Do Private Regulations ‘Ratchet Up?’
A comparative classification framework

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[Dear APW readers: This paper is aimed at an interdisciplinary literature across political science, economics, sociology, and management. I am especially interested in feedback on how it could be made more interesting to an American Politics audience. Thank you!]

Abstract

Studies of private regulation tend to deal with the conceptually and empirically challenging task of measuring differences in policy content by ‘cherry picking’ a few components, generalizing in ‘broad brush’ strokes, or bypassing it all together. Despite, or perhaps because of, limited attention to the substance of private regulations, the last 20 years has witnessed ongoing public and scholarly debates about the ‘stringency’ of various private regulations and how they change over time. However, without precise and systematic measures, it is difficult to assess these arguments. To remedy this, we offer a two-part framework. First, we focus attention on three features: policy scope; prescriptiveness; and specific policy settings. Second, these measures allow us to develop a framework for comparing regulatory systems over time, focusing on whether they are diverging, converging, or neither. We illustrate these two steps by turning to forest certification, one of the most advanced cases of global private governance. We focus on two competing programs in the United States: The Forest Stewardship Council, created by environmental advocates and their allies, and the Sustainable Forestry Initiative, created by the American Forest & Paper Association. We find that between 2008 and 2016, these programs’ regulatory standards changed little in scope but both increased in prescriptiveness. The observed patterns of ‘ratcheting up’ but also maintaining or increasing relative differences, are inconsistent with prominent arguments that competition among private regulations will lead to a “race to the bottom” or “convergence to the middle.” To guide future research, we reflect on how leading theories might explain these patterns and suggest concrete steps for scholars from a range of disciplines.

Keywords: private governance, forest certification, ecolabel, regulation, policy change
1 Introduction

In the last 30 years, private regulatory systems including “eco-labels” and “socially responsible” product certification programs have emerged to address goals such as improving farm and factory working conditions, controlling greenhouse gas emissions, and improving commercial management of fisheries, mines, farms, and forests (Auld, 2014; Bartley, 2003; Bozzi, Cashore, Levin, & McDermott, 2012; Hudson & Hudson, 2003; van der Ven, 2015; Vince & Haward, 2017; Vogel, 2008).

In response, scholars across political science, public administration, economics, and sociology have given sustained theoretical and empirical attention to these efforts (Grabs et al., 2017). A key motivation behind this research is understanding whether private regulations follow patterns observed in public regulations, including a “race to the bottom” as governments attempt to attract capital, a “race to the middle” as shared expectations emerge, or a “race to the top” as companies seek access to more regulated markets (Berger & Dore, 1996; Rodrik, Subramanian, & Trebbi, 2002; Vogel, 1995).

While great strides have been made on these questions, significant challenges remain because of relatively limited attention to how “high” versus “low” might be measured. Broad characterizations such as the degree of “stringency” are often made without precise definitions or are applied to a small subset of the issues that programs address. This ambiguity, we argue, has led to contradictory empirical findings, hindering efforts to understand how private regulations may “ratchet up,” “converge,” “diverge,” or reach equilibrium.

To address this gap, we offer a two-part framework to measure private regulations, which permits scholars to compare within and across programs over time. Step one compares the substance of regulations on three key criteria: How comprehensive is the scope of issues addressed? How prescriptive are the policy instruments? What are the specific requirements? Step two classifies relative changes between competing programs over time, yielding nine possible patterns in their relative difference and direction of change over time. Applying this framework to the case of forestry certification in the United States between 2008 and 2016 reveals a puzzle that none of the extant literature had predicted: a pattern of “upward divergence” among national-level programs. While their scopes remained largely the same, both regulations increased in prescriptiveness, but at different rates. The regulation starting at the higher level
increased on more key issues, producing a pattern of ‘ratcheting up’ but also divergence in regulatory prescriptiveness between programs. By comparing specific requirements, we are also able to reflect on substantive nature of change over time. For example, in 2015, the industry-associated program adopted requirements on several issues that are usually associated with the activist-backed program. These new findings highlight the importance of systematic measurement and offer exciting avenues for future research to understand these more nuanced empirical puzzles.

We proceed in the following steps. The next section reflects on the importance of regulatory requirements for theories of private governance and then on conceptual and measurement approaches taken by scholars to date. We show how most studies employ abstract definitions or selected evidence, frustrating efforts to assess different theoretical expectations about whether competing private regulations will ratchet up, down, or converge over time. In response, section three presents our two-part framework. Section four presents the results of applying it to our case. Section five turns to causal theories to develop potential explanations for the new patterns we observe and suggests concrete steps for future research.

2.1 Private Regulatory Requirements: Explanatory and Dependent Variables
Policy substance is key to two related sets of questions within scholarship on private regulations: (1) how do various forces such as market pressures, activist campaigns, and competition among alternative programs shape policy content? And (2) how does policy content then shape market adoption, activist support, and responses by competing programs. Many theories include regulatory requirements as both a dependent and explanatory variable. For example, Bernstein and Cashore (2007) consider how meaningful private regulations might emerge over time given an inherent conundrum: “raising” standards may lead to lower market adoption and thus low impact, while “lowering” standards may lead to higher market adoption, but potentially low impact as well.

Scholars of private regulation who use policy substance as an explanatory variable have assessed its effects on legitimacy and trust among various audiences (McDermott, 2012), market demand (Atkinson & Rosenthal, 2014), and adoption by firms (Darnall, Potoski, & Prakash, 2010; Prado, 2013). When policy changes disadvantage certain groups or firms, they may be inspired to create an alternative private regulatory program (Meidinger, 2003) or pursue their aims through public policy (Weimer, 2006). One key
assertion is that more costly requirements are negatively correlated with firm-level adoption of, and compliance with, “corporate social responsibility” (CSR) projects, such as environmental management systems (EMS), industry codes of conduct, and third-party certification programs (Delmas & Montiel, 2008; Kollman & Prakash, 2001; Lyon & Maxwell, 2008).

This relationship between policy content and uptake is important because, whereas governments enjoy sovereign authority, private regulatory programs must achieve and maintain legitimacy in the eyes of both those that they aim to empower and those they aim to regulate (Bartley, 2007; Bodansky, 1999; Cashore, 2002). Changing ideas about the political responsibilities of businesses shape both activist demands and firms’ responses (Bartley, 2003; Djelic & Etchanchu, 2017). The substance of private regulations is thus a result of the evolutionary logics by which coalitions of private actors gain and maintain rulemaking authority (Botzem & Dobusch, 2012) and the political context in which they set specific requirements.

