

# Law-abiding organizational climates in developing countries: The role of regulatory burden and socially responsible organizational practices

**Track:** Culture, Social, and Ethical Issues

**Key words:** Key words: developing countries, law-abiding climate, regulatory burden, CSR certification, code of ethics

**Abstract:** Determinants of law-abiding organizational climates in developing countries can explain the widespread unlawful conduct of firms in the context. We investigate a) the negative effect of regulatory burden on a law-abiding climate, and b) the role of socially responsible organizational practices in combating this effect. Hypotheses were developed using anomie theory and tested with survey data collected from Mexican firms. A manager's perception of regulatory burden is found to negatively relate to the extent to which the firm has a law-abiding climate. Furthermore, our findings reflect the importance of substantive adoption of socially responsible practices for promoting a law-abiding climate.

*Law-abiding organizational climates in developing countries: The role of regulatory burden and socially responsible practices*

**Introduction**

Unlawful conduct is widely prevalent in firms in developing countries and justified as a normal business practice. Across Indian firms, 62% of employees report hearing of at least one of form of financial fraud occurring at their firm (Ernst & Young, 2015), while 70% of employees believe that at least one form of unethical conduct can be justified to meet financial targets (Ernst and Young, 2016). Insight into the determinants of "law-abiding climates" of firms in developing countries can shed light on the prevalence of this unlawful conduct. We use the term "law-abiding climate" to denote the "law and code" ethical climate type that is part of the typology of ethical climates in Ethical Climate Theory (ECT). Law and code ethical climates are characterized by the internal belief of firms that ethical decisions should be made based on the mandate of externally imposed societal rules such as the rule of law and professional codes of conduct (Martin and Cullen, 2006). Accordingly, law-abiding climates in our study act as the moral compass of firms that underlie transgressions of the law.

Consistent with there being little overall knowledge about how firms become corrupt in the extant research (Ashforth et al., 2008), there is little known about the determinants of law-abiding climates in developing countries that underlie the common practice of firms to behave unlawfully. This can be attributed to a lack of attention in the literature paid to contextual factors that act as antecedents to ethical climates (Simha and Cullen, 2012), including those particularly salient in developing-country contexts, and the role of organizational practices intended to foster an ethical orientation within firms in producing desired ethical climates (Martin and Cullen, 2006).

The purposes of this paper are to better understand 1) the antecedents of a law-abiding climate among firms in developing countries by taking explicit consideration of a unique contextual factor, regulatory burden, that drive them to be unlawful, and 2) the role that socially responsible organizational practices, namely CSR (corporate social responsibility) certification and code-of-ethics use, have in bounding these inclinations. Our study contributes to the ethical climate literature by showing that firms that face regulatory burden have weaker law-abiding climates, as well as highlighting the importance of the substantive adoption of socially responsible organizational practices for combating this influence. Codes of ethics that are used more extensively are found to weaken this effect, while CSR certification is found to strengthen it. The latter, surprising finding may be due to the symbolic nature of the certification system applicable to our study. Our work is important because it sheds light on the causes and potential firm-level deterrents of wide-spread corruption prevalent in developing countries which is a key cause of underdevelopment (Doh et al., 2003, Kaufmann, 1997).

To develop our theoretical insights, we draw on the lens of anomie theory for its explicit consideration of external context, and moreover, its ability to conceptualize a context relevant to developing countries in which elements of the environmental context render legitimate means to achieve desired ends unfeasible (Merton, 1968). Figure 1 depicts the theoretical model, which was tested using primary, firm-level survey data collected on Mexican firms.

-----  
Insert Figure 1 about here  
-----

Our paper is structured as follows. First, we provide the theoretical basis for our arguments and then formally develop our hypotheses. Next, we explain our data collection methods and survey sample. We then present our findings. Lastly, we provide implications and limitations of our work, as well as future research directions.

### **Theoretical Background**

Ethical climates are conceptualized as norms and ethical decision criteria that underlie the decision-making and subsequent behaviours of firms in response to ethical dilemmas (Victor and Cullen, 1988). They determine the issues that are considered ethically pertinent at a firm and the moral criteria organizational members use to understand, weigh and resolve such issues (Cullen et al., 1989). Accordingly, scandals like insider trading and fraud involving prominent organizations such as Enron and Lehman Brothers are traceable back to their ethical climates (Arnaud, 2010).

Ethical climate theory (ECT) was first conceptualized by Victor and Cullen (1987, 1988) as an analytical tool for understanding the different normative systems that can exist within organizations. While there are five ethical climates (Martin and Cullen, 2006), our sole focus on law-abiding climate is warranted in our study. First, in developing countries, a law-abiding climate for firms indicates how conducive a firm's norms regarding compliance are to engaging in illegal and corrupt acts. Due to the broader social ramifications of corruption that hinders development, the rule of law in developing countries tend to have a strong emphasis on its prevention and enforcement. This is especially true since developing countries have come under considerable pressure from inter-governmental organizations such as the OECD, World Bank, and IMF from the late 1990s through the mid-2000s to adopt anticorruption policies.<sup>1</sup> Second, law-abiding climates are considered amongst the most desirable ethical climates due to their positive consequences across a range of organizational outcomes, including a positive association with ethical behaviour (Fritzsche, 2000) and negative association with unethical behaviour (Wimbush et al., 1997) and instrumental climates (Victor and Cullen, 1988), the climate type associated with the poorest organizational outcomes.

---

<sup>1</sup> Davis, Kevin E. 2009. Does the Globalization of Anti-corruption Law Help Developing Countries? New York University Law and Economics Working Papers. Paper 203.

In uncovering the determinants of the prevailing ethical climates of firms, the literature has focused on internal organizational factors centered around organizational form (Liu et al., 2004, Agarwal et al., 2010) and strategic and managerial orientations (Morris, 1997, Schminke et al., 2005). This has resulted in two significant gaps in our understanding of the determinants of ethical climates: the influence of external organizational context (Martin and Cullen, 2006, Simha and Cullen, 2012, O'Fallon and Butterfield, 2005) and the role of organizational practices intended to foster an ethical orientation within firms in producing desired ethical climates, prompting a call in the literature to clarify their consequences on prevailing ethical climates (Martin and Cullen, 2006).

In order to incorporate context into the analysis of ethical climates (Martin and Cullen, 2006), we employ anomie theory, which posits that structural conditions faced by an actor within its environment, coupled with the societal values that emphasize traditional, monetary notions of success create strain and contradiction in the social system (Merton, 1995). The result of this tension is anomie, a state in which actors accept the breaking of societal rules as a normalized practice in response to the environmental conditions they face (Bernard, 1987). At its core, anomie is a theory of moral deliberation and the tension that exists when an actor must choose between achieving goals or acting within moral bounds. The concern of anomie theory with the underlying determinants of moral decisions (Rosenfeld and Messner, 1997) allows it broad applicability across all societal domains in which decisions have ethical considerations, including firms (Cullen et al., 2004).

