

# Fragmented or cohesive transnational private regulation of sustainability standards? A comparative study

Luc Fransen

*Department of Political Science, University of Amsterdam, Amsterdam, The Netherlands*

Thomas Conzelmann

*Faculty of Arts and Social Sciences, Maastricht University, Maastricht, The Netherlands*

## Abstract

Literature on private regulation recognizes the proliferation of competing regulatory organizations and approaches in various industries. Studies analyzing why fragmentation arises so far focus on single-case studies, the exploration of single variables, or variation in types of fragmentation. This article analyzes why in certain industries and for certain issues regulatory organizations proliferate, while in others a single regulatory organization emerges which covers the entire industry. Through a comparative case study of private regulation of sustainability standards in the forestry, clothing, IT-electronics, and chemicals industries, we show how a combination of low industrial concentration, civil society involvement in governance, and stringent standards of a first-moving regulator offer the strongest explanation for a fragmented private regulatory field, while high industrial concentration, business-driven governance, and lenient standards of a first-moving regulator lead to cohesive regulation.

**Keywords:** corporate social responsibility, private regulation, regime complexity, regulatory competition, sustainability.

## 1. Introduction

In many industries, private regulatory organizations (PROs) oversee sustainability standards in production chains. The literature recognizes that in some sectors sustainability issues are addressed by several PROs, distinguishing between two generic types of PRO proliferation and their consequences. First, in some industries, various PROs exist that each have a different policy focus. This may produce artificial boundaries between issues regulated by different organizations, whereas sustainability issues in practice may exceed such boundaries. As a result, collective action on broad sustainability issues, such as land use and climate change, may become harder. Moreover, the approaches of one PRO to a particular issue sometimes affect the policies of another PRO in unexpected ways (Auld 2014). Second, in many industries, several PROs adopt a similar policy focus. This may result in competition between PROs that focus on substantively similar industries. The literature holds that such competition is likely to affect the effectiveness of PROs (Fransen 2011).

This paper focuses on the second type of private regulatory fragmentation in which several PROs with a *similar* policy focus emerge and compete. We discuss *why* in some industries private regulation is fragmented in such a way, while in other industries a single monopolist PRO emerges. Our argument is based on the empirical analysis of the emergence of more or less cohesive private regulation in four prominent industries and sustainability issue areas: labor standards in IT-electronics, environmental health and safety (EHS) in the chemical industry, sustainable forest management in forestry, and labor standards in clothing. The former two industries have a cohesive pattern of private regulatory organization; the latter two, a pattern that is more fragmented. Our argument focuses, in particular, on the interplay between industrial characteristics and the institutional design of first-mover PROs that encourage more or less fragmentation.

The issue of fragmentation among competing private sustainability standards is important because of its implications for the effectiveness and shape of private regulation. Both the literature on Transnational Business

Correspondence: Luc Fransen, Department of Political Science, University of Amsterdam, O. Z. Achterburgwal 237, 1012 DL Amsterdam. Email: lucfransen@gmail.com

Accepted for publication 3 April 2014.

Governance Interactions (Eberlein *et al.* 2014) and the literature on regime complexity in International Relations (Alter & Meunier 2009; Biermann *et al.* 2009) recognize that interactions among regulatory organizations may have beneficial or detrimental consequences. “Pessimists” hold that competing PROs may become involved in a race to the bottom in terms of regulatory standards and practices (Cashore *et al.* 2005). With businesses being able to choose between regulators, there might be a gravitational effect to the most lenient standards up to the point where the effectiveness of a PRO is in question. Moreover, the existence of multiple regulations has been shown to create confusion and to increase costs among those regulated. It thereby may threaten the authority of private regulators (Fransen 2011). In contrast, “optimists” hold that fragmentation between PROs may engender a race to the top in terms of standards and practices, possibly increasing the effectiveness of regulations overall (Vogel 1997; Bertels & Peloza 2008; Overdevest & Zeitlin 2014). Fragmentation is also discussed in terms of a division of labor, where different regulators cater for different needs, each focusing on other strengths (cf. Auld 2014; Overdevest & Zeitlin 2014). From this perspective, cohesive and inclusive regulation may be detrimental as it hampers learning and innovation, and could lead to lowest common denominator outcomes (cf. Kolk *et al.* 1999).

A broader study of *why* PROs compete in some industries, while in others a single PRO reigns, is relevant in three respects. First, analyzing the dynamics that have created cohesive or fragmented regulation in the initial phases of PRO development helps us understand the dynamics driving cohesion or fragmentation of regulation in various industrial sectors later on, as single industry case studies claim (Fransen 2011; Reinecke *et al.* 2012). Second, our work will be of interest from a policy perspective, by highlighting the implications of design choices in first-mover PROs for later institutional developments. Third, we propose a comparative, multi-faceted perspective to studying PRO development, thus, adding to the scholarly discussion on driving forces for cohesiveness or fragmentation. Studies based on single-industry cases (Cashore *et al.* 2004; Esbenschade 2004), exploration of variation in fragmentation (Bartley 2007), or the strength of one particular independent variable (Porter 2014), have offered important insights. Through its focus on various factors and its analysis of both fragmented and cohesive types of private regulation, our study helps to identify a combination of factors that have explanatory power *across* industries and sustainability issue areas.

In the next section we define cohesive or fragmented private regulation. Section 3 introduces theoretical considerations; section 4 discusses methodology; and section 5, empirics. Section 6 combines the lessons of the different cases. A final section concludes.

## 2. Defining fragmentation and cohesiveness in private regulation

Our unit of analysis is an “industry.” We define it by the product and its production process, and firms making, buying, or selling a product are understood to be part of it. We speak of the “IT-electronics” or the “chemical” industry, while noting that a product can be marketed in different ways, can be sold by different types of firms, or can be included in a different product, so that, effectively, the range of firms engaging in an industry can be diverse across several sub-sectors.<sup>1</sup>

We understand PROs as non-governmental organizations managing a regulatory process that covers rulemaking, implementation, monitoring, and enforcement (Büthe 2010, p. 1). We, therefore, distinguish PROs from private business principles or industry guidelines that have no institutionalized implementation or review mechanisms, and from self-regulatory codes of conduct that apply to one firm (cf. Kolk *et al.* 1999). Within industries, we identify *cohesive* PROs where standards are either implemented by a single PRO catering to multinational business participation, or by various national associations that use a common regulatory template derived from the same transnational organization. Distinguished from industries with such cohesive PROs are *fragmented* regulatory structures. Similar to scholars who discuss the fragmentation of intergovernmental sustainability governance (cf. Biermann *et al.* 2009), we identify the following possible dimensions of private regulatory fragmentation:

- The emergence of one or more contender programs within the same industry at the global level (*fragmentation in regulatory standards*).<sup>2</sup>
- The emergence of meaningful contender programs at another (territorial) level, usually at the domestic tier (*fragmentation in standard levels*).
- The absence or decline of effective oversight/coordination of the implementation of a global (uniform) program, so that it means quite different things “on the ground” (*fragmentation in implementation*).

- The presence of several PROs in one industry that each focus on different stages of the production process, such as environmental considerations in the production of raw materials and labor standards in refining (*fragmentation along the value chain*).<sup>3</sup>

While all of these types of fragmentation are relevant, our analysis focuses on the first two types: situations where fragmentation takes place in terms of competition either at other standard levels or with other regulatory standards.

