



Institutional Pressures and Organizational Characteristics: Implications for Environmental Strategy

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Working Paper

11-050

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IMPLICATIONS FOR ENVIRONMENTAL STRATEGY**

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November 1, 2010

Prepared for the *Oxford Handbook of Business and the Environment*
(Oxford University Press, 2011)
Co-edited by Andrew J. Hoffman and Tima Bansal

¹ The authors gratefully acknowledge the excellent research assistance provided by Jenna Bernhardson, and financial support from the Division of Research and Faculty Development at the Harvard Business School.

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Abstract

A broad literature has emerged over the past decades demonstrating that firms' environmental strategies and practices are influenced by stakeholders and institutional pressures. Such findings are consistent with institutional sociology, which emphasizes the importance of regulatory, normative and cognitive factors in shaping firms' decisions to adopt specific organizational practices, above and beyond their technical efficiency. Similarly, institutional theory emphasizes legitimation processes and the tendency for institutionalized organizational structures and procedures to be taken for granted, regardless of their efficiency implications. However, the institutional perspective does not address the fundamental issue of business strategy necessary to explain the persistence of substantially different strategies among firms that are subjected to comparable levels of institutional pressures. In this chapter, we present current research arguing that such firms adopt heterogeneous sets of environmental management practices despite facing common institutional pressures because organizational characteristics lead managers to interpret these pressures differently.

INTRODUCTION

Why do some firms adopt environmental management strategies that go beyond regulatory compliance? A broad literature has emerged over the past decades demonstrating that firms' environmental strategies and practices are influenced by external stakeholders and institutional pressures, including from regulators and competitors (Aragón-Correa, 1998; Christmann, 2000; Dean and Brown, 1995; Delmas, 2003; Hart, 1995; Nehrt, 1996; Nehrt, 1998; Russo and Fouts, 1997; Sharma and Vredenburg, 1998) and non-governmental organizations (Lawrence and Morell, 1995).

Such findings are consistent with institutional sociology, which emphasizes the importance of regulatory, normative and cognitive factors in shaping firms' decisions to adopt

specific organizational practices, above and beyond their technical efficiency (DiMaggio and Powell, 1983; Lounsbury, Fairclough and Lee, Chapter 9 this volume). Several authors have built on institutional theory to explain firm's adoption of environmental strategies. Jennings & Zandbergen (1995) argue that because coercive forces—primarily in the form of regulations and regulatory enforcement—have been the main impetus of environmental management practices, firms throughout each industry have implemented similar practices. Delmas (2002) proposed an institutional perspective to analyze the factors that led companies in Europe and in the United States to adopt the ISO 14001 Environmental Management System (EMS) international standard. She described how the regulatory, normative, and cognitive aspects of the institutional environment within a specific country affect the costs and potential benefits of ISO 14001 adoption, and how this which lead to different adoption rates across countries. Other researchers have explored how companies operating in different organizational fields are subject to different institutional pressures.

However, the institutional perspective does not address the fundamental issue of business strategy: why do organizations subject to the same level of institutional pressure pursue different strategies? In other words, how might institutional forces lead to heterogeneity, rather than homogeneity, within an industry? Hoffman (2001) argues that while organizations do not simply react to the pressures dictated by the organizational field, they also do not act completely autonomously without the influence of external bounds. Institutional and organizational dynamics are tightly linked.

Other research has analyzed how organizational characteristics affect firms' adoption of "beyond compliance" strategies. These studies have examined the influence of organizational context and design (Ramus and Steger, 2000; Sharma, 2000; Sharma, Pablo, and Vredenburg, 1999) and organizational learning (Marcus and Nichols, 1999). Others have focused on

individuals and managers, examining the role of leadership values (Egri and Herman, 2000), and managerial attitudes (Cordano and Frieze, 2000; Sharma, 2000; Sharma et al., 1999).