Specifically, we use anomie theory to explore the consequences for a law-abiding climate where members perceive legitimate access to goal achievement to be blocked by contextual forces in the environment (Martin and Cullen, 2006). We argue that regulatory burden, a salient environmental factor in developing countries, causes firms to perceive lawful and ethical means of goal achievement to be impractical. As a result, firms stray away from the norms and ethical decision criteria characteristic of a law-abiding climate in making ethical decisions and guiding behaviour, negatively affecting the extent to which such an ethical climate exists at the firm. While previous studies using anomie have incorporated environmental factors that drive firms towards being unethical (Martin et al., 2007, Johnson et al., 2011), the factors considered have not been indicative of the especially salient issues in a developing-country environment that can influence a firm's ethics.

We consider managers' perceptions of regulatory burden rather than conceptualize it as an exogenous factor in order to capture the differences in the ability of firms within a context to manage regulation. Managers of firms for which regulation is especially burdensome are more likely to feel that rules pertaining to regulation are impractical, reflecting the

experience of anomie in their firms, which will have negative consequences on the extent to which a law-abiding climate is prevalent at their firm.

In addition, we examine the effectiveness of socially responsible organizational practices in maintaining a law-abiding climate in firms that experience anomie. We do so because socially responsible organizational practices are intended to promote an ethical orientation within firms that can influence the extent to which they have a law-abiding climate. In particular, we consider whether 1) possession of a corporate social responsibility (CSR) certification, and 2) code-of-ethics use, a measure of the influence of ethics in guiding strategic decisions, place bounds on a firm and combat the negative effect that regulatory burden has on a law-abiding climate. These two organizational practices are worthy of specific consideration. CSR certification is especially valuable for firms in the developing country context where it serves as a signal of behaviour desired by stakeholders amidst the inability of formal compliance to do so (Montiel et al., 2012), while differences across firms in the extent to which they use their codes of ethics and the implications this has for ethical climates has not yet been explored (Martin and Cullen, 2006). By examining a contextual factor in conjunction with organizational practices, our research is able to span the multiple levels of analysis required to better understand the determinants of unethical behaviour (Simha and Cullen, 2012).

## **Hypotheses**

### **Influence of perceived regulatory burden on law-abiding climate**

In light of the underdeveloped market-supporting institutions for fostering economic exchange common to developing countries, greater regulation by the state fills this institutional void. Compared to developed countries, governments in developing countries intervene more extensively in business operations, establishing requirements for a greater range of decisions made by firms. While greater regulation is intended to increase economic activity, it often proves burdensome to firms in developing countries due to the discretionary power given to regulatory actors in applying rules, causing their actions to be unpredictable (Khanna and Palepu, 1997). The added bureaucratic costs involved in economic activities when regulatory requirements of firms are inconsistent and ambiguous create disincentives for firms to invest and expand. Firms for which these costs are severe may perceive the rules of the regulatory process as unfeasible and, in response, work around them. For instance, corrupt practices such as bribes may become part of working with the bureaucracy (Khanna and Palepu, 1997), with illegal payments being made to regulatory actors to ease or by-pass regulatory requirements. For firms that experience strain from burdensome regulation, corruption can be thought of as an efficient “grease” that facilitates exchanges that would have otherwise not taken place (Méon & Weill, 2010). Firms can differ in the

extent to which they are regulated as well as their effectiveness in managing regulations, both of which influence managers' perceptions of the burdensomeness of regulation. The extent of regulation can differ according to a firm's industry or its size and legal status, while the political connectedness of a firm determines its ability to receive inside information pertaining to regulation or receive favorable regulatory decisions. Given that norms and ethical decision criteria of law-abiding climates are contrary to undermining or breaking the rules of the regulatory process, we hypothesize a negative relationship between perceived regulatory burden and the extent to which a firm has a law-abiding climate.

*Hypothesis 1: Perceptions of regulatory burden by a firm's managers decrease the extent to which the firm has a law-abiding climate.*

### **Influence of socially responsible organizational practices on law-abiding climate**

Socially responsible organizational practices require firms to embody characteristics and exhibit behaviour that adhere to a law-abiding climate. By delineating permissible actions from those considered impermissible according to the norms and ethical decision criteria of a law-abiding climate, they reduce the inclination of firms to steer away from law-abiding climates caused by perceptions of regulatory burden. We examine CSR certification and code-of-ethics use in particular.

Certification to private management standards can be obtained by firms to signal desired, unobservable characteristics to external stakeholders (King et al., 2005). These standards require firms to adhere to specific requirements that are typically verified by third-parties. Certifications exist in areas such as quality management, environmental management, and CSR. Private certifications are especially valuable signals of unobservable firm characteristics in contexts where external stakeholders likely do not perceive formal compliance with government regulations as accurate signals of firm conduct (Montiel et al., 2012). Such is the case in developing countries in light of the absence of stringent reporting standards, a lack of transparency into the regulatory process, and corruption in which approval can be granted to firms that do not meet mandatory requirements. Therefore, firms in developing contexts can use private certification as a stronger signal of their desirable characteristics.

CSR certifications can serve as a particularly useful signal amidst regulatory compliance that fails to convince stakeholders of a firm's ethical conduct, requiring firms to adhere to standards across multiple ethical dimensions that can run parallel to regulatory requirements. Some common dimensions of CSR certifications can be considered voluntary in nature and would not fall under the jurisdiction of regulation, such as supporting the economic and social development of the local community. Others, such as transparent and ethical corporate governance and providing safe and equitable working conditions, are mandated by the rule of law since failing to adhere to them can result in ethical transgressions such

as fraud and dangerous work environments that harm social welfare. In light of regulatory burden, which can reduce the feasibility of following the law by abiding by regulations, the benefits of CSR certification as a signal of desired behaviour can help offset the costs of adhering to norms and ethical decision criteria of a law-abiding climate. Thus, we predict the following:

*Hypothesis 2: The negative relationship between perceived regulatory burden and the extent to which a firm has a law-abiding climate is weakened for firms that are certified to a CSR standard.*

