

Extending the Literature on the Environmental Strategy of MNEs

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Structured Abstract:

Purpose: To explain the different international environmental strategies that multinational enterprises (MNEs) can adopt.

Approach: This study updates the traditional country-specific advantages/firm-specific advantages (FSA/CSA) framework. In order to do so, the concepts of environmental institutional distance between countries and MNEs' availability of slack resources are used.

Findings: First, a low environmental institutional distance between headquarters' and subsidiaries' countries contributes to creating environmental standards within the company. Second, MNEs with high availability of slack resources are willing to standardize their environmental practices. However, those MNEs that have a high availability of slack resources but have units based in high-distance countries prefer to generate valuable and advanced environmental management practices only in specific countries. Finally, those MNEs with a low level of slack resources and with units based in low-distance countries only comply with national environmental institutional requirements, becoming isomorphic with other local firms.

Research implications: Although previous findings suggest that MNEs are increasingly standardizing their environmental practices, this generalization can be applied to those MNEs with units based in low-distance countries that have a high availability of slack resources,

which lead them to create valuable non-location-bound, green, firm-specific advantages (FSAs).

Originality/Value: This paper sheds light on the way in which MNEs' activities affect the natural environment. Since MNEs are key actors in terms of economic and environmental development, they can promote social and environmental values in society, and at the same time encourage other organizations and institutions to adopt a socially responsible attitude.

Keywords: Natural environment, country-specific advantages, firm-specific advantages, environmental institutional distance between countries, slack resources.

Classification: RESEARCH PAPER

Short title: The Environmental Strategies of Multinational Enterprises

1. INTRODUCTION

The multinational enterprises' (MNEs') approach to the natural environment is one of the most controversial and widely studied in international business (IB) literature (e.g. Bansal, 2005; Christmann, 2004; Christmann and Taylor, 2006). On the one hand, it has been argued that MNEs locate their most polluting activities in those countries with lax environmental regulations (e.g. Stewart, 1993; Vernon, 1992). On the other hand, other studies reveal that MNEs tend to use an environmental standardization strategy in the different countries where they operate (e.g. Christmann and Taylor, 2001, 2006). As a result, these firms would be able to adopt common environmental management practices and policies worldwide, independent of countries' environmental regulations' level of stringency (Christmann, 2004; Dowell *et al.*,

2000). Other scholars show that MNEs can adopt different international environmental strategies depending on country-specific advantages (CSAs) and firm-specific advantages (FSAs) (Rugman and Verbeke, 1998a, 1998b). For instance, Kolk and Pinkse (2008) explore whether and how an important environmental issue, such as climate change, can not only give MNEs the opportunity to develop ‘green’ FSAs, but also help reconfigure key FSAs that are viewed as the main sources of firms’ profitability, growth, and survival.

This paper updates the traditional CSA–FSA framework to explain four different multinational enterprises’ international environmental strategies. The traditional CSA concept is advanced by introducing the notion of environmental institutional distance between the home and the host country. This better explains the MNE’s level of legitimacy and the decision about transferring environmental standards within its network. Besides, this paper analyzes the role of MNEs’ availability of slack internal resources as an antecedent to generating green FSAs within the MNE’s internal network. Meanwhile, previous literature has used external (institutional) and internal (resource) arguments to analyze the firms’ sustainable development at a country level (Bansal, 2005) or the environmental regulations’ influence (Rugman and Verbeke, 1998). This approach answers calls from literature for new research using an integrated approach of both arguments (Aragón-Correa and Sharma, 2003). The findings presented here contribute to helping managers and policy makers understand the great impact that MNEs’ activities have on the natural environment, and encourage these firms to develop a socially responsible attitude.

This paper proceeds with the second section covering a theoretical review, discussing the important role that the CSA/FSA configuration has nowadays in explaining the MNEs’ management activities in general, and the environmental management practices in particular. Using the CSA/FSA framework as a reference, the third section explains the different

international environmental strategies that can be adopted by MNEs. The final section refers to the discussion and future research.

