

CHAPTER 2



The Correlates of Procedural Credibility in Transnational Eco-Labeling

What conditions might make an eco-label more or less credible, and relatedly, why do some transnational ELOs follow best practices more than others? A number of answers have been proposed to these questions, but surprisingly few have been tested outside of narrow sector-specific contexts. The goal of this chapter is to survey the landscape of these responses and submit likely candidates to a “plausibility probe” (Eckstein 1975) with the benefit of original, large-N data on transnational eco-labeling. The original dataset of 123 ELOs presented in this chapter represents one of the first attempts to systematically examine the conditions associated with procedural credibility in ELOs across commercial sectors and around the world. It examines the policies and practices of forestry ELOs (e.g., FSC) alongside those of cosmetic labels (e.g., Leaping Bunny) thereby offering an empirical base of unprecedented scope through which to analyze the correlates of procedural credibility. Throughout the chapter I heed the caution that correlation does not equal causation. Hence, the conclusions offered below are necessarily preliminary and constrained by the cross-sectional nature of the data. While the chapter offers a surprising and interesting account of the conditions that align with best practice adherence in 2013, a more robust account of which processes and mechanisms lead ELOs to follow best practices requires the sort of careful qualitative analysis performed in chapters 4 and 5.

Caveats notwithstanding, my statistical analysis produces a number of surprising findings. I find that existing scholarship, which primarily focuses on the effects of ownership, institutional context, or sectoral competition

between ELOs, only partially explains best practice adherence in transnational eco-labeling. Perhaps most surprisingly, I find no evidence to suggest that industry-sponsored ELOs are less adherent to best practices than non-industry-funded ones. Nor do I find evidence that competition between ELOs in the same sector leads to heightened or diminished attention to best practices. Both findings throw into question the widely held beliefs that industry-sponsorship necessarily results in less than rigorous governance and that competition between ELOs spurs either “racing-to-the-bottom” or “racing-to-the-top” dynamics. I do, however, find evidence to suggest that, on balance, private ELOs are more likely to disregard best practices than public or state-sponsored ones. I also find significant evidence that ELOs developed in partnership with existing environmental groups, structured as not-for-profit organizations, or possessing broad transnational reach are more likely to comply with best practices than ELOs without these attributes. These findings suggest that a narrow focus on who owns an ELO, where it is located, or which sector it governs offers, at best, an incomplete account of procedural credibility. The statistics also open an interesting new puzzle with respect to transnational reach. Namely, why are eco-labels that are present in many different countries more associated with best practice adherence? The answer to this question motivates the close examination of ELO market strategies and the targets of governance in chapter 3.

This chapter is structured as follows. I begin by briefly surveying past treatments of eco-labeling in political science. I find that while eco-labels are an increasingly common object of analysis, few previous studies have directly engaged with questions of credibility. I therefore broaden my search for explanations of credibility to include the transnational governance literature and deductively generate a series of testable hypotheses about best practice adherence in the chapter’s third section. Following this, I review the data and methods used to test these hypotheses, present the results of my statistical analysis, and discuss the meaning and significance of my findings. The chapter concludes by outlining a number of puzzles that arise out of the statistics and laying the foundation for the abductive explanation on the causes of best practice adherence presented in chapter 3.

ECO-LABELS: MANY NAMES, COMMON GAPS IN RESEARCH

Eco-labels are the focus of a number of overlapping literatures in political science.¹ Each of these intersecting literatures contributes valuable

insights into where eco-labels come from, why and how they become authoritative, and how they interact with conventional state-centric forms of global governance. However, questions of procedural credibility—the suitability of organization-level systems, policies, and processes for bringing about positive environmental, social, and economic outcomes—are dealt with indirectly, if at all.

The research on non-state market-driven governance (NSMD) focuses primarily on why and how non-state actors gain the authority to govern (Bernstein and Cashore 2007; Cashore 2002; Cashore, Auld, and Newsom 2004). Scholars in this field argue that the political authority of non-state actors hinges on the legitimacy of the governance body as determined by communities of relevant external stakeholders and the level of “fitness” with broader social structures (Bernstein 2011, 2014). The literature on voluntary environmental programs (VEPs) takes a different approach to a similar question by asking why firms choose to participate in VEPs (Potoski and Prakash 2005, 2010; Thauer 2014). In contrast to the NSMD literature, the rationale for acknowledging the authority of VEPs is mostly strategic and flows from the desire of firms to receive “club benefits” (Potoski and Prakash 2005, 235). Both literatures offer important insights into why ELOs make certain decisions but ultimately, provide only indirect clues as to why variation exists in levels of procedural credibility.

Graeme Auld’s groundbreaking book offers further insight into this topic. Auld (2014, 25) argues that private governance is highly path dependent and that variation between schemes can be attributed to the consequences of early design choices in each program, which “affect the evolution of these initiatives and potentially their effectiveness.” However, Auld stops short of suggesting a clear or linear relationship between early design choices and procedural credibility. Fransen (2011a) and Gulbrandsen (2010) provide a more direct argument. Both argue that stringency and effectiveness are at least partially determined by who owns or operates a private governance scheme.² However, the generalizability of their conclusions is constrained by their relatively small and sector-specific sample sizes. Gulbrandsen focuses exclusively on forestry and fisheries while Fransen targets the apparel, retail, and sportswear sectors. Hence, there are sound reasons to probe their hypotheses against a larger cross-sectoral sample.

The most notable efforts to investigate cross-sectoral trends in eco-labeling—outside of the dataset used in this chapter—are by Green (2013) and Bullock (2017).³ However, a number of differences separate their efforts from mine. Green is primarily interested in theorizing the emergence of private authority. She uses data in support of a broader conceptual argument about the distinction between delegated and entrepreneurial

private authority. Similarly, Bullock uses his dataset primarily for descriptive purposes, showing the diversity in the reliability and validity of information-based environmental governance. However, he does not make a direct argument about the causes of this variation. By contrast, my dataset is designed specifically to explore relationships between procedurally credible ELOs and certain contextual or organization-specific conditions.

In sum, the aim of this book is to complement and extend past research by adopting a novel focus on best practice adherence. Since none of the past literature addresses questions of variation in procedural credibility directly (or does so only within the narrow confines of a handful of sectors) the following pages delve into the broader research on transnational governance to deductively generate hypotheses on what explains variation in the rigor and credibility of ELOs.

EXPLAINING RIGOR AND CREDIBILITY IN TRANSNATIONAL GOVERNANCE

In broad terms, past efforts to explain the rigor of transnational governance tend to focus on one of the following questions: (1) *Who* is involved in the governance scheme? (2) *Where* does the governance scheme takes place? (3) *Which* sector or issue area does the governance scheme cover?

Who Is Involved in the Governance Scheme?

Within those theories that examine *who* is involved (e.g., Darnall, Ji, and Potoski 2017; Darnall, Ji, and Vázquez-Brust 2016), a key axis of variation concerns the governance scheme's relationship to the state, which is often simplified through labels like "public" and "private." In this context, I define public ELOs as those directly connected to the institutions of the state; this includes organizations established by sub-units of government, supranational entities, or units of intergovernmental organizations acting quasi-independently of national decisions (Eberlein et al. 2014, 3). Conversely, private ELOs are those that are neither owned, governed, nor primarily funded by states. This category includes industry-funded organizations, ENGO initiatives, and free-standing organizations with neither NGO nor industry involvement. In between public and private bodies are hybrid organizations, which may divide funding and governance duties between public and private stakeholders or may operate as independent bodies at arms-length from government.