While it is known that the overwhelming majority of firms adopt a code of ethics since it is a de-facto standard in governance (Stevens et al., 2005, Weaver et al., 1999), not all codes of ethics serve the purpose of aligning the decisions of the firm to an ethical framework. The actual use of such codes by executives is highly variable (Carroll and Buchholtz, 2003), given the possibility that management adopts policies such as a code of ethics for symbolic purposes without applying them substantively in practice (Westphal and Zajac, 1993). Rather than ensuring the adherence of a firm to ethical conduct, a firm's code of ethics may exist to serve the instrumental purpose of promoting a positive image of the firm to gain the favor of stakeholders or assuring regulators of the firm's ability to police itself to reduce the legal and regulatory actions taken against it (Stevens et al., 2005). While research in ECT has incorporated the presence of a code of ethics as a cause of differences in ethical climate (Agarwal and Malloy, 1999; Peterson, 2002), a distinction between substantive and symbolic ethics codes has not been made in the ECT literature even though it speculates that differences in prevailing ethical climates may exist on this basis (Martin and Cullen, 2006). For firms in which a code of ethics is used substantively for strategic decision-making, the policies, procedures, and values of which it is constituted are likely influential in guiding its behaviour. When regulatory burden causes firms to experience anomie and question the practicality of adhering to the norms and ethical decision criteria of a law-abiding climate, the reliance of firms on codes of ethics to provide guidance for dealing with the 'gray areas' of business decisions (Berman et al., 1999; Quinn and Jones, 1995) makes them influential in countering the negative effect of regulatory burden on law-abiding climate. Accordingly, we hypothesize the following:

*Hypothesis 3: The negative relationship between perceived regulatory burden and the extent to which a firm has a law-abiding climate is weakened for firms that make greater use of their code of ethics for strategic decision-making.*

## **Data**

### **Research setting**

Mexico is a relevant context for our study given the pervasive acceptance of unlawful conduct by firms. For instance, 40% of Mexican entrepreneurs agree that the most effective way to gain a competitive advantage is through bribes

and connections (Mexican Institute for Competitiveness, 2015). Furthermore, this acceptance manifests itself in the rampant corruption that is considered a key contributing factor to the lack of competitiveness of Mexican firms (Mexican Institute for Competitiveness, 2015).

### **Data collection**

Our survey sample was obtained from a directory of firms in the *American Chamber of Commerce of Mexico* (Amcham), a non-profit organization whose aim is to represent the interests of its members by promoting policies that positively impact trade and investment between the United States and Mexico. The chamber's members typically consist of small to medium size firms that have a trade relationship with the United States or are the Mexican subsidiaries of U.S firms. Surveys were sent to firms primarily in the metropolitan areas of Monterrey, Guadalajara, and Mexico City, since they are considered the three major industrial centers of the country. The survey was directed to a single executive, senior manager, or manager at each firm who was asked to answer Likert-scale questions regarding the experience of the firm. Priority was given to those with the highest-ranking position when selecting among multiple respondents. Potential respondents were offered a chance to win a monetary prize through inclusion in a draw to win one of three gift cards to a popular department store valued at 2500 Mexican pesos (about US\$125.00). The fact that the majority of firms that belong to Amcham are small to medium size businesses justifies our single-respondent approach. While it can be preferable to have multiple survey responses to gauge the overall perception across a firm, a single respondent in a relatively small firm with an influential position within the organizational hierarchy is able to provide opinions and perceptions that are reflective of other key decision-makers (Li and Atuahene- Gima, 2002; Phillips, 1981). Although 220 responses were obtained by email and by regular mail, out of a total of 1330 firms (a response rate of about 17%), we limited our sample to the 188 responses from managers who indicated their firm has a code of ethics. We did so because the measurement of one of our variables, the use of code of ethics at a firm, presumes that a firm has a code of ethics to begin with. We feel this approach is justified since the mere presence of a code of ethics alone is not very indicative of whether it has been adopted substantively within a firm (Carroll and Buchholtz, 2003), which would be required for codes of ethics to be an effective influence on the law-abiding climate of firms. Out of these 188 responses, 140 were useable for the purpose of this study. Our response rate is comparable to other studies in the Latin American context (Carneiro et al., 2011; Ramos-Garza, 2009) and the relative number of useable responses compared to total responses is reflective of the tendency in Mexico for surveys to be returned incomplete (Merino and Vargas, 2013). The survey consists of items drawn from existing constructs that have been adapted to fit the Mexican context. The adaptation process consisted of translating items from English to Spanish, while maintaining their intended meaning. In a few cases, minor changes were made to increase their relevance for the Mexican context. An

extensive pre-testing process ensured the survey's external validity through in-depth interviews with experts in the Mexican context, including two executives, four business professors, and four executive MBA students currently working as managers. Final face validity testing was conducted with a panel of Mexican PhD students. A back translation of the Spanish language survey instrument to English was conducted and differences were reconciled by the research team.

A number of steps were taken to reduce the risk of socially desirable responses, a risk associated with doing ethics related research (Randall and Fernandes, 1991). Online distribution allowed for the self-administration of the survey and the instrument contained a strongly worded guarantee of anonymity, both of which are recommended for surveys dealing with sensitive information (Reinikka and Svensson, 2006). Partnership with a Mexican business school and formal sponsorship by the American Chamber of Commerce provided the survey with credibility and helped to establish trust as the respondents are likely familiar with both organizations. Furthermore, social desirability is a severe problem when it is random in nature and biases the results in an unpredictable manner. To the extent that social desirability causes a shift in the distribution of responses that can be predicted, concerns regarding the validity of results can be reduced by interpreting them in light of the possible bias. Since firms would have the tendency to exaggerate the extent to which they base their decisions on laws and codes to give the best impression of themselves, the correlations presented in this study are likely to be underestimated, and as such, can be considered conservative estimates.

## **Measures**

The measures used in this study are primarily perceptual and have been adapted from the existing literature. Since managers' perceptions and interpretations of their environment influences their decision-making (Boyd et al., 1993), a perceptual measure is well suited for this study to understand how regulatory burden affects a firm's adoption of a law and code ethical climate.

Our measure of *law-abiding climate* was obtained from the original law and code scale from Victor and Cullen (1988), consisting of four items that capture the extent to which laws and professional standards are taken into consideration when making decisions. The *regulatory burden* measure consists of four items from a previous firm-level survey administered by a Mexican university that gathered data on business perceptions of corruption in Mexico, the "Governance and Business Development Survey" (EDGE, 2001), which has been used in prior management studies (Montiel et al., 2012). The items corresponding to the measure evaluate the clarity and predictability of regulation facing firms; accordingly, items were reverse coded to gauge the burdensomeness of regulation facing a firm. *CSR certification* is a binary variable measured according to whether a firm possesses *Empresa Socialmente Responsable (ESR)*, a prominent CSR certification in Mexico, awarded by Cemefi, the Mexican Centre for Philanthropy. Data corresponding to this variable were

obtained from the listing of companies awarded ESR on the Cemefi website. ESR is a voluntary standard to which firms across industries can adhere and is based on a firm's commitment to environmental preservation, community involvement and development, quality of life of its employees, and ethics and corporate governance. We measured *code-of-ethics use* using a scale from Stevens et al. (2005), consisting of five items which evaluates the extent that a code of ethics is used in guiding the firm's strategic decisions.

