The Natural Environment as Stakeholder: An Exploration of Sustainable Value Creation

Jeffrey Gauthier
State University of New York at Plattsburgh

In this paper, I argue that an integration of insights from instrumental stakeholder theory with research on corporate sustainability can reveal new value creation opportunities. Specifically, I suggest that a firm's ability to view the natural environment itself as a stakeholder can form a foundation upon which to strengthen the relationship between sustainable business practices and improved economic performance. I further argue that factors such as a firm's product market strategy and characteristics of the competitive environment impact the means by which firms may create value through their sustainability efforts.

INTRODUCTION

In the 1990s, management scholars began to question prevailing assumptions concerning the relationship between corporate environmental and financial performance. Porter and van der Linde (1995) suggested that well-designed environmental regulation could trigger innovation, leading to improved financial performance. Hart's (1995) natural-resource-based view (NRBV), an extension of resource-based theory, predicted that the ability to gain competitive advantage would be increasingly linked to capabilities promoting environmental sustainability. These assertions spawned a considerable body of theoretical and empirical research that has become known as the pays to be green literature (Berchicci & King, 2007).

Over the years, this research stream has generated significant insights, including the identification of variables that moderate the relationship between corporate environmental and financial performance, such as innovation capabilities (Christmann, 2000) and cognition (King & Lenox, 2002). Scholars have recently called for further research to examine the factors that influence firms' ability to profit from proactive environmental strategies (Hart & Dowell, 2011). This paper responds to such calls.

This paper attempts to provide greater clarity about the relationship between environmental and financial performance by integrating insights from instrumental stakeholder theory with research on corporate sustainability. Specifically, this research argues that by viewing the natural environment itself as a stakeholder, managers are better-equipped to identify new value creation opportunities and, by extension, to strengthen the return on investment of their sustainability efforts. Contextual variables such as the firm's product market strategy and characteristics of the competitive environment, furthermore, affect the mechanisms by which firms create value through corporate sustainability.

The remainder of the paper proceeds as follows. First, I review the concept of value creation and consider the implications of instrumental stakeholder theory for value creation. Next, I discuss the means

through which firms can create value through corporate sustainability. I conclude with a discussion and suggestions for a future research agenda.

VALUE CREATION AND INSTRUMENTAL STAKEHOLDER THEORY

To understand the mechanisms through which corporate sustainability yields value creation opportunities, it is necessary to understand the underlying strategic logic of resource-based theory. Resource-based theory has become one of the most prominent perspectives in strategic management (Barney, et al., 2011). The origins of resource-based theory can be traced to Penrose (1959), who viewed firms as bundles of resources. Although Wernerfelt (1984) introduced the term resource-based view, Barney (1991) developed the first comprehensive conceptual framework of resource-based theory (Newbert, 2007). For a resource to be a source of sustained competitive advantage, Barney (1991) argued, it must be valuable, rare, inimitable, and non-substitutable. Inimitability may result from path dependence (Dierickx & Cool, 1989), causal ambiguity (Reed & DeFillippi, 1990), or social complexity (Barney, 1986). Firms with valuable and rare resources could attain a short-term competitive advantage, but sustained advantage could only result if those resources were also inimitable and non-substitutable (Barney, 1991).

Amit and Schoemaker (1993) distinguished between the concepts of resources (in effect, what a firm *has*) and capabilities (what a firm *does* with its resources). A central notion in resource-based theory is that of core capabilities or competencies (Leonard-Barton, 1992; Prahalad & Hamel, 1990). A capability would be considered core if it provides strategic differentiation and, hence, competitive advantage (Leonard-Barton, 1992).

Hart's (1995) NRBV is an extension of resource-based theory that identifies the resources and capabilities needed to improve firms' environmental and social performance. Hart identified three strategies – pollution prevention, product stewardship, and sustainable development (subsequently split into clean technology and base of the pyramid) – each building on different resources and offering different sources of competitive advantage (Hart & Dowell, 2011).

In essence, Hart's (1995) strategic logic is that firms with existing capabilities in certain areas will be able to accumulate the resources needed for different strategies more quickly than firms without those capabilities, and that competitive advantage then results from the further development of those capabilities. For example, Hart argues that firms with total quality management capabilities will be able to accumulate the resources needed for a pollution prevention strategy more quickly than firms lacking total quality management capabilities. Pollution prevention, Hart further suggests, provides "opportunity for a sustained competitive advantage through the accumulation of tacit (causally ambiguous) resources embedded in large numbers of people" (1995, p. 1000). Shareholder value is ultimately enhanced through cost and risk reduction (Hart & Milstein, 2003).

