

Assembling an experimentalist regime: Transnational governance interactions in the forest sector

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Abstract

Transnational governance initiatives increasingly face the problem of regime complexity in which a proliferation of regulatory schemes operate in the same policy domain, supported by varying combinations of public and private actors. The literature suggests that such regime complexity can lead to forum shopping and other self-interested strategies, which undermine the effectiveness of transnational regulation. Based on the design principles of experimentalist governance, this paper identifies a variety of pathways and mechanisms, which promote productive interactions in regime complexes. We use the case of the EU's Forest Law Enforcement Governance and Trade (FLEGT) initiative, interacting with private certification schemes and public legal timber regulations, including those of third countries such as the US and China, to demonstrate how an increasingly comprehensive transnational regime can be assembled by linking together distinct components of a regime complex. We argue that it is the experimentalist features of this initiative and its regulatory interactions, which accommodate local diversity and foster recursive learning from decentralized implementation experience, that make it possible to build up a flexible and adaptive transnational governance regime from an assemblage of interconnected pieces, even in situations where interests diverge and no hegemon can impose its own will.

Keywords: European Union, experimentalism, FLEGT, forestry, regime complexity, transnational governance.

1. Introduction

It is a commonplace of international relations theory that effective, integrated regulatory regimes cannot easily be constructed in issue areas characterized by divergent interests and beliefs among key actors, where there is no hegemon with the power to impose a single set of rules (Hasenclever *et al.* 2000; Keohane & Victor 2011). The result in such conditions is typically regime complexity: a proliferation of regulatory schemes operating in the same policy domain, supported by varying combinations of public and private actors, including states, international organizations, businesses, and NGOs. Where these

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parallel, overlapping, or competing initiatives are not combined into a coherent hierarchical system, the ensuing fragmentation has often been held to undermine the effectiveness of transnational regulation (Raustiala & Victor 2004; Alter & Meunier 2009). Recently, however, some scholars working in this area have identified the possibility of productive interactions emerging, or being deliberately orchestrated, among the components of such transnational regime complexes (Alter & Meunier 2009; Abbott & Snidal 2009b, 2010; Keohane & Victor 2011). This special issue is itself a reflection of such rethinking, as the editorial introduction proposes a new conceptual framework for analyzing both positive and negative interactions between transnational business governance initiatives operating in the same economic sector or policy domain (Eberlein *et al.* 2012).

In this paper, we build on such rethinking to outline a theoretically informed route to the stepwise construction of a joined-up transnational governance regime in hotly contested policy fields where no single actor can enforce a unilateral solution. We use the case of the European Union's Forest Law Enforcement Governance and Trade (FLEGT) initiative, interacting with private certification schemes and public legal timber regulations, including those of third countries such as the US and China, to illustrate how an increasingly comprehensive transnational regime can be assembled *de facto*, if not *de jure*, by linking together distinct components of a regime complex. We highlight the experimentalist features of the FLEGT initiative and its regulatory interactions, arguing that it is precisely these features, which accommodate local diversity and promote recursive learning from decentralized implementation experience, that make it possible to build up a flexible and adaptive transnational governance regime from an assemblage of interconnected pieces.

2. Complexity and experimentalism in transnational regime formation

2.1. Regime complexity

Regime complexity may be defined as a situation in which there is no single, unified body of hierarchically imposed rules governing a transnational issue area or policy domain, but instead a set of parallel or overlapping regulatory institutions. In a recent survey, Alter and Meunier (2009) sketch out the possible consequences of such plural institutional arrangements for transnational governance. Like most previous commentators, they argue that regime complexity increases the likelihood of "cross-institutional political strategies," such as forum shopping, regime shifting, and strategic inconsistency. Faced with competing institutions and rules, actors will exploit regulatory diversity to pursue self-interested goals and particularistic advantages. In forum shopping, actors strategically select from among a set of institutional venues in hopes of obtaining a decision that will advance their own specific interests. In regime shifting, they try to move the regulatory agenda for a particular issue from one institution to another in order to reshape the global set of rules. In strategic inconsistency, actors intentionally create a contradictory rule or exploit contradictions between overlapping institutions in order to weaken the effect of existing disadvantageous rules. Alter and Meunier argue that regime complexity creates greater structural opportunities for these cross-institutional strategies and suggest further research to evaluate their frequency and impact.

Although Alter and Meunier (2009) focus primarily on the negative consequences of regime complexity, they also suggest that it may generate more positive interactions

between parallel or overlapping institutions. Thus competition between regimes can promote productive experimentation by actors pursuing different approaches, reduce the risk of failure of any single institution, stimulate cross-fertilization and horizontal learning, and enhance accountability by creating new opportunities for dissatisfied parties to challenge existing rules. But Alter and Meunier do not specify under what conditions such competition can produce these positive effects, nor do they identify institutional strategies for promoting them.

Keohane and Victor (2011) elaborate further on the potential for regime complexity to generate positive interactions in transnational governance. In their view, “loosely coupled” regime complexes, or sets of interlinked institutions without an overall architecture, often emerge as a creative response to the failure of attempts to create a more comprehensive and integrated international regime. Where the interests and beliefs of key actors persistently diverge and there is no hegemonic power, a weak or non-existent international regime is the most likely result. Under these conditions, groups of actors may create narrower institutions in order to move parts of the regulatory field forward. These uncoordinated moves may actually produce a stronger *de facto* regulatory regime. For instance, regime fragmentation increases the probability that individual components of complex problems such as climate change can be tackled separately and solutions adapted to local or regional conditions and concerns. In this way, if the first-best world of a coherent, broadly agreed global regulatory regime proves politically unfeasible, there may be a second-best world in which a loosely coupled regime complex improves regulatory outcomes in comparison with the real alternative of a weak or non-existent overarching regime.

In a more radical departure from standard regime theory, Keohane and Victor go on to argue that such loosely coupled regime complexes may also be more flexible across issues and adaptable over time than a hierarchical system of rules imposed by a monopolistic international institution. Rather than representing a second-best alternative to a broadly agreed global regulatory regime, regime complexes may thus offer a superior starting point for building a joined-up, sustainable set of transnational governance institutions. Keohane and Victor set out a number of criteria for evaluating actually existing regime complexes in terms of their coherence, accountability, determinacy, sustainability, epistemic quality, and fairness. But they do not provide a road map for the emergence of regime complexes with these beneficial features, nor do they identify a governance architecture within them for learning from local experimentation.

Recent work on transnational private, public–private, and multi-stakeholder regulation reaches similar conclusions. Abbott and Snidal (2009a,b) observe that the proliferation of Regulatory Standard Setting (RSS) schemes in fields like labor rights, human rights, and the environment, can undermine the effectiveness of transnational governance by raising compliance costs for firms, creating opportunities for both firms and states to shop around for the weakest or most favorable standards, and confusing consumers and other public audiences. But they also argue that the multiplicity of competing RSS schemes has a number of salient virtues in comparison to “International Old Governance” (hierarchical regimes led by intergovernmental organizations or IGOs): facilitating adaptation of standards and procedures to local circumstances; promoting regulatory experimentation; and avoiding institutional capture, by obliging RSS schemes to compete with one another for legitimacy and public support (Abbott

& Snidal 2009b). To retain the benefits of multiplicity within “Transnational New Governance” while minimizing the disadvantages of complexity, Abbott and Snidal recommend that states and IGOs should “orchestrate” RSSs by establishing substantive and procedural criteria for approved schemes, and publicizing the results to consumers and other audiences; providing material benefits to firms meeting the standards of approved schemes such as relaxed administrative requirements or preferential access to loans, grants, and contracts; and fostering collaboration and comparison among competing schemes to identify, diffuse, and scale-up effective practices and approaches (Abbott & Snidal 2009b, 2010). Like Keohane and Victor, however, Abbott and Snidal do not delineate a governance architecture within which local experimentation and dispersed expertise can be systematically combined with coordinated learning and regime coherence.

2.2. Experimentalism

Experimentalism, we argue, provides just such a governance architecture. Defined in the most general terms, experimentalist governance is a recursive process of provisional goal setting and revision based on learning from comparison of alternative approaches to advancing these goals in different contexts. Experimentalist governance in its most developed form involves a multi-level architecture, whose four elements are linked in an iterative cycle. First, broad framework goals (such as “sustainable forests” or “legally harvested timber”) and metrics for gauging their achievement are provisionally established by some combination of “central” and “local” units, in consultation with relevant stakeholders. Second, local units are given broad discretion to pursue these goals in their own way. These “local” units can be public, private, or hybrid partnerships. In regulatory systems, they will typically be private firms and the territorial authorities or branch organizations to which these immediately respond. But, third, as a condition of this autonomy, these units must report regularly on their performance and participate in a peer review in which their results are compared with those of others employing different means to the same ends. Where they are not making good progress against the agreed indicators, the local units are expected to show that they are taking appropriate corrective measures, informed by the experience of their peers. Fourth and finally, the goals, metrics, and decision-making procedures themselves are periodically revised by a widening circle of actors in response to the problems and possibilities revealed by the review process, and the cycle repeats (Sabel & Zeitlin 2012).

