THE DANGER OF NOT LISTENING:
HOW BROAD-BASED BUSINESS PARTICIPATION IN GOVERNMENT DESIGN OF REGULATIONS CAN INCREASE COMPLIANCE AND BENEFIT SOCIETY

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February 1, 2016
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ABSTRACT:
Firms in emerging economies exhibit dangerously low compliance with government regulations aimed at protecting society from the negative externalities of their operations. Weak government enforcement contributes to this lack of compliance, but we argue that the limited legitimacy of government and its regulations also plays a critical role, especially among firms without insider access to key policy makers. We ground our theory development in the procedural justice and deliberative democracy literatures to show how a positive effect on regulatory compliance of participation by a firm in the regulatory design process is mediated by the firm’s view of government legitimacy. Importantly, government itself also plays a pivotal role in this process, as the effect of firm participation on compliance can actually become negative if firms see government as unresponsive to their input. We find empirical support for our theory in analysis of a large-scale survey of firms in the rapidly changing emerging economy of Vietnam.

WORD COUNT: 11,486
INTRODUCTION

Can emerging economy societies benefit if a broad spectrum of firms participate in the design of government regulations? At first, this seems unlikely. The corporate political strategy (Hillman & Hitt, 1999; Pearce, De Castro, & Guillén, 2008) and regulatory capture (Hellman, Jones, & Kaufmann, 2003; Hoff & Stiglitz, 2004) literatures frame participation by firms in government policy making as rent-seeking behavior with generally negative consequences for society. On the other hand, though, management scholars have demonstrated that public-private partnerships can facilitate the provision of vital services (Kivleniece & Quelin, 2012; Rangan, Samii, & Van Wassenhove, 2006; Roehrich, Lewis, & George, 2014) and society can even benefit from handing over full control of certain government regulatory functions to industry (Barnett & King, 2008; Di Stefano, King, & Verona, 2013; Scherer & Palazzo, 2007; Short & Toffel, 2010).

This paper examines participation by firms in the form of feedback on draft regulations designed to limit the negative effects of business operations on workers, communities, and the natural environment. We argue that a firm that participates in design of a regulation is more likely to view the outcome as legitimate and, as a result, behave in a more socially responsible way by choosing to comply. Participation programs based on this logic have gained favor around the world, including across such diverse entities as the World Bank (Mansuri & Rao, 2012) and authoritarian regimes in China (Batson & Fong, 2007; Fishkin, He, Luskin, & Siu, 2010) and Vietnam (Gillespie, 2008; O'Rourke, 2004). But implementation of these programs is often weak and inconsistent (Tang, Wong, & Lau, 2008) and evidence of their effectiveness with regard to positive social outcomes remains limited (Cooke & Kothari, 2001; Mansuri & Rao, 2012).

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We develop a theoretical framework of how participation by firms in the regulatory design process and the corresponding response by government can influence regulatory compliance by considering the microfoundations of firm behavior (Felin & Foss, 2005; Foss & Pedersen, 2014). Our approach merges individual-level insights from work on procedural justice and the behavior of employees (Kim & Mauborgne, 1993; Korsgaard, Schweiger, & Sapienza, 1995) with those from deliberative democracy research on citizen behavior vis-à-vis their governments (Fishkin, 1991; Verba, Nie, & Kim, 1978). These literatures in organizational behavior and political science, respectively, argue and present evidence that people tend to accept constraints on their behavior as legitimate when the rules are seen to emerge from a fair and consultative process. Following this reasoning, we propose that being consulted on a draft of a regulation makes firm owners and top managers (henceforth, firm leaders) more likely to implement policies that lead to compliance, and that they do so because they see the regulation as more legitimate.

We further propose that government legitimacy’s mediating effect on the participation-compliance relationship is itself influenced by whether firm leaders see government as responsive to their participation. People’s negative reactions to unfair processes can be far greater than their positive responses to fairness. Evidence to this effect is found not only in procedural justice (Bosse, Phillips, & Harrison, 2009; Offerman, 2002; Robinson & Rousseau, 1994; Rousseau, 1989) but also economics work on reciprocity (Falk & Fischbacher, 2006; Fehr & Fischbacher, 2002). As such, we highlight that participation can perversely undermine regulatory compliance if participating firms conclude that government is treating the process as a mere formality.

We expect our theoretical framework to be of greatest relevance to small and medium-sized enterprises (SMEs), which make up the vast majority of firms in emerging economies. Our argument has four main components. The first follows from the political strategy and capture
literatures: large, politically connected firms do not need formal participation processes to influence regulatory policy. SMEs are well aware of this and likely to see it as unfair. In this context, introducing open participation in the regulatory design process should have a greater effect on the psychology and behavior of SMEs than on that of firms that already had access. Second, it is more difficult for government to enforce regulations on SMEs, due to their lower visibility and greater mobility. This increases the degree to which their compliance is a voluntary decision. Third, SME managers are more likely to be personally integrated in their local communities and to be influenced by nonfinancial objectives than is the case for large firm CEOs. Finally, the fourth and most mechanical reason our theory is likely to apply more to SMEs is that greater complexity makes it more difficult for large firms (Bower, 1970; Chandler, 1962) to translate increased intention to comply into reality (Hart & Banbury, 1994; Lawrence & Lorsch, 1967).

We see potential benefits for participation programs in all economies, but focus on emerging economies because of their greater challenges relating to government legitimacy and regulatory non-compliance. Negative views of government legitimacy in emerging economies create distance between what is legal and what firms believe their communities see as legitimate behavior, leading many firms to consciously choose to operate outside the realm of government control (Webb, Tihanyi, Ireland, & Sirmon, 2009). Furthermore, research on political connections (Faccio, 2006; Fisman, 2001) and “filling institutional voids” (Khanna & Palepu, 2000) indicate that policy capture by elite firms is particularly salient in emerging economies. Finally, weak institutions in emerging economies reduce social trust and make firms less likely to decentralize decision-making to middle managers (Bloom, Eifert, Mahajan, McKenzie, & Roberts, 2013).

We find empirical support for our theoretical conjectures in the corruption-riddled, authoritarian-ruled emerging economy context of Vietnam. Vietnam is a fitting test because rapid
growth in its economy and the number of formal and informal firms has put considerable stress on its government’s already weak regulatory design and enforcement capabilities. The government’s status as nominally communist further heightens its legitimacy problems vis-à-vis its business community, especially entrepreneurial and politically marginalized SMEs. Despite this reality, our empirical study is only possible because—as in China to the north—Vietnam’s political leadership has introduced a variety of measures in recent years intended to increase public feedback on government policies (Gillespie, 2008; O'Rourke, 2004).

Our paper contributes to theory in at least four important ways. First, our use of individual-level theories from both management and political science sheds light on the microfoundations of work in institutional theory on why and how firms deal with environmental uncertainty, in general, and government, in particular (Oliver, 1991; Webb et al., 2009). Second, our explicit theoretical focus on the behavior of SMEs extends and complements existing management theories that have been developed primarily based on study of elite firms (Barkema, Chen, George, Luo, & Tsui, 2015; George, McGahan, & Prabhu, 2012). The different perspective that emerges from our focus on “ordinary” firms helps illustrate how most of the firm-level theories referenced in this paper are shaped by their bias in favor of large firms and shows that this bias can lead to incorrect expectations of firm behavior if applied inappropriately to smaller firms. Third, and relatedly, our highlighting of the grand challenge of widespread non-compliance by firms with regulations of substantial social value adds important context to existing theories on the social responsibility of firms, including the earlier-mentioned literatures on public-private partnerships and self-regulation, as well as related streams on the benefits of corporate social responsibility (Aupperle, Carroll, & Hatfield, 1985; Carroll, 1979; McGuire, Sundgren, & Schneeweis, 1988; McWilliams & Siegel, 2001) and responsiveness to stakeholders (Henisz, Dorobantu, & Nartey, 2014; Mitchell, Agle, & Wood, 1997). Finally, we demonstrate
that there is a need for greater attention in management research to how firm behavior, including
that relating to social responsibility, is shaped by the behavior of government.

BACKGROUND: A CHALLENGE OF FRIGHTENINGLY GRAND SCALE

“...[T]he ATM electrocution is a tragedy... But the real problem runs deeper: A corrupt system that
isn't safeguarding its citizens or giving them enough voice in how society should be organized.”

Our work is inspired by the tragic story of 10-year-old Chau Linh Uyen. In March 2010, Uyen
was horsing around with friends after a rainstorm and rested her hand on an ATM outside her Ho
Chi Minh City (Vietnam) primary school. Because of terrible luck and the fact that the machine
was not grounded in compliance with existing regulations, the little girl died instantly. Soon
thereafter, police revealed that 14 percent of the city’s 866 ATMs were not properly grounded
and shut down 61 for regulatory non-compliance (Magnier, 2010). This was no isolated tragedy:
accidental electrocutions in Vietnam number 400-500 a year, many due to regulatory lapses such
as faulty wiring or improper weather insulation (VNS, 2009). Such installation and maintenance
tasks are commonly contracted out by banks to smaller private firms.

As with more publicized cases of garments factory fires and collapses in Bangladesh that
killed over a thousand workers (BBC, 2013) and the more than 16,000 dead pigs found in
China’s Huangpu River (Davison, 2013), Uyen’s story is symptomatic of a larger struggle across
emerging economies: the increasingly daunting task governments face of minimizing the negative
effects that firms can have on the world around them. Government capacity to enforce regulations
in emerging economies is generally limited, as low per capita GDP translates into low salaries for
government regulators and therefore problems attracting talent and motivating effort. When
combined with significant power to punish firms, the temptation for corruption is substantial,
which, in turn, drives firms to hide activities from the government (Friedman, Johnson,
Kaufmann, & Zoido-Lobaton, 2000; Webb et al., 2009). The result is that industrial accidents by
country are positively correlated with levels of corruption (Damania, Fredriksson, & Mani, 2004) and negatively correlated with governance quality (Takala et al., 2014).

It is generally understood that rules truly matter only if they are enforced (Greif, 1993; Ingram & Clay, 2000; Ostrom, 1990). However, while increased penalties tend to increase compliance (Andreoni, Harbaugh, & Vesterlund, 2003), they tend not to be large enough to make compliance the dominant utility maximizing choice when costs of compliance are substantial (Andreoni, Erard, & Feinstein, 1998). Furthermore, punishment is also costly for the enforcer and therefore hard for resource-constrained governments in emerging economies to implement. As such, solutions to regulatory non-compliance in emerging economies focused primarily on enforcement are not likely to serve as constructive guides for government action.

Perhaps due to the agency it grants our primary object of study, the firm, the management literature has shown a preference for exploring the solution of self-regulation. This can occur at the firm, industry, or value chain levels, and the motivations for firms to take on this additional task can range from the desire to reduce vulnerability to government authorities to the desire for a more effective compliance system than government is believed capable of providing. Perhaps the most prominent example in recent years has been the pressure from stakeholder groups on prominent global buyers like Nike and IKEA to use their market power to regulate infractions against labor and the environment by smaller supplier firms, situated lower in the global value chain and often in emerging economies with limited regulatory capacity. However, there is limited evidence of this phenomenon meaningfully influencing behavior beyond the world’s largest multinational firms. Furthermore, the focus of these strategies is primarily on the reputations of global firms, with potential downsides for emerging economy societies in cases where these firms decide to exit in response to non-compliance. Even in advanced economies, evidence on the effectiveness of self-regulation strategies in constraining firms and protecting
society is mixed, at best (Barnett & King, 2008; King & Lenox, 2000). In emerging economies, low levels of regulatory compliance and generally weaker political representation of different stakeholder interests make broadly handing over meaningful regulatory duties to industry seem like no policy at all. As a result, frighteningly low rates of compliance with business regulations in emerging economies remain a truly grand challenge still in search of a realistic solution.

