriation, private authority may serve to diffuse and reinforce public authority.<sup>76</sup>

Unlike delegation, where the state grants authority to private actors to undertake specific activities, diffusion captures situations where private actors work autonomously to deepen the institutionalization of public authority. For example, Tarrow suggests that international organizations serve a ‘coral reef’ function, attracting advocates to the locus of political activity, where they can then form connections among themselves.<sup>77</sup> In our version, forms of public authority attract private actors, who in turn build on extant public rules. Through their use and appropriation of public authority, private actors build off and build up the coral reef, potentially strengthening and expanding its effects. The observable implication of this mechanism is the substantive overlap between public and private rules. If private authority serves as a diffuser of public authority, it should adopt public rules and then modify them in ways that serve their goals.

#### 4.5. *Incorporation by Reference*

Incorporation by reference is the final mechanism for public–private interaction.<sup>78</sup> It refers to ‘the practice of codifying material published elsewhere by simply referring to it in the text of a regulation’.<sup>79</sup> Incorporation by reference occurs when public regulations adopt or build upon private rules. We view this as a strong interaction, in the sense that incorporation by reference provides a new institutional framework for private authority.

If incorporation by reference has occurred, then we should expect to find the ‘fingerprints’ of some or all private rules in public regulations. In some cases, this may entail specific protocols but, in others, it may be the principles upon which rules are based.

### 5. EMPIRICAL ANALYSIS

In order to explore the plausibility of our suggested mechanisms, this section traces the development of private authority in three regime complexes: (i) climate change; (ii) tropical commodities; and (iii) fisheries. These issue areas have been selected because they all are characterized by dense institutional landscapes and the presence of private authority. Dense landscapes provide more opportunities for interaction and, obviously, the presence of private authority is a requirement for public–private interactions. Thus we have chosen three ‘most likely’ cases to develop our arguments and illustrate how the mechanisms function. We acknowledge the limitations of such

<sup>76</sup> For similar mechanisms, see Perez, n. 16 above. For a preliminary application of this model to the interaction of public and private, see O. Perez, ‘International Environmental Law as a Field of Multi-Polar Governance: The Case of Private Transnational Environmental Regulation’ (2012) 10(2) *Santa Clara Journal of International Law*, pp. 285–96.

<sup>77</sup> S.G. Tarrow, *The New Transnational Activism* (Cambridge University Press, 2005), p. 27.

<sup>78</sup> We gratefully acknowledge the input of an anonymous reviewer in this discussion.

<sup>79</sup> E.S. Bremer, ‘Incorporation by Reference in an Open-Government Age’ (2013) 36(1) *Harvard Journal of Law Public Policy*, pp. 131–210, at 133.

an approach, and underscore the need for future work in other issue areas to evaluate the robustness of our arguments.

The empirical discussion proceeds in two steps. We first focus on the multilateral institutions that serve as the central public nodes of each regime complex and describe the ways in which public authority has failed to achieve its desired outcomes. We offer a brief assessment of the shortcomings of the public node of each regime complex. This is not meant to be a rigorous analysis of institutional processes or outcomes; rather, our aim is to identify opportunities for private authority to contribute to the problem-solving capacity of the regime complex. We then turn to the interactions of private authority with each major public node, as these are the focal point for rule-making activities within a given regime complex. If private authority serves as an idea incubator, it should provide policies or proposals that constitute the basis for experimentation in the public realm. If it provides a reformulation of the problem, private regimes will try to circumvent public focal points by creating alternative rules to address the problem. In the diffusion mechanism, we should expect to see private authority adopting, and then amending public rules. Finally, in instances of incorporation by reference, we expect public regulations to appropriate parts of private rules.

### 5.1. *The Cases*

#### *Climate Change*

The UN Framework Convention on Climate Change (UNFCCC)<sup>80</sup> provides the international legal foundation for the current climate regime complex. Parties agree to track and report their greenhouse gas (GHG) emissions and, in the case of developed nations, to create domestic policies to reduce emissions. The Kyoto Protocol to the UNFCCC<sup>81</sup> is the second major public node at the centre of the regime complex. It required developed countries to meet specific reduction targets, which they could achieve through domestic measures as well as international market mechanisms. Although it has waned in political importance, the Kyoto Protocol casts a long shadow over the current and future climate regime. The recent Paris Agreement<sup>82</sup> has broken down the long-standing division between developed and developing countries, though the main provisions of the UNFCCC still hold.

Critiques of the Kyoto Protocol are numerous: the required reductions were too small to have any measurable effect on climate change, the compliance mechanism was arcane and counter-intuitive, and the Clean Development Mechanism (CDM) was fundamentally unworkable.<sup>83</sup> In short, the Protocol failed to achieve even its own modest goals.