2. FIRM- AND COUNTRY-SPECIFIC ADVANTAGES

MNEs are based in different countries (home and host countries) having their own institutional profiles, and need to gain legitimacy in all the contexts in which they operate (Kostova and Zaheer, 1999). Moreover, these firms can generate a set of valuable resources and capabilities, sources of competitive advantage, which can be transferred within their internal network (Barney, 1991; Bartlett and Ghoshal, 1989). As a result, there is a set of firm-specific factors that determine the competitive advantage of these firms (FSA). In addition, there are country factors, which can lead to CSAs. For these reasons, the CSA/FSA framework, widely recognized by the IB literature (e.g. Rugman, 1981; Rugman and Verbeke, 1990; 1992, 1998a, 1998b), is highly relevant to explaining the MNEs' management practices, since it is focused on firm-level strategy covering MNE activity in both home and host countries.

2.1. Firm-Specific Advantages (FSAs)

Organizations possess a set of firm-specific factors that determine their competitive advantage. Specifically, FSAs refer to advantages specific to a firm regardless of location (Rugman and Verbeke, 1992). They can be defined as '*knowledge bundles that can take the form of intangible assets, learning capabilities and even privileged relationships with outside actors*' (Rugman and Verbeke, 2003, p. 127). Therefore, the FSAs possessed by a firm are based ultimately on its internalisation of an asset, such as production, knowledge, managerial, or marketing capabilities over which the firm has proprietary control (Collinson and Rugman, 2008). Many empirical studies use various intangible assets as proxies for FSAs (e.g. Hennart,

1986; Rugman, 1981). Such intangible assets are commonly thought to include technological know-how (research and development), marketing ability and related consumer goodwill, and effective and dedicated management (Helpman, 1984; Morck and Yeung, 1992).

In relation to environmental issues, resource commitments to activities such as pollution prevention, waste reduction, product differentiation based on improving environmental quality for which consumers are willing to pay a premium (Aragón-Correa and Sharma, 2003; Reinhardt, 1998), or in-house development of pollution prevention technologies to lower environmentally induced costs (Christmann, 2000; Kolk and Pinkse, 2008), have a strategic use only if they lead to the creation of 'green' FSAs. Whether this is the case depends on the leveraging potential of resource commitments and the flexibility regarding their reversibility (Kolk and Pinkse, 2008). MNE managers must decide whether specific green FSAs can be developed and used within individual countries (*location bound*) or whether they can be used globally through environmental standards (*non-location bound*) (Rugman and Verbeke, 1998a, 1998b). Indeed, it is the non-location-bound FSAs, when combined with the existence of market imperfections associated with international transactions, that explain the existence of MNE activity (Rugman, 1981). However, pressures for national responsiveness exerted by governments, consumers and other stakeholders may stimulate MNEs to develop location-bound green FSAs (Kolk and Pinkse, 2008; Rugman and Verbeke, 1998b). Thus, the important role of CSAs has to be considered as well.

2.2. Country-Specific Advantages (CSAs)

CSAs refer to location advantages specific to the country in which the unit of the MNE is located. These advantages may arise from structural market imperfection, such as government regulation (Rugman *et al.*, 1985) or the potential to economize on transaction costs by

reducing risks and benefit from local opportunities (Rugman, 1990). CSAs group factors, such as availability of natural resources, access to markets to sell products and services, factor costs (labor, capital, and land), and knowledge-intensive assets, such as skilled labor and public infrastructure (Dunning, 1998). They can also include demand conditions; the political, cultural, and regulatory systems; and infrastructure. In Porter (1990) terminology, the CSAs form the basis of the international platform from which the MNE derives a home-base 'diamond' advantage. Tariff and non-tariff barriers to trade and other government regulation also influence CSAs (Collinson and Rugman, 2008). Building on these CSAs, the firm's leading managers make decisions about the efficient global configuration and coordination between segments of its value chain (operations, marketing, R&D and logistics). Thus, MNEs can benefit from CSAs either because they already own facilities in this particular location, or because they move to these locations in an effort to seek strategic assets to complement their existing FSAs.