As control variables, we used organizational size, ownership type, and endowment of slack resources, which are thought to determine ethical climate perceptions (Martin and Cullen, 2006). We measured these variables with the number of employees, foreign ownership, and sales, respectively. Firm age is also included as a control. Data on sales and number of employees were both obtained from the AMCHAM directory. In anomie theory, an unequal distribution of opportunities within a social system explains why some actors are more likely than others to undermine societal rules and engage in deviant behavior. Those whose environment affords them fewer legitimate opportunities resort to means outside of what is considered appropriate to maintain their aspirations to cultural prescriptions of success (Merton, 1968). To capture this idea, we included *perceived lack of industry munificence* as an additional control variable. It is a reverse coded four-item measure adapted from Jambulingam et al. (2005) who used the original measure, environmental munificence, to capture the perception of managers with regards to the opportunities for growth that exist in their business environment.

## **Results**

### **Construct validation**

A CFA (confirmatory factor analysis) was used for construct validation. Distinct factors corresponding to each construct were produced with eigenvalues greater than 1.0, accounting for 72% of the total variance. All items loaded significantly on their respective constructs with factor loadings ranging from 0.63 to 0.89. This indicates that the multi-item scales measure independent constructs, in support of their discriminant validity. Each construct is also shown to be internally consistent, with composite reliability values being greater than 0.80 (Nunnally and Bernstein, 1994). Furthermore, the recommended AVE (average variance extracted) benchmark of 0.50 was surpassed for each construct (Formell and Larcker, 1981). The measures, their individual item loadings, as well as the composite reliabilities and AVE statistics, are reported in the Appendix.

Discriminant validity can be further assessed by observing the correlation between constructs and comparing the square root of the AVEs to those correlations that are considered high (Formell and Larcker, 1981). As shown in Table 1, correlations between all constructs, except control variables, are relatively low, with none being greater than 0.30. The

largest of the correlations between key constructs is between law-abiding climate and use of code of ethics ( $r=0.293$ ), which is less than the square root of the AVE for law-abiding climate ( $\sqrt{0.72} = 0.85$ ) and less than the square root of the AVE for use of code of ethics ( $\sqrt{0.63}=0.79$ ), providing evidence of discriminant validity.

-----  
Insert Table 1 about here  
-----

**Tests for sources of bias**

We conducted multiple statistical tests to rule out common method bias (CMB). CMB represents the risk that results can be biased in an unpredictable manner when data on both the independent and dependent variable are collected from the same source, such as a survey. The first test was conducted through our initial CFA which demonstrated the validity of our constructs, as explained previously. If CMB exists in our data, a single factor should have emerged that accounts for most of the covariance in the independent and dependent variables (Podsakoff and Organ, 1986). However, the CFA produced distinct factors with Eigen values greater than 1, with the first factor accounting for 31% of the variance, demonstrating that a common factor was not present in the data. Two iterations of Harman’s single factor test were conducted to test for CMB. Firstly, we used another CFA to compare our model to a model constrained to a single factor (Podsakoff et al., 2003). A significantly worse fit for the single factor model provides evidence against CMB. Linking all variables to a single factor produced a  $\chi^2=986.7$  with d.f. = 119, in contrast to the measurement model, which produced a  $\chi^2=147.4$  with d.f. = 74, demonstrating a significantly improved fit for the latter ( $p < 0.001$ ). Secondly, we used a procedure recommended by Podsakoff et al. (2012) based on adding another common methods factor to the original measurement model. The factor accounted for only 4.58% of the model variance. Furthermore, the factor loadings of all items were below 0.31 with the exception of a single item. Finally, the common methods factor did not exhibit internal reliability or discriminate validity, producing a composite reliability of 0.58 and an AVE of 0.003, which provides further support that our results do not suffer from CMB.

It is worthwhile noting that our research design inherently alleviates some concern for common method bias (CMB) in light of our survey-based approach. As mentioned before, data for some variables, namely CSR certification, number of employees, and sales were obtained from sources external to the survey. Furthermore, since CMB has been shown to decrease when additional independent variables suffering from CMB are included in a regression equation (Siemsen et al., 2010), our multivariate approach to hypothesis testing as outlined in the next section of this paper helps to alleviate concern. Furthermore, since interaction terms can be severely deflated due to CMB and thus more difficult to

detect (Siemsen et al., 2010), significant interaction effects associated with our moderating hypotheses should be an indication that issues pertaining to CMB are not biasing results.

We also attempted to detect various response biases. Results of chi-square tests demonstrated no significant differences between respondents and non-respondents based on geographic location or firm size. A series of ANOVA tests were also conducted to test for differences between early respondents (those who answered the survey within the first three email mailings) and late respondents (those who answered the survey after the first three email mailings) to responses on all survey items, revealing no significant differences. Lastly, similar ANOVA tests were also conducted to test for differences between email respondents and the ten responses received through physical mail, again, revealing no significant differences across all survey items.

### **Hypothesis testing**

Hypotheses were tested using OLS regression with standard errors clustered at the city level, the results of which are featured in Table 2.

To alleviate concerns that the relatively small number of clusters in our data (15) is underestimating standard errors and thus biasing our results (Cameron et al., 2008), we ran our regressions using the wild bootstrap method of clustering that is recommended for more accurate standard errors when a small number of clusters are used. Model 1 shows the results pertaining to the main effect hypothesis pertaining to regulatory burden, while Model 2 shows the results pertaining to the moderation hypotheses of organizational practices.

Hypothesis 1 posited that perceived regulatory burden would lower the extent to which a law-abiding climate exists at a firm. From model 1, it can be seen that perceived regulatory burden had a significant negative effect on law-abiding climate ( $\beta = -0.28, p < 0.01$ ), confirming our hypothesis.

In Hypothesis 2, we predicted that perceived regulatory burden would affect the presence of a law-abiding climate differently based on whether a firm was certified to a CSR standard. The main effect of CSR certification is only significant at the 10% level and has a negative coefficient ( $\beta = -0.25, p < 0.1$ ), providing partial support that adoption of such a standard alone has a negative impact on law-abiding climate. The associated interaction term is significant and negative ( $\beta = -0.51, p < 0.01$ ), indicating that CSR certification amplifies the negative effect of perceived regulatory burden on law-abiding climate, contrary to our prediction.

