**Proactive Environmental Strategy, Foreign Institutional Pressures, and Internationalization of Chinese SMEs**

**ABSTRACT**

We explain how proactive environmental strategy affects emerging country small- and medium-sized enterprise (SME) internationalization and the contingency roles of foreign institutional environment. A survey of 217 Chinese SMEs reveals the positive effects of proactive environmental strategy on inward-focused and outward-focused internationalization activities. The results also show that foreign institutional pressures influence such effects in nonlinear ways. That is, a medium level of foreign environmental regulatory pressure maximizes the positive effects of proactive environmental strategy on inward-focused internationalization activities, while a medium level of foreign environmental customer pressure maximizes the positive effects of proactive environmental strategy on outward-focused internationalization activities.

Keywords: Proactive environmental strategy; Institutional pressures; SME internationalization; Emerging countries; China

**1. Introduction**

Pursuing proactive environmental strategy and internationalization are two major trends in small- and medium-sized enterprises’ (SMEs’) practices in developed countries. Proactive environmental strategy refers to a range of practices that firms adopt to take a proactive stance towards incorporating environmental sustainability in their business operations (Christmann & Taylor, 2002; Jones, Willness, & Madey, 2014). The emergence of environmental concerns in recent years has motivated SMEs to devote greater efforts to proactive environmental strategy. For example, evidence shows that more than 90% and 70% of the clean technology organizations in the UK and Finland, respectively, are SMEs (Koirala, 2018). Internationalization refers to the process of increasing involvement in international operations (Bagheri, Mitchelmore, Bamiatzi, & Nikolopoulos, 2019; Hennart, Majocchi, & Forlani, 2019; Welch & Luostarinen, 1993). SMEs are under increasing pressure to internationalize their activities to expand their business. For example, the Office for National Statistics’ study shows that the number of UK SMEs’ exports increased by 6.6% in 2017 (UK Exporting, 2018). It has been suggested that the engagement in proactive environmental strategy helps developed country SMEs to improve their competitiveness in the international marketplace (e.g., Martin-Tapia, Aragon-Correa, & Senise-Barrio, 2008).

Surprisingly, however, there is only limited theory and empirical data on whether and, if so, under what conditions proactive environmental strategy affects emerging country SME internationalization. Although findings from studying SMEs in developed countries may thus be transferable to some degree to different contexts, SMEs from emerging countries face a wide range of different circumstances in internationalizing their activities. First, a study conducted by Marano, Tashman, and Kostova (2017) indicates that the underdevelopment of institutions (e.g., laws, etc.) in emerging countries impedes the development of knowledge and resources, and constrains economic opportunities, which in turn motivates firms to internationalize their activities to developed countries. Thus, emerging country SMEs are more likely to seek both inward-focused internationalization activities such as learning foreign skills and technology (e.g., Zhou, Wu, & Luo, 2007) and foreign direct investment (Hertenstein, Sutherland, & Anderson, 2017), as well as outward-focused internationalization activities such as exporting (e.g., Chan & Ma, 2016) and developing alliance relationships with foreign partners (e.g., de Oliveira, Nguyen, Liesch, Verreynne, & Indulska, 2021; Zhang, Ma, Wang, Li, & Huo, 2016). Previous literature has primarily focused on how proactive environmental strategy affects SME exports (Martín-Tapia, Aragón-Correa, & Rueda-Manzanares, 2010; Martin-Tapia *et al.*, 2008), but is incomplete in the context of emerging country SMEs.

Second, firms from emerging countries with underdeveloped institutions often face legitimation challenges when internationalizing their activities to developed countries because the governance of their actions in their home country institution environment is weak (Cuervo-Cazurra & Ramamurti, 2014; Nuruzzaman, Singh, & Gaur, 2020; Wang & Ma, 2018). One aspect associated with this lack of good governance is that the host country governments (e.g., regulators) and civil societies (e.g., customers) may assume that emerging countries have poor environmental protection guidelines (Marano *et al.*, 2017) and may exert environmental (institutional) pressures on the firms, sometimes surpassing domestic requirements (Zhu & Sarkis, 2007). There are two primary types of environmental pressure – foreign environmental regulatory and customer pressures. The former is coercive pressure emanating from the states (i.e., regulators) that affects the actors’ practices through force or authority, and the latter is normative pressure stemming from civil societies (e.g., customers) that affect the actors’ practices by creating norms and expectations (Swaminathan & Wade, 2018). Researchers have yet to offer an in-depth analysis of how these pressures affect emerging country SMEs’ efforts to leverage their proactive environmental strategy to enhance internationalization outcomes. Thus, investigating how proactive environmental strategy contributes to emerging country SME internationalization under different foreign environmental pressures remains an important research topic.

This research focuses on Chinese SMEs as the empirical setting for three reasons. First, Chinese SMEs are often referred to as the proverbial example of emerging country SMEs with a strong preference for internationalizing their activities to developed countries. As legal enforcement exhibits wide variations across regions and is sometimes subject to local authority intervention, China’s institutional environment is deemed underdeveloped (Sheng, Zhou, & Li, 2011). Thus, Chinese SMEs are increasingly compelled to acquire resources and seek economic opportunities in foreign countries (Zhou et al., 2007). Second, research shows that Chinese SMEs have started to adopt proactive environmental strategy to manage their operations’ impact on the natural environment (Zeng, Meng, Zeng, Tam, Tam, & Jin, 2011). Third, foreign regulators and customers have developed negative stereotypes about Chinese SMEs’ environmental performance (Zhu, 2016; Zhu & Sarkis, 2007). Thus, many Chinese SMEs face pressure from foreign regulators and customers regarding environmental issues (Li, Ye, Dai, Zhao, & Sheu, 2019; Luo, Jie, Li, & Yao, 2018).

Drawing on different aspects of the resource-based view and institutional theory, we develop a conceptual framework (see Figure 1). The resource-based view posits that the presence of unique resources enables firms to acquire new resources and achieve competitive advantages in the marketplace (Barney, Ketchen, & Wright, 2011; McWilliams & Siegel, 2011). Applied to our context, we argue that the engagement of proactive environmental strategy by Chinese SMEs can be considered a unique resource that supports the firms’ internationalization efforts by acquiring resources and exploring economic opportunities from developed countries. The resource-based view also indicates that the optimal use of firms’ resources requires alignment with certain institutional conditions (Aragón-Correa & Sharma, 2003; Oliver, 1997). Building on the concepts of isomorphism and institutional distance of institutional theory, we further argue that foreign environmental regulatory and customer pressures play important roles in influencing this association between proactive environmental strategy and Chinese SMEs’ internationalization activities. Because SMEs face limited resources, different levels of foreign institutional pressures may be useful for SMEs with proactive environmental strategy in some instances but not in others (Schwens, Eiche, & Kabst, 2011). We argue that the moderating effect is nonlinear.

We make two crucial theoretical contributions. First, our research expands the explanatory value of the resource-based view in studying SME environmental strategy and internationalization to the emerging country SME context. Previous international business literature pays more attention to how developed country SMEs’ incorporation of environmental sustainability can be considered an important resource that can lead to competitive advantage in exporting – an outward-focused internationalization activity (e.g., Martín-Tapia *et al.*, 2010; Martin-Tapia *et al.*, 2008). The insights generated from these studies cannot fully explain emerging country SMEs’ internationalization activities as they are derived from the acquisition of both foreign resources and economic opportunities (Zhou *et al.*, 2007). By illustrating how proactive environmental strategy can help to support Chinese SMEs’ inward-focused and outward-focused internationalization activities, we provide a more holistic perspective on how the resource-based view can be applied to explain the influence of proactive environmental strategy on the full range of SME internationalization activities.

Second, our research advances the use of institutional theory in line with the resource-based view to explain firms’ international business strategies (He, Brouthers, & Filatotchev, 2013; Meyer, Estrin, Bhaumik, & Peng, 2009). Theorists have traditionally suggested that isomorphism and institutional distance can impact the value that firms can generate from resource-based advantages in international business (He *et al.*, 2013; Oliver, 1997). However, this mechanism of how foreign environmental pressures can affect emerging country SMEs’ efforts to leverage their proactive environmental practices in the pursuit of internationalization has not been empirically demonstrated. Furthermore, we suggest that emerging country SMEs pose challenges to this combined theoretical perspective. This is because, 1) as SMEs, their resource limitation may prevent them from fully realizing their advantages of pursuing proactive environmental strategy when faced with different levels of institutional pressures, and 2) as SMEs from emerging countries, they face environmental challenges from foreign regulators and customers about their firms based on negative stereotypes about their countries of origin. This is evinced by our findings that show foreign regulatory and customer pressures as pivotal vehicles with nonlinear moderating effects on the relationship between proactive environmental strategy and Chinese SME internationalization. Both low and high levels of foreign environmental pressures (from regulators and customers) do not maximize the strength of such a relationship. The beneficial effect of proactive environmental strategy on Chinese SME internationalization is the strongest when foreign environmental pressures are at a medium level. As such, this work contributes to the growing literature on legitimation challenges of emerging country SMEs in host countries (e.g., Deng & Zhang, 2018; Park & Ghauri, 2015), as well as extending the applicability of institutional theory in line with the resource-based view to explain the influence of institutional environment to foster or impede SMEs’ efforts to leverage proactive environmental strategy in pursuing internationalization.

**2. Research Background**

Engaging in proactive environmental strategy and internationalization are two major trends in contemporary business practices. Consequently, the relationship between these two activities has attracted increasing attention in the academic literature. In the international business literature, researchers have devoted a great deal of attention to exploring how proactive environmental strategy affects large multinational companies’ internationalization practices (e.g., Arora & De, 2020; Chen, Ong, & Hsu, 2016; Christmann, 2004; Dowell, Hart, & Yeung, 2000). Yet only a few studies explore this relationship in the SME context. For example, the seminal studies led by Martin-Tapia and colleagues suggest a positive effect of SMEs’ environmental practices and export intensity, which varies in strength according to the degree of perceived uncertainty (e.g., Martin-Tapia *et al.*, 2008) and size (Martín-Tapia *et al.*, 2010). These researchers have provided enduring insights into how proactive environmental strategy can affect SME internationalization, and they also show how the strength of such an association depends on various contingent factors. Nevertheless, they focus primarily on the perspective of SMEs from developed countries.

Our study builds on these insights but focuses on how emerging country SMEs leverage their proactive environmental strategy to internationalize their activities to developed countries. This perspective is important and unique in two ways. First, the pursuit of internationalization by developed country SMEs focuses mainly on securing business growth (Love & Roper, 2015; Martín-Tapia *et al.*, 2010). However, the underdeveloped institutional environment in emerging countries impedes the development of knowledge and the flow of financial capital and constrains economic opportunities (Khanna & Palepu, 2010; Kostova, Marano, & Tallman, 2016). Thus, the pursuit of internationalization by SMEs from emerging countries often puts the emphasis on both inward-focused and outward-focused internationalization activities to not only acquire foreign resources, but also to grow revenue and profits. Second, emerging country firms often face legitimation challenges on environmental issues from developed countries’ regulators and customers as their home country institutions do not enforce or enable good governance (Cuervo-Cazurra & Ramamurti, 2014; Kostova *et al.*, 2016). Thus, the pursuit of internationalization by SMEs from emerging countries needs to account for environmental pressures from foreign regulators and customers.

So far, we have only identified Chan and Ma (2016) work that explores the processes underlying the development of an environmental orientation and its impacts on emerging country SMEs’ export performance, which is closely related to the topic of this research. However, their work focuses primarily on the financial performance achieved from engaging in internationalization activities (i.e., exporting), as well as the influence of home country institutions (China’s local ecological infrastructure). Thus, whether proactive environmental strategy has desirable effects on the engagement of inward-focused/outward-focused internationalization activities is yet to be explored, as well as the host country institutions' influence concerning environmental sustainability on this relationship. We address these gaps by studying Chinese SMEs’ proactive environmental strategy and internationalization activities directed at developed countries. Chinese SMEs have taken various actions to develop their proactive environmental strategy to manage their operations’ impact on the natural environment (Li *et al.*, 2019; Zeng *et al.*, 2011). Like other emerging countries, China has an underdeveloped institutional environment (Marano *et al.*, 2017; Sheng *et al.*, 2011) which may motivate SMEs to seek both inward-focused and outward-focused internationalization activities when entering developed countries (Zhou *et al.*, 2007). Foreign regulators and customers from developed countries have established negative stereotypes concerning Chinese SMEs’ environmental sustainability (Li *et al.*, 2019; Luo *et al.*, 2018). This contextualization allows us to study the role of proactive environmental activity and foreign institutional pressures on environmental issues in emerging country SME internationalization activities, and to generate managerial insights for emerging country SMEs.