Scholars also address the reverse causal relationship: how economic, political, and social forces shape and constrain the substance of private regulations (e.g. Bartley, 2003; Cashore, Auld, & Newsom, 2004; Fischer & Lyon, 2014). Some find private regulations emerging from collective action by industry to preempt or replace government regulations (Bartley, 2007; Cashore, 2002; Grabosky, 2013; Green, 2013; Loconto & Fouilleux, 2014; Lyon & Maxwell, 2008; Maxwell, Lyon, & Hackett, 2000; Maxwell et al., 2000; Prakash, 2000). Others find private regulations emerging when social movements target companies with tactics that aim to redirect, rather than challenge, neo-liberal ideology (Bartley 2003). Cashore et al. (2004) highlight how market and institutional structures create institutional logics that initially work to pressure the coalitions behind programs to “lower” substantive requirements. Hsueh and Prakash (2012) focus on how different program sponsors create different policies. Others suggest that the substance of private regulations results from interactions with one another and with public policy (DeLeon & Rivera, 2009; Eberlein, Abbott, Black, Meidinger, & Wood, 2014; Green & Auld, 2017; Gulbrandsen, 2014; Howard-Grenville, Nash, & Coglianese, 2008; Li & van ‘t Veld, 2015; Mills, 2016). For example, Abbott and Wood (2009) conceptualize public and private regulations as a joint result of bargaining between firms and activists.
A growing body of scholarship investigates how competition among programs backed by different coalitions shapes the content of their regulations. Smith and Fischlein (2010, p. 520) conclude: “The strength of competing private governance networks may precisely be that they are moving targets: while they appear to rally around a common definition of rules and norms over time, they continue to innovate and imitate each other.” Some focus on how competition may lead to more “weak or lax standards” as firms “shop” for lower-cost programs, potentially causing a “race to the bottom” (Abbott & Snidal, 2010; Fransen, 2011; Gulbrandsen, 2004). Others find competition causing “weak” regulations to be “revised upwards” as activists invite public comparisons of their requirements with the requirements of “higher” ones (Overdevest, 2005, 2010). And still others find that both patterns occurring, depending on market and industry structures (Cashore et al., 2004; Hassel, 2008). Formal models by Youssef and Abderrazak (2009) and Fisher and Lyon (2014) yield both results under different conditions. For example, one intuitive result of Fischer and Lyon’s (2014) formal model is that if one program changes, its competitors have incentives to change as well, leading to a new equilibrium. Cross-sector analysis also finds different results of competition in different sectors (van der Ven, 2015). As Eberlein et al. (2014, p. 14) conclude, private regulations are “co-regulatory and co-evolutionary” and may be shaped by multiple kinds of interactions including competition, coordination, and cooptation.

Competition does not mean that programs will converge in their substantive requirements. Formal models (Fischer & Lyon, 2014; Li & van ’t Veld, 2015; Poret, 2016) and empirical research (Cashore et al., 2004) both suggest that asymmetric incentives lead competing programs to adopt different requirements in equilibrium. In cases of competition between an activist-backed regulation and an industry-backed regulation, these theories predict a stable equilibrium where the activist-backed regulation is more “stringent.” In the broadest study to date, van der Ven (2015) finds evidence of systematic variation in requirements based on the organizational structure and membership. He does not find support for the prediction that industry-backed regulations are less likely to comply with “best practices” but does find support for the predictions that public and activist-backed private regulations are more likely to best practice compliant. In part, this is because drivers of change are both external—market conditions or competing programs—and internal—sponsorship and membership, or, more broadly, the “community” driving the writing and adoption of each program’s regulations (see Djelic & Quack, 2012).
Having reviewed why policy content is a key variable in studies of private regulation, we now interrogate the various concepts of policy substance that run through this literature. We then offer a framework to clarify these yet muddled concepts and allow for systematic measurement.

2.2 Concepts & Measurement of Variation in Private Regulations

Given its importance, how do scholars of private regulation conceive of, and measure, concepts like regulatory stringency? Some scholars evoke “vertical” notions of variation, describing standards as “high” or “low” or “more or less stringent” (Fischer & Lyon, 2014; Li & van ’t Veld, 2015). Others evoke “horizontal” variation, describing the “width” of issues covered (Auld, 2014; Heyes & Martin, 2017). McDermott et al. (2008) also call attention to variation in prescriptiveness, i.e. the extent to which regulations use mandatory and substantive thresholds. “Best practices” are often considered “benchmarks,” but they may reference a variety of different notions in defining “rigor” and “credibility” (van der Ven, 2015). Furthermore, definitions of concepts like “stringency” are often either insufficiently precise to be consistently applied across programs, insufficiently comprehensive to yield consistent empirical findings, or completely absent. Formal models often assign each program a single “quality” or “stringency” parameter and it is unclear what this represents empirically. In the absence of consistent measures of policy content, scholars have used proximate features that are comparable across programs. For example, Darnall et al. (2010) suggest that a program’s sponsor may be a signal of its “stringency” and van der Van (2015) uses compliance with perceived “best practices.”

The handful of scholars who do develop more precise measurement strategies, tend to focus on specific examples, rather than attempting to specify a full range of relevant issues (Table 1), causing similar concepts to be measured in different ways that may lead to opposite results. For example, Overdevest and Zeitlin (2014), following Fernholz et al. (2010), argue that private regulations in the forestry sector have “all moved closer” by assessing whether or not each program addresses six dimensions—two on the calibration of compliance mechanisms (auditing and chain of custody tracking), two substantive requirements on firm behavior (public reporting and stakeholder consultation), and another two on the nature of program decision-making and marketing strategy—finding policy convergence on all six. This sample of issues illustrates the different ways private regulations may vary. It also illustrates two common difficulties
<table>
<thead>
<tr>
<th>Selected Scholarship</th>
<th>Concept</th>
<th>Measurement orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moore et al. (2012)</td>
<td>Management practices changed</td>
<td>Survey of self-reported number and type of management practices implemented</td>
</tr>
<tr>
<td>McDermott et al. (2010, 2008)</td>
<td>“comprehensiveness and prescriptiveness”</td>
<td>Number of key issues with most prescriptive language</td>
</tr>
<tr>
<td>Overdevest and Zeitlin (2012)</td>
<td>“far apart” or “closer” on select “Program Characteristics”</td>
<td>Binary table of select issues and descriptive examples</td>
</tr>
<tr>
<td>Overdevest (2005, 2010)</td>
<td>“comparative quality”—“weaker” standards are “revised upwards” to be “equivalent” to “higher and more prescriptive standards”</td>
<td>Descriptive theory, examples, and review of previous comparisons</td>
</tr>
<tr>
<td>Fransen (2011), Fransen &amp; Conzellman (2015)</td>
<td>“stringency” as “comprehensive in scope, specific in content, and prescriptive in terms of requirements”</td>
<td>Descriptions based on “leading policy analysts per issue area”</td>
</tr>
<tr>
<td>Hansen et al. (2006)</td>
<td>Select “general features” and “six aspects” of management</td>
<td>Descriptive table of select issues</td>
</tr>
<tr>
<td>Auld (2014)</td>
<td>“Policy scope and regulatory domain” “policy changes,” “character of the rules developed”</td>
<td>Description of the set of problems addressed and how</td>
</tr>
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<td>Cashore et al. (2004)</td>
<td>“stringency”</td>
<td>Descriptive theory and examples</td>
</tr>
<tr>
<td>Smith &amp; Fischlein (2010)</td>
<td>“stringency” of “weightings across multiple, and often conflicting, attributes,” also “excellence in content”</td>
<td>Descriptive theory and examples</td>
</tr>
<tr>
<td>Porter (2014)</td>
<td>“hard law” or “soft law”</td>
<td>Descriptive examples</td>
</tr>
<tr>
<td>Gulbrandsen (2004)</td>
<td>“variations in the strength of standards”—“more stringent and less discretionary,” “more rigorous and wide-ranging” vs. “weak or lax” “and allow far wider flexibility” Some regulations have become more flexible while others are “changing upward”</td>
<td>Descriptive examples</td>
</tr>
<tr>
<td>Eberlein et al. (2014)</td>
<td>“differentiation among rule systems” along “dimensions of regulatory governance,” e.g. “more or less stringent requirements” or “regulatory capacity”</td>
<td>Descriptive typology and examples</td>
</tr>
<tr>
<td>Bartley (2003)</td>
<td>“more credible claims” vs. “lax standards”</td>
<td>Descriptive theory and examples</td>
</tr>
<tr>
<td>Bernstein &amp; Cashore (2007)</td>
<td>Pressure to “raise” or “lower” requirements “explains convergence / divergence”</td>
<td>Descriptive theory</td>
</tr>
<tr>
<td>Prakash &amp; Potoski (2007)</td>
<td>“stringent” vs. “lenient” standards</td>
<td>Proportional costs, social externalities, and branding benefits</td>
</tr>
<tr>
<td>Formal models of “stringency” or “quality”</td>
<td>“sustainability quality level” (Poret 2016), “more ambitious” (Fischer et al., 2017), “stricter rules” (Schmitz et al., 2017), “stringency” (Fischer and Lyon 2014; Hayes and Martin, 2017)</td>
<td>Proportional costs &amp; benefits to programs &amp; firms</td>
</tr>
<tr>
<td>Formal models of issue scope</td>
<td>“issue-width” in an “issue space” (Hayes and Martin 2015)</td>
<td>Proportional costs and benefits to programs and funders</td>
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in identifying patterns like convergence. First, it is risky to draw broad conclusions from a narrow sample of known dimensions of variation. McDermott et al. (2008) identify an additional 46 key types of substantive requirements in the forestry sector—selecting any two of them, as we show below, may lead to different conclusions. Second, binary indicators such as whether or not a program addresses a topic may miss variation in degree. Measuring variation in program’s scope of requirements, variation in the prescriptiveness of its requirements, or variation in where it sets certain policy thresholds (e.g. the required frequency of public reporting or prohibited amount of pollution) may result in different conclusions.

