

Proactive Environmental Strategy and Environmental Performance: A Resource-based Perspective

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Abstract- This paper reviews the relationship between proactive environmental strategy and environmental performance from the resource-based perspective by providing the recent findings on this relationship. The benefits and meaning of proactive environmental strategy and environmental performance are discussed in this article. We find that the resource-based view theory is important to define the relationship between proactive environmental strategy and environmental performance.

Index Terms- proactive environmental strategy, environmental strategy, environmental performance, resource-based view theory

I. INTRODUCTION

Recently, environmental problems like greenhouse gas emissions, climate change, biodiversity destruction, global warming, toxic waste, and ozone depletion have increased globally (Aragón-Correa, Hurtado-Torres, Sharma, & García-Morales, 2008; Solovida & Latan, 2017). These problems require organizations and societies to reduce their influence and impact on the environment and find solutions to these effects and improve their environmental performance (EP) (Aragón-Correa et al., 2008; Shrivastava, 1995; Solovida & Latan, 2017). The EP of the organization is a set of measures that describe an organization's success in reducing and minimizing its environmental impacts (Klassen & McLaughlin, 1996).

The main advantages of EP adoption are the reduction of new resources use through recycling, minimizing energy consumption in the production processes, and decreasing the amount of production residues that might contain dangerous materials (Rae, Sands, & Gadenne, 2015). In addition to that, both small and large organizations face growing pressures to improve their EP as part of meeting their obligations towards environmental issues (Roy, Boiral, & Paillé, 2013). Organizations are concerned about their EP to show their responsibility towards environmental issues because of pressures from society. Organizations fear that their performance might decrease if they do not engage in activities related to environmental issues (Winter & May, 2001). Accordingly, organizations have been setting up environmental strategies to demonstrate their commitment to local communities and environmental issues (Fraj-Andrés, Martínez-Salinas, & Matute-Vallejo, 2009; Solovida & Latan, 2017). The environmental issues are essential for the organization, and they implement environmental strategies to reduce the effects of their activities on the environment (Wijethilake, 2017). By doing that,

organizations can gain several benefits, such as increasing their environmental performance, improving the organization's image, and increasing profitability. Furthermore, adopting environmental strategies allows an organization to compete in an existing market, access new markets, and increase customer and employee satisfaction, which, in turn, contributes positively to the overall economy of the country (Dias-Sardinha & Reijnders, 2005).

Because of their advantages, organizations have incorporated environmental plans into their strategies (Gunarathne & Lee, 2015; Ko & Liu, 2017; Pondeville, Swaen, & De Rongé, 2013). The primary purposes of environmental strategies are to improve the environmental performance of an organization and decrease the impact of organizational activities on the environment as well as to manage these activities and to maintain a positive relationship between an organization and its natural environment (Aragón-Correa, 1998; Fraj-Andrés et al., 2009). An environmental strategy helps an organization to become more aware of environmental issues and improve the organization's performance (Henri & Journeault, 2010).

In this regard, the environmental strategies of organizations may be classified as reactive and proactive strategies. On the one hand, a reactive environmental strategy is concerned with meeting legal requirements and regulations and responding to stakeholder pressures. On the other hand, a proactive environmental strategy (PES) provides actions and activities beyond regulations to reduce the environmental harm caused that an organization may cause (Aragón-Correa & Sharma, 2003; Kang & Lee, 2016; Murillo-Luna et al., 2011; Sharma, 2000). PES is identified as systematic procedures for voluntary activities by an organization that goes beyond the legal and regulatory requirements (Aragón-Correa & Rubio-Lopez, 2007).

PES is designed to deal with an organization's environmental impacts voluntarily to avoid harming the environment (Aragón-Correa, 1998; Sharma, 2000; Sharma & Vredenburg, 1998). Additionally, PES is vital in reducing organizational activities that could harm the environment (Garcés-Ayerbe, Scarpellini, Valero-Gil, & Rivera-Torres, 2016). Such a strategy also helps an organization to forecast future regulations regarding environmental issues and designing or changing the operations, process, and product to reduce negative environmental impacts (Hart, 1995; Sharma & Vredenburg, 1998; Tsai & Liao, 2017).

In addition, as part of the competition among firms to increase both financial and environmental performance, various organizations adopt a PES to reduce pollution in their activities.

They do so by producing environmentally friendly products and showing their commitment to environmental issues (Klassen & Whybark, 1999; Sharma & Vredenburg, 1998; Wijethilake, 2017).

