1 *Introduction*

If you ask the question 'if all the coffee in the world were sustainably certified, would that sort out all the environmental problems related to coffee?', the answer is no. Then the next question is 'would it sort out most of the important ones?' and I think there again the answer may be no. So the third question is: 'what is the point?'

(Interview 6, Centre for Agriculture and Bioscience International, 2015)

Approaching yet another tiny Honduran coffee farm, I marvel at its integration into the mountainous landscape. Tall pine trees rise above the man-high coffee shrubs; orange trees offer a quick snack; a stream snakes its way through the plot; and I hear birds chirping. I am on my way to interview the farm owner, a shy gentleman of about 60 years of age, on the production practices he uses to manage his Fairtrade-/organic-certified farm. About halfway through the conversation, I ask what types of fertilizer he uses – does he apply only organic or also synthetic fertilizer, which would be prohibited according to the certification rules? He hesitates, looks me in the eye, and then says softly, "I use both." After a pause, he adds, "only using organic fertilizer simply does not produce high enough yields."

Back at the cooperative headquarters, the manager sighs.

We converted to organic production because they promised it would give us access to higher prices. But we experienced yield declines so severe that the premiums barely allow us to break even compared to conventional production. To make matters worse, our largest Fairtrade buyer wants to renegotiate our contracts and is asking us for a discounted price. But that would be a noncompliance in our books and could lead to us losing our certification! We are having trouble finding demand for our certified coffee in general. The conscientiousness and reliability of other supply chain actors is a huge problem. (Field notes, 2016)

As our discussion concludes, he sends me off with some cooperative-produced honey, and an associate drives me to the next village in the one Jeep the community owns.

On the way there, and looking out over wide swaths of clear-cut forest that have been planted with interminable rows of coffee saplings, I ponder what I just heard and think back to a conversation I had over breakfast in a luxurious hotel at the Costa Rican Pacific Coast. This is where large coffee buyers, traders, and producing-country actors gather annually for the Semana Internacional del Café, the International Coffee Week. A representative of a multinational trading house had just asked me about my work. As I explained my focus on certifications, he scoffed.

> Oh, certifications! What you need to understand is that the coffee trade is about much more than that. I only ever buy Honduran Fairtrade coffee at the fixed minimum price if I get a container of conventional coffee from the same cooperative at a discount. Otherwise, why would I buy Honduran coffee if I can get also get Fairtrade coffee from Peru, which has much higher quality? The problem with Peruvian Fairtrade/organic coffee, however, is that everybody knows there is certificate-trading going on. There are far too many certificates floating around for the amount of coffee they are actually producing. (Field notes, 2015)

As if on cue, that same day the head of another trading house noted in his keynote speech to the assembled representatives of the coffee industry that "unfortunately, as many of us here would be aware, there are loopholes and malpractices in many coffee origins in the sourcing of certified coffee. I feel that each of us has to strongly guard against these. A PR disaster with any one player will hurt the entire industry and will take a long time to recover from" (Verma 2015). The frankness of the statement raised eyebrows and generated meaningful glances between members of the audience, but caused little visible surprise among these leaders of the coffee trade.

As the Jeep continues making its way along the bumpy Honduran mountain roads, my thoughts wander to Germany, my home country, and one of the very first interviews I conducted there before moving to Costa Rica. I had taken the train to Hamburg to talk to the sustainability project manager of a leading coffee importer, who looked at me with genuine exasperation.

> I really wonder what impact all the money that the coffee industry spends each year on certifications has in the field. We recently did a back-of-the-envelope

calculation and determined that the sector is paying around 250 million dollars in premiums annually. But there seems to be so much red tape and overhead costs that the improvements in the field – from what we can see – are quite moderate compared to these high costs. Could putting this money into results-oriented projects, rather than supporting global certification programs, have a better return on investment?" (Interview 3, importer-affiliated nongovernmental organization [NGO], 2015)

When I put this question to the head of the Corporate Social Responsibility department of a major German roaster, he provided a differentiated answer:

I think we need both. For our specialty segment, we have established our own training program that leads farmers in high-quality regions toward fulfilling NGO-led certification requirements while also advising them in other aspects that are important to us – such as improving quality and yields, or providing for gender equality – that the certifications do not cover. However, we estimate that overall, around 300,000 smallholder farmers are involved in producing the coffee that comes through our supply chain. It would be economically ruinous to roll out such closely accompanied projects to everyone; and this is where baseline industry-led standards such as 4C could allow for at least first steps in – let me put it very carefully – a developmental process toward sustainability. But if I now ask from a managerial perspective: 'do they fulfill that function? Do I get smallholder farmers from the conventional sector onto a pathway toward sustainability?', I have to honestly say that I have increasing doubts. In particular, there appears to be a political opposition by leading global roasters – other than us – to seeing 4C as a first step in a transformational pathway. Instead, they want to settle for the baseline standards alone. And that, for me, is not sustainable. (Interview 20, roaster 3, 2016)

As I approach my destination, a tiny town close to the Salvadoran border where I will spend the night, I wonder: Are these impressions and experiences representative of the way private sustainability standards are implemented in the coffee value chain? How effective are such standards in bringing about the sustainability advances they promote? And can we identify features of such schemes that make them more likely or less to succeed in their mission to simultaneously change production practices and redistribute wealth across the value chain? This book uses research carried out in three countries, interviews with over sixty experts, and surveys of more than 1,900 coffee farmers to answer these questions.