Environmental management literature has widely analyzed the influence of home and host countries' environmental regulations on the adoption of an MNE's environmental strategies. For instance, Rugman and Verbeke (1998a) argue that strict environmental regulations implemented at the national level may influence the relative location advantages of a specific country for the operation of both domestic and foreign firms. Porter and van der Linde (1995) argue that MNEs benefit from higher environmental standards in their home market, because such standards induce them to develop superior environmental management capabilities, which improve an MNE's international competitiveness once environmental regulations are raised in other countries. Furthermore, the role of international environmental regulations has also been incorporated (Christmann, 2004). However, the environmental institutional profile of each country is very complex and incorporates additional institutional dimensions beyond the regulatory one, such as the cognitive and normative dimensions (Hoffman, 1999; Kostova,

1999; Kostova *et al.*, 2008; Kostova and Zaheer, 1999). Evidence suggests that even if formal environmental regulations are identical across countries, de facto regulations may differ as a result of differences in countries' capacities to implement, monitor and enforce regulations (Dasgupta *et al.*, 2000). Finally, there are differences in countries' capacities to tolerate, dilute, absorb or ignore pollution, as well as differences in economic and environmental priorities (Christmann and Taylor, 2001). Therefore, the local context of a network of other firms or non-profit organizations that are in the process of developing environmentally friendly products may be strongly complementary to an MNE's own green FSA development.

3. MNEs AND INTERNATIONAL ENVIRONMENTAL STRATEGIES

In order to determine the MNEs' international environmental strategies, this paper updates the traditional FSA/CSA framework (Rugman, 1981; Rugman and Verbeke, 1992), introducing two new dimensions.

3.1. Multinational Enterprises' Availability of Slack Resources

The implementation of environmental practices and policies requires a substantial investment by these firms (Christmann and Taylor, 2001). For this reason, the role of the *MNEs' availability of slack resources* as a factor influencing the generation of green FSAs is examined here. Slack resources refer to the stock of excess resources available to an organization during a given planning cycle (Nohria and Gulati, 1996). They can accrue as a result of organizational performance in prior periods, as a planned buffer, or as a result of poor planning (Voss *et al.*, 2008). Slack resources give the firm leeway in managing changes in response to a dynamic environment. Indeed, slack can become a resource for conflict resolution and may be employed as a buffer to insulate the technical core of the organisation from environmental turbulence. In addition, it can facilitate strategic behavior, which allows

the firm to experiment with new strategies, such as introducing new products and entering new markets (Tang and Peng, 2003). Bourgeois (1981) adds that slack is a resource cushion that firms can use in a discretionary manner, both to counter threats and to exploit opportunities. In summary, slack is one of the capital-based firm resources (financial, physical, human and organizational) that the organization uses to implement strategies designed to improve firm efficiency and/or effectiveness (Adams and Lamont, 2003).

Considering the different types of slack, the financial slack is of great importance in relation to environmental issues. Perfectly divisible for allocation to multiple activities, it is the least absorbed form of slack and the easiest to redeploy (Greve, 2003). It is argued that there should be less motivation to conserve and a greater willingness to deploy financial slack to risky exploration that can strengthen an organization's long-term position (Levinthal and March, 1993). Since corporate environmental and social performance represents an area of high managerial discretion, the initiation of voluntary environmental policies may, to a large extent, depend on the availability of surplus funds. Indeed, if managers have more discretionary financial slack at their disposal, they can better view environmental issues as opportunities rather than as threats (Bansal, 2005; Sharma, 2000). In contrast, when financial slack is low, other issues may dominate the mindset of management, relegating environmental issues to lower priority (Henriques and Sadorsky, 1996).

3.2. Environmental Institutional Distance between Headquarters' and Subsidiaries' Countries

The IB literature has paid scant attention to study the *institutional distance between headquarters' and subsidiaries' countries* in terms of environmental issues (*environmental institutional distance*) and its effect on the adoption of international environmental strategies

by MNEs. Countries have idiosyncratic characteristics in their national institutional environment, which is composed of various types of institutions such as policy, regulation, value system and education systems (Kostova, 1999). As MNEs spread their operations in different countries, they need to interface across multiple institutional environments, as well as carry their operations under diverse institutional pressure and absorb such pressure (Kostova and Zaheer, 1999; Xu and Shenkar, 2002). For instance, the institutional environment in emerging markets may display the constraints of lack of reliable market information and extensive state intervention in business operations, both of which will bring risks to the MNE performing in those markets (Shige, 2004). Hence, institutional distance between the home and the host country plays an essential role in defining the MNEs' management practices. It reveals the degree of institutional similarity between countries (Kostova and Roth, 2002).

