

THE IMPACT OF ENVIRONMENTAL SUSTAINABILITY ON FINANCIAL PERFORMANCE OF ORGANIZATIONS; A STUDY OF MALAYSIA

Anam Ashraf

Lecturer, Grand Asian University, Sialkot.

anamashrafmalik786@gmail.com

Dr. Ayaz Qaiser

Grand Asian University.

qaiser.ayaz06@gmail.com

Hasnain Haider

Course: MBA,

School of Business & Creative Industries,

University of the West of Scotland (UWS).

hasnainhaider2505@gmail.com

Dr. Surayya Jamal

PhD, Abdul Wali Khan University Mardan,

Pakistan. surayyajml@gmail.com

Sajid Khan

In-Charge (Health, Safety & Environment

Laboratory), The Benazir Bhutto Shaheed

University of Technology & Skill Development,

Khairpur Mirs, Pakistan.

sajidkhan@bbsutsd.edu.pk

*Corresponding author: Dr. Surayya Jamal (surayyajml@gmail.com)

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Abstract

The debate on the economic benefits of adopting environmentally friendly practices continues. This study does not aim to resolve the argument; instead, it alleviates it by enhancing the notion of "when it is advantageous to be environmentally conscious". This research study focusses on the shortcomings of current literature review by focusing the influence of environmental sustainability on financial performance of Malaysian firms for the period of 2014-2023. The data is collected from Thomson Reuter DataStream. In general, environmental sustainability and financial performance holds an optimistic relationship. The empirical result shows that the outcome of environmental sustainability on financial performance is positive. Institutional and legitimacy criteria serve as an effective foundation for establishing environmental sustainability. Policymakers and investors must consider these results when formulating economic policies and investment strategies, while enterprises in emerging nations such as Malaysia should recognize the potential implications of these elements and seek appropriate management strategies.

Keywords:

Environmental sustainability, Financial performance, Literature review, Malaysia, Economic.

Introduction

The connection between having a sustainable environment and having a successful financial performance has been studied for many periods, getting traction in the most recent years. The primary cause of this progression is the expanding awareness of the need to protect the environment from harmful business practices. The detrimental effects of corporations have contributed to current global warming, significant forest fires, and the loss of Arctic ice (Toliver et al., 2020; Pannett, 2022). Environmental sustainability is a multifaceted and adaptable initiative capable of mitigating symbolic distress, contributing to its widespread appeal. To reconcile the interests of shareholders and stakeholders, it is essential to use sustainability measures in corporate decision-making. Sustainability initiatives may influence financial performance in several operational aspects. Cost reduction by means of energy efficiency and increased produce sustainable products and services appeal to environmentally sensible stakeholders. Corporations that prioritize sustainability are better equipped to mitigate hazards. Efficient sustainability risk management lessens the likelihood of expensive legal as well as environmental or penalties. Sustainable enterprises to a greater extent enhance reputation of the brand, thereby fostering improved consumer devotion (Dal Maso et al., 2023).

To date, sustainability, with its many interpretations, has been used as a complicated terminology in both academic and practical contexts. The thought of environmental sustainability is defined as the execution of business plans and actions that satisfy the present requirements of organisations and their stakeholders whereas safeguarding, Conserving and augmenting human and ecological resources to address future requirements (Adapted from the Brundtland report, 1987). Environmental, social, governance, and economic sustainability must all conform to this criterion. Numerous prior research defined sustainability as corporate social responsibility (CSR) (Kim et al., 2023; Coelho et al., 2023). We see CSR as merely a component of the broader sustainability initiatives. Dahllsrud (2008) found 38 distinct descriptions of CSR; the predominant term describes a company engagement with participants and its voluntary disclosure of environmental and social information. To attain comprehensive sustainability, firms must continually pursue ecological, governance, social, and economic components of sustainability within their regular operations, rather than relegating these efforts to volunteer endeavours such as corporate social responsibility (CSR). Our study revealed that only a limited number of papers addressed this comprehensive perspective of sustainability, while others used several associated concepts, including sustainable development, corporate social responsibility, green innovation, and climate change (Galego-Alvarez et al., 2014; Dahlsrud, 2008; Tange et al., 2016). Initially, research on Environmental Sustainability and financial performance examined solely a unidirectional relationship; however, this relationship may be multidimensional and influenced by various factors within the macroeconomic climate for business. Xiao et al. (2018) contend that environmental sustainability impacts financial performance, with stakeholder expectations varying based on country characteristics. Current studies on environmental sustainability and financial performance lack a cohesive framework, resulting in inconsistent findings in prior research. To date, several reviews on environmental sustainability have been published (e.g., Goyal et al., 2013; Ye et al., 2021; Alshehhi et al., 2018; Lu & Taylor, 2016).