The strategic logic is similar for product stewardship and sustainable development. Product stewardship strategies are accelerated by prior capabilities in cross-functional management, and competitive advantage can be achieved through the accumulation of socially complex resources associated with cross-functional management. Shareholder value is then improved by gains in reputation and legitimacy (Hart, 1995; Hart & Milstein, 2003). Sustainable development strategies are accelerated by prior capabilities in establishing a shared vision, and competitive advantage results from accumulation of rare resources associated with shared vision. Future positioning and growth then improve shareholder value (Hart, 1995; Hart & Dowell, 2011).

In summary, resource-based theory, including the NRBV, emphasizes the role of the firm's internal capabilities in gaining competitive advantage. This theoretical basis, combined with the logic of the value-price-cost (VPC) framework (Hoopes, et al., 2003), sheds additional light on how corporate sustainability yields value creation opportunities. Using the language of the value-price-cost (VPC) framework (Hoopes, et al., 2003), V represents use value, P exchange value, and C the seller's production cost. By setting the exchange value, P, the firm determines both consumer surplus (V – P) and producer surplus (P – C). V – C constitutes total value created.

This paper contends that integrating insights from instrumental stakeholder theory with corporate sustainability research can help to reveal new value creation opportunities. Stakeholder theory argues that all entities impacted by an organization should be taken into account in organizational decision-making (Freeman, 1984). In this view, shareholders are one of multiple stakeholders to be considered. Instrumental stakeholder theory builds upon this recognition to suggest that a firm's approach to its stakeholders can serve as a source of competitive advantage (Jones, 1995). This advantage may be realized through reduced costs of opportunism; cooperative and trusting relationships between a firm and its stakeholders can help to reduce the threat of opportunism and its concomitant costs (Jones, 1995).

While instrumental stakeholder theory's logic rests, in large part, on mitigation of opportunism, additional mechanisms through which competitive advantage may be achieved should be acknowledged. In particular, the recognition that the natural environment itself is a stakeholder (Driscoll & Starik, 2004; Starik, 1995) can help to uncover additional means of gaining advantage. Starik (1995), for example, contends that conferring stakeholder status on the natural environment offers a more holistic approach to stakeholder management, offering the chance to realize "win-win" scenarios that benefit both organizations and the natural environment. Further, an examination of the salience of stakeholder groups as a function of stakeholders' power, legitimacy, and urgency (Mitchell, et al., 1997) suggests that the natural environment is among organizations' most salient stakeholders (Driscoll & Starik, 2004). Empirical studies have suggested a positive relationship between stakeholder management and financial performance (Berrone, et al., 2007; Hillman & Keim, 2001).

Taken together, instrumental stakeholder theory and prior research on corporate sustainability suggest that firms' sustainability efforts offer opportunities for value creation. This paper seeks to identify the means through which these value creation opportunities are realized. Accordingly, the following section examines the ability of sustainable business practices to create value, and argues that distinct value creation opportunities can be realized at each stage of the product life cycle.

VALUE CREATION MECHANISMS

A review of the literature on organizations and the natural environment suggests that there is no explicit definition of sustainable business practices. Conceptualizations of sustainability strategies, with illustrative examples of practices consistent with different strategies, have been proposed (e.g., Hart, 1995, 1997). Scholars have also developed industry-specific measures of sustainable practices (e.g., Bansal, 2005; Sharma & Henriques, 2005). Absent, however, is a concise definition of sustainable business practices that is not restricted to a specific industry context.

Thus, given this need and acknowledging the central role of life cycle assessment in informing the environmental impact of products, I offer the following definition of sustainable business practices: activities that address environmental problems resulting from one or more stages of a product's life cycle. I define life cycle stages in terms of life cycle assessment, rather than in terms of the product life cycle stages of introduction, growth, maturity, and decline used in marketing (Anderson & Zeithmal, 1984). Life cycle assessment is a technique used in environmental management and engineering to determine the environmental impacts that occur at each stage of a product's life (Remmen, et al., 2007). Although the specifics of different products' life cycles will vary, a generic product life cycle consists of the following basic stages: raw materials extraction, design and production, packaging and distribution, use and maintenance, and disposal (Remmen, et al., 2007). Terminology varies between authors, however, and for the sake of simplicity, I have labeled the generic life cycle assessment stages as follows: extraction, manufacturing, distribution, use, and disposal.