HYPOTHESES DEVELOPMENT

Regulatory Compliance and Political Participation

“It is not always feasible to consult the whole people, either directly or indirectly, in the formation of the law; but it cannot be denied that, when such a measure is possible, the authority of the law is much augmented. This popular origin… contributes prodigiously to increase its power.”

– Tocqueville (1838)

Theories underlying the motivation for consulting affected actors in the design of societal rules trace their roots back to the direct democracy of Ancient Athens. In management research, theory of this nature has been developed and tested under the heading of procedural justice, with focus on the firm-level benefits of including employees and middle-level managers in the development of organizational policies. Meanwhile, in political science, deliberative democracy scholars have taken the mantle from Aristotle, Rousseau, and John Locke with continued work on the societal benefits of citizen participation in the design of laws and regulations. This paper brings these literature streams together as co-anchors in a theoretical framework of how the participation of firms in government’s regulatory design process affects subsequent regulatory compliance.

The key insight we draw from our anchor theories is the pivotal role played by people’s perceptions of whether or not a rule is the result of a fair and impartial process in determining the effectiveness of that rule. In both organizational and political contexts, people see rules as more legitimate when they also view the rule making process as fair. Providing people voice in the making of rules is one means for achieving this sense of fairness (Folger, 1977), even when the
final rules do not favor them (Thibaut & Walker, 1975). Fairness allows people to accept the inevitable constraints that government regulation places on personal liberties as necessary means for achieving benefits, such as stability and predictability, for the group with which they associate themselves (Blader & Tyler, 2013). In an organizational setting, fairness of process also makes employees feel better about their job (Folger & Konovsky, 1989; Lind & Tyler, 1988) and more valued by their employer (Moorman, Blakely, & Niehoff, 1998). In sum, these findings indicate that participating in a fair rule making makes people view resulting rules as more legitimately serving group-level interests and makes them place higher value on those benefits.

Fundamentally, people are more willing to comply with rules they see as legitimate. In organizational settings, this increased compliance shows up in the form of employees demonstrating greater commitment to organizational goals (Kim & Mauborgne, 1993; Korsgaard et al., 1995; Moorman et al., 1998; Naumann & Bennett, 2000; Rhoades, Eisenberger, & Armeli, 2001), less willingness to quit their jobs (Rhoades et al., 2001), and a greater likelihood report the wrongdoing of others (Feldman & Lobel, 2008). In a paper that particularly closely parallels our firm-level theory, Moorman et al. (1998) show evidence that participation programs make employees feel more attached to their firms and that this mediates participation’s impact on the likelihood that employees will act in the interest of their employer, which the authors refer to as “organizational citizenship behavior”.

Deliberative democracy researchers have similarly found that participation by citizens in the shaping of government produces more sympathy with opposing views, respect for evidence based reasoning, and, critically, a greater commitment and a higher probability of societal consensus around decisions made by government (Fishkin, 1991; Fishkin et al., 2010; Fung, 2006; Verba et al., 1978). Political scientists have also shown that participation processes allow
the subjects of rules to appreciate the complexities and tradeoffs faced by authorities (Beierle & J., 2002; Fearon, 1998; Thomas, 1995).

Research on China, in particular, finds that the largest improvements in feelings about government legitimacy to emerge from participation emerge among the most politically marginalized citizens (Truex, 2014). As a result, Chinese legislation has been significantly less likely to be amended when exposed to public comment, even when controlling for importance and issue area of the document. In fact, consistent with a positive effect of participation on longer-term public acceptance, no Chinese law requiring public comment has ever been repealed (Gueorguiev, 2013). Researchers have found similar evidence of greater legitimacy accruing to authority through participation in the contexts of tax payment (Murphy, 2005), police-community relations (Mazerolle, Antrobus, Bennett, & Tyler, 2013; Sunshine & Tyler, 2003), and regulation of fishing (Kuperan & Sutinen, 1998; Sutinen, Gauvin, & Gordon, 1989).

In his book titled *Why People Obey the Law*, Tyler (1990) argues that people have an intrinsic desire to comply with rules and that this forms an important basis for the explanatory powers of procedural justice. This individual-level desire to comply offers an additional explanation for the tendency of firms to conform with institutional norms that would appear to be distinct from the organization-level benefits stressed by institutional and resource dependence scholars (DiMaggio & Powell, 1983; Oliver, 1991; Pfeffer & Salancik, 1978). There is potential for this effect to influence firm compliance through the thinking and actions of people ranging from the lowest level employee to owners and managers at the top of the firm. While the primary focus of procedural justice research in management has been the effect of organizational participation processes on employee alignment with organizational goals, the desire to comply is likely to also influence employee behavior with respect to government regulations as well.
The focus of our theory development in this paper, however, is the behavior of firm leaders. They are the people who shape firm-level behavior through, first, their decisions with regard to intent to comply with government regulations and, second, the actions they take to put in place top-down policies that translate intention into reality. If internal and external rules are in line, there is reason to expect that employees will tend towards compliance. The interesting tension at the level of firm leaders occurs when a desire to comply with external rules competes with a desire to maximize firm performance that may be better served by non-compliance. It is under these conditions of costly compliance that we argue the decision-making of boundedly self-interested firm leaders can be critically influenced by their perceptions of the fairness of government’s regulatory design process. This is consistent with evidence that firm leaders are meaningfully influenced by non-pecuniary objectives, including social values (Bosse & Phillips, 2014).

Some empirical support does already exist for our theory that firm leaders’ perceptions of fairness in the external environment importantly influence firm-level behavior. In a paper particularly closely related to our work, Makkai and Braithwaite (1996) found evidence that the regulatory compliance of a sample of small firms increased when their CEOs felt they had more influence over how government enforced regulations. Moving down a level from the firm to country-specific subsidiaries within a multinational firm, there is also evidence that such business units are more likely to implement policies dictated by headquarters when cross-border organizational procedures are seen as consultative and just (Chan & Mauborgne, 1998; Kim & Mauborgne, 1991, 1993).

It is easier to get people to comply with government regulations when there is broad agreement that what is illegal is also immoral (Carlsmith, Darley, & Robinson, 2002; Tyler). This relates closely to firm-level institutional theory showing that space for legitimate non-compliance
with government regulations can open up when regulatory requirements contradict informal institutions, i.e. when what is legal is not the same as what is legitimate (Webb et al., 2009). This legality-legitimacy distinction makes it easier for firm leaders to make opportunistic operational decisions that ignore government regulations in favor of cost saving violations that improve their bottom line. We see this as an important contributing factor influencing the regulatory compliance decisions of SMEs. These range from decisions with relatively low costs, such as compliance with the requirement to provide formal contracts to all employees that we examine in this paper’s empirical analyses to compliance involving more distinct investments of money and effort, such as that faced by the small firms to which Vietnamese banks outsource installation and maintenance of their ATMs. It is in relation to these types of decisions that we believe firm participation in government’s the rule making process should increase the likelihood of regulatory compliance by increasing the degree to which firm leaders see resulting rules as legitimate.

Hypothesis 1: A firm that participates in the regulatory design process is more likely to comply with the resulting regulation than a firm that does not participate at all.

Hypothesis 2: The positive influence of participation in the regulatory design process on regulatory compliance is mediated by a firm’s perception of government’s legitimacy.

The Backlash Threat: Government’s Response to Firm Participation in Regulatory Design

Critics of the popular concept of participation processes, including those in the regulatory design process, argue that too often these processes are mere formalities, especially in less democratic settings where governments have little incentive to heed the public’s input (Tang et al., 2008). Governments in China and Vietnam are fairly explicit that the primarily goal of introducing participation processes is to maintain authoritarian power, not to yield significant decision-making influence to stakeholders. In fact, in China, there is evidence that public participation in the drafting of laws is actually dropping, despite increased volume of opportunities to do so, and
scholars suspect the reason is that cynicism regarding the degree to which government takes heed of the participation process is growing (Stromseth & Gueorguiev, 2015). There are elements of this scenario that relate to a concept of “legal cynicism” that has been developed by legal scholars based on analysis of evidence connecting perceptions about the responsiveness of police to increased illegal activity in some U.S. cities (Carr, Napolitano, & Keating, 2007; Sampson & Bartusch, 1998). This leads us to introduce an important corollary to our legitimacy mechanism: government must show some minimum level of responsiveness to the input it invites into the design process from affected parties.

Our argument is that the absence of government responsiveness is likely to lead participating firms to see the participation program as a meaningless formality and to reduce the legitimacy of the resulting regulations to the extent that firms are even less likely to comply than if they had not participated at all. Ariely, Kamenica, and Prelec (2008) show through a lab experiment that people consider effort towards an unpleasant, tedious task far more costly if they are told that it will be ignored than if they told it will be looked over by someone. Furthermore, psychological studies have shown that consistently unmet expectations can generate a permanent sense of disappointment and anger, as well decreased public confidence and trust (Dirks & Ferrin, 2002; Morrison & Robinson, 1997; Robinson & Rousseau, 1994). In our setting, firm leaders who spend scarce time and energy analyzing a draft regulation and providing feedback for improvement are likely to be disappointed if they then get the impression that their voice was never even heard by policy makers.

This is essentially the government-firms relations equivalent of the decoupling of stated policy and from actual expected behavior in organizations vis-à-vis employees described by institutional theorists (Meyer & Rowan, 1977). Such decoupling can institutionalize non-compliance and depress perceptions of organizational legitimacy (MacLean & Behnam, 2010).
our context compliance with government regulations, this effect on government legitimacy could be greater space for firms to frame actions that are formally illegal as still being legitimate (Webb et al., 2009). As a result, we expect that participation by firms in the regulatory design process that goes unacknowledged by government can have a perverse backlash effect, damaging government legitimacy and ultimately actual regulatory compliance. We summarize the main relationships that make up our overall theoretical framework in Figure 1.

Hypothesis 3: If government is not seen to be responsive the participation process, there may be a backlash whereby a firm that participates in the regulatory design process is less likely to comply with the resulting regulation than a firm that does not participate at all.