Two challenges appear to have created a breadth-depth tradeoff (Table 1). First, to be both comprehensive and precise is costly for researchers. Second, even if researchers conduct a detailed analysis of a comprehensive set of policy issues, aggregating comparisons on different issues to make general observations is extremely difficult. Indeed, specific requirements are often incommensurable between programs and can only be appropriately compared through descriptive narratives.

**TABLE 1**

We overcome this dilemma by, in addition to comparing specific requirements, using two measurement strategies that can be applied to all types of requirements and thus can be aggregated to assess general trends. First, we identify a comprehensive set of issues by inductively classifying the content of regulations in our policy domain. The comprehensiveness of each regulation’s scope can then be measured simply by asking which, and how many, key issues are addressed. Second, we measure the extent to which each requirement is prescriptive, i.e. uses mandatory and substantive thresholds. Because this question is about the means by which each issue is addressed, not the ends of the policy, it can be answered for any substantive requirement. We then compare comprehensiveness and aggregate prescriptiveness across programs and over time.

This strategy is the foundation of our core contribution: a simple analytical framework to assess regulatory requirements.

### 3 A Framework to Classify Change in Private Regulations
To better conceptualize change in private regulations, we turn to public policy scholarship that distinguishes between the broad and specific ends of a policy and the means used to achieve them (Cashore, 1997; Hall, 1993; Weimer & Vining, 2005). To date, the differences between public and private authority have rightly attracted scholarly attention. There are also parallels. Private regulations resemble a system of laws (Errol Meidinger, 2003, 2006). Yet policy change, a core concept in public policy scholarship, lacks a clear conceptual analog in scholarship on private regulation.

Conflating different measures is not only a problem in private governance. It permeates a vast array of scholarship where confusion reigns over the definition, operationalization, and measurement of policy change, frustrating the study of policy dynamics (Pierson, 2001). As Green-Pedersen (2007) argues “the debate about explanations of variations in [policy] cannot move beyond the stage of hypotheses before the dependent variable problem has been addressed” (Green-Pedersen, 2007, p. 4). A rich public policy scholarship has emerged to address the challenge of “disaggregating the dependent variable” (Howlett & Cashore, 2014).

3.1 Step 1: Measuring standards’ scope, prescriptiveness, and policy settings

To disaggregate private regulations, we focus on three dimensions of variation: (1) the comprehensiveness of a regulations scope, i.e. which policy problems are addressed, (2) the extent to which regulatory requirements are prescriptive, i.e. use mandatory and substantive thresholds, and (3) the levels of those thresholds or similarly specific policy setting (see Table 2).

| TABLE 2 |
| Table 2: Measures of Policy Content |

<table>
<thead>
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<th>Program Level</th>
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<td>How comprehensive is the scope of issues addressed?</td>
<td>What are the specific requirements (i.e. policy settings) on each issue?</td>
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<tr>
<td><strong>Policy Means</strong></td>
<td></td>
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<td>In aggregate, across all issues, how prescriptive is the regulation? To what extent (e.g. on what portion of issues) are mandatory and substantive thresholds used?</td>
<td>1. How prescriptive is the requirement?</td>
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<td>2. What specific ways are they applied?*</td>
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We thus suggest that scholars who wish to make claims about the content or direction of change in private regulations begin with three related tasks: they must describe policy content according to scope, prescriptiveness, and specific policy settings. Those who are also curious about how competing program change have a second step: to measure their relative positions and degrees of change on each dimension (see table 3). First, we elaborate on step one.

Defining a comprehensive scope requires inductive assessment of regulatory texts in a defined policy domain. It requires careful readings of texts and then deriving distinct ‘issues’ that are addressed by one or more policy texts. This approach must consciously avoid ‘cherry picking’ certain issues in advance. Given that scholars have asserted issue scope to influence uptake (both negatively and positively), this step, while difficult, cannot be overlooked if causal theories are to be interrogated.

We draw on Cashore (2007) and McDermott et al. (2010), to identify prescriptiveness according to substantive and mandatory features (table 3). This allows us to track not just variation in the scope and number of specific changes but also the cumulative direction of change on each issue. This covers the continuum from discretionary guidelines, which allow maximum flexibility, to procedural requirements that define processes that must be followed but do not prescribe outcomes, to non-discretionary (i.e. mandatory) substantive requirements, which prescribe precise actions such as quantitative performance thresholds. In contrast, even non-discretionary requirements to follow local best management practices are considered less prescriptive since these practices may not include substantive requirements. Discretionary practices, processes, or plans are considered even less prescriptive. On each issue, requirements are coded as either the “most prescriptive” (requiring as much as or more than any other program), “some prescriptive requirements,” or “no prescriptive requirements.” Additionally, each change is evaluated on whether it became more prescriptive, became less prescriptive, or stayed the same on each issue.

[Table 3]

<table>
<thead>
<tr>
<th>Substantive (e.g. a policy threshold)</th>
<th>Discretionary</th>
<th>Non-discretionary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantive (e.g. a policy threshold)</td>
<td>Flexible</td>
<td>Most prescriptive</td>
</tr>
<tr>
<td>Procedural (plan- or systems-based)</td>
<td>Flexible</td>
<td>Somewhat prescriptive</td>
</tr>
</tbody>
</table>

[Table 3]
Finally, the specific requirements such as quantitative thresholds or specific outcomes are also key. For example, as we describe below, private forestry regulations have different requirements for stream-side harvesting buffers. In this example, all standards prescribing minimum buffer widths would be considered equally prescriptive since all are mandatory requirements, albeit with different thresholds. This does not mean buffer widths or other specific policy settings is not an important type of variation. However, most specific policy settings, even prescriptive ones, are not quantifiable and thus difficult to aggregate. Even numeric buffer widths are difficult to compare because they apply in different contexts, such as the slope of the stream bank (see appendix E). Measurement strategies that allow program-level aggregation should not replace issue-specific qualitative comparison. Indeed, we complement our new measures of general trends with rich descriptive comparisons of select high-salience requirements, similar to approaches in previous research. Our combination of precise and comprehensive measurement reveals potential bias in using either approach alone.