These four key elements should be understood as a set of necessary functions, which can be performed through a variety of possible institutional arrangements. There is in such an experimentalist architecture no one-to-one mapping of governance functions to specific institutional mechanisms or policy instruments, and vice versa. A single function, such as monitoring and review of implementation experience, can be performed through a variety of institutional devices, operating singly or in combination. Conversely, a single institutional mechanism, such as a formal peer review, can perform a number of distinct governance functions, such as assessing the comparative effectiveness of different implementation approaches, holding local units accountable for their relative performance, identifying areas where new forms of national or transnational capacity building are required, and contributing to the redefinition of common policy objectives (Sabel & Zeitlin 2008).

Experimentalist governance architectures of this type have become pervasively institutionalized across the European Union, covering a broad array of policy domains from regulation of energy, telecommunications, financial services, and competition through food and drug safety, data privacy, and environmental protection, to justice, security, and anti-discrimination rights (Sabel & Zeitlin 2008, 2010). But experimentalist governance architectures with similar properties can also be widely found in the United States and other developed democracies, both in the regulation of public health and safety risks, such as nuclear power, food processing, and environmental pollution, and in the provision of public services like education and child welfare (Sabel & Simon 2011). Transnational experimentalist regimes likewise appear to be emerging across a number of major issue areas, such as disability rights, data privacy, food safety, and environmental sustainability (Sabel & Zeitlin 2011).

Experimentalist governance architectures have a number of salient virtues. First, they accommodate diversity in adapting general goals to varied local contexts, rather than imposing uniform, one-size-fits-all solutions. Second, they provide a mechanism for coordinated learning from local experimentation through disciplined comparison of different approaches to advancing broad common goals. Third, both the goals themselves and the means for achieving them are explicitly conceived as provisional and subject to revision in the light of experience, so that problems identified in one phase of implementation can be corrected in the next. For each of these reasons, such governance architectures have emerged as a widespread response to turbulent, polyarchic environments, where strategic uncertainty means that effective solutions to problems can only be determined in the course of pursuing them, while a multi-polar distribution of power means that no single actor can impose her own preferred solution without taking into account the views of others.

The scope conditions for experimentalist governance are thus precisely the opposite of those for regime formation in standard international relations theory. For the latter, as we have seen, the formation of a comprehensive international regime depends on a convergence of interests and beliefs among the key actors, or the capacity of a hegemonic power to impose her preferred rules. Experimentalist governance, by contrast, depends on strategic uncertainty, a situation in which actors do not know their precise goals or how best to achieve them *ex ante*, but must discover both in the course of problem-solving, as well as on a polyarchic or multi-polar distribution of power, where no single actor can enforce a unilateral solution. Thus under conditions of polyarchy and disagreement among the parties, where standard international relations theory sees bleak prospects for creating a unified, effective multilateral regime, experimentalism discerns instead the possibility of building a new type of transnational regime with a different governance architecture. Because of their reflexive, self-revising capacity and deliberately corrigible design, such experimentalist governance architectures are also well-adapted to cope with volatile, rapidly changing environments characterized by deep uncertainty, which prominent theorists like Young (2006) and Keohane and Victor (2011) consider the critical contemporary challenge to sustaining effective international regimes.

2.3. Emergent pathways and causal mechanisms

Experimentalist governance appears particularly well-suited to transnational domains, where there is no overarching sovereign with authority to set common goals, and where the diversity of local conditions and practices makes adoption and enforcement of

uniform fixed rules even less feasible than in domestic settings. Yet the very polyarchy and diversity that make experimentalist governance attractive under such conditions can also make it difficult to get a transnational experimentalist regime off the ground. Thus, too many participants with sharply different perspectives may make it hard to reach an initial agreement on common framework goals. Conversely, a single powerful player may be able to veto other proposed solutions even if he cannot impose his own.

In some cases, an experimentalist regime may nonetheless be created through the established multilateral procedures for negotiating international agreements, as a result of reflexive learning by state and non-state actors from the failures of more conventional approaches. The clearest example is the 2008 UN Convention on the Rights of Disabled Persons (CRDP). Traditional regimes of this kind contain catalogues of specific obligations for states and sporadic international monitoring, understood as an analogue and (ideally) precursor to judicial enforcement. The CRDP, as de Búrca (2010) documents, arose out of a sustained debate among participating governments and NGOs about the deficiencies of such international human rights treaties. It departs from the model of formalist law strictly enforced by a court by incorporating many experimentalist features, including broad, open-ended goals such as “reasonable accommodation” for the disabled; participation of national NGOs and human rights institutions in implementation monitoring; and annual review of its operations on the basis of comparative national data by an inclusive conference of stakeholders.

Conversely, a transnational experimentalist governance architecture may also emerge through “cooperative decentralization” of an established international regime in response to failed attempts at imposing uniform universally applicable standards. Something of this kind may be occurring in the field of financial regulation, where pervasive differences in national and regional circumstances have led in the past to “sham compliance” with tightly harmonized global rules. Thus the new Financial Stability Board, as Helleiner and Pagliari (2011: p. 193) argue, appears to be moving fitfully toward “the development and promotion of broad principles-based regulatory standards.” These would allow for a substantial margin of policy autonomy to accommodate regional and national diversity, supported by “activities such as information-sharing, research collaboration, early warning systems, and capacity building.” Compliance with these broad regulatory standards would then be secured through a combination of regular peer reviews, periodic assessments by international financial institutions, and restriction of market access for non-conforming jurisdictions.

Often, however, the familiar coordination and collective action problems discussed earlier will block the initial formation of a comprehensive multilateral experimentalist regime. But that is only the beginning, not the end of the story. Because they are defined in functional rather than structural terms, experimentalist governance architectures can take a variety of institutional forms. They can be built in multiple settings at different territorial scales, which can be nested within one another vertically and joined up horizontally. A number of emergent pathways and causal mechanisms can be identified through which transnational experimentalist regimes may be assembled piece by piece in this way, rather than being constructed as a unified whole through conventional multilateral procedures. These pathways should be understood analytically as stylized, ideal-typical trajectories leading from a characteristic starting point (national or international, public or private) toward the emergence of a transnational experimentalist regime, while

the mechanisms should be understood as recurrent causal processes that explain the movement along these trajectories.¹

There is no reason to believe that these ideal-typical pathways and mechanisms exhaust the full range of possible routes to a transnational experimentalist regime, nor are they mutually exclusive, as they can often be found in combination with one another in specific empirical cases. Whether these pathways originate with public or private actors, or at the national or the international level, they converge on a multi-level, multi-actor governance architecture, which, in practice, should efface the relevance of these distinctions and thus the relevance of particular starting points and development patterns. In this sense, these experimentalist mechanisms can also be understood as devices for overcoming the path dependency and institutional inertia which many standard theorists consider endemic to transnational regimes, both public and private (Büthe & Mattli 2011; Keohane & Victor 2011).

In our analysis of the emergence of a transnational experimentalist regime for sustainable forestry and the control of illegal logging, we will focus on four such ideal-typical pathways. The first involves the creation of private experimentalist regimes in response to impasses in multilateral negotiations and inaction by public authorities, followed by their diffusion vertically along supply chains and horizontally within industry associations. In forestry, as we will see in the next section, a transnational coalition led by environmental NGOs established a private scheme to develop sustainable management standards and certify their application in response to the governance gap resulting from the failure of earlier intergovernmental efforts to agree to a binding global forestry convention. The Forest Stewardship Council (FSC), as we shall also see, has many experimentalist features, including not only its multi-stakeholder governance structure and deliberative decision-making procedures, but also its broad, principles-based standards, adapted to local conditions by national or regional chapters; continuous monitoring, independent verification, and revision of individual forest management plans; and full traceability of certified wood from initial harvest to final point of sale.

One mechanism, through which private forest certification has expanded and developed, is vertical diffusion along supply chains from downstream customers to upstream producers. Thus retailers, branded manufacturers, and government procurement agencies have responded to NGO campaigns for responsible sourcing by pressing and sometimes assisting their suppliers to upgrade standards and achieve sustainable forestry certification. A second such mechanism is horizontal diffusion within industry associations. In some cases, industry associations have accepted FSC standards and promoted certification among their members. In others, they have established alternative business-dominated schemes with weaker initial standards and verification requirements. Either way, industry associations have proved important institutional devices for recruiting forestry firms into certification schemes, coordinating their responses to changing demands from external actors, and pooling learning from implementation experience.