### 3. Explaining fragmentation and cohesiveness of private regulation

Literature on PROs mostly offers historical accounts and micro-actor perspectives on why PROs with similar problem focus proliferate in a particular industry, and why businesses and civil society organizations (CSOs) have preferences for one PRO over another. So far, case studies of individual or multiple PROs in one particular industry predominate (Cashore *et al.* 2004; Egels-Zandén & Wahlqvist 2007; Fransen 2011; Conzelmann 2012). The few studies that compare across industries do not distinguish between cohesive or fragmented regulation (Bartley 2007; Auld 2014; Turcotte *et al.* 2014), or explore the significance of one independent variable in an issue area outside of the sustainability-standards field (such as technical systems in finance; Porter 2014). Studies recognize that certain dynamics creating PRO fragmentation may apply across industries, but so far we lack empirical work inquiring across industries and issue areas what industry characteristics or what PRO features in an industry influence the fragmentation or cohesiveness of private regulation.<sup>4</sup>

We develop an analytical framework that seeks to explain the likelihood of fragmentation or cohesion of PROs in an industry. It applies insights from our own research and previous studies of particular industries, and the actor strategies and activities observed in these industries. We take the preferences and interests of actors as our starting point, focusing most specifically on firms. The initiatives of CSOs and governments notwithstanding, the development and adoption of PROs by business actors is crucial for the fragmented or cohesive nature of regulatory activities in a sector (Cashore *et al.* 2004; Büthe 2010; Fransen & Burgoon 2012; Potoski & Prakash 2013).

Studies offer a variety of reasons why firms develop, align with, defect, or stay away from PROs. We organize these in two categories: first, (dis-)incentives created by the structure of the industry, and second, aspects of the institutional design of private regulation. We elaborate on both categories further.

In the category of incentives provided by industrial structure,<sup>5</sup> studies identify the degree of concentration of an industry as a first factor that may affect cohesive or fragmented private regulation (Ronit & Schneider 1999; Fransen 2011). These studies argue that a few firms dominating the industry through their market share facilitate collective action toward cohesive private regulation. By contrast, large numbers and dispersed market shares hamper cohesiveness of PROs.

Second, the degree to which corporate reputation sensitivity differs across firms may lead to different preferences for private regulation (Bartley & Child 2014). Civil society campaigns are often targeting firms with well-known brands and reputation, leaving others outside of the spotlight. Firms that are frequently targeted by campaigns may prefer different types of PROs than those that rarely receive criticism (Fransen & Burgoon 2012). Industries with such variation in reputation sensitivity are expected to show more divergent preferences regarding PROs and, consequently, fragmentation of private regulation. In contrast, industries that are faced with the problem of a “reputation held in common” (Prakash & Potoski 2007, pp. 785–787) are expected to develop cohesive regulatory patterns.

Third, functional similarity among firms in terms of product lines, consumer audiences, or focus on sales or on manufacturing may stimulate cohesiveness. Firms making and selling similar products in similar ways are likely to converge in their PRO preferences as they identify similar stakes (Sasser 2003; Merk 2007).

Fourth, the extent to which private regulation affects competition among firms in this sector may lead to cooperation dilemmas (Fransen 2011). Adopting a PRO and its specific standards may require that information about inputs, contracts, technologies, and designs becomes available to competitors, because such details are embedded in information about compliance. The desire to shield these assets from competitors, therefore, stimulates fragmentation.<sup>6</sup>

These considerations about industrial characteristics lead to a first set of propositions:

H1a) The higher the degree of industrial concentration, the higher the likelihood of cohesive private regulation.

H1b) The smaller the difference in reputation sensitivity among firms in an industry, the higher the likelihood of cohesive private regulation.

H1c) The higher the degree of functional similarity among firms in an industry, the higher the likelihood of cohesive private regulation.

H1d) The higher the degree of competitive value of the economic activity being regulated, the lower the likelihood of cohesive private regulation.

Regarding the institutional design of PROs as our second cluster of independent variables, the literature holds that the initial stage of PRO development and the nature of the (dominant) PRO emerging at this stage inform firm preferences (Cashore *et al.* 2004; Esbenshade 2004; cf. Auld 2008). The reactions of firms to the “first-mover” PRO (i.e. the first to emerge in an industry) are crucial for the development of cohesive or fragmented private regulation. Once again, we theorize these aspects as four types of meso-level conditions that affect firm strategies.

First, case studies of single industries show that firms often become divided over the inclusion of CSOs in the development and subsequent governance of first-mover PROs (Bartley 2007; Egels-Zandén & Wahlqvist 2007). For some firms, CSOs are welcome allies crucial to generate reputation benefits, as CSOs may more credibly communicate about a PRO’s practices and outcomes (Potoski & Prakash 2013). Others consider CSOs as slow-moving and untrustworthy, and prefer to keep them outside of PROs.<sup>7</sup> The inclusion of CSOs in a first-mover PRO is likely to bring such latent disagreements into the open and is, thus, expected to be a trigger for fragmentation.

Second, firms will respond more or less favorably to the stringency of standards of PROs, as costs and benefits of participation may be unequally spread over the industry (Prakash & Potoski 2007; cf. Mutersbaugh 2005). PROs with lenient standards have lower participation costs, and may draw in most firms, but may also suffer from a lack of credibility. In turn, PROs with stringent standards may create more external reputation benefits, but may be too costly for many firms and will, therefore, only attract firms with a high sensitivity for sustainability issues (Borck & Coglianese 2009, pp. 318–320). First-mover PROs with lenient standards are, therefore, expected to facilitate cohesiveness of the regulatory effort, whereas more stringent standards in first-mover PROs have the opposite effect.

Third, it is important whether a first-mover PRO is established within a national or a cross-border setting. Governments may facilitate national PRO development as part of their development assistance or environmental policy. Consequently, adopting firms may be locked into distinct national PROs that do not converge, while foreign firms are discouraged from joining (cf. Auld 2008). Such a development fragments private regulation across national borders. And fourth, literature holds that the involvement of global business associations or the cross-border collaboration of national associations may be significant in rallying firms around one PRO, especially if association membership obliges firms to also subscribe to a PRO (Conzelmann 2012). We expect that strong association involvement in the development of a first-mover PRO decreases the likelihood of proliferation of contending PROs at a later stage.

Accordingly, we present the following propositions:

H2a) Inclusion of CSOs in first-mover PROs decreases the likelihood of cohesive private regulation.

H2b) The higher the stringency of standards of first-mover PROs, the lower the likelihood of cohesive private regulation.

H2c) Facilitation of first-mover PRO development by national-level policymakers decreases the likelihood of cohesive private regulation.

H2d) Inclusion of global business associations or the cross-border collaboration of national associations in first-mover PROs increases the likelihood of cohesive private regulation.

Our propositions, thus, presume that both *structural characteristics* of specific industries that are relatively constant and unchangeable for actors in the short and mid term, and institutional design features of first-mover PROs that result from *concrete actor choices*, have consequences for the development of private regulation. These factors provide incentives for business actors to join and further develop, to defect from, or to stay outside of (first-mover) PROs altogether and possibly develop alternative approaches. As a result of such structural and

institutional incentives, actor choices relating to PROs produce fragmentation or cohesiveness of regulation in an industry.

While the hypotheses proposed here are discussed by various authors, our contribution lies in the systematic and comparative examination of hypotheses across industries. Only some of these hypotheses turn out to hold explanatory power in all sectors. Other hypotheses, which have received support in single-industry studies, are disconfirmed in our study when applying them to other industries. These findings are expected to be useful both for theory building concerning the emergence and interaction of PROs, and for formulating the explanatory models of single-case studies more rigorously.

#### 4. Methodology

Our analysis focuses on four cases of private regulation: labor standards in IT-electronics supply chains; labor standards in clothing supply chains; sustainable forestry management; and EHS in the chemical industry. These industries and issues vary on our dependent variable of interest (fragmentation or cohesiveness of private regulation, where clothing and forestry belong to the former category, and IT-electronics and chemicals to the latter). Regarding explanatory factors, our case selection controls for variation on the independent variable by choosing cases that hold characteristics in common, or are at least similar across two characteristics while differing on the dependent variable. These variables include: transnational organization of the PRO (either through single programs, in IT-electronics and clothing, or through global umbrella programs with national chapters, in chemicals and forestry); issue focus (the clothing and IT-electronics cases emphasize labor issues, while the forestry and chemicals cases focus more on the environment); scope of supply chains (global in all cases); industry character (all cases involve industrial manufacturing, in contrast to production based in mining or agriculture), and issue salience (which is high in all cases, with media attention on child labor and worker repression in IT-electronics and clothing, large-scale accidents in the chemical sector, and logging tropical wood in forestry). Finally, in all four cases, private regulation for sustainability standards is not of a recent date, to ensure we can review medium-term developments.