While each study has provided a piece of the puzzle, there is still a lack of understanding of the conditions under which institutional pressures and organizational characteristics explain the adoption of beyond compliance strategies (see Figure 1 below). In this chapter, we first describe the empirical research that examines how pressures from constituents of firms' institutional environments affect their adoption of environmental strategies (relationship #1 in Figure 1). We then review the research that examines the moderating role of organizational characteristics on this relationship (relationship #2 in Figure 1). Finally, we offer some directions for future research.

Insert Figure 1 here

ENVIRONMENTAL STRATEGIES

Firms can adopt various types of voluntary environmental strategies that seek to reduce the environmental impacts of operations beyond regulatory requirements. For example, firms can implement EMS elements by creating an environmental policy, developing a formal training program, or instigating routine environmental auditing (Delmas, 2000). In addition, management can choose to have the comprehensiveness of their EMS validated by a third party by seeking certification to the ISO 14001 Environmental Management System Standard (Toffel, 2000). Management can also convey the importance of environmental management by including it as a criterion in employee performance evaluations (Nelson, 2002).

Companies can also seek to improve relations with regulators and signal a proactive environmental stance by participating in government or industry sponsored voluntary programs (Delmas and Terlaak, 2002; Delmas and Montes-Sancho, 2011; Short and Toffel, 2010; Toffel

and Short, Forthcoming). Indeed, the US EPA, some industry associations, and several NGOs have recently created voluntary standards to provide incentives for firms to go beyond minimal regulatory requirements. For example, the US EPA has developed several voluntary agreements between governmental agencies and firms to encourage technological innovation or reduce pollution while providing relief from particular procedural requirements (Delmas and Terlaak, 2001: 44). Industry programs include Responsible Care and Sustainable Slopes (King and Lenox, 2000; Rivera and de Leon, 2003), and NGO programs include The Natural Step and the Global Reporting Initiative Guidelines (Bradbury and Clair, 1999; Hedberg and von Malmberg, 2003).

Companies can also work directly with customers and suppliers to improve their environmental performance. Furthermore, they may engage in “systematic communication, consultation and collaboration with their key stakeholders...(and) host stakeholder forums and establish permanent stakeholder advisory panels at either the corporate level, the plant level, or to address a specific issue” (Nelson, 2002: 18) .

INSTITUTIONAL PRESSURES: INFLUENCE ON ENVIRONMENTAL STRATEGIES

The new institutional perspective suggests that firms obtain legitimacy by conforming to the dominant practices within their institutional field (DiMaggio and Powell, 1983; Scott, 1992). An organizational field includes “those organizations that...constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products” (DiMaggio and Powell, 1983: 148).

Several scholars have argued that examining only institutional forces is not sufficient to explain divergent organizational change (D'Aunno, Succi, and Alexander, 2000; Kraatz and Zajac, 1996). Kraatz and Zajac (1996) investigated the effect of both the institutional and technical or market environment on organizational change and found pressures from the

technical environment to be an important driver of organizational change. D'Aunno, Succi and Alexander (2000: 700-1) argue that “both institutional and market forces are likely to affect divergent change to varying degrees in different organizational fields and, probably, in different historical periods. Moreover, institutional and market forces may interact in important ways to affect organizational change, and future research should aim to specify their roles more precisely.” This speaks to the need to define precisely the external forces that pressure firms to engage in organizational change.

In this chapter, instead of characterizing market forces as being in opposition to institutional forces, we consider that institutional forces can bound and define rational argument and approaches (Fligstein, 1990). In this approach, we differentiate two main sets of constituents of the organizational field: market and non-market constituents (Baron, 1995) and argue that both may be subjected to institutional forces. In doing so, we build on Hoffman’s (2001) insight that buyers and other market actors are constituents within an organizational field.

Firms engage with market constituents (e.g., customers, suppliers, competitors, shareholders) via economic transactions, whereas non-market constituents (e.g., regulators, environmental organizations) are interested in social, political, and legal issues (Baron, 1995; Baron, 2000). Non-market and market constituents frame environmental management issues differently (Hoffman and Ventresca, 1999). For example, market constituents tend to view environmental issues primarily within the rubric of business performance, focusing on their cost and efficiency implications. On the other hand, non-market constituents such as regulators and activist groups typically view environmental issues as negative externalities and often operate via the legal system and the mass media (e.g., as a court of public opinion).