A second pathway toward a transnational experimentalist regime involves unilateral regulatory initiatives subject to procedural requirements imposed by multilateral institutions like the World Trade Organization (WTO). Thus a large jurisdiction such as the EU or the US may unilaterally seek to extend its internal regulations to transnational supply chains as a condition of market access. WTO rules permit member states to restrict imports in order to protect public health and the environment. But as interpreted by the WTO Appellate Body in its landmark *Shrimp-Turtle* decisions (WTO 1998, 2001), they

also require states wishing to restrict imports on these grounds to ensure that their proposed measures are non-discriminatory and proportional to the intended goals, take account of relevant international standards, and consult with their trading partners to minimize the impact on affected third parties (Weinstein & Charnovitz 2001; Scott 2007). These disciplines, when they permit such extensions at all, can thus provide a reflexive mechanism for transforming unilateral regulatory initiatives by developed jurisdictions into a joint governance system with stakeholders from the developing world, if not a fully multilateral experimentalist regime.

The EU's FLEGT initiative offers a clear illustration of this pathway. As we will see in Section 4, FLEGT seeks to control exports of illegally logged wood by negotiating Voluntary Partnership Agreements (VPAs) with developing countries to create export licensing systems, based on jointly defined legal standards, regular monitoring and performance review, and third-party verification. Local civil society stakeholders participate both in the definition of "legally harvested wood" and in monitoring its certification, each of which is explicitly conceived as revisable in light of the other, while the EU provides development assistance to build up the regulatory capacity of both public and private actors. But the effectiveness of this experimentalist initiative depends on individual developing countries' willingness to sign such agreements. To reinforce FLEGT's effectiveness and extend its geographical scope, the EU has therefore enacted legislation requiring all businesses placing wood products on the European market from whatever source to demonstrate "due diligence" in ensuring that they had not been illegally harvested. The EU's approach to combating illegal logging appears likely to be accepted as legitimate not only by the WTO but also by developing countries, because it offers them an opportunity to participate in a jointly governed system of legality assurance, while imposing parallel obligations on European timber firms to exercise due diligence in respecting local legal standards.

A third pathway arises where multilateral treaty obligations do not impose procedural constraints on unilateral regulation, but there is transnational pressure for coordination of separate national and/or regional regimes. Under these circumstances, convergence toward an experimentalist regime can emerge via mutual influence, transmitted through thin links such as the operation of multinational corporations within each other's territory, or interchange within transnational advocacy networks. In forestry, as we will see in Section 5, the US has recently adopted legislation subjecting trade in illegally harvested wood to criminal prosecution, with harsher penalties for violators who fail to exercise "due care" in acquiring such products, and obligations for importers of timber products to declare their species and place of origin. Although the US Lacey Act lacks many of the experimentalist features of FLEGT and the EU Timber Regulation, civil society activists and public officials from both jurisdictions are exploring opportunities for synergy between the two regimes through exchange of information and experiences on the one hand, and joint pressure on their trading partners to adopt similar schemes on the other.

A fourth pathway to the development of transnational experimentalist regimes works through benchmarking and public comparison of competing components of regime complexes. In private forest regulation, as we argue in section 3 below, both the governance arrangements and substantive standards of the FSC and its business-led rivals have converged as a result of what we call "benchmarking for equivalence," conducted by retailers, government procurement agencies, and industry associations in response to pressure from NGOs, which has pushed the industry schemes to raise their standards and

the FSC to make certification less costly and more practically feasible, even if they remain some distance apart on key issues. Without such processes of public comparison, which obliged each “private” certification scheme to justify and where necessary revise its standards to meet the assessment of external actors, the competition between them could easily have degenerated into a race to the bottom, rather than upward harmonization through mutually productive interaction. FLEGT VPAs and the EU Timber Regulation extend and formalize this logic of accountability by providing for public recognition of private certification schemes, subject to comparative assessment of their legal standards, monitoring systems, and verification arrangements. A weaker form of such public recognition is also implicit in the US Lacey Act, where participation in a bona fide private certification scheme may serve as mitigating evidence of “due care.” Both the EU and the US, finally, are likely to have a similar impact on their major trading partners, such as China, by pressing them to adopt equivalent legality assurance regimes, whether public or private, as a condition of market access.

Taken together, we conclude, these four pathways and the mechanisms underlying them appear to be leading to the de facto emergence of a joined-up transnational experimentalist regime for sustainable forestry and control of illegal logging, which blurs and may ultimately efface standard distinctions between public and private regulation.

3. From failed public governance to private experimentalism

Transnational efforts to build a regulatory regime for forestry date back to 1992, when environmental groups and northern countries concerned with high rates of tropical deforestation proposed a binding global convention at the UN Conference on Environment and Development. Developing countries led by Malaysia rejected that proposal, fearing that their capacity to achieve economic development would be constrained by northern demands for conservation, which they also viewed as a disguised form of protectionism (Bernstein & Cashore 2004). The Rio Earth Summit instead produced only a set of non-binding forest management principles, which enshrined the principle of national sovereignty over forest exploitation. Over the ensuing 30 years, several additional attempts, including the UN Intergovernmental Panel on Forests (IPF) and its successor, the Intergovernmental Forum on Forests (IFF), created international dialogues on forest sustainability but as at Rio, “the IPF delegates failed to agree on major issues” (Rosendal 2001, p. 450; Humphreys 2006).

Efforts by some northern governments to tackle this issue by imposing unilateral environmental standards or mandatory eco-labeling systems for imported timber were likewise blocked by their incompatibility with the rules of the global trade regime. Thus, for example, the Austrian government was obliged to withdraw a law banning import of unsustainably harvested tropical wood products in the face of complaints by developing countries to the WTO’s predecessor, the General Agreement on Tariffs and Trade (GATT). An earlier effort during the late 1980s to develop a system for certifying ecologically acceptable forest products through the International Tropical Timber Trade Organization (ITTO) similarly foundered on opposition from timber-exporting countries and charges of GATT-incompatibility (Bartley 2007).

3.1. Experimenting with private certification

Such failures of multilateral agreements and national public governance, however, can create openings through which non-state actors creatively move parts of a complex issue

forward. Forestry provides a clear illustration. Thus in response to the failure of nations to agree on common global rules at the 1992 Rio conference, civil society groups began developing private standards and certification systems. A year after the Rio debacle, environmental NGOs, businesses, foundations, and social organizations launched the Forest Stewardship Council. The FSC has a number of experimentalist features which explicitly address the impasse at Rio by establishing a deliberative, multi-stakeholder process for setting and revising broad, principles-based standards for sustainable forest management, adapting them to local conditions, certifying their voluntary application by firms, independently verifying the results, and requiring corrective action where needed.

In order to overcome the mistrust and resentments that blocked agreement at Rio, the FSC creatively balanced the influence of environmental, business, and social organizations, as well as southern and northern interests, in its central standard setting and revision body. Standards and procedures are determined through deliberation and supermajority voting by three equal chambers representing environmental, economic, and social interests, with equal weight within them for members from the global north and the global south.

The FSC's principles include respect for labor and indigenous people's rights, as well as biodiversity, ecological sustainability, and environmental management requirements. These general principles are elaborated through more specific global standards and criteria, which are in turn adapted to local conditions by national or regional chapters.

Compliance with FSC principles and standards is verified by independently accredited third-party monitoring organizations. Conformance audits occur every five years, supplemented by annual surveillance audits. Audit teams review forest management planning documentation, firm financial data, and contracts for services (such as chemical applications), as well as conduct consultations with forest employees and other local stakeholders, such as NGOs, community leaders, resource managers, and neighbors about problems with the certified forest's management.

FSC audits also enable continuous learning at the forest management unit (FMU) level. Principle 8 states that certified management units must continually assess the condition of the forest, monitoring harvest yields, growth rates, compositional changes in flora and fauna, environmental and social impacts of harvesting, and costs, productivity, and efficiency of forest management. Results of such monitoring must be incorporated into the revision of management plans. In theory, therefore, the FSC establishes a process of continuous learning, whereby firms should be able to assess regularly updated information on environmental impacts, growth rates, yields, and so on. This also means that auditors have access to information about the relative effectiveness of forest management practices, which they could use to develop performance-based comparisons across certified units. Such comparisons could be used to put additional pressure on laggards and leaders and to inform the regular three-year General Assembly Meeting of the FSC, where the chambers vote on any changes needed in the standards. To date, however, the FSC has inadequately developed its own capacity for experimentalist "learning by monitoring" (Sabel 1994), even if the institutional preconditions for the functioning of such a system are already in place, because it fails to pool, compare, and thereby induce greater reflection on local standards implementation.