Specifically, the most significant purpose of this investigation is to examine the elements influencing the connection concerning environmental sustainability and financial performance. Our analysis we use factors such as waste reduction, carbon dioxide emission, energy consumption, product innovation and water consumption. Prior research neglecting these environmental elements that may influence this relationship. The results indicate that environmental sustainability impacted the financial performance of businesses and organisations that are currently functioning in Malaysia!

The frame of the work is structured as follows: Section 2 encompasses the literature evaluation, while Section 3 delineates the methodological approach. Section 4 addresses the findings of the analysis. In Section 5, we conclude our assessment by proposing future research topics.

Literature Review

2.1 Theories Used

A multitude of ideas has been used to elucidate the function of commercial organisations within society. These ideas delineate the responsibilities of shareholders, creditors, workers, suppliers, government, consumers, society, and the environment. The following sections delineate these theories.

2.1.1 Shareholder/Agency theory

The shareholder or agency theory, first articulated by Jensen and Meckling (1976), examines corporate management by positing that Principals, who are the owners, and their agents, who are the executives, interests often conflict. The shareholder or agency paradigm emphasizes risk allocation and agency dilemmas amongst management and shareholders, together with the associated three agency costs which is bonding, monitoring, and residual—incurred by shareholders, as posited by Fama and Jensen (1983). Within the framework of agency theory, the moral hazards arise from information asymmetry, when the agent (management), representing the principle (shareholders), has superior knowledge of its acts and/or intentions than the principal, attributable to inadequate oversight of the agent.

2.1.2 Stakeholder theory

Stakeholder theory categorises stakeholders into internal and external stakeholders. Stakeholders maintain a reciprocal connection with a business, since their contributions enhance the value of firm generation, while the firm's success influences their well-being. According to Freeman's (1984) stakeholder theory and Jensen's (2001) "Profit maximization" theory identify the enhancement of company performance as well as long-term worth of the business as the standard for reconciling the benefits of entire stakeholders. Stakeholder theory is pertinent to all management activities, since the combination and synergy of all of the distinct components of the company processes and model are crucial for attaining comprehensive sustainable performance targets (Freeman, 2010; Donaldson & Preston, 1995).

2.2 Association Concerning Environmental Performance and Financial Performance

Wan Mohammad and Wasiuzzaman (2021) Investigate the influence of the corporate sustainability disclosures on performance of organization. They used company competitive advantage as a moderator. The dataset comprises 3,966 observations of firms year wise from 2012 to 2017, including 661 enterprises registered on Bursa Malaysia. They use clustering approaches in regression analysis to enhance the robustness of their conclusions. This study demonstrates that sustainability disclosure enhances corporate performance, even when accounting for competitive advantage. Consistent data indicates that a one-unit rise in sustainability disclosure correlates with an estimated 4 percent enhancement in company performance in Malaysia.

Sadiq et al. (2020) assessed the association concerning environment, social, and governance activities and the implications of their revelation on corporate value. The information came from 123 firms' final accounts listed on Bursa Malaysia from 2011-2019, including 1,098 observations. This research used three instrumental factors to ascertain the endogeneity of ESG performance: the existence of a Board of Directors CSR committee, the dispersion of anticipated profits, and the concentration of business ownership. They used three initial regression models concerning ESG disclosure and the interplay of the

concern, strength, and disclosure of ESG, and furthermore utilized a stage second regression to examine the insider impacts of ESG activities and ESG disclosure. Their outcomes indicated that ESG strength enhances business value, whereas ESG transparency and ESG concern diminish it. This research demonstrated that ESG disclosures may mitigate the adverse impression of weaknesses and enhance the beneficial influence of strengths for a corporation.