Despite such safeguards, we are faced with the problem of a large number of potentially interesting independent variables with a limited number of observable events. Because of this, our propositions cannot be “tested” in positivist terms. Our analysis, therefore, uses a congruence set-up, recognizing that empirical examination of the propositions constitutes a plausibility probe of their significance for the world of PROs focusing on sustainability standards. Our argument relies on a combination of process tracing in order to examine causal mechanisms and comparison across cases in order to identify relevant explanatory variables, and the degree to which variables may be co-varying (George & Bennett 2005). Because of the limited amount of cases and to flesh out the development trajectories of PROs in specific industries, we use conventional case-study methods, rather than the medium-sized-N method of Qualitative Comparative Analysis (QCA), which offers less room for historical detail. Nonetheless, in presenting our overall results in Table 1, we draw inspiration from the QCA truth table format.

Our analysis is based on the triangulation of primary and secondary sources, including semi-structured interviews with PRO, business, and CSO representatives in the chemicals, IT-electronics, and clothing industries conducted between 2005 and 2011, and document analysis of reports issued between 1996 and 2013. For the forestry sector, we used secondary literature discussing industrial characteristics and PRO development.

The other five factors are measured as follows.<sup>8</sup>

The operationalization of industry concentration is initially based on secondary literature describing PRO evolution and broader industrial organization. To ensure that the resulting estimations of “low” and “high” concentration are correct, we examine overall concentration data presented in economic studies. This shows apparel and forestry to be cases of low and chemicals and IT-electronics to be cases of high concentration.

Reputation sensitivity is measured inductively, analyzing whether firm size, internationalization, and brand investment differ significantly for a cluster of 10 to 20 firms engaging in PRO development in each industry. We probe the issue further in interviews with firm representatives that vary in terms of these indicators. We dichotomize even and uneven reputation sensitivity, and find only chemicals to be in the even category as a result of a specific reputation “held in common” for the entire industry (cf. Prakash & Potoski 2007).

Functional similarity of firms is based on estimation of product differences and, because of focus on particular products, differences in corporate strategic outlook, as evidenced in secondary literature. These differences are

further investigated in interviews. All analyzed industries score low on this variable, with evidence of various products, and various product strategies across the firms involved in a similar productive practice.

We first explore the competitive value touched by PROs on the basis of secondary literature evidencing such values. In interviews, we probe this issue with respondents. We dichotomize between low and high competitive value, where forestry and IT-electronics score low and apparel and chemicals score high.

Finally, stringency of PRO standards, following Fransen (2011), is operationalized as comprehensive in scope, specific in content, and prescriptive in terms of requirements. For specific assessment of these dimensions, the paper relies on leading policy analysts per issue area, cited in the empirical sections. This enables a contextualized understanding of stringency.

In our operationalization, we assume that the industrial–structural factors are constants at the time of PRO development, and remain constant in the short and mid term. Of course, over time, industries evolve in concentration and strategic focus, and this should affect the evolution and fragmentation or cohesiveness of PROs. While we recognize the principal desirability of a longitudinal analysis, our study focuses on cross-industry comparisons, at the expense of a discussion of change over time.

## 5. Cases

Four cases of industries in which PROs emerged are discussed, highlighting the relevance of industrial characteristics and institutional design. The discussion seeks to uncover which of the factors discussed in H1a–d and H2a–d were decisive for private regulatory cohesiveness or fragmentation. While we have checked all independent variables previously mentioned, in the following discussion we highlight those elements we have found to be most powerful.<sup>9</sup> This approach helps us with theory building, while still applying the full analytical model developed above. Table 1 in section 6 presents the findings for all variables.

### 5.1. Fragmented private regulation Case I: Forestry

#### 5.1.1. *Industrial characteristics*

Supply chains in forestry span four stages (Sasser 2003): raw material producers (timber growers and harvesters), primary (saw and pulp mills) and secondary processing (paper, furniture, etc.), and the retail industry (builders merchants, DIY markets, furniture stores, paper and tissue makers, etc.). While wood at different refinement stages is used in the production process of various industries, the degree of vertical integration of supply chains is typically quite low. Generally, one specific firm is involved in, at most, two stages of the production process. Wood processors most often sell to manufacturers, who then sell to retailers. While supply chains have traditionally been predominantly nationally organized (Sasser 2003, p. 235), forestry production in the past two decades has become transnationalized. Both industrial concentration and functional similarity are low in the forestry sector. Forestry industrial associations are mostly organized nationally (Auld *et al.* 2008).

The manifold uses of wood, the different types of industrial activities, and the low vertical integration of the industry create different needs in terms of private regulation, different gains that come with “responsible” wood and products, and different reputation sensitivity. Usage of tropical wood may necessitate certification while non-tropical wood, or wood not recognized as such, may have less of an imperative for certification (Sasser 2003). While the names of wood producers are usually unknown to consumers, retailers and paper and tissue makers have, in the past, been the subject of CSO campaigns on deforestation. Different corporate social responsibility (CSR) approaches may, therefore, be preferred by upstream and downstream firms and by no-name and branded manufacturing.

#### 5.1.2. *The institutional design and cohesiveness of private regulation*

At the global level, two contending PROs exist in forestry: the multi-stakeholder Forest Stewardship Council (FSC) and the Program for the Endorsement of Forest Certification (PEFC, initially the Pan-European Forest Certification scheme). The PEFC has not developed its own standards, but provides assessment and formal recognition of pre-existing national forest certification schemes, such as the United States (US) based Sustainable Forestry Initiative (SFI) (Overdevest 2010). By contrast, the FSC developed its standards globally, but allows their interpretation and

adaptation at the national level to increase precision, satisfy local needs, and engage more stakeholders. Both PROs offer certification by professional audit firms, so that corporate secrets are not disclosed to competitors.

Apart from differences in standards according to which the two organizations certify, the FSC and PEFC have different constituencies: the FSC was originally a CSO project to which several producer associations, certifiers, and international public organizations subscribed. CSOs supported private regulatory development after intergovernmental negotiations over tropical forest governance failed, and after experimenting with calls for tropical timber boycotts. The FSC was intended “to expand the traditional stick approach of a boycott campaign by offering market-based carrots” and to force “global and domestic SFM [sustainable forestry management] standards upwards, with social, economic and environmental interests competing in a more equal fashion” (Cashore *et al.* 2005, pp. 56–57). The dominance of CSOs in the FSC is safeguarded by a three-chamber system split into “environmental,” “social,” and “economic” chambers, leaving only one-third of input and decisionmaking power with firms. Firms and owners operating on a relatively high (company or public regulation) standard and large reputation-sensitive firms initially rushed to join the FSC in order to gain competitive advantage. The development of the FSC also gained steam with support from some governments (Bartley 2007, pp. 318–321).

In contrast, the PEFC is a business-driven organization originally founded by forest owners and foresters, which later took on non-governmental and non-profit organizations. It can be interpreted as a reaction by smaller (communal or family) forest owners and some large industry players to the emergence of the FSC (Cashore *et al.* 2004). These parties criticized the FSC for the predominance of CSOs in its governance structures, and its stringent standards, which were seen as impractical and costly (Auld *et al.* 2008, p. 191). After the FSC’s establishment, several national standards were newly created. These standards, such as the SFI, were initially less stringent than the FSC model, thus, quickly attracting charges of “greenwashing” (Overdevest 2010, p. 56). Moreover, they lacked international recognition, a gap that the PEFC then addressed. At the time of writing, the PEFC has national “members” (i.e. organizations which develop and promote a PEFC-endorsed certification scheme domestically) in 36 countries.<sup>10</sup> Governments across the world, meanwhile, varied in their preference for one or the other PRO, in their own landownership or public procurement policies (Auld *et al.* 2008, pp. 196–197).