*** Insert Figure 1 Here ***

DATA AND METHODS

Research Setting: Emerging Vietnam

Vietnam has multiple strengths as a research context for exploring the relationship between regulatory participation and compliance. As in China, rapid economic growth (averaging 7% annual GDP growth over the past two decades) has, in large part, been driven by emergence of a dynamic, domestic private sector. In particular, introduction of a new company law in 2000 led to a nearly twenty-fold increase in private firms by 2014. Nevertheless, government policy remains biased against the nascent private sector and in favor of SOEs. Many government officials continuing to view private firms as only marginally legitimate, including being less trustworthy, less socially responsible, and less important to the economy than SOEs. As we describe later, this questioning of legitimacy runs both ways, with nearly half of the firms in our survey labeling government’s business regulations as fundamentally corrupt. Furthermore, private firms are harder to regulate because they are generally smaller, more mobile and difficult to find, and have limited technological capacity. In short, these firms constitute exactly the type for which regulatory compliance is hardest to achieve.
Despite its authoritarian and nominally communist nature, Vietnam’s institutional setup also makes the country a good fit for our study. Perhaps surprisingly to some, the Vietnamese Communist Party has a long history of public participation in legal drafting. The process has been used strategically by the party with the specific goal of generating legitimacy for, and information about, key policy changes (Sidel, 2002). Even constitutional revisions in 1992 (Thayer, 1992) and 2013 included well-publicized public feedback processes. In 2013, these comments were quite substantial, with one group using the online forum to call for removal of Article IV, the clause that mandates Communist Party rule, from the constitution (Malesky & Morris-Jung, 2015).

Of most relevance to our study, in 1996, Vietnam’s National Assembly adopted “The Law on the Promulgation of Legal Normative Documents,” popularly known as the Law on Laws (LoL). The current (2008) version of the LoL contains a provision (Article 61) requiring that any government office charged with drafting a regulation must post the draft a minimum of 60 days for public comment, study the comments, and file an internal report on why the comments were or were not accepted. Articles 33 and 34 specifically lay out the format for facilitating participation, including digital submission of comments:

“Collection of comments and ideas as inputs for the development of the draft decree can be undertaken in the form of direct comments and suggestions, circulation of the draft decree for comments and suggestions, organizing consultation workshops, making use of websites of the Government and the lead drafting agency or mass media.”

Certainly, there has been significant distance between the de jure policies around participation in the regulatory design process that Vietnam has recently introduced and their de facto implementation. In fact, the clear public frustration in Vietnam over lack of government acknowledgement of the deluge of comments it received on the draft constitution in 2013 served as an important inspiration to us for Hypothesis 3. But our data, which we describe below, shows that limited participation in Vietnam’s regulatory design process does indeed occur.
Sample

All of our data comes from the 2013 version of an annual survey of several thousand Vietnamese firms carried out by the Vietnam Chamber of Commerce and Industry (VCCI) and funded by the U.S. Agency for International Development known as the Vietnam Provincial Competitiveness Index (PCI) survey. The survey is mailed out to firms across the country, based on stratification according to province, industry, age, and legal form. In 2013, the response rate was 30 percent and the final sample size was 7,500 firms. Due to missing data on variables in our statistical analysis, the sample used for our main analyses consists of 5,633 firms. Because all the variables for our analysis are drawn from this single survey instrument, tests to ensure the relationships we uncover do not result from Common Method Variance (CMV) are included in the Appendix.

We focus on the survey’s 2013 iteration for two reasons. First, its release followed closely on the heels of the public comment period for Vietnam’s new Labor Code, the advantages of which we detail in description of our dependent variables. Second, we were fortunate that VCCI allowed us to run a participation module in their annual survey to document firm participation.

Empirical Analysis Strategy

Our empirical analysis proceeds according to the following four steps. First, we address non-random selection into provision of public comments by using a variant of propensity score matching, called entropy balancing, to hold constant key confounders that might be associated with both our dependent and independent variables. Second, using weights generated by this procedure, we test H1 by regressing measures of compliance with the Labor Code on indicators of business participation. Third, we test the backlash hypothesis (H3) by analyzing how government responsiveness to business comments conditions the compliance benefits of

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2 For more on this survey, see pcivietnam.org.
participation. Fourth, we use a three-equation, structural equation model analysis to test how much of the effect of government responsiveness is mediated by business perceptions of government legitimacy (H2). Performing this final test necessitated using factor analysis to construct a latent operationalization of legitimacy from several PCI survey questions. Key variables used in these analyses are presented in Table 1 and described in detail below.

*** Insert Table 1 Here ***

Dependent Variables

We operationalize our theoretical framework’s key outcome of interest, a firm’s regulatory compliance, in four ways. Two measures—*Formal Labor* and *Compliance Scale*—are used in primary analysis and two serve as alternative constructs to test the sensitivity of our findings.

All four variables capture compliance with Vietnam’s Labor Code (*10/2012/QH13*), which passed June 18, 2012 and went into effect on May 1, 2013, just two months before implementation of our survey. The Labor Code was subject to extensive participation by domestic firms and debate in the National Assembly. We believe it was the regulation most likely to be on the minds of firms when they sat down to participate in the survey. We make this claim based on evidence that it had the highest documented participation of any regulation in the past decade: the Labor Code’s comment page on VCCI’s VIBonline.com portal received 7,077 page views, compared to 3,859 for the next highest regulation, and 592 for the median regulation.³ Additionally, Figure 2 summarizes a Google Trends analysis of the degree of interest in a key set of Vietnamese regulations during the time in question and further confirms the Labor Code’s dominant position. Another advantage of the Labor Code for the purposes of our study is that it

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affected every firm in Vietnam and therefore represents a general measure of compliance. More fine-grained regulations would only apply to specific industries or types of firms.

*** Insert Figure 2 Here ***

Our main operationalization of regulatory compliance is *Formal Labor*, which is each firm’s self-reported share of long-term employees with formal contracts. We focus on labor contracts within the Labor Code because it was subject to the greatest amount of public debate and represented a particularly clear change over previous regulation. Article 18 of the new code makes clear that labor contracts are required and must be signed between the employer and the employee before the beginning of long-term, full-time work. The requirement for contracts includes seasonal workers, for whom contracts were not required under earlier versions of the code. Article 19 adds that workers must be informed of working conditions, their duties, and rights, before the signing of the contract. This avoids situation where employers try to escape statutory obligations to workers, such as paying for their insurance.

The first row of Figure 3 illustrates the distribution of our primary dependent variable for regulatory compliance. Mean compliance across the sample is around 72 percent, which could be interpreted as a relatively high number. We contend, however, that provision of a formal contract to all workers is a relatively easy regulatory requirement to comply with, as the financial costs are of compliance are relatively limited. There are also benefits to the firm of compliance, in the form of longer-term orientation and greater commitment to the firm on the part of workers. Furthermore, unlike with many forms of compliance, the direct beneficiary, the employee, can easily monitor and directly pressure the firm on compliance. All of these are also reasons why we believe firms are more comfortable accurately reporting on their provision of formal contracts than on other measures of regulatory compliance. Over the entire sample, about 56 percent of firms are fully compliant with 100 percent of workers under contract. Amongst the 46 percent
that are to some degree non-compliant, four percent (240 firms), do not have a single one of their roughly 2,830 employees under formal contract and about 15 percent have less than half their workers under formal contract. Furthermore, 21 percent did not answer the question at all, indicating sincere concern about revealing lack of compliance.4

*** Insert Figure 3 Here ***

Figure 3 also introduces two additional complications that we must account for in our analysis. First, according to the LoL, firms have a 180-day implementation period after the law goes into effect to alter their operations in compliance with a new law. In the case of the Labor Code, this date fell on October 31, 2013. Because the PCI research team mailed out the survey in several tranches between September and December of 2012, about 49 percent respondents received the survey in the last two months of the implementation period and 51 percent received it after the implementation period had expired.5 Because the dates of the PCI mail-out are randomly assigned, there are no differences in key characteristics of firms (size, connections, business sector) between firms who received the survey early and late. Yet, it is clear that firms receiving the survey after October 31st faced a very different enforcement regime and were therefore more likely to be in compliance than those in the earlier period. We account for this in our analysis below by including a dummy variable for whether a firm received the survey before or after the implementation period, which allows us to hold constant the enforcement regime.

The heavy skew of Formal Labor toward full compliance poses a second complication. Methodologically, censoring at 100 percent could potentially bias OLS analysis, and standard errors are likely to be inefficient. Moreover, the measure risks introducing a great deal of noise

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4 In this paper, we do not present results correcting for missing data. Nevertheless, results based on imputing responses to the formal contracting question using advanced statistical procedures such as multiple imputation (implemented using the STATA MI function) reveal similar answers.

5 Due to the capacity of local post offices, it is not possible to mail out all 8,000 PCI surveys at the same time.
into the estimation. Certainly, most respondents did not formally review and quantify their labor contracts before answering the survey, relying primarily on rapid educated guesses. Thus, it is not clear that the 10-point distinction between 60 and 70 percent of employees under contract is theoretically meaningful. At the end of the day, both firms are in partial compliance with law. To address this problem, we created a three-point scale, which scored a firm as non-compliant (0) if it had less than 50 percent of employees under contract, partially compliant (1) if it had between 50 and 99 percent of employees contracted; and fully compliant (2) if the firm had 100 percent of employees under contract. We analyze the scale with an ordered probit analysis.

Two alternative dependent variables help probe the robustness of our estimations. If we are right that participation was most likely to relate to the Labor Code, our theory would predict increased compliance not just on formal contracting but on other stipulations of the code as well. Article 50 provides such a measure by requiring that labor contracts are invalid if they prohibit workers from joining unions, which are a right guaranteed by Article 5. Thus, our third measure of compliance with the labor law, Trade Union, is based on question PCI question E16 about whether employees of the firm have established a labor union to represent worker interests. Only about 16.4 percent of the PCI sample has formal labor unions. Other firms either have no labor representative or rely on informal procedures. Low compliance on the union measure results from the fact that it places substantially more costs on the enterprise than labor contracting alone.

Our final dependent variable, Recruitment Budget, is a behavioral measure based on the assumption that complying firms should feel more constrained in their ability to replace workers. As a result, firms should invest more heavily in identifying and hiring workers for the long-term. To this end, we use the share of a firm’s budget spent on labor recruitment. We take the natural log to normalize the distribution.
**Independent Variables**

We use three different variables to represent participation by firms in the drafting of new business regulations and the corresponding responsiveness of government to their comments. The actual wording of each question is presented in Figure 4.

*** Insert Figure 4 Here ***

Provided Comment equals one if a firm contributed any comment on a draft piece of regulation to the government within the past year and equals zero if it did not. More than a fifth of firms in our sample (21.4%) reported doing so. Our second measure, Received Response, narrows down to just those commenting firms whose comment received a formal government acknowledgement. Controlling for Received Response means Provided Comment captures the variation in Labor Contract associated with unacknowledged participation and thereby allows us to test for H3. According to firm responses, fully two-thirds of all commenting firms did receive responses (13.6% of the total sample). Our third and final measure, Effective Comment, is a higher form of government responsiveness, in that the firm understands its comment to have contributed to altering the regulation. More than a third of commenting firms in our sample (and 7.6% of the total sample) felt their comment had indeed made a difference.

