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A framework of theoretical lenses and strategic purposes to describe relationships among firm environmental strategy, financial performance, and environmental performance

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Abstract

Purpose – The purpose of this paper is to investigate whether the type of theoretical lens and strategic purpose impacts the relationships among firm environmental strategy, financial performance, and environmental performance.

Design/methodology/approach – This is a theoretical paper which first investigates three constructs: firm environmental strategy, environmental performance, and economic performance. Scholars have argued for different relationships among the three constructs. The paper then discusses two theoretical lenses (strategic choice and the resource-based view) and two strategic purposes (stakeholder and shareholder) used in the literature. The paper argues that the type of theoretical lens and strategic purpose will impact the way the three constructs (firm environmental strategy, financial performance, and environmental performance) are arranged.

Findings – The paper provides a two-by-two matrix distinguishing between theoretical lens and strategic purpose. The paper argues that the specific choice of theoretical lens and strategic purpose helps define the way firm environmental strategy, financial performance, and environmental performance are arranged.

Originality/value – As different scholars have argued for different relationships among the three constructs, this paper provides a framework that could help justify the seemingly paradoxical relationships. The paper concludes with ideas for future research on these issues.

Keywords Corporate strategy, Resource management, Environmental management, Financial performance, Stakeholder analysis

Paper type Conceptual paper

Introduction

The relationship among firm environmental[1] strategy, financial performance, and environmental performance has been a major focus of environmental strategy researchers for more than a decade (Hart, 1997; Hoffman, 1997; Russo, 1997). In the 1990s the Academy of Management devoted special issues of the *Academy of Management Review* and the *Academy of Management Journal* to environmental management (King, 1995; Starik and Rands, 1994). Since its humble beginnings, the field has burgeoned and blossomed into one of the fastest growing areas of scholarly activity. The birth, creation, and development of the Organizations and the Natural Environment division in the Academy of Management, which also evolved from the Greening of Industry Network, is testament to that growth. Three of the most studied constructs are firm environmental strategies, financial performance, and environmental performance.

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However, this research has seemingly lacked cohesion, partly because it has been conducted from numerous perspectives. Different researchers have combined firm environmental strategies, financial performance, and environmental performance in a variety of paradoxical ways. This paper adds to the literature by theoretically investigating how different theoretical lenses and strategic purposes help predict the different relationships among firm environmental strategy, financial performance, and environmental performance in the extant literature. This research uses the firm level of analysis which has proved effective in similar studies (Darnall, 2006; Milstein *et al.*, 2002).

This paper builds a framework based on the strategic management research stream. Strategic management is a highly appropriate theoretical stream for the research topic at hand because its fundamental goal has been to understand the relationship between firm strategy and performance. As such, the framework is built around two mainstream strategic management theoretical lenses: strategic choice and the resource-based view. The framework also incorporates the two predominant strategic purposes of a firm: stakeholder and shareholder. Depicting these theoretical lenses and strategic purposes in a two-by-two framework illustrates how the different theoretical perspectives and purposes impact the relationships researchers have found and would expect to find among firm environmental strategy, financial performance, and environmental performance.

The paper investigates the three constructs: firm environmental strategy, environmental performance, and economic performance. Next, the paper discusses two theoretical lenses (strategic choice and the resource-based view) and two strategic purposes (stakeholder and shareholder). The paper then combines the type of theoretical lens and strategic purpose and the way in which the three constructs (firm environmental strategy, financial performance, and environment performance) interrelate. The paper concludes with suggestions for additional research in this area.

The three constructs

Firm environmental strategy

Hass (1996) performed a meta-study of firm environmental strategies which found no existing models sufficiently empirical and argued the need for more empirically based approaches (Bansal and Roth, 2000; Clemens, 2001; Sharma, 2000). Researchers have studied a plethora of firm environmental strategies issues including voluntary programs (Christmann and Taylor, 2002; Darnall and Carmin, 2005), international (Henriques and Sadorsky, 1999; Sarkis and Dijkshoorn, 2007), government impact (Clemens and Douglas, 2000; Short and Kleiner, 2003) supply chain management (Marcus and Anderson, 2006), and industrial-based (Prakash and Kollman, 2004; Potoski and Prakash, 2004; Ashby *et al.*, 2004). Environmental researchers have grounded their research in a variety of literatures, including strategic choice (Fogler and Nutt, 1993), resource-based (Klassen and Whybark, 1999), stakeholders (Henriques and Sadorsky, 1999), and shareholders (Levy, 1995).

