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Environmental orientation and corporate performance: The mediation mechanism of green supply chain management and moderating effect of competitive intensity

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ABSTRACT

This study proposes and empirically tests a model delineating the relationship among environmental orientation, green supply chain management (GSCM) activities (green purchase, customer cooperation and investment recovery) and corporate performance. Based on responses from 194 foreign invested enterprises operating in China, this study has generated several important findings. First, it demonstrates that while both internal and external environmental orientations exert a positive and significant influence on the practice of green purchase and customer cooperation, internal environmental orientation further serves as a significant driver for the practice of investment recovery. Second, it shows that the practice of these three major GSCM activities, in turn, significantly enhances corporate performance. Last, the study reveals that competitive intensity strengthens the positive influence of customer cooperation on corporate performance. Overall, the findings explicate the importance for firms, in particular those operating in a highly competitive market condition, to nurture a pro-environmental corporate culture and improve their sensitivity to salient external stakeholders' environmental demands so as to pursue greener supply chain management.

1. Introduction

Owing to the emergence of various mega-developments such as heightening societal concerns about ecological deterioration and regulators' tightening environmental control over business activities, firms today are under increasing pressure to act in an environmentally oriented manner (Banerjee, Iyer, & Kashyap, 2003; Chan, 2010; Menon & Menon, 1997). While ethicists advocate that firms' caring about their environmental impacts is by itself a moral virtue, some strategists conceive that understanding the strategic value for being more environmentally oriented is of ultimate importance for sustainable corporate success (Russo & Fouts, 1997). A quest of this understanding logically requires researchers to address a central issue, namely whether and how environmental orientation impacts on corporate performance.

In the environmental management literature, environmental orientation refers to managerial recognition of the importance of environmental issues facing firms (Banerjee, 2001, 2002). The prior literature has documented a wide range of factors, such as institutional/regulatory forces (Chan, 2010), stakeholder pressures (Banerjee, 2001), organizational resources and cultural factors (Banerjee et al., 2003; Menguc & Ozanne, 2005), that may drive firms to be more environmentally oriented. Besides, although environmental management researchers have long believed that a firm's increased level of environmental orientation will improve its strategic responses toward environmental issues, and consequently its performance (e.g., Lindell & Karagozoglu, 2001), their belief has yet to be fully validated. For instance, except for the limited amount of prior research that demonstrated the positive effect of environmental orientation on performance via pro-environmental corporate strategic practices (Chan, 2010), previous investigations often only focused on the bivariate correlation between environmental orientation and performance (Menguc & Ozanne, 2005) or even omitted the performance implications of this orientation from the analysis at all (Banerjee et al., 2003). As a result of this scant research attention, the issue of how environmental orientation exactly influences corporate environmental practices as well as performance remains largely unexplored.

Against the foregoing backdrop, this research aims to enrich the extant literature by examining the mechanism underlying the environmental orientation — performance relationship and the moderating influence of market condition on this mechanism. To this end and to take advantage of cross-fertilization of related disciplines, this research first proposes an important pro-environmental managerial practice, green supply chain management (GSCM), as a mediator of the influence of environmental orientation on corporate performance. GSCM has recently attracted considerable academic interest to explore its various strategic implications (e.g., Zhu, Geng, Sarkis,

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& Lai, 2011; Zhu & Sarkis, 2004; Zhu, Sarkis, & Geng, 2005). Despite the potential for employing GSCM to improve marketing practices (e.g., in terms of product and package design, marketing communication and channel selection) and ultimately enhance firm competitiveness (Closs, Speier, & Meacham, 2011), such employment has only received scant attention from marketing researchers. Moreover, as regards those GSCM investigations reported in other non-marketing (mostly logistics and operations management) literature, they have invariably omitted an important strategic variable, environmental orientation as an antecedent from their analysis. Given that environmental orientation relates closely to a firm's environmental practices (Banerjee, 2002), a more comprehensive analysis of the impacts of environmental orientation on GSCM, and the performance implications of the latter is considered timely and important to bridge the gaps in the extant literature.

This research also tests how market condition (e.g. competitive intensity) moderates the effect of environmental orientation on corporate performance. This examination helps rectify the traditional internal focus of prior resource-based research (Aragon-Correa & Sharma, 2003) and advance understanding of the essential role that contextual conditions may play in the transformation of environmental orientation into such desirable organizational outcomes as ecologically responsible supply chain practices and improved corporate performance. In short, this study not only inspires marketing researchers to pursue investigations on this important yet neglected area, but also provides practitioners with useful insights into fine-tuning their supply chain management practices to outperform competitors in the marketplace.