**Control Variables**

Fully specified models include provincial fixed effects to hold constant the location and local regulatory enforcement regime, two-digit sector fixed effects based on revision four of the United Nation’s International Standard Industrial Classification (ISIC-Rev4), and a dummy variable for whether the firm was surveyed after the implementation period.
Confounding Variables

Several potential confounders could be associated with both participation and compliance, leading to omitted variable bias. Figure 5 illustrates this by showing the lower compliance of SMEs with the requirement to provide formal contracts to all employees. To address this threat, we include a number of relevant variables in the entropy balancing procedure described in the Data Analysis section below. Employment Size is an ordinal variable from one to eight representing the following categories of increasing value for each firm’s total employees: less than five, five to nine, ten to 49, 50 to 199, 200 to 299, 300 to 499, 500 to 1,000, and more than 1,000. Capital Size is an ordinal variable from one to eight representing the following categories of increasing value for the firm’s total equity capital in billions of Vietnamese dong (VND): less than 0.5, 0.5 to 1, 1 to 5, 5 to 10, to 50, 50 to 200, 200 to 500, above 500. In line with our theoretical focus on SMEs, the vast majority of sample firms are quite small, averaging just over three on the eight-point labor and equity size scales. More tangibly, 82 percent have less than 50 employees and 42 percent have less than 10, while 84 percent have less than VND 10 billion (US$476,000) in equity capital.

*** Insert Figure 5 Here ***

The variables State Ownership and Former SOE are dummy variables that equal one if the government currently or formerly owns an equity stake in the firm. Connected Owner equals one if the firm owner was ever a government official, military officer, or manager of a state-owned enterprise. Former Household Enterprise equals one if the firm began operations before formally registering with the government as a company. We also account for the firm’s legal form as a sole proprietorship, partnership, limited liability company, or joint stock company.

As it is well established that customers can put pressure on suppliers to comply with local labor regulations (Greenhill, Mosley, & Prakash, 2009; Mayer & Gereffi, 2010; Mosley, 2010),
we include dummy variables to measure whether the firm’s primary customers are foreign companies based in Vietnam, third-party buyers for indirect export, or direct export consumers.

**Mediating Variables**

We construct latent measures representing firm perceptions of government legitimacy, as well as the regulatory knowledge of firms, using the following indicators from the PCI survey. We add the measures of regulatory knowledge in order to explore a simple, alternative pathway for participation’s influence on compliance suggested by work in political science and economics.\(^6\)

**Firm’s View of Government Legitimacy.** Our first measure of government legitimacy is *Business Friendliness*, based on the survey response to the following question: “What do you perceive as the attitude of provincial government officials towards private business?” Responses were given on a five-point scale ranging from 1 (Negative) to 5 (Positive). Half of firms (50.1%) chose the neutral category (3) and few ranked the government lower (6.3%), leading to an average score of 3.45. This measure is a particularly relevant measure of firm perceptions of government legitimacy in Vietnam, given significant variance around the country in the degree to which local officials have embraced the country’s transition away from full reliance on state-owned firms and official skepticism about private entrepreneurs. We expect that firms that rank government low on this measure will also have greater questions about the legitimacy of government’s authority in determining which business activities harm society.

Our second measure of legitimacy, *Regulatory Intentions*, is based on firm responses to whether they agree with the following statement: “Government officials use compliance with local regulations to extract informal fees from business.”\(^7\) Firms were asked to answer on a four-

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\(^6\) See Appendix 2 for further explanation of rationale behind this alternative pathway.

\(^7\) Informal fee (*chi phi khong ching thuc*) is the commonly used term for bribe in Vietnam.
point scale ranging from 1 (Strongly Agree) to 4 (Strongly Disagree), meaning that a higher score implies a more positive evaluation of the intentions behind government regulation. Reflecting the substantial cynicism in our setting, however, nearly half of our sample agreed (37.8%) or strongly agreed (5.5%) with this statement. As we would expect, our two variables for firm’s view of government legitimacy are positively correlated with one another (0.26).

Finally, Biased Implementation measures legitimacy based on responses to the following survey question: “The attitude of the provincial government does not depend on the firm’s contribution to local development (e.g. number of employees hired, amount of tax paid).” Firms were again asked to answer on a four-point scale ranging from 1 (Strongly Agree) to 4 (Strongly Disagree), meaning that a higher score implies a more positive evaluation of the intentions behind government regulation.

**Firm’s Regulatory Knowledge.** We also created two additional variables to measure firm knowledge about its regulatory environment. The first is Information Value, based on a firm’s own estimation of its ability to successfully predict government’s regulatory behavior. It is based on a question in the survey asking, “How predictable is the implementation of these rules, laws, and regulations at the provincial level?” Firms are invited to answer on a five-point scale ranging from 1 (Never) to 5 (Always). Average predictability was 2.08 with nearly two-thirds of sample firms (63.8%) answering that implementation was never or rarely predictable.

The second independent variable on regulatory knowledge is Information Effort, which is based on a firm’s reporting of how much time it spent researching government regulations and how to comply with them. Firms answered on a six-point scale ranging from 1 (Less than 1%) to 6 (Over 50%). The mean for the sample was 2.47 with 63.6 percent answering that they spend less than 5 percent of their time on such activities. Somewhat surprisingly, our two variables for
firm’s regulatory knowledge are actually negatively correlated (-0.18), indicating that they represent quite different forms of regulatory knowledge.

DATA ANALYSIS

Entropy Balancing

Self-selection into participation and non-random selection of responses to comments by government officials raise concerns of bias in our analysis. The key threat can be seen in the first panel of Table 2, where we assess differences in confounding variables based on whether a firm provided a comment (shaded) or not (white). Commenting firms differ from non-commenting firms on a number of observable characteristics: they are slightly larger, more likely to have resulted from privatization or to still have state investment, more likely to have owners with political connections, and slightly more likely to sell goods to foreigners. Since these features are also theoretically correlated with compliance, they could bias results. Relatedly, it is possible that an unobserved factor is driving both the choice to participate and compliance with the downstream regulation. For instance, firms more afraid of punishment by authorities may try harder to influence the draft law and also pay more careful attention to abiding by the final version.

While not the experimental ideal, matching techniques have been proposed as one possible remedy to this selection problem (Dehejia & Wahba, 2002). In this section, we employ a variant of matching suggested by Hainmueller (2012) called entropy balancing (ebalance). Ebalance reweights observations to generate statistically a region of common support where commenting and non-commenting are comparable on structural covariates. Ebalance does this directly by incorporating covariate balance into the weight function that is applied to the sample
units.\textsuperscript{8} The benefit over other propensity score matching approaches is that we do not need to shed observations and reduce statistical power.

To apply this technique, we impose a set of balance constraints, which imply that the covariate distributions of the treatment and control groups in the preprocessed data match exactly on all pre-specified observations. We take care to use only pre-treatment variables in the balancing equation. The entropy balancing algorithm then searches for the set of weights that satisfies the balance constraints but remains as close as possible to a set of uniform base weights to retain information. This recalibration technique assures maximum balance between the treatment and control groups (Hainmueller, 2012). After re-weighting, commenting firms and non-commenting systems match directly in terms of average value, variation and skew (see the second panel of Table 2). Another assumption of the technique is that, if the region of common support is large enough, our balancing on observable confounders reduces potential biases caused by unobservable confounders. Of course, balance on unobservables can never be fully verified.

The weights generated by ebalance were then employed in weighted regressions. For analyses using Formal Labor, we employ an Ordinary Least Squares (OLS) model to test our hypotheses. We cluster standard errors at the province level, the primary sampling unit for our survey. We use ordered probit and clustered standard errors for analyses using Compliance Scale.

*** Insert Table 2 Here ***

Testing the Main Relationship between Participation and Compliance

Table 3 presents results of our analysis of H1. Models 1 through 4 investigate the straightforward effect of political participation on our main measure of regulatory compliance, Formal Labor.

\textsuperscript{8} Due to space constraints, we do not present additional ebalance tables, but analyses using the variables government responsiveness and effectiveness of comments were re-run balancing on these variables specifically, rather than using the weights derived from balancing on provided comment. Substantively, results are the same.
Model 1 begins with a stripped down regression including only our core independent variable, *Provided Comment*, and shows an initial correlation with compliance that is positive and weakly significant. When we use the ebalance weights in Model 2, however, the significance disappears and the coefficient effectively declines to zero. Subsequent regressions using provincial and industry fixed effects also show no significance. We observe the same pattern of null results in analyses using our compliance scale (Models 7-10). In short, there does not appear to be an independent relationship between just providing a comment and subsequent compliance.

*** Insert Table 3 Here ***

Submission of a comment on a draft regulation does not account for government responsiveness. A firm may only feel it truly participated if it receives acknowledgement from government of its participation. Model 5 investigates this possibility by replacing *Provided Comment* with our stricter definition of political participation, *Received Response*, in the fully-specified model, which uses ebalance, province, and industry fixed effects. In this case, the result is a coefficient that is highly significant (p=0.001). Interpreting this coefficient, all else equal, firms that commented on draft regulations and received acknowledgement of their comment from government had 3.2 percentage points higher share of workers with formal contracts than those that either did not comment at all or commented but did not receive a response. Results are similar in 6, where we replace *Received Response* with our strictest definition of responsiveness, *Effective Comment*. While slightly less significant, we observe the same positive relationship between responsiveness and compliance using our three-point scale in Models 11 and 12. Calculating, the marginal probabilities, we see that *Government Response* and *Effective* increase the probability of full compliance by 1.6 percent and 3.0 percent respectively.

**Testing the Backlash Hypothesis**
We dig deeper into the differences in effect of our participation measures in Table 4. The backlash hypothesis (H3) holds that the degree to which a government is responsive to their ideas heavily influences the constructive effect of political participation by businesses on regulatory compliance, and that firms may reduce regulatory compliance if they feel the participation process is a mere formality. We test this hypothesis more directly in Models 1 and 2 of Table 4, where we return to *Provided Comment* as our participation variable and constrain our sample to firms that did not receive a response to their comments from government, comparing them to firms that firms did not comment at all.

We observe the expected negative coefficient on *Provided Comment*, which is statistically significant at the p<0.05 level. Firms that provided comments, but did not hear a response from government have lower compliance (3.5 percentage points) than firms that did not comment at all. Again, we observe a similarly signed and sizable coefficient in the oprobit analysis with the probability of full compliance declining by 7 percent.

In Models 3 and 5, we constrain our sample to include only firms that commented on a draft regulation and examine whether having received feedback from the government had an effect on the compliance of this subsample. Consistent with our earlier results, the coefficient on *Received Response* in Model 2 is highly significant (p<0.01) and substantively quite large. *Ceteris Paribus*, firms that received acknowledgement from government about their comment had a 5.6 percentage point higher share of workers with formal contracts than those who commented but did not receive a response. Again, results are robust to using our three-point scale as the dependent variable where the probability of full compliance increases by 6.5 percent.

Models 3 and 6 combine our variables for political participation. The results offer a refined depiction of the results described above. The coefficient on *Provided Comment* is negative and highly significant in both models. In interpreting this coefficient, it is important to
understand that the presence of our other, stricter political participation variable, Received Response, within the same models means that the results on Provided Comment specifically captures the variation in Labor Contract associated with public comments that did not receive any feedback from government. This is evident in the similarly sized coefficients to Models 1 & 4. The coefficient on Received Response remains positive, significant, and similarly sized to both Models 3 and 6. As with Provided Comment, the size of its coefficient also remains quite consistent with its size in the subsample analysis.⁹

In Models 7 & 8, we substitute in our alternative dependent variables into the fully specified models to examine compliance with the Labor Code. Model 7 indicates that firms that received a government response were 14 percent more likely to have a trade union, in compliance with Article 50. In Model 8, we find that recipients of government responses spent nearly 20 percent more of their annual budget in the past year on labor recruitment, which we take to be behavioral indicator of compliance. We do not, however, find evidence for backlash in either model, as there is no indication that unanswered comments generated reduced compliance according to these two measures. In both cases, the coefficient on Provided Comment is not statistically distinguishable from zero.