It is worth noting that, although life cycle assessment has its origins in environmental management and engineering, the life cycle stages are related to the concept of the value chain (Porter, 1985) in management. For example, the inbound logistics and outbound logistics activities of the value chain are rough proxies for the distribution stage of the life cycle. Operations activities of the value chain are roughly akin to the manufacturing stage of the life cycle. The relationship, however, is imprecise, and all stages of the life cycle do not map cleanly to a value chain activity.

The implication of this inexact relationship is that sustainable business practices cannot be defined in terms of Porter's (1985) value chain. Instead, it is necessary to define environmentally sustainable business practices in terms of a concept rooted in environmental management – the life cycle. Thus, I define each stage of the life cycle as a category of sustainable business practices. Practices such as packaging redesign and enhanced transportation efficiencies would, for example, map to the distribution category, because they reduce negative environmental impacts that occur during the distribution phase of the life cycle. In short, a particular category of sustainable practices is defined by the particular life cycle phase in which reduction of negative environmental impacts occurs. A summary of sustainable business practices and associated consumer benefits, necessary for value creation, is presented in Table 1.

TABLE 1
CATEGORIES OF SUSTAINABLE BUSINESS PRACTICES

Sustainable Business Practice Categories	Consumer Benefit	Examples
Extraction	Lower energy prices	Clean technology
Manufacturing	Lower price	Initiatives to reduce energy consumption, air emissions, effluents, and waste
Distribution	Lower price	Packaging redesign, transportation efficiencies
Use	Lower total cost of ownership	Products offering improved reliability, durability, or performance
Disposal	Lower disposal costs	Take-back initiatives, recycling

Categories of Sustainable Business Practices

The development of clean technologies such as renewable energy is a fundamental sustainable extraction practice. As clean technologies are developed and commercialized, there is a reduction in the need to source non-renewable resources such as fossil fuels. As such, extraction pressures on the Earth's finite resources are mitigated. Ultimately, the development of clean technologies seeks not merely to minimize negative environmental impacts but to solve environmental problems (Hart, 1997).

The specific logic of increased consumer benefits through sustainable extraction practices rests on decreased exchange value. That is, when renewable sources of energy allow consumers to pay lower energy prices in relation to fossil fuels, consumer benefits increase. Although the choice of energy sources may be perceived as largely outside the control of consumers, direct control can indeed be exercised by, for example, the purchase of residential solar panels or other photovoltaic products.

In the manufacturing category of sustainable business practices, reduction of negative environmental impacts occurs in the manufacturing phase of the life cycle. In manufacturing, as with all other categories of sustainable practices, specific practices may also impact other stages of the life cycle to a lesser degree. Sustainable practices in manufacturing include initiatives to reduce energy consumption, air emissions, effluents, and waste. Such initiatives are consistent with the concept of pollution prevention, which views pollution as waste and inefficiency (Hart, 1995, 1997; Hart & Milstein, 2003).

Sustainable manufacturing practices may be used to increase consumer benefits. Sustainable manufacturing practices, by allowing firms to make more productive use of their resources, allow firms to lower their costs and pass along some or all of those savings to consumers through lower prices. Value

creation serves to either increase use value or decrease exchange value, and firms engaged in sustainable manufacturing practices can, as with sustainable extraction practices, increase consumer benefits by decreasing the prices paid by consumers (i.e., decreasing exchange value).

In the distribution category of sustainable business practices, mitigation of negative environmental impacts occurs in the life cycle's distribution phase. Practices such as packaging redesign and transportation efficiencies allow firms to use less fuel during the distribution process and, by extension, reduce their direct or indirect greenhouse gas emissions.

Firms engaged in sustainable distribution practices may increase consumer benefits by passing along the cost savings resulting from lower fuel usage to consumers through lower prices. In this manner, the consumer benefits through decreased exchange value, as with sustainable extraction and manufacturing practices. Walmart's efforts in the 1990s to eliminate the process of packaging deodorant in small cardboard containers, and its subsequent decision to increase consumer benefits by sharing resulting cost savings with consumers through reduced prices (Fishman, 2006), is consistent with such an approach.