These organizations develop their PES voluntarily and invest their resources to achieve their objectives and goals related to gaining a competitive advantage (Tsai & Liao, 2017). Accordingly, a PES is considered as to be related to organizational capabilities that decrease an organization's impact on the environment and increase its competitive advantages (Christmann, 2000; Garcés-Ayerbe et al., 2016; Hart, 1995; Judge & Douglas, 1998; Li et al., 2016; Ryszko, 2016; Sharma & Vredenburg, 1998). In this regard, the resource-based view theory (RBV) posits that an organization's capabilities and resources play major roles in gaining sustainable competitive advantages (Barney, 1991). Thus, PES is an organizational capability that will increase an organization's EP if appropriately implemented (Kang & Lee, 2016).

In summary, PES is a strategy that goes beyond the law and regulations to reduce the impact of organizations on the environment and improve their EP. This strategy is considered a resource that enhances organizational performance aligns with the resource-based view theory. Accordingly, this study reviews the relationship between PES and EP from the perspective of resource-based view theory and how this theory helps to explain this relationship.

The remainder of this paper is organized as follows. The first section presents the definitions and benefits of environmental performance. Then, the second section presents the definitions and benefits of a proactive environmental strategy. Section three discusses the resources based-view theory followed by section

II. ENVIRONMENTAL PERFORMANCE

Klassen and McLaughlin (1996) described an organization's EP as a set of measures that describes how successful organizations are in reducing and minimizing their impacts on the environment. In other words, EP refers to an organization's efficiency in meeting and go beyond social expectations concerning the natural environment Chan (2005). It also indicates the capabilities of organizations to establish consistent relationships with different stakeholders who concerned about environmental issues (Henri & Journeault, 2006).

EP focuses on the consequences of an organization's strategic activities that manage its influence on the natural environment (Walls, Berrone, & Phan, 2012). AboelMaged and Ahmed (2015) described EP as the environmental effect that a company's actions had on the natural environment. More specifically, EP refers to the abilities of organizations to integrate environmental factors into their production systems to reduce pollution and increase the quality of the product (Song, Fisher, Wang, & Cui, 2016). However, Tam and Fernando (2018) emphasized that EP

III. PROACTIVE ENVIRONMENTAL STRATEGY

Now According to Aragón-Correa and Rubio-Lopez (2007), scholars and consultants have demonstrated the importance of PES to organizations since 1990. PES is described as a statement of processes actions of an organization that goes beyond basic

is a measurement that is being used to quantify the environmental impacts that pollution activities cause.

The main advantages of the adoption of an EP are the reduction of the utilization of new resources through recycling, minimizing the energy consumption in production processes, and decreasing the amount of production residues that might contain dangerous materials (Rae, Sands, & Gadenne, 2015). In addition to that, both small and large organizations face growing pressures to improve their EP as part of their obligations towards environmental issues (Roy, Boiral, & Paillé, 2013). Organizations utilize EP to demonstrate their responsibility to environmental issues because of pressures from society to engage in these issues. Organizations fear that their financial performance might decrease if they do not engage in activities related to environmental issues (Winter & May, 2001).

The improvement of an organization's EP is among the fundamental sources for achieving a competitive advantage through implementing an excellent environmental strategy that reduces costs and improves production processes (Horváthová, 2010; Solovida & Latan, 2017). Organizations are encouraged to control, measure, and disclose information about their EP (Henri & Journeault, 2008). What is more, Mensah (2014) emphasized that stakeholders are the main drivers of the EP improvement among organizations to explain more.

Among the potential benefits of an EP are an increase organizational performance and productivity (Galdeano-Gomez, Céspedes-Lorente, & Martínez-del-Río, 2008; Schaltegger & Lüdeke-Freund, 2013), a reduction in the costs of production by decreasing obligated additional costs to organization products like clean up expenditures and fines (Dasgupta, Hong, Laplante, & Mamingi, 2006; Sharfman & Fernando, 2008), supporting relationships with stakeholders, boosting an organization's reputation and legitimacy by producing environmentally friendly products and reducing pollution. (Bansal, 2005; Darnall, Henriques, & Sadorsky, 2008; Melo & Garrido-Morgado, 2012; Perrini & Tencati, 2006; Van Reenen, 2011), enhancing product quality, increasing product sales which boosts market value (Chen, Tang, Jin, Li, & Paillé, 2015; Darnall et al., 2008) (Dasgupta et al., 2006; Schaltegger & Lüdeke-Freund, 2013), and influencing the environmental involvement of employees (Chen et al., 2015).