*** Insert Table 4 Here ***

There are two key takeaways from the analyses presented in Table 4. First, while we do not find support for H1 using our most basic measure of participation, we find quite solid support for it once we recognize that government responsiveness to firm participation matters. Second, the negative effect on regulatory compliance of comments unacknowledged by government, relative to firms that provided no comments at all, is consistent with our expectations in H3.

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⁹ Similar results are obtained if we replace Received Response with Effectiveness
Disaggregation by Size

As we note in the Introduction, we expect our theory to have greater relevance for SMEs than for larger, politically connected firms. We directly test this implication by dividing our sample between firms with less than or equal to 200 employees and firms with over 200 employees. We then re-run all of the fully specified models from Table 4. Table 5 presents the results, which constitute strong support for our contention that participation and responsiveness have greater effect on the regulatory compliance of smaller firms. On our two primary measures of compliance, acknowledged comments matter only among SMEs. For larger firms, the effect is not significant and even has the incorrect sign. Thus, the inclusion of large firms in Table 4’s Model 4 actually appears to have biased against us finding support for H3, our backlash hypothesis. A similar pattern is observed on the alternative recruitment measure, but not for the trade union measure.

*** Insert Table 5 Here ***

Mediation Analysis

Finally, we test whether the influence on a firm’s regulatory compliance of giving feedback during the regulatory design process is mediated by firm perception of the legitimacy of government (H2). Given our results on H1, we focus our analysis on participation that was responded to by government. We begin by constructing latent variable measures of the legitimacy and knowledge constructs, before performing multiple equation mediation analysis. To perform the factor analysis, we use the three legitimacy indicators and two knowledge indicators discussed in the Mediation Variables sub-section.

Table 6 presents the results of the factor analysis with varimax rotation to ease interpretation. The procedure identified two latent variables with eigen values above one. The three legitimacy variables load most strongly onto the first factor, which explains 35 percent of
the variation in the variable grouping. The two information indicators load strongly onto the second factor, which explains about 22 percent of the observed variation. Because of the clear separation between indicators and the strong loadings onto the uncovered latent variables, we label the two factors *Legitimacy* and *Information*, which align clearly with our main legitimacy mechanism and alternative information mechanism. Using a simple regression based prediction, we generate the two latent variables and use them in our mediation analysis below.

*** Insert Table 6 Here ***

Following Preacher and Hayes (2008), we use a three-equation structural model to perform the mediation analysis and product of coefficients approach to calculate indirect and direct effects. In the first regression, we regress *Legitimacy* on *Government Response*. In the second, we regress *Information* on *Government Response*. The final equation regresses our compliance measure on predicted Legitimacy and Information measures from the previous two equations alongside the original *Government Response* measure. All three equations adhere to our fully-specified models from previous analysis, which employ the ebalance weights to hold confounders constant, control for whether a firm received the survey after the implementation period, introduce province and sector fixed effects, and cluster standard errors at the province level.

1. \[ \text{Legitimacy}_i = \delta_0 + \delta_1 \text{GovResponse}_i + \delta_2 \text{After}_i + p_i + s_i + u_{i}^{\text{leg}} \]
2. \[ \text{Information}_i = \alpha_0 + \alpha_1 \text{GovResponse}_i + \alpha_2 \text{After}_{ii} p_i + s_i + u_{i}^{\text{inf}} \]
3. \[ \text{Compliance}_i = \beta_0 + \beta_1 \text{Legitimacy}_i + \beta_2 \text{Information}_i + \beta_3 \text{GovResponse}_i + \beta_4 \text{After}_i + p_i + s_i + \epsilon_i \]

Because we control for the original government response measure in the third equation, we can then reconstruct the direct effect of government response and the indirect effects mediated by the two latent variables. We implement using STATA’s SEM command, following the procedures outlined in UCLA’s Institute for Digital Research and Education [http://www.ats.ucla.edu/stat/stata/faq/sem_mediation.htm/](http://www.ats.ucla.edu/stat/stata/faq/sem_mediation.htm/)
by information and legitimacy. According to Preacher and Hayes (2008), the direct effect of Government Response is $\beta_3$, while the indirect effect Government Response through Legitimacy is $(\delta_i \ast \beta_i)$, and through Information is $(\alpha_i \ast \beta_2)$. It follows that the total indirect effect of government response through the mediators is $(\delta_i \ast \beta_i) + (\alpha_i \ast \beta_2)$. We also employ the Imai et al. estimation approach, based on the potential outcomes framework as a robustness test.\(^{11}\) This approach does not allow for multiple mediators, so we test separately for Legitimacy and Information, rather than separating their effects.

Table 7 presents results of the mediation analysis. The shaded Panel 1 provides results using our continuous measure of compliance, while Panel 2 uses the three-point scale. Both panels follow a similar progression through the specifications. The first two models present results of regressing our mediator variables on government response (equations 1 & 2 above). The third model shows the indirect and direct effects of government response (equation 3). Finally, the fourth and fifth equations present results of the Imai et al. (2010) mediation approach.

Consistent with our theory, Government Response is a significant predictor of Legitimacy $(p<0.01)$. Using the continuous scale, response to comments increases feelings of legitimacy by about a quarter of a standard deviation. The relationship between Government Response and information, however, is even stronger (about half a standard deviation and also significant at the 0.01 level). In the third equation, we see evidence that Government Response has a weakly significant direct effect $(p<0.1)$ and strongly significant indirect effect mediated through legitimacy $(p<0.001)$. The indirect effect of government through Information is negatively signed but statistically insignificant. In short, while participation and responsiveness appear associated

\(^{11}\) Implemented using STATA’s medeff command (see Hicks and Tingley 2012).
with greater regulatory knowledge, this knowledge has little apparent influence on a firm’s decision to comply and could even undermine it. The findings are similar whether we use the noisier continuous measure of formal labor or the three-point scale.

*** Insert Table 7 Here ***

Table 8 calculates the quantities of interest derived from the analysis. We find that the total effect of government response is about 2.8 percentage points more contracted employees. Of this, 2.6 percentage points are achieved directly, while 8 percent (0.228) of the effect of government response is indirectly mediated by the Information and Legitimacy mechanisms. This small total indirect effect results from the countervailing influence of Information and Legitimacy, which pull compliance in two different directions. If we eliminate, the negative effect of information on compliance, the mediating effect of Legitimacy is 0.66, about 24 percent of the total effect of Government Responsiveness. Studying the compliance scale, the effects are even stronger, accounting for 45 percent of the total effect of Government Response.

*** Insert Table 8 Here ***

In conclusion, depending how compliance is measured, between 24 percent and 45 percent of the effect of Government Response is mediated by Legitimacy. Firms that receive a government response to their comments have more positive feelings about the attitude of government actors toward their business. This attitude appears to affect how those actors view the role of regulation, as these firms are less likely to view regulations as merely a way to extract bribes from private businesses. As a result, firms are more likely to adhere to the principles articulated in the law through compliance.

DISCUSSION

This paper suggests that broad-based participation by firms in government’s regulatory design process can help to increase dangerously low rates of compliance with important business
regulations in emerging economies. We argue that low regulatory compliance rates are, in part, a result of the very low opinion that emerging economy firms commonly hold of government’s legitimacy as the primary authority on what is and what is not good for society. In this context, we propose that firms that comment on draft regulations are more likely to see resulting government protections as legitimate and thereby worthy of compliance. Because this dynamic between government and firms relates to views of legitimacy and fairness, our theoretical framework further predicts that government’s responsiveness to firm participation in the regulatory design process matters, as well, and that a lack of responsiveness can even make matters worse. Analysis of firm-level survey data from the rapidly changing institutional environment of nominally communist Vietnam produces results consistent with this framework.

Our mediation analysis confirms our expectation that the positive relationship between participation and compliance is mediated by firm perceptions of government’s legitimacy. But the share of the relationship accounted for by legitimacy is less than we anticipated. This could, in part, be the result of noise in our legitimacy measures. Any remaining direct effect of participation most likely results from two alternative pathways. First, a responsive government is more likely to listen to the expert advice of firms, adjusting the final regulation to address issues in the draft document highlighted by participating firms. For instance, in our case, articles in the Labor Code may have benefited from firm input about the terms of the contracts and different types of labor employed by different types of firms. Small adjustments may have brought the document better into line with the actual business activities of affected firms. We call this the Better Law hypothesis. Alternatively, it is also possible that participation made compliance easier by weakening constraints on firms and protections for workers. We call this the Weaker Law hypothesis. Certainly, further research is necessary to test these two mechanisms fully and to better understand under what conditions one is more likely than the other.
We develop our firm-level theoretical framework based on insights from two key individual-level theories, organizational behavior’s procedural justice and political science’s deliberative democracy. Together, these two theories shape our expectation that boundedly self-interested owners and top managers of emerging economy firms will view regulatory compliance as more important after engaging in a meaningful government-led participation process. This consideration of how the behavior of firm leaders underlies the relationship between the actions of firms and those of government constitutes a constructive response to recent calls for greater attention to the microfoundations of firm level theories (Felin & Foss, 2005; Foss & Pedersen, 2014). In our particular context, this basis in individual-level motivations allows us to add to the richness of the existing firm-level explanations for compliance behavior in institutional theory. Furthermore, we believe this focus on microfoundations offers exciting potential for further exploration about how firms can proactively shape their own institutional environments.

As we stress in the Introduction, the relevance of individual-level theory to explaining firm-level relationships is particularly high in our setting, because we are specifically not interested in the behavior of the largest, most politically connected firms in emerging economies. This particular bias with regard to firm size contrasts diametrically with the very impactful norm in management studies, whereby theories are commonly built on the study of elite firms (Barkema et al., 2015; George et al., 2012). This bias is particularly evident in the theories relevant to interaction between firms and government that we cover in this paper. Many readers, for example, are likely to feel a serious discomfort about the idea of participation by businesses in the regulatory design process that derives from their fears of the social consequences of regulatory capture. But whereas regulatory capture refers primarily to politically connected firms colluding with government to carve out additional rents through regulations that create entry barriers to competition, there really are no prospects for, for example, even a relatively large 200-
employee limited liability company manufacturing garments in southern Vietnam convincing national makers to write regulations in a way that give it a competitive advantage. There is, however, a real opportunity for such a firm to help policy-makers better understand ways in which their draft regulation may not have its intended effect, due to conditions that officials do not sufficiently understand. As such, our focus on the rest of the spectrum of firm size constitutes a contribution to what realistic political strategy is more likely to look like for the majority of firms in emerging economies.