1.1 The Private Governance of Sustainability in the Coffee Sector

Why look at the private governance of coffee rather than another commodity? Arguably, coffee is the lifeblood of modern society. It provides energy in workplaces with ever-increasing demands; it facilitates social encounters in a highly individualized culture; and it delivers new sensatory experiences to consumers seeking out high-quality products. Coffee also connects individuals across the globe through intricate supply chains. This allows us to appreciate the advantages and pitfalls of globalization in a very concrete fashion. For decades, the sustainability of coffee production has therefore carried great weight in the minds of consumers and policymakers. How can we guarantee that our purchasing habits contribute to the socioeconomic advancement of the estimated 25 million smallholder coffee farmers worldwide? And can we do so without destroying the fragile ecosystems of the subtropical regions where coffee is produced?

Thanks to the public interest in these questions, the governance instrument I examine – private sustainability standards such as Fairtrade or Rainforest Alliance certification – has enjoyed a longer existence and greater proliferation in coffee than any other commodity sector. The very idea of using market-based instruments to improve farmer livelihoods by providing 'fair trade' labels arose from a collaboration between Mexican coffee producers and a Dutch civil society organization (Renard 2003). The coffee sector also sports the greatest number of competing schemes. At least seven standards are used in the mainstream market, and new ones continue to emerge. Overall, between 40 and 50 percent of all coffee is produced according to the tenets of some certification or verification scheme (GCP 2015; Lernoud *et al.* 2017). For all these reasons, the coffee sector is a front-runner in global supply chain governance. Lessons learned in this sector also travel to comparable value chains such as the production and trade of cocoa, tea, cotton, or palm oil. Like coffee, these industries are defined by transnational webs of production in which smallholder farmers in the Global South produce a large share of global supply. They also share similar challenges regarding the ethical and environmentally friendly production of commodities in biodiversity hot spots where public governance capacity is frequently limited. The private governance of coffee is thus a test case that can provide insights into the intractable challenge of sustainable commodity production worldwide.

Given its front-runner status, scholars researching the introduction and dissemination of private sustainability standards have shown great interest in coffee as a case study (see, for instance, Giovannucci and Ponte 2005; Muradian and Pelupessy 2005; Raynolds 2009; Auld 2010; Manning *et al.* 2012; Reinecke *et al.* 2012; Levy *et al.* 2016). Similarly, impact evaluation studies have increasingly focused on the coffee sector (see DeFries *et al.* 2017 and Bray and Neilson 2017 for comprehensive meta-reviews), providing us with an ever-growing evidence base on outcomes and impacts of certification. Yet, this evidence continues to be inconclusive, with contradictory findings that appear to be strongly linked to local contexts. Only a subset of studies applies robust counterfactual designs. Many are outdated and refer to certifications when they were just a niche occurrence, not a mainstream strategy. Furthermore, few such studies use a clear theoretical framework of analysis that allows for between-standard differentiation or hypothesis testing on institutional design features. Consequently, there has been little linkage of those results back to the governance literature. This book fills this research gap by adding a novel theoretical approach and unique comparative data, as well as rich contextual information to the existing knowledge.

1.2 Defining Transnational Market-Driven Regulatory Governance

The empirical focus of this analysis are private standards, certification and verification schemes focused on economic, environmental, and social sustainability in the coffee sector. Such schemes create systems of private rules, formalized in standards, according to which sustainable production practices and products arising from such practices are verified and/or certified. These products are then made recognizable to either intermediate buyers (in business-to-business standards) or final consumers (through on-package labeling) in the marketplace (cf. Pattberg 2005a). Importantly, the implementation of these standards is not mandated by governmental authority. Rather, such initiatives use market-based incentives to attract and maintain participating producers (Bernstein and Cashore 2007). Typical market-based incentives are promises of premium pricing and preferential market access, as well as a latent threat of market exclusion if producers decline to take part (Cashore *et al.* 2004).