Much existing scholarship in this field points to the inherent weakness of private organizations in crafting rigorous and credible transnational governance schemes. Skepticism over the credibility of private governance stems from a number of issues. First, critics argue that private governance schemes are less inclusive and representative than their public counterparts (Carmin, Darnall, and Mil-Homens 2003). The “rules” of private governance schemes are rarely, if ever, created with the consent and participation of the targets of governance (Bennett 2017; Büthe 2010, 19; Fuchs and Kalfagianni 2010, 10). This can have important consequences for the rigor of a governance initiative since it curtails proper feedback mechanisms (van der Ven forthcoming (b)).

Second, skeptics suggest that accountability in private governance schemes is generally lacking (Fuchs and Kalfagianni 2010; Van Harten 2005, 615). Those outside the rule-making circle often “have no source of redress” even when the same type of organized activity “in a public policy context, may be considered properly the subject of democratic deliberation and constraining, and not simply the outcome of competitive market forces” (Cutler, Haufler, and Porter 1999, 370). This lack of accountability can lead to problems in compliance with and enforcement of eco-labeling rules, and subsequently, diminished regulatory rigor.

Third, a number of scholars have expressed concern about the impartiality of private forms of transnational governance. These concerns center mainly around corporate and/or industry-sponsored transnational governance initiatives. In reference to private standard-setting bodies, Mattli and Büthe (2005, 405) suggest that agents that are financially dependent on a principal funder will have strong incentives to take their interests into account at the expense of other interests. Neo-Gramscian scholars suggest that private and hybrid forms of transnational governance emerge out of a desire to proactively accommodate oppositional claims—such as a duty to care for the environment—thereby stabilizing the hegemonic capitalist worldview and reproducing a corporate-friendly global governance system (Levy and Newell 2002, 84; Schäferhoff, Campe, and Kaan 2009, 455). In this conception, the primary objective of industry-backed ELOs (e.g., the Sustainable Forestry Initiative) is therefore not environmental, rather it is to demonstrate just enough regulatory effort to mitigate anxiety about the benevolent nature of global capitalism.

This lack of independence and impartiality may also be evident in for-profit certification and labeling bodies. Such organizations leave themselves vulnerable to downward pressure since their continued survival and prosperity depends on expanding their clientele. In keeping with the

notion that standards are much more likely to be adopted when they keep the costs of compliance low or non-existent, it can be argued that for-profit ELOs may have a structural imperative to pay less attention to rigor and credibility if this allows them to expand their client base (Cashore et al. 2007, 163; Cashore, Auld, and Newsom 2004; Mayer and Gereffi 2010, 14).

Outside of explanations that focus on the public-private relationship, a number of authors have previously found NGO influence to be a relevant factor in ensuring the rigor and credibility of a governance scheme, particularly when NGOs are afforded full opportunity to participate in the development of the scheme (Bartley 2003; Darnall, Ji, and Potoski 2017; Fransen 2011a; Gulbrandsen 2010). Similarly, in examining international environmental agreements, scholars found that ENGOs were successful in advancing their environmental objectives and strengthening compliance regimes when they were afforded access to the negotiating process or were able to use an “insider strategy” to sway negotiations (Corell and Betsill 2001; Gulbrandsen and Andresen 2004). This same influence may be evident in private transnational governance schemes where early and routine ENGO participation can act as a voice for public concerns and provide a check on industry influence (Büthe and Mattli 2011, 220). Alternately, ENGO-led ELOs may show a deep concern for regulatory rigor out of a desire to maintain the credibility upon which funding from outside donors depends.

While there is considerable debate around which of these explanations is most accurate, the common thread that unites them is that rigor and credibility—and therefore adherence to best practices—are functions of which group or type of groups owns and operates a transnational governance scheme. The following four hypotheses therefore flow from the explanations in the “who governs” category:

- H1: *Private ELOs will be less likely to meet best practice than public ELOs.*
- H2: *ELOs receiving more than 50% of their initial funding from a corporation or industry association will be less likely to meet best practice than non-industry-funded ELOs.*
- H3: *ELOs legally registered as not-for-profit organizations will be more likely to meet best practice than for-profit ELOs.*
- H4: *ELOs that were originally funded or initiated by a pre-existing environmental NGO will be more likely to meet best practice than ELOs that were not funded or initiated by a pre-existing environmental NGO.*

Where Does the Governance Scheme Take Place?

Another category of scholarship focuses on the physical location of transnational governors and the unique impact of domestic institutional context. One such branch of theory makes a distinction based on the variety of capitalism (VOC) that characterizes the country in which an ELO's headquarters are located. Two types of institutional contexts are commonly identified in the VOC literature: Liberal Market Economies (LMEs) and Coordinated Market Economies (CMEs) (Hall and Soskice 2001, vi).⁴ Whereas LMEs tend to have decentralized systems where certification schemes are run like for-profit institutions and expected to compete for customers, CMEs often have supportive institutions which seek to encourage collaboration between standard setters and provide resources to support shared innovation (Tate 2001, 446). Examples of such institutions include the Dutch Sustainable Trade Initiative (IDH) in the Netherlands, GIZ in Germany, the State Secretariat for Economic Affairs (SECO) in Switzerland, and the Japan Environmental Management Association for Industry (JEMAI) in Japan. Supportive institutions encourage best practices in eco-labeling by aggregating and disseminating knowledge and by providing forums for collaboration between local ELOs. IDH, for example, routinely organizes "strategic reflection sessions" for groups of ELOs headquartered in the Netherlands (IDH 2015). By contrast, ELOs in LME countries mostly operate without the advantage of supportive institutions. The CME/LME distinction is therefore a parsimonious way of determining whether the presence of state-funded supportive institutions leads to shared learning and innovation around the rigor of eco-labeling practices.

Physical location can also be important for learning and diffusion processes. Previous research has examined the effect of specific territorial dynamics on business innovation. If location-specific attributes and existing institutions can affect innovation in the business world, it is plausible that they may equally affect innovation in eco-labeling. Spatial proximity facilitates regular face-to-face meetings and encourages the development of localized conventions which can stimulate further learning and knowledge generation (Bathelt, Feldman, and Kogler 2011, 3). These same processes may drive groups of ELOs to collaborate and push each other toward a more stringent approach to governance activities. Hence scholars in this camp suggest that innovation clusters and regional mimicry play a role in ratcheting up the rigor of transnational governance.

Here again, there is considerable debate around which attributes of physical location are most relevant for explaining rigor and credibility.

However, a common theme uniting these existing explanations is that rigor and credibility are a function of country-specific political/institutional context. Certain places in the world are simply more conducive to following best practices in eco-labeling. Two hypotheses flow from the preceding discussion:

- H5: *ELOs headquartered in CME countries will be more likely to meet best practice than ELOs headquartered in non-CME countries.*
- H6: *ELOs headquartered in cities where there is a high concentration of other ELOs will be more likely to meet best practice than ELOs headquartered in cities with a low concentration of other ELOs.*

Which Sector or Issue Area Does the Governance Scheme Cover?

The final sub-set of explanations focuses on sector and issue-specific dynamics that may affect the degree to which a governance scheme is predisposed to rigor and credibility. One notable group of such explanations focuses on the role of competition. Competition between ELOs operating within a particular sector might drive regulatory rigor downward as ELOs aim to expand the number of entities certified to their standards. Competing ELOs have an imperative to cut costly regulatory corners as self-interested firms “shop” for the most cost-effective certification scheme amid a buffet of choices (Abbott and Snidal 2010, 324; Gulbrandsen 2005). The resulting dynamic has been characterized as a regulatory “race-to-the bottom” (Fransen 2011b, 359). A similar tendency toward downward pressure may be observed when an ELO enters a sector already crowded with other governance schemes and attempts to gain a foothold by lowering barriers to eco-label compliance (Cashore et al. 2007, 163). Empirical evidence of such practices has been well documented in the forestry sector (Gulbrandsen 2005, 349).