A study on the uptake of FSC certification and competitor programs found “that when companies are aware of an industry-initiated competitor program they will be much less likely to pursue FSC certification” (Cashore *et al.* 2005, p. 66). Both PROs are perceived to offer environmental benefits and help offset consumer pressure (Cashore *et al.* 2005, p. 66), while the costs linked with PEFC certification are perceived as lower. In this sense, the competitive logic behind the establishment of the PEFC worked out, even though recent studies hold that pressure from consumers and procuring governments has led to regulatory convergence between the PEFC and FSC regarding standards content, stakeholder inclusion in governance, and the broader certification process (Overdevest 2010).

Summing up, a low degree of industrial concentration, dissimilarity among businesses, and uneven reputation sensitivity have all worked against the cohesiveness of private regulation in the forestry industry. In addition, the participation of CSOs and the high bar set by the first-mover PRO have spurred the proliferation and fragmentation of private regulation.

## 5.2. Fragmented private regulation Case II: Clothing

### 5.2.1. Industrial characteristics

Clothing production involves firms from different sub-sectors: fashion, apparel, sporting goods, and multi-product retail. The industry consists of thousands of companies combining different functions in the value chain to different degrees: buying, marketing, designing, and retailing. The horizontal organization of the industry is fragmented across countries and regions, and often within countries as well, with different business associations tailoring to the needs of different companies (Fransen 2011).

The vertical organization of production of the clothing production chain has become globalized over the past few decades, and the production process itself has become fragmented. Most northern companies source substantial parts of their products from other regions in the world. In particular, labor-intensive parts of the manufacturing process have been outsourced to developing countries. In many of these countries, enforcement of labor and environmental standards by national governments is weak. Once local pressure groups, advocating predominantly for worker rights, succeeded in building ties with CSOs in Europe and the US, societal pressure was put on northern

firms to take responsibility for labor abuse at their suppliers. Development and participation in the private regulation of labor standards then took off in the mid-1990s in Europe and the US (Esbenshade 2004).

Firms, according to their position in markets and their strategies, may affect the organization of production and the labor process in different ways. Sporting brands, high street boutiques, specialized clothing firms, and discount retailers have different stakes in the game (McCormick & Schmitz 2001). Because of these different functions and different positions toward end consumers, firms may also be receptive to critical claims by CSOs to different degrees (Bartley & Child 2014). For this reason there is uneven sensitivity to reputation attacks among firms.

Finally, private regulation in the clothing industry focuses on a part of the production process where, in a private regulatory context, information of competitive value could be obtained. This is because knowledge of factory conditions leads to possibly sensitive knowledge about materials used, production techniques that refer to specific design choices, and timing of collections (Fransen 2011).

### 5.2.2. *The institutional design and fragmentation of private regulation*

The following PROs were developed for the clothing industry between 1995 and 2005:

- The Fair Labor Association (FLA), including, at first, American apparel and sporting goods firms, such as Nike and Reebok, and American CSOs;
- Social Accountability 8000 (or Social Accountability International, SAI), established by the US social research institute Council on Economic Priorities and including brand and retail firms;
- The Ethical Trading Initiative (ETI) in the UK, a result of engagement of NGOs and trade unions with mainly multi-product retail representatives;
- The Fair Wear Foundation (FWF), a collaboration of two clothing industry-related trade associations, Dutch trade unions, the Clean Clothes Campaign activist network, and developmental CSOs;
- The Worker Rights Consortium (WRC), an initiative by the US United Students Against Sweatshops, American trade unions, and other CSOs;
- The Worldwide Responsible Apparel Production program (WRAP), initiated by the American Apparel Manufacturers Association with input from consultants and US university staff;
- The Business Social Compliance Initiative (BSCI), initiated in the European business association for retailers, the Foreign Trade Association (FTA);
- The Initiative Clause Sociale (ICS) by a group of French retailers, including Carrefour and Casino.

Three agendas arguably drove the evolution of PROs, among both first-movers and late-movers: labor activism among CSOs that have specific ties to worker communities in developing countries; consumer solution-focused activism by CSOs with CSR-promoting agendas; and reputational concerns of brands and retailers as a result of scandals at their suppliers (Fransen 2011). British, Dutch, and American government officials sometimes mediated among these private parties, in light of policy priorities with regard to labor and development assistance.

In comparison to forestry, these PROs are even more diverse with regard to their regulatory approach. Adopted labor standards particularly vary in terms of wage levels and language on Freedom of Association, although most are inspired by International Labour Organization (ILO) conventions. Second, a minority of organizations, including SAI and WRAP, offer certificates to suppliers monitored for compliance with labor standards. The other organizations, except for ETI, provide standards, monitoring, and redeeming requirements promoting continuous improvement. Business membership in the PROs should ensure a commitment to progress on the part of either supplying or buying firms. ETI relies on a learning-by-doing approach for member firms in terms of increasing compliance with ETI standards in the supply chain, and requires members to report. A final source of variation between the PROs is the degree to which buyer firms or supplier firms are held financially and managerially responsible for compliance (O'Rourke 2006).

All of these PROs were initially negotiated in national settings. The dialogue between CSOs and businesses over global labor standards was orchestrated by different national governments in three instances (FLA, FWF, ETI). Because of this, the first generation of PROs (consisting of FLA, FWF, SAI and ETI) emerged more or less at the same time, a couple of years after sweatshop circumstances started making headlines. It was only later that they went transnational and competed with one another, as well as with other more recently founded PROs (Fransen 2011). Apart from their different origins, two elements of the institutional design of the first-mover PROs encouraged the

proliferation of private regulation. First, CSOs (such as activist networks, developmental organizations, and trade unions) were included in the negotiation and subsequent governance of the PRO. After having participated in the negotiation of multi-stakeholder organizations or being pressured to join one, some businesses and their associations rejected this model and instead created business-governed organizations, such as the BSCI and WRAP (Fransen 2011). Among the firms initiating these PROs a less appreciative perspective of CSOs was dominant, related to a lack of trust in the intentions and professionalism of CSO representatives (Egels-Zandén & Wahlqvist 2007).

Second, particular aspects of the regulatory approach of the FWF and FLA were deemed a bad fit by some interest groups. In the case of the FLA, some CSOs turned their backs on the initiative. These groups considered the FLA too lax on public disclosure and transparency of monitoring and complaints, and too lenient regarding living wage provisions in its standards. Some of these groups joined the WRC, which had more comprehensive labor standards (Esbenshade 2004).<sup>11</sup> In the case of the FWF, large Dutch retail representatives left over differences regarding problem perceptions and the regulatory burden installed by the PRO.<sup>12</sup> They later supported the BSCI as a buyer-driven form of labor-standards promotion and enforcement.

Patterns in the industry uptake of PROs reflect the tensions outlined above. Retailers and brands tend to join different PROs (Fransen & Burgoon 2012). Sub-sectoral differences also tend to matter, as, for instance, sportswear brands prefer one specific organization (FLA), as do multi-product retailers (BSCI). Finally, there is a geographic division of regulatory participation, in particular between the North American and European industries.

In summary, for the clothing industry, differences and tensions among businesses and between businesses and CSOs promoted regulatory fragmentation, as did the negotiation of private regulation initiated by national governments. Inclusion or exclusion of CSOs in regulatory governance of the first-mover PROs also stimulated fragmentation, as did the stringency of standards pursued by these PROs.

### 5.3. Cohesive private regulation Case I: IT-electronics

#### 5.3.1. Industrial characteristics

IT is significant for different and functionally separate product markets that often involve different industrial associations, including modern consumer electronics, telecommunications, computers, and game consoles.

Most IT-electronics mass consumer goods are manufactured in transnational production chains that run from lead firms in the West, South Korea, and Japan, to developing countries and emerging economies in the Americas and Asia. Mass manufacturing is concentrated in independent companies in poorer countries supplying to computer brands. In most of these countries, labor and environmental standard enforcement is weak. Since the 2000s, pressure has grown on PC and laptop brands to safeguard working conditions in computer manufacturing and in the management of hazardous materials (Raj-Reichert 2011).

Compared to clothing and forestry, the horizontal concentration of the electronics industry is higher, so fewer firms compete and a small group of firms may determine the political course of action in the industry. Moreover, the geographic and organizational concentration of manufacturing suppliers in the electronics industry is much higher as well (Gereffi *et al.* 2005).