Others have conceptualized these types of initiatives using a variety of terms: eco-labels (van der Ven 2019), non-state market-driven governance systems (Cashore 2002; Bernstein and Cashore 2007; Auld *et al.* 2009), regulatory standard-setting schemes (Abbott and Snidal 2009), private governance organizations (Fransen 2011), or transnational private regulation (Bartley 2007). Yet, not all initiatives focus mainly on eco(logical) characteristics and not all use front-package labeling – making the term eco-label a misnomer in certain cases (cf. Delmas and Grant 2014). Other terms include only some of the key distinctive features of this governance instrument. Instead, I consider such schemes to be *transnational market-driven regulatory governance initiatives*.

Transnational market-driven regulatory governance exhibits features common to many, but not all, initiatives that have been categorized as 'private governance' to date. First, it is governance that is applied *through or within the marketplace*. It does not include private governance that occurs through standardizing focal institutions such as the International Organization for Standardization (ISO). In such settings, nonmarket negotiations shape standards' content, and network compatibility pressures enable the self-enforcement of standards (Büthe and Mattli 2011). In the absence of a single focal institution, however, multiple standards may emerge that compete for the participation of actors at all levels of the value chain (Cashore *et al.* 2004; Auld 2014). As this book shows, this leads to distinct strategic calculations by both standard-setters and participants. Second, the regulatory aspect focuses our attention on private governance initiatives that set at least some *substantive rules* that participants are subject to and which may affect their core behavior. Purely procedural rule-making (such as, for instance, accounting procedures [e.g., Green 2010]) is therefore not in the purview of this analysis. It may, however, have indirect or secondary effects that spur behavioral changes. Finally, this book focuses on *transnational* governance in which the 'shadow of the state' and the possibility of governmental intervention in standard-setting or enforcement is comparatively less present than in domestic settings (although not completely absent; compare Verbruggen 2013). Still, many of the core insights also apply to domestic market-driven regulatory governance in states that have made credible commitments to relegate certain regulatory tasks to private initiatives and the market.

To avoid excessive wordiness, I occasionally use the term 'private governance' in the following chapters. This should be read, in line with

the preceding explanation, as a stand-in for 'market-driven regulatory governance'. Given the empirical focus, I will also intermittently use 'private sustainability standards', 'certification schemes', or similar language in later text. However, the theoretical scope applies to other transnational market-driven regulatory governance initiatives as well.

1.3 Research Questions and Structure of This Book

At its core, this book aims to answer a simple question: does private governance work? Can the use of market-driven, voluntary mechanisms compel value chain actors to change their practices in the direction of greater sustainability? And, if yes, why are some standards more successful in that mission than others?

This book thus evaluates market-driven regulatory governance initiatives' effectiveness in leading to sustained behavioral change in line with the original institutional goals of resolving collective environmental and social problems (cf. Black 2008). It identifies institutional design features that are more likely to contribute to such effectiveness, as well as flaws in regulatory design and implementation that limit the potential of private standards in achieving their mission. With this aim, it connects five elements related to the effectiveness of private governance. First, it defines institutional effectiveness by identifying the *outcome goals* of market-driven sustainability governance. It then assesses the success of such initiatives in passing *market incentives* down through the chain and changing conventional supply chain mechanisms. Third, it studies the impacts of such initiatives in the field on *producer behavior and practices*. Fourth, it evaluates the initiatives' *institutional design* as it relates to these two outcomes. Recognizing that private regulation does not exist in a vacuum, it finally analyzes how private standards *interact with international and national-level institutions* already in place.

I draw on Kiser and Ostrom's (1982) Three Worlds of Action to locate the empirical focus of this research on the operational level of institutional analysis, where "participants interact in light of the internal and external incentives they face to generate outcomes directly in the world" (Ostrom 2005, p. 60). Combining this framework with definitions of institutional effectiveness drawn from the study of international environmental regimes (Bernauer 1995; Young and Levy 1999; Underdal 2002), I proceed as follows.

After this introduction, Chapter 2 presents the theoretical framework underpinning the analysis. It serves two functions. First, it introduces the micro-institutional rational choice approach to evaluating institutional effectiveness used in this book. The chapter explains why I consider producers targeted by market-driven regulatory governance boundedly rational actors, what this characterization entails, and how institutional arrangements can help such actors to overcome coordination problems. It then explains how I leverage Kiser and Ostrom's Three Worlds of Action to link institutional design choices to their outcomes and to operationalize institutional effectiveness. In a second step, Chapter 2 examines market-driven regulatory governance using this approach. It uncovers the institutional design dilemma that standards face as they scale up. It also specifies a number of hypotheses on how these choices (e.g., between binding and flexible standard-setting; strict or flexible oversight mechanisms; and a focus on price premiums or on capacity building) will affect the implementation of standards by drawing on institutional rational choice theory as well as insights from the socio-legal literature.