Consumers' use of products may have harmful environmental effects. Businesses can mitigate these effects through practices that influence the use phase of the life cycle. Among these practices is the development of products offering improved reliability, durability, or performance. Increased reliability and durability decrease the need for energy-intensive maintenance activities. Improved performance may also confer environmental benefits such as engines with greater fuel efficiency.

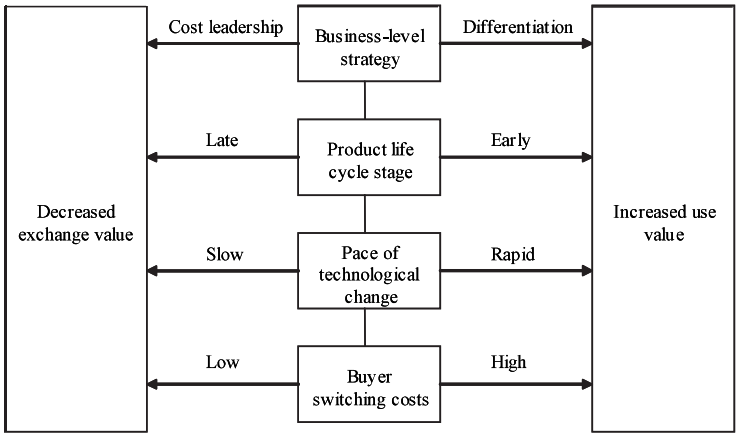
Sustainable use practices increase use value by increasing consumers' valuation of a product's benefits. Product quality is valued by consumers, who appreciate the decreased operating, maintenance and replacement costs of higher-quality products. Consumers' total cost of ownership decreases, resulting in increased use value. Michelin is one example of a firm that has sought to increase consumer benefits through sustainable use practices. The company's green tires minimize wasted energy, improve fuel efficiency, and help to lower emissions (Michelin, 2012). Patagonia, a firm whose products offer superior durability that helps to reduce negative environmental impacts involved in the life cycle's use phase, lowers consumers' total cost of ownership by prolonging product life (Lowitt, 2011).

Negative environmental impacts occur during the disposal phase of the life cycle, as waste is generated for landfills. Further environmental degradation may occur when products are not disposed of in landfills. Products such as pharmaceuticals may pollute water supplies if adequate disposal practices are not followed (Kummerer, 2010). Sustainable business practices can reduce these negative impacts. Take-back and recycling initiatives are among the tools that firms may use to address the environmental ramifications of disposal (Webster & Mitra, 2007).

The strategic logic of value creation through sustainable disposal practices is similar to that of value creation through sustainable use practices, as use value is ultimately increased. The benefits of reduced disposal costs (Thierry, et al., 1995), including the time and effort involved in arranging for the disposal, increases use value. Take-back initiatives offered by companies such as Xerox (Reinhardt, 1999), Dell (Dell, 2012), and HP (HP, 2011) increase consumer benefits by reducing consumer disposal costs.

Although the sustainable business practices described in this paper and summarized in Table 1 have the potential to create value through increased consumer benefits, the mechanisms by which this value creation occurs would be expected to be impacted by a number of contextual factors. To identify potential variables, I considered the potential impact of both firm-level and product-level characteristics, identifying one relevant variable at the firm level and three at the product level: the firm's business-level strategy, and a given product's stage in the product life cycle, pace of technological change, and buyer switching costs for that product. A summary of these factors, along with associated value creation mechanisms, is shown in Figure 1.

FIGURE 1
CONTEXTUAL FACTORS AND VALUE CREATION MECHANISMS



Contextual Factors

In the context of Porter's (1980) generic strategies, we would expect a cost leadership strategy to be consistent with increased value creation through decreased exchange value. To the extent that cost leadership emphasizes economies of scale and, as such, necessitates large volumes, an emphasis on sustainable business practices that lower exchange value to attract greater numbers of consumers would enhance the success of a cost leadership strategy. Differentiation strategies, by contrast, do not require the large volumes inherent in cost leadership (Porter, 1980). Central to the success of a differentiation strategy is the provision of products with unique and desirable features. Sustainable business practices that strengthen the firm's ability to offer such features, increasing use value, are consistent with a differentiation strategy.