#### 5.3.2. The institutional design and cohesiveness of private regulation

The only PRO in this industry is the Electronics Industry Citizenship Coalition (EICC), originally the Electronics Code of Conduct, developed in 2004. The EICC initially focused on labor standards exclusively, but now also incorporates environmental aspects of manufacturing. Key drivers in the development of the EICC were large multinationals like HP, Dell, and IBM (Raj-Reichert 2011).<sup>13</sup> Compared to clothing, working conditions in IT-electronics factories in China initially received less public attention. Nonetheless, these companies were concerned about the possible negative reputation effects of scandals at suppliers. Moreover, at the time of establishment of the EICC, there were, as yet, no large CSOs or CSO networks primarily concerned with working conditions in this industry, which could have led PRO development the way that the World Wide Fund for Nature (WWF) had done for forestry, or the Clean Clothes Campaign and United Students Against Sweatshops had done in clothing.

The EICC focus initially resembled HP's CSR supply chain policy, in terms of labor standards and auditing practices. Next to the EICC, the Global e-Sustainability Initiative (GeSI) emerged as a discussion and learning forum for businesses from a cooperation between international organizations (United Nations Environment Programme

[UNEP] and the International Telecommunication Union [ITU]) and key figures in the telecommunication electronics industry. GeSi functioned exclusively as a discussion forum and did not include a standard-setting role. It, therefore, did not fragment regulation in the industry, but rather, participants argue, became a stepping stone for innovations in the approach of the EICC (SSIR 2007).

Compared to labor standards in clothing, the social part of the EICC's standards is arguably lax.

There is neither reference to ILO standards, nor to living wage requirements, and soft language on rights of association. The program has drawn participation from computer brands, computer manufacturers, and telecommunications firms. The partnership between the EICC and GeSi ensures that participants in the EICC can experiment with regulatory tools for the improvement of enforcement with the EICC. At the same time, GeSi and the EICC also function as forums for discussion for sustainability issues in parts of the electronics value chain other than manufacturing sites (GeSI 2012).

While public pressure by CSOs had increased the motivation to create the EICC, at no point did participants seriously involve societal critics in negotiation of the PRO.<sup>14</sup> The most that was on offer for members of CSO networks was an advisory role, which the EICC proposed in the second half of the 2000s. This was a reaction to increasing activism for sustainability considerations of IT electronics production, focusing on e-Waste (such as the Basel Action Network), and, after 2005, broader sustainability concerns. CSOs so far have declined, claiming that the EICC offers too little influence on decisionmaking. Observers also note an explicit anti-union sentiment among some EICC participants (makeITfair and GoodElectronics 2009; Raj-Reichert 2011).

By keeping CSOs outside the organization in the first years, and then offering them inclusion on an unequal basis (which CSOs predictably declined), the EICC succeeded in preventing a split between firms with different approaches to CSO involvement, as was observed in the clothing industry. Firms favorable to CSO interaction (including HP) set up stakeholder dialogues on an individual firm basis, but outside of EICC structures (SSIR 2007).<sup>15</sup> In addition, the open learning approach of GeSI and the low and unspecific bar set by the EICC standard facilitated adoption of the PRO. In comparison to first-generation PROs in clothing and forestry, the EICC presented a model most companies could agree upon and work with, and provided room to maneuver for companies that wanted more than the EICC required (Schipper & de Haan 2005; SSIR 2007). Additionally, the EICC experimented with CSO consultation outside of regular governance functions, through discussion seminars and open consultation rounds (EICC 2013).

There is a final chapter to the story of private regulation in the IT electronics industry that might pose a challenge to future cohesiveness of regulation. After prolonged societal discussion about working conditions at Apple's most important manufacturing supplier, FoxConn in China, Apple announced in March 2012 that it would let the FLA, an organization so far focused on clothing and sporting goods, audit FoxConn (FLA 2012). At the same time, HP openly endorsed the multi-stakeholder initiative Social Accountability International, which is, likewise, focused on clothing. While Apple and HP continue to be EICC members, their endorsement of multi-stakeholder PROs alongside the EICC may affect the latter's position in the IT electronics industry. Should the EICC not be able to manage this challenge, and should other companies follow Apple and HP, a fragmentation of the regulatory effort would be likely. Apple is not known as a CSR frontrunner, but as a flagship firm for the IT-electronics industry, its strategies have implications across the industry (Schipper & De Haan 2005). HP, according to respondents, is regarded as leading in CSR.<sup>16</sup>

In sum, the cohesiveness of private regulation in the IT-electronics industry in the past 10 years seems to have benefited from a high degree of industrial concentration, lenient standard-setting by the first-mover PRO, and the formal exclusion of CSOs in negotiation and governance of the PRO. The consequences of overlapping membership with clothing-focused PROs will most likely become clear in the coming years.

## 5.4. Cohesive private regulation Case II: Chemicals

### 5.4.1. Industrial characteristics

The chemical industry is a highly globalized and integrated industrial sector. Large multinational companies dominate globally integrated value chains, such as US- and European-based firms BASF, Du Pont, and Dow Chemical. There are, nowadays, also large chemical companies headquartered in non-Organisation for Economic Co-operation and Development (OECD) countries, such as Sabic and Sinopec. Apart from such giants, thousands

of smaller chemical firms exist. The chemical industry's products are very diverse and are used in almost all industrial production processes, ranging from polymers, petrochemicals, derivatives such as rubber, agrochemicals, over pharmaceuticals and specialty products. While firms typically have limited contact with the end consumer (Kannegiesser 2008, p. 64), the large players have "high public profiles and reputations" and "are extremely vulnerable to adverse publicity" (Gunningham 1998, p. 324). While this is inherently less true for smaller firms, analyses of CSR activities in the chemical industry are replete with references to the problem of a reputation held in common (Moffet *et al.* 2004; Prakash & Potoski 2007). This effectively puts small and large firms, as well as publicly visible and less well-known companies, in the same boat.

Chemical firms are often located in the geographical vicinity of buyers (often other industries) and in areas where energy supply, in particular, gas and electricity, is reliable and available in sufficient quantities. Production processes in the chemical industry often also require a highly skilled workforce (Feldmann 2009). Chemical companies, therefore, have major production facilities in industrialized countries, typically characterized by high levels of regulation and public attention to the environmental effects stemming from the chemical industry. Sustainability debates in this industry, thus, traditionally focus on health, safety, and environment (HSE) issues, and industry standards conform to, and sometimes go beyond, the level required by public regulation in industrialized states.

#### 5.4.2. *The institutional design and cohesiveness of private regulation*

The chemical industry is characterized by one key PRO called Responsible Care (RC). The program started in Canada and the US as a reaction to increasing public concerns about the environmental credentials of the chemical industry after the 1976 Seveso and the 1984 Bhopal incidents (Belanger *et al.* 2009). These crises gained the attention of public regulators and CSOs for HSE issues in the chemical industry, so much so that the program has extended to other countries since the mid-1980s. A key element in the process was that RC did not develop as an independent PRO, but was added to the functions of national chemical associations, largely on the initiative of "large, transnational corporations that . . . drive Responsible Care . . . [and] have the necessary motivation and capacity to change industry practice and culture" (Gunningham 1998, pp. 339–340). Since 1989, the International Council of Chemical Associations (ICCA) and its "Responsible Care Leadership Group" coordinate the process. Today RC has diffused across the globe, with 54 chemical associations representing 60 economies (among them all major industrial countries) subscribing to RC.<sup>17</sup> Many national associations, in particular, from the biggest industrial countries, make adoption of the RC scheme binding on their member firms. This mechanism has prevented the emergence of competing organizations at the global level,<sup>18</sup> has forced large and small companies with different interests and outlooks under the roof of one PRO, and has also offset competition concerns between member firms to some extent (Gunningham 1998).<sup>19</sup> The ICCA and the national associations also serve as fora for exchange of best practices, especially regarding the introduction of environmental management systems at a firm level.