Muslichah (2020) studied the impact that social factors have on environmental disclosure (ESD) on business value, using financial performance as a mediating variable. The samples included firms who participated in the Indonesia Sustainability Reporting Award (ISRA) from 2013 to 2016. This study's findings indicate that ESD positively and significantly affects financial performance, that financial performance positively and significantly influences company value, and that financial performance mediates the link that exists between social and economic performance and organization value. This discovery validates the relevance of legitimacy and stakeholder theory in developing nations, because stakeholders lack the influence to compel corporate management to engage in social and environmental initiatives. The outcomes also advantage managers and standards developers. This conclusion underscores that ESD is essential for managers in legitimizing the company's offerings to stakeholders. The data are beneficial for standard makers in formulating social and environmental reporting criteria.

Gerged et al. (2020) investigated the correlation amongst corporate environmental disclosure (CED) and business significance in the Gulf Cooperation Council (GCC) nations, where CED has risen from its historically low levels. Results from a multicounty sample of 550 company-year observations consists of 50 un-weighted environmental disclosure index indicate that corporate environmental disclosure (CED) is strongly and optimistically correlated with firm value as assessed by Tobin's Q (TBQ). The findings indicated a confirmed correlation between CED and return on assets; however, this correlation is much less than that seen with Tobin's Q. Their findings indicated that both policymakers and managers in GCC nations should have an affirmative perspective on the expansion of CED.

Shakil et al. (2019) examined the influence of environmental, social, and governance performance of banks about the financial effectiveness of their operations inside underdeveloped nations. The authors assert that prior assessments of organisations mostly focused on financial performance; however, with the growing prominence on sustainability objectives, the environmental, social, and governance effectiveness of businesses has emerged as a primary issue for stakeholders. This research used the generalised method of moments (GMM) methodology for estimate owing with relation to the dynamic characteristics with regard to the data and to address endogeneity. This research used environmental, social, and governance performance data from 94 developing market banks for the period of 2015-2018, sourced from the Asset4 ESG database. The accounting system and financial information is sourced from the Refinitiv DataStream database. The results demonstrate a favourable correlation amongst the environmental and social pillars of developing market banks as well as economic success; however, governance determinants does not affect financial performance.

Garcia et al. (2017) examined the correlation concerning financial success and sustainability in BRICS nations from 2010 to 2012. The study's findings suggested that enterprises in sensitive sectors exhibit superior environmental performance. Their research investigation indicated that financial performance was greatly influenced by environmental sensitivity. The additional aspects, such as governance and social, had little impact on financial success.

Ghosh et al. (2017) analyzed the association concerning corporate social responsibility and the financial performance of organisations. The research's population included the manufacturing and production sector, with a sample span from 2011 to 2015. The researcher used ROE as well as ROA in order to evaluate the performance variable. The outcomes suggested that the decrease of greenhouse gas emissions

enhances company performance. The scholar advised that a long-term financial analysis be conducted for more reliable findings.

Orlitzky et al. (2003) contended that the possible links between CSR and financial success have been extensively examined. Margolis and Walsh (2003) examined 108 observes that used corporate social performance as the independent variable. Most of these research demonstrated a favourable association concerning financial performance and CSR, while others indicated a negative association. The discrepancy in results stemmed from the divergent perceptions and perspectives about the association involving financial success and CSR. The researchers, according to the principle wealth maximization of shareholder, demonstrated a negative correlation concerning CSR and financial success, according to Barnett (2007). According Friedman (1970) posited that the fundamental social obligation of business is profit maximization. He said that Corporate Social Responsibility (CSR) was expensive, and the costs associated with its implementation were anticipated to diminish financial benefits. Consequently, it diminished shareholder welfare by decreasing financial benefits. Neo-classical thinkers contended that the economic advantages of CSR are minimal, although the costs are substantial, according to Waddock & Graves (1997). Grey and Shadbegian (1993) discovered a negative correlation between production and environmental practices. When CSR processes are used to enhance environmental performance, they adversely affect the financial performance of organisations. Orlitzky (2013) suggested that CSR adversely affects stock market performance due to unequal information.