To promote accountability of both certified forests and monitors, the FSC requires accredited auditors to publish public summaries of the audit reports on their websites. Descriptions of the forest are recorded (location, management objectives, size of holding,

types of sites) and documentation of the audit findings are provided, including major and minor non-conformances, summaries of field and office assessments, and stakeholder interviews. These audit summaries have enabled watchdog groups and activists to monitor the functioning of the FSC and thereby contribute to securing the FSC's accountability to the broader forest governance community.

The FSC also certifies supply chains. In order for retail products to carry an FSC label, each step along the supply chains must be certified. Traditionally, chain of custody audits have been built on "paper-based" systems, where checkers evaluate whether companies have systems in place to track FSC certified wood through the supply chain. Recent advances, however, suggest that DNA fingerprinting technologies may soon enable genetically based spot checks to supplement paper and system audits (Auld *et al.* 2010).

The FSC thus displays several key features of an experimentalist governance architecture. Its global organization establishes broad framework goals for "sustainable forests." The national and regional chapters are given discretion to customize these goals to local conditions. Individual FMUs apply these standards and report regularly on their performance through audits. Theoretically, the FSC can orchestrate a process of information pooling and review in which the results of local experimentation with sustainable forestry are compared with those of others employing different means to the same ends. Auditors do in fact require that local units show that they are taking appropriate corrective measures, although the FSC could do more to require continuous improvement from experience-based learning across, as well as within, FMUs, by endogenizing lessons learned from implementing the standards in regular revisions at General Assembly meetings.

3.2. Productive interactions or regime fragmentation?

The emergence of private certification schemes could have led to a highly fragmented regime in which high-standards forest operations joined the FSC for strategic advantage while others looked to weaker schemes to shield themselves from public regulation (Bartley 2007). In fact, as competing industry certification schemes emerged, progressive firms and those under strong state regulatory standards did join the FSC for strategic advantage, while many large forest industry companies and small forest landowners joined weaker competing schemes, creating an apparently fragmented governance space (Cashore *et al.* 2004).

However, three key mechanisms have combined to encourage more positive interactions between the FSC and its competitors (Overdevest 2004). Rather than fragmentation, competition among private schemes instead resulted in mutual adjustment, learning from experience, and increased accountability of schemes to one another and to external audiences. This accountability, initiated by downstream customers, government procurement offices, and NGOs through "benchmarking for equivalence," enhanced the social nature of their rationality, explaining how a reflexive competition emerged which yielded productive interactions rather than a race to the bottom.

These regime dynamics thus call attention to how issue areas characterized by strategic uncertainty and complex interdependence, in which actors like forest companies cannot achieve narrow self-interested goals because they depend on the approval of others (such as consumers, retailers, regulators), may generate conditions for a more other-regarding rationality to emerge. Rather than shielding participants from public scrutiny, private certification schemes thus subjected them to broader demands for

mutual accountability. We argue in subsequent sections that as EU FLEGT and potentially the US Lacey Act start to recognize private forest certification schemes as evidence of legality and subject them to a measure of public oversight, further productive interactions and a more coherent transnational governance regime can be expected to emerge, cutting across conventional distinctions between public and private authority.

One mechanism through which private forest certification has expanded and developed as an alternative to the weak international regime created by states following Rio is vertical diffusion along global supply chains from downstream customers to upstream producers. Retailers, branded manufacturers, and public procurement agencies have responded to NGO campaigns for sustainable sourcing by pressing and sometimes assisting their suppliers to upgrade standards and achieve forestry certification. Initially, such large end-of-chain retailers only adopted FSC-preference policies after being targeted by NGO campaigns. NGOs thus played an important role in pushing economic actors to discover a “self-interest” in adopting higher standards so that they could put an end to the forest campaigns. Over time, however, such standards have become more broadly institutionalized as good business practice.

In addition to these commercial supply chains, government purchasing policies provided a major stimulus for the adoption and diffusion of private forest certification standards. Denmark, Belgium, France, Germany, Netherlands, the UK, Japan, and New Zealand all accept private certification as evidence of legality and/or sustainability in meeting green public procurement standards (Gulbrandsen 2011). In combination, public and private supply chains have thus proved an important conduit for partial and selective transnational forest regulation in the absence of a multilateral regime.

A second mechanism through which private certification has expanded and developed as an alternative to the weak public international forestry regime is horizontal diffusion within industry associations. As of April 2011, for instance, the Program for the Endorsement of Forest Certification Schemes (PEFC), which historically has been much more closely associated with industry associations, had certified 60 percent more hectares than the FSC.²

The PEFC’s larger share of certified acreage reflects its emergence as the standard of choice among national forest industry associations, sometimes even becoming a requirement for associational membership, as with the US Sustainable Forestry Initiative (SFI). The PEFC, like the FSC, endorses nationally customized certification systems. But it originally appealed to non-industrial landowner associations who found the FSC’s model of regular annual audits economically impractical, because many small-scale forest operations do not harvest every year and because they worried that the FSC was dominated by environmental advocacy organizations which knew little about silviculture. Small landowners’ associations in countries dominated by fragmented, small-scale ownership, but generally quite strong environmental regulations, like Finland, Sweden, and Germany, created the PEFC in order to combat pressure to join the FSC. Later however, the PEFC enrolled industrial landowner associations whose members harvest thousands of acres on an annual basis in countries such as the US and Canada, as well as industrial forestry associations in the global south, such as Argentina and Brazil (Cashore *et al.* 2004).

The high rate of adoption of private standards through associational channels suggests the comparative organizational advantage of horizontal diffusion strategies for private standards, although in forestry this has arguably benefitted industry-sponsored

certification schemes more than their NGO-sponsored counterparts. A key mechanism engendering more productive interactions in the face of such forum shopping is public comparison and benchmarking for equivalence. In the following discussion, we show how such benchmarking generated positive interactions and upward convergence of standards among private certification schemes. The results presented here suggest that a narrow, asocial strategic rationality leading to races to the bottom is not a necessary outcome of competition within regime complexes.

Impressed by the differences between the FSC and its competitors and concerned that these would not be readily apparent to others in the broader governance field, NGOs, retailers, government procurement agencies, and international organizations like the World Bank, began to benchmark the standards of these schemes against one another. NGOs supporting the FSC took the lead in generating comparative studies in which operational details of different emerging schemes were exposed to public debate. In each major location where competitors emerged NGOs produced detailed comparisons, showing how FSC and competitors differed in terms of substantive and procedural standards, emphasizing how the weaker rival schemes lacked the FSC's balanced governance, annual and independent audits, stakeholder consultations, regular revisions, and performance-based principles and assessment criteria.

These reports generated unexpected reactions from weaker industry schemes, which became concerned that such contrasts would delegitimize them with external audiences. But this benchmarking process also generated learning by the FSC about the relative strength of competing systems, such as the PEFC's greater accessibility and affordability for smaller landowners. The NGOs did not intend their reports to guide internal changes in the standards, but hoped instead that external audiences would reject the FSC's competitors. But these comparisons instead ended up producing substantial adjustment on both sides.

The explanation for this unexpected development can be found in the legitimacy dynamics of private governance schemes. Both Cashore *et al.* (2004) and Black (2008) have argued that because private certification schemes do not enjoy the same taken-for-granted legitimacy of public authorities, they need to gain it from legitimacy-providing communities such as supply chain actors, industry associations, academics, international organizations, and so on. Their need to be accepted by such legitimacy communities gives the latter significant power to influence private certification standards in accordance with their own narrow rationality, a point emphasized by Black and Cashore *et al.* But it also creates interdependence and strategic uncertainty among the participants in these relationships.

By strategically targeting public and private supply chains' reliance on "demonstrably questionable" forest management or certification systems, NGOs not only rendered the differences between the FSC and its competitors transparent, but also highlighted to downstream customers their deep dependence on the trustworthiness of upstream suppliers. This exposed the interdependence and uncertainty in the system. End-users' reputations depended on how seriously suppliers took their standards. Rather than reinforcing a narrow self-interested rationality, weaker certification schemes were forced to justify their standards publicly, at the same time as retailers, manufacturers, and government procurement agencies came under pressure to live up to their commitment to high standards. These comparisons therefore had the effect of broadening the rationality of industry certification schemes vis-à-vis retailers and other end-users, as well as of the latter vis-à-vis their own standards.

Table 1 Forest certification program characteristics

Program	Third-party auditors?	Chain of custody?	Public reporting?	Stakeholder consultation?	Independent governance?	On-product label?
American Tree Farm System	Yes	Yes	Yes	Yes	Yes	No
Canadian Standards Association	Yes	Yes	Yes	Yes	Yes	Yes†
Forest Stewardship Council	Yes	Yes	Yes	Yes	Yes	Yes
Programme for the Endorsement of Forest Certification	Yes	Yes	Yes	Yes	Yes	Yes
Sustainable Forestry Initiative	Yes	Yes	Yes	Yes	Yes	Yes

†The Canadian Standards Association (CSA) has adopted the Program for the Endorsement of Forest Certification (PEFC) on-product label and discontinued use of the original CSA on-product label.