**3. Theories and Hypotheses**

*3.1 Proactive environmental Strategy and Internationalization*

We draw on the resource-based view to argue that proactive environmental strategy affects SME internationalization (see Figure 1). The theory assumes that firms’ unique resources that are valuable, rare, and inimitable influence their strategic actions (Barney *et al.*, 2011). Because resources are the sources of firms’ advantages in the marketplace, it is thus more feasible for managers to plan actions to exploit business opportunities based on the strengths of the firms’ resources. Drawing on the resource-based view, we conceptualize proactive environmental strategy as the predictor in our framework. Proactive environmental strategy reflects firms’ incorporation of a range of environmentally sustainable practices in their business operations to improve their interaction with the natural environment (Christmann & Taylor, 2002; Jones *et al.*, 2014). Engagement in proactive environmental strategy can be considered an important firm resource (Chan, 2005). Previous studies report that Chinese SMEs are increasingly adopting a proactive environmental strategy to “green up” their operations and convert environmental threats to their advantage in implementing business strategy (Zeng *et al.*, 2011).

“Insert Figure 1 Here”

At the same time, we conceptualize inward-focused and outward-focused internationalization activities as the dependent variables in our conceptual framework (see Figure 1). This consideration also builds on the resource-based view, which argues that firms’ various strategic actions, such as internationalization (e.g., Martín-Tapia *et al.*, 2010), can be considered important consequences that arise from realizing the value of its incorporation of green operations (Chan, 2005; Hart, 1995). This study focuses on four types of internationalization activity pursued by Chinese SMEs (Zhou *et al.*, 2007). The first type of internationalization activity is exporting. Previous studies have recognized that exporting is the most common strategy for SMEs to gain entry to foreign markets and aggressively seek foreign markets (customers) (Love & Roper, 2015). The second type of internationalization activity is to develop alliance relationships with foreign partners (e.g., supplier-buyer relationship). Under this approach, SMEs become their foreign partners’ international suppliers and indirectly sell their products/services to foreign customers (Khavul, Prater, & Swafford, 2012; Zhang *et al.*, 2016). Zhou *et al.* (2007) categorize these two activities as “outward-focused internationalization activities", focusing on exploring foreign economic opportunities.

The third type of internationalization activity is to learn advanced foreign knowledge (i.e., management skills and technologies). Internationalization has been defined as the process of increasing involvement in international operations (Bagheri *et al.*, 2019; Welch & Luostarinen, 1993). Following this definition, besides seeking and expanding into foreign markets, SMEs can also engage in internationalization by incorporating foreign knowledge into the existing operations (Korhonen, Luostarinen, & Welch, 1996). The fourth type of internationalization activity is to utilize foreign direct investment. Acquiring and using foreign direct investment is an important route to SME internationalization because it stimulates foreign knowledge transfer and allows SMEs to access foreign investors’ strategic assets (Kang, Scott-Kennel, Battisti, & Deakins, 2020). Zhou *et al.* (2007) categorize these two activities as “inward-focused internationalization activities” that focus on acquiring knowledge and financial capital from foreign countries.

We anticipate the positive relationship between proactive environmental strategy and Chinese SMEs’ inward-focused internationalization activities. In comparison to developed countries, China has underdeveloped institutions (e.g., legal enforcement exhibits wide variations across regions and sometimes intervention by local authorities) (Marano *et al.*, 2017; Sheng *et al.*, 2011) that may impede the development of knowledge and flow of financial capital. As a result, Chinese SMEs seek internationalization to acquire resources from developed countries. The engagement of proactive environmental strategy favors Chinese SMEs’ pursuit of inward-focused internationalization activities. Our arguments build on an aspect of the resource-based view which suggests that firms’ existing resources support their acquisition of new resources (Barney *et al.*, 2011; Wernerfelt, 2011). In other words, the implementation of a proactive environmental strategy makes it easier for Chinese SMEs to utilize knowledge (e.g., advanced management skills and technology) and financial capital from developed countries.

More specifically, applying a proactive environmental strategy requires Chinese SMEs’ efforts to incorporate environmental practices into their regular business operations to reduce their impact on the natural environment. Prior studies suggest that implementing environmental practices involves using more advanced management skills (or technologies) to facilitate environmentally sustainable economic activities (Chan, 2005; Hart, 1995; Trumpp & Guenther, 2017). In other words, environmentally sustainable Chinese SMEs have already incorporated more advanced management skills or technologies (to certain degrees) in their business operations. Concurrently, knowledge (e.g., advanced management skills and technology) created by organizations in developed countries often features some levels of environmental protection and green initiatives because of the more developed institutional environment (Delmas & Toffel, 2008; Marano *et al.*, 2017). Thus, Chinese SMEs with a proactive environmental strategy can adopt these foreign advanced management skills and technologies without considerable adjustments to the current practices. This is also evinced by prior studies, which show that the lack of relevant knowledge in applying respective technologies (i.e., smart waste management) is an important barrier (Zhang, Venkatesh, Liu, Wan, Qu, & Huisingh, 2019), but technological factors such as the compatibility with existing operations are an important determining factor for Chinese firms when adopting new managerial concepts (e.g., circular economy) and technologies (e.g., green technology, e-commerce, etc.) from foreign countries (Pesce, Tamai, Guo, Critto, Brombal, Wang, Cheng, & Marcomini, 2020). Thus, we argue that environmentally sustainable Chinese SMEs are more likely to acquire and utilize advanced management skills and technologies from developed countries.

Incorporating environmental practices also improves Chinese SMEs’ attractiveness to investors from developed countries. Investors from developed countries’ institutional environments will consider firms with a reputation for being good corporate citizens as viable investment targets. This is because 1) foreign investors are more familiar with these operational practices (e.g., environmental protection), and 2) such a reputation will protect foreign investors when potential environmental threats occur (Ambec & Paul, 2008; Trumpp & Guenther, 2017). This attractiveness to foreign investors is particularly important for Chinese SMEs. For example, prior studies show that foreign investors often consider Chinese SMEs as risky investment targets due to their poor environmental record and a high likelihood of being challenged by green activists (Hildebrandt & Turner, 2009). Thus, Chinese SMEs with proactive environmental practices are more likely to acquire foreign direct investment.

We also anticipate the positive relationship between proactive environmental strategy and Chinese SMEs’ outward-focused internationalization activities. As discussed earlier, institutions play important roles in supporting the effective function of market mechanisms (Marano *et al.*, 2017; Sheng *et al.*, 2011), and the underdeveloped institutions constrain economic opportunities (Khanna & Palepu, 2010). When home country institutions are underdeveloped (such as China), firms often internationalize their activities to access more efficient marketplaces (Marano *et al.*, 2017). Following this logic, Chinese SMEs are more likely to seek internationalization to explore foreign economic opportunities. We argue that the engagement of proactive environmental strategy favors Chinese SMEs’ pursuit of outward-focused internationalization activities. Our arguments build on another aspect of the resource-based view, which suggests that unique resources enable firms to achieve competitive advantage in the marketplace (Barney *et al.*, 2011; McWilliams & Siegel, 2011).

More specifically, the implementation of a proactive environmental strategy allows Chinese SMEs to market themselves as environmentally friendly organizations and develop green (brand) reputations in the developed countries’ marketplaces. Such a reputation allows Chinese SMEs to meet foreign customers’ needs and differentiate themselves from close rivals whose practices are not environmentally sustainable. This is because customers in developed countries are more likely to accepted products offered by emerging firms whose operations have less harmful impacts on the natural environment (Zhu & Sarkis, 2007). For example, a study by Chan and Ma (2016) shows a positive relationship between Chinese SMEs’ environmental practices and export performance.

On the other hand, firms (i.e., potential foreign alliance partners) in developed countries often consider emerging country firms’ environmental performance an important sign of their reliability and effectiveness (de Oliveira *et al.*, 2021; Lin & Ho, 2011). For example, Chiou, Hsu, and Hwang (2008) show that Chinese firms’ environmental performance is a relatively crucial factor used by developed country firms (e.g., the USA and Japan) to select supply partners. Furthermore, selecting environmentally sustainable emerging country SMEs as alliance partners also enables developed country firms to justify their outsourcing strategy to domestic customers (Babin & Nicholson, 2011). Thus, we argue that environmentally sustainable Chinese SMEs are more likely to attract developed country alliance partners in building supplier-buyer relationships.

Besides, the implementation of a proactive environmental strategy requires Chinese SMEs to invest heavily in developing environmentally sustainable business operations (Zeng *et al.*, 2011). In order to extract more value from such operations, we argue that environmentally sustainable Chinese SMEs are willing to allocate more resources to exploring foreign economic opportunities. As discussed earlier, emerging countries’ (such as China’s) underdeveloped institutions may impede economic opportunities (Marano *et al.*, 2017). Thus, environmentally sustainable Chinese SMEs will become more active and more willing to invest efforts in overcoming the challenges of seeking markets and developing alliances with partners in the developed countries. Combining the above discussions, our corresponding hypothesis reads as follows:

*Hypothesis 1: Proactive environmental strategy is positively related to a) inward-focused and b) outward-focused internationalization activities in the Chinese SME context.*

*3.2 Foreign Environmental Regulatory and Customer Pressure*

The institutional theory indicates that actors must conform to the rules of the institutional environment (Delmas & Toffel, 2008), which is primarily shaped by coercive and normative pressures[[1]](#footnote-1) (Swaminathan & Wade, 2018). Coercive pressure originates from the states (i.e., regulators) that can enforce the laws via the courts. In contrast, normative pressure arising from public opinion (i.e., customers) can create norms and expectations. Actors must conform to these pressures to gain legitimacy (Cheng & Yu, 2008; Swaminathan & Wade, 2018). This research focuses on the foreign institutional pressures generated from regulators (coercive pressure) and customers (normative pressure) among different constituents[[2]](#footnote-2). This perspective is also supported by prior research that indicates that internationalized organizations will face the institutional environment shaped by the coercive pressure arising from the host government regulations and the normative pressure from foreign customers (Xu, Zeng, & Chen, 2018).

In this research, we refer to foreign environmental regulatory pressure as regulations enforced by foreign regulators on environmental conduct, while foreign environmental customer pressure refers to foreign customers’ expectations about protecting the natural environment (Banerjee, Iyer, & Kashyap, 2003; Katsikeas, Leonidou, & Zeriti, 2016). Actors that conform to these institutional pressures are likely to gain environmental legitimacy (Delmas & Toffel, 2008). Chinese SMEs often face legitimation challenges due to the negative stereotype concerning having less desirable environmental records (Li *et al.*, 2019; Luo *et al.*, 2018). They are more likely to be confronted by the institutional environment (e.g., developed countries) that favors environmentally-friendly business operations (Marano *et al.*, 2017). In our framework, we conceptualize two moderators that reflect these institutional pressures.

Oliver (1997) argues that combining the resource-based view and institutional theory offers a fresh theoretical angle for understanding how the institutional environments affect firms’ optimal use of their resources. Without considering the external conditions caused by the institutional environment in which the firms operate, the resource-based view would lead to a conclusion that emphasizes firms’ competitive advantages due to the unique resources they possess (Priem & Butler, 2001). Drawing on different aspects of institutional theory – isomorphism (Delmas & Toffel, 2008) and institutional distance (He *et al.*, 2013; Schwens *et al.*, 2011) – we argue that developed countries’ institutional pressures on environmental sustainability can affect Chinese SMEs’ ability to cast their advantages from implementing proactive environmental strategy in pursuing internationalization activities.

More specifically, we anticipate that foreign environmental regulatory pressure can influence the relationship between proactive environmental strategy and Chinese SMEs’ inward-focused internationalization activities. Our arguments build on an aspect of institutional theory which suggests that environmental regulatory pressure can lead organizations to adopt similar practices (isomorphism) to gain legitimacy (Delmas & Toffel, 2008). Inward-focused internationalization activities involve acquiring foreign knowledge (concerning advanced management skills or technologies) and direct investment (Bagheri *et al.*, 2019; Zhou *et al.*, 2007). The actors related to inward-focused internationalization in the developed countries are 1) organizations (e.g., private firms) that are the creators of advanced knowledge and 2) investors that make foreign direct investment decisions. Environmental regulations are highly influential on these two actors’ behaviors because regulators (e.g., natural authorities) charged with granting permission for these two actors to carry out business activities can develop legal programs to hold the actors accountable for their environmental impacts (Aragon-Correa, Marcus, & Vogel, 2020; Delmas & Toffel, 2008).