Of course, the reverse argument may also be true. While competition may exert downward pressure on the rigor of governance activities, coordination, institutional mimicry, and upward pressure on rigor can also be found (Eberlein et al. 2014, 2)—Vogel’s (1995) California effect. Competition has been theorized to lead to public comparison and environmental benchmarking, thereby ratcheting up competing standard systems (Overdevest 2010; Overdevest and Zeitlin 2014). Others have suggested that competition engenders mimetic isomorphism wherein ELOs mimic the most prominent entities in their field (Bernstein and Cashore 2007, 359). Still others have suggested that a racing to the bottom/top dynamic

is contingent on other factors, such as whether a standard system is firmly “entrenched” in a given sector (Cashore and Stone 2014, 51). In all cases, scholars in this realm predict a relationship between competition and the rigor of eco-labeling activities.

There remains considerable debate around whether competition exerts upward or downward pressure on regulatory rigor. However, both factions agree that rigor and credibility are contingent on sector-specific dynamics. Variables that are unique to a particular commercial sector will condition ELO adherence to best practices. The following hypothesis therefore captures the potential for competition to exert downward pressure on best practice adherence:

- H7: *ELOs in direct competition with multiple competing standards in the same sector, practice, or issue area will be less likely to meet best practice than ELOs in non-competitive sectors or issue areas.⁵*

DATA AND METHODS

I test the hypotheses just outlined using an original dataset of 123 ELOs (see Appendices A and B). The DV for this study is the IBP in eco-labeling discussed in chapter 1 and documented in Appendix B. IBP scores reflect ELO practices in 2013, when the dataset was constructed. The (IVs) are a combination of both categorical and interval level variables that correspond to the hypotheses. A summary of the IVs, their affiliated hypotheses, and coding rules is presented in table 2.1. Readers should note that the dichotomous variables in the “who governs” category are not mutually exclusive. It is possible for an ELO to be coded as both industry-funded *and* initiated by an existing ENGO (e.g., the Roundtable on Sustainable Palm Oil).

In addition to the IVs, I also control for a number of variables that lack an extensive theoretical foundation in the literature but hold common-sense explanatory value. First, I control for the number of countries in which products bearing an ELO’s most widely used standard can currently be purchased. I use this indicator of transnational presence as a proxy for organizational size and capacity since large transnational ELOs are more likely to possess the resources needed to fully conform to best practices.

Second, I control for whether an ELO explicitly develops standards for either food or fisheries. This is because the reputational stakes for firms operating in these sectors tend to be higher since they are subject to more consumer scrutiny (Fransen and Conzelmann 2015, 4; Mayer and Gereffi

Table 2.1 IVS AND CODING RULES

Hyp.	Var. name	Type	Coding rules
H1	private	Dich.	ELO meets ALL of the following criteria (1) funding is currently drawn from product/service sales or private endowments with less than 50% of current funding from government contracts or grants; (2) the standard and its criteria are owned, operated, developed, and revised by individuals outside the public service; (3) the ELO and its standards were initiated by a non-state organization; (4) the ELO makes no explicit references to ownership by governments entities in its public facing documents or websites.
H2	industry_origin	Dich.	Over 50% of initial funding for an ELO or its most widely used standard was provided by a pre-existing major corporation or industry association.
H3	non_profit	Dich.	ELO is legally registered as a not-for-profit organization in its home country.
H4	NGO_origin	Dich.	Over 50% of initial funding for an ELO or a particular standard OR the impetus for creating a particular standard was provided by a pre-existing NGO or a group of NGOs.
H5	CME	Dich.	ELO is currently headquartered in a CME, defined as Germany, Japan, Switzerland, the Netherlands, Belgium, Sweden, or Norway.
H6	ELO_density	Int.	Number of other ELOs headquartered within the same defined metropolitan area (city) at the time the study was conducted.
H7	competing_standards	Int.	Number of transnational standards in direct competition with the most widely used standard of the ELO for transnational market-share at the time the ELO was founded. Direct competition entails: (1) the standards target the same commercial sector (multi-sector labels will not be said to be in direct competition with single-sector labels); (2) the standards overlap on at least one aspect of the products or services they seek to evaluate (i.e., management systems); (3) the standards overlap on at least one environmental attribute they seek to evaluate (i.e., energy efficiency).
Controls			
	no_countries	Int.	Number of countries in which products bearing the ELO's most widely used standard can currently be purchased.
	food_related	Dich.	ELO only develops food or fisheries related standards, not including tradable commodity crops (i.e., soy or sugar).
	year	Int.	The year (AD) the ELO launched its first eco-labeling standard.

(continued)

Table 2.1 CONTINUED

Hyp.	Var. name	Type	Coding rules
	no_standards	Int.	Number of standards (both environmental and other) that an ELO currently manages (value does not include variations/versions of a single standard that apply to multiple products or product categories.)
	multi_sector	Dich.	ELO develops standards across more than one commercial or industrial sector.
	multi_attribute	Dich.	ELO's most widely used standard (in terms of number of entities certified) examines multiple environmental attributes in determining whether a product/service can be certified.
	GDP_capita	Int.	GDP per capita (USD) of the ELO's headquarter country in 2013.

Note: Hyp = hypothesis; Var = variable; Dich= dichotomous variable; Int = interval variable.

2010, 9). ELOs in these sectors may be more likely to follow best practice to circumvent the reputational damage that could result from making false, misleading, or irrelevant claims.

Third, I control for the year an ELO launched its first eco-labeling standard. This control is meant to highlight any temporal dynamics affecting adherence to best practices. Past research has suggested that newly launched eco-labeling standards often limit their behavioral requirements to attract clients as they seek to gain widespread support (Cashore et al. 2007, 163). If this were the case, one would expect newly emerged ELOs to be less adherent to best practices. Others have suggested that organizational features associated with good operating principles strengthen as an organizational field develops and matures over time (Dingwerth and Pattberg 2009). If this were true, we would see a positive relationship between late-emerging ELOs and best practice adherence.⁶

Fourth, I control for the number of standards, both environmental and otherwise, that an ELO currently manages. This control measures an ELO's depth of standard-setting experience, the rationale being that ELOs operating as professional standard-setting organizations or with a wealth of experience in creating sustainability standards are likely better equipped to adhere to best practices.

Fifth, I control for whether an ELO develops standards across more than one commercial/industrial sector and whether its most widely used standard examines multiple environmental attributes in determining whether a product/service can be certified. The inclusion of these variables

$$\text{Logit IBP Score} = \log\left(\frac{\text{IBP Score}}{1 - \text{IBP Score}}\right) + X\beta + \varepsilon$$

Figure 2.1 Equation summarizing logit transformation of the DV (Logit IBP Score)

is meant to identify any confounding relationship between specialization in a given sector/issue and best practice adherence.

Lastly, I control for GDP per capita in the ELO's headquarter country. This variable is a proxy for a country's overall wealth. It is included to determine the effect of affluence on best practice adherence and gauge whether ELOs in wealthy regions benefit from supportive institutions, independent from their home country's VOC.