In Hypothesis 3, we predicted that the extent to which a code of ethics is used at a firm moderates the relationship between perceived regulatory burden and the presence of law-abiding climate. First, the main effect of code-of-ethics use is both significant and positive ( $\beta = 0.37, p < 0.01$ ), indicating that greater use of a code of ethics by a firm increases the extent

to which it has a law-abiding climate. Since code-of-ethics use is a continuous variable, to facilitate the interpretation of its moderating influence, we present both the main interaction term as well as the conditional interaction terms. While the main interaction term evaluates the overall significance of code-of-ethics use, the conditional interaction terms examine the range of values at which it has a significant moderating influence. Although the main interaction term is not significant, the conditional interaction terms evaluated at the value of the mean of code-of-ethics use as well as one standard deviation below the mean and its maximum value are more telling of the exact nature of the moderating effect.<sup>2</sup> Whereas the interaction term at the maximum value of code of ethics use is not significant, the interaction terms at both one standard deviation below the mean and at the mean are both significant ( $p < 0.1$  and  $p < 0.05$ , respectively). Furthermore, the magnitude of the coefficient of the conditional interaction terms rises going from one standard deviation below the mean ( $\beta = -0.30$ ) to the mean ( $\beta = -0.20$ ), indicating that an increase in the use of code of ethics has a positive moderating influence at this range of values. Taking into consideration the conditional interaction effects together, the results provide support for Hypothesis 3, and moreover, the importance of substantively adopting codes-of-ethics within firms; the extent to which an ethics code is used weakens the negative effect of regulatory burden on the extent to which a firm has a law-abiding climate, with the added caveat that the moderation effect applies only when code-of-ethics use is increased from an initially low level.

## Discussion

### Implications

Our study aimed to explore the determinants of ethical climate particularly relevant for the context of developing countries. In doing so, we focused on law-abiding climate in particular for its wide-spread applicability across firms and its relation to unlawful conduct, a pervasive problem in developing contexts. Primary data was collected on Mexican firms and analyzed using OLS regression with standard errors clustered at the city level to test our hypotheses.

Consistent with our prediction, a manager's perception of regulatory burden reduces the extent to which the firm has a law-abiding climate. This finding suggests that firms in developing contexts, in which regulation is both common and considered unpredictable, adapt to their environment by placing less emphasis on norms and ethical decision criteria that promote adherence to the rules of the regulatory process.

We examined the moderating effects of socially responsible organizational practices designed to promote internal ethics on the relationship between perceived regulatory burden and law-abiding climate. Our findings reflect the importance of substantively adopting such practices in order to foster law-abiding climates in light of adverse contextual influences.

---

<sup>2</sup> The conditional interaction was evaluated at the maximum value of use of code of ethics rather than one standard deviation above the mean because the latter is outside the range of values for the variable.

Surprisingly, we found that certification to a CSR standard enhances the negative relationship between perceived regulatory burden and the extent to which a firm has a law-abiding climate, opposite to our prediction. We reason that this finding may be due to the symbolic enforcement of the ESR certification in Mexico. As King and Lenox (2000) discovered in a study of a self-regulatory program without explicit sanctions in the chemical industry, not only was the program ineffective in reducing the emissions of program participants, it also created opportunism. Given that participation in the program provided some relief from stakeholder pressure, participants actually become worse polluters after joining. While the certification process for ESR includes a self-report survey and supporting documentation subject to external review (Cemefi, 2016), it is similar to the program examined in King and Lenox (2000) in its lack of explicit sanctions against undesired behaviour. This situation may be underlying the surprising effect in which certification exacerbates (rather than inhibits) tendencies of firms to stray away from law-abiding climates when faced with regulatory burden. Firms are provided the signalling benefits of certification that are independent of its actual implementation, effectively causing it to be a form of "CSR-washing" in which there is a disconnect between the positive image projected to stakeholders from the certification and a firm's actual internal practices (Boiral et al., 2017).

Managers thinking of adopting private CSR certifications without sanctions should be leery of their ability to prevent firms from straying from law-abiding climates. Furthermore, the ability of such certifications to signal desired behaviour may be tarnished if they are not only ineffective, but exacerbate the type of conduct they are intended to deter, confirming stakeholders' suspicions that self-serving motivations drive CSR which raises doubts on whether the firm is ethical or socially responsible (Hur and Kim, 2017). In addition, it highlights the importance of the role of stakeholders, such as trade unions and NGOs, who have been found to have a positive influence on firms' internalization of CSR practices (Boiral et al., 2017), in applying pressure on firms in developing contexts to substantively adopt CSR certifications.

Our results do show that codes of ethics that are adopted more substantively by firms, by being used more extensively to guide strategic decisions, reduce the inclination of firms to stray away from law-abiding climates caused by perceived regulatory burden. But interestingly, this moderating relationship only holds when the use of codes of ethics increases from an initially low level. This finding bodes well for managers in developing countries who aim to foster law-abiding ethical climates given that a substantive code of ethics is under the direct control of firms as a cultivable organizational practice. However, the diminishing value of codes of ethics in nurturing such an ethical climate in light of perceived regulatory burden implies that firms cannot depend too heavily on them.

### **Limitations and future research directions**

Socially desirable response is an inherent challenge in ethics studies such as ours that involve self-responses from corporate managers. While significant measures were taken to limit the chance of socially desirable responses affecting our data, this risk cannot be ruled out entirely.

Obtaining data from firms in a single country provided the benefit of a homogenous sample in which unobservable, country-level factors are inherently controlled. This is an appropriate approach for our study since we focus our analysis on managerial perceptions of an environmental factor, regulatory burden, which is likely to vary across firms within a country as opposed to a more objective measure. The benefit of a cross-national sample is that it can incorporate socio-cultural variables since they are more likely to differ across countries than within countries (e.g. Martin et al., 2007, Cullen et al., 2004). Future studies can be enriched by incorporating socio-cultural variables, another key aspect of anomie theory, which likely influences the mindset of actors to consider illegitimate means as acceptable. Accordingly, future ethical climate research examining the influence of environmental factors can use a cross-national sample of firms to conjointly examine the influence of not only environmental factors, but also cultural values.

While we speculate that our study's finding that CSR strengthens the negative relationship between perceived regulatory burden and law-abiding climate is due to the symbolic nature of the specific CSR certification we examined, our claim cannot be considered conclusive since we tested only one type of certification, and thus, did not vary this measure in terms of its substantive vs. symbolic nature. As such, a future research opportunity lies in investigating this finding further by incorporating CSR certifications that vary in substantiveness to see whether they differ in how they moderate the relationship between contextual factors in developing countries and desirable ethical climates of firms.