In this section, we review the empirical evidence that various institutional actors have influenced organizations' environmental practices, focusing on politicians, regulators, local communities, customers, competitors, and shareholders (owners).

Pressures from Non-Market Constituents

Political and regulatory pressures. Government is perhaps the most obvious institutional constituent that influences firms' adoption of environmental practices. Legislation authorizes government agencies to promulgate and enforce regulations, a form of coercive power. Whereas political pressure refers to the level of political support for broader or more stringent laws and regulations, regulatory pressure represents the extent to which regulators threaten to or actually impede a company's operations based on their environmental performance (Delmas and Toffel, 2004).

Many researchers have focused on the influence of enforced legislation and regulations on firms' environmental practices (Carraro, Katsoulacos, and Xepapadeas, 1996; Delmas and Montes-Sancho, 2010; Delmas, 2002; Majumdar and Marcus, 2001; Rugman and Verbeke, 1998). One study found government regulations to be the most frequently cited source of pressure in the adoption of environmental management practices (Henriques and Sadorsky, 1996a).

Several studies have compared institutional environments across different countries, many of which demonstrated that more stringent regulatory environments were associated with higher levels of adoption of beyond compliance environmental practices. Christmann (2004) found that a positive relationship between managers' perception of the stringency of governmental environmental regulation in the country in which they operated and the stringency of their company's internal environmental policy. Governments have also played an important role in firms' decision to adopt ISO 14001 (Delmas and Montes-Sancho, 2011; Delmas, 2002).

Governments can signal their endorsement of ISO 14001 by, for example, enhancing the reputation of adopters. Governments can also facilitate adoption by reducing information and search costs by providing technical assistance to potential adopters. Regulatory pressure was also found to be an important driver of firms' participation in government led voluntary programs (Delmas and Terlaak, 2002). Delmas and Terlaak argued that institutional environments that strengthen the regulator's ability to credibly commit to the objectives of governmental programs were key to the implementation of the voluntary programs.

Within individual countries, research has shown that government pressure, measured by environmental inspections or the threat of legal liabilities, has increased the adoption of voluntary environmental practices. For example, one study showed that companies facing a greater threat of legal liability adopted more environmental management practices (Khanna and Anton, 2002a). Furthermore, the threat of liabilities in a firm's industry, as well as regulations aimed at other industries, was shown to increase the likelihood a firm will publicly disclose environmental practices and strategies (Reid and Toffel, 2009). Firms were more likely to self-disclose environmental regulatory compliance violations if they recently experienced an enforcement measure (like an inspection or being issued a violation) and if they received immunity from prosecution for self-disclosed violations (Laplante and Rilstone, 1996; Short and Toffel, 2008). There is also fairly consistent evidence across many national government voluntary programs that regulatory pressures were important in motivating participation (Delmas and Montes-Sancho, 2010; Delmas and Terlaak, 2001; Maxwell, Lyon, and Hackett, 2000; Rivera and de Leon, 2004; Segerson and Miceli, 1998). In at least one instance, this relationship changed over time, as Delmas and Montes-Sancho (2010) found that regulatory pressure significantly influenced the participation of early adopters of the US Climate Challenge voluntary program but found no evidence that it influenced late adopters.

Community and environmental interest group pressures. Local communities can also impose coercive pressure on companies through their vote in local and national elections, via environmental activism within environmental non-government organizations (NGOs), and by filing citizen lawsuits. Several studies have found that company decisions to adopt environmental management practices are influenced by the desire to improve or maintain relations with their communities (Florida and Davison, 2001). Studies have found that pressure from community groups have influenced firms to adopt environmental plans (Henriques and Sadorsky, 1996a) and government-sponsored voluntary environmental programs (Darnall, Potoski, and Prakash, 2010). Another study based on a survey of ISO 14001 certified companies across 15 countries found that one of the strongest motivating factors to pursue certification was the desire to be a good neighbor (Raines, 2002).