3.2 Step 2: Deriving Patterns of Change
For those interested in comparing regulatory content over time, there is a second step. Drawing on Baumgartner and Jones (2002), Howlett and Cashore (2007) note the importance of directionality of change “thought of not in terms of the ‘size’ of moves away from the status quo, but whether these changes are cumulative, i.e., leading away from an existing equilibrium toward another, or whether they represent a fluctuation consistent with an existing policy equilibrium” (p. 537). Systematic analysis allows scholars to describe general relationships among regulations over time and whether they are in or out of equilibrium.

Having classified types of policy content, each can be compared across regulations and measured over time. Each regulation may be increasing or decreasing on each dimension. They may be increasing on some issues and decreasing on others, but in aggregate, nine relationships fully capture the possible dynamics for each dimension of change. Requirements may be increasing, decreasing, or neither, and competing regulations may be converging, in equilibrium, or diverging on each dimension over any given period. All of the diverse concepts of policy substance from Table 1 should be able to be expressed in the dimension(s) to which a theory applies and the directions and relationships it predicts.
This framework complements the Eberlein, Abbott, Black, Meidinger (2014) framework characterizing types of governance interactions. Our framework aims to characterize the policy substance that may result. In a study where the scope or prescriptiveness of requirements was the dependent variable, many of the cells in Eberlein et al.’s framework may be explanatory variables. They identify “frequent rule revision” or “differentiation among rule systems” as one effect of interaction (Table 2 in Eberlein et al., 2014). We conceptually define and measure exactly what rule revision and differentiation entail.

Our framework also suggests new interpretations of formal models of competition between private regulations. For example, Fischer & Lyon (2014) predict that, under normal conditions, an NGO-driven standard will set more “stringent” requirements than an industry-driven standard. Our framework suggests more fine-grained measures of stringency, which lead to new questions. Will an NGO-driven standard have requirements on more issues or more prescriptive requirements? Additionally, if expanding scope is low-cost but increasing prescriptiveness is high-cost, does an industry-driven standard match the NGO-driven standard on scope but not on prescriptiveness in equilibrium? If costs and benefits of increasing prescriptiveness are asymmetric between standards, do we expect greater elasticity with respect to changes in prescriptiveness than changes in scope? We observe behavior consistent with such a result in our analysis of competing forestry standards below.

In the next section, we combine this improved conceptualization of policy change with a detailed framework for comparing forestry policies developed by (McDermott et al., 2010). While some scholars aggregate comprehensiveness of scope and prescriptiveness of
requirements into one broader notion of “stringency” (e.g. Fransen, 2011), we keep them conceptually distinct in our analysis avoid conflating potentially important causal interactions among them which we revisit in the discussion.

Importantly, while substantive policy change is essential to a wide range of theories and policy areas, the written text of private regulations is only part of the complex casual change from institutional emergence, market uptake, auditing practices, compliance and ‘on the ground’ behavior. Just as with public policy, some written rules may take on more importance others. While the text of a private regulation may only be an approximation of how it is applied, managers and auditors use these documents to make decisions. Legal traditions of all kinds include obligations and understandings independent of the text of the law. Nevertheless, the nature of textual requirements is a place to begin assessing how a policy may achieve its aims. It permits a more careful set of research questions into the effects of different degrees of scope, prescriptiveness and specific policy settings on compliance and behavior, rather an assuming some correlation with on the ground behavior. Just as more prescriptive language may decrease flexibility for landowners, it may also decrease the ability for auditors to adjust to local ecological differences. We also recognize that careful analysis on a comprehensive scope is difficult to undertake in practice, as a rapidly expanding or asymmetric scope of issues can render such evaluations, despite best intentions, arbitrary.

4 Application: Competing US Forest Certification Programs
We illustrate the advantages of our approach with the example of forestry in the United States as one of the most advanced cases of private regulation. Thus, in addition to a general framework for classifying change in private regulates, this paper advances a systematic and detailed framework for measuring policy change within and across forestry regulations specifically. Like many substantive domains, forestry specialists have carefully dissected components of forestry regulations, both public and private, but the unit of analysis in scholarship on policy change still tends to be broad characterizations of policies or only a few of their many constituent parts. By drawing on forestry-specific scholarship we are able to conduct a more systematic and detailed analysis.

We chose an example of non-state market-driven governance because, among private regulations, this type often involves the most complex regulatory requirements where
noncompliance can have high costs (see claims of damages in *Resolute v. Greenpeace* (Tigar, 2017)). Forestry standards illustrate how market-based authority often involves highly formal institutional decision-making, often modeled on governmental rulemaking processes, formal requirements, and stronger, often third-party, enforcement mechanisms. For example, when product certification programs gain market-based authority, a producer’s contracts may depend on a third-party auditor’s assessment of compliance with hundreds of different required processes and/or outcomes. While institutionalization enables detailed study of this type of private regulation, the associated complexity makes it especially challenging to capture such initiatives’ many moving parts.

For over 20 years, two private authorities, the Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI), have been developing written Forest Management Standards (standards) that promote different conceptions of sustainable forest management (Cashore et al., 2004). The FSC was established as an international non-profit organization in 1993 by a multi-stakeholder group of environmental and social NGOs, academics, indigenous groups, and private companies. FSC rulemaking has been designed as a “democratic” process where members vote on decision-making procedures as well as substantive requirements (Meidinger, 2003), but the auditing of firms to those requirements is conducted by third-party contractors.

The FSC standards are organized around a set of international “Principles and Criteria” (P&C) which are operationalized at national or regional levels through the development of national indicators which add additional specificity. FSC-US initially had nine regional working groups, which each produced regional indicators. These sub-national documents have since been merged into a single national standard, retaining a smaller number of region-specific indicators.

In 1995, the US-based industry association, the American Forest & Paper Association (AF&PA), established the standard that would become the SFI and required its members (most of the U.S. forest products industry) to support it. Optional third-party auditing was added in 1998, which became mandatory in 2002, the same year that the AF&PA made the SFI a legally distinct entity with independent rulemaking authority. The SFI has since been endorsed by the global Program for the Endorsement of Forest Certification (PEFC). The PEFC maintains a set of Sustainable Forest Management Benchmarks intended to guide participating national programs, many of which are
industry-backed alternatives to the FSC. Unlike the FSC P&C, the PEFC does not require the SFI and other national-level programs to adopt its benchmarks verbatim. Rather they are expected to demonstrate the “equivalence” of their standards with PEFC benchmarks.

The SFI and FSC play a significant role in regulating the forest products industry in the United States (see Figure 1). Both apply to all forestry operations and are thus more closely related to each other than to the American Tree Farm System (ATFS) which is also endorsed by PEFC but focuses on small-scale producers.