Porter and Kramer (2006) contended that seeing CSR as a business expense implies that social wellbeing is only derived from an economic perspective. Ceasing investment in social welfare will result in a decline in financial growth. Friedman (1970) posits that organisations should see CSR as a strategic management instrument. This perspective posits that corporate social responsibility (CSR) will provide advantages for both society and businesses. The performance of the business will improve by leveraging competitive advantage and implementing product innovation. Porter and Kramer (2011) posited that when corporate social responsibility initiatives are integrated into organizational processes, they provide value for shareholders. They said that CSR is a procedure capable of enhancing the competitive standing of organisations and favorably impacting their operations as well as financial success. The conclusions of Porter and Kramer (2006) were substantiated by the results of Hillman and Keim (2001). Performance in social settings is categorized into two segments: management of stakeholders, which includes key stakeholders like as workers, customers, and shareholders, and the engagement with social issues, which addresses the allocation of corporate resources to mitigate societal problems. Their findings demonstrated a considerable correlation between social performance, facilitated by stakeholder management, and shareholder value, but social concerns yielded negligible effects. When an organisation adheres to ESG principles, its reputation improves, hence providing reputational advantages.

2.3 Hypothesis Development

Organisations may achieve sustainable success by maintaining long-term profitability. Despite this, financial performance and ESG performance metrics are chosen together since they may enhance one another, but trade-offs may arise. Environmental performance may be defined as the reduction of hazardous substance consumption, waste production, energy consumption, and material utilisation, while observing all environmental norms. Jin and Zialani (2010). It evaluates the influence of corporations on the natural system, encompassing both abiotic as well as biotic components. It also comprises air, land, and water, therefore completing ecosystems. It denotes proportionately to the extent that a corporation employs optimal management practices to mitigate environmental risks and maximize environmental possibilities, Ortas et al. (2015). According to Limkriangkrai et al. (2017) characterize environmental performance as the obligations of enterprises to mitigate detrimental effects on the environment and adhere to ecological regulations. The subsequent domains included are biodiversity, climate change,

deforestation, energy proficiency, water shortages, pollution, as well as waste controlling (Chartered Financial Analyst Institute 2008, 2015). Gupta & Gupta (2020) examined the effect of corporate environmental sustainability on business performance. The study's sample included 210 Indian enterprises. The scholar examined the relationship relating environmental factors and company performance employing structural equation modelling in AMOS. The findings of this research demonstrated a favourable correlation between environmental sustainability and corporate success.

Clarkson et al. (2007) assert that organisations exhibiting superior environmental performance are committed to keeping other stakeholders as well as investors adequately knowledgeable via more extensive voluntary environmental disclosures than firms with worse environmental performance. The data indicate that environmental performances and financial are the primary determinants of the degree of environmental disclosures. Research oversight by Clarkson et al. (2007); Qiu et al. (2014); also Iatidris (2013) indicates that superior environmental performance induces enterprises to provide more comprehensive environmental disclosures, ultimately resulting in an increased company value. This conclusion indicates that environmental disclosures operate as a moderating element in the connection relating environmental, firm market value and financial success are both important.

2.3.1 Waste Reduction

Li & Olorunniwo (2008) define waste reduction as the process and strategy aimed at decreasing the volume of garbage generated by an entity. Srivastava (2008) defines waste as superfluous labour or inventory accumulation stemming from mistakes, inadequate organisation, or ineffective communication. Scrap denotes damaged products or materials that are unusable, irreparable, or unsellable. Gobbi (2011) asserts that certain conditions are crucial in the supply chain procedure for the minimization of waste. For instance, container materials, eliminated print runs, trash, refunds, and used publications. Ochiri et al. (2015) analysed that reducing waste would improve firm performance. The companies see waste reduction as an investment that yields results rather than as an expense. Garbage reduction encompasses several methods and activities aimed at reducing the volume of garbage generated. To foster a more sustainable society, it is essential to eradicate or decrease toxic waste. Miralles-Quirós et al. (2018). Day et al. (2020) examined the impact of waste management strategies used by Indian small and medium-sized manufacturing firms on their financial performance. The findings of this research indicate that reducing energy consumption leads to an improvement in financial performance, while reducing waste has a positive correlation with an improvement in financial performance.