<sup>80</sup> New York, NY (US), 9 May 1992, in force 21 Mar. 1994, available at: <http://unfccc.int>.

<sup>81</sup> Kyoto (Japan), 11 Dec. 1997, in force 16 Feb. 2005, available at: [http://unfccc.int/kyoto\\_protocol/items/2830.php](http://unfccc.int/kyoto_protocol/items/2830.php).

<sup>82</sup> Annex to the Paris Decision of the Conference of Parties to the UNFCCC, Paris (France), 11 Dec. 2015, available at: <https://unfccc.int/resource/docs/2015/cop21/eng/109r01.pdf>.

<sup>83</sup> D.G. Victor, *The Collapse of the Kyoto Protocol and the Struggle to Slow Global Warming* (Princeton University Press, 2004); M. Wara, 'Is the Global Carbon Market Working?' (2007) 445(7128) *Nature*,

The recent Paris Agreement has been hailed as a breakthrough in climate politics,<sup>84</sup> in its erasing of the long-standing division between the developed and developing world. It has adopted a weak legal form, which counter-intuitively has allowed for more ambitious goals. Indeed, collectively, states have pledged to limit temperature increase to well below 2 degrees Celsius. It has also institutionalized a platform for ongoing non-state actor involvement. Pessimists maintain that despite state commitments to reduce GHG emissions and adopt other climate-friendly policies, the gap between proposed national actions (as set out in Nationally Determined Contributions (NDCs)) and the 2-degree goal is considerable – and rising.<sup>85</sup>

### *Tropical Commodities*

The set of institutions that have arisen to deal with terms of trade for basic commodities is more fragmented than those for climate change, though it centres around the UN Conference on Trade and Development (UNCTAD). UNCTAD supplanted the earlier Interim Coordination Committee for International Commodity Agreements, and focuses on promoting development by emphasizing market regulations to control commodity supplies and prices to enhance export earnings for developing countries.<sup>86</sup> This approach was reinforced in 1976 when UNCTAD established the Integrated Programme for Commodities (IPC), charged with overseeing the negotiation of commodity agreements for 18 goods, including tropical timber.<sup>87</sup>

Efforts to negotiate and maintain commodity agreements have met with varied success. Sugar and tin agreements were adopted in 1954; a coffee agreement was adopted in 1962; cocoa and natural rubber agreements were adopted in 1980 and 1981 respectively. Tropical timber followed in 1983.<sup>88</sup> However, just as the International Tropical Timber Agreement (ITTA)<sup>89</sup> emerged, the other agreements diminished in scope or broke down completely. By 1999, all major commodities agreements had either collapsed or they had been redirected from regulating commodity markets through quotas to focusing on facilitating commodity trade and development. UNCTAD remains the central public node, however, because of its

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pp. 595–6; J. Depledge, 'The Opposite of Learning: Ossification in the Climate Change Regime' (2006) 6(1) *Global Environmental Politics*, pp. 1–22.

<sup>84</sup> See, e.g., F. Harvey, 'Paris Climate Change Agreement: The World's Greatest Diplomatic Success', *The Guardian*, 14 Dec. 2015, available at: <http://www.theguardian.com/environment/2015/dec/13/paris-climate-deal-cop-diplomacy-developing-united-nations>.

<sup>85</sup> Updated information is available at: <http://climateactiontracker.org/global.html>.

<sup>86</sup> A. Mojarov & M. Arda, 'Commodities', in S. Kasahara & C. Gore (eds), *Beyond Conventional Wisdom in Development Policy: An Intellectual History of UNCTAD 1964–2004* (UNCTAD, 2004), pp. 61–71; UNCTAD, *The History of UNCTAD 1964–1984* (UNCTAD, 1985), p. 57.

<sup>87</sup> B. Khindaria, 'Timber Accord May Lead the Way', *Financial Times*, 13 Jan. 1982; D. Poore, *Changing Landscapes: The Development of the International Tropical Timber Organization and its Influence on Tropical Forest Management* (Earthscan, 2003); D. Humphreys, *Forest Politics: The Evolution of International Cooperation* (Earthscan, 1996).

<sup>88</sup> C.L. Gilbert, 'International Commodity Agreements: An Obituary Notice' (1996) 24(1) *World Development*, pp. 1–19; Humphreys, *ibid*.