The marketing conception of the product life cycle – introduction or initial trajectory, growth, maturity, and decline (Anderson & Zeithmal 1984; Day, 1981) – may be another factor that influences the mechanisms through which sustainable business practices create value. The relationship between profitability and efficiency has been found to strengthen in later stages of the life cycle (Anderson & Zeithmal, 1984). To that end, sustainable business practices that help to lower exchange value offer compelling value creation potential for firms competing in later stages, as firms benefit from decisions that attract greater numbers of customers and increase economies of scale. Conversely, sustainable business practices serving to increase use value hold the potential to create value for firms competing in earlier stages.

A further variable concerns the pace of technological change for a given product. Degree of technological change has been suggested to be an important variable in other considerations within strategic management, such as the likelihood of securing first mover advantage (Suarez & Lanzolla, 2005, 2007). In general, more rapid change decreases the ability of any one firm to establish a market-dominant position (Suarez & Lanzolla, 2005). In such a context, short-term cost recovery concerns and the need to justify sufficiently high prices by increasing use value may outweigh goals of growing the firm's customer base by decreasing exchange value. To the extent that faster technological change not only decreases the ability of firms to secure first mover advantage but also renders the goal of market leadership itself less plausible, we would expect that the primary mechanism through which sustainable business practices create value would be increased use value. With slower-changing technology, sustainable business practices lowering exchange value are consistent with the firm's environment.

Buyer switching costs are another important consideration in assessing the economic performance implications of a high degree of consumer or producer surplus. Lieberman and Montgomery (1988) have identified three major types of buyer switching costs: investments buyers make to adapt to the seller's products such as the time needed to qualify a new seller, seller-specific learning by buyers, and

contractual switching costs such as those inherent with loyalty programs offered by service firms. The notion that the bargaining power of buyers, driven in part by buyer switching costs, affects industry profitability, is not, of course, a new concept in strategic management (Porter, 1979). But in the context of sustainability, we would anticipate that value creation opportunities through increased use value are consistent in industry environments marked by high switching costs, as firms are less likely to compete primarily on the basis of price. And in industry environments characterized by low switching costs, value creation would be expected to be realized through sustainable business practices lowering exchange value.

DISCUSSION AND CONCLUSION

Sustainable business practices will not always improve economic performance. This paper argues that a firm's ability to view the natural environment as a stakeholder can help to strengthen the relationship between sustainable business practices and economic performance. Building on arguments inherent in instrumental stakeholder theory (Jones, 1995), I argue that firms are better able to identify new value creation opportunities when viewing the natural environment as a stakeholder. The mechanisms by which firms create value through sustainable business practices, I further suggest, are influenced by contextual variables such as the firm's business-level strategy and attributes of the industry environment.

This paper contributes to scholarship on organizations and the natural environment by answering recent calls for further research on when it "pays to be green" (Hart & Dowell, 2011). More broadly, by foregrounding the benefits to consumers of sustainable business practices at each stage of the product life cycle, the paper contributes to the growing body of research that applies demand-side perspectives in strategic management (Priem, et al., 2012). The consumer perspective adopted in this paper complements, rather than replaces, resource-based theory. Resource-based and demand-side perspectives are essential to understanding the value creation opportunities articulated in the paper.

Organizations and the natural environment scholars have recently called for future empirical research to move beyond traditional data sources such as surveys (Etzion, 2007). Scholars have recently demonstrated the ability of annual reports to reveal important insights with respect to sustainable business practices (Bansal, 2005; Sharma & Henriques, 2005). Hypothesis testing of the ideas set forth in this paper could similarly be undertaken through creative use of archival data. Such sources, supplemented by surveys of managers, offer the potential to significantly increase our understanding of the mechanisms through which firms create value through sustainable business practices.

In operationalizing sustainable business practices, a content analysis of Global Reporting Initiative-based sustainability reports could be conducted. Sources such as IBISWorld's industry reports may be helpful in operationalizing the contextual variables suggested in this paper. Financial data from Compustat such as return on assets, return on equity, or return on sales, controlled for industry, may be used to operationalize economic performance.