Firm environmental strategies are defined here as a pattern of decisions pertaining to the environment. It is currently common for firms to have firm strategies with respect to the environment (Christmann, 2000; Darnall *et al.*, 2000; Husted and Salazar, 2006; Ilinitch *et al.*, 1998; Sharma, 2000; Sharma and Vredenburg, 1998). These strategies can range from simply reducing energy costs and environmental footprints to such an extent that a firm becomes a model for other corporations.

Financial performance

This is one measure of an organization's overall performance, and from the stakeholder strategic purpose, it is the purpose of the firm (Friedman, 1970). This construct has

been found to be multi-dimensional (Venkatraman and Ramanujam, 1987) and therefore is commonly operationalized in empirical studies using more than one measure. In this paper, financial performance refers to the financial impacts of the application of firm environmental strategies. Indeed, these costs are significant. This construct is often operationalized in environmental studies by measuring managers' perceptions of how the strategy has impacted the firm's bottom line (Aragón-Correa *et al.*, 2008; Judge and Douglas, 1998; Sharma and Vredenburg, 1998). Research has shown that the cost of environmental law compliance over the past 25 years has exceeded $1 trillion (Berry and Rondinelli, 1998).

Environmental performance

Environmental performance is now a value important to many competitive and successful companies around the world (Jacobs and Kleiner, 1995; Sarkis *et al.*, 2006). Environmental performance is a multidimensional construct with factors including environmental impact on the biosphere, customers, employees, the local community, and other stakeholders (Christmann, 2000; Lober, 1996; Ilinitch *et al.*, 1998; Sharma, 2000; Sharma and Vredenburg, 1998).

During the late 1980s, research first suggested that environmental performance could provide a competitive advantage (Clemens, 2001). Politicians (Gore, 1992), chief executive officers of major chemical companies (Reilly, 1990), and prominent scholars (Ahmed *et al.*, 1998; Bragdon and Marlin, 1972; Cairncross, 1993; Dowell *et al.*, 2000; Farrow *et al.*, 2000; Halvorsen and Smith, 1991; Stead *et al.*, 1998; Zhu and Sarkis, 2004, 2007) argued that improved environmental practices do not necessarily detract from a firm's financial performance. In this paper, environmental performance refers to the environmental impacts of firm environmental strategies.

Theoretical perspectives and strategic purposes

Theoretical perspectives

This paper chose strategic choice and the resource-based view of the firm for multiple reasons. Chief among these are that strategic choice is among the first and most fundamental theory of strategy, and the resource-based view is arguably the fastest growing. Strategies aimed at improving the natural environment are becoming increasingly prevalent. Stakeholders are demanding that firms adopt efficient environmental strategies (Hoffman, 2000). Researchers have found that the costs of identifying and managing stakeholders in industry-based programs were significantly lower than expected (Blackman *et al.*, 2001).

Strategic choice. The Holy Grail in the field of strategic management is the relationship between strategy and performance. Many argue that the only reason for a firm to have a strategy is to improve performance. The strategic choice theory (Child, 1972, 1997) holds that a firm's strategies drive performance (Powell, 1990). Traditionally, in the field of strategic management, financial performance was the only kind of performance investigated. Firms chose a particular strategy if the financial benefits outweighed the costs; thus, strategies determined financial performance.

Starik and Marcus (2000) argued that strategic choice theory is especially relevant in the environmental field. Firms' environmental strategies are inherently complicated due to the number, complexity, and jurisdictional issues of environmental regulations as well as the number, complexity, diversity, and importance of stakeholders. As such, strategic choice theory could explain managers' attempts to apply a rational framework in such a disorganized business environment (Clemens, 2006). Model 1 and

Model 3 in Figure 1 highlight the strategic choice theoretical lens. As such, firm environmental strategy has an effect (direct or mediated) on both environmental performance and financial performance.