Source: Adapted from Fernholz *et al.* (2010).

The results of benchmarking for equivalence can be seen in the often dramatic responses of industry schemes. The FSC and its competitors started off far apart in both substantive and procedural standards. Thus the industry-sponsored schemes initially lacked multi-stakeholder governance structures, independent audits, stakeholder consultations, regular revisions, and performance-based principles and assessment criteria (Overdevest 2005, 2010). Table 1 shows that competitors have all moved closer to the FSC on these dimensions.

Conversely, the FSC in turn has modified its own standards in certain areas to make certification less costly and more practically feasible, for example, by introducing simplified procedures and group certification schemes for small forest operations.

Other studies of competing forest certification schemes, while acknowledging this trend toward cross-scheme convergence, also emphasize continuing divergences in substantive standards not only between the FSC and its competitors, but also among the national and regional standards of the FSC itself. But these studies tend to assume that more stringent and prescriptive substantive standards, for example, regarding riparian logging exclusion zones or clear-cutting bans, are inherently superior, without reference to their practical effectiveness in promoting environmental sustainability in specific local contexts, which would be the key evaluation criterion from an experimentalist perspective. Conversely, such studies also tend to consider any adaptation of FSC standards to forest firm concerns as a sign of weakening in conformity to market pressures, irrespective of whether changes, such as reducing the frequency of audits of small landowners or introducing a secondary “percentage-in/percentage-out” label for certified wood, may enhance rather than compromise their fitness for purpose (Cashore *et al.* 2004; McDermott *et al.* 2009).

Responses to recent comparisons suggest that these dynamics remain effective in the sense that the gaps between the PEFC and FSC continue to close. Thus a recent World

Wildlife Fund (WWF) study concludes that the 2010 revision of the PEFC international standard brings it “much closer” to the International Social and Environmental Accrediting and Labeling (ISEAL) Alliance code of good practice, endorsed by the FSC, which sets minimum criteria for a credible voluntary standard system, including stakeholder consultation, balanced participation, and adaptation to local conditions (Walter 2011).

These comparisons, however, are largely based on analyses of the paper standards. As such, they lack the capacity to generate disciplined assessments of how well the schemes are working on the ground, which could feed into public accountability, recursive learning, and external pressure for improvement. This is a crucial issue and the next generation of evaluations of competing forest certification schemes – and thus their future interactions – would be better served if they were based on performance rather than paper-based comparisons. Such comparisons are necessary both to keep the FSC and its competitors responsive to their own standards as well as to forestall growing gaps between them.

Over the past two decades, private forest certification has offered a creative but incomplete response to the failed multilateral forest regime by extending vertically down supply chains and horizontally across industry associations. Over 25 percent of managed forest lands worldwide have been enrolled in one of the competing forest certification schemes. But the global south’s share of certified acreage has been far smaller, as most developing country producers could not afford the associated costs, needed external support to adopt high forest sustainability standards, and faced little domestic demand for certified forest products (Muthoo 2009). Furthermore, through benchmarking for equivalence the standards of the weaker industry schemes’ standards have been raised, although inadequate attention has been paid to comparisons of on-the-ground performance. Yet despite these mechanisms of vertical, horizontal, and competitive diffusion, private experiments with forest certification have not so far produced a coherent, joined-up transnational governance regime.

4. FLEGT as an experimentalist transnational regime³

By the early 2000s, private certification schemes had thus achieved high rates of coverage among industrial forest companies in developed economies. But their take-up by developing countries remained limited, especially in the tropical forests whose deterioration sparked the original campaign for global regulation. In response, NGOs, governments, and international organizations have focused increasingly on combating illegal logging, an endemic problem in many countries, which depresses prices for legally harvested wood and undercuts the adoption of sustainable forestry practices (Humphreys 2006; Cashore *et al.* 2007; Lawson & MacFaul 2010).

The most ambitious such initiative is the EU’s FLEGT Action Plan, adopted in 2003, and buttressed by the enactment of a voluntary import licensing scheme in 2005 and the EU Timber Regulation in 2010. Like private certification itself, FLEGT arose from dissatisfaction with the lack of progress in tackling the problem of forest degradation through multilateral institutions. During the mid-1990s, environmental NGOs had successfully pushed the issue of illegal logging onto the agenda of the UN Intergovernmental Panel (later Forum) on Forests, which called on participating countries to consider national action and promote international cooperation to reduce illegal trade in forest products. The G8 then included illegal logging in its 1998 Action Programme on Forests,

and proposed a set of measures to improve domestic forest law enforcement and reduce illegal international trade in forest products, which were echoed in turn by the Johannesburg World Summit on Sustainable Development in 2002. Beginning in 2001, the World Bank sponsored a series of regional dialogues on Forest Law Enforcement and Governance (FLEG), which brought together governments, businesses, and NGOs from timber-producing and consuming countries to discuss domestic and international actions aimed at tackling illegal logging and trade. These initiatives, particularly the FLEG processes in Asia and Africa, produced a growing political and epistemic consensus on the problem of illegal logging and appropriate policies to combat it, including improvements in domestic law enforcement and forest management capacity, involvement of stakeholders and local communities in forest decision-making, monitoring of forest resources, and coordinated efforts to control international trade in illegally harvested timber. They also stimulated bilateral agreements between producing and consuming countries to implement some of the proposed measures. But none of these processes generated binding commitments among the participating countries, nor the creation of systematic mechanisms for monitoring progress toward their agreed aims (European Commission 2003; Humphreys 2006; Cashore & Stone 2011).

Under these circumstances, the EU decided to proceed unilaterally, by linking the improvement of forest law enforcement and governance (FLEG) to regulation of trade (T), but in ways shaped by the need to comply with WTO rules, as well as to obtain the consent of developing countries themselves. The centerpiece of the FLEGT Action Plan was the negotiation of bilateral Voluntary Partnership Agreements with developing countries to establish licensing systems for the export of legally harvested wood to the European market, where legality includes reference to the social and environmental conditions of production. Because they are voluntary and jointly agreed, such licensing systems were expected to be fully WTO-compatible, unlike the unilateral eco-labeling requirements for imported tropical wood proposed by some northern governments a decade earlier (Brack 2009). But the VPAs were also designed to win the active cooperation of developing country stakeholders by promoting “equitable and just solutions” for all concerned interests; engaging local communities and NGOs in forest sector governance reform; and providing capacity-building support for civil society and the private sector as well as for public fiscal, law enforcement, and forestry authorities. Given the “important but not dominant” place of the EU in the world market for wood products, the FLEGT Action Plan underlined the need for continuing efforts to build an effective multilateral framework for controlling illegal trade in collaboration with other major importers. But “in the absence of multilateral progress,” the European Commission would eventually consider further measures, including “legislation to control imports of illegally harvested timber into the EU” (European Commission 2003).

The first FLEGT VPA was signed with Ghana in September 2008, followed by the Republic of Congo (2009), Cameroon (2010), the Central African Republic (2010), Indonesia (2011), and Liberia (2011). Negotiations are currently underway with Malaysia, Gabon, the Democratic Republic of Congo, and Vietnam. These agreements have taken years to negotiate, not only because of the technical complexity and political sensitivity of the issues concerned, but also because the EU has insisted on an open and deliberative multi-stakeholder process, with full participation of domestic civil society in their design and implementation. To facilitate this process, the EU has provided extensive support to partner country governments, civil society organizations, and indigenous

forest communities through capacity-building projects organized by international NGOs and consultancies.

At the heart of each VPA is a national Legality Assurance System (LAS), based on jointly agreed definitions of legally harvested timber; a legality “grid” or “matrix,” with indicators and verifiers defined for each obligation; and a comprehensive, integrated system for controlling the flow of logs from the forest to the point of export, ensuring that no illegal wood enters the supply chain. Wood conforming to these standards will receive FLEGT export licenses, subject to verification of individual shipments, and monitoring of the operation of the LAS as a whole by independent auditors and civil society organizations, as well as by government officials. Each VPA is overseen by a joint committee comprising both EU and partner country representatives, which is responsible for resolving disputes; monitoring and reviewing implementation of the agreement; assessing its broader social, economic, and environmental impacts; and recommending any necessary changes, including further capacity-building measures. The European Commission and EU member states commit to providing financial and organizational support for implementation of the agreement, and to helping partner countries raise additional funding from other international sources as needed.