When foreign environmental regulatory pressure shifts from low to medium (i.e.voluntary environmental regulations), organizations in the developed countries will develop the management skills and technologies necessary to facilitate environmentally sustainable business activities to legitimize their business operations (Aragon-Correa *et al.*, 2020). In addition, developed country investors will assess potential investment opportunities according to voluntary environmental standards to protect their reputation and be seen as legitimate entities (Richardson, 2019). In such conditions, Chinese SMEs with proactive environmental strategy are more likely to acquire foreign advanced management skills, technologies, and foreign financial capital. The rise in foreign environmental regulatory pressure increases the “supply” of various kinds of “green” management skills and technologies. This offers sustainable Chinese SMEs more opportunities to find suitable skills and technologies to adopt into their business operations. The rise in foreign environmental regulatory pressure enhances investors’ incentives for financing firms associated with environmental practices. As a result, investors in the developed countries will pay more attention to whether the Chinese SMEs have adopted proactive environmental strategy when making investment decisions.

A good example is ISO 14001, a type of voluntary environmental regulation on standards related to environmental management, which pressures firms in developed countries to create necessary management skills and technologies to support its implementation and motivate developed country investors to select foreign investment targets that practice its principle (Prakash & Potoski, 2006). This offers more opportunities for sustainable Chinese SMEs to learn the management skills and technologies about ISO 14001 implementation relates to their industry sector and attract foreign investors that wish to finance environmentally sustainable firms (Christmann & Taylor, 2001; Zhu, Sarkis, Cordeiro, & Lai, 2008). The above discussions conclude that the increase in foreign environmental regulatory pressures improves the relationship between proactive environmental strategy and Chinese SMEs’ inward-focused internationalization activities.

In contrast, when foreign environmental regulatory pressure shifts from medium to high (i.e., mandatory environmental regulation), firms are pressured to develop more complex and country-specific management skills and technologies to support sustainable business operations in the developed countries to legitimize their business operations (Aragon-Correa *et al.*, 2020). In response, developed country investors are pushed to adopt more stringent and country-specific environmental standards to assess investment targets to gain legitimacy in their own countries (Dowell *et al.*, 2000; Kim & Rhee, 2019). For example, the introduction of the US Federal Clean Air Act (a type of mandatory environmental regulation – national ambient air-quality standards for various pollutants by determining their maximum concentrations) prompted the development of modern pollution control technology and affected institutional investors’ decision making (Asghari, 2013; EPA, 2020).

In such conditions, the implementation of a proactive environmental strategy does not make it easier for Chinese SMEs to utilize this knowledge. This is because 1) they are more complex, which may require more investments from firms to adopt into their business operations (del Brío & Junquera, 2003) and 2) they are country-specific, which requires firms to move parts of their operations to the host countries in order to realize the full potential after adoption (Wijen & van Tulder, 2011). It also increases emerging country firms’ (e.g., Chinese firms’) barriers to meeting developed country investors’ requirements. This challenge is intensified when the firms are SMEs because they usually lack the necessary resources to upgrade their current environmental practices (del Brío & Junquera, 2003; Mir & Feitelson, 2007). Applying this to our context, we argue that Chinese SMEs are less likely to acquire foreign direct investment from developed countries when foreign environmental regulatory pressure is high. Combining the discussions above, we formally propose that the different levels of environmental regulatory pressure can affect sustainable Chinese SMEs to acquire and utilize foreign advanced management skills, technologies, and financial capital from developed countries:

*Hypothesis 2: Foreign environmental regulatory pressure has an inverted U-shaped moderating effect on the positive relationship between proactive environmental strategy and inward-focused internationalization activities in the Chinese SME context.*

We also anticipate that foreign environmental customer pressure can influence the relationship between proactive environmental strategy and Chinese SMEs’ outward-focused internationalization activities. Our arguments build on an aspect of institutional theory, which suggests that institutional distance can affect firms’ internationalization (He *et al.*, 2013; Schwens *et al.*, 2011). Firms’ international business activities are less likely to gain legitimacy in the host country if the firms are from the more institutionally distant home country. This research focuses on the differences in institutional settings concerning civil societies’ (e.g., customers’) common values and beliefs between home and host countries (Salomon & Wu, 2012). Outward-focused internationalization activities involve exporting and building alliance (supplier-buyer) relationships with foreign partners (Zhou *et al.*, 2007). The actors related to outward-focused internationalization in the developed countries are customers who purchase exported products/services and foreign firms that select Chinese SMEs as their outsourcing partners. Foreign customer environmental pressure is highly influential on these two actors’ behaviors because foreign customer environmental pressure reflects foreign customers’ (collective) common values and beliefs relating to firms’ interactions with the natural environment in the host country (Aguilera-Caracuel, Hurtado-Torres, Aragón-Correa, & Rugman, 2013). This pressure also affects foreign firms’ behaviors as they are the “middle-man” between emerging country firms (e.g., Chinese SMEs) and foreign customers (Zhu, 2016; Zhu & Sarkis, 2007). Foreign customers may challenge their outsourcing partners’ (emerging country firms’) environmental performance (Babin & Nicholson, 2011).

The shift of foreign environmental customer pressure from low to medium levels indicates that green consumption starts to become a trend and a fashionable activity in the developed countries (Haws, Winterich, & Naylor, 2014), and some (i.e., high-income) foreign customers consider green consumption as a way to demonstrate their status and environmental stance (White, Hardisty, & Habib, 2019). This will trigger the shift in civil societies’ (e.g., customers’) common values and beliefs concerning firms’ interactions with the natural environment and motivate developed country firms to adopted proactive environmental strategy (Aguilera-Caracuel *et al.*, 2013). In order to gain legitimacy for their international operation (e.g., exporting or building cross-border alliances), the institutional theory posits that emerging country firms need to imitate the practices of developed country firms (Salomon & Wu, 2012). In such conditions, Chinese SMEs that have implemented proactive environmental strategies are more likely to capture foreign market shares or build alliances with firms in developed countries. They act and behave as developed country firms engaging in environmental practices and becoming more appealing to foreign customers and firms (potential outsourcing partners). This is displayed by a study conducted by Christmann and Taylor (2001), which shows that sustainable Chinese firms (act as firms in foreign countries) are more able to engage in exporting or selling products to foreign companies in supplier-buyer relationships due to foreign customers’ concerns. Hence, the increase in foreign environmental customer pressure positively moderates the relationship between proactive environmental strategy and outward-focused internationalization activities.

However, this positive moderating effect may diminish as foreign environmental customer pressure rises. The further increase in developed country customer environmental pressure widens the institutional distance between emerging and developed countries. The enhanced customer environmental consciousness will eventually develop powerful social norms about green consumption (Peattie, 2010). Everyone (all customers) in the developed countries needs to conform to these social norms by giving greater preference to environmentally-friendly products to gain legitimacy among their peers and family members and feel satisfied with their own behavior (Lin & Niu, 2018). This also pushes firms in the developed countries to adopt higher levels of environmental standards to run their business operations by introducing environmentally-friendly products and developing (or looking for outsourcing partners with) green production processes to compete with one another (Aguilera-Caracuel *et al.*, 2013; Zhu & Sarkis, 2007).

We argue that Chinese SMEs keep up with these processes and instead continue to upgrade their environmental practices for two reasons. First, to imitate developed country firms that adopted higher environmental standards, Chinese SMEs need to introduce significant changes in their current environmental practices and allocate more resources toward their implementation. Their smaller size makes it difficult for managers to make investments (de Jesus Pacheco, ten Caten, Jung, Navas, & Cruz-Machado, 2018). For example, a study conducted by Zhang, Bi, and Liu (2009) shows that cost is a crucial barrier preventing Chinese SMEs from pushing further investment toward environmental practices. Second, the introduction of products or production processes with higher environmental standards may cause Chinese SMEs to lose their products’ competitive advantage in the home markets. This is because that they are often associated with high costs (prices) that customers in the home markets are not able or willing to pay due to the lower average income level and less customer environmental consciousness in the emerging countries (Prakash & Pathak, 2017). For example, field research shows that Chinese customers (despite their environmental consciousness) are unwilling to pay for green products with higher prices (CfK Custom Research, 2015; China Daily News, 2014). As a result, Chinese SMEs are at a disadvantage in doing business with developed country customers who are having growing environmental consciousness and building suppler-buyer alliances with developed country firms that are demanding “greener” operation processes when foreign environmental customer pressures are at medium to high levels. Combining the discussion above, we formally propose that the different levels of environmental customer pressure can affect sustainable Chinese SMEs to seek foreign markets and build an alliance with foreign partners in the developed countries:

*Hypothesis 3: Foreign environmental customer pressure has an inverted U-shaped moderating effect on the positive relationship between proactive environmental strategy and outward-focused internationalization activities in the Chinese SME context.*

**4. Methodology**

*4.1 Questionnaire Development and Data Collection*

We conducted surveys of SMEs in China. SMEs’ classification in China is based on companies’ number of employees, business income, assets, and other indicators (Hoffmann, 2019). Compared with other countries that use the number of employees to classify an SME, this classification method is quite complicated. Nevertheless, an organization from the industrial sector (e.g., manufacturing) with fewer than 2,000 employees can often be defined as an SME (Tian, Nicholson, Eklinder-Frick, & Johanson, 2018).

We designed the questionnaires after thoroughly reviewing the relevant literature. We used seven-point Likert-type scales to capture the multi-item constructs. To measure proactive environmental strategy, we adapted the scales from Jones *et al.* (2014) that were originally designed to assess job seekers’ perceptions regarding environmental practices in an organization. We modified these to assess an SME executive’s perception of the firm’s environmental practices concerning the configuration of managerial principles, corporate actions, and observable outcomes to address the natural environment’s issues. To measure internationalization activities, we adapted the scales developed by Zhou *et al.* (2007) to assess the extent to which SMEs are actively utilizing foreign knowledge (i.e., advanced management skills and technologies) and financial capital (foreign direct investment) as inward-focused internationalization activities, and the extent to which SMEs are actively seeking foreign markets (exporting) and business partners (supplier-buyer relationship) as outward-focused internationalization activities (Zhou *et al.*, 2007). Adapting Banerjee *et al.* (2003) and Katsikeas *et al.* (2016), we examined the foreign environmental regulatory and customer pressures that an SME’s management team uses to assess the perceived pressures exerted by governments and customers in developed countries.

We also considered several control variables that may potentially affect SMEs’ internationalization activities, such as industry type, firm size, firm age, competitive intensity, technology turbulence, and market turbulence (Bagheri *et al.*, 2019; Zhou *et al.*, 2007). We followed previous studies in measuring the firm size as the number of employees and the firm age as the years since the establishment of the firm (e.g., Bagheri *et al.*, 2019). Log transformation regarding firm size and firm age made it possible to avoid extreme values and account for the diminishing marginal effects at the tail end of the distribution. Finally, we measured competitive intensity, technology turbulence, and market turbulence by adapting multi-items scales from Hult, Ketchen, and Arrfelt (2007).

We first developed the questionnaire in English, then translated it into Chinese. All the authors who participated in this study are bilingual and can speak and write formally and fluently in both languages. We took turns to compare the Chinese translation with the original English questionnaire to ensure that they were equivalent. We then conducted a pilot study involving two representatives from different Chinese SMEs. The pilot test enabled further revisions that led to the final version of the questionnaire (see Appendix 1) for the primary data collection.

After finalizing the questionnaire, we invited a third-party independent research agency, which has worked with many universities and scientific research institutes in China, to collect our survey data. In the contract, we clearly stated our data collection requirements, including the targeting of senior SME executives (e.g., CEOs), the definition of SMEs, the random sampling of 2,000 SMEs from different industrial sectors in three major economic clusters[[3]](#footnote-3) in China, a two-wave survey, and so on. As we could not obtain data from different sources, we decided to introduce a time lag in our data collection process[[4]](#footnote-4). We asked senior SME executives to choose a foreign market in a developed country where their firms have internationalized their activities and answered the questions (e.g., about internationalization activities and foreign institutional pressures) from this perspective. At Time 1, we sent the questionnaire to 2,000 SME executives (one per company) to access proactive environmental strategy, foreign environmental regulatory and customer pressures, and control variables. We received 542 responses. At Time 2 (six months later), we sent out questionnaires that included items for assessing inward-focused/outward-focused internationalization activities to the 542 SME executives who participated in our first round of survey data collection (Time 1). We received 217 responses. After matching up and deleting incomplete questionnaires, we obtained 211 effective responses (response rate = 10.55%).

This response rate was not necessarily ideal. However, low survey response rates are typical when conducting an organization-based survey that directs the questionnaire to executive-level respondents, and nonresponse does not necessarily suggest the presence of sampling bias (Baruch & Holtom, 2008). Furthermore, the low response rate is also a trade-off for the rigorous data collection method. The two-wave survey design was a contributing factor to the low overall response rate as some of the SME executives were unavailable during the second round of survey data collection due to various reasons (e.g., they had left the company) (Murphy, 1990). This is evinced by the fact that, while the number of responses to the first round of survey data collection was 542, only 217 of these SME executives decided to participate in the second round of survey data collection. We also adopted the procedure proposed by Armstrong and Overton (1977) to assess nonresponse bias. We found no significant differences between the early and late respondents’ answers. As a result, we concluded that the probability of nonresponse bias is minimal.