Resource-based view of the firm. The resource-based view (Barney, 1986a, b, c, 1988, 1991a, b, 2001; Dierickx and Cool, 1989; Mahoney and Pandian, 1992; Penrose, 1959; Prahalad and Hamel, 1990; Priem and Butler, 2001; Wernerfelt, 1984) holds that firms obtain sustained competitive advantages through developing resources or capabilities that are rare, valuable, inimitable, and non-substitutable. An impressive array of scholars has investigated the environment through the theoretical lens of the resource-based view (Christmann, 2000; Darnall, 2006; Darnall and Edwards, 2006; Dowell *et al.*, 2000; Hart, 1995). Such studies argued that effective environmental strategies could be valuable, rare, inimitable, and non-substitutable resources or capabilities that can produce sustained competitive advantage (Hart, 1995). Klassen (2000) and Klassen and Whybark (1999) argued that the pattern of investment in environmental technologies could be rare, valuable, inimitable, and non-substitutable. Furthermore, if environmental performance leads to improved reputation, environmental performance can be a rent-generating capability. Indeed, combining these resources and capabilities across different units in a firm could be even more advantageous (Ensign, 2004). Arguably, unlike the strategic choice perspective, the resource-based view implies that sustained environmental excellence (both strategies and performance) can be a rare,

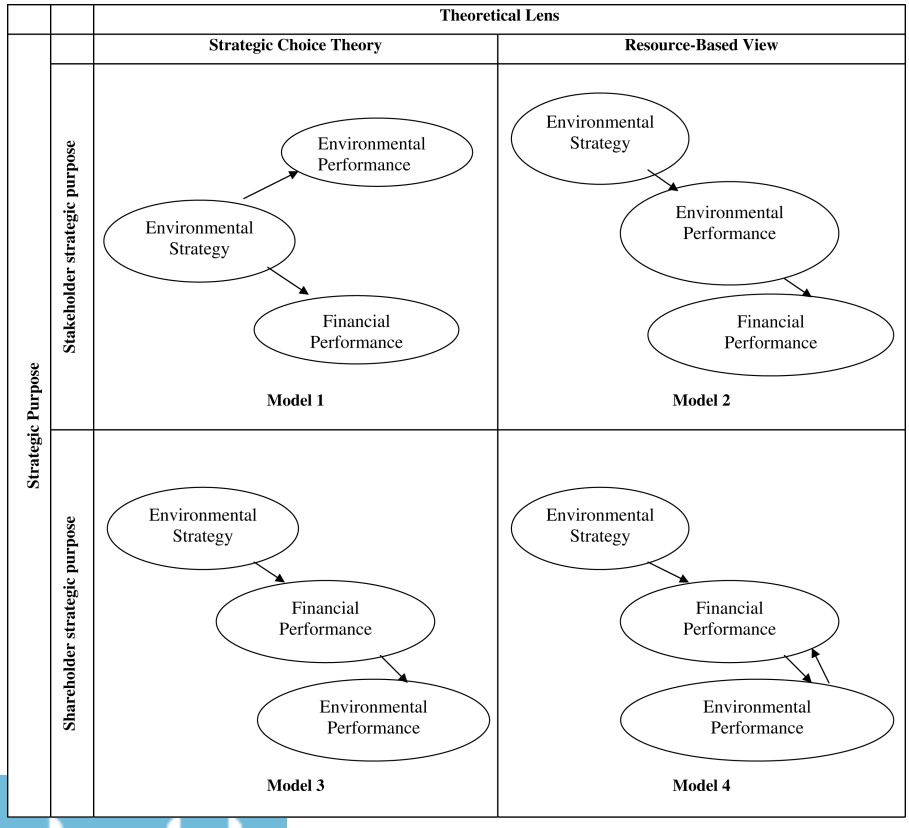

Figure 1.
Framework linking constructs, theories, and purposes

valuable, inimitable, and non-substitutable capability. Model 2 and Model 4 in Figure 1 show the resource-based view theoretical lens where environmental performance, as a resource or capability, directly impacts financial performance.

Strategic purposes

Stakeholder strategic purpose. The stakeholder (Freeman, 1984) strategic purpose holds that firms choose strategies for more than pure financial performance. Freeman's (1984) thesis that long-term competitive advantage accrues for organizations that balance the needs and desires of a variety of stakeholders has been applied to the extended enterprise (Post, 2002) and sectors as diverse as gambling and the environment (Drago, 1998; Keane, 2006). Building on Freeman's work, Porter and Kramer (2006) argue that it is critical for businesses to find ways to improve both the conditions for society and firm finances at the same time. Thus, it has become common for firms to have strategies aimed at improving both firm performance and other society-oriented performance measures.