Previous literature distinguishes two different considerations regarding the relation between institutional distance between countries and the MNE's strategies. On the one hand, it is shown that standardization of managerial practices is easier between countries with similar institutional structures. Ang and Massingham (2007) show that when the pressures for economies of scope are high and pressures for cultural responsiveness are low, the standardization decision is the most appropriate. In addition, a low institutional distance contributes to adjusting the legitimacy requirements of a country that is institutionally similar to its home country (Kostova and Zaheer, 1999). Consequently, a high institutional distance between countries would create a *liability of foreignness* for firms doing business abroad (Orr and Scott, 2008; Zaheer and Masakowski, 1997). On the other hand, another view suggests that countries' differences might drive creation of international standards within MNEs in order to unify their management rules (Christmann and Taylor, 2006). Thus, the MNE would

tend to reinforce its own internal institutional profile through homogeneous management models that justify the MNE's conduct worldwide (Kostova *et al.*, 2008).

Thus, considering these two dimensions explained above, Figure 1 shows a matrix which explains the different MNEs' international environmental strategies. On the horizontal axis, the influence of MNEs' slack resources on the MNEs' environmental strategies and the linked generation of green FSAs are observed. These resources range from low to high. On the vertical axis, the influence of level of environmental institutional distance between countries is seen. Hence, four different MNEs' environmental strategies are delimited with different implications for the potential to generate environmental capabilities.

 Insert Figure 1 about here

Quadrant 1: Pollution haven hypothesis

Those MNEs with units based in high-distance countries and that have a low level of slack resources are grouped. These MNEs do not generate green FSAs. The low level of slack resources makes it difficult to generate and transfer a pattern of advanced environmental strategies across all the internal units. Moreover, a high institutional distance between countries can deter the legitimacy process in a host country (Kostova and Zaheer, 1999). As a result, this lack of legitimacy is exploited by these firms to undertake opportunistic environmental behavior in certain locations. Stated differently, these MNEs take advantage of the resulting cross-country differences in environmental regulations by moving production capacity to the country most willing to operate lax environmental standards (e.g. Stewart,

1993; Vernon, 1992). Although this ‘hypothesis’ has only taken into consideration the countries’ environmental regulatory dimension (finding controversial empirical results), it can also be applied to the rest of the national institutional dimensions.

Quadrant 2: Environmental compliance

Here MNEs with units based in low-distance countries and that have a low level of slack resources are distinguished. These firms do not generate green FSAs. It is shown that it will be easier for an MNE to understand and adjust to the legitimacy requirements of a country that is institutionally similar to its home country than of one that is institutionally distant (Kostova and Zaheer, 1999). Thus, MNEs from this quadrant comply with each country’s environmental institutional requirements in order to gain national legitimacy (Kostova and Roth, 2002). Consequently, MNEs that interact in that country tend to adopt structures and processes that are approved by the relevant institutional context, becoming isomorphic with the other local firms (DiMaggio and Powell, 1983; Zucker, 1977). The low level of slack resources does not provide potential to voluntarily exceed environmental regulations; however, for the low-distance countries a standardized strategy can be used without extra effort.

Quadrant 3: Environmental resources

Those MNEs with units based in high-distance countries and that have a high level of slack resources are found in quadrant three. These resources allow these firms to generate advanced environmental approaches focused on the creation of green resources and capabilities, even when the high distance does not easily allow transfer of the generated capabilities within the MNE. Consequently, these green FSAs are generated and implemented in specific countries (*location-bound green FSAs*). Although these MNEs are not environmentally opportunistic,

they are not willing to transfer their environmental practices within countries that are institutionally very different, since these regions may deter the internalization and assimilation of the new practices (Kostova and Roth, 2002).

Quadrant 4: Environmental standardization

These MNEs have their different units based in low-distance countries and have a high level of slack resources, which lead these firms to generate non-location-bound green FSAs. Consequently, these MNEs self-regulate their environmental conduct, which means that there is a firm's commitment to control its own conduct beyond what is required by the law through voluntary environmental initiatives (Christmann and Taylor, 2006). Indeed, they can easily transfer green resources and capabilities, independent of the headquarters' or subsidiary's country. As a result, firms are able to increase their transparency and reputation worldwide (Bansal, 2005), and gain legitimacy among critical stakeholders along the supply chain (e.g. Christmann, 2004; Cordano *et al.*, 2010; Eiadat *et al.*, 2008).