I use bivariate and multivariate regression analysis to assess the relationship between each of my independent/control variables and IBP score. To accommodate the bounded nature of my DV (the range of possible values is 0 to 1) and meet the assumptions for linear regression, I follow Baum's (2008) suggestion to use a logit transformation on my DV.⁷ This allows me to model the logit transformation of IBP score as a linear function of a set of regressors (X) (Baum 2008). The operation is summarized in figure 2.1 where " β " is the slope of the regression line and " ε " is the error term. The logit transformation works because there are no IBP score values of either 0 or 1, thus I do not have to account for extreme values. Having transformed my DV to allow for linear modeling, I then use ordinary least squares (OLS) regression analysis. As a further precautionary measure, I use HC3, a form of heteroskedasticity-consistent (robust) standard errors suggested for OLS regression with fewer than 250 cases (Long and Ervin 2000). The tables in the following section present r-squared instead of pseudo r-squared values because the model remains a linear regression, even if the DV has been transformed.

RESULTS

Descriptive Findings

Beginning with descriptive statistics, I find considerable variation in best practice adherence across the ELOs in my dataset. Observations on the IBP ranged from a high of 0.97 to a low of 0.12 with a mean of 0.54 and a standard deviation of 0.18 ($N=123$, all values rounded to two decimals). This suggests that while some ELOs are almost entirely compliant with best practices, others disregard them entirely. As illustrated in figure 2.2

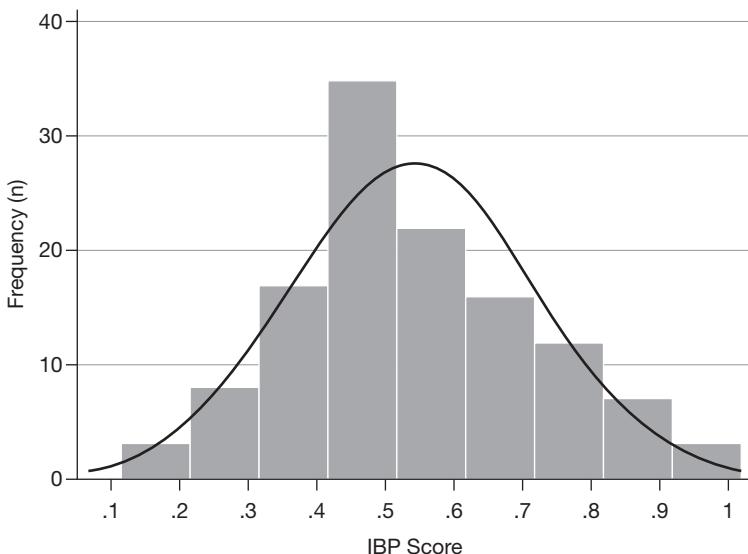


Figure 2.2 Histogram of IBP scores

and statistically confirmed through Shapiro-Wilk and Shapiro-Francia tests, IBP scores are normally distributed. The majority of ELOs fall somewhere in the middle in terms of IBP score, while a handful score very well or very poorly. These results confirm what was anecdotally suggested in chapter 1: there is considerable variation in best practice adherence between transnational ELOs. Credible ELOs exist alongside highly dubious ones, but the majority fall into a grey area in between the two poles.

Table 2.2 presents descriptive statistics for all variables in the dataset; the top five performers on the IBP are highlighted in table 2.3. Significantly, the top performing ELOs have all been previously identified as rigorous and credible in a number of other sources.⁸ Table 2.4 presents descriptive statistics by sector and the average and range of IBP scores for each sector included in the dataset.

In broad terms, ELOs that scored well on the IBP tended to have clear environmental objectives in place and well-defined strategies to meet those objectives. They possessed advanced evaluation and monitoring systems to assess their environmental impact and strong feedback mechanisms to ensure continuous improvement of their standards and procedures. These organizations involved persons with expertise in standard development. They also sought participation from broad groups of stakeholders (including vulnerable stakeholders) and had policies in place to ensure that no single group of stakeholders exerted undue influence over their standards.

Table 2.2 DESCRIPTIVE STATISTICS FOR VARIABLES IN THE TRANSNATIONAL ECO-LABELING ORGANIZATION DATASET

Dependent Variable (DV)

IBP Score	Mean	Standard deviation	Minimum	Maximum
	.54		.18	.97

Dichotomous Independent Variables (IVs)

	% of pop.	Freq.	Mean IBP Score	Min. IBP Score	Max. IBP Score
private	.83	102	.52	.12	.97
industry_origin	.26	32	.52	.23	.92
non_profit	.73	90	.56	.23	.97
NGO_origin	.18	22	.65	.30	.97
CME	.31	38	.56	.27	.97
food_related	.19	23	.65	.41	.93
multi_sector	.37	45	.51	.12	.82
multi_attribute	.59	73	.54	.12	.93

Continuous Independent Variables (IVs)

	Mean	Standard deviation	Min.	Max.
ELO density	1.43	2.46	0	9
comp_standards	3.32	5.07	0	22
no_countries	20	25.76	2	135
year	2000	7.04	1978	2013
no_standards	23.72	138.95	1	1490
GDP_capita	49,895.67	15,339.88	6,617.90	84,815.40

Note: N = 123. Data is current as of December 2013. All values rounded to two decimals.

Table 2.3 TOP FIVE ELOS BY IBP SCORE

Rank	ELO	IBP Score
1	Forest Stewardship Council	.973
2	Bonsucro	.934
3	Marine Stewardship Council	.921
4	Linking Environment and Farming (LEAF)	.892
5	UTZ Certified	.892

Table 2.4 DESCRIPTIVE STATISTICS AND IBP SCORE BY SECTOR

Sector	% of pop.	Freq.	Mean IBP Score	Min. IBP Score	Max. IBP Score
Building products	3	4	.55	.51	.61
Buildings	6	7	.44	.23	.80
Carbon	7	9	.47	.18	.74
Carbon offsets	3	4	.66	.47	.84
Cleaning products	2	2	.51	.45	.57
Commodities	5	6	.76	.41	.93
Cosmetics	2	3	.34	.27	.38
Electronics	3	4	.59	.47	.74
Energy	5	6	.65	.47	.86
Fish/Fisheries	5	6	.68	.49	.92
Food	11	14	.60	.43	.89
Forest products	6	7	.54	.24	.97
Furniture	2	2	.37	.33	.41
Other	9	11	.53	.32	.80
Textiles	3	4	.46	.23	.71
Tourism	5	6	.38	.26	.50
Waste management	2	2	.55	.46	.64
Multiple sectors	21	26	.51	.12	.75
All sectors	100	123	.54	.12	.97

Top ELOs implemented rigorous compliance procedures, routine audits, and unannounced spot-checks, often employing well-trained independent auditors. They also exhibited a concern for transparency throughout their operations. Lastly, ELOs that scored well on the IBP aimed to maximize their impact by making their standards as accessible as possible to diverse markets and by collaborating and coordinating with other ELOs where appropriate. As table 2.4 shows, ELOs that develop standards related to

commodities (e.g., sugar), carbon offsets, and fish/fisheries had the highest average IBP scores. Conversely, ELOs operating in the cosmetics, tourism, buildings, and furniture sectors had the lowest average IBP scores.