## REFERENCES

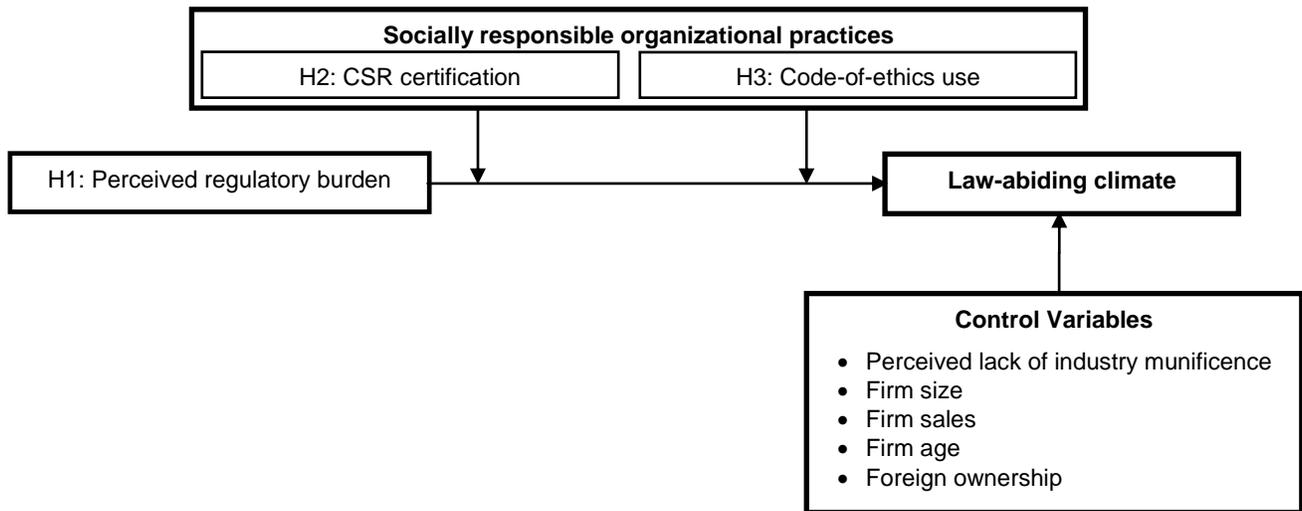
- Agarwal, J. and Malloy, D.C. 1999. Ethical work climate dimensions in a not-for-profit organization: An empirical study. *Journal of Business Ethics* **20**(1): 1-14. DOI: <https://doi.org/10.1023/A:1005974718602>.
- American Chamber of Commerce of Mexico, A.C. 2017. <http://www.amcham.com.mx/> [5th May 2017]
- Arnaud, A. 2010. Conceptualizing and measuring ethical work climate development and validation of the ethical climate index. *Business & Society* **49**(2): 345-358. DOI: <https://doi.org/10.1177/0007650310362865>.
- Ashforth, B.E., Gioia, D.A., Robinson, S.L. and Trevino, L.K. 2008. Re-viewing organizational corruption. *Academy of Management review* **33**(3):670-684. DOI: <https://doi.org/10.5465/AMR.2008.32465714>.
- Berman, S.L., Wicks, A.C., Kotha, S. and Jones, T.M. 1999. Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance. *Academy of Management journal* **42**(5): 488-506. DOI: <https://doi.org/10.2307/256972>.
- Bernard, T.J. 1987. Testing structural strain theories. *Journal of Research in Crime and Delinquency* **24**(4): 262-280. DOI: <https://doi.org/10.1177/0022427887024004002>.

- Boiral, O., Heras-Saizarbitoria, I. and Testa, F., 2017. SA8000 as CSR-Washing? The Role of Stakeholder Pressures. *Corporate Social Responsibility and Environmental Management* **24**(1): 57-70. DOI: <https://doi.org/10.1002/csr.1391>.
- Boyd, B.K., Dess, G.G. and Rasheed, A.M. 1993. Divergence between archival and perceptual measures of the environment: Causes and consequences. *Academy of Management Review* **18**(2): 204-226. DOI: <https://doi.org/10.5465/AMR.1993.3997514>.
- Cameron, A.C., Gelbach, J.B. and Miller, D.L.2008. Bootstrap-based improvements for inference with clustered errors. *The Review of Economics and Statistics* **90**(3) :414-427. DOI: <https://doi.org/10.1162/rest.90.3.414>.
- Carneiro, J., da Silva, J.F. and da Rocha, A., 2011. Strategic profiles of Brazilian exporters and performance implications. *Journal of Business Research* **64**(3): 250-257. <https://doi.org/10.1016/j.jbusres.2009.11.009>
- Carroll AB, Buchholtz AK. 2003. *Business and Society: Ethics and Stakeholder Management 5th edition*. South-Western: Cincinnati, OH.
- Cemefi. 2017.<http://Www.cemefi.org/esr> [24th May 2017]
- Cullen, J.B., Parboteeah, K.P. and Hoegl, M. 2004. Cross-national differences in managers' willingness to justify ethically suspect behaviors: A test of institutional anomie theory. *Academy of Management Journal* **47**(3): 411-421. DOI: <https://doi.org/10.2307/20159590>.
- Cullen, J.B., Victor, B. and Stephens, C. 1989. An ethical weather report: Assessing the organization's ethical climate. *Organizational dynamics* **18**(2): 50-62. DOI: [https://doi.org/10.1016/0090-2616\(89\)90042-9](https://doi.org/10.1016/0090-2616(89)90042-9).
- Doh, J. P., Rodriguez, P., Uhlenbruck, K., Collins, J., & Eden, L. 2003. Coping with corruption in foreign markets. *Academy of Management Executive* **17**(3): 114–129. DOI: <https://doi.org/10.5465/AME.2003.10954775>.
- EDGE . 2001 . *La Corrupcion Gobierno-Empresas en Mexico: Perspectivas del Sector Privado*. Centro de Estudios Estrategicos. Tecnologico de Monterrey: Monterrey, Mexico.
- Ernst & Young (2015). Europe, Middle East, India and Africa Fraud Survey 2015. [http://www.ey.com/Publication/vwLUAssets/ey-emeia-fraud-survey/\\$FILE/ey-emeia-fraud-survey.pdf](http://www.ey.com/Publication/vwLUAssets/ey-emeia-fraud-survey/$FILE/ey-emeia-fraud-survey.pdf) [12th May 2017].
- Ernst & Young (2016). Global Fraud Survey 2016. [http://www.ey.com/Publication/vwLUAssets/ey-global-fraud-survey-2016/\\$FILE/ey-global-fraud-survey-final.pdf](http://www.ey.com/Publication/vwLUAssets/ey-global-fraud-survey-2016/$FILE/ey-global-fraud-survey-final.pdf). [12th May 2016].
- Fornell, C. and Larcker, D.F. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research* **18**(1): 39-50. DOI: <https://doi.org/10.2307/3151312>.
- Fritzsche, D.J. 2000. Ethical climates and the ethical dimension of decision making. *Journal of Business Ethics* **24**(2): 125-140. DOI: <https://doi.org/10.1023/A:1006262914562>.
- Hur, W.M. and Kim, Y., 2017. How Does Culture Improve Consumer Engagement in CSR Initiatives? the Mediating Role of Motivational Attributions. *Corporate Social Responsibility and Environmental Management*. DOI: <https://doi.org/10.1002/csr.1432>.
- Jambulingam, T., Kathuria, R. and Doucette, W.R. (2005). Entrepreneurial orientation as a basis for classification within a service industry: the case of retail pharmacy industry. *Journal of operations management* **23**(1): 23-42. DOI: <https://doi.org/10.1016/j.jom.2004.09.003>.
- Johnson, J.L., Martin, K.D. and Saini, A. (2011). Strategic culture and environmental dimensions as determinants of anomie in publicly-traded and privately-held firms. *Business Ethics Quarterly* **21**(03): 473-502. DOI: <https://doi.org/10.5840/beq201121327>.