[FIGURE 1]

Forest management and the appropriate role of private regulations are contested. As in many sectors, “sustainable” forestry has many meanings (McDermott, 2012). For example, some programs use “natural” conditions or functions as a benchmark for sustainability, involving complex choices about what is “natural” and what degree of it is appropriate. In other conceptions, “sustainable” is less associated with naturalistic management and more about long-term efficiency. Such differences manifest in different requirements and means to achieve them. A regulation focused on efficiency may require high levels of utilization of trees and tree-parts whereas naturalistic management may include requirements to leave economically valuable timber behind for animal habitat. It is in the details of the particular requirements that disagreements become concrete. Thus, an assessment of the meaningful similarities and differences between certification systems requires attention to fine detail.
4.1 Scope, prescriptiveness, and policy settings of forest certification
To address comprehensiveness of scope, we reviewed all FSC and SFI standards to identify 48 distinct “key issues” covering a broad scope of forestry requirements from employee wages and resource utilization to protections for endangered species and indigenous peoples’ rights. These issues were selected in 2008 using an iterative process, following McDermott et al. (2010), disaggregating forest policy to cover all of the major issues raised by the FSC, PEFC, and SFI in their guiding documents (online appendix A, summarized in B-D).

To address prescriptiveness, we turned to precise wording of text on each issue. Where both discretionary and non-discretionary language was present, it was evaluated based on the non-discretionary requirements. For example, if a standard requires managers to “maintain or enhance” water quality, we read it as “maintain.” Substantive differences between regions in the FSC-US standards complicated national analysis. In such cases, coding used the text that bound at least a majority of regions.

Similar to the way previous scholars descriptively compare the SFI and FSC on a select set of issues, we offer detailed comparison of their policy settings on many of our 48 issues in the text below and all of them in the appendices. Doing so allows us to identify each specific change, the types of issues on which these changes were made, and subtitle but important difference between programs on issues that may be important but not salient in the public debates from which many scholars draw a narrow sample of issues.

We compare each private regulation to its previous version and the contemporary version from its competitor. For example, using our framework, we assess revisions in the International FSC’s 2012 Revised Principles and Criteria 01-001 Version 5-0 (P&C), and we compare them to the PEFC’s Sustainable Forest Management Standards (1003:2010). Similarly, we assess differences between the 2010 FSC-U.S. Forest Management Standard Version 1.0 and the FSC-U.S. National Indicators and the regional standards it replaced, and we compare these to the 2005-2009, 2010–2014, and 2015-2019 SFI standards. Unless otherwise specified, “FSC-US” and “SFI” refer to the current version of each standard. We do not fully capture subnational variation. The FSC-US standard recognizes nine different sub-national regions, and some have extra indicators, meaning that in some states, FSC standards were and are more prescriptive than our findings reflect.
4.2 Results

4.2.1 Comparing FSC’s and PEFC’s international requirements

International FSC P&C apply to all FSC programs worldwide. Any changes made to the FSC P&C must eventually be adopted verbatim by national standards. The PEFC’s international benchmarks do not require verbatim adoption by the national standards they endorse (e.g. the SFI) but nevertheless hold potentially significant normative influence.

At the international level, the program starting at the lower level increased prescriptiveness on more key issues, leading to “upward convergence.” Overall, and consistent with McDermott et al. (2008), we find that FSC continues to adopt more prescriptive requirements in its Principles and Criteria (P&C) than the PEFC benchmarks. It is also important to note that the PEFC has moved closer to the FSC in some key areas including new requirements on issues such as indigenous rights, community benefits, and public reporting and consultation (see online appendix for specific language). Yet significant differences remain. For example, the FSC P&C contain more prescriptive language on most ecological criteria, including protected areas and restrictions on conversion to plantations. Both standards now reference the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Despite these differences in prescriptiveness, both standards, on the whole, contain more procedural requirements than substantive requirements (i.e. they are more focused on process rather than setting substantive targets). Despite convergence in the PEFC’s new requirements, the FSC P&C are still more prescriptive than PEFC requirements on 17 of the 48 key issues. PEFC requirements are more prescriptive on 9 of the key issues (see Figure 2).

[FIGURE 2]

One particularly controversial issue is the conversion of natural forests to plantations. Both systems only allow conversion of natural forest to plantations under “justifiable circumstances”, which each program defines differently. For the FSC this means that conversion has “clear, substantial, additional, secure, long-term conservation benefits.” For the PEFC it means that conversion must have “long term conservation, economic, and social benefits.” These criteria also diverge on the parameter of “extent.” The FSC
Figure 2: Comparing FSC-P&C and PEFC on Scope and Prescriptiveness

Relative Prescriptiveness and Scope

As prescriptive or more on 36 issues
As prescriptive or more on 27 issues

Increased in 11 issues since 2008
Increased in 19 issues since 2008

No prescriptive requirements
Some prescriptive requirements
At least as or most prescriptive
Became less prescriptive
Became more prescriptive
No change

Absolute Change in Prescriptiveness

Increased
Net Change
allows “limited areas” to be converted while the PEFC allows “small proportions of forest types.” In other ways, the PEFC goes beyond the FSC, requiring that the benefits of conversion must also include economic and social benefits (in addition to long-term conservation benefits). Both standards specify that conversion must not damage culturally or socially significant areas. However, PEFC suggests that forests should be certified only if conversion occurred before December 31, 2010, while FSC criteria apply to areas converted before November 1994.

Both FSC P&C and PEFC now incorporate language on socio-economic issues, land tenure rights, and stakeholder consultations. Besides explicitly recognizing UNDRIP, both include criteria that require free, prior and informed consent of indigenous peoples and local communities. The FSC’s previous standard made reference to “free and informed consent” with regard to control over forest operations and compensation for use of traditional knowledge. Both standards also recognize legal, traditional, and customary rights. However, FSC is more prescriptive, defining the topics that require consultation with indigenous peoples, while PEFC standards are more procedural, requiring only that meaningful engagement takes place. FSC’s criterion regarding public consultation distinguishes between “affected stakeholders” and “interested stakeholders” while the PEFC standard treats “local people and other stakeholders” equally.

Both FSC P&C and PEFC requirements prohibit the use of GMOs in the area being certified, with some potential flexibility should scientific evidence affirm the safety of GMO trees. FSC P&C allow documented and monitored use of biological control methods but prohibit a specific list of “Highly Hazardous Chemicals.” The PEFC now also prohibits pesticides that remain biologically active and highly toxic pesticides where viable alternatives are available, noting that silvicultural and biological control is preferable to chemical control. The PEFC explicitly states that chemicals should be avoided in order to protect water quality, while FSC P&C water protection criteria are less prescriptive. The FSC P&C and PEFC requirements are similar on sustainable production of timber and non-timber forest products (NTFPs), but less so on protecting habitat. While the FSC P&C require protection of rare and threatened species and their habitats, the PEFC requires that protected and endangered species not be exploited for commercial purposes and mandates measures for their protection “where necessary.”

Overall, while the PEFC has added substantial new requirements with respect to indigenous rights and labor standards, FSC remains more prescriptive on social issues.
and significantly more prescriptive on environmental issues. That said, the PEFC added new requirements for 8 key issues and is now as prescriptive or more than FSC P&C for nearly half of the key issues assessed. The PEFC increased the prescriptiveness of its standards for 19 key issues and decreased on none, whereas FSC P&C increased on 11 and decreased on 4. Compared to the prescriptiveness of the FSC-US and SFI described below, the FSC P&C and PEFC requirements exhibit more convergence.