The stakeholder strategic purpose could reason that a firm should develop strategic goals based on both financial and environmental performance. Models 1 and 2 in Figure 1 show stakeholder strategic purposes where the ultimate organizational goals are both environmental and financial performance.

Shareholder strategic purpose. The Chicago school champions the shareholder strategic purpose, which holds that a firm's primary goal should be profit maximization (Friedman, 1970). The shareholder approach argues that any strategy should be based purely on economic performance. When this strategic purpose is applied to the subject at hand, a very different conclusion is reached about why firms should develop and implement strategies aimed at the natural environment (Walley and Whitehead, 1994). The shareholder strategic purpose argues that a firm will invest in environmental controls only if that investment produces a commensurate return equal to or greater than other investment opportunities available to the firm.

In the stakeholder strategic purpose, environmental performance was a critical goal. This is unlike the shareholder strategic purpose, in which financial performance is paramount and the direct result of firm environmental strategy. Every kind of strategy and every activity that is enacted within the organization should be done for the purpose of improving financial performance, according to the shareholder strategic purpose. This is reflected in Model 3 and Model 4 of Figure 1 where the principal goal is financial performance.

Combining the constructs, theories, and purposes

The use of these theoretical lenses and strategic purposes will add to our understanding of the relationship among firm environmental strategies, financial performance, and environmental performance. It is common for scholars to combine multiple theoretical perspectives for a better understanding of management phenomena as a more holistic approach to management theory (Franklin, 2002). The types of relationships that scholars would investigate from each of the four combinations of theoretical lenses and strategic purposes are investigated next.

Model 1: Stakeholder strategic purpose and strategic choice theoretical lens

Combining the stakeholder strategic purpose with the strategic choice theoretical perspective suggests that firms should make the best strategic choice based on both financial and environmental performance goals. This theme has become fairly common

in the literature. Scholars (Hart, 1997; Westley and Vredenburg, 1996) and practitioners (Gore, 1992) alike argue that effective environmental strategies must drive financial and environmental performance simultaneously. With respect to the natural environment, many firms successfully implemented strategies benefiting both the environment and their financial positions. This often involves targeting niches of environmentally conscious customers. A prime example is The Body Shop, which achieved a high level of financial performance by developing products that appealed to environmentally conscious consumers (Livesey and Kearins, 2002). This leads to the first proposition:

P1. Combining the resource-based view with stakeholder strategic purpose leads to firm environmental strategy having a direct effect on both environmental performance and firm performance.

Model 2: Stakeholder strategic purpose through resource-based lens

This model holds that environmental strategies can be core competencies that could lead to financial performance (Hart, 1995; Kogut and Zander, 1993; Russo and Fouts, 1997). Connor (2002) argues that combining the resource-based view with external analysis, such as the stakeholder strategic purpose, adds value to the understanding of firm strategy. Many cases exist in which effective firm environmental strategy, control, and performance prevent costly cleanups and liabilities. Warhurst and Mitchell (2000) described such a case in the mining industry where a firm's environmental strategy and performance produced extensive cost savings. Important stakeholders included a firm's buyers and suppliers. Hoffman (2000) argued that a firm's suppliers (banks, shareholders, and investors) and buyers (insurance companies) consider effective firm environmental strategy as an important resource. Indeed, Barnett (2007) argued that the relationship between environmental and financial performance depends on the degree to which the firm addresses stakeholder concerns. This leads to the second proposition:

P2. Stakeholder strategic purpose through the resource-based view theoretical lens leads to firm environmental performance mediating the relationship between firm environmental strategy and financial performance.

Model 3: Shareholder strategic purpose and the strategic choice theoretical lens

The shareholder strategic purpose holds that the primary (or only) goal of a strategy is to improve financial performance. Thus, effective strategy will produce financial performance. If the strategy produces sufficient financial slack, environmental performance will occur. In this case, environmental performance would accrue as a secondary effect of the firm environmental strategy. The environmental benefit is an externality of a firm's financially based decisions. As a result, it is the financial performance that produces environmental performance. This leads to the third proposition:

P3. Combining shareholder strategic purpose with strategic choice theory leads to financial performance mediating the relationships between firm environmental strategy and environmental performance.