An EP valuable in all organizations and sectors whether they are industrial or service related (Allet, 2011; Carmona-Moreno, Céspedes-Lorente, & De Burgos-Jiménez, 2004; França, Silva, & Marques Júnior, 2003). According to Rosenblum, Horvath, and Hendrickson (2000), organizations can reduce their impacts on the environment in various ways. These include influencing suppliers to provide environmentally products and services that do not harm the environment, decreasing resource inputs in their operations by implementing efficiency programs, educating their customers about environmental issues and their product offered, and decreasing resources usage by of customers by providing more beneficial environmentally activities or services

compliance with regulations and laws (Ateş, Bloemhof, Van Raaij, & Wynstra, 2012). Menguc, Auh, and Ozanne (2010) described PES as the strategy that is intended to reduce pollution and emissions through continuous learning and planning by an

organization. Furthermore, Sharma (2000) explained PES as a consistent set of actions that an organization takes to reduce the environmental impacts of its operations and activities not just to fulfill environmental regulations but to go beyond that. Under this strategy, the top management is responsible for compliance with the laws and regulations regarding environmental issues (Aragón-Correa et al., 2008). In addition to this, the PES has been mainly viewed from an internal and competitive perspective (Menguc et al., 2010).

Consistent with RBV theory, several studies have identified PES in terms of an organization's capabilities (Christmann, 2000; Garcés-Ayerbe et al., 2016; Hart, 1995; Judge & Douglas, 1998; Li, Jayaraman, Paulraj, & Shang, 2016). Past studies have shown that the link between PES and organizational capabilities allows organizations to bring together all human resources, raw materials, and technologies to decrease their negative impacts on the environment and, at the same time, increase organizational performance (Galdeano-Gómez & Céspedes-Lorente, 2004; Garcés-Ayerbe et al., 2016). In addition, proactive organizations can improve their internal and external environmental reporting (Henriques & Sadosky, 1999; Sharma & Vredenburg, 1998).

An organization that is committed to engaging in a PES and going beyond regular requirements is more likely to earn additional profits and meet the social expectation than an organization that does not demonstrate such a commitment (Barnett, Darnall, & Husted, 2015; Fraj, Matute, & Melero, 2015). In organizations that adopt a PES, the top management seeks to fulfill its responsibilities to environmental issues. These responsibilities include addressing environmental issues, supporting environmental programs and policies, giving the employees rewards that reduce and improve environmental impacts, and allocating organizational resources to environmental issues and initiatives (Berry & Rondinelli, 1998). Improving organizational performance, as well as recognizing the urgent need to use its capabilities in a better way, is vital for an organization to enhance its reputation. These capabilities include a shared vision, organizational learning, continuous innovation, and stakeholder management, which are considered as essential pre-requisites for the adoption and successful implementation of a PES (Hart, 1995). Employee participation and understanding are also crucial for the development and improvement of these internal capabilities (Russo & Fouts, 1997; Winn & Angell, 2000).

Moreover, PES provides many benefits to the organizations like improving the EP through the effective use of resources, boosting customers preferences, promoting and generating innovative capabilities for an organization that has implemented this strategy (Banerjee, 2001; Bhupendra & Sangle, 2015; Christmann, 2000; Judge & Douglas, 1998; Klassen & Whybark, 1999; Sharma & Vredenburg, 1998; Wijethilake, 2017). An organization that has adopted a PES has recognized environmental issues and gained new opportunities to enter new markets and produce new products. Such organizations demonstrate concern to their communities and public about the importance of environmental issues, integrate environmental issues into their activities and functions, and provide benefits to their stakeholders directly (Gonzalez-Benito, 2008; Klassen & Angell, 1998; Tsoutsoura, 2004). It also enhances economic

performance and organizational profitability (Porter & Van der Linde, 1995; Stefan & Paul, 2008).

According to Sangle (2010), a PES goes beyond regulatory and legal requirements by enhancing the establishment of environmental policies and goals, improving employee skills through training, helping an organization to disclose about its environmental activities and making these reports available to public, reducing organizational environmental impacts and setting environmental standards for an organization's suppliers. These benefits are achieved by preventing pollution and the development of an organization's products by using resources efficiently (Klassen & Whybark, 1999). In recent years, many managers have attempted to implement some practices and activities of proactive environmental strategies (Aragón-Correa & Rubio-Lopez, 2007). And some of the largest organizations like 3M and Du Pont have changed their environmental strategies from reactive to proactive (Judge & Douglas, 1998). Also, organizations that have adopted a PES have an increased opportunity to internationalize their work and transactions (Chen, Ong, & Hsu, 2016).

Traditional wisdom suggests that organizations that have adopted and implemented environmental strategies recoup the associated costs and increase their competitive advantages (Friedman, 2007). Thus, a PES encourages organizations to innovate environmental products that reduce costs and gain cost-saving advantages (Christmann, 2000).

IV. RESOURCE-BASED VIEW THEORY

In the strategic management area, the RBV theory is widely used as a theoretical perspective (Barney & Arkan, 2001) and is recognized as an underpinning theory in strategic management (Liang, You, & Liu, 2010). Wernerfelt (1984) developed this theory, which explains the relationship between organizational resources and capabilities and their competitive advantages and performance (Barney, 1991).