FLEGT VPAs are designed to incorporate key experimentalist features such as deliberation, revisability, and recursive learning. Thus the legality standards in each agreement are the product of a deliberative, multi-stakeholder review process, requiring reconciliation and consolidation of conflicting regulations from different sources, including international treaty commitments as well as domestic law. They cover not only fiscal, forestry, and environmental regulation, but also labor law, worker health and safety, and the rights of indigenous communities. In many of these areas, the review process revealed significant inconsistencies and gaps in existing regulation, which the signatory governments have committed themselves to rectify through legal and administrative reforms. The legal definitions themselves are explicitly subject to periodic review and revision in light of new developments and experience with their implementation.

Verification and monitoring, similarly, are conceived as mechanisms for learning and continuous improvement of forest management and governance, as well as compliance enforcement. Thus for example, the role of independent monitoring is understood as “not just to find infractions as they occur, but to investigate the root causes of the infraction by analyzing information channeled from various sources in a systematic manner and to document governance problems” (Resource Extraction Monitoring 2010; DG DEVCO 2011, p. 28). Transparency and public disclosure of information on verification of the LAS are likewise regarded as crucial provisions aimed at enabling civil society networks to participate actively in monitoring its operations at all levels. The joint implementation committees, which operate by consensus but may refer unresolved disputes to arbitration, are constituted as deliberative problem-solving bodies responsible for sustaining the agreement through improvements based on learning by monitoring of its implementation.

Although FLEGT VPAs are becoming increasingly standardized, they differ from one another in several areas, reflecting both specificities of the local setting, and the sequence in which they were negotiated. Thus for example the Republic of Congo is creating two separate legality grids, one for forest timber and the other for commercial plantations, while Cameroon, which is a major processor of imported wood, has led the way in developing a sophisticated traceability and chain-of-custody system to prevent illegal

timber from neighboring countries entering its supply chain. Although the LAS in each VPA applies to all timber exports, not just those to the EU, countries vary in how they are integrating production for the domestic market into these systems in order to avoid creating a double standard of legality. Institutional arrangements for participation of civil society actors in implementing and monitoring the VPAs likewise vary cross-nationally, becoming progressively more extensive and specific in later agreements. Negotiating FLEGT VPAs has thus been a “learning-by-doing process,” with transfer of knowledge and experience not only between countries, but also across regions (e.g. between Cameroon and Vietnam, which is a major processor of imported timber from the Mekong Basin). This adaptive learning and knowledge transfer process has been supported by the development of a rich and variegated expert community of research and policy institutions, consultancies, and NGOs.

FLEGT VPAs were attractive from the start to some developing countries because of their potential to enhance consumer confidence, improve access to European markets, increase tax revenues, and open up new sources of development assistance. But these agreements are also quite challenging, both politically and administratively, in terms of their demands for multi-stakeholder participation and reform of forest-sector governance. The first round of VPA negotiations accordingly proceeded slowly, with some developing country governments remaining initially reluctant to move beyond exploratory talks, particularly as their competitors continued to be able to export timber to the EU with no legality checks.

In response to these concerns, the EU enacted new legislation in 2010 requiring all businesses placing timber products on the European market from whatever source to demonstrate “due diligence” in ensuring that they had not been illegally harvested. Such due diligence can be demonstrated in three possible ways: (i) possession of a FLEGT VPA export license; (ii) establishment of a private risk management system, with full traceability, risk assessment, and risk mitigation procedures; or (iii) participation in a recognized monitoring scheme, based on independent verification of compliance with applicable forestry legislation. The European Commission, in cooperation with national “competent authorities,” is responsible for determining that recognized monitoring bodies are maintaining effective systems of due diligence against illegal logging, including procedures for remediation of violations. EU member states are responsible for setting and enforcing penalties on companies contravening the regulation, but the Commission will orchestrate a dialogue network among the national competent authorities to ensure that implementation does not vary too widely. The Commission will produce regular progress reports on the operation of these rules based on information provided by the member states, and the regulation itself will be reviewed, and if necessary revised, at the end of five years.

Like FLEGT, the EU Timber Regulation (EUTR) is carefully designed to comply with WTO rules, because it applies the same requirements to domestic operators placing wood products on the European market as to importers. By making FLEGT export licenses a “green lane” into the European market, the new regulation significantly increases the incentive for developing countries to sign VPAs. For processing countries and export businesses, the cost per unit of legal verification and traceability is likely to be substantially lower under a national VPA scheme compared to importing licensed wood from another FLEGT country or certifying its legality independently (Gooch 2010; Proforest 2010). For each of these reasons, the number of VPA

negotiations successfully concluded or nearing completion has spiked sharply since the legislation's passage.

Together, FLEGT and the EUTR are also likely to have a significant positive impact on private forest certification. Most FLEGT VPAs explicitly envisage recognition of private certification schemes in their export licensing system, provided that these incorporate the agreed legal definitions, and subject to regular monitoring and review of their operation and procedures. The due diligence requirement of the EUTR will likewise stimulate forestry firms and importers from non-VPA countries to join private certification schemes as a cost-effective alternative to creating and administering their own free-standing risk management systems. A number of private certification bodies, including the FSC, have already announced plans to develop legality assurance standards designed to meet EU requirements (Proforest 2010; presentations and discussion at Chatham House and Potomac Illegal Logging Fora, 10–11 January and 4 May 2011).

It is possible, of course, that FLEGT and the EUTR could have a negative impact on private certification schemes by spurring both customers and suppliers to shift their energies toward meeting less demanding legal requirements (Bartley 2011; Cashore & Stone 2011). But by reducing a major source of cost pressure on legitimate timber operations, these measures appear likely instead to encourage progression to more ambitious standards of sustainable forestry promoted by private certification schemes like the FSC. The FSC itself is developing a modular, step-wise system in which forest management units would first be certified for legality by accredited auditors, while committing to work toward certification to full sustainability standards at a subsequent stage (Guillery 2011). In the UK, a leader in green procurement policies, FLEGT licenses will be acceptable for public purchases until 2015, when sustainable timber will be required (Brack & Buckrell 2011). Finally, by harmonizing inconsistencies, filling gaps, and resolving conflicts in domestic law, including those concerning customary rights of indigenous communities, the revised legal standards produced through the VPA process will greatly facilitate auditing of compliance by individual FMUs with national legal requirements, which is a core element of all private certification schemes (Proforest 2010).

By placing private forest certification schemes under ongoing scrutiny and review by national and European authorities, FLEGT and the EUTR should push them to ensure that illegal logging is actually detected and corrected on the ground, thereby addressing a key gap in their public accountability. Depending on how they are implemented, the procedures for recognizing monitoring organizations and reviewing their operations under the EUTR may also serve as a mechanism for improving the performance standards of private certification schemes through public comparison and benchmarking for equivalence. The implementing regulations are still being worked out, but are likely to include clear procedures for avoiding conflicts of interest, and internal control systems for certification and verification equivalent to those used by other bodies providing these services in comparable sectors (European Forest Institute 2011a)

FLEGT and the EUTR go a long way toward the construction of a transnational experimentalist regime for forest sector governance. They demonstrate how such a regime can emerge from unilateral regulatory initiatives by large developed country jurisdictions, subject to procedural constraints imposed by the rules of multilateral institutions like the WTO. The EU's approach to combating illegal logging appears likely to be accepted as legitimate not only by the WTO but also by developing countries, because it offers them an opportunity to participate in a jointly governed system of

legality assurance, while imposing parallel obligations on European timber firms to exercise due diligence in respecting local legal standards. FLEGT VPAs and the inclusive, deliberative negotiation processes leading up to them have already had a major impact in a number of countries in terms of empowering civil society stakeholders, exposing inconsistencies and gaps in existing forest regulation, securing political commitments to legal and governance reform, and measurably reducing illegal logging in anticipation of their implementation (Lawson & MacFaul 2010). The joint governance systems created to oversee these agreements institutionalize key experimentalist principles, including regular review and revision of both the underlying legal standards and the assurance system designed to achieve them through recursive learning by monitoring of implementation experience. The EUTR enhances the incentives for developing country governments to sign VPAs and ensures that wood imports into the European market will not be diverted to countries with weaker legality enforcement standards. Its due diligence requirements are already encouraging importing firms to join private forest certification schemes, while promising to enhance the public accountability and performance standards of these schemes by subjecting them to comparative review and benchmarking for equivalence.

As the original FLEGT Action Plan observed in 2003, the EU is an important but not dominant player in the world wood market. According to an analysis conducted for the Organisation for Economic Co-operation and Development (OECD), the EU accounted in 2005 for 49 percent of all industrial wood imports, followed by the US at 23 percent, China at eight percent, and Japan at seven percent. But the EU accounted for only 24 percent of imports from countries representing a high risk of illegal logging, compared to 23 percent for China and 14 percent for both the US and Japan respectively (Contreras-Hermosilla *et al.* 2007). Since then, Chinese imports and exports of wood products have both surged dramatically (European Forest Institute 2011b). Hence the global effectiveness of the EU regime for promoting sustainable forestry and combating illegal logging will inevitably depend on its capacity to develop productive interactions with regulatory initiatives in other large importing countries.