Relationships between Variables

The statistics also tell an interesting story about the relationships between certain variables. The findings are presented in several formats below. Table 2.5 presents simple bivariate correlations between each of the IVs/control variables and the IBP to give readers an idea of how variables correlate in the absence of controls. Table 2.6 presents eight different multivariate regression models which test each category of hypotheses in sequence. Models 1a–1e focus on variables in the who governs category; model 2 where they govern; model 3 what they govern; and model 4 all IVs and control variables. I include standardized coefficients for model 4 in table 2.6 to give the reader an idea of effect sizes in the most complete model (column 4b). In table 2.7, I disaggregate the IBP into its ten constituent

Table 2.5 BIVARIATE CORRELATIONS
BETWEEN INDEPENDENT/CONTROL
VARIABLES AND IBP SCORE

Variable	Correlation coefficient
private	-.239***
industry_origin	-.072
non_profit	.184**
NGO_origin	.297***
CME	.072
ELO density	.218**
comp_standards	-.206**
no_countries	.329***
food_related	.303***
year	-.039
no_standards	.059
multi_sector	-.125
multi_attribute	-.021
GDP_capita	-.025
N	123

Note: *** p<0.01, ** p<0.05, * p<0.1

Table 2.6 MULTIVARIATE REGRESSIONS EXPLAINING ADHERENCE TO BEST PRACTICES ACROSS ELOSS; DV = LOGIT TRANSFORMED IBP SCORE

Model	Who governs				Where they govern				All vars.		Stdized Coefs.	
					govern		govern		3			
	1a	1b	1c	1d	1e	2	3	4a	4b			
private	-.596*** (.157)	-	-	-	-.820*** (.161)	-	-	-	-	-.721*** (.173)	-.312	
industry_origin	-	-.272 (.169)	-	-	-.110 (.162)	-	-	-	-	-.179 (.190)	-.090	
non_profit	-	-.308* (.158)	-	.308* (.158)	.374** (.142)	-	-	-	-	.301** (.137)	.153	
NGO_origin	-	-	.597*** (.218)	-	.643*** (.220)	-	-	-	-	.625** (.237)	.276	
CME	-	-	-	-	-	.215 (.167)	-	-	-	.177 (.164)	.094	
ELO_density	-	-	-	-	-	.057 (.034)	-	-	-	.042 (.044)	.120	
comp_stds	-	-	-	-	-	-	-.032 (.019)	-	-	-.018 (.020)	-.106	

no_countries	.012***	.011***	.011***	.012***	.011***
	(.004)	(.004)	(.003)	(.003)	(.004)
food_related	.519**	.564**	.596**	.558**	.411*
	(.231)	(.235)	(.231)	(.231)	(.235)
year	.006	.003	.003	.004	.014
	(.010)	(.011)	(.011)	(.010)	(.010)
no_standards	.000	.001	.001	.001	.001*
	(.001)	(.001)	(.001)	(.002)	(.001)
multi_sector	-.172	-.117	.040	.000	-.110
	(.163)	(.163)	(.167)	(.167)	(.152)
multi_attribute	.040	.015	-.021	.070	.136
	(.158)	(.163)	(.165)	(.165)	(.146)
GDP_capita	.000	.000	.000	.000	.000
	(.000)	(.000)	(.000)	(.000)	(.000)
constant	-10.79	-6.38	-.6.03	-7.91	-27.26
	(20.78)	(21.54)	(21.22)	(20.26)	(19.77)
R_Square	.263	.221	.226	.268	.385
N	123	123	123	123	123

Note: *** p<0.01, ** p<0.05, * p<0.1; robust HC3 standard errors in parentheses.

Table 2.7 MULTIVARIATE REGRESSIONS EXPLAINING ADHERENCE IN DISAGGREGATED CATEGORIES OF BEST PRACTICE;
 DV = IBP SCORE BY CATEGORY

	Sustainability	Improvement	Relevance	Rigor	Engagement	Impartiality	Transparency	Accessibility	Truthfulness	Efficiency
private	-.247*** (.054)	-.189** (.073)	-.078 (.057)	-.106** (.054)	-.203** (.079)	-.226*** (.065)	-.113* (.064)	-.188** (.095)	-.110* (.057)	-.293*** (.088)
industry_origin	-.069 (.050)	-.017 (.059)	-.124** (.050)	-.102** (.050)	.047 (.076)	.084 (.065)	-.012 (.055)	-.109* (.064)	.060 (.062)	.035 (.061)
non_profit	.104** (.048)	.000 (.047)	.009 (.050)	.020 (.048)	.158** (.078)	.144*** (.050)	.037 (.063)	.034 (.063)	.017 (.056)	.109 (.071)
NGO_origin	.184*** (.060)	.075 (.068)	.051 (.066)	.120*** (.043)	.180** (.079)	.197** (.079)	.053 (.072)	.217*** (.069)	.056 (.069)	.085 (.089)
CME	.013 (.047)	-.005 (.059)	.052 (.051)	.035 (.042)	-.046 (.068)	.030 (.062)	.065 (.048)	.164*** (.054)	.020 (.057)	.024 (.061)
ELO density	.012 (.009)	.019 (.012)	.006 (.011)	.006 (.009)	.026* (.015)	.005 (.012)	.013 (.012)	.001 (.013)	.010 (.011)	-.004 (.011)
comp_standards	-.004 (.005)	-.011* (.006)	-.008 (.005)	.001 (.002)	-.001 (.002**)	-.001 (.003**)	.003 (.007)	-.006 (.006)	.001 (.007)	-.003* (.007)
no_countries	.002* (.001)	.002** (.001)	.002** (.001)	.002** (.001)	.002** (.001)	.002** (.001)	.001 (.001)	.002** (.001)	.001 (.001)	.003* (.001)

food_related	.060	.068	.003	.123***	.109	.140*	.108*	.139*
	(.062)	(.079)	(.063)	(.042)	(.089)	(.072)	(.058)	(.081)
year	-.000	.001	.006*	.003	.010**	.010**	.003	.002
	(.003)	(.001)	(.003)	(.003)	(.005)	(.004)	(.003)	(.004)
no_standards	-.000	.000	-.000	.000	.001	.000**	.000	.000
	(.000)	(.001)	(.001)	(.001)	(.001)	(.000)	(.001)	(.001)
multi_sector	.041	.017	-.013	-.005	.058	.008	-.077	-.070
	(.051)	(.061)	(.056)	(.043)	(.079)	(.063)	(.052)	(.054)
multi_attribute	.037	.090*	.079	.031	.092	.048	.035	.046
	(.042)	(.050)	(.049)	(.041)	(.065)	(.055)	(.045)	(.049)
GDP_capita	.000	.000	.000	.000	.000	.000	.000	.000
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
constant	1.020	-1.317	-11.84*	-5.766	-20.02*	-18.90*	-4.98	-.752
	(6.032)	(6.950)	(6.728)	(5.701)	(9.221)	(7.930)	(6.627)	(7.962)
R-Square	.401	.234	.171	.349	.298	.313	.387	.348
N	123	123	123	123	123	123	123	123
								123

Note: *** p<0.01, ** p<0.05, * p<0.1; robust HC3 standard errors in parentheses.

Table 2.8 SUMMARY OF RESULTS FOR HYPOTHESES 1–7

DV	Who governs				Where they govern		What they govern
	H1	H2	H3	H4	H5	H6	H7
Total IBP	✓	X	✓	✓	X	X	X
Sustainability	✓	X	✓	✓	X	X	X
Improvement	✓	X	X	X	X	X	X
Relevance	X	✓	X	X	X	X	X
Rigor	✓	✓	X	✓	X	X	X
Engagement	✓	X	✓	✓	X	X	X
Impartiality	✓	X	✓	✓	X	X	X
Transparency	X	X	X	X	X	X	X
Accessibility	✓	X	X	✓	✓	X	X
Truthfulness	X	X	X	X	X	X	X
Efficiency	✓	X	X	X	X	X	X

Note: ✓ signifies that the hypothesized direction of the relationship is correct and that the variable is significant at $p < 0.05$ in table 2.6 (model 4) or table 2.7.

categories, presenting a new DV for each category, which represents an IBP score specific to that category. I then run a new series of regressions with all independent and control variables to get a better idea of how each variable affects particular aspects of best practice adherence. The disaggregated IBP allows me to observe whether industry sponsorship—or any other variable—strongly affects a specific category of best practices, such as commitment to impartiality.