4.2.2 Comparing the FSC-US and SFI
Consistent with the international level, a national-level analysis reveals the FSC-US standard as more prescriptive than the SFI standard on most key issues. Comparison of the changes made to the FSC-US and SFI standards in 2010, and again to SFI in 2015, reveals an “upward diverging” pattern. With respect to the 48 key issues, the FSC-US became more prescriptive than did the SFI. Of our 48 key issues, the FSC-US became more prescriptive in 20, whereas SFI became more prescriptive in 8 in 2010, 1 more in 2013, and 3 more in 2015 (See Figures 3 and 4, Appendices A and B). In 2008 the FSC-US was most prescriptive on 36 key issues, and the SFI was most prescriptive on 5. In 2016 the FSC-US was most prescriptive on 37 key issues, and the SFI was most prescriptive on the same 5 (Figure 3).

[FIGURE 3]

Both the FSC-US and SFI standards have generally become more prescriptive over time, although to different degrees and in different areas. The SFI’s changes in 2010 emphasized issues related to industry capacity such as training and communication while changes made during the same period by the FSC-US emphasized conservation-oriented forestry while removing a training requirement. Unlike the SFI’s 2010 revisions, the 2015 revisions to the SFI standard focus on ecologically responsible forestry as well as indigenous peoples’ rights. For example, in 2010, the SFI added new requirements to collect data on “Forests of Exceptional Conservation Value” (FECV), which we compare to the FSC’s requirements for “High Conservation Value Forests” (HCVF). Also in 2010, the FSC-US added language regarding monitoring and adaptive management of HCVFs. While the acronyms and even the additional language appear similar, the FSC-US added a number of more prescriptive requirements requiring certain areas to be designated HCVFs and specific types of accountability in HCFV management. SFI allows more flexibility in FECV management. HCVFs under the FSC-US require significantly more than baseline practices (Newsom et al., 2006), while SFI’s FECV
Figure 3: Comparing FSC-US and SFI on Scope and Prescriptiveness

Relative Prescriptiveness and Scope

Absolute Change in Prescriptiveness

- No prescriptive requirements
- Some prescriptive requirements
- At least as or most prescriptive
- Became less prescriptive
- Became more prescriptive
- No change

Increased in 20 issues since 2008
Increased in 13 issues since 2008
Increased
Net Change
requirements have been criticized as not significantly exceeding legal baselines which already protect threatened and endangered species (SFI 2014). In these different contexts, a requirement for monitoring or collecting data can have significantly different implications for what is actually required of forest managers. This dynamic exemplifies the overall dynamic of “upward divergence” by both standards, with the FSC-US maintaining significantly more prescriptive requirements.

The SFI and FSC-US also differ on policy settings (e.g. quantitative thresholds, specific performance outcomes, or levels of specific requirements). This is illustrated by issues such as clearcuts and harvesting near streams where policy settings can reasonably be compared. SFI limits clearcuts to an average of 120 acres with no maximum for all forest types. In contrast, the FSC-US requires that cutting resemble natural disturbance for harvesting in natural forests, and on plantations. The FSC-US also limits cutting to a 40-acre average and 80-acre maximum, with additional restrictions based on region. Regarding harvesting near streams, the FSC-US lists specific requirements for water quality, habitat, and other objectives with a focus on restoration. Additionally, two-thirds of nine FSC-US regions mandate numerical minimum riparian buffer zone sizes. In 2015, SFI expanded its definitions of riparian areas but continues to allow more discretion regarding what is included in plans to protect water resources. SFI provides no numerical minimums beyond those in state laws and best management practices.

While fairly stable in scope, there have been some changes. SFI allows for conversion of natural forests to plantations if ecological impacts are not significant and the converted forest type is not rare. In 2015, SFI added a more prescriptive requirement to conduct an assessment of these impacts. Following international criteria, the FSC-US only allows certification of plantation forests converted from natural forest if conversion occurred prior to 1994, and it requires a portion of these plantations to be maintained as, or restored to, natural conditions.

Divergence occurred mostly in ecological requirements like protecting habitat where the FSC-US became more prescriptive while the SFI stayed constant or, in the case of protecting Old-growth forests, decreased in prescriptiveness. Regarding protected areas, the FSC-US continues to require that representative samples of habitats be protected, but, since 2010, also requires an assessment of the adequacy of permanent protections. SFI’s requirements for protected areas continue to be largely encompassed by its requirements to protect imperiled species. SFI continues to require plans to identify and
protect moderately to highly valuable known populations of imperiled or critically imperiled species (designations G1-G2). In 2015, SFI added a requirement to participate in conservation planning. In 2010, the FSC-US expanded the scope of species requiring protection even further to include natural heritage species and candidate species (designations G1-G3, S1-S3, N1-N3). The FSC-US now requires surveys for any at-risk species potentially present or a presumption that listed or candidate species are present if the forest is in a species’ range. For old-growth forests, in 2010, the FSC-US added prescriptive requirements to restore a portion of old-growth forests where they would naturally occur and continues to demand protection measures that prohibit harvesting in most cases. In 2010, SFI removed a requirement to maintain sufficient old-growth acreage to maintain biodiversity, but still requires participation in regional old-growth conservation programs.

Overall, we find that each standard continues to have a different overarching focus reflected in the distinct areas in which each standard is most prescriptive. The FSC’s requirements tend to demand that forest operations “resemble natural processes” and “maintain ecosystem function” perhaps reflecting the interests of the environmental groups that founded the FSC. Over time, this emphasis has manifested in an increasing number of areas. This language appears more frequently and forcefully in the 2010 standard concerning issues including clearcutting, riparian management, HCVFs, protected areas, old-growth forests, snags and downed wood, residual trees, genetic diversity, plantations, restoration, natural disturbance, non-timber forest products, soil protection, road building, and management planning—for which the FSC-US maintains the most prescriptive standards.

In contrast, SFI is most prescriptive on issues such as material utilization, research, training, education, and public reporting and consultation. One possible explanation for SFI’s leadership on these issues is that they most directly affect the capacity and reputation of the forestry industry. For example, whereas the FSC-US increasingly restricts the size and shape of clearcuts to reflect natural disturbance and maintain ecological functions, SFI puts more emphasis on rapid site “green-up.” Green-up implies active planting to get tree crops growing quickly and to “manage the visual impact” of clearcuts.

The 2015 changes to the SFI standard reflect a different focus. The eight key issues on which the SFI increased prescriptiveness in 2010 reflect the SFI’s focus on industry
capacity and reputation. These included aesthetics, public reporting, education, training, and utilization. In contrast, the three issues in which the SFI increased prescriptiveness in 2015 reflect more social and ecological goals. These include prohibiting the use of certain toxic chemicals, restricting the circumstances under which natural forest can be converted to plantation, and requiring a written policy to recognize and respect indigenous rights. The SFI also added language clarifying and expanding the definitions of wetlands and riparian areas and requiring participation in conservation planning initiatives. We now discuss the implications of this turn and our other findings for theories of change in scholarship on private regulations.

5 Discussion

Several puzzles emerge from applying our framework to the forestry sector. We expect other undiscovered patterns would be uncovered with applications to other sectors, but we focus here on our results to illustrate the types of new research programs that may emerge.