5. Joining up the pieces: Transnational governance interactions⁴

Beyond FLEGT and the EUTR, the most important recent development in the transnational campaign against illegal logging has been the 2008 extension of the US Lacey Act from fish and wildlife to plants. This amended Act, which dates back originally to 1900, makes it a criminal offense to import, trade, or otherwise handle any timber product harvested in violation of the laws applicable in the country of origin. Penalties, which can include imprisonment, fines, and confiscation of goods, depend on the level of intent of the violator, and the extent to which “due care” was exercised to avoid foreseeable risks of trafficking in illegal products. To facilitate detection of illegal timber, importers are obliged to submit customs declarations with information on the scientific name of the species, the value and quantity of the shipment, and the country of origin.

The amended Lacey Act, which was the product of a “Baptist-bootlegger” coalition of environmental NGOs and domestic forest firms concerned about competition from illegal wood imports (Cashore & Stone 2011), lacks most of the experimentalist features of FLEGT and the EUTR. It takes foreign laws as they stand, without seeking to reconcile ambiguous and contradictory legislation or fill gaps in existing regulations, unlike the

updated legal standards produced by FLEGT VPAs. Nor does it engage local forest communities and other domestic stakeholders in the definition of illegal logging, controversies over which have derailed previous US efforts to address this problem in bilateral trade agreements (Brack & Buckrell 2011, p. 7). US officials, prosecutors, and judges are thus placed in the difficult position of assessing the current state of foreign laws in order to determine whether a given timber shipment has been harvested illegally. Lacey Act enforcement relies primarily on spot inspections by US Customs and Fish & Wildlife agents, often based on tipoffs from external competitors or internal whistleblowers. Such inspections and the prosecutions to which they give rise are highly resource-intensive, and hence necessarily infrequent. The US Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) is seeking a major increase in staff and funding to identify suspicious shipments by analyzing declarations of origin for imported wood, which are now coming in at a rate of 5,000–6,000 per week, but it is unclear whether this will be forthcoming in the current fiscal and political climate.

Given these limits of enforcement capacity, the major impact of the amended Lacey Act is likely to come through the deterrent effect of high-profile prosecutions, which despite their low frequency appear to create strong incentives for larger firms to set up internal legality assurance systems to mitigate the risk of criminal liability and reputational damage. The Act is also likely to stimulate importing firms to enroll in private certification systems as a means of demonstrating "due care" in avoiding illegally logged wood, though unlike the EUTR it neither refers explicitly to third-party monitoring schemes nor provides for public accreditation and oversight of their operations. The SFI has revised its rules to incorporate the requirements of the Lacey Act, and there has been a significant rise in demand for private certification and legal verification services among US firms since its passage in 2008.

Despite these transatlantic differences in governance architecture, there are significant mutual influences and points of intersection between the US and EU regimes for combating illegal logging. Thus the EU FLEGT Action Plan encouraged US environmental activists to push for the Lacey Act amendment, while the latter helped to build political momentum for the passage of the EU Timber Regulation, and inspired the European Parliament to incorporate an "underlying offense" of handling illegal timber which was absent from the Commission's original proposal (British Woodworking Federation 2010). Conversely, the revised legal standards and export licenses produced by FLEGT VPAs will dramatically simplify the task of US Lacey Act enforcement for imported timber from those countries. EU authorities' monitoring and review of firms' internal risk management systems and private third-party certification schemes could likewise be used as an information platform for improving the effectiveness of the more conventional US enforcement system and adjudicating due care claims in US courts. Dense networks of private activists, public officials, and business people from both jurisdictions meet regularly in illegal logging fora on both sides of the Atlantic to exchange experiences and ideas about how best to exploit opportunities for productive interaction between the US and EU regimes.

But the most powerful synergy between the two regimes is their combined impact on other countries. The US and the EU together account for a majority of the global wood market, which is now formally closed to illegally harvested timber. The Lacey Act amendment has helped to overcome resistance to FLEGT VPAs and stimulate the negotiation of domestic legality assurance systems in countries like Indonesia, where these had previ-

ously stalled. The coexistence of Lacey and the EUTR ensures that illegal wood exports from non-VPA countries are not simply diverted from one large northern market to another. Their joint example has stepped up moral and political pressure on other developed economies to adopt similar measures, notably Australia, which has announced plans for new legislation against illegal timber imports. The EU cites the Lacey Act in its information missions in Latin America and Asia, while the US is pushing for the inclusion of measures against illegal logging in the Trans-Pacific Partnership trade pact which it hopes to conclude with the other members of the Asia Pacific Economic Cooperation (APEC).⁵

Crucial to the effectiveness of any transnational regime to combat illegal logging and promote sustainable forestry is the incorporation of China, which has emerged as the world's largest importer of timber from high-risk countries, as well as a leading global exporter of processed wood products such as furniture, flooring, plywood, and paper (European Forest Institute 2011b). China now officially increasingly accepts the need for national and international action to combat illegal logging, and has signed bilateral cooperation agreements or memoranda of understanding on FLEG with a number of countries, including the US, the EU, Australia, Indonesia, Russia, and Myanmar. Few tangible steps have thus far been taken to implement these agreements, beyond a crack-down on unlicensed wood imports from Myanmar and the issuance of non-binding guidelines for Chinese forest firms abroad. But both the national authorities and forest firms themselves appear to recognize the strategic importance of sustainability certification, and legality verification in safeguarding access for Chinese wood exports to Western markets. Thus the Chinese authorities are currently designing a national legal verification scheme aimed at complying with EUTR and Lacey Act requirements, while at the same time aggressively seeking to promote their own sustainability and chain-of-custody certification system at the expense of the FSC, which had begun to achieve a toehold among domestic forest firms over the past decade. The take-up of these schemes and their impact on the behavior of Chinese wood products firms, which often have little internal capacity to monitor and control their supply chains, will depend in no small measure on the rigor with which the US and the EU enforce their due diligence/due care requirements. Critical in this regard will be the EU's approach to recognizing the Chinese national legal verification and certification scheme (van der Wilk 2010; Bartley 2011; European Forest Institute 2011b). Such benchmarking for equivalence of local certification and verification schemes will be equally important for integrating other large producing countries like Russia and Brazil, which are unlikely to sign FLEGT VPAs, into the emergent transnational forestry regime.⁶

6. Conclusion

Since 1992, national governments have failed to produce a binding global forest convention. Instead, beset by divergent interests and values, governments have created a weak international public regime that has failed to produce meaningful change on the ground. In response to this impasse, private actors have sought to push the forest governance agenda forward piecemeal. The FSC sidestepped the primary barriers to a global forest convention by balancing the voice of the main stakeholders and taking the discussion outside the deadlocked intergovernmental arena. Addressing the voice gap between north and south, bypassing entrenched government actors, and pursuing regulation voluntarily

along supply chains and through industry associations, this strategy elicited competing responses from other actors. The FSC was quickly followed by industry imitators with weaker standards, which were broadly adopted and threatened to undermine the nascent experiment in multi-stakeholder forest certification. However, through public comparison and benchmarking for equivalence, the competition between private schemes resulted in mutual adjustment and upward convergence of standards, without completely closing the gap between them. But the most serious limitation was the sluggish uptake of certification in the global south, due to the more difficult conditions faced by developing country producers.

Faced with this lacuna, the EU moved unilaterally to advance a different but complementary approach to transnational forest governance. Inspired by an emerging global consensus on the role of illegal logging in tropical deforestation and disciplined by WTO procedural constraints on import restrictions, the EU launched the FLEGT Action Plan. At its heart is a participatory process requiring developing countries to reach consensus on the definition and prevention of illegal logging among domestic stakeholders, combined with external support for the construction and monitoring of export licensing legality assurance systems. Encouraged by the EU initiative, American environmental activists successfully joined with domestic forest firms in persuading the US government to amend the Lacey Act, thereby reinforcing political momentum for passage of the EU Timber Regulation. Despite their architectural differences, the EU and US regimes together close off the world's largest markets to illegally logged wood, build an ongoing platform for transnational exchange of information and implementation experience, and provide a powerful stimulus to participation in forest certification and legal verification schemes by private firms and third-country governments.