<sup>89</sup> Geneva (Switzerland), 18 Nov. 1983, in force 1 Apr. 1985, available at: [https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&cmdtsg\\_no=XIX-26&chapter=19&lang=en](https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&cmdtsg_no=XIX-26&chapter=19&lang=en).

general mandate on matters of international trade and development, which are much broader than the commodities-specific agreements. Both the various commodity organizations and councils, along with UNCTAD, have had mixed results over time in facilitating trade in and the maintenance of tropical commodities.

### *Fisheries*

There are three main public nodes of the regime complex for fisheries management. Firstly, the FAO Committee on Fisheries serves as the forum to consider FAO work related to fisheries.<sup>90</sup> It presided over the negotiations on three major fisheries management agreements: the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Sea;<sup>91</sup> the Code of Conduct for Responsible Fisheries;<sup>92</sup> and the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing.<sup>93</sup> It also coordinates the work of regional fisheries management organizations (RFMOs).<sup>94</sup> Secondly, the 1982 UN Convention on the Law of the Sea (UNCLOS)<sup>95</sup> includes numerous provisions for fisheries. UNCLOS reinforces the role of the FAO and RFMOs in managing straddling and migratory fish stocks, which has been further addressed by the 1995 Agreement for the Implementation of the Provisions of UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.<sup>96</sup> Finally, in 1994, the UN General Assembly (UNGA) decided to discuss oceans and the law of the sea on an annual basis.<sup>97</sup>

In spite of the extensive fisheries instruments, the effectiveness of cooperative efforts to date raises considerable concern.<sup>98</sup> According to the FAO, marine catches

<sup>90</sup> FAO, 'Report of the Conference of FAO: Constitutional, Financial and Administrative Matters', Rome (Italy), 20 Nov.–9 Dec. 1965, available at: <http://www.fao.org/docrep/46140E/46140e0c.htm#amendment%20of%20article%20v%20of%20the%20constitution%20%20%20committee%20on%20fisheries>.

<sup>91</sup> Rome (Italy), 24 Nov. 1993, in force 24 Apr. 2003, available at: [http://www.fao.org/fileadmin/user\\_upload/legal/docs/012t-e.pdf](http://www.fao.org/fileadmin/user_upload/legal/docs/012t-e.pdf).

<sup>92</sup> FAO, *Code of Conduct for Responsible Fisheries* (FAO, 1996), available at: <http://www.fao.org/3/a-v9878e.pdf>.

<sup>93</sup> Rome (Italy), 22 Nov. 2009, not yet in force, available at: [http://www.fao.org/fileadmin/user\\_upload/legal/docs/2\\_037t-e.pdf](http://www.fao.org/fileadmin/user_upload/legal/docs/2_037t-e.pdf).

<sup>94</sup> S.H. Marashi, 'The Role of FAO Regional Fishery Bodies in the Conservation and Management of Fisheries', FAO Fisheries Circular No. 916, 1996, p. 65, available at: <http://www.fao.org/docrep/W3123E/W3123E07.htm>.

<sup>95</sup> Montego Bay (Jamaica), 10 Dec. 1982, in force 16 Nov. 1994, available at: [http://www.un.org/depts/los/convention\\_agreements/convention\\_overview\\_convention.htm](http://www.un.org/depts/los/convention_agreements/convention_overview_convention.htm).

<sup>96</sup> New York, NY (US), 4 Aug. 1995, in force 11 Dec. 2001, available at: [http://www.un.org/depts/los/convention\\_agreements/texts/fish\\_stocks\\_agreement/CONF164\\_37.htm](http://www.un.org/depts/los/convention_agreements/texts/fish_stocks_agreement/CONF164_37.htm); A.C. de Fontaubert, 'The Politics of Negotiation at the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks' (1995) 29(1–3) *Ocean & Coastal Management*, pp. 79–91; D.J. Doulman, 'Structure and Process of the 1993–1995 United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks', FAO, Dec. 1995, available at: <http://www.fao.org/docrep/v9929e/v9929e00.htm>.

<sup>97</sup> UNGA Resolution A/RES/49/28, 'Law of the Sea', UN Doc. A/RES/49/28, 19 Dec. 1994, available at: [http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/49/28&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/49/28&Lang=E).