The ideas presented in this paper offer implications for practitioners. The paper's insights suggest a practical means for managers to consider the implementation of sustainable business practices. Managers must ultimately recognize that by viewing the natural environment itself as a stakeholder, new value creation opportunities can be realized. Further, managers may also wish to understand the mechanisms through which value creation is realized, and to acknowledge the central role of important contextual variables such as the firm's product market strategy and attributes of the industry environment.

A limitation of this paper is its scope: the mechanisms identified in this paper pertain to firms selling to end-consumers. Future research might consider examining mechanisms for business-to-business firms. As Priem (2007) has argued, even business-to-business firms contribute, in some degree, to benefits enjoyed by end-consumers. Although Intel is a business-to-business firm, for example, its strategy of branding its chips has increased consumer benefits and, hence, consumers' willingness to pay (Priem, et al., 2012). The case of Intel notwithstanding, further research that examines implications for business-to-business firms is warranted.

The challenge of achieving sustainable development cannot be met without commitment from business. Such commitment is not likely to be realized, however, without an awareness of the relationship between sustainable business practices and economic performance. By examining the mechanisms through which sustainable business practices yield value creation opportunities, this paper sough to improve this understanding. Future conceptual and empirical research seeking to build on this paper's insights can offer a more refined understanding of the relationship between sustainable business practices and economic performance.

REFERENCES

Amit, R., & Schoemaker, P. (1993). Strategic assets and organizational rent. *Strategic Management Journal,* 14(1), 33-46.

Anderson, C., & Zeithaml, C. (1984). Stage of the product life cycle, business strategy, and business performance. *Academy of Management Journal,* 27(1), 5-24.

Aragon-Correa, J., & Sharma, S. (2003). A contingent resource-based view of proactive corporate environmental strategy. *The Academy of Management Review,* 28(1), 71-88.

Bansal, P. (2005). Evolving sustainably: A longitudinal study of corporate sustainable development. *Strategic Management Journal,* 26(3), 197-218.

Barney, J. (1986). Strategic factor markets: Expectations, luck, and business strategy. *Management Science,* 32(10), 1231-1241.

Barney, J., Ketchen, D., & Wright, M. (2011). The future of resource-based theory. *Journal of Management,* 37(5), 1299-1315.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management,* 17(1), 99-120.

Berchicci, L., & King, A. (2007). Postcards from the edge: A review of the business and environment literature. *Academy of Management Annals,* 11, 513-547.

Berrone, P., Surroca, J., & Tribó, J. (2007). Corporate ethical identity as a determinant of firm performance: A test of the mediating role of stakeholder satisfaction. *Journal of Business Ethics*, 76(1), 35-53.

Bowman, C., & Ambrosini, V. (2000). Value creation versus value capture: Towards a coherent definition of value in strategy. *British Journal of Management,* 11(1), 1-15.

Christmann, P. (2000). Effects of "best practices" of environmental management on cost advantage: The role of complementary assets. *Academy of Management Journal,* 43(4), 663-680.

Day, G. (1981). The product life cycle: Analysis and applications issues. *Journal of Marketing,* 45, 60-67.

Dell. (2012). *2012 Corporate Responsibility Report.*

Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science,* 35(12), 1504-1511.

Driscoll, C., & Starik, M. (2004). The primordial stakeholder: Advancing the conceptual consideration of stakeholder status for the natural environment. *Journal of Business Ethics*, 49(1), 55-73.

Etzion, D. (2007). Research on organizations and the natural environment, 1992-present: A review. *Journal of Management,* 33(4), 637-664.

Fishman, C. (2006). *The Walmart effect: How the world's most powerful company really works – And how it's transforming the American economy*. Penguin, New York.

Freeman, R. (1984). *Strategic management: A stakeholder approach.* Cambridge University Press, Cambridge.

Hart, S., & Dowell, G. (2011). A natural-resource-based view of the firm: Fifteen years after. *Journal of Management,* 37(5), 1464-1479.

Hart, S. (1995). A natural-resource-based view of the firm. *Academy of Management Review,* 20(4), 986-1014.