Some communities may be better able than others to encourage plants to adopt environmental practices. Communities with larger minority populations, lower incomes and less education had greater exposure to toxic emissions (Arora and Asundi, 1999; Brooks and Sethi, 1997; Khanna and Vidovic, 2001). Communities with higher incomes, higher population density, and greater participation in environmental and conservation organizations had less exposure to toxic emissions (Kassinis and Vafeas, 2006). One study found that adoption of a US EPA voluntary program was more likely in communities with higher median household income, suggesting that socioeconomic community characteristics could affect plants' decisions to adopt environmental management practices (Khanna and Vidovic, 2001). Greater declines in toxic emissions have been observed among plants located in communities with higher voting rates (Hamilton, 1999) and in states with higher membership in environmental interest groups (Maxwell *et al.*, 2000), both proxies for a community's propensity for collective action.

There are many examples where companies have amended their environmental practices in response to environmental group pressures (Baron, 2003; Lawrence and Morell, 1995; Sharma and Henriques, 2005). For instance, after Mitsubishi Corporation was subject to a protracted consumer boycott led by the Rainforest Action Network (RAN), Mitsubishi announced it would no longer use old-growth forest products (World Rainforest Movement, 1998).

Pressures from Market Constituents

In addition to the non-market pressures described above, market pressures can also lead firms to adopt environmental management practices. Below, we review the literature that explores the influences of customers, industries, and shareholders.

Customer pressures. Pressure from buyers is perhaps the primary mechanism through which quality management standards have diffused (Anderson, Daly, and Johnson, 1999), and has also played a significant role in motivating firms to adopt environmental practices (Delmas and Montiel, 2008). Several studies have found evidence that customer pressure has motivated firms to adopt environmental management practices, with one study noting customers' influence was second only to that of government pressure (Henriques and Sadorsky, 1996b). A recent empirical analysis found customer pressure to be an important determinant of the likelihood of adopting the ISO 14001 standard (Delmas and Toffel, 2008). Others have found that companies customize their response to customer demands depending on the types of information being requested. For example, firms facing customer demand for information on the sustainability of products improved input processes, whereas firms that faced customer demand for product certification embarked on more fundamental changes to their operations including improving environmental efficiency in product design and packaging (Sharma and Henriques, 2005). In addition, companies adopted more comprehensive environmental practices if they sold goods and services directly to consumers (Anton, Deltas, and Khanna, 2004; Khanna and Anton, 2002b).

This suggests that managers perceive retail consumers (as opposed to than commercial and industrial customers) as exerting more pressure on companies to adopt environmental management practices.

Industry pressure. Industry pressure is another important market pressure. For example, multinationals are widely recognized as key agents in the diffusion of practices across national borders by transmitting organizational techniques to subsidiaries and other organizations in the host country (Arias and Guillen, 1998). Firms may also mimic practices that successful leading firms have adopted. In addition, firms respond to customer requirements. Industry trade associations are also a strong driver of firm environmental behavior (Christmann, 2004; Delmas and Montes-Sancho, 2010; King and Lenox, 2000; Lenox and Nash, 2003).

Competitor pressure can also encourage the adoption of EMS (Bremmers et al., 2007). In the U.S. hazardous waste management industry, local competition increased compliance with environmental regulation, though the effect diminished in larger markets (Stafford, 2007). One study found that firms facing little competition were less likely than firms in more competitive markets to decrease their environmental impact (Darnall, 2009).

Several studies have found that industry associations have motivated firms to adopt environmental management practices or participate in voluntary programs (Christmann, 2004; Delmas and Montes-Sancho, 2010; Delmas and Terlaak, 2002; Gunningham, 1995; Lenox and Nash, 2003; Rivera and de Leon, 2004). The decisions of whether to pursue certification and which EMS standard to pursue (ISO 14001 or the European Union's Eco-Audit and Management Scheme) were found to be strongly influenced by pressure from industry associations as well as from regional chambers of commerce, suppliers, and regulators (Kollman and Prakash, 2002). Trade conferences and seminars, representing industry pressure, can also influence environmental aspects of procurement decisions (Sharma and Henriques, 2005). Market

concentration within an industry may also affect environmental management practices; firms with fewer competitors were found to be less likely to reduce their environmental impacts (Darnall, 2009). Trade associations also employ a variety of informal mechanisms to encourage compliance with their own program requirements (Lenox and Nash, 2003). Lenox and Nash (2003) describe how a number of trade associations convene meetings to share implementation experiences among members and how such meetings impose pressure on managers of firms that are falling behind.