<sup>98</sup> D. Pauly et al., 'The Future for Fisheries' (2003) 302(5649) *Science*, pp. 1359–61.

have been declining in recent years, and the percentage of over-exploited stocks has grown from 10% in the 1970s to around 30% as of 2011, the last year for which data are available.<sup>99</sup> Thus, although the density of international instruments on fisheries is extensive and growing, their implementation, compliance and enforcement remain challenges for the fisheries regime complex.<sup>100</sup>

### 5.2. *Idea Incubator: Evidence from the Cases*

The UN programme on Reduced Emissions from Deforestation and Forest Degradation (REDD) provides a clear illustration of how private authority works as an idea incubator. REDD is a mechanism designed to pay developing countries to preserve forests to sequester carbon. The idea of paying for improved forest management or forest protection has a long history, including debt for nature swaps – an idea conceived and implemented by NGOs. Thus, some of the earliest precursors of REDD originated outside the intergovernmental arena.<sup>101</sup>

Within the climate change regime complex, concerns over monitoring forest activities to ensure proper carbon accounting contributed to the extremely limited use of forest offsets in the Kyoto Protocol.<sup>102</sup> Since Kyoto was signed, an array of private rules and regulators have formed for the purposes of forest management, carbon accounting and trading, and agriculture and land use, all of which provide an incubator for different approaches to forest carbon offsets. Although the public part of the regime complex largely excluded forest carbon as a policy option, private authority in this area has steadily institutionalized over the same time period. These various forms of private authority have helped to demonstrate the feasibility of the policy in other arenas. In turn, these experiences have fed back into rounds of negotiations focused on a REDD mechanism, which broadened attention to forests within the climate regime. For example, private authority is now leading the way in developing methodologies for REDD projects.<sup>103</sup> In addition, private authority in the forest sector has developed methods and procedures around two key issues in REDD: (i) measuring, reporting and verification (MRV), and (ii) ensuring safeguards to prevent deleterious social or environmental effects of projects. The REDD+ decision in the Cancún Agreement in 2010<sup>104</sup> subsequently provided considerable funding for

<sup>99</sup> FAO, *The State of World Fisheries and Aquaculture: Opportunities and Challenges* (FAO, 2014), available at: <http://www.fao.org/3/a-i3720e.pdf>.

<sup>100</sup> K.L. Cochrane & D.J. Doullman, 'The Rising Tide of Fisheries Instruments and the Struggle to Keep Afloat' (2005) 360(1453) *Philosophical Transactions of the Royal Society London B – Biological Sciences*, pp. 77–94.

<sup>101</sup> P. Ayoub, J.F. Green & P. Katzenstein, 'Protean and Control Power: Environment, LGBT Rights and Bitcoin', paper prepared for 2016 Meeting of the International Studies Association, on file with the author.

<sup>102</sup> N. 81 above.

<sup>103</sup> The Verified Carbon Standard and the Climate, Community and Biodiversity Standard are dominating the voluntary carbon market with REDD projects: see M. Peters-Stanley et al., *Back to the Future: State of the Voluntary Carbon Markets 2011* (Bloomberg New Energy Finance/Ecosystem Marketplace, 2011).

<sup>104</sup> UNFCCC, Decision 1/CP.16, UN Doc. FCCC/CP/2010/7/Add.1, 15 Mar. 2011, available at: <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>.

a number of different forest-offset projects and programmes. The key point here is that the existence of private forest carbon offsets kept the idea alive, so that when public authority reconsidered this approach, it was viewed as a more viable programme for action. As a result, forest carbon offsets are now actively implemented in the intergovernmental part of the climate regime.

Tropical timber provides a further example of the idea incubator mechanism.<sup>105</sup> The International Tropical Timber Organization (ITTO) considered and subsequently rejected the idea of labelling in the late 1980s, although the labelling approach did not wholly disappear from the organization's agenda. Rather, the ITTO commissioned the London Environmental Economics Council, an environmental think tank, to investigate the feasibility of incentives for improved forest management. It concluded that trade was actually a relatively insignificant concern as very limited quantities of tropical timber were exported. It also promoted country-level certification schemes, rather than a global approach of the type discussed and pursued by FSC supporters.<sup>106</sup>

The important message here is that the FSC considered 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 approach to the problem has been important. Arguably, the FSC approach has helped to reinforce more recent attention to forest law enforcement and governance, which took hold over ten years after the formation of the FSC. The emphasis placed by the FSC on tracking forest products through global supply chains has become a central governance mechanism for public initiatives such as the European Union (EU) Timber Regulations,<sup>107</sup> the United States (US) Lacey Act,<sup>108</sup> and rules developed in other countries including Japan and Australia, which seek to exclude illegally produced timber from the forest product market place.<sup>109</sup> Timber tracking, in other words, was an idea that lay in waiting within private certification processes and has now become a central mechanism deployed by public authority.