As Wernerfelt (1984) stated, "a firm's resources at a given time could be defined as those tangible and intangible assets which are tied semi-permanently to the firm. Examples of resources are brand names, in-house knowledge of technology, employment of skilled personnel, trade contracts, machinery, efficient procedures, and capital" (172). The importance of organizational resources and capabilities are highlighted in RBV theory because of the support that they provide an organization in developing and surviving and achieving overall effectiveness and success (Barney, 1991).

This theory explains the outcome of the development of an organization's valuable resources and capabilities that are linked to a sustained competitive advantage. These capabilities, such as continuous innovation, stakeholder integration, and organizational learning, are associated with a PES (Sharma & Vredenburg, 1998). Hart (1995) argues that the prerequisite capabilities of an organization to implement a PES are organizational learning, a shared vision, continuous innovation, and stakeholder management.

An organization utilizes either tangible or intangible resources to build a competitive advantage (Brulhart, Gherra, & Marais, 2017). Various scholars have classified the differences between tangible and intangible resources differently. For example, Grant (1991) classified tangible resources as fixed assets, production

equipment, inventories, and financial resources, while intangible resources were classified as reputation, technology, human resources, employee training, employee loyalty, employee experience, and employee commitment. Teece, Pisano, and Shuen (1997) included different resources such as knowledge, media, structure (governance), network, market, and institution resources. Whatever the case, an organization generates economic benefits by combining and exploiting both tangible and intangible resources (Barney, 1991).

One focus of RBV theory is on the resources of an organization that are not easily transferable and difficult to reproduce. The RBV theory argues an organization's internal capabilities and resources that are valuable, inimitable, rare, non-changeable, and have high costs to copy and provide an organization with a sustainable competitive advantage, and let them compete favorably in their environment (Barney, 1991; Barney & Mackey, 2005). The fundamental argument of RBV theory is that the resources that an organization owns influence its performance, and an organization with more valuable resources is more likely to maintain a sustainable competitive advantage than an organization with fewer valuable resources (Liang et al., 2010). One argument of this theory derives from the capabilities and resources of an organization. The logic is that competitors would find capabilities and resources difficult either to copy or replace. Such resources include physical assets, financial assets, employee skills, or organization procedures (Clarkson, Li, Richardson, & Vasvari, 2011).

Based on Barney (1991), the RBV theory identified and categorized three different resources of an organization. These resources are physical, organizational, and human resources. Physical resources typically include the tangible assets of the organization like a plant, equipment, raw materials, geographical location, information technology of the organization, and financial instruments. Organizational resources include management system, planning, coordination, controlling, and formal reporting structure. Human resources of the organization include employee experience and their judgment, social relationships, and insights.

According to Barney (1991), the resources of an organization that create sustained competitive advantages should have the following attributes. First, they should be valuable, which refers to the resources that can support an organization in implementing its strategies that improve both the efficiency and effectiveness of the organization. Second, they should be non-substitutable, which means that the valuable resources of the organization cannot easily be replaced or changed. Third, they should be rare, which refers to the valuable resources of an organization that many competitors cannot easily possess. Last, they should be imperfectly imitable, which means that the valuable resources of an organization are difficult, if not impossible, to duplicate.

Moreover, Buysse and Verbeke (2003) divided the natural components of an organization into five categories. These are conventional factors, human resources, procedural, strategic planning, and organizational resources. Conventional resources refer to physical resources that are used to produce more environmentally friendly products like technology, plants, raw materials, and equipment. Human resources refer to the participation of employees in the natural environment and their experience, qualification, and training. Procedures resources

refer to standards and formal procedures that are related to environmental issues and reporting systems. Strategic planning refers to the environmental strategies that clearly define the objectives, plans, and budget of an organization's commitment to the natural environment. Lastly, organizational resources refer to environmental concerns as components of corporate structure, such as degree of centralization, allocation of mission, responsibilities, coordination, and hierarchical structure that are related to environmental development and improvement.

V. DISCUSSION AND THE RELATIONSHIP BETWEEN PROACTIVE ENVIRONMENTAL STRATEGY AND ENVIRONMENTAL PERFORMANCE FROM RESOURCE BASED-VIEW THEORY

A PES requires the aggregation of skills, resources such as human resources, technologies, and assets to be implemented by an organization (Aragón-Correa, 1998; Russo & Fouts, 1997; Sharma & Vredenburg, 1998). Additionally, the PES allows an organization to organize and use all of its resources, such as human resources, raw materials, and organizational technologies, to reduce its impacts on the environment (Galdeano-Gómez & Céspedes-Lorente, 2004; Garcés-Ayerbe et al., 2016).