RC is adopted both by associations and firms. Key norms are fixed in a list of "fundamental features" to which member associations commit. These include performance measurement, promotion of RC in member firms, establishment of verification procedures, and provision of learning fora.<sup>20</sup> In addition, national associations have to ensure that companies commit to generic "guiding principles," covering, for instance, HSE risk prevention, and reporting about emissions and accidents. However, RC is not a uniform program as it allows for variation in the range of substances and issues on which performance data is collected, and different ways of overseeing implementation at firm level (ICCA 2012, pp. 22–50). Therefore, despite a common core of RC, the PRO is sufficiently flexible to allow local adaptation, including the possibility for leading associations to upgrade the scheme domestically (Moffet *et al.* 2004). As a downside, studies have pointed out that implementation oversight by national or international associations is often lacking (Garcia-Johnson 2000).

RC was initially developed without CSO involvement. Some national RC schemes, for instance, in Canada and the US, however, include CSOs both in consultations on the development of standards and in monitoring of RC commitments through National Advisory Panels. This is an attempt to boost the credibility of the program and to generate acceptance by public regulators and local communities (Belanger *et al.* 2009, pp. 22–23). Such panels are, however, neither involved in deciding on regulatory standards, nor are they part of the "fundamental features" of RC. In a similar manner, the Responsible Care Global Charter, launched in 2006, includes a number of elements upgrading the initiative, but does not make them mandatory.

Summing up, the chemical industry has been able to avoid PRO fragmentation through a variety of factors. First, the chemical industry is characterized by a strong common reputation problem, as firms “face a collective threat in the form of government regulation, environmental catastrophe and public backlash while firms in more innocuous industries face primarily specific firm related risks” (Bertels & Peloza 2008, p. 69). Second, RC is a product of and strongly linked to business association structures. Many national associations make subscribing to RC a condition of membership, so that firms have little choice other than joining the PRO. At the same time, national and international associations serve as fora for promoting the initiative, the exchange of best practice, the creation of level playing fields, and for managing competition concerns among member firms. Finally, beneath the façade of a uniform and strictly managed program, RC offers flexibility to its participants and options for local adaptation (Conzelmann 2012).

## 6. Comparative results

Table 1 summarizes the results of our cases and signifies (by gray shading) which factors proved powerful across all cases in explaining cohesiveness or fragmentation.

Among the industrial characteristics variables, only concentration (H1a) is able to explain events across all cases. Industrial concentration has benefited collective action in electronics and chemicals through the leadership of large multinationals. Lower concentration has spurred fragmentation in forestry and clothing. Unevenness in reputation sensitivity (H1b), functional similarity among firms (H1c), and competitive concerns (H1d) do not help to explain cohesiveness or fragmentation across cases.

Second, our comparative examination of the institutional design of first-mover PROs shows that the inclusion of CSOs (H2a) and the stringency of standards (H2b) offer the strongest explanation for the likelihood of fragmentation, playing a role in all four cases. First-mover PROs that include CSOs in the negotiation and, subsequently, governance of the standards are likely to fragment the regulatory field. Industries tend to split between businesses that see a strategic benefit in cooperating with CSOs, and those that do not, as shown in the cases of forestry and clothing. In chemicals and IT-electronics, the sidelining of CSOs promoted cohesiveness. Likewise, the cases of chemicals and IT-electronics show that first-mover PROs starting with lenient standards attract more firms initially and allow ambitious firms to go beyond minimum standards on a voluntary, individual basis. In clothing and forestry, the fragmentation of regulation was affected by the stringent and ambitious standards of first-mover PROs.

The other two variables in the institutional design cluster turn out to be less powerful in explaining outcomes. While national negotiation of PROs, sometimes involving governmental intervention, arguably worked as a barrier to cohesiveness in the clothing and forestry industries (as posited in H2c), it was not a hindrance to the evolution of the global RC program in chemicals. And while business association involvement spurred cohesiveness in chemicals (as in H2d), the IT-electronics case shows that without direct association involvement it is also possible for a group of firms to create cohesive private regulation.

The strongest explanation for the emergence of cohesive PROs on the basis of our cases is, thus, the combination of industrial concentration on the one hand and absence of CSO involvement and lenient standard setting in first-mover PROs on the other. The design of this study does not allow us to precisely assess the relative strength of these different factors, nor to specifically determine their interaction. However, the process tracing conducted above can assist in developing inferences about interactions among variables.

First, industrial concentration and CSO involvement in first-mover PROs clearly interact. As the chemicals and IT-electronics cases show, consultation and coordination in more concentrated industries and the leadership of large firms enabled a strategy that kept CSOs effectively at bay. Conversely, lower industrial concentration gives CSOs more opportunities to seek out possible ally firms in co-designing a new PRO.

Second, CSO involvement in the design of a PRO often effectuates stringent standard setting by this PRO. Most CSOs analyzed advocated specific social and environmental causes, which they sought to translate into specific and prescriptive regulations. Examples include the trade union preference for ILO standards and living wage clauses in clothing, and the environmental movement’s sustainability criteria for forestry. However, CSO involvement does not necessarily lead to stringent standards, as the case of the Ethical Trading Initiative for clothing production demonstrates. Nor do approaches developed without CSOs necessarily have to lead to low standards, as the largely business-driven BSCI and PEFC show.

**Table 1** Explaining fragmentation and cohesiveness in four industries

Variables	Cases			
	Forestry: Fragmentation	Clothing: Fragmentation	IT-Electronics: Cohesiveness	Chemicals: Cohesiveness
Industrial characteristics				
Industrial concentration	Low	Low	High	High
Industrial reputation sensitivity	Uneven	Uneven	Uneven	Even, because of “reputation held in common”
Diversity of business players	High: wood producers, processing (paper, furniture), retail	High: Retail, brands, sportswear, multi-product retail	High: laptop, PC, console, MP3, smartphone	High: petrochemicals, specialty chemicals, agrochemicals
Competitive issues within regulatory scope	No	Yes	No	Yes
Institutional design of first-mover PRO				
Inclusion CSOs	Yes (FSC)	Yes (FLA, FWF, SAI, ETI)	No (EICC)	No (RC)
Stringency	Stringent standards	Some stringent standards, some lenient standards	Lenient standards	Lenient standards
(Political) level	Global	National	Global	National, with global perspective from outset
Business associations	No	No	No	Yes

CSO, civil society organizations; EICC, Electronics Industry Citizenship Coalition; ETI, Ethical Trading Initiative; FLA, Fair Labor Association; FSC, Forest Stewardship Council; FWF, Fair Wear Foundation; PRO, private regulatory organizations; RC, Responsible Care; SAI, Social Accountability International.

## 7. Conclusion

There is increasing academic and policy interest in the effect of fragmentation or cohesiveness of transnational private regulation of sustainability standards, but few studies discuss which factors explain across industries and issue areas why private regulation evolves into a field of competing PROs with a *similar* policy focus or why only one PRO emerges in an industry. Our study shows for a range of industries and issue areas pertinent to the sustainability agenda that low industrial concentration, CSO involvement in PRO governance, and high stringency of standards of a first-moving PRO in an industry offer the strongest explanations for a fragmented private regulatory field. Conversely, high concentration, lenient standards, and keeping CSOs at bay in first-mover PROs explain cohesiveness. These results are robust across all four industries researched, while other hypotheses have been shown to apply only in specific cases and, thus, to hold less explanatory power. Our analysis, therefore, illuminates a varied set of factors that, in combination, contribute to the cohesiveness or fragmentation of the regulatory effort. At the same time, the study suggests that other explanations for fragmentation and cohesion identified in the literature are case-specific and/or need further elaboration in order to offer generalizable insights. As such, our analysis adds to previous work analyzing private regulatory fragmentation mainly in terms of PROs using *different* problem foci and the consequences of issue boundaries set by such PROs (Auld 2014). Second, our analysis adds to studies inside the sustainability-standard field examining a multitude of factors, but *within* a single-case study, and to studies outside of the sustainability-standards field exploring a single factor as potential *explanans* of cohesiveness (Cashore *et al.* 2004; Porter 2014).