### 5.3. *Problem Reformulation: Evidence from the Cases*

The climate change regime complex provides an instructive example of how private authority can reframe problems. Private authority outside intergovernmental arrangements first emerged around 2001, the year in which the US announced that the Kyoto Protocol was 'fatally flawed' and that it would not pursue ratification. As the world's largest emitter at the time, the US failure to participate threatened to completely

<sup>105</sup> Kingdon (n. 68 above, Ch. 8) describes the key moment when an idea is finally considered viable as the opening of the 'policy window'.

<sup>106</sup> F.P. Gale, *The Tropical Timber Trade Regime* (St. Martin's Press, 1998), p. 171; Poore, n. 87 above.

<sup>107</sup> Regulation (EU) No. 995/2010 laying down the Obligations of Operators Who Place Timber and Timber Products on the Market [2010] OJ L 295/23 (EU Timber Regulations).

<sup>108</sup> Lacey Act (1900) 16 USC §§ 3371–3378.

<sup>109</sup> B. Cashore & M.W. Stone, 'Can Legality Verification Rescue Global Forest Governance? Analyzing the Potential of Public and Private Policy Intersection to Ameliorate Forest Challenges in Southeast Asia' (2012) 18(May) *Forest Policy and Economics*, pp. 13–22.



unravel international cooperation. Concurrently, private actors began to create rules governing GHG emissions.<sup>110</sup> 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 did not assume a position of prominence until intergovernmental efforts hit their first sizeable obstacle.

The private authority that began to emerge can be divided into four different types of rule-making process: (i) those that deal with offsets; (ii) procedures for accounting; (iii) rules for transparency; and (iv) trading rules.<sup>111</sup> 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 emanations of private authority respond to the shortcomings of the Kyoto Protocol, and seek to refocus emissions reduction activity where fewer political obstacles exist. Firstly, they target different actors from those under the Kyoto Protocol. Whereas Protocol participants are necessarily states, private standards target non-state actors of all stripes: firms, NGOs, and sub-national actors. All private governance arrangements are voluntary; those who adopt them choose to opt in. Secondly, the accounting and transparency standards focus on emissions measurement and reporting rather than on reductions. The Kyoto Protocol requires developed countries to reduce their emissions; reporting is a means to assess progress towards this target. However, private regulations around accounting and transparency purposefully sidestep the contentious issue of mitigating emissions, and focus on understanding their sources. The problem reframing 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. It also reinforces why it is important to consider the full suite of private rules, not just those that deal primarily with externality incentives. Thirdly, virtually all private standards emphasize the reputational benefits of adopting voluntary measures, which frames the problem as one of image management rather than mitigating climate change. With all these types of standard, private authority serves as a complement to public authority, providing less controversial ways to promote emissions management and reductions by actors who, depending on their location, may not be bound by the Kyoto Protocol.

Consistent with the problem reformulation mechanism, private authority in the regime complex for climate change has provided alternative rules and procedures to measure, report and verify GHG emissions reductions that are at times more inclusive than those developed by the Kyoto Protocol, as they seek to target emitters directly rather than via state regulation. By changing the targets of regulation, these

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<sup>110</sup> There were earlier private efforts, such as internal trading programmes created by BP and Shell, yet both were short-lived pilots: see, e.g., D. Victor & J. House, 'A New Currency: Climate Change and Carbon Credits' (2004) 26(2) *Harvard International Review*, pp. 56–9.

<sup>111</sup> J.F. Green, 'Order out of Chaos: Public and Private Rules for Managing Carbon' (2013) 13(2) *Global Environmental Politics*, pp. 1–25.

alternatives reconceptualize the problem, offering different rules, modes of implementation, and approaches to monitoring and enforcement.

The tropical commodity case provides an additional illustration of private authority as a means for reframing the problem. Max Havelaar, the world's first fair trade labelling initiative, was formed to address the problem of market access rather than terms of trade, which was the focus of UNCTAD, the International Coffee Agreement (ICA),<sup>112</sup> and other commodity agreements. Although ICA rules maintained coffee prices above a floor price, the benefits accrued mainly to elites in coffee-growing countries and failed to address distributional issues within countries.<sup>113</sup> For smaller producers, the question of access was equally, if not more, important than a guaranteed price. To remedy this problem, Max Havelaar sought to help smaller producers gain access to international markets. It emerged to give the Union of Indigenous Communities of the Isthmus Region (UCIRI), a Mexican coffee cooperative, an alternative market channel which cut out intermediaries, ensuring that more coffee could be exported under 'fair trade' terms than was possible through existing trade organizations.<sup>114</sup> Thus, Max Havelaar redefined the challenges facing coffee producers in a way that was distinct from the public nodes of the regime complex. The problem was not one of prices as UNCTAD, the ICA and others had emphasized, but one of market access as well. The private governance initiative developed rules and programmatic initiatives to show how market access for smaller producers could be achieved.