In literature, many past studies have shown a positive relationship among environmental strategy, PES and EP (Alt, Díez-de-Castro, & Lloréns-Montes, 2015; Ateş et al., 2012; Bae, 2017; Hoffmann, Kuss, & Delmas, 2011; Kim, 2018; Solovida & Latan, 2017; Wijethilake, 2017). For example, in a study of two primary longitudinal databases among 490 organizations in the United States in two periods between 1991 and 2010, Kim (2018) found that PES practices positively led to improvements of EP. Accordingly, in a study among 68 Indonesian organizations that have an ISO14001 certification and listed on the Indonesia stock exchange, Solovida and Latan (2017) found a significant and positive relationship between environmental strategy and environmental performance. The study also found that environmental management accounting directly mediates this relationship. Bae (2017) had similar findings in a study of 219 organizations that were members of the Korea International Trade Associations. Hart (1995) and Rodrigue, Magnan, and Boulianne (2013) showed the importance of the PES processes for the improvement of EP.

In a survey of 175 managers in multinational and local organizations in Sri Lanka, Wijethilake (2017) found a positive relationship between PES and EP. Previously, Alt et al. (2015) used a cross-country and multi-industry sample of 170 firms. They found that the proactive environmental strategies of firms translated employee stakeholder integration into an environmental performance.

In a survey of 96 manufacturing organizations in Turkey, Ateş et al. (2012) investigated the impact of PES on the EP with the mediating effect of environmental investments. The results revealed a positive relationship between PES and EP through the mediating effect of environmental investments. This finding suggests that environmental investments encourage cooperation with suppliers, both internally and externally.

Kang and Lee (2016) conducted a meta-analysis to provide an overview of the environmental strategy of organizations in the management and business literature. The authors reviewed

19,839 papers that were published between 1990 to 2003 in management journals. Their study concluded that most studies investigating environmental strategy focused on one country, and most of them had used data from the United States. Most of these studies had used an RBV theory to examine the relationship among environmental strategy, EP, and financial performance while other studies used stakeholders theory and institutional theory to examine the variables that encourage or barriers the organizations to adopt the environmental strategy. Finally, the study shows a lack of studies conducted between environmental strategy and management research.

VI. CONCLUSION

This paper reviewed the relationship between proactive environmental strategy and environmental performance from the resource-based view perspective. The paper demonstrated that previous studies found a positive relationship between proactive environmental strategy and environmental performance, and the resource-based view theory is important in defining the relationship between proactive environmental strategy and environmental performance.