2. Conceptual framework and hypothesis development

For reference, Fig. 1 presents the overall conceptual framework and delineates the proposed relationships among internal and external environmental orientations, GSCM activities and corporate performance. Specifically, this study postulates that GSCM activities mediate the influence of environmental orientation on corporate performance. These proposed relationships are consistent with Banerjee's (2002) notion of environmental orientation that concerns managers' cognitive responses toward environmental issues facing firms. As such, the impact of this orientation on performance is thus believed to be realized only after translating into corresponding strategies. The postulated mediating effect of GSCM activities also echoes strategy researchers' long-held premise that managerial perceptions need to be translated into corresponding acts before influencing performance (Anderson & Paine, 1975). It is believed that empirical examination of these proposed relationships would enrich the limited amount of prior research on environmental orientation. As highlighted earlier, this prior research often omitted the performance implications of environmental orientation from its analysis (Banerjee et al., 2003), or simply examined the bivariate correlation between this orientation and performance (Menguc & Ozanne, 2005).

Besides the foregoing relationships, Fig. 1 also incorporates a possible market condition-related moderating variable, competitive intensity, into the analysis (as mentioned). In the following literature review, this paper will first elaborate on the concept of environmental orientation and its performance implications. This will be followed by a description of the concept of GSCM as well as how this corporate environmental practice and environmental orientation together can help explain corporate performance. Finally, it will explain why competitive intensity moderates the effect of a particular GSCM activity (customer cooperation) on corporate performance. This explanation further highlights how the indirect impact of environmental orientation (via customer cooperation) on corporate performance is contingent upon competitive intensity of the marketplace.

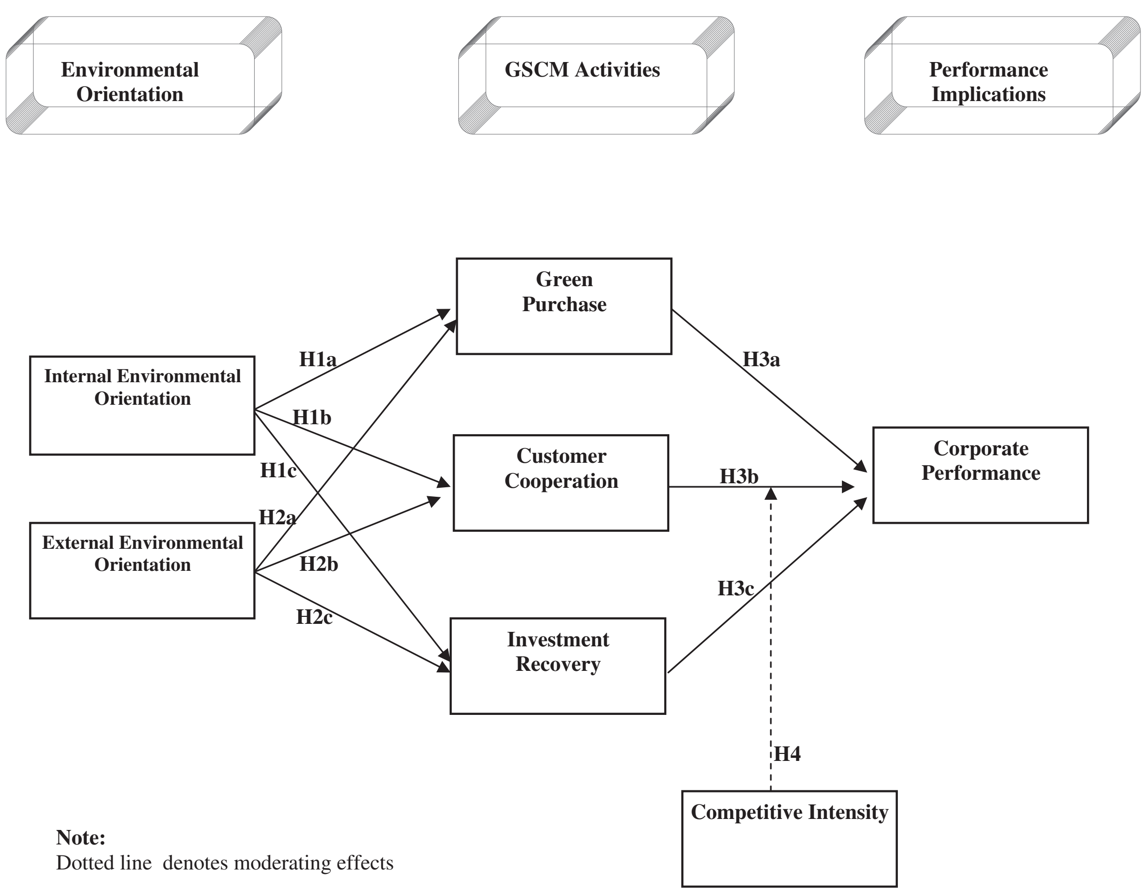

Fig. 1. The conceptual model.