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A Conceptual Analysis of the Relationship Between Environmental Strategy and Financial Performance

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Abstract: The resource-based view (RBV) is emerging as the dominant paradigm for comprehending the interaction between strategic management and the natural environment. Based on the RBV perspective, effective environmental strategies require more resources and capabilities. Firms with more resources can build environmental capabilities more easily as it allows them to invest in technological leadership and gain a competitive advantage. In addition, companies that actively integrate the environment into their business strategies possess sustainable competitive advantages. This paper outlines the concept to investigate the correlation between environmental strategies and financial performance. From the RBV's perspective, environmental strategies are valuable, rare, difficult to imitate, and capable of enhancing firms' competitive advantage and financial performance. Consequently, firms that adopt environmental policies are poised to elevate their image and reputation among stakeholders, customers, and shareholders, augmenting their competitive advantage and performance. This study's findings are expected to enhance the literature on corporate environmental strategies by offering additional information regarding the impact of applying such strategies on financial success. The findings of this study are also anticipated to encourage corporations to adopt environmentally friendly practices.

Keywords: *Environmental strategy, resource base view, eco-efficiency, environmental management, energy efficiency.*

1. Introduction

Climate change, biodiversity depletion, air, water, and soil pollution, and resource scarcity are significant environmental challenges of the 21st century. Climate change, sometimes known as global warming, represents the most significant environmental peril humans encounter. How we respond to this crisis will greatly impact both current and future generations and other species. Environmental problems that result from extreme utilization of energy and consumption of non-renewable natural resources such as fuel due to industrialization, economic growth and an increasing population have posed significant problems for most developing countries, including Malaysia (Wang & Azam, 2024a). Tiwari et al. (2024) suggested that one of the barriers among countries in developing sustainability is over-dependence on fossil fuels and exploitation of natural resources like oil and gas. They concluded that primary energy usage is anticipated to rise by 1.6 percent per year from 2009 to 2030. Moreover, employing unclear production processes and using materials that are unfriendly to the environment cause more environmental hazards and issues in developing countries (Ma & Zhu, 2024).

At present, there is an increase in awareness among companies on the need to be responsible for sustainability issues within their operations. Sustainability can be defined as employing resources to fulfill the current needs without compromising the ability of future generations to satisfy their own needs (Challoumis, 2024). Sustainable development emphasizes the evolution of human society to prioritize environmental stewardship and natural processes, rather than solely focusing on economic responsibility. Moreover, sustainable development systems, when driven by political will and grounded in ethical and ecological principles, will establish connections among environmental preservation, financial performance, and societal well-being. As such, to counter environmental sustainability challenges, an increasing number of companies have started or are planning to switch to more sustainability-oriented business models by implementing proactive environmental strategies (Gazzola et al., 2024). In other words, many businesses have switched from a reactive to a proactive approach to deal with environmental challenges. Consequently, environmental strategies have emerged as a critical component of strategic management to address sustainability issues.

The purpose of this research is to examine the relationships between environmental strategies and financial performance via the lens of the resource-based view (RBV) theory as the differentiator from other studies. The

RBV has emerged as a predominant framework for elucidating the relationship between strategic management and the natural environment. According to this theory, firms that implement proactive environmental strategies as one of their business strategies are able to gain and maintain their competitive advantage (Alkaraan et al., 2024).

This paper is divided into four sections. The introduction provides readers with a comprehensive overview to enhance their knowledge of the issues examined. The literature review then elucidates the significance of this study through an examination of prior literature and theoretical frameworks to examine previous research on environmental strategies. This section also discusses the results of previous studies in relation to the impact of implementing effective environmental initiatives on financial success. Next, the third section explains the research methodology by delineating the procedure for gathering secondary data via content analysis through the utilization of annual reports. The methodology also outlines the selection of the sample. Finally, the conclusion, contributions, and recommendations for future research are addressed in the fourth section of this paper.