The creation of industry self-regulatory institutions often occurs as a result of an accident or controversy, as a way to proactively manage more stringent regulation that would be imposed as a result of the event. The Three Mile Island incident prompted industry executives to create the Institute of Nuclear Power Operation (Rees, 1994). The chemical industry's Responsible Care program was borne out of a deadly accident in Bhopal, India (Gunningham, 1995). As a caveat, some industry-created self-regulatory programs attracted more heavily polluting firms, which can be viewed as a form of adverse selection (Lenox and Nash, 2003).

Industry groups have created other institutions such as the Global Climate Coalition in response to threats of environmental regulations. This group was financed by firms and trade groups in the oil, coal, and auto industries, among others, and campaigned against the idea that the release of greenhouse gases led to global climate change. Its public relations campaigns were sufficiently effective to stir public debate and likely delayed government action (Revkin, 2009).

Firm characteristics vis-a-vis adoption of industry standards have also been investigated. Previous adoption of voluntary environmental standards, such as Responsible Care and ISO 9000, spur diffusion of subsequent standards, like ISO 14001 (Delmas and Montiel, 2008). Larger companies and those with better-known brands and corporate names, more intensive

polluters, and companies in sectors with higher emissions were more likely to participate in the Chemical Manufacturers Association's Responsible Care Program (King and Lenox, 2000).

Shareholder pressures. Several studies have examined efforts of shareholders to influence the environmental management practices of firms. Institutional investor ownership, measured through public pension fund ownership, was found to positively affect corporate social performance (Chatterji and Listokin, 2009). While shareholder resolutions on environmental topics seldom attract enough votes to pass, Reid and Toffel (2009) found that the very presence of an environmental shareholder resolution (many of which called for greater transparency) being targeted at a firm subsequently led its management to become more transparent by publicly reporting its climate change strategy and greenhouse gas emissions. Such shareholder proposals not only had not a direct effect on the targeted company, but also a spillover effect on firms in the same industry as a targeted firm, who also became more transparent (Reid and Toffel, 2009).

Many scholars have observed that shareholder resolutions prompt companies to change their environmental practices through private meetings between management and activists during which the companies agree to adopt some of the proposals' specifications in exchange for the activists withdrawing their proposals (O'Rourke, 2003; Proffitt and Spicer, 2006; Rehbein, Waddock, and Graves, 2004). For example, Amoco resisted calls by nine religious groups that proposed a shareholder resolution that called for the company to adopt the Valdez Principles, but reached a negotiated settlement. In exchange for the withdrawal of the proposal, the company agreed to abide by one of the principles and to publish an environmental progress report (Hoffman, 1996). The company subsequently enacted several other management practices aligned with the Valdez Principles. One study found that this compromise between activists and management was strongly related to more robust (or thorough) disclosure of environmental practices (Marshall, Brown, and Plumlee, 2007).

Examining how companies respond to environmental ratings is another approach to discern the influence of investors on managerial behavior. Chatterji and Toffel (2010) analyzed how firms' responded to KLD's corporate environmental ratings and found that firms that initially received poor ratings subsequently improved their environmental performance more than other firms (including firms that had more positive initial ratings and firms that were never rated). Such improvements were most substantial among poorly-rated firms that were able to make low-cost environmental improvements and that were in highly regulated industries (Chatterji and Toffel, 2010).