*4.2 Measurement Reliability and Validity*

Using confirmatory factor analysis, we assessed the reliability and validity of our variables' measurement presented in Figure 1. According to Hair, Black, Babin, and Anderson (2010), our overall model showed a satisfactory fit with the data (*X*2 = 100.516; *df* = 55; *X*2/*df* = 1.828; p = 0.000; goodness of fit index - GFI = 0.932; normed fit index - NFI = 0.910; comparative fit index – CFI = 0.956; root mean square error of approximation – RMSEA = 0.063). Our scales exhibited sufficient psychometric properties. The correlation between the main variables in our framework was less than 0.700. This demonstrated adequate discriminant validity – the extent to which the variables are distinct and uncorrelated (Hair *et al.*, 2010). We also examined the variance influence factors (VIF), which are well below the suggested cut-off value of 10 (highest VIF = 2.261), indicating no severe multicollinearity problem (Cohen *et al.*, 2003; Hair *et al.*, 2010). The values for the composite reliability and average variance extracted surpassed the recommended thresholds of 0.600 and 0.500, respectively (DeVellis, 2012). Furthermore, there were sufficient factor loadings of each variable's measurement items (all loadings were greater than 0.500, and the average loading for each variable was greater than 0.700). Together, these findings demonstrate adequate reliability – the consistency of the item-level errors within a single factor, and convergent validity – so the variables within a single factor are highly correlated (Hair *et al.*, 2010). We also found that each construct’s AVE is greater than all of its correlations with the other constructs (Fornell & Larcker, 1981). This is another sign of adequate discriminant validity. In general, the reliability, convergent validity, and discriminant validity of the measurements were adequate. Table 1 presents the results.

“Insert Table 1 Here”

To control the common method bias, we applied the following remedies. Following the suggestions of Podsakoff *et al.* (2003), we adopted procedural remedies to collect measures of the independent variables. The dependent variables use temporal separation (time lag) and offer anonymity to the respondents using multi-item scales to minimize the common method bias. We also applied multiple statistical remedies (Podsakoff *et al.*, 2003). First, we conducted a Harman one-factor test by subjecting all of the items to exploratory factor analysis. Second, we performed further confirmatory factor analysis to load all of the items onto a single factor in a CFA. We found that common method bias is not a serious problem for our data in both approaches. Finally, the complex data relationships (i.e. nonlinear moderating effects) that we tested in this study helped to alleviate possible common method bias concerns, because the respondents were unable to guess the research hypotheses or respond in a socially desirable manner, which would lead to spurious findings.

**5. Analysis and Results**

*5.1 Main Findings*

We compute the variable scores by averaging the remaining scale items[[5]](#footnote-5) following each variable's validity and reliability tests. We use these variable scores to conduct our data analysis using multivariate regression. Table 2 presents the results of our regression analysis. Hypothesis 1 posits the positive association between proactive environmental strategy and internationalization activities. Model 1 confirms this association (β = 0.217, p < 0.050). A 1% increase in proactive environmental strategy will lead to a 0.217% increase in inward-focused internationalization activities. The effect size (Cohen’s *f*2 = 0.023) is greater than 0.020 (the lower threshold for small effect size) (Selya, Rose, Dierker, Hedeker, & Mermelstein, 2012). These findings support Hypothesis 1a. Model 4 confirms this association (β = .214, p < .050) and shows that a 1% increase in proactive environmental strategy will lead to a 0.161% increase in outward-focused internationalization activities. The effect size (Cohen’s *f*2 = 0.026) is greater than 0.020. These findings support Hypothesis 1b.

Hypotheses 2 and 3 predict the nonlinear moderating effects of foreign environmental regulatory and customer pressures on the relationship between proactive environmental strategy and internationalization activities. We mean-center the independent variables before computing the interaction terms and quadratic terms to reduce the possible collinearity between the main and interaction effects (Aiken & West, 1991; Cohen *et al.*, 2003). Furthermore, we calculate the VIF for the interaction terms. The highest VIF in all of the interaction terms and quadratic terms is 2.260 – well below the cut-off value of 10 – so multicollinearity is not an issue (Cohen *et al.*, 2003; Hair *et al.*, 2010). We follow the suggestion of (Aiken & West, 1991) to test these nonlinear moderating effects. More specifically, Equation 1 expresses the linear moderating effect. In this model, three antecedent variables predict the dependent variable Y – X, Z, and XZ (the product of X and Z) – where α is the intercept, β1 ~ β3 are the regression coefficients for X, Z and XZ, and ↋ is a residual term. The product term (XZ) permits the researcher to test for the presence of the linear moderating effect of Z on the relationship between X and Y.

Y = α + β1X + β2Z + β3XZ + ↋. (1)

In comparison, Equation 2 expresses the nonlinear moderating effect. In this model, three antecedent variables – X, Z, Z2 (the quadratic term of Z), XZ (the product of X and Z), and XZ2 (the product of X and Z2) – predict the dependent variable Y, where α is the intercept, β1 ~ β5 are the regression coefficients for X, Z, Z2, XZ and XZ2, and ↋ is a residual term. The product term (XZ2) permits the researcher to test for the nonlinear moderating effect of Z on the relationship between X and Y.

Y = α + β1X + β2Z + β3Z2 + β4XZ + β5XZ2 + ↋. (2)

This research adopts this approach to test the nonlinear moderating effects of foreign environmental regulatory pressure (ERP) on the relationship between proactive environmental strategy (PES) and inward-focused internationalization activities, as well as the nonlinear moderating effects of foreign environmental customer pressure (ECP) on the relationship between proactive environmental strategy and outward-focused internationalization activities. The specific equations are as follows:

Inward-focused internationalization activities = α + β1PES + β2ERP + β3ERP2 + β4PS x ERP + β5PES x ERP2 + ↋. (3)

Outward-focused internationalization activities = α + β1PES + β2ECP + β3ECP2 + β4PS x ECP + β5PES x ECP2 + ↋ . (4)

Hypothesis 2 posits that foreign environmental regulatory pressure has an inverted U-shaped moderating effect on the relationship between proactive environmental strategy and inward-focused internationalization activities. Model 2 shows that the interaction effect of the proactive environmental strategy and foreign environmental regulatory pressure square is significant (β = -0.138, p < .001), as the effect size (Cohen’s *f2* = 0.148) is greater than 0.020. Further, the plots in Figures 2a and 2b demonstrate the nonlinear moderating effect of the foreign environmental regulatory pressure on the relationship between proactive environmental strategy and inward-focused internationalization activities. These findings support Hypothesis 2.

Hypothesis 3 posits that foreign environmental customer pressure has an inverted U-shaped moderating effect on the relationship between proactive environmental strategy and outward-internationalization activities. Model 5 shows that the interaction effect of the proactive environmental strategy and foreign environmental customer pressure square is significant (β = -0.236, p < .010), with an effect size (Cohen’s *f2* = 0.107) greater than 0.020. Further, the interaction plots in Figures 2c and 2d demonstrate the nonlinear moderating effects of foreign environmental customer pressure on the relationship between proactive environmental strategy and outward-focused internationalization activities. These findings support Hypothesis 3.

“Insert Figure 2 Here”

*5.2 Post-Hoc Analysis*

We conduct several robustness checks to verify the rigor of our data analyses. First, we verify the arguments that foreign regulatory pressure mostly affects the relationship between proactive environmental strategy and inward-focused internationalization activities, and foreign customer pressure mostly affects the relationship between proactive environmental strategy and outward-focused internationalization activities. To do so, we estimate two regression models that include all the interaction effects. Model 3 shows that the interaction effect of the proactive environmental strategy and foreign environmental regulatory pressure square is still significant (β = -0.126, p < .010), but the interaction effect of the proactive environmental strategy and foreign environmental customer pressure square is not significant (β = -0.122, n.s.). Model 6 shows that the interaction effect of the proactive environmental strategy and foreign environmental customer pressure square is still significant (β = -0.195, p < .050), but the interaction effect of the proactive environmental strategy and foreign environmental regulatory pressure square is not significant (β = -0.043, n.s.). The results are in line with our arguments.

Second, as our data do not result from a randomized experiment, endogeneity may be a concern. We employ two approaches to correct for potential endogeneity (Hamilton & Nickerson, 2003). The first approach is to use a comprehensive set of control variables – such as industry, firm size, firm age, and technology turbulence – to reduce the likelihood that unobserved industry and resources (including experiences) differences may bias our results. The second approach is to conduct a two-stage regression to alleviate potential endogeneity concerns. Following Jin, Zhou, and Wang (2016) approach, we regress proactive environmental strategy against firm size, competitive intensity, technology turbulence, and market turbulence to obtain the residuals of the variable, which are free of the influence of resource limitation and market uncertainty (Aragón-Correa & Sharma, 2003). We then use the residuals of proactive environmental strategy as the new independent variable. We perform the same regression analysis using these new variables. As Table 3 shows, the new results match our original results in Table 2. Thus, endogeneity is not a concern for our study.

“Insert Table 3 Here”

To check the robustness of the regression analysis, we also run a path analysis to examine all of the effects simultaneously. Following De Clercq, Dimov, and Thongpapanl (2013) approach, we sum all scales to represent relevant constructs and calculate the quadratic terms and product terms. Such an approach helps us resolve the nonlinearity estimation difficulties associated with estimates of all possible product terms among the interaction and quadratic items within the constructs (Ping Jr, 1996). This issue will increase when testing multiple interaction and quadratic terms with a relatively small sample size. Table 4 presents the results. Model 13 suggests that proactive environmental strategy can affect inward-focused (β = 0.155, p < .050) and outward-focused (β = 0.162, p < .050) activities simultaneously. Model 14 shows that the product of proactive environmental strategy and quadratic foreign environmental regulatory pressure affects inward-focused internationalization activities (β = -0.487, p < .001), while the product of proactive environmental strategy and quadratic foreign environmental customer pressure affects outward-focused internationalization activities (β = -0.280, p < .050). We also estimate a full model that includes all the variables and interaction terms (Model 15). The findings are still consistent with those found in Table 2.

“Insert Table 4 Here”

In developing our hypotheses for the inverted U-shaped moderating effects, we suggest that foreign environmental regulatory pressure will moderate the effects of proactive environmental strategy on Chinese SMEs’ capability to acquire foreign knowledge (e.g., management skills and technologies) and financial capital (e.g., investment). We also suggest that foreign environmental customer pressure will moderate the effects of proactive environmental strategy on Chinese SMEs’ capability to build foreign supplier-buyer relationships (e.g., alliances) and export (e.g., markets). To corroborate our arguments, we use a single item from our measurement (see Appendix 1) to capture different inward-focused (utilizing foreign management skills[[6]](#footnote-6) and investments) and outward-focused (seeking foreign alliance and markets) activities. We then perform additional regression analyses to test the moderating effects. Table 5 (Models 16~23) and Figure 3 (a~f) show that our results are in line with our arguments, except that foreign customer environmental pressure does not have an inverted U shaped moderating effect on the relationship between proactive environmental strategy and the activities of seeking foreign alliances (Models 20 and 21). A possible explanation is that Chinese SMEs supply products or parts (of products) to firms in the developed countries in alliance (supplier-buyer) relationships. Prior research shows that, in this situation, the developed country firms act as a shield (to some degree)against customer legitimation challenges to emerging country firms (Klossek, Linke, & Nippa, 2012). Applying it into our context, as Chinese SMEs are not facing developed country customers directly, foreign environmental customer pressure has fewer impacts on how they leverage their proactive environmental strategy to pursue international supplier-buyer relationships.

**6. Discussion**

*6.1 Theoretical Contributions*

This work advances literature and theories concerning SME internationalization in several ways. First, previous SME internationalization research primarily focuses on the impact of proactive environmental strategy on outward-focused internationalization activities such as exporting (e.g., Martín-Tapia *et al.*, 2010; Martin-Tapia *et al.*, 2008). However, we have argued that emerging country SMEs (such as Chinese SMEs) represent a unique opportunity to extend this strand of research. Suffering from the underdevelopment of institutions, which impedes the development and flow of new knowledge and financial capital and also constrains economic opportunities, emerging country firms are trying to escape through internationalization (Khanna & Palepu, 2010; Marano *et al.*, 2017; Nuruzzaman *et al.*, 2020). This means that SMEs from emerging countries focus not only on outward-focused internationalization activities to generate more revenue in the foreign markets but also on inward-focused internationalization activities to acquire foreign resources (Zhou *et al.*, 2007). Our study demonstrates that proactive environmental strategy promotes both Chinese SMEs’ inward-focused and outward-focused internationalization activities. We shed new light on the crucial role of proactive environmental strategy in SME internationalization by including emerging country SMEs’ perspectives.