2. Literature Review

This section discusses the theoretical framework pertinent to the RBV theory. This study seeks to utilize the RBV philosophy as a foundational impetus for the adoption of environmental policies by companies. The following subsections further discuss environmental strategies and provide a comprehensive examination of pertinent literature regarding the correlation between financial performance and environmental strategies.

Resource Based View (RBV) Theory

Edith Penrose's RBV theory gained popularity in 1959. The theories propose that unique resources and capabilities are the main factors that influence firm performance relative to competitors (Malhotra et al., 2024). According to Rugman and Verbeke (2002), the RBV perspective can be divided into four main characteristics. Firstly, the primary aims of organizations that employ the RBV are to maintain market sustainability and improve firm performance relative to their competitors. Secondly, each company has a different number of resources. Therefore, to enhance profitability, a company's resources must be unique, valuable to customers, challenging for competitors to replicate, and non-substitutable; consequently, their competencies and capabilities will facilitate increased profits. The resources present within a corporation, along with new assets such as technological advances or product designs, will also boost organizational effectiveness. A study by Ahsan (2024) that was conducted through the lens of the RBV suggests that firm resources, which are resources owned and controlled by the company, are the main factor that helps a company to develop a sustainable competitive advantage. More specifically, to gain and maintain competitive advantage, the resources and capabilities that a company has should be valuable, rare, imitable, and non-substitutable (Bokhari et al., 2024). An example is an organization's capacity for change, which encompasses its leadership, culture, infrastructure, and systems. Furthermore, the RBV theory has been employed to ascertain how corporations effectively leverage their resources for operational management and meet their social and environmental responsibilities.

Environmental Strategy

Environmental strategy is defined as the extent to which an organization is involved in a wide range of organizational and managerial actions on environmental issues (Gunarathne et al., 2021). The primary objective of companies adopting environmental strategies is to decrease expenses and enhance financial performance to attract corporate stakeholders, while simultaneously improving environmental quality. Numerous studies have been undertaken to investigate the impact of adopting environmental strategies on corporate performance. In today's globalized world, the competitive landscape for businesses regarding environmental issues is ever-evolving. These scenarios arise from new legislation and standards, stakeholder pressures, and technological advancements. According to Wu and Tham (2023), companies implement specific strategies as part of their efforts to deal with this dynamic scenario. Based on previous literature, there are several types and classifications of environmental strategies, which have been proposed by adopting different perspectives.

Elrayah and Zakariya (2024) highlight three strategies, namely pollution prevention, product stewardship, and clean technology, as being needed to face the environmental sustainability challenge. Besides that, Palenychak

et al. (2024) proposed four types of competitive environmental strategies. They are eco-efficiency, beyond compliance leadership, eco-branding, and environmental cost leadership. Moreover, according to a study by Albitar et al. (2023), which focused on firms' responses to climate change, environmental strategies are classified into two dimensions: process level and organizational level. The option from these two dimensions can be further divided into the following strategies: enhancement of processes, development of products, novel product/market combinations, internal transfer of emission reductions, procurement of emission credits, and supply chain initiatives.

Furthermore, corporate environmental strategy is another business strategy that is implemented by firms to meet legal requirements, which includes other strategies that are adopted to control pollution (Awewomom et al., 2024). In demonstrating proactiveness, firms tend to implement strategies that not only meet legal requirements but also demonstrate good environmental practices, such as voluntary eco-efficiency that results in the reduction of materials used, good waste management, and reduction in energy usage (Meleddu et al., 2024). Hariadi et al. (2023) also concluded that to be more proactive, firms need to implement voluntary pollution prevention practices, which require innovation in production processes by using new technology and product innovations like green product design. This can help minimize the energy and material used at the source. Apart from that, innovation in product and process design and even business models are re-designed to be more environmentally friendly as well as minimize a firm's ecological footprint along the entire product life cycle (Cappelletti & Germani, 2024).