REFERENCES

- [1] Aboelmaged, M. G., & Ahmed, I. E. S. (2015). Adoption of supply chain sustainability in developing countries: An empirical investigation. In D.E. Palmer (ed.), *Handbook of research on business ethics and corporate responsibilities* (pp. 420-443). Hershey, PA: IGI Global.
- [2] Allet, M. (2011). *Measuring the environmental performance of microfinance*. CEB Working Paper, No. 11/045.
- [3] Alt, E., Díez-de-Castro, E. P., & Lloréns-Montes, F. J. (2015). Linking employee stakeholders to environmental performance: The role of proactive environmental strategies and shared vision. *Journal of Business Ethics*, 128(1), 167-181.
- [4] Aragón-Correa, J.A. (1998). Strategic proactivity and firm approach to the natural environment. *Academy of Management Journal*, 41(5), 556-567.
- [5] Aragón-Correa, J.A., Hurtado-Torres, N., Sharma, S., & García-Morales, V. J. (2008). Environmental strategy and performance in small firms: A resource-based perspective. *Journal of Environmental Management*, 86(1), 88-103.
- [6] Aragón-Correa, J.A. & Rubio-Lopez, E.A. (2007). Proactive corporate environmental strategies: myths and misunderstandings. *Long Range Planning*, 40(3), 357-381.
- [7] Aragón-Correa, J.A. & Sharma, S. (2003). A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review*, 28(1), 71-88.
- [8] Ateş, M. A., Bloemhof, J., Van Raaij, E. M., & Wynstra, F. (2012). Proactive environmental strategy in a supply chain context: The mediating role of investments. *International Journal of Production Research*, 50(4), 1079-1095.
- [9] Bae, H. S. (2017). The effect of environmental capabilities on environmental strategy and environmental performance of Korean exporters for green supply chain management. *The Asian Journal of Shipping and Logistics*, 33(3), 167-176.
- [10] Banerjee, S. B. (2001). Managerial perceptions of corporate environmentalism: Interpretations from industry and strategic implications for organizations. *Journal of Management Studies*, 38(4), 489-513.
- [11] Bansal, P. (2005). Evolving sustainably: A longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26(3), 197-218.
- [12] Barnett, M. L., Darnall, N., & Husted, B. W. (2015). Sustainability strategy in constrained economic times. *Long Range Planning*, 48(2), 63-68.
- [13] Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- [14] Barney, J., & Arian, A. M. (2001). The resource-based view: Origins and implications. In M.A. Hitt, E. Freeman, & J. Harrison (Eds), *Blackwell Handbook of strategic management* (pp. 124-188). Hoboken, NJ: John Wiley & Sons.
- [15] Barney, J., & Mackey, T. (2005). Testing resource-based theory In *Research methodology in strategy and management 2* (pp. 1-13). Bingley, United Kingdom: Emerald Insight.
- [16] Bhupendra, K. V., & Sangle, S. (2015). What drives successful implementation of pollution prevention and cleaner technology strategy? The role of innovative capability. *Journal of Environmental Management*, 155, 184-192.
- [17] Bodansky, D. (2016). The Paris climate change agreement: A new hope? *American Journal of International Law*, 110(2), 288-319.
- [18] Brulhart, F., Gherra, S., & Marais, M. (2017). Are environmental strategies profitable for companies? The key role of natural competences from a resource-based view. *Management Decision*, 55(10), 2126-2148.
- [19] Buysse, K., & Verbeke, A. (2003). Proactive environmental strategies: A stakeholder management perspective. *Strategic Management Journal*, 24(5), 453-470.
- [20] Carmona-Moreno, E., Céspedes-Lorente, J., & De Burgos-Jiménez, J. (2004). Environmental strategies in Spanish hotels: Contextual factors and performance. *The Service Industries Journal*, 24(3), 101-130.
- [21] Chan, R. Y. (2005). Does the natural-resource-based view of the firm apply in an emerging economy? A survey of foreign invested enterprises in China. *Journal of Management Studies*, 42(3), 625-672.
- [22] Chen, P-H., Ong, C-F., & Hsu, S-C. (2016). The linkages between internationalization and environmental strategies of multinational construction firms. *Journal of Cleaner Production*, 116, 201-216.
- [23] Chen, Tang, G., Jin, J., Li, J., & Paillé, P. (2015). Linking market orientation and environmental performance: The influence of environmental strategy, employee's environmental involvement, and environmental product quality. *Journal of Business Ethics*, 127(2), 479-500.
- [24] Christmann, P. (2000). Effects of "best practices" of environmental management on cost advantage: The role of complementary assets. *Academy of Management Journal*, 43(4), 1-44.
- [25] Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2011). Does it really pay to be green? Determinants and consequences of proactive environmental strategies. *Journal of Accounting and Public Policy*, 30(2), 122-144.
- [26] Darnall, N., Henriques, I., & Sadorsky, P. (2008). Do environmental management systems improve business performance in an international setting? *Journal of International Management*, 14(4), 364-376.
- [27] Dasgupta, S., Hong, J. H., Laplante, B., & Mamingi, N. (2006). Disclosure of environmental violations and stock market in the Republic of Korea. *Ecological Economics*, 58(4), 759-777.
- [28] Dias-Sardinha, I., & Reijnders, L. (2005). Evaluating environmental and social performance of large Portuguese companies: A balanced scorecard approach. *Business Strategy and the Environment*, 14(2), 73-91.
- [29] Fraj-Andrés, E., Martínez-Salinas, E., & Matute-Vallejo, J. (2009). Factors affecting corporate environmental strategy in Spanish industrial firms. *Business Strategy and the Environment*, 18(8), 500-514.
- [30] Fraj, E., Matute, J., & Melero, I. (2015). Environmental strategies and organizational competitiveness in the hotel industry: The role of learning and innovation as determinants of environmental success. *Tourism Management*, 46, 30-42.
- [31] França, A., Silva, J. M. D. d., & Marques Júnior, S. (2003). Environmental performance indicators in the hotel industry: A methodological analysis. Presented at POM 2003. Retrieved from <https://www.pomsmeetings.org/ConfProceedings/001/Papers/ENV-07.5.pdf>
- [32] Friedman, M. (2007). The social responsibility of business is to increase its profits. In W.C. Zimmerli, M. Holzinger, & K. Richter (eds.), *Corporate ethics and corporate governance* (pp. 173-178). Berlin, Heidelberg: Springer.
- [33] Galdeano-Gomez, E., Céspedes-Lorente, J., & Martínez-del-Río, J. (2008). Environmental performance and spillover effects on productivity: Evidence from horticultural firms. *Environmental Management*, 88(4), 1552-1561.
- [34] Galdeano-Gómez, E., & Céspedes-Lorente, J. (2004). The effect of quality-environmental investment on horticultural firms' competitiveness.