Although there is still no global forestry convention, the interaction between these pieces seems to be generating an effective patchwork or joined-up regime, whose core elements have experimentalist characteristics. In particular, by combining local experimentation with performance monitoring, information pooling, and deliberative review of successes and failures, there is increased capacity for coordinated learning from pieces of the regime complex. The rise of private forest certification demonstrated the importance of experimentalist disciplines of participatory goal setting and comparative performance monitoring, while its own failures pointed to the need to address capacity gaps between north and south to advance a transnational forestry regime complex. FLEGT provided an important pathway for addressing these capacity issues, but also created a platform for learning from comparison of overlapping negotiations in different settings. The VPAs in turn quickly demonstrated both their transformative potential and their limited capacity for autonomous diffusion, which the EUTR and the Lacey Act, as well as the possibility of similar legislation in other countries, go a long way toward redressing. Compared to the weak public international regime built since 1992, this emergent regime complex, which involves a multiplicity of regulatory experiments, monitoring, and revision based on implementation experiences, appears as though it will produce a more comprehensive, strongly recursive policy effort than its individual pieces or stand-alone public or private efforts. Although implementation of many components of this emergent forest governance regime is still at an early stage, there is evidence that it has already begun to have a significant and measurable impact on the ground, especially in reducing illegal logging.⁷

Table 2 Pathways and mechanisms of experimentalist regime formation in the forest sector

Pathway	Mechanism(s)	Case(s)
From multilateral impasse and public inaction to private transnational regime formation	Balanced, multi-stakeholder governance Vertical diffusion along supply chains Horizontal diffusion through industry associations	FSC
From unilateral public (national/regional) regulatory initiatives to transnational joint governance	Multilateral procedural requirements as reflexive disciplines	EU FLEGT
Convergence between separate national/regional regimes	Mutual influence through transnational networks Exchange of information and experiences Reciprocal support toward third countries	Interactions between EU FLEGT/Timber Regulation and US Lacey Act
Joining up competing pieces of regime complexes	Public comparison and benchmarking for equivalence	Upwards convergence between FSC and PEFC Public recognition of private certification schemes

FLEGT, Forest Law Enforcement Governance and Trade; FSC, Forest Stewardship Council; PEFC, Programme for the Endorsement of Forest Certification.

Four major conclusions for transnational regime formation follow from this analysis. First, the paper shows that there are multiple pathways to the creation of an experimentalist transnational regime, which can be combined in various ways in specific empirical cases. These pathways have different starting points (public/private, national/international), involve different causal mechanisms, and operate at different levels (within and between separate regulatory schemes). But they lead in a common direction: toward the construction of transnational governance regimes with a similar experimentalist architecture, which can be nested within one another vertically and joined up horizontally. Table 2 presents, in analytical form, the four main pathways and associated causal mechanisms through which an experimentalist transnational governance regime has developed in the forest sector over the past two decades. Although the interactions between them analyzed in this paper are specific to the forestry case, these ideal-typical pathways and mechanisms – and others like them – are general enough to be applicable across many other sectors of transnational governance (cf. Sabel & Zeitlin 2011).

Second, this paper challenges the view that building an effective transnational regime is possible only under restrictive scope conditions, notably the existence of a hegemonic power or broad convergence of interests, values, and beliefs among the parties. The forest governance case is widely discussed precisely because it is beset with interest and value conflicts and the absence of a hegemon. This paper demonstrates how polyarchy, diversity, and strategic uncertainty can be used productively to promote the formation of a transnational regime based on coordinated learning from decentralized experimentation.

Insofar as there has been a partial convergence of policy preferences and beliefs among key actors in the forest sector, which includes developing as well as developed countries, this should be considered as an endogenous *product* of the experimentalist mechanisms we analyze in the paper, notably reflexive learning from past failures of both public and private regulation, multilateral procedural constraints on unilateral initiatives, and benchmarking for equivalence of competing schemes, rather than an exogenous *precondition* for the construction of an effective transnational regime. Polyarchy, diversity, and strategic uncertainty characterize many issue areas in global governance today, suggesting the wide applicability of experimentalist approaches to transnational regime formation.

Third, experimentalism provides an analytical framework for evaluating transnational governance interactions in regime complexes. In our view, experimentalism provides a normatively desirable governance architecture for building regimes that respect diversity, address complexity, and respond to change. The four architectural elements of: (i) broad participatory goal-setting; (ii) decentralized experimentation with alternative implementation approaches; (iii) performance monitoring, information pooling, and peer review; and (iv) revision of goals, metrics, and procedures based on deliberative comparison of experience, identify a set of governance functions that can be provided through a variety of institutional forms by different combinations of public and private actors. The keys to evaluating the effectiveness of such regime complexes lie in whether progress is made toward achieving the desired performance goals, and whether failures and the inevitable unintended consequences of specific institutional designs are recursively recognized and redressed.

Looking forward, we argue that a key mechanism for realizing the promise of the emergent transnational regime is the experimentalist discipline of benchmarking and public comparison of its components. Benchmarking for equivalence is an important accountability mechanism for polyarchic governance arrangements. Because polyarchic systems, by definition, lack a central authority with the legitimacy to impose its will, the process of publicly comparing nascent experiments constitutes a crucial platform for deliberation and reflexivity. Benchmarking leads to public reflection on successes and failures that creates mutual accountability by obliging actors in the regime to provide persuasive accounts of their performance. Regularly accounting for performance is a central requirement of fully developed experimentalist regimes. To support such accountability, experimentalist regimes must be both performance-based and participatory. In forestry, the nascent transnational regime has been characterized by policy experiments that lead to performance assessment, learning from success and failure, and broad stakeholder participation. Introducing more systematic benchmarking both within each component of the regime complex (forest certification schemes, VPAs, legality assurance systems, timber regulations) and between them could thus help to institutionalize a platform from which to continue productive adaptation and elaboration of the emerging experimentalist governance architecture.

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Notes

- 1 For a preliminary inventory and analysis of these pathways and mechanisms, see Sabel and Zeitlin (2011). For an overview of the social-science literature on explanation through mechanisms, see Mayntz (2004).
- 2 <http://www.fsc.org>, <http://www.pefc.org>, respectively, accessed 1 May 2011.
- 3 Except where otherwise indicated, the analysis in this section is based on the following sources: FLEGT VPAs, <http://ec.europa.eu/environment/forests/flegt.htm>; FLEGT VPA briefing notes, prepared jointly by European Commission delegations and signatory governments, http://www.euflegt.efi.int/portal/home/vpa_countries/; “Regulation (EU) no. 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operations who place timber and timber products on the market,” *Official Journal of the European Union*, L 295/23, 12.11.2010; interviews with officials of the European Commission (DG Environment), FERN, and the European Forest Institute FLEGT Facility, March 2011; FERN *Civil Society Counter-Briefs*, <http://www.fern.org>; DG DEVCO (2011); Leal Riesco and Ozinga (2010); Beeko and Arts (2010); presentations and discussions at Chatham House Illegal Logging Stakeholders’ Forum, London, 10–11 January 2011, http://www.illegal-logging.info/item_single.php?it_id=206&it=event, and the 4th Potomac Forum on Illegal Logging and Associated Trade, Washington, DC, 4 May 2011, <http://forest-trends.org/event.php?id=547>, respectively.
- 4 Except where otherwise indicated, the analysis in this section is based on the following sources: United States Code Annotated, Title 16, Conservation, Chapter 53, Control of Illegally Taken Fish and Wildlife, §§ 3371–3378 [Legal Act.] [Last accessed 29 Feb 2012.] Available from <http://www.animallaw.info/statutes/stusfd16usca3371.htm>; Brack and Buckrell (2011); Lawson and MacFaul (2010); presentations and discussions at Chatham House and Potomac Illegal Logging Fora, 10–11 January and 4 May 2011.
- 5 “US Hopeful of a Major Trans-Pacific Deal by Year-End,” *Deccan Herald* 15 March 2011.
- 6 Russia participates in a FLEG program with the EU funded through the European Neighbourhood and Partnership Instrument (ENPI), <http://www.enpi-fleg.org>, and has also been a major growth pole for FSC certification (Malets 2011). Brazil has been rapidly improving its domestic forest governance and enforcement capacity in recent years, while also experiencing significant growth in certification of individual FMUs both through the FSC and through a PEFC-affiliated national scheme (Lawson & MacFaul 2010).
- 7 Thus, for example, an authoritative study by Chatham House of 12 countries which together account for 50 percent of illegal wood trade estimates that they were responsible for a 22 percent reduction in the global incidence of illegal logging between 2002 and 2008, while imports of illegally sourced wood to the countries in the sample had fallen 30 percent from their peak (Lawson & MacFaul 2010). The study covered five producer countries (Brazil, Cameroon, Ghana, Indonesia, Malaysia), two import processing countries (China, Vietnam), and five consumer countries (France, Japan, the Netherlands, the UK, and the US), using a variety of methods including wood-balance analysis and expert surveys.

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