Combined pressures. It is important to note that while we described the institutional pressures individually, several studies use a combination of these institutional pressures and compare the differential effects of these pressures or combine them through factor analyses (Delmas, 2001; Delmas and Toffel, 2008). Furthermore the interaction between these institutional pressures is likely to moderate their individual influence on company practices (Bansal and Clelland, 2004). For example, Bansal and Clelland provided insights about how competitors, regulators, and customers can influence investors' assessments of firms' environmental legitimacy (Bansal and Clelland, 2004). As another example, the pressure from environmental groups may encourage the formulation of more stringent regulations. This, in turn, can induce industry leaders to encourage laggard firms to adopt environmental practices. Similarly, following its chemical disaster in Bhopal in 1984, Union Carbide along with other large chemical companies faced mounting public pressure for more stringent safety and environmental regulations. In response, the chemical industry developed and promoted a set of environment, health and safety (EHS) management practices—the Responsible Care program—to chemical industry associations in Canada and the United States (King and Lenox, 2000; Prakash, 2000).

ORGANIZATIONAL CHARACTERISTICS MODERATING THE IMPACT OF INSTITUTIONAL PRESSURES ON ENVIRONMENTAL STRATEGIES

Institutional theory has traditionally described how isomorphic institutional pressures lead to common organizational practices. In the traditions of this framework, persistent heterogeneity among various firms within the same industry might be attributed to differences in the *composition* of their organizational fields. For example, firms located in different states would face different institutional pressures, which could result in dissimilar organizational practices. Differing *levels* of institutional pressure could also lead to heterogeneous activities during any specific period, but ultimately these are purported to result in common organizational structures and practices to ensure legitimacy. As a consequence, few have employed institutional theory to understand questions of strategy, which focus on *persistent differences among organizations that share common organizational fields*. We therefore need more informed theories about how and why organizations respond differently to institutional pressures. While scholars have made significant advances in analyzing how institutional pressures affect firms' decisions to pursue 'beyond compliance' strategies, there remains very limited research about how organizational factors moderate these relationships. Levy and Rothenberg (2002) describe several mechanisms by which institutionalism can encourage heterogeneity. First, they argue that institutional forces are transformed as they permeate an organization's boundaries because they are filtered and interpreted by managers according to the firm's unique history and culture. Second, they describe how an institutional field may contain conflicting institutional pressures that require prioritization by managers. Third, they describe how multinational and diversified organizations operate within several institutional fields—both at the societal and organizational levels—which expose them to different sets of institutionalized practices and norms. In this section, we review the empirical research on the interaction between institutional pressures and

organizational characteristics.

Organizational Functions

One line of research examines how differences in organizational functions moderate how institutional pressures affect firms' responses. Hoffman (2001) theorized that organizations channel institutional pressures to different subunits, which frame these pressures according to their typical functional routines. For example, legal departments interpret pressures in terms of risk and liability, public affairs does so in terms of company reputation, environmental affairs in terms of ecosystem damage and regulatory compliance, and sales departments in terms of potential lost revenues. Consequently, the pressure is managed according to the cultural frame of the unit that receives it: either as an issue of regulatory compliance, human resource management, operational efficiency, risk management, market demand, or social responsibility (Hoffman, 2001). Delmas and Toffel (2008) extend this to hypothesize and demonstrate that corporate assignments of responsibilities to specific departments lead firms to differ in their receptivity to pressures from various stakeholders. In their framework, pressures from external stakeholders are channeled to different organizational functions, which influence how they are received by facility managers. These differences in receptivity are critical because they, in turn, influence organizations' responses in terms of adopting management practices. In other words, some organizations will allow pressures from stakeholders to permeate the organization. For example, firms with powerful legal departments will be more responsive to pressures from regulators while firms with powerful marketing departments will be more responsive to pressures from customers. These functional departments influence managers' sensitivity and responses to institutional pressures in the form of adopting different environmental management practices. Analyzing survey and archival data, Delmas and Toffel (2008) find that organizations that were more receptive to institutional pressure from market constituents (controlling for the amount of

pressure exerted) were more likely to adopt the ISO 14001 Environmental Management System Standard, and that organizations that were more receptive to institutional pressure from non-market constituents (controlling for the amount of pressure exerted) were more likely to adopt government-initiated voluntary programs and less likely to adopt ISO 14001.