- Canadian Journal of Agricultural Economics/Revue Canadienne d'Agroéconomie, 52(3), 371-386.
- [35] Garcés-Ayerbe, C., Scarpellini, S., Valero-Gil, J., & Rivera-Torres, P. (2016). Proactive environmental strategy development: from laggard to eco-innovative firms. *Journal of Organizational Change Management*, 29(7), 1118-1134.
- [36] Gonzalez-Benito, J. (2008). The effect of manufacturing pro-activity on environmental management: An exploratory analysis. *International Journal of Production Research*, 46(24), 7017-7038.
- [37] 7017-7038. Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *Journal of California Management Review*, 33(3), 114-135.
- [38] Gunarathne, N., & Lee, K.-H. (2015). Environmental Management Accounting (EMA) for environmental management and organizational change: An eco-control approach. *Journal of Accounting & Organizational Change*, 11(3), 362-383.
- [39] Hart, S. L. (1995). A natural-resource-based view of the firm. *Journal of Academy of Management Review*, 20(4), 986-1014.
- [40] Henri, J-F., & Journeault, M. (2008). Environmental performance indicators: An empirical study of Canadian manufacturing firms. *Environmental Management*, 87(1), 165-176.
- [41] Henri, J.F., & Journeault, M. (2010). Eco-control: The influence of management control systems on environmental and economic performance. *Journal of Accounting, Organizations and Society*, 35(1), 63-80.
- [42] Henriques, I., & Sadosky, P. (1999). The relationship between environmental commitment and managerial perceptions of stakeholder importance. *Journal of Academy of Management*, 42(1), 87-99.
- [43] Hoffmann, V. H., Kuss, M., & Delmas, M. (2011). Under the tip of the iceberg: Absorptive capacity, environmental strategy, and competitive advantage. *Business & Society*, 50(1), 116-154.
- [44] Horváthová, E. (2010). Does environmental performance affect financial performance? A meta-analysis. *Ecological Economics*, 70(1), 52-59.
- [45] Journeault, M., De Ronge, Y., & Henri, J-F. (2016). Levers of eco-control and competitive environmental strategy. *The British Accounting Review*, 48(3), 316-340.
- [46] Judge, W. Q., & Douglas, T. J. (1998). Performance implications of incorporating natural environmental issues into the strategic planning process: An empirical assessment. *Management Studies*, 35(2), 241-262.
- [47] Kang, S.-W., & Lee, K.-H. (2016). Mainstreaming corporate environmental strategy in management research. *Benchmarking: An International Journal*, 23(3), 618-650.
- [48] Kim, K. (2018). Proactive versus reactive corporate environmental practices and environmental performance. *Sustainability*, 10(1), 1-19.
- [49] Klassen, R. D., & Angell, L. C. (1998). An international comparison of environmental management in operations: The impact of manufacturing flexibility in the US and Germany. *Journal of Operations Management*, 16(2), 177-194.
- [50] Klassen, R. D., & McLaughlin, C. P. (1996). The impact of environmental management on firm performance. *Journal of Management Science*, 42(8), 1093-1227.
- [51] Klassen, R. D., & Whybark, D. C. (1999). Environmental management in operations: The selection of environmental technologies. *Decision Sciences*, 30(3), 601-631.
- [52] Ko, W. W., & Liu, G. (2017). Environmental strategy and competitive advantage: The role of small- and medium-sized enterprises' dynamic capabilities. *Business Strategy and the Environment*, 26(5), 584-596.
- [53] Li, S., Jayaraman, V., Paulraj, A., & Shang, K.-C. (2016). Proactive environmental strategies and performance: Role of green supply chain processes and green product design in the Chinese high-tech industry. *International Journal of Production Research*, 54(7), 2136-2151.
- [54] Liang, T.-P., You, J.-J., & Liu, C.-C. (2010). A resource-based perspective on information technology and firm performance: A meta analysis. *Industrial Management & Data Systems*, 110, 1138-1158.
- [55] Melo, T., & Garrido-Morgado, A. (2012). Corporate reputation: A combination of social responsibility and industry. *Corporate Social Responsibility and Environmental Management*, 19(1), 11-31.
- [56] Menguc, B., Auh, S., & Ozanne, L. (2010). The interactive effect of internal and external factors on a proactive environmental strategy and its influence on a firm's performance. *Business Ethics*, 94(2), 279-298.
- [57] Mensah, I. (2014). Stakeholder pressure and hotel environmental performance in Accra, Ghana. *Management of Environmental Quality: An International Journal*, 25(2), 227-243.
- [58] Murillo-Luna, J. L., Garcés-Ayerbe, C., & Rivera-Torres, P. (2011). Barriers to the adoption of proactive environmental strategies. *Journal of Cleaner Production*, 19(13), 1417-1425.
- [59] Perrini, F., & Tencati, A. (2006). Sustainability and stakeholder management: the need for new corporate performance evaluation and reporting systems. *Business Strategy and the Environment*, 15(5), 296-308.
- [60] Pondeville, S., Swaen, V., & De Rongé, Y. (2013). Environmental management control systems: The role of contextual and strategic factors. *Journal of Management Accounting Research*, 24(4), 317-332.
- [61] Porter, M. E., & Van der Linde, C. (1995). Green and competitive: Ending the stalemate. *Journal of Harvard Business Review*, 73(5), 120-134.
- [62] Rae, K., Sands, J., & Gadenne, D. L. (2015). Associations between organisations' motivated workforce and environmental performance. *Journal of Accounting & Organizational Change*, 11(3), 384-405.
- [63] Rodrigue, M., Magnan, M., & Boulianne, E. (2013). Stakeholders' influence on environmental strategy and performance indicators: A managerial perspective. *Journal of Management Accounting Research*, 24(4), 301-316.
- [64] Rosenblum, J., Horvath, A., & Hendrickson, C. (2000). Environmental implications of service industries. *Environmental Science Technology*, 34(22), 4669-4676.
- [65] Roy, M.-J., Boiral, O., & Paillé, P. (2013). Pursuing quality and environmental performance: Initiatives and supporting processes. *Business Process Management Journal*, 19(1), 30-53.
- [66] Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Journal of Academy of Management*, 40(3), 534-559.
- [67] Ryszko, A. (2016). Proactive environmental strategy, technological innovation and firm performance — Case of Poland. *Sustainability*, 8(2), 156-175.
- [68] Sangle, S. (2010). Empirical analysis of determinants of adoption of proactive environmental strategies in India. *Business Strategy and the Environment*, 19(1), 51-63.
- [69] Schaltegger, S., & Lüdeke-Freund, F. (2013). Business cases for sustainability In S. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 245-252). Berlin/Heidelberg: Springer.
- [70] Schmidheiny, S. (1992). *Changing course: A global business perspective on development and the environment 1*. Cambridge, MA: MIT Press.
- [71] Sharfman, M. P., & Fernando, C. S. (2008). Environmental risk management and the cost of capital. *Strategic Management Journal*, 29(6), 569-592.
- [72] Sharma, S. (2000). Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy. *Journal of Academy of Management*, 43(4), 681-697.
- [73] Sharma, S., & Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic Management Journal*, 19(8), 729-753.
- [74] Shrivastava, P. (1995). The role of corporations in achieving ecological sustainability. *Journal of Academy of Management Review*, 20(4), 936-960.
- [75] Solovida, G. T., & Latan, H. (2017). Linking environmental strategy to environmental performance: Mediation role of environmental management accounting. *Sustainability Accounting, Management and Policy Journal*, 8(5), 595-619.
- [76] Song, M.-L., Fisher, R., Wang, J.-L., & Cui, L.-B. (2016). Environmental performance evaluation with big data: Theories and methods. *Annals of Operations Research*, 270, 459-472.
- [77] Stefan, A., & Paul, L. (2008). Does it pay to be green? A systematic overview. *The Academy of Management Perspectives*, 22(4), 45-62.
- [78] Tam, J. P. K., & Fernando, Y. (2018). Ecological performance as a new metric to measure green supply chain practices *Encyclopedia of Information Science and Technology* (4th ed., pp. 5357-5366). Hershey, PA: IGI Global.
- [79] Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.