For purposes of clarity, the findings on each hypothesis are summarized with a checkmark or “X” in table 2.8. This simple plausibility summary is based on whether a hypothesized relationship was statistically significant at the 95% confidence level in the most complete regression model (4a) or in a particular category of the IBP in table 2.7. In brief, three of the four hypotheses regarding ownership or funding of an ELO appear plausible while the hypotheses regarding ELO location or sector do not. I review the results of each hypothesis in turn next.

Privately-Owned ELOs are Less Likely to Follow Best Practices

As table 2.6 shows, across all models, private ELOs (variable: *private*) are significantly and substantively associated with lower scores on the IBP. ELOs that are neither owned, governed, nor primarily funded by the state

are less likely to adhere to best practices than ELOs controlled by states, sub-units of government, supranational entities, or units of intergovernmental organizations. As indicated in table 2.6, column 4b, this effect is the second largest among significant regressors. Table 2.7, which disaggregates the IBP into its constituent categories, provides further evidence that private ELOs are weaker than their public counterparts with regard to best practice adherence, showing negative and significant relationships across the sustainability, improvement, rigor, engagement, impartiality, accessibility, and efficiency categories. The only categories in which private ELOs are not significantly correlated with lower best practice adherence scores are relevance, transparency, and truthfulness. In sum, there appears to be a significant difference between public and private ELOs, however the findings discussed next urge caution in making generalizations about the rigor of private governance.

Industry-Owned or -Funded ELOs are neither More nor Less Likely to Follow Best Practices

Surprisingly, I find less support for H2. There appears to be no statistically significant negative relationship between industry-funded ELOs (variable: *industry_origin*) and adherence to best practices. In plain terms, an industry-funded ELO is no more likely to disregard best practice guidelines than one that is not funded by industry. The relationship is negative but not statistically significant across any of my models. However, the disaggregated IBP shows a negative and significant relationship on measures of relevance and rigor (table 2.7). This suggests that industry-funded ELOs perform worse than their non-industry counterparts on practices like involving experts in standard development, hiring competent auditors, and ensuring thorough checks on certified bodies. This result notwithstanding, there is no significant relationship in categories where we might expect industry-funded ELOs to underperform, namely sustainability, impartiality, stakeholder engagement, and transparency. Indeed, even absent controls, there is no significant negative correlation between ELOs that are mostly funded by industry and IBP score as a whole (table 2.5).

Non-Profit ELOs are More Likely to Follow Best Practices

Consistent with H3, there is a positive and significant relationship between ELOs that are legally registered non-profits (variable: *non_profit*) and

adherence to best practices. This relationship holds across all models, however the size of the effect is only half that of the other significant variables in the model (table 2.6, column 4b). Non-profit ELOs are more likely to adhere to best practices than their for-profit counterparts. The disaggregated IBP shows that non-profit ELOs outperform their for-profit counterparts on practices related to sustainability, stakeholder engagement, and impartiality (table 2.7). In essence, non-profit ELOs excel at practices like setting clear and measurable environmental objectives, engaging stakeholders in standard development and revision, and maintaining strong independence from funding sources and third-party certifiers.

NGO Ownership Positively Influences Best Practice Adherence

Consistent with H4, ELOs that were founded or funded by an existing ENGO (variable: *NGO_origin*) are positively and significantly associated with best practice adherence across all models. Moreover, the size of this effect is comparatively large, roughly comparable to that of the *private* and *no_countries* variables (table 2.6, column 4b). This result suggests that ELOs with deep and persistent ties to existing ENGOs (e.g., World Wildlife Fund (WWF), the Sustainable Agriculture Network) follow best practices more closely than those without significant ties to NGOs (i.e., free-standing organizations). The disaggregated IBP suggests that ENGO-led ELOs are particularly adept at practices related to sustainability, rigor, engagement, impartiality, and accessibility (table 2.7). These practices include setting clear and measurable environmental objectives, using robust compliance procedures, engaging stakeholders, maintaining independence, and making standards inclusive and accessible.

Geographic Location is Indeterminate for Best Practice Adherence

Model 2 investigates the relationship between variables in the “where they govern” category and IBP score. Contra H5 and H6, my analysis suggests that the place where an ELO is headquartered has no impact on best practice adherence. Neither location in a CME country (variable: *CME*) nor proximity to other ELOs (variable: *ELO_density*) is significantly related to IBP score.⁹ Model 2 finds no evidence of a significant relationship when including controls in the regression and model 4 confirms the lack of a statistical relationship with all other variables in the regression. These results

cast doubt on hypotheses that domestic institutional supports or regional innovation clusters play a role in driving up adherence to best practices. The disaggregated IBP shows a positive and significant relationship between ELOs headquartered in CME countries and practices related to accessibility (table 2.7). ELOs in these countries may benefit from government resources directed at making eco-labeling standards more inclusive to small firms and marginalized stakeholders. No other conclusions, however, about institutional/political context and best practice adherence can be drawn from these results.

Competition Has an Indeterminate Effect on Best Practice Adherence

Surprisingly, I find no evidence to support H7, which suggests that ELOs competing in the same sector as other ELOs (variable: *comp_standards*) will be less likely to adhere to best practices. The relationship is negative but not statistically significant in either model 3 or the more complete model 4. The competition variable is only weakly significant in the *relevance* category of the disaggregated IBP (table 2.7). In plain terms, competition with other ELOs appears to hold no general relationship to any aspect of best practice adherence.

Transnational Presence Is Strongly Related to Best Practice Adherence

Among control variables (included in all models), I find that ELOs with broad transnational presence (variable: *no_countries*) are significantly and substantively associated with higher IBP scores. This suggests that an increase in an ELO's transnational presence—here operationalized as the number of countries in which its eco-labels are present—has a strong and positive relationship with its level of best practice adherence. Significantly, the relationship holds even when controlling for all other variables in the regression (table 2.6, model 4). Furthermore, the causal effect of transnational presence on IBP score is the largest of any of the variables in the model (by a small margin), as suggested by the standardized coefficient presented in table 2.6, column 4b. Further evidence of the relationship between transnational presence and the various dimensions of best practice adherence is presented in table 2.7. Transnational presence has a positive and statistically significant relationship with eight out of the ten modified

DVs in the disaggregated IBP. Thus, quite surprisingly, there is strong evidence of a correlation between transnational presence and an ELO's propensity to adhere to best practices. This is a puzzling result; I attempt to explain it in the final section of this chapter.

Other Control Variables

Lastly, there is also a positive and significant relationship between ELOs that exclusively develop food/fisheries-related standards (variable: *food_related*) and IBP score (table 2.6, models 1–3), however, the relationship diminishes in strength and significance as more variables are added to the model (table 2.6, model 4). Additionally, the size of the effect is smaller than for most other significant variables. None of the remaining control variables are statistically significant across more than one regression model.