- Kaufmann, D. 1997. Corruption: The facts. *Foreign Policy* **107**(Summer): 114–131. DOI: <https://doi.org/10.2307/1149337>.
- Khanna, T. and Palepu, K. 1997. Why focused strategies may be wrong for emerging markets. *Harvard business review* **75**(4); 41-48.
- King, A.A. and Lenox, M.J. (2000). Industry self-regulation without sanctions: The chemical industry's responsible care program. *Academy of management journal* **43**(4): 698-716. DOI: <https://doi.org/10.2307/1556362>
- King, A., Lenox, M.J. and Terlaak, A. (2005). The strategic use of decentralized institutions: Exploring certification with the ISO 14001 management standard. *Academy of management journal* **48**(6):1091-1106. DOI: <https://doi.org/10.5465/AMJ.2005.19573111>.
- Kohlberg, L. K. 1981. *The Philosophy of Moral Development*. Harper & Row: New York, NY.
- Li, H. and Atuahene-Gima, K. 2001. Product innovation strategy and the performance of new technology ventures in China. *Academy of Management Journal* **44**(6): 1123-1134. DOI: <https://doi.org/10.2307/3069392>
- Liu, A.M., Fellows, R. and Ng, J. (2004). Surveyors' perspectives on ethics in organisational culture. *Engineering, Construction and Architectural Management* **11**(6):438-449.
- Martin, K.D. and Cullen, J.B. 2006. Continuities and extensions of ethical climate theory: A meta-analytic review. *Journal of Business Ethics* **69**(2):175-194. DOI: <https://doi.org/10.1007/s10551-006-9084-7>
- Martin, K.D., Cullen, J.B., Johnson, J.L. and Parboteeah, K.P. 2007. Deciding to bribe: A cross-level analysis of firm and home country influences on bribery activity. *Academy of Management Journal* **50**(6): 1401-1422. DOI:<https://doi.org/10.5465/AMJ.2007.28179462>.
- Méon, P.G. and Weill, L. 2010. Is corruption an efficient grease?. *World development* **38**(3): 244-259. DOI: <https://doi.org/10.1016/j.worlddev.2009.06.004>
- Merton, R.K. (1968). *Social theory and social structure*. Simon and Schuster: New York, NY.
- Merton, R. K. 1995. Opportunity structure: The emergence, diffusion, and differentiation of a sociological concept, 1930s-1950s. In *The legacy of anomie theory*, Adler, F., Laufer, S.W. Transaction Publishers: London, U.K.
- Mexican Institute for Competitiveness Instituto (Mexicano para la Competitividad A.C.). 2015. *Índice de Competitividad Internacional, La Corrupción en México: Transamos y No Avanzamos*.[http://imco.org.mx/indices/documentos/2015\\_ICI\\_Libro\\_La%20corrupcion\\_en\\_Mexico.pdf](http://imco.org.mx/indices/documentos/2015_ICI_Libro_La%20corrupcion_en_Mexico.pdf) [14th April 2017].
- Montiel, I., Husted, B.W. and Christmann, P. 2012. Using private management standard certification to reduce information asymmetries in corrupt environments. *Strategic Management Journal* **33**(9): 1103-1113. DOI: <https://doi.org/10.1002/smj.1957>.
- Morris, S.A. 1997. Internal effects of stakeholder management devices. *Journal of Business Ethics* **16**(4): 413-424. DOI: <https://doi.org/10.1023/A:1017900209031>.
- Nunnally, J.C. and Bernstein, I.H. 1994. The assessment of reliability. *Psychometric theory* **3**(1): 248-292.
- O'Fallon, M.J. and Butterfield, K.D. 2005. A review of the empirical ethical decision-making literature: 1996–2003. *Journal of business ethics* **59**(4): 375-413. DOI: <https://doi.org/10.1007/s10551-005-2929-7>.
- Peterson, D.K. 2002. The relationship between unethical behavior and the dimensions of the ethical climate questionnaire. *Journal of Business Ethics* **41**(4): 313-326. DOI: <https://doi.org/10.1023/A:1021243117958>
- Phillips, L.W. 1981. Assessing measurement error in key informant reports: A methodological note on organizational analysis in marketing. *Journal of Marketing Research* **18**(4): 395-415. DOI: <https://doi.org/10.2307/3151333>.

- Podsakoff, P.M. and Organ, D.W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of management* **12**(4): 531-544. DOI: <https://doi.org/10.1177/014920638601200408>
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology* **88**(5): 879.
- Podsakoff PM, MacKenzie SB, Podsakoff NP. 2012. Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology* **63**: 539–569. DOI: <http://dx.doi.org/10.1037/0021-9010.88.5.879>
- Quinn, D.P. and Jones, T.M. 1995. An agent morality view of business policy. *Academy of Management Review* **20**(1): 22-42. DOI: <https://doi.org/10.5465/AMR.1995.9503271989>.
- Ramos-Garza, C., 2009. TMT strategic consensus in Mexican companies. *Journal of Business Research* **62**(9): 854-860. <https://doi.org/10.1016/j.jbusres.2008.10.003>
- Randall, D.M. and Fernandes, M.F., 1991. The social desirability response bias in ethics research. *Journal of business ethics* **10**(11): 805-817. DOI: <https://doi.org/10.1007/BF00383696>.
- Reinikka, R. and Svensson, J. 2006. Using micro-surveys to measure and explain corruption. *World Development* **34**(2): 359-470. DOI: <https://doi.org/10.1016/j.worlddev.2005.03.009>
- Rosenfeld, R. and Messner, S.F. 1997. Markets, morality, and an institutional anomie theory of crime. In *The future of anomie theory*, N. Passas & R. Agnew(Eds.). Northeastern University Press: Boston, MA: 207-224.
- Schminke, M., Ambrose, M.L. and Neubaum, D.O. 2005. The effect of leader moral development on ethical climate and employee attitudes. *Organizational Behavior and Human Decision Processes* **97**(2): 135-151. DOI: <https://doi.org/10.1016/j.obhdp.2005.03.006>.
- Siemsen, E., Roth, A. and Oliveira, P., 2010. Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational research methods* **13**(3): 456-476. DOI: <https://doi.org/10.1177/1094428109351241>.
- Simha, A. and Cullen, J.B. 2012. Ethical climates and their effects on organizational outcomes: Implications from the past and prophecies for the future. *The Academy of Management Perspectives* **26**(4): 20-34. DOI: <https://doi.org/10.5465/amp.2011.0156>.
- Stevens, J.M., Kevin Steensma, H., Harrison, D.A. and Cochran, P.L. 2005. Symbolic or substantive document? The influence of ethics codes on financial executives' decisions. *Strategic Management Journal* **26**(2): 181-195. DOI: <https://doi.org/10.1002/smj.440>.
- Victor, B. and Cullen, J.B. 1987. A theory and measure of ethical climate in organizations. *Research in corporate social performance and policy* **9**(1):51-71.
- Victor, B. and Cullen, J.B. 1988. The organizational bases of ethical work climates. *Administrative science quarterly* **33**(1):101-125. DOI: <https://doi.org/10.2307/2392857>.
- Weaver G, Trevino L, Cochran L. 1999. Corporate ethics practices in the mid-1990's: an empirical study of the Fortune 1000. *Journal of Business Ethics* **18**(3): 283–294. DOI: <https://doi.org/10.1023/A:1005726901050>.
- Westphal, J. D., & Zajac, E. J. 1994. Substance and Symbolism in CEOs' Long-Term Incentive Plans. *Administrative Science Quarterly* **39**(1994): 367-390. DOI: <https://doi.org/10.2307/2393295>.
- Wimbush, J.C., Shepard, J.M. and Markham, S.E. 1997. An empirical examination of the relationship between ethical climate and ethical behavior from multiple levels of analysis. *Journal of Business Ethics* **16**(16): 1705-1716. DOI: <https://doi.org/10.1023/A:1017952221572>