After the 1989 suspension of the ICA's floor price, however, Max Havelaar's requirement for a 'fair trade' coffee price became as important as, or even more important than, its market access aims.<sup>115</sup> Research has identified the fair trade price as a contributor to the welfare of certified coffee growers, even though the added price alone is often not sufficient to address the broader challenges that marginalized farmers face.<sup>116</sup> Hence, private authority once again reframed the problem in response to shortcomings in public authority, and developed a set of rules and procedures to govern the distribution of premiums to certified producers. This above-market price has remained a significant focal point for fair trade since then, a point to which we return below.

<sup>112</sup> New York, NY (US), 28 Sept. 1962, in force 1 Jul. 1963, available at: [https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XIX-4&chapter=19&lang=en](https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XIX-4&chapter=19&lang=en).

<sup>113</sup> Subsequent research has documented rent-seeking behaviour in both Indonesia and Brazil: see, respectively, M. Bohman, L. Jarvis & R. Barichello, 'Rent Seeking and International Commodity Agreements: The Case of Coffee' (1996) 44(2) *Economic Development and Cultural Change*, pp. 379–404; L.S. Jarvis, 'The Rise and Decline of Rent-Seeking Activity in the Brazilian Coffee Sector: Lessons from the Imposition and Removal of Coffee Export Quotas' (2005) 33(11) *World Development*, pp. 1881–903. In both cases, considerable waste was incurred as a result of efforts taken to capture ICA quotas: see R.H. Ullman, 'Human Rights and Economic Power: The United States versus Idi Amin' (1978) 56(3) *Foreign Affairs*, pp. 529–43.

<sup>114</sup> D. Jaffee, *Brewing Justice: Fair Trade Coffee, Sustainability, and Survival* (University of California Press, 2007), p. 13.

<sup>115</sup> Auld, n. 60 above.

<sup>116</sup> C.M. Bacon et al. (eds), *Confronting the Coffee Crisis: Fair Trade, Sustainable Livelihoods and Ecosystems in Mexico and Central America* (The MIT Press, 2008); K. Utting-Chamorro, 'Does Fair Trade Make a Difference? The Case of Small Coffee Producers in Nicaragua' (2005) 15(3–4) *Development in Practice*, pp. 584–99.

In both cases, private authority targeted a different problem from that experienced by the public nodes of the regime complex. Private authority responded to gaps, shortcomings, and other difficulties in the public part of the regime complex, and has reoriented its approach accordingly.

#### 5.4. *Diffusion of Public Authority: Evidence from the Cases*

The political slowdown surrounding the Kyoto Protocol gave rise to a host of new voluntary private standards, including myriad offset standards. Despite the proliferation of private institutional arrangements, closer analysis demonstrates that this is not a chaotic mess; rather, private authority is linked to public authority in deliberate and strategic ways. Upon careful inspection of the rules set out by each standard, we see a high level of compatibility between public and private standards. More than 75% of private standards recognize public rules created under the CDM.<sup>117</sup> In this sense, private authority shapes public authority by providing another venue for its diffusion.

The relative durability and the growing number of users of the many standards suggest that private authority coordinates action on climate change in ways that the Kyoto Protocol has not. Moreover, in the area of offset standards, private authority promotes mitigation above and beyond that which occurs under the auspices of the market mechanisms of the Kyoto Protocol: 99% of all credits purchased in 2013 on the voluntary market were purchased not for ‘pre-compliance’ purposes, but rather for ‘retirement’, thus representing completed emissions reductions. Firms were under no obligation to retire their credits by any regulatory requirements, but chose to do so anyway.<sup>118</sup> In 2013, the voluntary market was valued at US\$ 380 million.<sup>119</sup>

It is clear that even if the Kyoto Protocol dissolves entirely, the offset rules it created will persist through the voluntary markets. Moreover, any future regulatory market is likely to consider this in its design. The full effects of private authority will not be known for some time. Still, given the high level of deference to public rules by private standards, we can think of private authority as reinforcing and deepening public authority.

In fisheries, private authority in the regime complex has helped to further diffuse public authority. The Marine Stewardship Council (MSC), for one, requires that all certified operators conduct their management consistent with local, national and international laws,<sup>120</sup> and the MSC principles and criteria are, in part, based on the FAO Code of Conduct for Responsible Fisheries.<sup>121</sup> Another example is the Earth

<sup>117</sup> Green, n. 111 above.