INTERPRETING THE CORRELATES OF PROCEDURAL CREDIBILITY IN TRANSNATIONAL ECO-LABELING

The findings in the preceding analysis are interesting for a number of reasons. To begin, it appears that ELOs with no discernible ties to the state generally perform worse on measures of best practice adherence than their public counterparts. In other words, private ELOs are generally less clear in their objectives, less focused on continuous improvement, less concerned with the relevance and rigor of their standards, less likely to engage with their stakeholders, less likely to ensure impartiality, transparency and accessibility through their operations, and less prone to making truthful and accurate claims that avoid the duplication of other eco-labeling efforts.

However, this finding should not be construed as implying that *all* private governance is of similarly questionable character. As the other positive findings suggest, ELOs that are legally registered as non-profits, those that grew out of existing ENGOs, those with broad transnational presence and, to some extent, those that focus on food certification perform better than their counterparts with the inverse characteristics. Indeed, a quick glance at the five highest scores on the IBP (table 2.3) reveals that all of the most adherent ELOs are private, non-state organizations. Hence, we can draw only a modest conclusion. All things being equal, publicly owned ELOs are more adherent to best practices than privately owned ELOs. However, private governance can be rigorous and credible, under certain conditions.

In line with existing explanations, the robust correlation between non-profit ELOs and IBP score suggests that legal structure matters. For-profit ELOs must first and foremost expand revenues from certification and label licensing to ensure their own economic viability. The easiest way to do so is by lowering the bar for companies seeking certification while at the same time trimming overhead costs. In practice, both of these actions could mean disregarding best practices. Hence it is not entirely surprising that non-profit ELOs adhere more to best practices than their for-profit counterparts.

Similarly, the positive and significant correlation between IBP score and ELOs that are founded or funded by an existing ENGO supports existing scholarship on NGO influence in transnational governance. ENGO-led eco-labeling schemes are normally more value-driven and oriented toward environmental goals than other third-party schemes. After all, presenting solutions to environmental problems is how ENGOs solicit funding from donors. Hence, it makes sense that ENGO-led ELOs would tend to have strong procedures in place to achieve environmental results and that their commitment to procedural rigor would be reflected in best practice adherence. Furthermore, ENGO-led ELOs have strong incentives to protect their parent organization's credibility. For example, the WWF is unlikely to put its weight behind a weak ELO since doing so might jeopardize the credibility upon which it depends for raising money from donors. Thus, ENGO-led ELOs have a clear motivation to advocate for public interests and ensure the credibility of their standards. This intuitive relationship is borne out by statistical evidence.

However, existing scholarship offers few insights into the positive and significant relationship between IBP score and transnational presence. Not only is transnational presence strongly correlated to best practice adherence as a whole, it also appears correlated with most of the independent components of best practice in the disaggregated IBP. While this could suggest that organizational size and capacity play a role in determining which governance schemes are best equipped to meet best practices, the size, significance and consistency of the effect across the disaggregated IBP suggest that transnational presence exerts some influence beyond organizational capacity. This is a surprising finding and I discuss the relationship between transnational presence and the other significant variables in more detail in the following section. However before doing so, the non-findings of this analysis warrant further discussion. I wish to highlight three such non-findings in particular.

The first concerns the lack of a significant relationship between industry-funded ELOs and best practice adherence. To reiterate, this finding

suggests that ELOs that received a majority of their seed funding from a corporation or industry association are not significantly different from free-standing ELOs that did not receive industry support. Much past work on this topic offers reasons for deep skepticism about industry-backed eco-labels, yet the evidence presented here does not necessarily support this skepticism. Mattli and Büthe (2005, 405) envision a principal–agent relationship between industry and industry-funded ELOs wherein agents will have strong incentives to take the interests of their funders into account at the expense of other interests. However, industry-funded ELOs score no better or worse on measures of independence and impartiality than their non-industry counterparts. Nor is there a significant negative relationship on other dimensions of best practice in which we might expect industry-funded ELOs to shirk their commitments, such as setting clear and measurable objectives, involving balanced groups of stakeholders, and maintaining transparency throughout their operations (table 2.6). Indeed, two aspects of best practice adherence where we would most expect industry resistance—ceding control over standard content and risking further public scrutiny—find little support in this study.

However, lest we celebrate the death of greenwashing too soon, it is important to note the areas where industry-funded ELOs are underperforming. As table 2.7 shows, industry-backed ELOs are negatively and significantly associated with practices related to regulatory rigor. This is disconcerting because best practices in this category include such vital processes as involving scientists and experts in standard development, employing competent auditors, conducting routine audits, and implementing mandatory corrective actions for instances of non-compliance. These are important aspects of a credible eco-labeling program and also practices that are often under-scrutinized by the public. This finding suggests that industry-funded ELOs may have found a way to conform with some aspects of best practice and still produce eco-labeling standards that do not compel behavioral change in certified companies. If this is the case, industry-funded ELOs may be engaging in a sophisticated form of “greenwashing” designed to mislead the public into seeing their governance as credible while in fact they are maintaining business as usual. The only way to ascertain what is really happening here is to further examine the relationship between best practice adherence and eco-labeling standard content. This is a task that I discuss at further length in chapters 4 and 5 and in the concluding chapter.

The second surprising finding concerns the lack of a relationship between competition and best practice adherence. As the preceding analysis shows, competition within a given sector is not significantly correlated with either heightened or diminished attention to best practices. Much of the literature

to date asserts that competition either leads ELOs to disregard procedural rigor as they compete for finite market-share by keeping the cost of compliance low (Mayer and Gereffi 2010, 14) or results in more attention to regulatory rigor through public comparison and benchmarking (Overdevest 2010). Still others argue that competition inspires some degree of convergence (Gulbrandsen 2005). The evidence presented here confirms none of these dynamics. Indeed, a more detailed sector-by-sector analysis yields contradictory results. High numbers of competing ELOs inspired better than average IBP scores in some sectors (commodities, fish/fisheries) and lower than average scores in others (tourism, sustainable buildings) (table 2.4). In other sectors, such as the highly competitive realm of organic food certification, IBP scores remain densely clustered around the mean value for the entire study. In sum, outside of a specific sectoral context, competition is an unreliable predictor of best practice adherence.

A few caveats should be acknowledged for the competition finding. First, the result may be influenced by the scope conditions of the dataset. Recall that the dataset includes only ELOs with primarily environmental objectives. Competition arising between social and environmental standard setters (e.g., Fairtrade) is therefore not captured. Nor does the data capture competition between generic multi-sector ELOs (e.g., the Blue Angel) and sector-specific organizations (e.g., FSC) that compete in a specific sector. Second, decisions on how sectors are defined may influence the result. An ELO's sector is coded according to the end product to which its most widely used standard (by number of entities certified) is applied. The distinction between whether that end product is a commodity or a food product, for example, can be blurry. In this case, commodities are defined as raw products that are tradable on a large scale (e.g., sugar, soy), whereas food products are those that are ready for consumers and usually non-tradable on a large scale (e.g., tomatoes). Lastly, the result must be interpreted within the limits of cross-sectional data. Given that IBP score and competition within a sector are measured at a single point in time, the data does not account for changes to an ELO's sectoral focus over time and cannot capture how adherence to best practices was changed with the addition of new competitors. These caveats notwithstanding, the lack of a discernible relationship between competition and best practice adherence at a given moment in time should give us pause to consider the generalizability of explanations centered on the effects of competition on eco-labeling systems.