Chapter 3 then introduces the first piece of the puzzle – the definition of the *institutional goal of a sustainable coffee sector*. In comparison to other foci of private governance, for instance, technological standards (Büthe and Mattli 2011), sustainability is a loaded term whose concrete definition has long been disputed. This is no different in the coffee sector – representing a reality that makes the neutral evaluation of sustainability governance initiatives tricky. I solve the dilemma by identifying, and separately analyzing in the field, different interpretations of 'coffee sector sustainability' put forward by different stakeholders. Each of these interpretations has different implications for the role that private governance is required to play.

Chapter 4 takes a deeper look at the *integration of private sustainability standards in the broader market*. In particular, it analyzes how well economic compensation trickles down to the farm level once standards enter mainstream marketing channels. It further probes how the level of economic incentives corresponds to the practice changes farmers are expected to make.

Chapter 5 presents an overview of the *field-level evidence of producer behavior* gathered in three producing countries across three categories of sustainability practices. In doing so, it summarizes the state of sustainability across 1,900 coffee producers, and provides in-depth

information on the agro-ecological and social challenges in coffee production.

As the fourth analytical component, Chapter 6 compares the *institutional design of the seven market-driven regulatory governance initiatives* in the coffee sector. Drawing on a meta-analysis of the indicators from Chapter 5, it assesses whether certain design characteristics of standards make it more likely that farmers change their production practices and adopt more sustainable behavior.

Chapter 7 explains how standards interact with public regulatory frameworks in the three case study countries. Specifically, it asks whether *public and private regulation complement or counteract one another* in the case of socially and environmentally responsible farming practices in Latin America.

Finally, Chapter 8 concludes and provides an outlook for the future of the private governance of the coffee chain and supply chains in general. It furthermore explores what implications the analytical conclusions of this work have for the broader disciplines of regulatory governance and international political economy.

1.4 Theoretical and Empirical Contributions to the Literature

This book's main contribution is a novel theoretical framework for analyzing the large-scale effectiveness of market-driven regulation, one of the most-heralded new forms of global governance. Although a vast literature has examined the development and design of private governance initiatives, such efforts are rarely in conversation with research about their on-the-ground effects. By allowing for the interaction of several private governance schemes, considering sector-wide dynamics, and tracing their effects to the producer level, this theory of private governance effectiveness uncovers the limits of regulating through markets in unprecedented ways. These advances further our knowledge of the likely potential of private regulatory tools to complement or replace state action in attempts at 'smart regulation' (Gunningham and Grabosky 1998). My framework furthermore introduces three innovations: an improved approach to linking institutional design choices to their outcomes; a new conceptualization of effectiveness; and a novel approach to allow for regime complexity and polycentricity. Finally, I employ a rich new data set that draws on both qualitative and quantitative research in a multilevel and comparative triangulation design.

First, contributions from political science and business ethics that study private regulation have to date struggled to provide consistent theoretical frameworks that permit the examination of rule-setting and implementation in the same analysis. In consequence, such work has focused on the behavior of certification organizations (Fransen 2011; Auld 2014), stakeholders (Fransen 2012; Moog *et al.* 2015), or lead firms (Dauvergne and Lister 2012; van der Ven 2014; Levy *et al.* 2016), paying less attention to the choice sets of producers. Impact evaluations and work on the decoupling of rules and practices (Aravind and Christmann 2011; Bray and Neilson 2017; DeFries *et al.* 2017; Giuliani *et al.* 2017), in turn, tend to focus solely on outcomes without analyzing the institutional design choices that led to suboptimal implementation in detail. This book bridges this gap by extending and adapting a micro-institutional rational choice analysis approach (Kiser and Ostrom 1982) to investigate the effectiveness of private regulatory governance. This framework presumes all actors to be boundedly rational, and uses three levels of decision-making (constitutional, collective choice, and operational) to logically connect rule-making to its outcomes. The innovative operationalization of this framework in the present case demonstrates its applicability to the evaluation of both private and public regulatory tools, and provides a blueprint for other scholars to adapt it to their own cases under investigation.

Second, previous efforts at examining the effectiveness of private regulatory governance (Gulbrandsen 2005, 2009; Pattberg 2005b; Espach 2006; Auld *et al.* 2008; Auld 2010; Marx and Cuypers 2010), while valuable in their own right, have used idiosyncratic definitions of effectiveness that – due to their timing and data availability – frequently did not allow for the assessment of on-the-ground impacts. Most focused on certification uptake and – at best – audit reports of required changes in practices, making the a priori assumption that effective monitoring and enforcement of standard rules are universal, and that certifiers' audits reflect the real implementation rates on the ground – which may, but must not, be the case. Finally, few authors (with the notable exception of Gulbrandsen 2004) spell out explicitly the causal mechanisms (and necessary conditions for those mechanisms to work long-term) that connect the institution of private standard-setting to its goal attainment and problem-solving potential. These mechanisms, and their impacts on the ground, are at the central focus of analysis