The bias of theory built on study of large firms is also apparent in research on the social responsibility of firms. Previous work in management on the social responsibility of firms has almost always focused on the value firms can gain from going beyond mere regulatory compliance. Self-regulation, for example, is commonly defined as firms deciding to impose higher standards on themselves than what is formally required by government. Some of this research argues that socially responsible strategies can even bolster performance by helping firms differentiate themselves from less socially responsible competitors. This makes sense for an elite, potentially even multinational firm, which is under the microscope of powerful stakeholder organizations ready to hold it to account for any missteps. As illustrated nicely in Webb et al. (2009), however, most firms in emerging economies are instead actively engaged in negotiations with their local communities about which government rules are really required and which are not. This does not necessarily mean that they are less socially conscious than their elite counterparts; just that they face a very different set of pressures.

Finally, we believe that a particularly clear implication of our findings is the continued importance of government within management studies. A common refrain is management is study of ways in which firms can substitute for government institutions and our discipline seems constantly in search of new ways in which this might be done. Furthermore, despite the concerns
raised by research in the regulatory capture and political strategy literatures, such substitution tends to be framed in positive terms. In our study, in contrast, the social responsibility of firms is critically complemented by evidence of stronger, more competent government. This stands out in our findings that not only is the positive effect of participation on compliance contingent on whether government is seen to be responsive to the participation, but also opportunities for participation can actually worsen compliance behavior when government is not responsive. Furthermore, it is clear that government must play an important role in sorting through feedback from the field of participating firms to determine which input is indeed of social value and which is not. We see substantial potential for further attention along these lines in future management research, exploring the constructive ways in which government and firms can interact.

Ultimately, we believe the main contribution of this paper lies in its clear implications for how to approach an important set of real world problems relating to business and society. The past few years have provided a preponderance of evidence in emerging economies of the heavy societal costs of regulatory non-compliance. Nevertheless, effective means for addressing this problem have proven elusive. The findings in this paper provide initial support in favor of government programs that more formally and proactively seek out input from a wider distribution of firms during design of new business regulations. As noted above, this does not mean yielding power to business elites in the formation of social protections or reduced spending on the task of business regulation. In short, business participation does not substitute for government institutions.

Increased input from across the spectrum of businesses should instead mean more information and perspectives for government regulators to process and balance against each other and against non-business perspectives, which will actually require investments into upgrading government resources and capacity. A specific area for constructive government action would be
provision of public responses to firm comments on draft regulations. Relatedly, our findings should discourage authoritarian regimes that wish to adopt participation programs merely to assuage desires for voice without really expending any resources or yielding any true influence. This is consistent with evidence that public participation in the drafting of laws in China is actually dropping, despite increased volume of opportunities to do so, and suspicions that the reason is growing cynicism regarding the degree to which government takes heed of the participation process (Stromseth & Gueorguiev, 2015).

Our findings are also consistent with the idea that firms are boundedly self-interested and willing to accept regulatory constraints as long as there is evidence that they emerge from a fair process truly aimed at protection and benefits for the society in which the firms are embedded. This points to the potential social benefits of business associations, especially those that are more broadly representative of the interests of non-elite firms operating in competitive industries.

REFERENCES:
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Figure 1: A Theory of Political Participation and Regulatory Compliance by Firms

- Firm Feedback to Government on Draft Business Regulation
- Firm Compliance with Implemented Business Regulation
- Firm Perception of Government Legitimacy as Regulatory Authority
- Firm Perception that Government Treats Participation Process as a Mere Formality

H1 (+)
H2 (+)
H3 (-)

Figure 2: Was Labor Code Salient?

Interest over time graph showing trends in search terms related to construction law, labor code, environmental protection law, law on food safety, and law on fire safety.
Figure 3: Distribution of Key Dependent Variables

![Graph showing distribution of key dependent variables during and after implementation periods.]

Figure 4: Survey Question Used To Create Participation Variables

3. Have you ever provided comments on the Government's regulations and policies?
   ☐ Yes (Please answer question 3.1 and 3.2)
   ☐ Never (Please skip to question 4)

3.1. If yes, which channel in your opinion is the most effective? (Check only one option)
   ☐ Public - private dialogues
   ☐ Provincial delegations of the National Assembly
   ☐ Provincial website, online dialogue forums
   ☐ Business and professional associations
   ☐ Direct comments to relevant state agencies
   ☐ Others (please specify)...

3.2. Did your comments receive responses from authorized agencies?
   ☐ Yes
   ☐ No

3.3. Did the authorized agencies use your comments?
   ☐ Yes
   ☐ No
Figure 5: Compliance by Firm Size

![Compliance by Firm Size](image)

Table 1: Descriptive Statistics and Correlations

<table>
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<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td>Formal Labor (%)</td>
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<td>80.30</td>
<td>30.41</td>
<td>0</td>
<td>100</td>
<td>1</td>
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<td></td>
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</tr>
<tr>
<td>Compliance Scale (0-2)</td>
<td>5,633</td>
<td>1.43</td>
<td>0.73</td>
<td>0</td>
<td>2</td>
<td>0.922*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Union=1</td>
<td>4,578</td>
<td>0.53</td>
<td>0.89</td>
<td>0</td>
<td>4.6</td>
<td>-0.123*</td>
<td>-0.172*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budget Spent on Recruitment (% ln)</td>
<td>5,633</td>
<td>0.19</td>
<td>0.39</td>
<td>0</td>
<td>1</td>
<td>0.119*</td>
<td>0.042*</td>
<td>0.052*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Provided Comment</td>
<td>5,633</td>
<td>0.21</td>
<td>0.41</td>
<td>0</td>
<td>1</td>
<td>0.013</td>
<td>-0.030*</td>
<td>0.068*</td>
<td>0.202*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Government Responded</td>
<td>5,633</td>
<td>0.14</td>
<td>0.34</td>
<td>0</td>
<td>1</td>
<td>0.027*</td>
<td>-0.007</td>
<td>0.082*</td>
<td>0.203*</td>
<td>0.762*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comment Used in Revision</td>
<td>5,633</td>
<td>0.08</td>
<td>0.26</td>
<td>0</td>
<td>1</td>
<td>0.030*</td>
<td>0</td>
<td>0.056*</td>
<td>0.156*</td>
<td>0.549*</td>
<td>0.695*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gov't attitude toward private sector</td>
<td>5,444</td>
<td>3.45</td>
<td>0.81</td>
<td>1</td>
<td>5</td>
<td>0.108*</td>
<td>0.117*</td>
<td>-0.084*</td>
<td>0.015</td>
<td>0.021</td>
<td>0.068*</td>
<td>0.086*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gov't officials use regulations to extract bribes</td>
<td>5,071</td>
<td>2.55</td>
<td>0.66</td>
<td>1</td>
<td>4</td>
<td>0.078*</td>
<td>0.110*</td>
<td>-0.202*</td>
<td>-0.083*</td>
<td>-0.053*</td>
<td>-0.014</td>
<td>0.011</td>
<td>0.264*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gov't attitude doesn't depend on contribution</td>
<td>5,280</td>
<td>2.66</td>
<td>0.63</td>
<td>1</td>
<td>4</td>
<td>0.054*</td>
<td>0.098*</td>
<td>-0.134*</td>
<td>-0.045*</td>
<td>-0.011</td>
<td>0.026</td>
<td>0.043*</td>
<td>0.345*</td>
<td>0.364*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time spent learning about regulations</td>
<td>5,107</td>
<td>2.47</td>
<td>1.44</td>
<td>1</td>
<td>6</td>
<td>-0.067*</td>
<td>-0.122*</td>
<td>0.223*</td>
<td>0.091*</td>
<td>0.068*</td>
<td>0.062*</td>
<td>0.053*</td>
<td>-0.049*</td>
<td>-0.184*</td>
<td>-0.160*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Predictability of Regulation</td>
<td>5,113</td>
<td>2.12</td>
<td>1.01</td>
<td>1</td>
<td>5</td>
<td>-0.008</td>
<td>-0.047*</td>
<td>0.128*</td>
<td>0.122*</td>
<td>0.235*</td>
<td>0.228*</td>
<td>0.172*</td>
<td>0.061*</td>
<td>-0.057*</td>
<td>-0.004</td>
<td>0.073*</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 2: Matching Commenting and Non-Commenting Firms

<table>
<thead>
<tr>
<th>Confounder</th>
<th>Treatment (Provided Comment)</th>
<th>Control (Did Not Comment)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Variance</td>
</tr>
<tr>
<td>Employment Size Scale (1-8)</td>
<td>3.11</td>
<td>1.93</td>
</tr>
<tr>
<td>Equity Size Scale (1-8)</td>
<td>3.58</td>
<td>2.16</td>
</tr>
<tr>
<td>State Owns Shares=1</td>
<td>5.9%</td>
<td>0.06</td>
</tr>
<tr>
<td>Equitized State Owned Enterprises=1</td>
<td>12.0%</td>
<td>0.11</td>
</tr>
<tr>
<td>Owner w/Gov. Connections =1</td>
<td>24.7%</td>
<td>0.19</td>
</tr>
<tr>
<td>Former Household Enterprise=1</td>
<td>47.2%</td>
<td>0.25</td>
</tr>
<tr>
<td>Partnership=1</td>
<td>0.4%</td>
<td>0.00</td>
</tr>
<tr>
<td>Limited Liability Co.=1</td>
<td>48.7%</td>
<td>0.25</td>
</tr>
<tr>
<td>Joint Stock Company =1</td>
<td>27.9%</td>
<td>0.20</td>
</tr>
<tr>
<td>Other Company Form=1</td>
<td>0.3%</td>
<td>0.00</td>
</tr>
<tr>
<td>Main Customer is Foreign Company=1</td>
<td>8.5%</td>
<td>0.08</td>
</tr>
<tr>
<td>Direct Exporter=1</td>
<td>6.9%</td>
<td>0.06</td>
</tr>
<tr>
<td>Indirect Exporter=1</td>
<td>3.9%</td>
<td>0.04</td>
</tr>
</tbody>
</table>

This table describes the Entropy Balancing Procedure (Hainmueller 2012) to address observed differences between firms that provided comments and those that did not. The first panel shows mean, variance, and skew between commenting firms and control firms before balancing. The second panel shows the same statistics afterwards. The second panel demonstrates much more balance on confounders.
## Table 3: Correlation between Providing Comments on Draft Regulation and Compliance