Environmental Management Efficiency

Chatterji and Toffel (2010) argue that firms facing lower-cost opportunities to improve their environmental performance are more likely to respond to stakeholder pressures that besmirch their reputation. They find that less eco-efficient firms (those with above-average pollution levels given their size and industry) were particularly likely to respond to poor environmental ratings from KLD, a major socially responsible investment rating agency, by improving their environmental performance.

Buyer-Supplier Relations

The relationship between firms and their customers also affects firms' responses to customer pressure. Delmas and Montiel (2009) revealed the importance of buyer-supplier relationships to moderate firms' responses to customer pressures to adopt ISO 14001. Examining ISO 14001 adoption by automotive suppliers, Delmas and Montiel (2009) found that adoption was more likely among suppliers that were younger, which used ISO 14001 certification to gain legitimacy and signal their environmental practices; suppliers that had highly specialized assets and were thus more dependent on their current customers; suppliers that were headquartered in Japan and thus had a greater need to reduce the information asymmetries arising from the physical and cultural distance to the U.S.; suppliers that reported to the US EPA's Toxic Release Inventory and therefore received higher levels of public scrutiny of their environmental management practices (Delmas and Montiel, 2009). Firms were more likely to adopt ISO 14001 if they were located far from their potential buyers (King, Lenox, and Terlaak, 2005) and

adopted more comprehensive environmental practices if they sold goods and services directly to consumers (Christmann and Taylor, 2001).

Industry Characteristics

Others have focused on industry characteristics as moderators of institutional pressures on firm behavior. Lyon and Maxwell (forthcoming) predict greater transparency among firms in industries that have socially or environmentally damaging impacts. Cho and Patten (2007) found that firms in environmentally sensitive industries were especially likely to respond to pressures for transparency by disclosing some forms of environmental information (e.g., expenditures on pollution control and abatement) in their annual reports (10-Ks) because such firms “face greater exposure to the public policy process than companies from non-environmentally sensitive industries.” In their analysis of corporate disclosure of climate change strategy and greenhouse gas emissions, Reid and Toffel (2009) found that firms targeted by environmental shareholder resolutions were more likely to disclose this information, and that this relationship was especially pronounced for firms in environmentally sensitive industries. They also found that firms in industries with more environmental shareholder resolutions (i.e., targeting their competitors) were also more likely to disclose this information, even when the focal firm had not itself been targeted. Similarly, Chatterji and Toffel (2010) find that firms in more intensively regulated industries are particularly likely to respond to poor environmental ratings by improving their environmental performance.

CONCLUSION AND FUTURE RESEARCH

This chapter reviews the literature that describes how stakeholders including politicians, regulators, local communities, customers, competitors, and shareholders impose institutional pressures on firms and how these pressures influence firms to adopt beyond compliance

environmental strategies. In addition, this chapter reviews research that reveals how organizational factors moderate how managers perceive and act upon these pressures. These moderating factors, which can magnify or diminish the influence of institutional pressures, include organizational structure and functions, environmental management efficiency, buyer-suppliers relations, and industry characteristics. This novel research stream contributes to institutional theory by exploring how institutional pressures interact with organizational characteristics in influencing managerial decisions in general, and environmental strategies in particular.

We also believe that this novel approach can reveal conditions under which firms are more likely to resist institutional pressure. Most prior studies predict and show positive relationships between institutional pressures and the adoption of environmental strategies. In most cases, more pressure is associated with the adoption of more environmental management practices. However, incorporating moderating effects of firm characteristics in the model can yield substantial insights that can even inverse relationships. For example, Delmas and Toffel (2008) found that, controlling for the level of regulatory pressure, ISO 14001 was less likely to be adopted by organizations that had strong legal departments. This approach allows researchers to identify factors that enable firms to disregard or actively resist institutional pressures. Likewise, Delmas and Montiel (2009) analyzed the motivations for automotive suppliers to resist the mandate of the Big Three US automotive manufacturers to adopt ISO 14001 by 2003. They found that suppliers resisting adoption by the deadline tend to be older, smaller, and to produce less specialized products. In addition, many resistant firms were less visible to regulators and environmental NGOs because they were not required to report their emissions to the US Environmental Protection Agency (EPA) Toxic Release Inventory (TRI).