The set-up of our study allows only limited probing of how policymakers in first-mover PROs can maintain their pivotal position. Because in the forestry and apparel case fragmentation ensued very early, we lack a comparable case of a first-mover PRO which met competition after being the sole established PRO for a longer period. While we propose that early decisions in the design of first-mover PROs matter most in the evolution of cohesiveness or fragmentation, we think it plausible that, in organization ecology terms, maintenance strategies for PROs and the conscious management of interactive effects between PROs may be necessary in the long run (cf. Abbott *et al.* 2013). The process tracing of two cohesive cases of private regulation suggest the importance of flexible additions (such as widening the scope of the PRO's regulatory approach), which leader firms may choose to adopt. As the chemicals and IT-electronics cases indicate, such measures cater to diversity among firms without endangering the common ground that the original PRO standard established. Moreover, various forms of engagement with CSOs outside of the general PRO architecture took place in these two industries. On the level of firms this may possibly solve reputation and regulatory impact challenges. Whether such strategies also boost PRO effectiveness at industry level is more questionable.

A policy-relevant implication of our results concerns the institutional design of first-mover PROs. While CSO involvement in governance is believed to be important to secure reputation benefits for participating firms (Potoski & Prakash 2013) and stringent standards may boost positive impacts at firm level (Borck & Coglianese 2009), the ensuing PRO proliferation may endanger PRO effectiveness at a general industry level. Such fragmentation may, in the end, lead to creative experimentation or the ratcheting up of standards among PROs, provided that socializing and harmonizing forces are at play. Our study cannot claim a clear answer here because of the brevity of the period under research.

Future research should ideally focus on three issues. First, long-term dynamics in PRO development, such as the possible ratcheting-up and spillover effects mentioned above, should be process-traced. This should also help us to understand the extent to which conflicts and dynamics during the early stages of PRO development have a bearing on the later management of PRO interactions (Auld 2014). Second, the viability of our propositions should be examined for other industries and PROs. The initial focus may be on other PROs focusing on sustainability issues, because industrial structures and the degree of civil society pressures, as well as dynamics of PRO institutional development, should be broadly comparable to the cases discussed in this paper. Studies of other issues (like finance or technology) may take inspiration from our exploration of institutional design and industrial variables, as these plausibly may affect fragmentation or cohesiveness of private regulation, next to other, possibly idiosyncratic factors. Third, the relationship between different types of fragmentation of private regulation should be explored. This allows us to examine whether the explanatory factors proposed in our study also affect different types of regulatory fragmentation, and whether different types of fragmentation and

cohesiveness possibly affect each other. Such research will help us to further assess private regulation's potential as a mode of cross-border (sustainability) governance.

## Acknowledgments

We thank both editors and reviewers of *Regulation & Governance* for their insightful comments which decisively helped to improve this paper. We have benefited from comments to early drafts of this paper at the ECPR Regulatory Governance conference in Exeter, June 2012, the Leiden University Public Administration Research Seminar, and the University of Amsterdam Political Science Department Seminar. We thank in particular Graeme Auld, Axel Marx, Seth Maenen, Jeroen van der Heijden, and Jelmer Schalk for their insights. We are also grateful to Ian Lovering for assistance with language editing. Luc Fransen acknowledges the Robert Schuman Centre for Advanced Studies of the European University Institute for financial support through the Jean Monnet Fellowship Programme.

## Notes

- 1 The final boundary of an industry is a matter of perception among business representatives and their peers. For our cases, we find agreement among interviewees about what constitutes such boundaries. This understanding is influenced by trading and competitive relationships, and is separate from the existence of PROs catering to such industries.
- 2 PROs can formally recognize the criteria and requirements of each others' standards or sets of criteria, but such recognitions have, so far, not ended competition among PROs in industries. We are thankful to Axel Marx for this point.
- 3 Such PRO fragmentation may produce the interactive effects identified by Auld (2014).
- 4 Auld (2014, p. 122), however, shows how "the choices of program founders were also shaped by what government policies and programs and other initiatives were already addressing."
- 5 Studies on industrial organization and global value chains inform our understanding of industrial characteristics. Private standards can be theorized in light of firm strategies to advance their position in the global organization of production (Gereffi *et al.* 2005, p. 91). We do not directly contribute to this debate, but focus our analytical message on the study of private regulation.
- 6 We do not adopt Porter's (2014) emphasis on technical systems for hypothesizing because referenced studies of sustainability-focused PROs do not make it plausible that such systems divide or unify actors and rules. However, this hypothesis might do significant explanatory work in issue fields beyond sustainability standards.
- 7 We conclude from existing studies that different attitudes toward CSOs *as a whole* lead to the most substantial split in businesses preferences regarding PROs, not preferences for one CSO over another (cf. Fransen 2011). Therefore, the variety in tactics and preferences of CSOs with regard to private regulation are not of major importance for explaining cohesiveness or fragmentation.
- 8 Indicators and scores of these variables are available from the publisher's website.
- 9 We owe this suggestion to the editor.
- 10 Information retrieved from <http://www.pefc.org/about-pefc/overview>; last accessed 2 Oct 2013.
- 11 Interview, FLA representative.
- 12 Interview, textile association representative.
- 13 Interview, IT electronics firm representative.
- 14 Interview, electronics representative.
- 15 Interview, IT electronics firm representative.
- 16 Interview, electronics representative.
- 17 2010 statistics (ICCA 2013a).
- 18 The ISO 14000 standards serve manufacturers in general and only cover some of the elements promoted by RC (Prakash & Potoski 2007). National association-driven programs, such as the US-based ChemStewards program, cannot match the global reach of RC.
- 19 Interviews, chemical association representatives.
- 20 See also ICCA (2013b).

## References

- Abbott KW, Green JF, Keohane RO (2013) Organizational Ecology in World Politics. Paper presented at the International Studies Association Annual Convention, April 2013, San Francisco, CA.