Our results pose many questions for future research: Why do forestry standards seem to be ratcheting up? Why are international programs converging while U.S. programs are diverging? Why did the SFI seem to shift its focus in 2015? Are observed patterns the result of different types of market pressures? Are consumers or retailers, for example, more active than they were a decade ago? Are the net economic benefits of being certified enabling the FSC and SFI to increase prescriptiveness, while still rewarding, rather than punishing, participating producers? Alternatively, are norms being generated that trump purely economic rationales? Or, do internal organizational dynamics explain observed changes? This section discusses the conditions under which our descriptive findings could be consistent with causal explanations for why changes occur and suggests directions for future research.

Applying our framework yielded unexpected empirical results. In the early 2000s, Cashore et al. (2004) found forestry standards to be converging and hypothesized that perceived market forces created certain “ceilings” and “floors” constraining possible policy changes. Indeed, the FSC had increased flexibility in an effort to reduce the costs of compliance and expand market share, suggesting that FSC would be unlikely to add costly prescriptive requirements. For example, the FSC created the concept of “High Conservation Value Forestry” (HCVF) as a way to include companies operating in old-growth forests which was previously prohibited. Likewise, the FSC decided to permit the
certification of “plantation forests” as long as these practices occurred in lands converted before 1994. In contrast, the SFI had become more prescriptive, for example, by adding third-party verification requirements.

Our analysis reveals a different trend: both standards increased prescriptiveness but at different rates. In the most significant year for both standards, 2010, the FSC-US became more prescriptive in twice as many areas as did SFI. SFI added additional requirements in 2015, but with a lower rate of change than in the previous cycle. Various predicted patterns of equilibrium, convergence, or a “race to the bottom” do not describe the last decade.

Furthermore, while the hypothesis that SFI is most focused on solving collective action problems related to the capacity and reputation of the industry still seems to capture the overall focus of the SFI, it does not explain the nature of its recent changes, such as those restricting chemical use and protecting indigenous rights.

Leading theories cannot explain these results. For example, Bernstein and Cashore (2007), theorized three phases in which convergence in phase one of a high standard program leads to divergence in phase two as competing programs respond to different core audiences, followed by a convergent phase three when stakeholders engage in a collaborative system in which debates are about policy content rather than membership. It cannot explain a pattern of ratcheting up and divergence.

To position future research, we distill four variables theorized to influence the content of private regulations: organizational form, market demand, stakeholder trust, and societal norms. We reflect on the conditions under which each could explain our results.

1. Organizational structure: Organizational structure has been shown to play important roles in shaping the ways in which organizations attempt to incorporate environmental values (Howard-Grenville, 2006; Howard-Grenville et al., 2008; Kollman & Prakash, 2001; Prakash, 2000) (Howard-Grenville, 2006; Howard-Grenville et al., 2008; Kollman & Prakash, 2001; Prakash, 2000). Regulatory requirements reflect the balance of power among “core audiences,” Cashore (2002) or organizational structure (van der Ven, 2015). In addition to external audiences and competing programs, conceptions of sustainable forestry are contested within each program.5 While social movements, activists, and firms press agendas from the outside, debates also occur
between participants within FSC regional, national, and international standard-setting processes, as well as between the American Forest & Paper Association, its members, the now independent SFI organization. For example, there are differing opinions among SFI stakeholders about the extent to which the SFI brand should promote “naturalistic” management on private land or focus on “sustainable levels of production” and not restrict harvesting for other objectives. SFI’s organizational decision to establish an External Review board may have been an effort to “tie their own hands” to “assure stakeholders that club requirements will not be diluted” by internal pressure for less costly requirements (Prakash & Potoski, 2007).

Organizational theories imply that the FSC will always have more prescriptive social and ecological requirements because of the strong role of social and environmental groups in the organization, while the SFI will always be less costly or more focused on solving collective action problems for the industry. Both are constrained by previous decisions about who makes decisions and how. This means that internal organizational changes may shift policy content in ways that are largely independent of external forces such as competing programs.

In order to explain our results as driven by organizational change requires that FSC experienced a single organizational transformation in 2010 that exceeded anything experienced by SFI over our time period. The consolidation of the FSC-US from nine regional working groups to one national standard fits this description. Changes by FSC may reflect an internal decision to “harmonize” regional standards that would be a “one-off” critical juncture rather than an ongoing dynamic. In the FSC case, the regional standards were merged into one national standard and often ended up reflecting the more prescriptive regional standards.

**Explanation 1.1:** Recent changes in the FSC-US standard are a result of the regional-to-national harmonization processes.

**Explanation 1.2** Recent changes in the SFI standard are the result of efforts by sponsors to “tie their own hands” to increase credibility.

**Research imperative:** Assessing whether organizational change is driving changes in forestry standards requires attention to the relationship between organizational structure and decisions about standard substance. While reorganization of the FSC-US
seems clearly related to observed changes, scholars also need to assess whether changes in the SFI standard on issues historically more associated with the FSC’s core audiences were related to new organization features like External Review.

2. Market Demand: Other scholars focus on how market forces may explain the content of private regulations. Demand may increase for particular program’s brand, in which case it would directly affect only that program’s incentives. Alternatively, demand may increase for qualities such as “social responsibility” that are often shared and contested among programs, in which case it would drive both programs in the same direction (Spinazze & Kant, 1999): i.e. the lower the market demand, the “lower” the requirements; the higher the demand, the “higher” the ability of private regulations to reshape the markets from which they draw their authority (Cashore et al., 2004).

First, it may be that demand increased specifically for FSC-US certified forest products, allowing standards to increase while still growing market share. This, in turn, may explain the increases in SFI standards if there exists a “ratcheting up” dynamic. Fischer and Lyon (2014) suggest that such a dynamic is likely given the coalitions backing the FSC and SFI standards. Many US retailers do have commitments to give preference to FSC-US products, exceeding available supply of FSC-US products (Domask, 2003). Because FSC is widely seen as a benchmark for sustainable forestry, changes to the FSC-US standard may prompt SFI to change in similar ways. If this explanation is correct, then market demand should directly affect FSC-US requirements and indirectly SFI requirements through strategic response mechanisms.

Explanation 2.1: Increasing market demand allowed the FSC-US to increase costs of compliance without reducing net economic benefits and the SFI strategically changes its standards in response to changes in FSC-US standards.

Research imperative: Assessing this potential explanation would require careful attention to factors influencing demand for certified forest products, such as the procurement policies of major retailers (several of which have recently increased purchases of FSC-US certified products). This explanation would be supported by evidence that purchasing policies are increasingly specifying FSC-US certified products, that stakeholders within the FSC-US revision process saw increasing demand as an
opportunity to demand more prescriptive requirements, and that stakeholders within the SFI revision process were influenced by changes to the FSC-US standard.

A second market-based explanation is that purchasers of certified products demanded more prescriptive standards. If retailers and consumers focus on the content of standards, not just one program’s brand, then both standards may be directly affected by increasing market demand for products certified to more prescriptive standards.

**Explanation 2.2:** *Increased market demand for products certified to more prescriptive standards caused standards to increase prescriptiveness.*

*Research imperative:* Testing this explanation requires scholars to assess whether procurement policies increasingly reference certain benchmarks rather than simply specifying a particular program. Evidence of such a trend shaping discussions within each program would support this explanation, especially if the FSC was more influenced than the SFI.

3. **Stakeholder Trust and Legitimacy:** A third line of theory suggests that policy substance is driven by the need to maintain legitimacy and trust among certain stakeholders and key observers. Here ‘legitimacy’ means an assessment of the appropriateness of institutionalized authority. ‘Trust’, in contrast, implies a two-way relationship, embedded in perceptions of shared commitments to behave in a ‘trustworthy’ way, and according to shared values (McDermott, 2012).