Furthermore, the resource-based view has been traditionally used to claim that SMEs’ engagement in proactive environmental strategy can build up their competitiveness in international marketplaces (Chan & Ma, 2016; Martín-Tapia *et al.*, 2010; Martin-Tapia *et al.*, 2008). This aspect of the theory helps explain the impact of proactive environmental strategy on outward-focused internationalization activities. Still, it may not be useful to explain the impact of proactive environmental strategy on inward-focused internationalization activities. In this research, we draw on another aspect of the resource-based view which suggests that firms’ existing resources make it easier to acquire new resources (Barney *et al.*, 2011; Wernerfelt, 2011) to explain the relationship between proactive environmental strategy and inward-focused internationalization activities. Combining these two aspects of the resource-based view, we suggest that the engagement of proactive environmental strategy by Chinese SMEs can be considered a unique resource that supports the firms’ internationalization efforts by acquiring resources (inward-focused internationalization activities) and exploring economic opportunities (outward-focused internationalization activities) from developed countries. Our efforts extend the applicability of the resource-based view to explain the relationship between proactive environmental strategy and SME internationalization more generally.

Second, previous studies suggest that the effect of proactive environmental strategy on internationalization mainly depends on how firms manage their internal resources and deal with market uncertainty (Bıçakcıoğlu, Theoharakis, & Tanyeri, 2019; Martin-Tapia *et al.*, 2008). This current research differentiates between foreign environmental regulatory and customer pressures, representing coercive and normative institutional pressures, respectively (Swaminathan & Wade, 2018; Xu *et al.*, 2018), and examines their moderating role in the relationship between proactive environmental strategy Chinese SME internationalization. We argue that understanding how foreign institutional pressures affect the ways in which SMEs leverage their proactive environmental strategy to support their internationalization efforts is of particular importance for SMEs in emerging countries (e.g., China). This is because emerging country firms (e.g., Chinese SMEs) often face legitimation challenges from developed country regulators and customers concerning environmental issues due to the negative stereotypes about the firms’ collective environmental records (e.g., Deng & Zhang, 2018; Park & Ghauri, 2015). Our study demonstrates that foreign environmental regulatory pressure has an inverted U-shaped moderating effect on the relationship between proactive environmental strategy and inward-focused internationalization activities, while foreign environmental customer pressure has an inverted U-shaped moderating effect on the relationship between proactive environmental strategy and outward-focused internationalization activities. In doing so, we extend the research on the legitimation challenges facing emerging country SMEs in host countries (e.g., Deng & Zhang, 2018; Park & Ghauri, 2015) and represent an initial attempt to assess the realization that the beneficial effects of proactive environmental strategy on emerging country SMEs’ various internationalization activities depend on different foreign institutional pressures.

Moreover, we advance the use of institutional theory in line with the resource-based view to explain firms’ international business strategies (He *et al.*, 2013; Meyer *et al.*, 2009) by showing that emerging country SMEs’ context represents a challenge. We also suggest that this challenge can be used to extend and generalize the theory once adequate attention is given to several areas. First, due to the underdevelopment of institutions, emerging country SMEs focus on both inward-focused and outward-focused internationalization activities (Zhou *et al.*, 2007). Emerging country SMEs need to use their resource advantage (i.e., proactive environmental strategy) to acquire resources (i.e., advanced management skills and investment) from developed countries and grow revenues in the foreign (developed countries) marketplaces. As a result, we need to employ different aspects of institutional theory to explain the effect of institutional environment in this situation. Drawing on institutional theory’s isomorphism logic (Oliver, 1997), we argue that resource providers (i.e., knowledge creators and investors) in developed countries tend to adopt similar practices (isomorphism) to conform to regulatory pressure (gain legitimacy) to pursue environmental sustainability. This will affect emerging country SMEs’ use of resource advantage derived from engaging a proactive environmental strategy to pursue inward-focused internationalization activities. On the other hand, drawing on the institutional theory’s institutional distance logic (He *et al.*, 2013), we argue that emerging country SMEs can take advantage of their proactive environmental strategy (resource) to overcome customers’ legitimation challenges (mitigate customers’ negative perceptions about the firms’ environmental records and gain legitimacy) in the developed countries.

Second, we identify that the moderating effects of foreign institutional pressures concerning environmental sustainability are not linear, unlike the linear effect assumptions from theorists who combine the resource-based view and institutional theory (He *et al.*, 2013; Oliver, 1997). Our reasoning behind this is that emerging country SMEs signify a unique context. As emerging country SMEs, their lack of resources prevents them from introducing significant changes in their current practices to conform to stringent environmental regulatory pressures (e.g., adopt more complex and country-specific environmental practices) or fully realize the potential benefits from making the changes (e.g., move part of the operation to developed countries). Furthermore, the differences in institutional settings between emerging and developed countries may cause emerging country SMEs that choose to make additional investments in environmental practices (to conform to stringent environmental customer pressures) to lose competitive advantage in the home markets (e.g., home market customers are unwilling to pay a high price for environmentally-friendly products). As a result, emerging country SMEs will elect not to make changes in their current practices and eventually lose resource advantage in acquiring foreign resources and developing competitive advantage in the foreign marketplace. Thus, the moderating effect is nonlinear. Overall, the results support our arguments derived from combining the resource-based view and institutional theory that the optimal use of emerging country SMEs’ proactive environmental strategy to pursue different internationalization activities requires alignment with certain institutional conditions.

*6.2 Managerial Relevance*

One critical dilemma that SME managers face is whether to pursue environmental sustainability, bearing in mind the organizations’ resource limitations. Our findings suggest that SME managers must understand that organizations’ proactive environmental strategy can support their quest for both inward-focused and outward-focused internationalization activities. Therefore, SME managers that aspire towards internationalization can start by allocating resources to address their operations’ impact on the natural environment. More specifically, by converting to environmentally-friendly operations, SMEs can effectively utilize advanced foreign knowledge and attract foreign direct investment (inward-focused internationalization activities). Moreover, proactive environmental strategy can provide SMEs with a competitive advantage in exporting and attracting foreign alliance partners in building supplier-buyer relationships (outward-focused internationalization activities).

SME managers must also understand that the beneficial effects of proactive environmental strategy on internationalization activities are conditional on foreign institutional environments. More importantly, SME managers should realize the differential moderating effects of foreign environmental regulatory and customer pressures on the relationship between proactive environmental strategy and internationalization activities. This study finds that foreign environmental regulatory pressure exerts an inverted U-shaped moderating effect on the relationship between proactive environmental strategy and inward-focused internationalization activities. This means that a medium level of foreign environmental regulatory pressure maximizes the positive effects of proactive environmental strategy on inward-focused internationalization activities. Thus, when foreign environmental regulatory pressure is at low levels, SME managers should invest more in developing proactive environmental strategy. SMEs can capitalize on such a strategy to utilize foreign advanced management skills and foreign direct investment. Alternatively, SME managers should withhold their pursuit of proactive environmental strategy when foreign environmental regulatory pressure is above a medium level. In such a situation, SMEs’ proactive environmental strategy will not bring any benefits in facilitating inward-focused internationalization activities. In fact, our results show that the engagement of proactive environmental strategy can actually damage SMEs’ efforts in inward-focused internationalization activities when foreign environmental regulatory pressure is at high levels.

This study also finds that foreign environmental customer pressure exerts an inverted U-shaped moderating effect on the relationship between proactive environmental strategy and outward-focused internationalization activities. This indicates that a medium level of foreign environmental customer pressure maximizes the positive effects of proactive environmental strategy on outward-focused internationalization activities. As a result, we recommend that SME managers engage in environmentally-sustainable practices when the levels of foreign environmental customer pressure are low. In such a situation, SMEs can take advantage of their proactive environmental strategy in seeking foreign markets. However, when foreign environmental customer pressure levels are high, we recommend that SME managers do not pursue proactive environmental strategy because such pursuit will not yield benefits. Moreover, our results suggest that proactive environmental strategy engagement can damage SMEs’ exporting efforts in such a situation.

*6.3 Limitations and Further Research*

First, this research design may raise concerns about common method bias. In this research, we attempted to minimize the potential bias by collecting data from a two-wave survey. However, we still collected all of the data from the same SMEs. Future research might use dyadic data to combat this limitation. Furthermore, our six-month time-lag may be insufficient to observe the influence of proactive environmental strategy and institutional pressures on SMEs’ internationalization activities. Future research should adopt a more appropriate longitudinal survey design to obtain survey data over multiple periods with an appropriate time separation (Menard, 2002).

Second, we focus our investigation on Chinese SMEs. Therefore, our findings’ generalizability remains limited to organizations located within a single country. SMEs in other countries (primarily emerging Southeast Asian, Latin American, or others) also consider internationalization as a means of achieving growth objectives and face pressure to comply with foreign countries’ environmental values when engaging in internationalization activities (de Jesus Pacheco *et al.*, 2018; Marano *et al.*, 2017), simultaneously. Future studies on different countries would help to generalize our findings and expand the boundary conditions. Furthermore, in our survey instructions, we asked the respondents to choose a developed country where their firm has internationalized their activities and answer the questions from this perspective. However, we did not ask respondents to reveal which developed country they selected, and we do control for this effect. This approach ignores institutional environments’ unique features concerning environmental protection in different developed countries (e.g., the US vs. the European Union). Additional research should compare the effects of institutional pressures on Chinese (other emerging countries’) SMEs’ proactive environmental strategy-internationalization activities relationship between different developed countries to enhance the generalizability of our findings.

Third, we adapted the survey questions from prior studies. Our pilot study did not reveal any major issues regarding the use of the phasing/terminology or the questions' wording. However, some misunderstandings may still exist. For example, a question about inward-focused internationalization activities asked the respondents how their firm utilizes foreign direct investment. Even though we issued a clear instruction that the respondents should choose a foreign market where their organization has internationalized their activities and answer the question from this perspective, the respondents might have felt confused about whether the phrase “foreign direct investment” referred to the investment that the firm received from foreign organizations or the investment that the firm itself made in foreign organizations. While this confusion is highly unlikely, we still wish to recognize this limitation. Researchers in the future should use more engaged methods (e.g., face-to-face on-site interviews) to collect survey data and so avoid the potential for confusion. Furthermore, we adopted a similar approach to previous studies to assess our variables by asking the executives about the perceptions of their SMEs’ practices. However, we cannot eliminate the possible existence of bias when rating such variables. Future research should consider using objective data to assess these variables.

Fourth, to distribute our two-wave survey data to a wide range of SME executives from different industrial sectors in multiple economic clusters in China, we decided to seek help from a third-party independent research agency with a sound track-record for assisting many Chinese universities and scientific research institutes to collect survey data. Although we specified the terms and conditions regarding how we wanted our questionnaires to be distributed and completed, we could not monitor the entire data collection process in great detail. Researchers in the future should consider engaging in data collection practices “first-hand” to give them better control over the whole data collection process.

Our findings also reveal other research opportunities. We examined the moderating roles of foreign environmental regulatory and customer pressures on the relationship between proactive environmental strategy and internationalization activities. This raises the question of whether other foreign (institutional) environmental pressures exist, such as investors, employees, and so on, as well as domestic (institutional) environmental pressures (Li *et al.*, 2019) that may influence the proactive environmental strategy-internationalization activities. Further researchers may wish to explore these topics.

**7. Conclusion**

To conclude, this study directs greater attention to the effect of the proactive environmental strategy on Chinese SME internationalization, and particularly the role of the foreign institutional environment in this effect. We find that Chinese SMEs’ engagement in proactive environmental strategy enables them to pursue both inward-focused and outward-focused internationalization activities. Furthermore, we find that foreign environmental regulatory pressure has an inverted U-shaped moderating effect on the relationship between proactive environmental strategy and inward-focused internationalization activities. That is, foreign environmental regulatory pressure improves the effect of proactive environmental strategy on inward-focused internationalization activities up to an optimal point (at a medium level). As the level of foreign environmental regulatory pressure exceeds this characteristic point, the positive impact of proactive environmental strategy on inward-focused internationalization activities decreases. We also find that foreign environmental customer pressure has an inverted U-shaped moderating effect on the relationship between proactive environmental strategy and outward-focused internationalization activities. In other words, the effect of proactive environmental strategy on outward-focused internationalization activities becomes stronger when the levels of foreign environmental customer pressure shift from low to medium, but weakens when foreign environmental customer pressure shifts from medium to high. This study is an important step toward enhancing our understanding of SME internationalization in the context of China’s emerging economy. In particular, we explain that Chinese SMEs can take advantage of their proactive environmental strategy in pursuing internationalization and their challenges when internationalizing activities to developed countries that favor environmentally-friendly business activities. We hope this will stimulate further conversations among international business researchers who seek to explore SME internationalization in light of the emergence of growing environmental concerns.