**FIGURE 1**  
**Conceptual Model**



**TABLE 1**

Table 1. Construct correlations, means, and standard deviations

	1	2	3	4	5	6	7	8	9
1. Law-abiding climate									
2. Regulatory burden	-0.26								
3. CSR certification	-0.04	-0.09							
4. Code-of-ethics use	0.29	-0.14	-0.02						
5. Lack of industry munificence	-0.15	0.13	0.12	-0.23					
6. Size (# of employees)	-0.04	-0.02	0.21	0.13	0.11				
7. Sales	0.13	-0.05	0.14	0.09	0.13	0.50			
8. Foreign ownership	0.20	-0.08	-0.03	0.09	-0.01	0.25	0.36		
9. Age	0.06	-0.04	-0.02	0.01	0.24	0.28	0.34	0.04	
Mean	6.34	3.81	0.09	6.27	2.56	1.44	0.38	1.60	26.17
Standard deviation	0.63	1.52	0.29	1.01	1.09	0.59	0.49	0.84	21.71

<sup>a</sup>Correlations at 0.15 and above are significant at  $p < 0.05$ ; Correlations at 0.20 and above are significant at  $p < 0.01$ , with the exception of the correlation between age and size, which is significant at  $p < 0.05$

**TABLE 2**

Table 2. Results of OLS analysis of law-abiding climate, with standard errors clustered at the city level, using wild bootstrap clustering (n=118)

Dependent variable: law-abiding climate		Parameter Estimates			
		Model 1		Model 2	
		$\beta$	p-value	$\beta$	p-value
Explanatory variables	Associated hypothesis				
<b>Key Independent Variables:</b>					
Regulatory burden	H1	-0.277***	0.005	-0.201**	0.045
CSR certification				-0.251*	0.065
COE use				0.371***	0.001
Regulatory burden x CSR certification	H2			-0.512***	0.005
Regulatory burden x COE use				0.096	0.520
Regulatory burden (COE use = mean -1 s.d)	H3			-0.296**	0.045
Regulatory burden (COE use = mean)				-0.200**	0.040
Regulatory burden (COE use = max value)				-0.114	0.510
<b>Controls</b>					
Lack of industry munificence		-0.164*	0.075	-0.026	0.635
Size (# of employees)		-0.206	0.180	-0.171	0.190
Foreign ownership		0.271	0.340	0.223	0.320
Sales		0.189**	0.020	0.124	0.155
Age		0.003	0.470	0.002	0.750
$r^2$			0.16		0.30
P value			<0.05		<0.01

<sup>a</sup> \* P<0.1, \*\* P<0.05, \*\*\*P<0.01

## APPENDIX

### *Study measures*

#### **Law and code ethical climate** (Victor and Cullen, 1988)

Construct reliability = 0.809 ; AVE = 0.63; range of loadings : 0.717- 0.843  
(scale items anchored by 1= “strongly disagree” and 7= “strongly agree”)

*Please rate your level of agreement with the following statements.*

1. In our company, people are expected to comply with the law and professional standards over and above other considerations.
2. In our company, the law or ethical code of their profession is the major consideration.
3. In our company, people are expected to strictly follow legal or professional standards.
4. In our company, the first consideration is whether a decision violates any law.

#### **Regulatory burden** (EDGE, 2001, reverse coded)

Construct reliability = 0.852 ; AVE = 0.67; range of loadings : 0.631- 0.898  
(scale items anchored by 1= “strongly disagree” and 7= “strongly agree”)

*Please rate your level of agreement with the following statements.*

1. Our company usually has clear and accurate information about the requirements and obligations that government authorities have established to participate in business.
2. During the process of defining new laws, policies or regulations affecting our company, the government generally keeps our company informed.
3. In the event of significant changes in laws, policies or regulations affecting our company, the government generally considers our firm's opinions or that of our business association
4. In general the interpretation of federal laws, policies or regulations affecting our company's operations are consistent and predictable.

#### **Code-of-ethics use** (Stevens et. al, 2005)

Construct reliability = 0.902 ; AVE = 0.72 ; range of loadings : 0.804-0.891  
(scale items anchored by 1= “strongly disagree” and 7= “strongly agree”)

*How helpful do you feel is your company's code of ethics in each of the following matters?*

1. Making financial decisions.
2. Making personnel decisions.
3. Making decisions about information disclosure.
4. Responding to questions about company actions.
5. Aiding your company's planning processes.

#### **CSR certification** (Cemefi, 2016)

Measured according to whether a firm is certified to ESR for the year 2015 (1= yes, 0 = no)

#### **Controls**

##### **Industry munificence** (Jambulingam et. al, 2005, reverse coded)

Construct reliability = 0.871 ; AVE = 0.72; range of loadings : 0.813-0.877  
(scale items anchored by 1= “strongly disagree” and 7= “strongly agree”)

*Please rate your level of agreement with the following statements.*

1. There are ample opportunities for growth in our company's industry.
2. Our company's industry will support continued growth of our company.
3. Prospects for growth in our current industry environment are good.
4. Our industry is rich with opportunities for growth.

**Firm size** (amcham database): number of employees in the firm's headquarters (1= 1-100, 2= 101- 1000, 3 = 1000 or more)

**Foreign ownership** (survey question): whether the firm is majority owned by a foreign party (1=yes, 0=no)

**Sales** (amcham database): firm sales (1=0- 94.9 million pesos, 2= 95-249.9 million pesos, 3=250 million pesos or greater)

**Firm age**(survey question)