In seeking to understand the factors that contribute to corporate environmental strategy,

further studies have highlighted the importance of additional organizational characteristics, including firms' capabilities, resources, and ownership structure (Darnall and Edwards, 2006; Sharma, 2000; Sharma and Vredenburg, 1998), board size (Kassinis and Vafeas, 2002), corporate identity and managerial discretion (Sharma, 2000), the characteristics of individual managers (Bansal and Roth, 2000; Cordano and Frieze, 2000), and corporate culture (Jermier and Forbes, Chapter 11 this volume). Future research could investigate how characteristics moderate how firms perceive and thus upon institutional pressures. For example, future work might examine the extent to which managers' personal characteristics and professional experiences influence their perception of particular institutional pressures. It seems feasible that a facility manager's nationality could imbue similar cultural-based sensitivities to those we ascribed to the influence of the headquarters country. In addition, corporate marketing and legal affairs department managers' prior experience with stakeholders (e.g., when these managers were employed at other firms) could influence their current sensitivity to institutional pressures. A richer understanding of such personal attributes would provide an important supplement to the organizational characteristics identified in this chapter.

Further promising areas of research stem from considering the dynamics of the interactions between institutional pressures and organizational characteristics. Just as Delmas and Montes-Sancho (2010; 2011) found that institutional pressures exerted a more powerful influence on firms when particular environmental management practices were just emerging, future research could explore whether, how, and why the moderating role of organization characteristics change over time. An example of such a study might examine the factors that lead organizations' perceptions of institutional pressures to change over time, such as accumulating positive experiences engaging with particular stakeholders or the shock of being targeted by regulators, community protests, or activist campaigns.

Exploring how organizational factors moderate firms' responsiveness to institutional pressures represents an important opportunity to develop institutional theory while enhancing its ability to foster a better understanding of why companies pursue different environmental strategies and environmental management practices.

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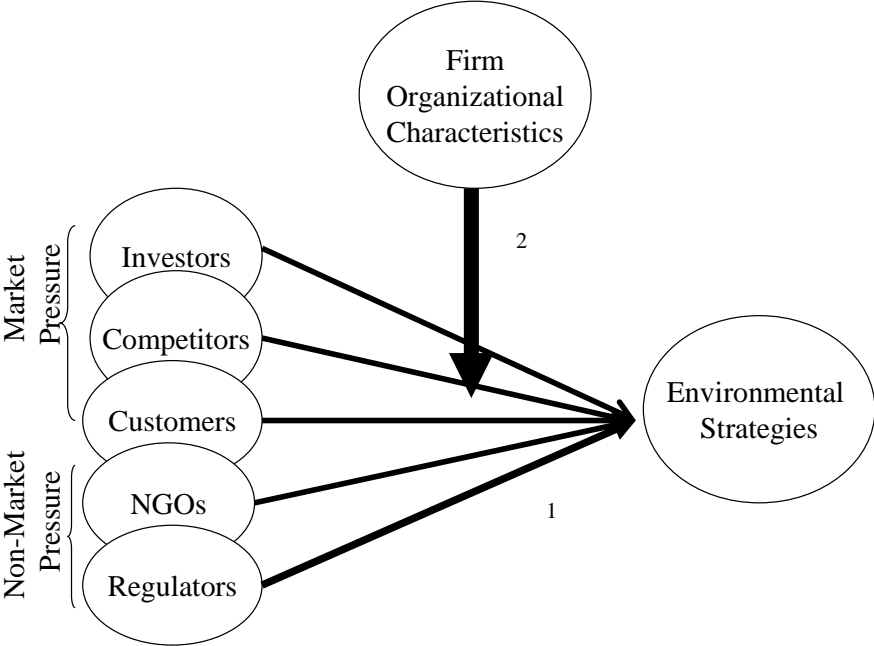
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Figure 1. Institutional Pressures, Organizational Characteristics, and Environmental Strategies



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