<sup>118</sup> M. Peters-Stanley & G. Gonzalez, *Sharing the Stage: State of the Voluntary Carbon Markets 2014* (Forest Trends’ Ecosystem Marketplace, 2014). Other credits are being purchased by NGOs, individuals and, to a lesser extent, governments.

<sup>119</sup> Ibid.

<sup>120</sup> MSC, *MSC Fishery Standard: Principles and Criteria for Sustainable Fishing* (MSC, 2010), available at: [http://www.msc.org/documents/scheme-documents/msc-standards/MSC\\_environmental\\_standard\\_for\\_sustainable\\_fishing.pdf](http://www.msc.org/documents/scheme-documents/msc-standards/MSC_environmental_standard_for_sustainable_fishing.pdf).

<sup>121</sup> N. 92 above; Auld, n. 60 above, p. 192.

Island Institute's (EII) 'dolphin safe' label, which has adopted, modified, and diffused international norms against the practice of drift-net fishing. Drift netting, a technique which calls for large nets to be set vertically in the water column to snare any and all passing marine life, emerged as a concern in the western tropical Pacific where bycatch included tuna, turtles, and sharks.<sup>122</sup> International norms against the use of drift nets emerged in the late 1980s and early 1990s. A series of UNGA resolutions focused on preventing the practice, beginning with calls for a moratorium on drift netting in all ocean fisheries, but then narrowing this to a prohibition on the high seas.<sup>123</sup> The EII's work on dolphin-safe seafood extended the reach of the latter by working to label fisheries that did not use drift-net techniques, regardless of whether they operated in the high seas or within the exclusive economic zones of coastal states.<sup>124</sup> Companies that seek to use the EII's 'dolphin-safe' label on tuna products must ensure that none of their operations use drift nets to catch tuna. According to the EII, it currently monitors more than 500 companies to ensure dolphins are not chased or netted by tuna boats. It also claims that more than 90% of the world's tuna companies have committed to fishing practices that do not harm dolphins.<sup>125</sup> Hence, the EII has effectively taken the norm against drift netting on the high seas and moved it towards becoming the de facto industry standard through its private authority.

### 5.5. Incorporation by Reference

The final form of public–private interaction in the regime complex occurs through incorporation by reference: public actors adopt private rules in their own regulations. There is limited evidence of this in the climate regime complex. A number of countries with carbon pricing policies accept or build upon standards from the voluntary market. In the majority of cases, private standards are incorporated only for voluntary measures, although in some cases, however, states may choose to adopt or recognize private authority. For example, the Australian government now recognizes two private carbon standards – the Verified Carbon Standard and the Gold Standard – as acceptable credits in their voluntary offset scheme.<sup>126</sup> This is not

<sup>122</sup> A. Wright & D.J. Doulman, 'Drift-Net Fishing in the South Pacific: From Controversy to Management' (1991) 15(5) *Marine Policy*, pp. 303–29.

<sup>123</sup> UNGA Resolution A/RES/44/225, 'Large-Scale Pelagic Driftnet Fishing and Its Impact on the Living Marine Resources of the World's Oceans and Seas', 22 Dec. 1989, available at: <http://www.un.org/documents/ga/res/44/a44r225.htm>; J.K. Jenkins, 'International Regulation of Driftnet Fishing: The Role of Environmental Activism and Leverage Diplomacy' (1993) 4(1) *Indiana International & Comparative Law Review*, pp. 197–218.

<sup>124</sup> I. Baird & N. Quastel, 'Dolphin-safe Tuna from California to Thailand: Localisms in Environmental Certification of Global Commodity Networks' (2011) 101(2) *Annals of the Association of American Geographers*, pp. 337–55.

<sup>125</sup> Miller and Bush report that 450 companies are certified as dolphin safe, which EII reports cover 90% of the market: A.M.M. Miller & S.R. Bush, 'Authority Without Credibility? Competition and Conflict Between Ecolabels in Tuna Fisheries' (2015) 107 *Journal of Cleaner Production*, pp. 137–45. According to the EII website, the figure of 90% represents the companies that have committed to dolphin-safe fishing practices: see <http://savedolphins.eii.org/campaigns/dsf>.

<sup>126</sup> Australian Department of Climate Change and Energy Efficiency, *National Carbon Offset Standard: Version 1*, Nov. 2009, available at: [http://www.climatechange.gov.au/government/initiatives/~/\\_/media/publications/carbon-accounting/revised-NCOS-standard-2010-pdf.ashx](http://www.climatechange.gov.au/government/initiatives/~/_/media/publications/carbon-accounting/revised-NCOS-standard-2010-pdf.ashx). See also J.F. Green, 'Blurred Lines: Public–Private Interactions in Carbon Regulations', unpublished manuscript, on file with the author.

the same as allowing private standards to be used for compliance purposes. Nonetheless, it fits our definition of incorporation by reference.