- Alter KJ, Meunier S (2009) The Politics of International Regime Complexity. *Perspectives on Politics* 7, 13–24.
- Auld G (2008) The Institutionalization of Global Private Regulation. Paper presented at the Pacific Northwest American Political Science Association Conference, April 2008, Chicago, IL.
- Auld G (2014) Confronting Trade-offs and Interactive Effects in the Choice of Policy Focus: Specialized versus Comprehensive Private Governance. *Regulation & Governance* 8, 126–148.
- Auld G, Gulbrandsen LH, McDermott CL (2008) Certification Schemes and the Impacts on Forests and Forestry. *Annual Review of Environment and Resources* 33, 187–211.
- Bartley T (2007) Institutional Emergence in An Era of Globalization: The Rise of Transnational Private Regulation of Labor and Environmental Conditions. *American Journal of Sociology* 113, 297–351.
- Bartley T, Child C (2014) Shaming the Corporation: The Social Production of Targets and the Anti-Sweatshop Movement. *American Sociological Review* (forthcoming).
- Belanger J, Topalovic P, Krantzberg G (2009) *Responsible Care: History & Development*. [Last accessed 4 Oct 2013]. Available from URL: <http://www.eng.mcmaster.ca/civil/facultypages/krantz11.pdf>.
- Bertels S, Pelozo J (2008) Running Just to Stand Still? Managing CSR Reputation in an Era of Ratcheting Expectations. *Corporate Reputation Review* 11, 56–72.
- Biermann F, Pattberg P, van Asselt H, Zelli F (2009) The Fragmentation of Global Governance Architectures: A Framework for Analysis. *Global Environmental Politics* 9, 14–40.
- Borck JC, Coglianese C (2009) Voluntary Environmental Programs: Assessing Their Effectiveness. *Annual Review of Environment and Resources* 34, 305–324.
- Büthe T (2010) Private Regulation in the Global Economy: A (P)Review. *Business and Politics* 12(3), 1–38.
- Cashore B, Auld G, Newsom D (2004) *Governing Through Markets: Forest Certification and the Emergence of Non-state Authority*. Yale University Press, New Haven, CT.
- Cashore B, van Kooten GC, Vertinsky I, Auld G, Affolderbach J (2005) Private or Self-Regulation? A Comparative Study of Forest Certification Choices in Canada, the United States and Germany. *Forest Policy and Economics* 7, 53–69.
- Conzelmann T (2012) A Procedural Approach to the Design of Voluntary Clubs: Negotiating the Responsible Care Global Charter. *Socio-Economic Review* 10, 193–214.
- Eberlein B, Abbott KW, Black J, Meidinger E, Wood S (2014) Transnational Business Governance Interactions: Conceptualization and Framework for Analysis. *Regulation & Governance* 8, 1–21.
- Egels-Zandén N, Wahlqvist E (2007) Post-Partnership Strategies for Defining Corporate Responsibility: The Business Social Compliance Initiative. *Journal of Business Ethics* 70, 175–189.
- EICC (Electronics Industry Citizenship Coalition) (2013) *Stakeholder Engagement*. [Last accessed 3 July 2013.] Available from URL: <http://www.eicc.info/initiatives03.shtml>.
- Esbenshade JL (2004) *Monitoring Sweatshops: Workers, Consumers, and the Global Apparel Industry*. Temple University Press, Philadelphia, PA.
- Feldmann J (2009) *Statement at Global Economic Symposium “The Post-Crisis Global Division of Labor 2009”*. [Last accessed 4 Oct 2013]. Available from URL: <https://www.global-economic-symposium.org/knowledgebase/the-global-economy/the-post-crisis-global-division-of-labor/proposals/the-post-crisis-global-division-of-labor>.
- FLA (Fair Labor Association) (2012) *Apple Joins FLA*. [Last accessed 4 Oct 2013]. Available from URL: <http://www.fairlabor.org/blog/entry/apple-joins-fla>.
- Fransen L (2011) Why Do Private Governance Organizations Not Converge? A Political-Institutional Analysis of Transnational Labor Standards Regulation. *Governance* 24, 359–387.
- Fransen L, Burgoon B (2012) A Market for Worker Rights: Explaining Business Support for International Private Labour Regulation. *Review of International Political Economy* 19, 236–266.
- Garcia-Johnson R (2000) *Exporting Environmentalism: U.S. Multinational Chemical Corporations in Brazil and Mexico*. MIT Press, Cambridge, MA.
- George AL, Bennett A (2005) *Case Studies and Theory Development in the Social Sciences*. MIT Press, Cambridge, MA.
- Gereffi G, Humphrey J, Sturgeon T (2005) The Governance of Global Value Chains. *Review of International Political Economy* 12, 78–104.
- GeSI (Global E-sustainability Initiative) (2012) *About Us*. [Last accessed 4 Oct 2013]. Available from URL: [http://gesi.org/About\\_ICT\\_sustainability](http://gesi.org/About_ICT_sustainability).
- Gunningham N (1998) Environmental Management Systems and Community Participation: Rethinking Chemical Industry Regulation. *UCLA Journal of Environmental Law and Policy* 16, 319–439.
- ICCA (International Council of Chemical Associations) (2012) *ICCA Responsible Care Progress Report: Growing our Future*. [Last accessed 4 Oct 2013]. Available from URL: <http://www.icca-chem.org/ICCADocs/RC%20annual%20report.pdf>.

- ICCA (International Council of Chemical Associations) (2013a) *FAQs*. [Last accessed 2 Oct 2013.] Available from URL: <http://www.icca-chem.org/en/Home/Responsible-care/FAQs/>.
- ICCA (International Council of Chemical Associations) (2013b). *Responsible Care: Fundamental Features*. [Last accessed 4 Oct 2013.] Available from URL: <http://www.icca-chem.org/ICCATools/ResponsibleCareFundamentalFeatures1.pdf>.
- Kannegiesser M (2008) *Value Chain Management in the Chemical Industry: Global Value Chain Planning of Commodities*. Physica-Verlag, Heidelberg, Berlin.
- Kolk A, van Tulder R, Welters C (1999) International Codes of Conduct and Corporate Social Responsibility: Can Transnational Corporations Regulate Themselves? *Transnational Corporations* 8, 143–180.
- McCormick D, Schmitz H (2001) *Manual for Value Chain Research on Homeworkers in the Garments Industry*. [Last accessed 4 Oct 2013]. Available from URL: <http://www.globalvaluechains.org/docs/wiegomanualendnov01.pdf>.
- makeITfair and GoodElectronics (2009) *Improving Labour Standards in the Global Electronics Industry Defining Strategies that Work*. [Last accessed 4 Oct 2013]. Available from URL: [http://goodelectronics.org/publications-en/Publication\\_3116/at\\_download/fullfile](http://goodelectronics.org/publications-en/Publication_3116/at_download/fullfile).
- Merk J (2007) The Private Regulation of Labour Standards: The Case of the Apparel and Footwear Industries. In: Graz JC, Nölke A (eds) *The Limits of Transnational Private Governance*, pp. 115–215. Routledge, London.
- Moffet J, Bregha F, Middelkoop MJ (2004) Responsible Care: A Case Study of a Voluntary Environmental Initiative. In: Webb K (ed) *Voluntary Codes: Private Governance, the Public Interest and Innovation*, pp. 177–208. Carleton University, Ottawa.
- Mutersbaugh T (2005) Fighting Standards with Standards: Harmonization, Rents and Social Accountability in Certified Agrofood Networks. *Environment and Planning* 37, 2033–2051.
- O'Rourke D (2006) Multi-Stakeholder Regulation: Privatizing Or Socializing Global Labor Standards? *World Development* 34, 899–918.
- Overdevest C (2010) Comparing Forest Certification Schemes: The Case of Ratcheting Standards in the Forest Sector. *Socio-Economic Review* 8, 47–76.
- Overdevest C, Zeitlin J (2014) Assembling an Experimentalist Regime: Transnational Governance Interactions in the Forest Sector. *Regulation & Governance* 8, 22–48.
- Porter T (2014) Technical Systems and the Architecture of Transnational Business Governance Interactions. *Regulation & Governance* 8, 110–125.
- Potoski M, Prakash A (2013) Green Clubs: Collective Action and Voluntary Environmental Programs. *Annual Review of Political Science* 16, 399–419.
- Prakash A, Potoski M (2007) Collective Action through Voluntary Environmental Programs: A Club Theory Perspective. *Policy Studies Journal* 35, 773–792.
- Raj-Reichert G (2011) The Electronics Industry Code of Conduct: Private Governance in a Competitive and Contested Global Production Network. *Competition and Change* 15, 221–238.
- Reinecke J, Manning S, Von Hagen O (2012) The Emergence of a Standards Market: Multiplicity of Sustainability Standards in the Global Coffee Industry. *Organization Studies* 33, 791–814.
- Ronit K, Schneider V (1999) Global Governance through Private Organizations. *Governance* 12, 243–266.
- Sasser E (2003) Gaining Leverage: NGO Influence on Certification Institutions in the Forest Products Sector. In: Teeter LD, Cashore B, Zhang D (eds) *Forest Policy for Private Forestry: Global and Regional Challenges*, pp. 229–244. CABI, Wallingford.
- Schipper I, de Haan E (2005) *CSR Issues in the ICT Hardware Manufacturing Sector. Somo ICT Sector Report*. [Last accessed 4 Oct 2013]. Available from URL: [http://somo.nl/publications-nl/Publication\\_476-nl](http://somo.nl/publications-nl/Publication_476-nl).
- SSIR (Stanford Social Innovation Review) (2007) *Making Supply Chains Socially Responsible: Environmental Sustainability in Electronics*. [Last accessed 21 Jun 2012]. Available from URL: [http://www.ssireview.org/podcasts/category/socially\\_responsible\\_business](http://www.ssireview.org/podcasts/category/socially_responsible_business).
- Turcotte M, Reinecke J, den Hond F (2014) Explaining Variation in the Multiplicity of Private Social and Environmental Regulation: A Multi-Case Integration Across the Coffee, Forestry and Textile Sectors. *Business and Politics* 16, 151–189.
- Vogel D (1997) *Trading Up: Consumer and Environmental Regulation in a Global Economy*. Harvard University Press, Cambridge, MA.

## Supporting information

Additional supporting information may be found in the online version of this article at the publisher's web-site:

**Appendix S1** Indicators used in this study and their operationalization.