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>1. Formal Labor (%)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided Comment</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
<td>(9)</td>
<td>(10)</td>
<td>(11)</td>
</tr>
<tr>
<td></td>
<td>1.687***</td>
<td>-0.351</td>
<td>0.077</td>
<td>0.057</td>
<td></td>
<td></td>
<td>-0.058</td>
<td>-0.071*</td>
<td>-0.057</td>
<td>-0.061</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.922)</td>
<td>(0.968)</td>
<td>(0.964)</td>
<td>(0.956)</td>
<td></td>
<td></td>
<td>(0.037)</td>
<td>(0.041)</td>
<td>(0.042)</td>
<td>(0.042)</td>
<td></td>
</tr>
<tr>
<td>Government Responded</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comment Used in Revision</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>After Implementation Period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9.634***</td>
<td>6.529***</td>
<td>5.890***</td>
<td>6.030***</td>
<td>6.189***</td>
<td>6.271***</td>
<td>0.507***</td>
<td>0.420***</td>
<td>0.415***</td>
<td>0.416***</td>
<td>0.421***</td>
</tr>
<tr>
<td></td>
<td>(0.791)</td>
<td>(0.977)</td>
<td>(1.036)</td>
<td>(1.046)</td>
<td>(1.049)</td>
<td>(1.052)</td>
<td>(0.031)</td>
<td>(0.043)</td>
<td>(0.045)</td>
<td>(0.046)</td>
<td>(0.046)</td>
</tr>
<tr>
<td>Constant/Cut Point 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>74.613***</td>
<td>78.353***</td>
<td>78.433***</td>
<td>76.226***</td>
<td>75.425***</td>
<td>75.621***</td>
<td>-0.843***</td>
<td>-0.993***</td>
<td>-1.058***</td>
<td>-1.069***</td>
<td>-1.038***</td>
</tr>
<tr>
<td></td>
<td>(0.651)</td>
<td>(0.750)</td>
<td>(0.773)</td>
<td>(2.911)</td>
<td>(2.886)</td>
<td>(2.909)</td>
<td>(0.026)</td>
<td>(0.035)</td>
<td>(0.124)</td>
<td>(0.168)</td>
<td>(0.170)</td>
</tr>
<tr>
<td>Cut Point 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.063***</td>
<td>0.053</td>
<td>0.024</td>
<td>0.033</td>
<td>0.065</td>
<td>0.064</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td>(0.034)</td>
<td>(0.124)</td>
<td>(0.168)</td>
<td>(0.169)</td>
<td>(0.131)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Ebalance                                                | No                  | Yes   | Yes   | Yes   | Yes   | Yes   | No    | Yes   | Yes   | Yes   | Yes   | Yes   |
| Province FE                                             | No                  | No    | Yes   | Yes   | Yes   | Yes   | No    | No    | Yes   | Yes   | Yes   | Yes   |
| Sector FE                                               | No                  | No    | No    | Yes   | Yes   | Yes   | No    | No    | No    | Yes   | Yes   | Yes   |

| Provinces                                               | 63                  | 63    | 63    | 63    | 63    | 63    | 63    | 63    | 63    | 63    | 63    | 63    |
| R-squared                                               | 0.025               | 0.013 | 0.060 | 0.084 | 0.086 | 0.086 | 63    | 63    | 63    | 63    | 63    | 63    |
| RMSE                                                    | 30.39               | 28.47 | 27.93 | 27.65 | 27.61 | 27.61 | 63    | 63    | 63    | 63    | 63    | 63    |

The table is divided into two panels with different constructions of our dependent variable. Panel 1 uses the share of workers with formal contracts and employs OLS. Panel 2 uses a three point scale of (0: Non-Compliant; 1: Partially Compliant; 2: Fully Compliant) and utilizes an ordered probit (oprobit) procedure. Robust standard errors are in parentheses in both models (*** p<0.01, ** p<0.05, * p<0.1). Each panel shows six models. The first model (1 & 5) provides the unadjusted bivariate correlation. The second model (2&6) presents estimates using the Hainmueller (2012) entropy balancing procedure to address confounding variables. The third model (3&7) adds provincial fixed effects to deal with the fact that firms are nested within different regulatory jurisdictions. The fourth model (4&8) employs two-digit ISIC sector fixed effects. Models 5, 6, 7 & 8 use the same full specification as the previous model, but replace the key causal variable (provided comment) with government responded and comment used in revision respectively.
Table 4: Testing the Backlash Hypothesis (Provided Comment but No Response)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>1. Formal Labor (%)</th>
<th>2. Compliance Scale</th>
<th>3. Alternative DVs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Response (1)</td>
<td>Only Comments (2)</td>
<td>Joint (3)</td>
</tr>
<tr>
<td>Provided Comment</td>
<td>-3.461** (1.475)</td>
<td>-3.524** (1.478)</td>
<td>-0.211*** (0.061)</td>
</tr>
<tr>
<td>Government Responded</td>
<td>5.583*** (1.739)</td>
<td>5.723*** (1.675)</td>
<td>0.240*** (0.076)</td>
</tr>
<tr>
<td>After Implementation Period</td>
<td>7.596*** (1.111)</td>
<td>4.442** (1.896)</td>
<td>0.495*** (0.050)</td>
</tr>
<tr>
<td>Constant/Cut Point 1</td>
<td>75.569*** (3.065)</td>
<td>74.139*** (5.072)</td>
<td>76.542*** (2.884)</td>
</tr>
<tr>
<td>Cut Point 2</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ebalance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Province FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sector FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
<td>4,793</td>
<td>1,187</td>
<td>5,550</td>
</tr>
<tr>
<td>Provinces</td>
<td>63</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.089</td>
<td>0.151</td>
<td>0.088</td>
</tr>
<tr>
<td>RMSE</td>
<td>28.20</td>
<td>27.10</td>
<td>27.58</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-22765</td>
<td>-5558</td>
<td>-26243</td>
</tr>
</tbody>
</table>

The table is divided into three panels. Panel 1 uses the share of workers with formal contracts and employs OLS. Panel 2 uses a three point scale of (0: Non-Compliant; 1) Partially Compliant; 2) Fully Compliant) and utilizes an ordered probit (oprobit) procedure. Panel 3 tests the robustness of our theory to alternative DVs. Robust standard errors are in parentheses in both models (*** p<0.01, ** p<0.05, † p<0.1). For the alternative dependent variables, Model 7 studies whether a firm has a trade union as required by the Labor Code. Model 8 studies the natural log of the budget share spent on personnel recruitment in the year of Labor Code implementation.
### Table 5: Disaggregating Main Effects by Size

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>1. Formal Labor (%)</th>
<th>2. Compliance Scale</th>
<th>3. Trade Union</th>
<th>4. Recruitment Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SME (1)</td>
<td>Large Ent. (2)</td>
<td>SME (3)</td>
<td>Large Ent. (4)</td>
</tr>
<tr>
<td>Provided Comment</td>
<td>-2.573ₜ</td>
<td>8.242***</td>
<td>-0.194***</td>
<td>0.307</td>
</tr>
<tr>
<td></td>
<td>(1.532)</td>
<td>(3.429)</td>
<td>(0.061)</td>
<td>(0.207)</td>
</tr>
<tr>
<td>Government Responded</td>
<td>4.858***</td>
<td>-5.938</td>
<td>0.216***</td>
<td>-0.282</td>
</tr>
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<td></td>
<td>(1.770)</td>
<td>(4.136)</td>
<td>(0.072)</td>
<td>(0.227)</td>
</tr>
<tr>
<td>After Implementation Period</td>
<td>7.010***</td>
<td>4.236</td>
<td>0.441***</td>
<td>0.334**</td>
</tr>
<tr>
<td></td>
<td>(1.122)</td>
<td>(3.249)</td>
<td>(0.046)</td>
<td>(0.169)</td>
</tr>
<tr>
<td>Constant/Cut Point 1</td>
<td>74.182***</td>
<td>89.116***</td>
<td>-0.937***</td>
<td>-2.198***</td>
</tr>
<tr>
<td></td>
<td>(3.172)</td>
<td>(4.887)</td>
<td>(0.173)</td>
<td>(0.582)</td>
</tr>
<tr>
<td>Cut Point 2</td>
<td>0.081</td>
<td>-0.651</td>
<td>(0.172)</td>
<td>(0.582)</td>
</tr>
<tr>
<td>Ebalance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Province FE</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sector FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
<td>5,485</td>
<td>428</td>
<td>5,485</td>
<td>428</td>
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<tr>
<td>Provinces</td>
<td>63</td>
<td>63</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.085</td>
<td>0.305</td>
<td>0.106</td>
<td>0.297</td>
</tr>
<tr>
<td>RMSE</td>
<td>29.03</td>
<td>24.76</td>
<td>0.383</td>
<td>0.439</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-26216</td>
<td>-1937</td>
<td>-5009</td>
<td>-346.8</td>
</tr>
</tbody>
</table>

The table is divided into four panels. Panel 1 uses the share of workers with formal contracts and employs OLS. Panel 2 uses a three point scale of (0: Non-Compliant; 1) Partially Compliant; 2) Fully Compliant) and utilizes an ordered probit (oprobit) procedure. Panel 3 studies whether a firm has a trade union as required by the Labor Code. Panel 4 measures the natural log of the share of budget on recruitment and uses OLS. Panel 3 studies whether a firm has a trade union as required by the Labor Code. Panel 4 studies the natural log of the budget share spent on personnel recruitment in the year of Labor Code implementation. Both use OLS. Each panel is divided into two models. The first limits analysis to firms with less than or equal to 200 employees. The second looks at firms with more than 200 employees. Robust standard errors are in parentheses (*** p<0.01, ** p<0.05, t p<0.1).
<table>
<thead>
<tr>
<th>Indicators</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Factor1 (Legitimacy)</th>
<th>Factor2 (Information)</th>
<th>Uniqueness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gov't attitude toward private sector</td>
<td>3.46</td>
<td>0.83</td>
<td>1</td>
<td>5</td>
<td>0.729</td>
<td>0.221</td>
<td>0.419</td>
</tr>
<tr>
<td>Gov't officials use regulations to extract bribes</td>
<td>2.58</td>
<td>0.67</td>
<td>1</td>
<td>4</td>
<td>0.719</td>
<td>-0.218</td>
<td>0.435</td>
</tr>
<tr>
<td>Gov't attitude doesn't depend on contribution</td>
<td>2.70</td>
<td>0.64</td>
<td>1</td>
<td>4</td>
<td>0.773</td>
<td>-0.019</td>
<td>0.402</td>
</tr>
<tr>
<td>Time spent learning about regulations</td>
<td>2.46</td>
<td>1.44</td>
<td>1</td>
<td>6</td>
<td>-0.320</td>
<td>0.580</td>
<td>0.561</td>
</tr>
<tr>
<td>Predictability of Regulation</td>
<td>2.09</td>
<td>1.01</td>
<td>1</td>
<td>5</td>
<td>0.102</td>
<td>0.813</td>
<td>0.561</td>
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<tr>
<td>Eigenvalue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.760</td>
<td>1.095</td>
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<tr>
<td>Difference</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.702</td>
<td>0.186</td>
<td></td>
</tr>
<tr>
<td>Variance Explained</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.352</td>
<td>0.219</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-2.130</td>
<td>-3.832</td>
<td></td>
</tr>
<tr>
<td>Max</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.038</td>
<td>2.949</td>
<td></td>
</tr>
</tbody>
</table>

The table presents the rotated factor loadings (pattern matrix) and unique variances from a factor analysis using a varimax rotation procedure. Five variables were used which load on to two unique factors (based on eigenvalues>1) which correspond to our theoretical distinction of legitimacy and information. Shading highlights which variables are correlated with the underlying factors.
# Table 7: Mediation Models