Model 4: Shareholder strategic purpose through resource-based theoretical view lens

The shareholder strategic purpose argues that strategy produces financial performance. As before, the financial performance can lead to environmental

performance if sufficient slack occurs. A rich body of research has investigated the relationship between financial and environmental performance; however, the results have been mixed (Margolis and Walsh, 2003; Orlitzky *et al.*, 2003). If environmental performance is rare, valuable, inimitable, or non-substitutable, the environmental performance can also produce additional financial performance. This leads to the fourth proposition.

P4. Shareholder strategic purpose through the resource-based view theoretical lens leads to financial performance mediating the relationship between firm environmental strategy and environmental performance; and environmental performance having a direct effect on financial performance.

As previously described, the framework proposed here, and shown in Figure 1, is a two-by-two matrix with theoretical perspectives on the horizontal axis and strategic purposes of the firm on the vertical axis.

Future research

Identification of gaps in the literature

Using this framework, future researchers can classify the extant firm environmental strategy literature using the strategic choice or the resource-based view theories and the stakeholder and shareholder strategic purposes. For example, Darnall (2006) and Darnall and Edwards (2006) applied the stakeholder purpose to the resource-based view theoretical lens. Folger and Nutt (1993) and Levy (1995) applied shareholder purposes to strategic choice theories. Such a literature classification could help uncover potential gaps in the literature. Future research should be classified based on the strategic purpose. After the classifications are complete, contradictions and missing links can be identified.

Often researchers test only part of one of the four models presented here. More research needs to be conducted in which all three conceptual variables are included so that we can more fully understand the relationships. This can be done using standard statistical procedures and tests including those for mediation outlined by Baron and Kenny (1986) and Judd and Kenny (1981). This type of research is necessary for scholars and practitioners to gain a more complete understanding of these constructs.

Contextual issues

While early studies on the relationship between financial and environmental performance were inconclusive, the current weight of the evidence supports a positive relationship in certain contexts. Scholars and practitioners have called for more studies in different contexts of the relationship between environmental strategies and performance (Ahmed *et al.*, 1998; Cairncross, 1993; Gore, 1992). The relationship seems to be contextual. In certain situations environmental strategies may be more important as certain industries are more sensitive to public scrutiny. For example, the pharmaceutical industry is more sensitive to public awareness of environment consciousness than the steel industry. Also, certain customers are more environmentally aware. Western Europe appears more environmentally conscious than many developing countries, which may have different priorities. Future researchers could investigate the context in which these relationships are arrayed.

Other areas of interest may include attempts to integrate moderating factors such as industry (Goodman, 2000), industry growth (Russo and Fouts, 1997), industry forecasts

and perceptions of performance (Cordeiro and Sarkis, 1997), and business environment dynamism.

Incorporation of institutional forces in the model

Future research could also investigate the way in which institutional forces link to a proposed model and Figure 1. Both the government and industry can apply institutional forces (Ashby *et al.*, 2004). The results of this investigation could provide a basis for the future debate of the efficacy of different institutional forces. For example, understanding the relative relationships between types of institutional forces and environmental performance will help regulators choose the most effective tools for implementing change. Also, findings regarding the relationships between specific types of institutional forces and financial performance can aid in negotiations between government and industry.

Bansal and Roth (2000) and Porter and van del Linde (1995) hypothesized that institutional forces such as legislation drove a firm's corporate ecological responsiveness. Dowell *et al.* (2000) confirmed the hypothesis in terms of multinational firms. Future research could investigate if institutional forces impact the relationships among strategy, environmental performance, and financial performance.

Conclusion

Integrating the theoretical lenses and strategic purposes that impact relationships among environmental strategies, environmental performance, and financial performance will allow future researchers and practitioners to better understand environmental decision-making. Environmental decision-making is a complex undertaking, and attempting to describe it without understanding the complete picture is like the blind man attempting to identify an elephant by holding just its tail. It is hoped that this paper will provide avenues and encouragement for researchers to further investigate these interesting relationships among firm environmental strategy, financial performance, and environmental performance. The discussion may also provide government and industry practitioners an opportunity to further understand these important issues that have the potential to impact future generations.

Note

1. In this manuscript, "environment" refers to the natural environment. In order to avoid confusion, the manuscript uses "business environment" to refer to the general business environment.

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