Based on the prior studies mentioned above, researchers have proposed many classifications of environmental strategies. Nonetheless, despite the proposal of many environmental plans, there remain notable resemblances among them. Generally, as suggested by the prevailing literature, environmental strategies can be classified as process-oriented or organization-oriented (Marei et al., 2024). This study, however, is based on a more comprehensive framework of the various environmental strategies identified in the literature review, which comprises four strategic approaches: process-oriented strategies, enhancement of material eco-efficiency, improvement of energy efficiency, and organization-oriented implementation of green management. Execution of sustainable supply chain management. The eco-efficiency approach is a method designed to reduce or eliminate resource consumption and waste in the production of a final product. Reducing energy use and using renewable energy sources are key components of the strategic approach known as energy efficiency. In environmental management, an organization-oriented strategy is considered a strategic approach that aims to create a comprehensive and methodical way to enhance a company's business and environmental performance. A green supply chain is a strategic approach designed to provide a systematic method and mechanism that enhances environmental sustainability throughout the entire supply chain.

Environmental Management

Environmental management comprises a range of approaches that are used by firms to enhance their environmental performance; in other words, they reduce the environmental impact of industrial processes, products and services (Cheng et al., 2024). The main objective of the environmental management approach is to operate, design, and develop business activities, produce environmentally friendly products and services that can reduce the impact on the environment, and improve a firm's financial performance by gaining competitive advantages (Ali et al., 2022). Environmental management practice is the application of strategies aimed at safeguarding the environment by prioritizing the mitigation of environmental consequences, including waste and emissions, to air and water, after product creation. On the other hand, the approaches that are used to prevent or minimize environmental impacts in the first place may result in business benefits in terms of cost savings, competitiveness, and market opportunities (Dorfman et al., 2024). From the RBV perspective, good environmental management is valuable to a company since it will enhance a company's performance (Baquero, 2024).

Green supply chain management

The green supply chain is an environmental strategy that can be implemented by firms to address environmental issues (Jum'a et al., 2024). Some studies have stated that to gain environmental sustainability, firms' focus should not be on the proactive implementation of a corporate environment alone; rather, they should also adapt and move towards green supply chain management as one of their strategies (Yang et al., 2023). Wiredu et al. (2024) defined green supply chain as an adoption or implementation of environmental

management principles to the whole set of activities from the entire customer order cycle, which encompasses design, procurement, manufacturing, assembly, packaging, logistics, and distribution.

Green supply chain management has emerged as a crucial method for enterprises to optimize profits and gain market share by mitigating environmental risks and enhancing ecological efficiency. Alkandi et al. (2024) stated that implementing green supply chain management as a firm's environmental strategy promotes efficiency and synergies among business partners and at the same time enhances the firm's economic performance. In addition to augmenting economic performance, it also contributes to boosting environmental performance, reducing waste, and conserving expenditures. Overall, the above-mentioned studies show that using a green supply chain as an environmental strategy will improve a company's environmental and financial performance.

Eco-Efficiency

Eco-efficiency, in simple terms, means doing more with less. Eco-efficiency can also be defined as using lower or less natural resources to produce more economic outputs and at the same time reduce environmental impact (Han et al., 2021). The concept of eco-efficiency itself focuses on the effects of economic performance and environmental impact. According to the World Business Council for Sustainable Development (WBCSD), eco-efficiency means:

"*Being achieved by the delivery of competitively priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impacts and resources intensity throughout the life cycle, to a level at least in line with the Earth's estimated carrying capacity"* (WBCSD, 1992; WBCSD, 2000a, p. 4).