Hart, S. (1997). Beyond greening: Strategies for a sustainable world. *Harvard Business Review,* 75(1), 66-76.
Hart, S., & Milstein, M. (2003). Creating sustainable value. *Academy of Management Executive,* 17(2), 56-67.
Hewlett-Packard. (2011). *HP 2011 Global Citizenship Report.*
Hillman, A., & Keim, G. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line?, *Strategic Management Journal*, 22(2), 125-139.
Hoopes, D., Madsen, T., & Walker, G. (2003). Guest editors' introduction to the special issue: Why is there a resource-based view? Toward a theory of competitive heterogeneity. *Strategic Management Journal,* 24(10), 889-902.
Jones, T. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics, *Academy of Management Review*, 20(2), 404-437.
King, A., & Lenox, M. (2002). Exploring the locus of profitable pollution reduction. *Management Science,* 48(2), 289-299.
Klassen, R., & Whybark, D. (1999). The impact of environmental technologies on manufacturing performance. *Academy of Management Journal,* 42(6), 599-615.
Kummerer, K. (2010). Pharmaceuticals in the environment. *Annual Review of Environment and Resources,* 35(1), 57-75.
Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic Management Journal,* 13(2), 111-125.
Lieberman, M., & Montgomery, D. (1988). First-mover advantages. *Strategic Management Journal,* 9(1), 41-58.
Lowitt, E. (2011). Patagonia's "buy less" campaign may lead to more revenue. *HBR Blog Network.* Retrieved from http://blogs.hbr.org/cs/2011/10/patagonias_buy_less_campai.html
Michelin. (2012). *Michelin Performance and Responsibility Review 2012.*
Mitchell, R., Agle, B., & Wood, D. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts, *Academy of Management Review*, 22(4), 853-886.
Newbert, S. (2007). Empirical research on the resource-based view of the firm: An assessment and suggestions for future research. *Strategic Management Journal,* 28(2), 121-146.
Orsato, R. (2006). When does it pay to be green? *California Management Review,* 48(2), 127-143.
Penrose, E. (1959). *The theory of the growth of the firm.* Blackwell, Oxford.
Porter, M. (1979). How competitive forces shape strategy. *Harvard Business Review,* 57(2), 137-145.
Porter, M. (1980). *Competitive strategy*. Free Press, New York.
Porter, M. (1985). Competitive advantage: Creating and sustaining superior performance. Free Press, New York.
Porter, M., & Van der Linde, C. (1995). Green and competitive: Ending the stalemate. *Harvard Business Review,* 73(5) 120-134.
Prahalad, C., & Hamel, G. The core competence of the corporation. *Harvard Business Review,* 68(3), 79-91.
Priem, R. (2007). A consumer perspective on value creation. *Academy of Management Review,* 32(1), 219-235.
Priem, R., Li, S., & Carr, J. (2012). Insights and new directions from demand-side approaches to technology innovation, entrepreneurship, and strategic management research. *Journal of Management,* 38(1), 346-374.
Reed, R., & DeFillippi, R. (1990). Causal ambiguity, barriers to imitation, and sustainable competitive advantage. *Academy of Management Review,* 15(1), 88-102.
Reinhardt, F. (1999). Bringing the environment down to earth. *Harvard Business Review,* 77(4), 149-57.
Remmen, A., Jensen, A., & Frydendal, J. (2007). *Life cycle management: A business guide to sustainability.* United Nations Environment Programme.

Russo, M. , & Fouts, P. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal,* 40(3), 534-559.
Sharma, S., & Henriques, I. (2005). Stakeholder influences on sustainability practices in the canadian forest products industry. *Strategic Management Journal,* 26(2), 159-180.
Starik, M. (1995). Should trees have managerial standing? Toward stakeholder status for non-human nature. *Journal of Business Ethics*, 14(3), 207-217.
Suarez, F., & Lanzolla, G. (2005). The half-truth of first-mover advantage. *Harvard Business Review,* 83(4), 121-127.
Suarez, F. F., & Lanzolla, G. (2007). The role of environmental dynamics in building a first mover advantage theory. *Academy of Management Review,* 32(2), 377-392.
Thierry, M., Salomon, M., Nunen, J., & Wassenhove, L. (1995). Strategic issues in product recovery management. *California Management Review,* 37(2), 114-135.
Walmart. (2012). *2012 Global Responsibility Report.*
Webster, S., & Mitra, S. (2007). Competitive strategy in remanufacturing and the impact of take-back laws. *Journal of Operations Management,* 25(6), 1123-1140.
Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal,* 5(2), 171-180.