Growth in participating firms may affect both trust and legitimacy. First, the number of issues and controversies may expand, leading to skepticism that auditors can address increasingly complex regulatory challenges. This may then lead stakeholders to demand more prescriptive requirements to compensate, and programs may capitulate in order to maintain legitimacy. As programs grow they may also include a wider diversity of producers and a larger number of auditors, reducing trust, and leading to more prescriptive requirements (McDermott, 2012). Late joiners may be relatively more motivated by market pressures than values and may thus take a more minimalist approach to meeting requirements (Baron & Lyon, 2011). This may reduce trust and spark conflicts. In response, programs may attempt to satisfy critics by adopting more prescriptive requirements. The need to maintaining legitimacy and trust points to a general dynamic regarding timing. The longer a policy in place, the greater the
opportunity for problems to be noticed or for new issues to emerge. New requirements are added to fill perceived gaps. If this explanation is driving change, then increasing prescriptiveness of standards does not necessarily signal increasing performance. Rather, increased prescriptiveness could be a response to decreased performance.

**Explanation 3.1:** *Broader adoption of the FSC and SFI has reduced trust and threatened legitimacy, resulting in both programs increasing prescriptiveness to compensate.*

*Research imperative:* To test theories focusing stakeholder trust, scholars could look for evidence that more recent adopters of the FSC or SFI certification were less trusted, had lower levels or prior performance, or other factors that may increase skepticism in private regulation. Additionally, scholars could measure the number and scope of conflicts around certification or directly assess trust in auditors and late-joining firms through interviews with members of the FSC or SFI governance bodies.

**4. Societal Norms:** Another set of explanations focus on how evolving norms directly affect the writing of regulations by shaping the decision-making agenda and ideas of appropriate behavior (Dingwerth & Pattberg, 2009). As private regulatory systems mature, they may shift from being driven mostly by market incentives to being shaped by shared values and beliefs. Potential changes would be increasingly evaluated by their “appropriateness,” not just by pragmatic concerns like feasibility, profitability, or competitive advantage. Indeed, strong norms within the forest industry have been credited with the increasing adoption of certification (Bradshaw Schulz, 2012). As there would be few shirkers, increases or decreases in regulatory cost could be passed on to consumers, limiting additional costs on participating firms (Cashore & Stone, 2014). This line of theory does not see private regulations as constrained by fixed ceilings or floors. Instead, these boundaries as socially constructed and likely to change.

**Explanation 4.1:** *Changes in societal definitions of appropriate forest practices directly influence the writing of standards. Due to differences in underlying coalitions, the FSC is more responsive changing societal norms than the SFI.* The original goal of the SFI to provide a lower cost alternative may be undergoing a “gradual transformation” (Streeck & Thelen, 2005), layering on additional requirements on issues such as genetically modified organisms where the SFI has come to match the FSC in
prescriptiveness. If, because of their different underlying coalitions, social norms affect FSC-US more strongly than SFI an “upward diverging” pattern may result. Shifting norms might also explain the recent focus of the 2015-2019 SFI standard changes on indicators historically more associated with FSC such as banning hazardous chemicals and recognizing indigenous rights.

*Research imperative:* To test this explanation, scholars might look for convergence among the opinions and values held by the broader communities involved in supporting, using, and writing standards. Research could also examine how changes were promoted and justified in the process of writing the standards. This explanation would be supported by evidence of changes over which there was little debate, or if the debate centered on what is appropriate rather than strategic. Debates and justifications around the cost of implementation, price incentives, or market share would be evidence against this explanation.

These hypotheses are not mutually exclusive. The organizational shift from sub-national working groups to a national standard may explain many changes in the FSC-US standard. Shifting market demand may explain other changes, such as FSC-US increasing restrictions on plantation forestry despite previously moving to include it. Shifting norms may be especially likely explanations for changes made by the PEFC and SFI to prohibit GMOs or to acknowledge indigenous rights recognized by the United Nations.

6 Conclusion

Scholars have made substantial progress in developing causal theories of how economic and political forces shape the substance of private regulations and how these different requirements then affect levels of adoption and compliance. We have argued for more precise definitions of the types of policy substance to which such theories may apply and for empirical work using comprehensive and disaggregated measures that can be measured across programs and over time. Our framework for measuring policy substance and classifying patterns of change with longitudinal data offers a foundation for further research about how competing private regulations compare, where they are going, and why.

Through the case of forestry standards in the U.S. we show what can be gained by such detailed measurement of policy change across a comprehensive scope of issues in a
specific domain. Our results show different patterns depending on whether one looks at policy scope, prescriptiveness or specific policy settings. Careful measurement uncovered patterns that previous scholarship has missed and which contradict some predictions of dominant theories. Our hope is that this deep dive into defining policy change in one domain not only enables scholarship on the causes of public and private regulation of forestry practices, but that it also offers a model for similar research in other policy domains.

This approach also has practical value. First, the power dynamics among groups that promote programs like the FSC or SFI have created an environment in which competing claims about policy substance and how it has changed confuse buyers. Because the politics of private regulation involves contested legitimacy, they “create demands by the respective ‘legitimacy communities’ for more ‘objective’ public comparisons that would resolve the debate about whose standards were higher” (Overdevest, 2010). We offer concepts to clarify what “higher” standards can mean. Second, it is simply impossible to measure the impact of a set of regulatory requirements without disentangling the component parts.

Most importantly, our framework and analysis offer a model for careful measurement of policy change as a variable. It is tempting to take ‘shortcuts’ by selecting what is easy to measure or what others have highlighted or by making broad generalizations. However, if private governance scholars are to advance theories that can be assessed against empirical evidence, our study highlights the importance of thinking carefully about policy content. Doing so will not only improve the quality of empirical research and theory, it may also uncover new puzzles.

References


Howard-Grenville, J. (2006). Inside the “Black Box”: How Organizational Culture and Subcultures Inform...


Notes

1 This paper represents the synthesis of scholarly expertise in forestry and political science. The research process also included significant engagement with the standard-writers themselves to accurately characterize nuanced difference between standards and changes over time. Our analysis fits in the “descriptive phase” of social science research, which permits the development of more nuanced explanatory research, as well as the development prescriptions for moving forward. If scholars seek to explain the adoption or creation of private regulations, assessing, comparing, and explaining their policy substance is an essential but largely overlooked step in the research process.

2 We analyze the content of the private standards themselves and do not address public policies even though both programs require adherence to domestic law. In some cases, US law is important for interpreting our results. For example, while the SFI does not have buffer zone standards, states like Oregon, California, and Washington have highly prescriptive laws on buffer zones to which any SFI or FSC certified operation operating in these states may be audited for compliance.

3 While the scope of our analysis is limited to forest practices, the conceptual framework could be applied to downstream regulations of supply chains such as supply chain tracking requirements, rules for minimum percent content, company-wide requirements, or grades of compliance. Any particular
comparative focus will involve different choices about the scope of issues to address, the prescriptiveness of instruments to do so, and the specific settings of requirements and thresholds.

Note that this analysis combines public disclosure and reporting requirements with consultation requirements under a key issue called “public reporting and consultation.” Public information is a first and necessary step for meaningful consultation of all forms, including informal and legal processes beyond certification processes. SFI added requirements for public audit summaries and annual reporting in 2010.