A study by Sáez de Guinoa Sentre et al. (2024) used the concept of eco-efficiency as one of the instruments or mechanisms that can help businesses make and support their decisions for alternative investments and production strategies. Accordingly, this concept can help a business contribute to sustainable development because it has a positive impact on firm competitiveness and improved environmental performance. Additionally, implementing eco-efficiency as an environmental strategy will not only result in benefits to the financial performance but at the same time reduce environmental issues such as consumption of energy, materials and water and the emission of greenhouse gases and ozone-depleting substances (Savitri & Nik Abdullah, 2023). Nikolakis et al. (2024) proposed that companies implementing eco-efficiency as their environmental strategy should focus on the reduction in the utilization of resources to produce their final output. In their study, eco-efficiency was measured based on the reduction of environmental performance key indicators, such as reduction in water usage, material use, resource use, and production waste recycling. Minimizing the usage of resources will lead to enhanced firm performance by reducing production costs. In other words, material saving and low wastage of materials by efficient consumption of firm resources will enhance firm productivity (Wang & Azam, 2024b). Minimizing the utilization of resources is one of the ways for firms to conserve natural resources (Wang & Azam, 2024b). This strategy can be applied not only to a firm's raw materials, water, and energy but also to natural resources.

Energy efficiency

Energy efficiency refers to any behavior or approach implemented by a corporation to decrease or conserve energy consumption. Energy efficiency is a strategic technique employed by organizations to minimize energy consumption or utilize renewable energy sources. A strategic approach may involve the implementation of new technologies that conserve energy or innovations in the production process; in other words, energy efficiency refers to the utilization of technology that demands less energy to achieve the same function. Companies should focus on long-term energy strategies and policies to build energy sustainability and use energy sufficiently to meet the needs of today and the future (Bakhsh et al., 2024). In addition, Abbas et al. (2024) stated that to achieve energy sustainability, companies should also invest in the research and development of advanced technologies to produce conventional energy sources, encourage the use of alternative energy sources, and promote sound environmental policies.

The energy efficiency strategic approach is important because irresponsible usage of energy not only results in environmental harm through pollution through increases in greenhouse gas (GHG) emissions; it also directly influences the profitability of firms (Olarewaju et al., 2024). The use of energy will affect a firm's financial

performance because if the firm is not efficient in its energy consumption, this will increase production costs and reduce profits (Ebire et al., 2024). Thus, the consideration of such market processes may have important implications for the efficiency of environmental policies concerned with energy use. Pavel et al. (2024) stated that efficiency in the usage of energy is recognized as one of the more effective and less costly mechanisms to reduce GHG emissions by decreasing the amount of energy required to accomplish the actual energy service. Hence, if a firm implements energy efficiency as one of its business strategies, it will enhance the firm's profits by reducing production costs and reduce the firm's environmental impact (Fan et al., 2017).

Environmental Strategies and Financial Performance

Certain research has sought to examine the impact of environmental strategies on financial performance. Managers must prioritize environmental considerations in their decision-making processes, attend to ethical and social values that the company should uphold, and secure a competitive advantage in ensuring future stability and sustainability. Commitment to the natural environment has become a strategic issue within the current competitive scenario. A study by Hidayat et al. (2024) suggests that environmental management may be a tool or one of the strategies that a company can use to help improve its competitiveness. Hendijani and Saeidi Saei (2024) concluded that the influence imposed by environmental strategies on firm performance may be a result of the positive impact on firm cost and differentiation levels. If firms have good environmental strategies to prevent pollution, this may enable them to save and control costs, input, and energy consumption as well as to reuse material through recycling (Ardini & Fahlevi, 2024). Consequently, by adopting effective environmental measures, a corporation can enhance its financial performance. Proactive environmental strategies may help a firm reduce environmentally dangerous processes, redesign its existing product system to reduce life cycle impact, and develop and design a new product with lower life cycle costs (Ahmed et al., 2021).

Additionally, implementing good environmental management as a strategy can improve firm revenue. The implementation of an environmental management system could also increase a firm's value-added by increasing demand and improving productivity (Jiang et al., 2024). Decreases in pollution through pollution prevention strategies also enhance a firm's value-added. Therefore, a positive effect between environmental strategies and financial performance could be obtained by increasing demand through improving customer loyalty and enhancing the firm image (Tan et al., 2022). In other words, firms will gain a competitive advantage by implementing an environmental strategy.