A second example of incorporation by reference is drawn from the regime complex for forestry. We recall that timber tracking was an idea first promulgated by the FSC, a private regulator. It has since been adopted by numerous governments in their own public rules. Moreover, not only has the *idea* of timber tracking been drawn from private authority but, indeed, so have the contents of the rules. For example, the EU Timber Regulations<sup>127</sup> specify how timber must be tracked and include a due diligence system for companies to follow to ensure they are not procuring or trading in illegal wood. The guidance document for implementing the regulations explains that ‘certification or other third party verified schemes that include verification of compliance with applicable legislation may be used in the risk assessment procedure’.<sup>128</sup> The EU thereby has incorporated reference to certification as one means to show due diligence in meeting the EU Timber Regulations.

## 6. CONCLUSION

This article attempts to unbundle the regime complex in two ways. Firstly, we maintain that a full understanding of regime complexes is impossible when a key source of variation, private authority, is omitted. Therefore, we have inserted private authority into our analyses of three illustrative cases: climate, tropical commodities, and fisheries. Secondly, we argue that private authority can affect governance processes within the regime complex through four distinct mechanisms: incubation, reformulation, diffusion, and incorporation by reference.

Our analysis raises additional questions. We flag three issues as particularly important to highlight and address in the future if the concept of regime complexity is to underpin a robust research agenda. Firstly, we have reviewed some negative effects of regime complexity as detailed in the literature – including fragmentation, conflict, and watering down of rules – and we have drawn attention to some positive effects of public–private interaction in regime complexes. Surely, this list is incomplete. Thus, a key question is what other effects, both positive and negative, result from the interactions of public and private authority within a regime complex?

A second key question inquires into the conditions under which these various effects materialize. More specifically, under what conditions does private authority result in stronger regulation to deal with global problems, and when does it jeopardize effective governance? In the case of tea as a tropical commodity, fair trade rules undermined important gains in social justice achieved through public regulation.<sup>129</sup> Similar problems are evident in the context of fisheries: private authority has been controversial in countries where it has been perceived to freeze

<sup>127</sup> N. 107 above.

<sup>128</sup> EU, ‘Guidance Document for the EU Timber Regulations’, Sept. 2013, p. 14, available at: <http://ec.europa.eu/environment/forests/pdf/Final%20Guidance%20document.pdf>.

<sup>129</sup> S. Besky, ‘Colonial Pasts and Fair Trade Futures: Changing Modes of Production and Regulation on Darjeeling Tea Plantations’, in S. Lyon & M. Moberg (eds), *Fair Trade and Social Justice: Global Ethnographies* (New York University Press, 2011), pp. 97–122.

attempts at government regulation of fisheries and marine conservation.<sup>130</sup> We fully acknowledge that private authority can be an instrument of powerful actors, and regime complexes can provide additional fora in which those actors can pursue their interests. This makes it all the more important to establish robust explanations of the conditions under which these outcomes arise.

Thirdly and finally, it is clear that different forms of private authority interact with each other, not just with public authority. Just as price requirements set by Fairtrade International (the international fair trade certification programme) served to reframe the commodity problem and develop a new solution, the price premium has been a comparative benchmark for other private certification programmes. Similarly, group certification systems offered by the FSC and the International Federation of Organic Agriculture Movements (IFOAM) are referenced as programmes to emulate by other systems.<sup>131</sup> The same is true for carbon accounting standards: the Greenhouse Gas Protocol has been widely adopted as the baseline for other private standards on emissions management.<sup>132</sup> This highlights that interactions between public and private authority may occur after, or in tandem with, interactions among different private rule systems. These examples raise further challenging questions about how interactions among private forms of authority may affect the overall design of the regime complex.

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<sup>130</sup> Auld, n. 60 above, pp. 204–5; Gulbrandsen & Auld, n. 65 above.

<sup>131</sup> For discussion of group systems being promoted for Global GAP, see UNCTAD, *Workshop on Environmental Requirements and Market Access for Developing Countries: How to Turn Challenges into Opportunities* (United Nations, 2007).

<sup>132</sup> J.F. Green, 'Private Standards in the Climate Regime: The Case of the Greenhouse Gas Protocol' (2010) 12(3) *Business and Politics*, available at: <http://www.degruyter.com/view/f/bap.2010.12.3/bap.2010.12.3.1318/bap.2010.12.3.1318.xml>.