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**Figure 1: Conceptual Framework**

Foreign Environmental Regulatory Pressure

H2

H1a

Inward-focused Internationalization Activities

Proactive Environmental Strategy

Outward-focused Internationalization Activities

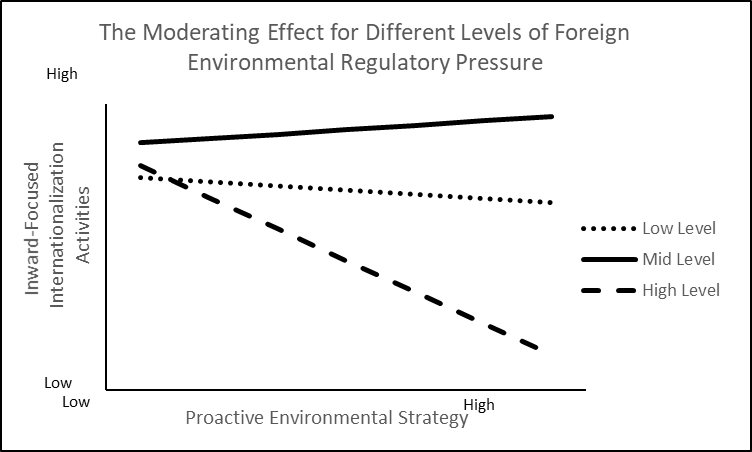
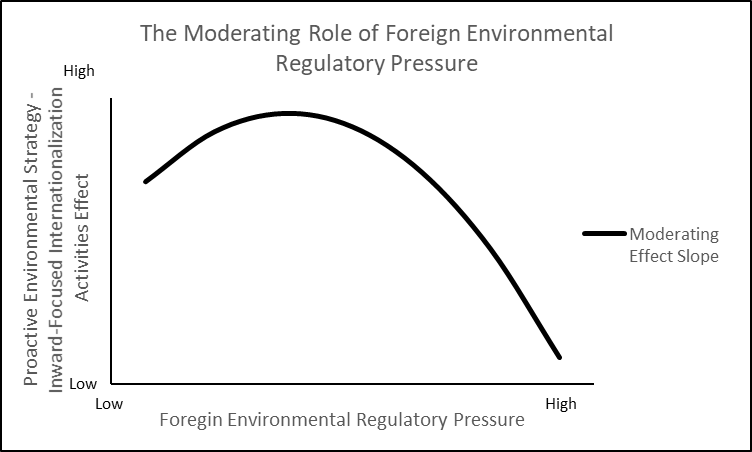
H1b

H3

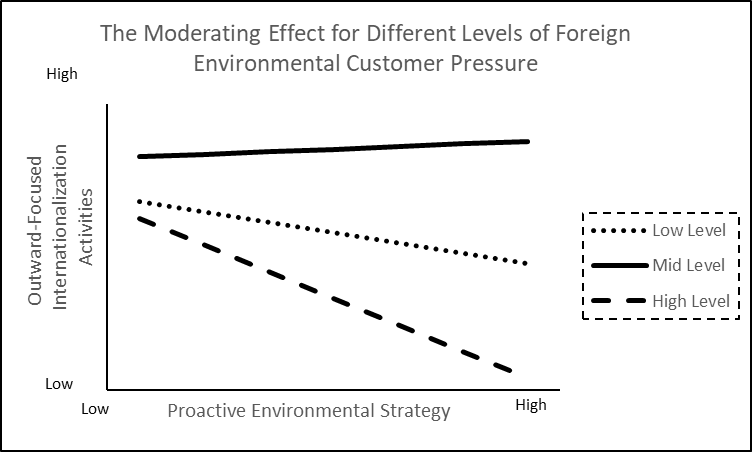
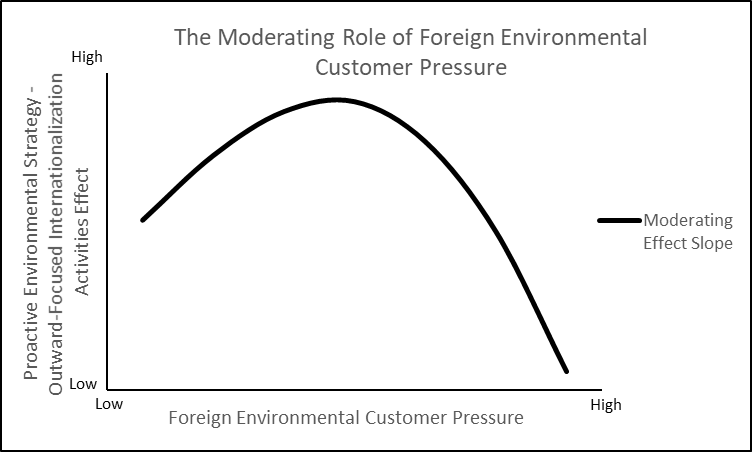
Foreign Environmental Customer Pressure

**Figure 2. Graphical Representation**

(a) (b)

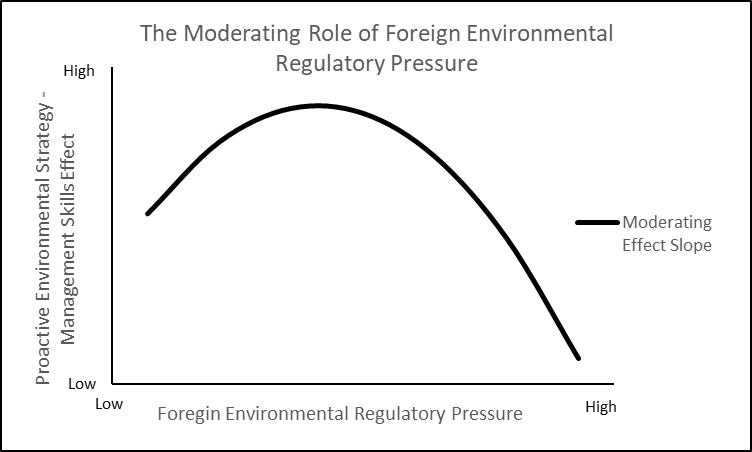


(c) (d)

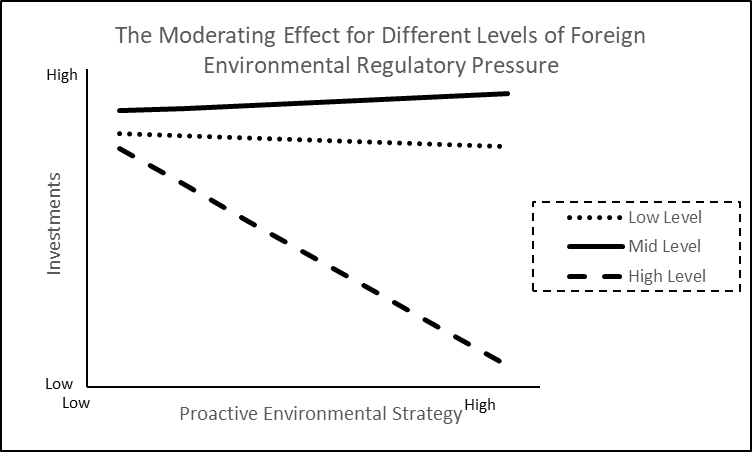
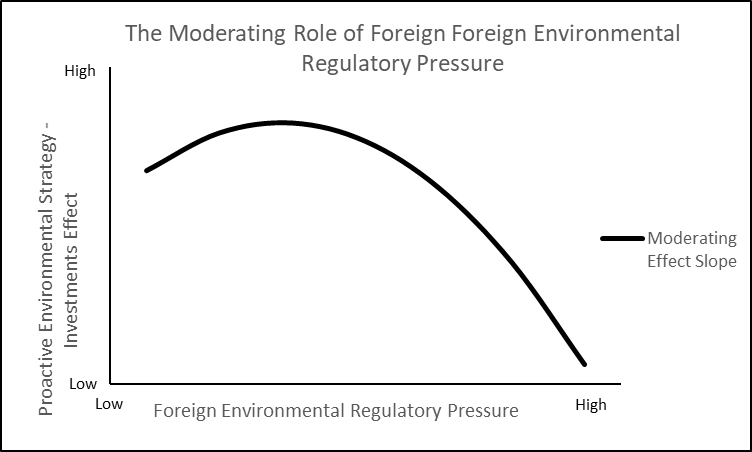


**Figure 3. Post-Hoc Analysis – Graphical Representation**

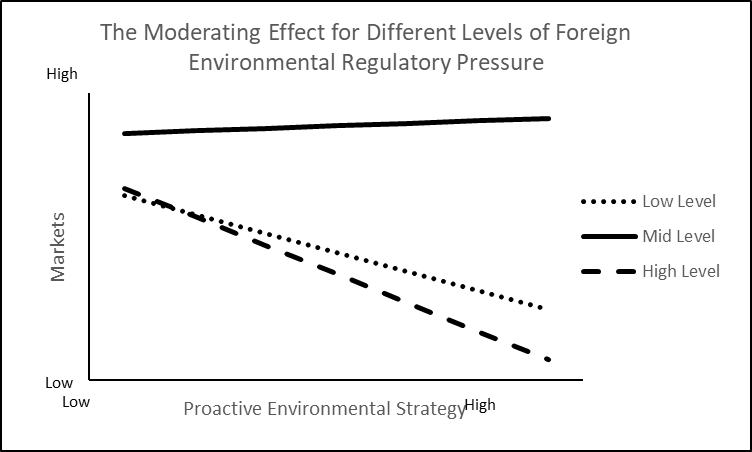
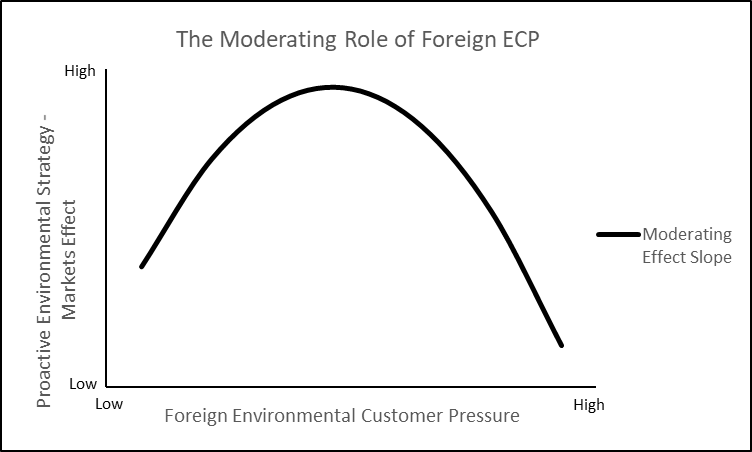
1. (b)



(c) (d)



(e) (f)



**Table 1: Descriptive Statistics**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Mean** | **SD** | **CR** | **AVE** | **1** | **2** | **3** | **4** | **5** |
|  |  |  |  |  |  |  |  |  |  |
| **1. Information Technology** | --- | --- | --- | --- | --- |  |  |  |  |
| **2. Machinery and Equipment** | --- | --- | --- | --- | -0.389\* | --- |  |  |  |
| **3. Electronic Goods** | --- | --- | --- | --- | -0.157\* | -0.318\* | --- |  |  |
| **4. Consumer Goods** | --- | --- | --- | --- | -0.142\* | -0.287\* | -0.116 | --- |  |
| **5. Firm Size** | 2.341 | 0.423 | --- | --- | -0.190\* | 0.229\* | -0.056 | -0.134 | --- |
| **6. Firm Age** | 3.293 | 0.121 | --- | --- | 0.034 | -0.078 | 0.027 | 0.02 | -0.026 |
| **7. Competitive Intensity** | 5.431 | 1.183 | --- | --- | -0.040 | 0.161\* | 0.122 | -0.091 | 0.047 |
| **8. Market Turbulence** | 5.190 | 1.147 | --- | --- | -0.061 | 0.045 | 0.006 | 0.116 | 0.010 |
| **9. Foreign Environmental Regulatory Pressure** | 5.447 | 0.922 | 0.758 | 0.511 | -0.092 | 0.125 | 0.069 | 0.013 | 0.133 |
| **10. Foreign Environmental Customer Pressure** | 5.562 | 0.843 | 0.753 | 0.504 | -0.084 | 0.046 | 0.121 | 0.027 | 0.102 |
| **11. Inward-focused Internationalization Activities** | 4.882 | 1.222 | 0.680 | 0.516 | 0.016 | 0.106 | 0.053 | -0.055 | 0.192\* |
| **12. Outward-focused Internationalization Activities** | 5.133 | 1.149 | 0.743 | 0.592 | -0.062 | 0.230\* | 0.037 | -0.052 | 0.196\* |
| **13. Proactive Environmental Strategy** | 5.597 | 0.865 | 0.772 | 0.531 | -0.019 | 0.009 | 0.052 | -0.043 | 0.121 |
|  | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |  |
| **6. Firm Age** | --- |  |  |  |  |  |  |  |  |
| **7. Competitive Intensity** | 0.086 | --- |  |  |  |  |  |  |  |
| **8. Market Turbulence** | -0.048 | 0.318\* | --- |  |  |  |  |  |  |
| **9. Foreign Environmental Regulatory Pressure** | 0.034 | 0.386\* | 0.304\* | **0.715** |  |  |  |  |  |
| **10. Foreign Environmental Customer Pressure** | 0.049 | 0.386\* | 0.342\* | 0.645\* | **0.710** |  |  |  |  |
| **11. Inward-focused Internationalization Activities** | -0.059 | 0.184\* | 0.250\* | 0.351\* | 0.277\* | **0.718** |  |  |  |
| **12. Outward-focused Internationalization Activities** | -0.048 | 0.191\* | 0.248\* | 0.266\* | 0.263\* | 0.621\* | **0.769** |  |  |
| **13. Proactive Environmental Strategy** | 0.050 | 0.151\* | 0.191\* | 0.605\* | 0.667\* | 0.239\* | 0.191\* | **0.729** |  |

Notes:

N = 211; \*p < 0.05.