3. Methodology

This study intends to investigate the relationship between environmental strategies and firms' financial success. The study intends to utilize secondary data to ascertain the relationship between independent and dependent variables. Data will be gathered from the annual reports of Malaysian listed companies for the years 2020 to 2024, concentrating on environmental policies that corporations employ in their companies. The data will be analyzed using the Statistical Package for Social Science (SPSS) software. Annual reports will be used to collect data about the environmental strategies that firms adopt (Reid et al., 2024). This study will also employ content analysis of annual reports to determine whether a corporation has decided to embrace environmental strategies. Annual reports are the primary communication mechanism between the organization's management and its stakeholders (Reid et al., 2024). Consequently, this study will assess environmental policies by analyzing the Annual Report Texts, which encompass the Letters to Shareholders, Company Report, and Management Discussion and Analysis of the firms. This study will analyze the relationship using samples from Malaysian-listed businesses on the main board for the years 2020 to 2024. Such a sample will be chosen largely due to convenience as Bursa Malaysia requires the PLCs to disclose CSR information in their annual reports.

However, only environmentally sensitive industries will be chosen for this study as their activities have a significant impact on the environment. Huang and Ge (2024) stated that companies with a high risk of environmental impact from their activities are considered more sensitive. Based on past studies, sensitive industries include mining, oil and gas, chemical, construction and building materials, forestry and paper, steel and other metals, electricity, gas distribution and water (Huo et al., 2025). Alternatively, Cormier et al. (2011) chose to examine the industries deemed as sensitive that have attracted investors' concern with respect to 48

environmental issues. The industries include consumer goods and services, manufacturing, water, energy, chemicals and drugs distribution, food and beverages, high technology, and heavy industries. This is because, within the environmental context, the suppliers of high-quality products consistently originate from such businesses. Furthermore, these businesses are associated with greater air, land, and water pollution compared to other sectors. Consequently, according to Bursa Malaysia's classification, the industries identified as sensitive include industrial products, consumer products, construction, plantations, and infrastructure project companies (IPCs).

4. Conclusion and Recommendations

This paper proposes a theoretical framework for the impact of implementing environmental measures on enterprises' financial performance. This study will employ the RBV theory to analyze the relationships between environmental strategies and financial success. This theory posits that to execute a successful environmental strategy, corporations require additional resources and competencies that are uncommon, non-substitutable, and challenging for competitors to replicate. This finding is grounded in the RBV perspective, which posits that environmental strategies constitute a unique and inimitable capability of a firm. By implementing effective environmental strategies, a firm can distinguish itself from competitors and bolster its reputation among stakeholders, thereby augmenting its revenue and performance. Furthermore, implementing environmental measures can decrease production costs by minimizing material consumption and reducing energy usage, among other factors. Consequently, decreases in production costs will augment business revenue.

This study's findings will enhance the literature on corporate environmental strategies by offering additional information regarding the impact of applying such strategies on financial success. This study illustrates the effect of implementing environmental policies on firm performance, offering valuable insights for Malaysian companies to assess the necessity of beneficial changes to their environmental practices. The study has the potential to encourage corporations to voluntarily adopt improved environmental strategies rather than merely engaging in environmental activities to comply with legislation and evade fines and penalties.

This study offers valuable insights to regulatory agencies in advancing environmental initiatives and enhancing business transparency. Additionally, authorities may consider the results beneficial for informing their decisions to establish or amend requirements concerning environmental issues, to promote ethical business practices among corporate entities, and to mitigate their environmental impact. Moreover, acknowledging resource limitations may assist environmental policymakers in formulating more efficacious pollution control strategies.

Future Direction

This study will utilize content analysis as a research tool, while direct interviews with firm managers will provide a deeper understanding of their engagement in environmental responsiveness activities and the role environmental practices play in enhancing a firm's financial performance strategies. Moreover, the researchers may opt to conduct in-depth interviews with corporate managers to attain a more profound comprehension of the subject matter. Furthermore, while the samples for this study will be confined to sensitive businesses, recommendations for future research will incorporate additional sectors as samples to conduct a comparative analysis between sensitive and non-sensitive industries.

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