The third surprise finding concerns the conflicting meaning of my results for broader theories of private governance. The regression results clearly indicate a negative and sizeable relationship between privately

owned ELOs and IBP score, which would bolster the claims of private-governance skeptics. However, the downward pressure of “privateness” does not apply evenly across ELOs. Indeed, as noted earlier, ELOs that are NGO-sponsored, non-profits, or have broad transnational presence demonstrate the reverse effect on best practice adherence. Hence, my findings suggest that generalizations about private governance must be used cautiously, particularly in the realm of eco-labeling. One should not conflate the credibility of a large, NGO-backed ELO like the FSC with that of a small, for-profit, regional organization. One type of organization is capable of offering transnational governance worth its name, while the other may simply be trying to capitalize on a demand for “green” products and services.

TOWARD A NEW EXPLANATION OF PROCEDURAL CREDIBILITY IN TRANSNATIONAL ECO-LABELING

At face value, the results reviewed here suggest a fairly conventional narrative. In brief, large, non-profit ELOs with strong ties to existing NGOs or the state tend to adhere to best practices more than small, for-profit, privately run ELOs with no connections to existing NGOs or states. These relationships transcend commercial sectors and environmental issue areas. Moreover, because my dataset captures a full population and not a sample, we can be reasonably confident that these are valid inferences.

Nearly all of the significant variables in my regression models have a firm foundation in past scholarship and confirm assumptions about eco-labels held by many consumers and casual observers. For example, it makes sense that NGOs are strongly motivated to develop credible standards since they are largely mission-driven organizations with an interest in achieving tangible governance outcomes. The same could be said of organizations with ties to states or international groups. Similarly, it is intuitive that legally registered non-profits are less likely to engage in self-interested behavior that could detract from procedural credibility. They are less beholden to a profit-maximizing imperative than their for-profit counterparts. Thus, the preceding analysis is significant because it provides empirical support for these assumptions and suggests that past accounts of credibility in eco-labeling offer some leverage for explaining variation in best practice adherence.

However, in addition to providing evidence in support of past explanations, this analysis also poses a number of new puzzles. First and foremost, the regressions show a strong and significant positive

relationship between transnational reach and best practice adherence that is previously unaccounted for in the eco-labeling and transnational governance literature. While I initially included transnational reach as a proxy for organizational capacity, the significance, size, and consistency of the effect seem to suggest that something is happening that extends beyond organizational capacity. One puzzle, therefore, concerns why this strong positive relationship exists.

Inasmuch as political scientists have theorized a relationship between transnational reach and the rigor of governance activities, the relationship is normally thought to go in the opposite direction. Under conventional wisdom, the substance of governance becomes watered down as the transnational reach of governance activities expands. A classic example of this is climate change governance. Multilateral climate change negotiations through the United Nations Framework Convention on Climate Change (UNFCCC) have yielded weak universal agreements precisely because they endeavor to cover nearly every country on Earth. In attempting to construct a comprehensive multilateral regime that encompasses climate-treaty-averse countries like Canada, Venezuela, and Saudi Arabia, the substance of climate change agreements often reflects the priorities of the lowest common denominator of signatory countries. Yet, the statistical finding that connects broad transnational reach to best practice adherence suggests the inverse relationship, at least as it pertains to procedural credibility. ELOs that certify firms in many different countries are actually the most likely to demonstrate a strong commitment to best practices. Concern for inclusiveness and representativeness when targeting a broad audience may explain part of this relationship, but it certainly does not account for the strong relationship to other dimensions of best practice.

Another puzzling aspect of the relationship between transnational reach and best practice adherence is the issue of timing. Specifically, it is unclear whether ELOs achieve transnational presence by following best practices or whether best practice adherence is somehow driven by the process of expanding into foreign markets. Either causal relationship would constitute an interesting finding. Regrettably, cross-sectional data is ill-equipped to address this question. While it suggests that a correlation exists between the two variables, it can provide little insight into the direction of the causal arrow.

Third, a number of the non-findings in my statistical analysis also give rise to new questions. For example, the lack of a negative relationship between industry funding and best practice adherence suggests that industry-funded ELOs in my population of cases demonstrate both high and low levels of commitment to best practices. Similarly, the lack of a

relationship between competition and best practice adherence suggests that ELOs in strongly competitive sectors are capable of demonstrating both strong and weak commitment to best practices. While it is possible that existing arguments about the effects of industry funding or competition on the credibility of voluntary governance have been over-stated, it is equally possible that some alternate variable is moderating the influence of both variables. If the latter is true, then one might reasonably wonder what this alternate variable might be. Another puzzle, then, is whether some other variable that is either endogenous or exogenous to my statistical models is moderating the impact of industry funding and competition on best practice adherence.

A corresponding puzzle is whether some alternate variable explains positive findings in the statistical analysis as well. It is worth noting that the preceding analysis cannot tell us whether the significant IVs included in the regressions are themselves driving adherence to IBP or whether they are merely intervening variables for some prior causal effect. For example, there may be some overarching factor that conditions public, NGO-led, non-profit, and transnational ELOs to demonstrate a high level of commitment to best practices. It is possible that this overarching factor is not accounted for in my statistical model and is leading to false positives across a number of IVs. It is equally possible that this variable is endogenous to each of the significant variables in my model.

Lastly, there is a puzzle surrounding outlier results and abnormal cases. While the statistics show probabilistic relationships between two variables (not law-like regularities), in nearly all cases one can think of anecdotal evidence of a case that belies its expected relationship. For example, while Audubon International (an ELO that certifies communities, golf courses, and lodgings) is both a non-profit organization and one that is owned and operated by an ENGO—two conditions that are supposed to correlate with higher IBP scores—it nonetheless scores a 0.31 on the IBP, well below the average score across all sectors. While these types of outliers are to be expected in a statistical study, they also raise the possibility that some variable not captured in the regression is influencing best practice adherence in outlier cases.

In short, while the statistical evidence supports the conventional narrative that ownership and legal structure matter for the procedural credibility of governance, it also allows for the possibility that something new and previously unaccounted for may be at work. To be sure, a focus on whether ELOs are connected to the state, their level of NGO-involvement, and whether they are structured as non-profit enterprises explains some of the variation in adherence to best practices, but it does not tell the whole story.

Thus, further research into what drives best practice adherence is vital for adding analytic leverage to these existing explanations and helping to explain the variation that is unaccounted for in my DV. As a logical first step in addressing these puzzles, one might begin by exploring the lone positive and significant variable that lacks a basis in prior scholarship, namely, the transnational reach variable. A focus on this variable may provide answers to some of the puzzles listed here, specifically, why some industry-funded ELOs are strongly best practice adherent, why competition does not have a predictable effect on best practice adherence, what connections exist between the significant variables in my statistical models, and why we can anecdotally observe numerous cases that defy their statistical expectations.

To begin this inquiry, I assume that transnational reach is not a random or arbitrary variable. The expansion of ELOs into multiple foreign markets does not happen easily or inadvertently. It requires a conscious and intentional strategy to grow. Granted, an ELO's growth strategy may be conditioned by broader structural forces, such as who owns it, how it is structured, where it is located, or which sector it operates in; nonetheless, a deliberate intention to grow must exist, and therefore, it should be possible to empirically document such a strategy through careful qualitative research.

The positive correlation between a high level of transnational market presence and IBP score is thus best conceived of as an observable indication of a purposeful desire to grow bigger. In other words, in order to demonstrate a high level of transnational market presence, an ELO must have, at some point in its history, deliberately targeted firms in foreign markets or businesses with broad transnational reach. In the following chapter, I explore the relationship between an ELO's desire to grow bigger and its commitment to best practices. Drawing inductively on evidence from my statistical analysis and deductively on past scholarship about how the targets of governance affect the governing body, I argue that a focus on the targets of governance can offer additional analytic leverage for explaining variation in best practice adherence among transnational ELOs.