SD = Standard Deviation; CR = Composite Reliability; Average Variance Extracted = AVE.

Average Variance Extracted (AVE) square roots are shown in bold on the correlation matrix diagonal.

Industrial Sector Dummies: “Other sectors” as the benchmark.

**Table 2: Regression Results**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
|  | Inward-focused Internationalization Activities | | | Outward-focused Internationalization Activities | | |
| **Controls** |  |  |  |  |  |  |
| **Information Technology** | 0.482(1.761)† | 0.438(1.690)† | 0.374(1.421) | 0.478(1.880)† | 0.343(1.387) | 0.399(1.660)† |
| **Machinery and Equipment** | 0.359(1.601) | 0.291(1.364) | 0.266(1.233) | 0.727(3.497)\*\* | 0.643(3.193)\*\* | 0.617(3.138)\*\* |
| **Electronic Goods** | 0.488(1.607) | 0.223(0.762) | 0.199(0.675) | 0.550(1.951)† | 0.421(1.537) | 0.354(1.314) |
| **Consumer Goods** | 0.144(0.449) | 0.068(0.223) | 0.065(0.212) | 0.367(1.230) | 0.292(1.015) | 0.331(1.183) |
| Firm Size | -0.540(-0.813) | 0.428(2.287)\* | 0.415(2.204)\* | 0.403(2.210)\* | 0.352(2.009)\* | 0.362(2.109)\* |
| Firm Age | 0.501(2.552)\* | -0.604(-0.962) | -0.607(-0.959) | -0.385(-0.624) | -0.363(-0.609) | -0.446(-0.772) |
| Competitive Intensity | 0.048(0.615) | -0.056(-0.725) | -0.063(-0.792) | 0.085(1.167) | 0.020(0.265) | 0.014(0.197) |
| Technology Turbulence | 0.067(0.712) | 0.021(0.224) | 0.034(0.344) | -0.124(-1.426) | -0.151(-1.753)† | -0.210(-2.326)\* |
| Market Turbulence | 0.191(2.485)\* | 0.070(0.917) | 0.074(0.954) | 0.211(2.959)\*\* | 0.177(2.481)\* | 0.131(1.849)† |
|  |  |  |  |  |  |  |
| **Independent Variables** |  |  |  |  |  |  |
| Proactive Environmental Strategy (PES) | 0.217(2.139)\* | 0.246(1.877)† | 0.331(2.082)\* | 0.214(2.278)\* | 0.229(1.735)† | 0.401(2.763)\*\* |
|  |  |  |  |  |  |  |
| **Moderator** |  |  |  |  |  |  |
| Foreign Environmental Regulatory Pressure (ERP) |  | 0.367(2.597)\* | 0.370(2.526)\* |  |  | 0.050(0.370) |
| Foreign ERP2 |  | -0.039(-0.700) | -0.014(-0.231) |  |  | 0.065(0.448) |
| Foreign Environmental Customer Pressure (ECP) |  |  | -0.003(-0.020) |  | 0.189(1.327) | -0.118(-2.143)\* |
| Foreign ECP2 |  |  | -0.168(-1.093) |  | -0.373(-2.998)\*\* | -0.101(-0.718) |
|  |  |  |  |  |  |  |
| **Interactions** |  |  |  |  |  |  |
| PES x Foreign ERP |  | -0.255(-1.849)† | -0.236(-1.384) |  |  | 0.182(1.166) |
| PES x Foreign ERP2 |  | -0.138(-3.725)\*\*\* | -0.126(-3.062)\*\* |  |  | -0.043(-1.141) |
| PES x Foreign ECP |  |  | -0.011(-0.056) |  | -0.142(-0.935) | -0.520(-2.879)\*\* |
| PES x Foreign ECP2 |  |  | -0.122(-1.264) |  | -0.236(-2.635)\*\* | -0.195(-2.206)\* |
|  |  |  |  |  |  |  |
| **Intercept** | 3.563(1.530) | 5.552(2.485)\* | 5.624(2.491)\* | 4.075(1.885)† | 5.124(2.437)\* | 5.967(2.896)\*\* |
| **Model Summary** |  |  |  |  |  |  |
| F-Value | 3.859 | 5.175 | 4.134 | 4.494 | 4.975 | 2.052 |
| P-Value | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| R-Square | 0.162 | 0.270 | 0.279 | 0.183 | 0.262 | 0.321 |
| Adjusted R-Square | 0.120 | 0.218 | 0.212 | 0.143 | 0.209 | 0.258 |

Notes: \*\*\* p < 0.001; \*\* p < 0.010; \* p < 0.050; † p < 0.100.

Unstandardized coefficients are reported with t-value in parentheses.

**Table 3: Post-Hoc Analysis – Two-Stage Regression**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Model 7** | **Model 8** | **Model 9** | **Model 10** | **Model 11** | **Model 12** |
|  | Inward-Focused Internationalization Activities | | | Outward-Focused Internationalization Activities | | |
| **Controls** |  |  |  |  |  |  |
| **Information Technology** | 0.482(1.761)† | 0.395(1.502) | 0.381(1.417) | 0.478(1.880)† | 0.358(1.446) | 0.432(1.783)† |
| **Machinery and Equipment** | 0.359(1.601) | 0.244(1.124) | 0.226(1.027) | 0.727(3.497)\*\* | 0.660(3.267)\*\* | 0.602(3.034)\*\* |
| **Electronic Goods** | 0.488(1.607) | 0.225(0.758) | 0.202(0.675) | 0.550(1.951)† | 0.414(1.510) | 0.347(1.282) |
| **Consumer Goods** | 0.144(0.449) | 0.050(0.162) | 0.052(0.167) | 0.367(1.230) | 0.304(1.054) | 0.327(1.166) |
| Firm Size | 0.554(2.842)\*\* | 0.466(2.441)\* | 0.462(2.373)\* | 0.454(2.513)\* | 0.381(2.166)\* | 0.462(2.635)\*\* |
| Firm Age | -0.540(-0.813) | -0.676(-1.066) | -0.672(-1.044) | -0.385(-0.624) | -0.374(-0.625) | -0.507(-0.874) |
| Competitive Intensity | 0.044(0.559) | -0.042(-0.546) | -0.045(-0.566) | 0.081(1.108) | 0.017(0.233) | 0.013(0.180) |
| Technology Turbulence | 0.134(1.526) | 0.054(0.554) | 0.056(0.538) | -0.058(-0.713) | -0.129(-1.514) | -0.142(-1.531) |
| Market Turbulence | 0.201(2.629)\*\* | 0.093(1.221) | 0.093(1.179) | 0.221(3.112)\*\* | 0.177(2.482)\* | 0.142(2.006)\* |
|  |  |  |  |  |  |  |
| **Independent Variables** |  |  |  |  |  |  |
| Proactive Environmental Strategy Residual (PESResidual) | 0.217(2.139)\* | 0.234(1.773)† | 0.267(1.639) | 0.214(2.278)\* | 0.235(1.746)† | 0.389(2.654)\*\* |
|  |  |  |  |  |  |  |
| **Moderator** |  |  |  |  |  |  |
| Foreign Environmental Regulatory Pressure (ERP) |  | 0.353(2.511)\*\* | 0.351(2.414)\* |  |  | 0.078(0.597) |
| Foreign ERP2 |  | 0.033(0.633) | -0.029(-0.185) |  |  | -0.011(-0.078) |
| Foreign Environmental Customer Pressure (ECP) |  |  | 0.043(0.747) |  | 0.146(1.057) | -0.051(-0.985) |
| Foreign ECP2 |  |  | -0.094(-0.682) |  | -0.356(-3.396)\*\* | -0.118(-0.948) |
|  |  |  |  |  |  |  |
| **Interactions** |  |  |  |  |  |  |
| PESResidual x Foreign ERP |  | -0.319(-2.222)\* | -0.241(-1.433) |  |  | 0.158(1.040) |
| PESResidual x Foreign ERP2 |  | -0.140(-3.536)\*\* | -0.125(-2.977)\*\* |  |  | -0.050(-1.331) |
| PESResidual x Foreign ECP |  |  | -0.095(-0.484) |  | -0.131(-0.906) | -0.541(-3.059)\*\* |
| PESResidual x Foreign ECP2 |  |  | -0.059(-0.558) |  | -0.229(-2.424)\* | -0.157(-1.662)† |
|  |  |  |  |  |  |  |
| **Intercept** | 3.054(1.328) | 5.320(2.350)\* | 5.395(2.330)\* | 3.572(1.674)† | 4.971(2.354)\* | 5.502(2.636)\*\* |
| **Model Summary** |  |  |  |  |  |  |
| F-Value | 3.859 | 4.768 | 3.739 | 4.494 | 4.885 | 5.007 |
| P-Value | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| R-Square | 0.162 | 0.254 | 0.260 | 0.183 | 0.259 | 0.319 |
| Adjusted R-Square | 0.120 | 0.201 | 0.190 | 0.143 | 0.206 | 0.256 |

Notes: \*\*\* p < 0.001; \*\* p < 0.010; \* p < 0.050; † p < 0.100.

Unstandardized Coefficients are reported with t-value in parentheses.

PESResidual = PES – PESpredicted.