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Mediation Equations</th>
<th>Final Model</th>
<th>Imai et al.</th>
<th>Mediation Equations</th>
<th>Final Model</th>
<th>Imai et al.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Legitimacy (1)</td>
<td>Information (2)</td>
<td>Labor (ln) (3)</td>
<td>Legitimacy (4)</td>
<td>Information</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legitimacy</td>
<td></td>
<td>2.555***</td>
<td>2.576***</td>
<td></td>
<td>0.093***</td>
<td>0.094***</td>
</tr>
<tr>
<td></td>
<td>(0.589)</td>
<td>(0.587)</td>
<td></td>
<td>(0.014)</td>
<td>(0.014)</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>-0.956</td>
<td>-1.013</td>
<td>-0.064***</td>
<td>-0.066***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.631)</td>
<td>(0.632)</td>
<td>(0.015)</td>
<td>(0.015)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received Response</td>
<td>0.260***</td>
<td>2.572***</td>
<td>3.261**</td>
<td>0.0587**</td>
<td>0.029</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(1.373)</td>
<td>(1.361)</td>
<td>(0.017)</td>
<td>0.083**</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.156***</td>
<td>79.659***</td>
<td>79.265***</td>
<td>-0.156***</td>
<td>1.368***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.025)</td>
<td>(0.684)</td>
<td>(0.681)</td>
<td>(0.025)</td>
<td>(0.017)</td>
<td></td>
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<tr>
<td>e.Variance</td>
<td>1.005***</td>
<td>815.912***</td>
<td>1.005***</td>
<td>0.495***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.032)</td>
<td>(28.118)</td>
<td>(0.031)</td>
<td>(0.012)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control for After</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Ebalance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Province FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Sector FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>4,055</td>
<td>4,055</td>
<td>4,055</td>
<td>4,055</td>
<td>4,055</td>
<td></td>
</tr>
<tr>
<td>Provinces</td>
<td>63</td>
<td>63</td>
<td>63</td>
<td>63</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-14403</td>
<td>-14403</td>
<td>-14403</td>
<td>-7949</td>
<td>-7949</td>
<td></td>
</tr>
</tbody>
</table>

This table presents the results of our mediation models. The mediation involves three equations implemented using STATA’s SEM procedure. In the first model we assess the intermediate relationship between receiving a government response and our measure of legitimacy (derived from Table 7). The second models performs the same analysis for our latent measure of information. The third model captures the direct effect of government response as well as the indirect effects mediated by legitimacy and information. The table is divided into two panels with different constructions of our final dependent variable. Panel 1 uses share of workers with formal contracts and employs OLS. Panel 2 uses a three point scale of (0: Non-Compliant; 1) Partially Compliant; 2) Fully Compliant) and utilizes an ordered probit (oprobit) procedure. We also replicate the operation using the Imai et al. (2012) procedure MEDEFF. All models use entropy balancing, control for before/after implementation period, and employ provincial and two-digit sector fixed effects. Robust standard errors, clustered at province level, are in parentheses in both models (*** p<0.01, ** p<0.05, t p<0.1).
Table 8: Quantities of Interest from Mediation Analysis

<table>
<thead>
<tr>
<th>Overall Effects of Government Response</th>
<th>Formal Labor (%, ln)</th>
<th>Compliance Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Effect</td>
<td>2.800</td>
<td>0.058</td>
</tr>
<tr>
<td>Direct Effect</td>
<td>2.572</td>
<td>0.053</td>
</tr>
<tr>
<td>Indirect Effect</td>
<td>0.228</td>
<td>-0.005</td>
</tr>
<tr>
<td>Proportion of Total Response Effect Mediated</td>
<td>8.2%</td>
<td>-9.1%</td>
</tr>
<tr>
<td>Ratio of Indirect to Direct Effect</td>
<td>0.162</td>
<td>-0.084</td>
</tr>
<tr>
<td>Ratio of Total Government Response Effect/Direct Effect</td>
<td>1.089</td>
<td>0.961</td>
</tr>
</tbody>
</table>

**Effects of Legitimacy Mechanism**

| Indirect Effect of Legitimacy          | 0.663                | 0.024            |
| Proportion of Total Effect Mediated by Legitimacy | 23.7% | 45.1%            |
| Ratio of Indirect Effect via Legitimacy | 0.258                | 0.413            |

**Effects of Information Mechanism**

| Indirect Effect of Information         | -0.435               | -0.029           |
| Proportion of Total Effect Mediated by Information | -15.5% | -54.2%           |
| Ratio of Indirect Effect via Information | -0.169               | -0.496           |

This table presents the derivations of the quantities of interest derived from Table 8. The columns correspond to the two different dependent variables.
Appendix A: Placebo Tests to Address Common Method Variance (CMV)

Although we were fortunate to be able to add questions to a national survey in Vietnam and have the survey coincide with introduction of an important new regulation, our reliance on a single survey instrument for all of the variables used in the analysis could lead to spurious correlation caused by CMV (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Richardson, Simmering, & Sturman, 2009). CMV can fool analysts into thinking they have uncovered a theoretical relationship when in fact the correlation is attributable solely to the attributes of the research method. Skepticism has been raised about the perniciousness of CMV in the management and organization literature (Malhotra, Kim, & Patil, 2006; Spector & Brannick, 2009). Nevertheless, the single-shot nature of our survey warrants deeper investigation.

In line with the recommendations of Podsakoff et al. (2003), we attempted to limit CMV in the research design by: 1) assuring all respondents of anonymity and promising that identifiers would be separate from the survey; 2) using different scales for the dependent (continuous) and independent variable; 3) rescaling the dependent variable in our analysis; 4) relying on experiential not perception based measures of the independent variables (i.e. respondents were asked if they commented, not how they feel about the commenting process); 5) introducing key variables at different points in the survey (e.g. there are three pages and over twenty buffering questions between the labor and participation questions).

Perhaps as a result of these procedures, our results do not seem to be susceptible to CMV. It is important to note that we found no direct relationship between commenting and compliance in the first set of tests, and a negative relationship once responsiveness was added to the model. In the terms of Harrison, McLaughlin, and Coalter (1996), the conditioning effect of responsiveness is unlikely to be part of a respondent’s theory-in-use and thus less susceptible to spuriousness caused by CMV.
While ex-posts statistical tests of CMV, such as confirmatory factor analysis, do exist, they are controversial and difficult to implement and interpret. As a more straightforward approach, we run a placebo test of three variables from the same labor module as our dependent variable that our theory would not anticipate to be correlated with participation or responsiveness. These include the respective shares of female, minority, and college educated workers in the firm. There are two benefits of these variables for assessing the threat of CMV. First, they are all measured on the same 100-point scale as our main dependent variable. According to the literature, CMV is most pronounced with similar scales as unreflective respondents move through the survey and locate themselves in similar positions on each new scale (Doty and Glick 1998). Second, these questions immediately preceded and followed our contracted labor question in the survey. Female share appeared in question E10.1, minorities in E10.2, contracted labor in E10.3, and college share in E11.1. Again, questions in the same module are most likely to be susceptible (Lindell & Whitney, 2001). Finally, we study a question about strikes experienced in the last three years, which could not possible result from comments provided on a regulation this year. In all cases, the expectation from our theory is zero correlation, but there is a high possibility of CMV driving spurious correlation.

To ensure consistency, we use the exact same specification that we did in the fully specified Model 3 (Table 4). The results in Table 5 are quite clear. On these variables, where CMV, is likely to most pronounced, we do not observe the same pattern as with our main dependent variable, despite similar position in the survey and similar scaling. There is no evidence of the positive relationship between responsiveness and these variables or the backlash results we observed. These results demonstrate that the observed associations in Table 4 are not spuriously generated by respondents answering our single-shot survey.
REFERENCES

Appendix A Table 1: Placebo Test to Assess Common Method Variance

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Female</th>
<th>Minority</th>
<th>College</th>
<th>Strikes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided Comment</td>
<td>3.184***</td>
<td>-0.109</td>
<td>0.840</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(1.132)</td>
<td>(1.307)</td>
<td>(1.559)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Responsive</td>
<td>-1.327</td>
<td>0.212</td>
<td>0.940</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(1.328)</td>
<td>(1.515)</td>
<td>(1.767)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>After Implementation Period</td>
<td>0.101</td>
<td>-4.074***</td>
<td>2.238**</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.831)</td>
<td>(0.922)</td>
<td>(1.087)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Constant</td>
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<td>22.227***</td>
<td>32.626***</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(2.171)</td>
<td>(2.674)</td>
<td>(2.583)</td>
<td>(0.002)</td>
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<tr>
<td>Ebalance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Province FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sector FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
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<td>4,897</td>
<td>6,136</td>
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<td>0.027</td>
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<td>63</td>
<td>63</td>
<td>63</td>
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<td>RMSE</td>
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<td>24.64</td>
<td>27.77</td>
<td>0.0728</td>
</tr>
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<td>Log Likelihood</td>
<td>-27931</td>
<td>-25410</td>
<td>-23184</td>
<td>7410</td>
</tr>
</tbody>
</table>

All models employ OLS. Robust standard errors, clustered at province level, in parentheses (** p<0.01, * p<0.05, * p<0.1). Female: Share of workforce female (%); Minority: Share of workforce non-Vietnamese (%); Bachelor: Share of workforce with college degree; Strikes: Number of strikes experiences in last 3 years; Tax: Negotiation with tax authority is a normal part of business (yes=1); Registration: Number of days to register business.
Appendix B: An Alternative Pathway for the Participation-Compliance Relationship

An alternative and simpler pathway, relative to our main legitimacy mechanism, is the idea that a firm can come to know more about a regulation through the act of participation than it otherwise would have. Business regulation in emerging economies is commonly described with the disparaging image of a confusing, confused, and costly mass of overlapping “red tape” (Djankov, Glaeser, & Shleifer, 2002). The effect of these poorly designed systems is that business managers, especially those in charge of resource-constrained SMEs, are less able to stay on top of and to fully understand all the regulations with which they are required to adhere. As discussed in the main body of the paper, low opinions of government legitimacy already means these firms are also less motivated to vigilantly invest in the acquisition of full knowledge of their regulatory obligations.

Scholars suggest that the process of participation in rule making can have the very straightforward benefit of teaching citizens about the law (Pateman, 1970; Sabatier, 1988). This mechanism is readily transferable to our setting wherein political participation involves firms gaining access to draft regulations before their formal implementation. In other words, the alternative to this participation process could be that firms are unaware of the requirements of new business regulations until the government announces formally implemention or, worse still, until regulatory inspectors arrive at the factory gates. As such, a positive relationship between participation and regulatory compliance could simply be a matter of participation increasing firms’ understanding of their regulatory obligations.

Olson (1999) finds that regulatory compliance increases when requirements are clearer and less complex. Researchers have also found that more informed stakeholders are less likely to make mistakes which lead to accidental violations (Fearon, 1998; Goren, 2004; Keefer & Khemani, 2011; Mackie, 2006). Even in research in the procedural justice literature, awareness of
the rules has been shown to play a role in compliance behavior (Winter & May, 2001). Despite the straightforward nature of this mechanism, however, lab-based experimental work in economics, which has sought to separate the legitimacy and information effects of participation, has actually only found support for the legitimacy path (Dal Bo, Foster, & Putterman, 2010).

It is important to differentiate between the potential information dissemination function of political participation and the legitimacy mechanism we emphasize because the two have quite different policy implications. If the primary benefit of participation is information dissemination, a more straightforward focus on training would likely be a less costly means for achieving this goal. Evidence on the positive impact of training initiatives on regulatory compliance has been forwarded by both legal scholars (Pires, 2008) and environmental economists (Dasgupta, Hettige, & Wheeler, 2000). In this section, we empirically test for these two potential pathways.

REFERENCES