4. DISCUSSION AND CONCLUSIONS

There is a general belief relating to the MNEs' code of conduct that ensures that their activities have a more negative impact on the natural environment than that of other firms (e.g. Vernon, 1992). In contrast, it has been suggested that MNEs increasingly self-regulate their environmental conduct. Therefore, firms would not take advantage of the different levels of permissiveness that countries' environmental regulations have (Christmann, 2004). This paper updates the traditional CSA–FSA framework to explain the different international environmental strategies adopted by MNEs. Two different contributions are derived from this research.

First, the CSA–FSA traditional configuration is advanced to show the environmental strategies that MNEs can use (Rugman and Verbeke, 1998a, 1998b). On the one hand, the global environmental institutional distance between countries is considered. On the other hand, the slack resources concept is applied as an antecedent to analyze the level and type of green FSAs that MNEs can generate and transfer. As a result, four different international environmental strategies are distinguished: *pollution haven hypothesis* (MNEs with a low level of slack resources and with units based in high-distance countries that leads them to undertake an opportunistic environmental conduct, locating their most polluting activities in countries with lax environmental regulations), *environmental compliance* (MNEs with a low level of slack resources and that only gain national legitimacy in countries with similar environmental institutional profiles), *environmental resources* (MNEs with units based in high-distance countries and with a high level of slack resources that leads these firms to generate location-bound green FSAs in specific countries, which are not transferred to the rest of the units), and *environmental standardization* (MNEs with units based in low-distance countries and with a high level of slack resources that allows them to generate non-location-bound green FSAs).

Second, using the CSA–FSA configuration the institutional and the resource-based views are combined in order to understand the environmental management of MNEs. In fact, not only do these organizations give importance to the green resources that can be generated, but also justify their existence through their direct contact with agents from the countries where they operate (Kolk and Pinkse, 2008; Rugman and Verbeke, 2001).

It is concluded that not all the MNEs are interested in adopting an environmental standardization strategy. Although previous findings suggest that MNEs are increasingly standardizing their environmental practices due to different stakeholders' pressures (e.g.

Christmann, 2004; Rappaport and Flaherty, 1992), this generalization can be applied to those MNEs with units based in low-distance countries and that have a high availability of slack resources that lead them to create non-location-bound green FSAs. A low institutional distance encourages MNEs to gain legitimacy in those countries, since they do not find difficulties in assimilating their institutional requirements. Additionally, since these MNEs can easily transfer their practices in these countries, they prefer to generate, through their high availability of slack financial resources, non-location-bound green FSAs to reduce their costs (e.g. Bartlett and Ghoshal, 1989), increase their reputation and transparency (e.g. Alberti *et al.*, 2000; Dowell *et al.*, 2000), and gain legitimacy (Bansal 2005; Kostova *et al.*, 2008). Consequently, additional critics of the Porter hypothesis of home-based environmental regulations beyond the home country size and the difficulties in anticipating the environmental regulations of all countries (Rugman and Verbeke, 1998a) are necessary. Indeed, the institutional distance between the home and the host country and the MNEs' availability of slack resources are important external and internal factors respectively that explain this strategy as well, and not only the headquarters' or subsidiaries' countries' environmental regulations.

This paper aims to shed light on the way in which MNEs' activities affect the natural environment. Since MNEs are key actors in terms of economic and environmental development, they can promote social and environmental values in society and, at the same time, encourage other organizations and institutions to adopt a socially responsible attitude (Kolk and Van Tulder, 2010). It is necessary for all public and private agents to become involved with MNEs' advanced environmental policies through the creation of common social and political mechanisms worldwide that lead organizations to adopt more stringent environmental standards in all the locations where they operate. Indeed, environmental standardization can not only reduce MNEs' ability to exploit cross-national differences in

environmental regulations, but is likely to create friction with organizations in emerging economies that develop opportunistic approaches to environmental problems. From a managerial viewpoint, this research encourages managers to develop an environmental standardization strategy. Through this strategy, the MNE will be able to take advantage of a set of positive benefits, such as cost reduction and improvement of corporate reputation, transparency, and international legitimacy.

In future research, it would be relevant to consider the strategic importance that subsidiaries may have on the MNEs' environmental management. In fact, subsidiaries can establish diverse, valuable relationships with stakeholders (Rugman and Verbeke, 2001) that can contribute to generating location and non-location-bound green FSAs.

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