**Table 4: Post-Hoc Analysis – Path Analysis**

|  |  |  |  |
| --- | --- | --- | --- |
| **Path Relationship** | **Model 13** | **Model 14** | **Model 15** |
| **Control Path:** |  |  |  |
| Information Technology 🡪 Inward-focused Internationalization Activities (IFIA) | 0.147(1.807)† | 0.141(1.770)† | 0.115(1.512) |
| Information Technology 🡪 Outward-focused Internationalization Activities (OFIA) | 0.154(1.928)† | 0.127(1.634) | 0.128(1.767)† |
| Machinery and Equipment 🡪 IFIA | 0.148(1.643) | 0.124(1.407) | 0.110(1.314) |
| Machinery and Equipment 🡪 OFIA | 0.316(3.590)\*\*\* | 0.288(3.359)\*\*\* | 0.268(3.344)\*\*\* |
| Electronic Goods 🡪 IFIA | 0.129(1.648)† | 0.080(1.053) | 0.053(0.725) |
| Electronic Goods 🡪 OFIA | 0.153(2.001)\* | 0.129(1.728)† | 0.098(1.412) |
| Consumer Goods 🡪 IFIA | 0.035(0.462) | 0.017(0.235) | 0.016(0.224) |
| Consumer Goods 🡪 OFIA | 0.094(1.264) | 0.079(1.083) | 0.085(1.251) |
| Firm Size 🡪 IFIA | 0.176(2.637)\*\* | 0.156(2.398)\* | 0.146(2.352)\* |
| Firm Size 🡪 OFIA | 0.149(2.283)\* | 0.136(2.133)\* | 0.134(2.250)\* |
| Firm Age 🡪 IFIA | -0.054(-0.835) | -0.061(-0.967) | -0.061(-1.012) |
| Firm Age 🡪 OFIA | -0.041(-0.641) | -0.040(-0.645) | -0.047(-0.815) |
| Competitive Intensity 🡪 IFIA | 0.047(0.631) | -0.023(-0.308) | -0.063(-0.896) |
| Competitive Intensity 🡪 OFIA | 0.088(1.197) | 0.042(0.586) | 0.015(0.222) |
| Technology Turbulence 🡪 IFIA | 0.058(0.781) | 0.027(0.373) | 0.030(0.430) |
| Technology Turbulence 🡪 OFIA | -0.113(-1.564) | -0.148(-2.095)\* | -0.192(-2.909)\*\* |
| Market Turbulence 🡪 IFIA | 0.181(2.554)\* | 0.110(1.590) | 0.071(1.068) |
| Market Turbulence 🡪 OFIA | 0.211(3.040)\*\* | 0.192(2.840)\*\* | 0.131(2.071)\* |
|  |  |  |  |
| **Hypotheses Tests:** |  |  |  |
| Proactive Environmental Strategy (PES) 🡪 IFIA | 0.155(2.428)\* | 0.117(1.362) | 0.239(2.237)\* |
| PES 🡪 OFIA | 0.162(2.585)\* | 0.130(1.477) | 0.303(2.968)\*\* |
| Foreign Environmental Regulatory Pressure (ERP) 🡪 IFIA |  | 0.272(3.142)\*\* | 0.285(2.770)\*\* |
| Foreign ERP 🡪 OFIA |  |  | 0.040(0.406) |
| Foreign ERP2 🡪 IFIA |  | 0.017(0.222) | -0.023(-0.255) |
| Foreign ERP2 🡪 OFIA |  |  | -0.207(-2.365)\* |
| Foreign Environmental Customer Pressure (ECP) 🡪 IFIA |  |  | -0.002(-0.022) |
| Foreign ECP 🡪 OFIA |  | 0.129(1.559) | 0.048(0.484) |
| Foreign ECP2 🡪 IFIA |  |  | -0.145(-1.202) |
| Foreign ECP2 🡪 OFIA |  | -0.231(-2.533)\* | -0.091(-0.790) |
| PES x Foreign ERP 🡪 IFIA |  | -0.343(-2.419)\* | -0.277(-1.465) |
| PES x Foreign ERP 🡪 OFIA |  |  | 0.223(1.234) |
| PES x Foreign ERP2 🡪 IFIA |  | -0.487(-3.678)\*\*\* | -0.542(-3.280)\*\* |
| PES x Foreign ERP2 🡪 OFIA |  |  | -0.193(-1.223) |
| PES x Foreign ECP 🡪 IFIA |  |  | -0.009(-0.062) |
| PES x Foreign ECP 🡪 OFIA |  | -0.166(-1.613) | -0.432(-3.184)\*\* |
| PES x Foreign ECP2 🡪 IFIA |  |  | -0.189(-1.349) |
| PES x Foreign ECP2 🡪 OFIA |  | -0.280(-2.361)\* | -0.315(-2.353)\* |
|  |  |  |  |
| **Fit Index:** |  |  |  |
| Chi-Square (*X*2) | 42.957 | 247.161 | 222.675 |
| Degree of Freedom (*df*) | 8 | 89 | 81 |
| *X*2/*df* | 4.773 | 2.777 | 2.749 |
| p-value | 0.000 | 0.000 | 0.000 |
| Comparative fit index (CFI) | 0.917 | 0.928 | 0.936 |
| Root mean square error of approximation (RMSEA) | 0.087 | 0.093 | 0.091 |

Note: \*\*\* p < 0.001; \*\* p < 0.010; \* p < 0.050; † p < 0.100.

Standardized Coefficients are reported with t-value in parentheses.

**Table 5: Post-Hoc Analysis – Individual Internationalization Activities**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Model 16** | **Model 17** | **Model 18** | **Model 19** | **Model 20** | **Model 21** | **Model 22** | **Model 23** |
|  | Management Skills | | Investments | | Alliances | | Markets | |
| **Controls** |  |  |  |  |  |  |  |  |
| **Information Technology** | 0.496(1.920)† | 0.476(1.802)† | 0.379(1.086) | 0.272(0.769) | 0.104(0.348) | 0.174(0.597) | 0.582(2.159)\* | 0.624(2.341)\* |
| **Machinery and Equipment** | 0.101(0.474) | 0.083(0.384) | 0.481(1.672)† | 0.449(1.548) | 0.553(2.269)\* | 0.524(2.196)\* | 0.734(3.340)\*\* | 0.711(3.259)\*\* |
| **Electronic Goods** | -0.010(-0.035) | -0.014(-0.048) | 0.456(1.155) | 0.412(1.040) | 0.444(1.339) | 0.379(1.160) | 0.398(1.333) | 0.329(1.102) |
| **Consumer Goods** | 0.329(1.082) | 0.329(1.069) | -0.193(-0.470) | -0.199(-0.482) | 0.425(1.221) | 0.464(1.369) | 0.159(0.507) | 0.198(0.637) |
| Firm Size | 0.513(2.749)\*\* | 0.510(2.706)\*\* | 0.343(1.357) | 0.319(1.261) | 0.510(2.402)\* | 0.525(2.522)\* | 0.195(1.020) | 0.199(1.047) |
| Firm Age | -0.595(-0.951) | -0.634(-0.998) | -0.612(-0.723) | -0.580(-0.682) | -0.301(-0.418) | -0.393(-0.562) | -0.424(-0.654) | -0.499(-0.779) |
| Competitive Intensity | -0.086(-1.125) | -0.087(-1.084) | -0.025(-0.242) | -0.040(-0.369) | -0.029(-0.318) | -0.037(-0.423) | 0.069(0.840) | 0.066(0.816) |
| Technology Turbulence | 0.017(0.176) | 0.009(0.093) | 0.026(0.202) | 0.059(0.442) | -0.157(-1.508) | -0.247(-2.253)\* | -0.145(-1.543) | -0.174(-1.732)† |
| Market Turbulence | 0.047(0.616) | 0.052(0.672) | 0.093(0.904) | 0.096(0.917) | 0.208(2.410)\* | 0.157(1.831)† | 0.146(1.877)† | 0.105(1.333) |
| **Independent Variables** |  |  |  |  |  |  |  |  |
| Proactive Environmental Strategy (PES) | 0.310(2.369)\* | 0.350(2.196)\* | 0.182(1.031) | 0.312(1.460) | 0.199(1.249) | 0.384(2.182)\* | 0.258(1.797)† | 0.419(2.598)\* |
| **Moderator** |  |  |  |  |  |  |  |  |
| Foreign Environmental Regulatory Pressure (ERP) | 0.537(3.813)\*\*\* | 0.535(3.640)\*\*\* | 0.196(1.029) | 0.205(1.042) |  | 0.078(0.482) |  | 0.021(0.141) |
| Foreign ERP2 | -0.022(-0.407) | -0.018(-0.299) | -0.055(-0.737) | -0.010(-0.120) |  | -0.157(-2.362)\* |  | -0.078(-1.283) |
| Foreign Environmental Customer Pressure (ECP) |  | 0.062(0.395) |  | -0.069(-0.325) | 0.092(0.534) | -0.064(-0.365) | 0.287(1.842)† | 0.193(1.207) |
| Foreign ECP2 |  | -0.004(-0.024) |  | -0.333(-1.608) | -0.371(-2.462)\* | -0.037(-0.217) | -0.375(-2.767)\*\* | -0.165(-1.058) |
| **Interactions** |  |  |  |  |  |  |  |  |
| PES x Foreign ERP | -0.152(-1.104) | -0.149(-0.869) | -0.357(-1.925)† | -0.324(-1.412) |  | 0.209(1.110) |  | 0.154(0.890) |
| PES x Foreign ERP2 | -0.121(-3.274)\*\* | -0.120(-2.905)\*\* | -0.155(-3.100)\*\* | -0.132(-2.388)\* |  | -0.048(-1.056) |  | -0.038(-0.904) |
| PES x Foreign ECP |  | -0.077(-0.388) |  | 0.055(0.206) | -0.118(-0.643) | -0.553(-2.529)\* | -0.166(-1.002) | -0.486(-2.427)\* |
| PES x Foreign ECP2 |  | -0.077(-0.796) |  | -0.167(-1.288) | -0.167(-1.539) | -0.112(-1.043) | -0.305(-3.126)\*\* | -0.278(-2.838)\*\* |
| **Intercept** | 5.913(2.652)\*\* | 6.081(2.685)\*\* | 5.191(1.722)† | 5.167(1.703)† | 4.714(1.854)† | 5.786(2.317)\* | 5.534(2.415)\* | 6.148(2.689)\*\* |
| **Model Summary** |  |  |  |  |  |  |  |  |
| F-Value | 6.729 | 5.182 | 5.639 | 2.289 | 3.565 | 3.836 | 4.642 | 4.246 |
| P-Value | 0.000 | 0.000 | 0.001 | 0.003 | 0.000 | 0.000 | 0.000 | 0.000 |
| R-Square | 0.325 | 0.327 | 0.159 | 0.177 | 0.203 | 0.265 | 0.249 | 0.285 |
| Adjusted R-Square | 0.276 | 0.264 | 0.099 | 0.100 | 0.146 | 0.196 | 0.195 | 0.218 |

Notes: \*\*\* p < 0.001; \*\* p < 0.010; \* p < 0.050; † p < 0.100.

Unstandardized Coefficients are reported with t-value in parentheses.

Management Skills (item) – we utilized advanced management skills from foreign countries; Investments (item) – we utilized foreign direct investment; Markets (item) – we aggressively seek foreign markets; Alliance (item) - we develop alliances with foreign partners.

**Appendix 1: Factor Loadings**

|  |  |
| --- | --- |
| **Measurement** | **Loading** |
| **Foreign Environmental Regulatory Pressure** |  |
| Regulation by government agencies has greatly influenced our organization’s concern for environmental issues. | 0.741 |
| Stricter environmental regulation is a major reason why our organization is concerned about its impact on the natural environment. | 0.650 |
| Our organization’s environmental efforts can help shape future environmental legislation in our industry. | --- |
| Our industry is faced with strict environmental regulations. | 0.741 |
| **Foreign Environmental Customer Pressure** |  |
| Our customers feel that environmental protection is a critically important issue facing the world today. | 0.669 |
| Our customers are increasingly demanding environmentally friendly products and services. | 0.719 |
| Our customers expect our organization to be ecologically friendly. | 0.740 |
| **Inward-Focused Internationalization Activities** |  |
| We utilize advanced management skills from foreign countries. | 0.687 |
| We utilize advanced and new technology from foreign countries. | --- |
| We utilize foreign direct investment. | 0.748 |
| **Outward-Focused Internationalization Activities** |  |
| We aggressively seek foreign markets. | 0.818 |
| We develop alliances with foreign partners | 0.718 |
| **Proactive environmental Strategy** |  |
| We have good environmental policies. | 0.733 |
| We are concerned about environmental sustainability. | 0.717 |
| We try to reduce our impact on the environment. | 0.733 |
| We are an environmentally friendly company. | --- |

Notes:

--- Items deleted due to low factor loading.

1. We acknowledge that mimetic pressure also shapes the institutional environment – emerging from organizations’ tendency to model each other’s best practices in the face of uncertainty (Swaminathan & Wade, 2018). Relative to coercive and normative pressures, mimetic pressure often arises from interorganizational relationships (Cheng & Yu, 2008). Given that our research focuses more on how macro environmental settings affect the influence of organizations’ proactive environmental strategy on internationalization activities, we do not consider mimetic pressure in our framework. [↑](#footnote-ref-1)
2. We recognize that the institutional environment consists of vast arrays of constituents (such as governments, trade associations, local communities, interest groups, activists, etc.). However, the existing research shows that regulators and customers are the two primary forces that shape the rules within the institutional environment (Swaminathan & Wade, 2018), particularly regarding issues related to pro-environemntal strategy (Delmas & Toffel, 2008; Li *et al.*, 2019) that is the focus of this research. [↑](#footnote-ref-2)
3. The three major economic clusters are “Jing-Jin-Ji” (Capital Economic Zone), “Yangtze River Delta,” and “Pearl River Delta” (Greater Bay Area). The SMEs in these three clusters are considered the most innovative and internationally-oriented in China, and accounted for approximately 40% of China’s national GDP (Groff & Rau, 2019; Sheng, Zhao, Zhang, Song, & Miao, 2019). [↑](#footnote-ref-3)
4. We acknowledge that the primary aim of a two-wave survey design (creating a temporal separation) is to avoid potential common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Whether such a design represents a longitudinal study remains debatable (Cohen, Cohen, West, & Aiken, 2003; Menard, 2002). [↑](#footnote-ref-4)
5. Scale items with low factor loadings are deleted based on the results of the validity and reliability tests (see Appendix 1). [↑](#footnote-ref-5)
6. The item “utilized advanced and new technology from foreign countries” is deleted due to low factor loading. [↑](#footnote-ref-6)