- [80] Tsai, K. H., & Liao, Y. C. (2017). Sustainability Strategy and Eco-Innovation: A Moderation Model. *Business Strategy and the Environment*, 26(4), 426-437.
- [81] Tsoutsoura, M. (2004). Corporate social responsibility and financial performance. Hass School of Business, the University of California at Berkeley. Retrieved from <https://escholarship.org/uc/item/111799p2>
- [82] United Nations Conference on Environment and Development (1993). *The Earth Summit*. London: Graham & Trotman/Martinus Nijhoff.
- [83] Van Reenen, J. (2011). Does competition raise productivity through improving management quality? *International Journal of Industrial Organization*, 29(3), 306-316.
- [84] Wade, M., & Hulland, J. (2004). The resource-based view and information systems research: review, extension, and suggestions for future research. *MIS Quarterly*, 28(1), 107-142.
- [85] Walls, J. L., Berrone, P., & Phan, P. H. (2012). Corporate governance and environmental performance: Is there really a link? *Strategic Management Journal*, 33(8), 885-913.
- [86] Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
- [87] Wijethilake, C. (2017). Proactive sustainability strategy and corporate sustainability performance: The mediating effect of sustainability control systems. *Journal of Environmental Management*, 196, 569-582.
- [88] Winn, M. L., & Angell, L. C. (2000). Towards a process model of corporate greening. *Organization Studies*, 21(6), 1119-1147.
- [89] Winter, S. C., & May, P. J. (2001). Motivation for compliance with environmental regulations. *Journal of Policy Analysis and Management*, 20(4), 675-698.
- [90] Wood, D. J. (1991). Corporate social performance revisited. *Journal of Academy of Management Review*, 16(4), 681-718.

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