H1: A positive connection exists between waste reduction and financial performance of firms.

2.3.2 Carbon Dioxide (CO₂) Emission

First and foremost, the combustion of fossil fuels is the primary trace of carbon dioxide (CO₂) emissions into the atmosphere of the Earth as well as the decomposition of wood and other plant materials. Carbon dioxide absorbs infrared light in the atmosphere. Additionally CO₂ diminishes the thermal radiation from the Earth's atmosphere to outer space, Ortas et al. (2015). Additional gases contribute to the warming of the Earth's climate, but the impact of CO₂ accounts for three-fourths of this effect. According to Limkariangkrai et al. (2017), the environmental efforts pertain to the obligations and responsibilities assumed by enterprises to mitigate their ecological consequences by adhering to environmental rules. The primary concerns are climate swap, biodiversity loss, energy proficiency, water shortages, pollution, waste management and deforestation. According to Busch et al. (2016), actions that are ecological are comprehensive endeavours focused on enhancing resource productivity, using renewable resources, implementing recycling and reuse programs, and ensuring the functionality of ecological systems across countries. There is a counterargument that foreign direct investment (FDI) is attracted to countries with

strong financial systems and advanced economies. In an environment including an influx of foreign enterprises, innovative low-carbon production practices may be used in host nations, as noted by Eskeland & Harrison (2003), ultimately leading to a reduction in CO₂ emissions. Kumbaroğlu et al. (2008).

H2: A positive connection exists concerning carbon dioxide emission and financial performance of firms.

2.3.3 Water Consumptions

Water consumption refers to the quantity of water utilized. Water is a crucial element of manufacturing, according to Ortas et al. (2015). Energy is generated utilizing water. A reduction in water use would enhance the financial performance of enterprises. Water usage is also a component of resource management. Resource management encompasses measures designed to enhance resource utilisation, including prioritizing recyclable, reusable, repairable, renewable, as well as biodegradable items, conducting frequent process flow evaluations, and adopting a paperless policy, Jin and Zailani, (2010).

H3: A positive connection exists between water consumptions and financial performance of firms.

2.3.4 Energy Consumptions

Energy consumption refers to the quantity of energy utilized. Energy and water are two essential elements of manufacturing, according to Ortas et al. (2015). The technological apparatus generates issues related to heightened energy consumption. Sadorsky, 2010. Consequently, Shahbaz et al. (2016) strongly advocated for investments in energy-efficient technologies as a viable strategy to gradually mitigate environmental challenges, given their discovery that inefficient energy utilisation adversely affects environmental quality in Pakistan. Yuxiang and Chen (2011) examined Chinese provinces from 1999 to 2006, revealing that R&D intensity, particularly in technologies that need a lot of energy, increased emissions of sulphur dioxide (SO₂) released by industrial processes. Similarly, the empirical data presented by Zhang (2011) for China indicates a positive correlation between financial growth and environmental deterioration. Al-Mulali et al. (2015) revealed same findings for 24 European nations from 1990 to 2013, concluding that financial outlays in non-environmental initiatives are likely to aggravate environmental issues.

H4: A positive connection exists between energy consumption and financial performance of firms.

2.3.5 Product Innovation

The initiation and advancement of a novel, remodeled, or significantly enhanced product or service is termed product innovation. It pertains to the creation of extra goods as well as the improvement of current ones, according to Miralles-Quirós et al. (2018). In order to achieve financial success, product innovation is essential.

Technological advancement and financial support are seen as two essential elements in tackling sustainability challenges. Kumbaroğlu et al. (2008). Facilitated approach to funding allows enterprises to concentrate more about the efforts being made in research and development (R&D), as noted by Switzer (1984), which influence new solutions to environmental issues. Tadesse (2005) emphasizes the financial sector's significance in promoting capital accumulation and risk-sharing. Financial growth, via these roles, propels technical improvement and innovation, therefore mitigating pollution. Consequently, nations globally may use innovative technology in their operations, including sustainable manufacturing methods and eco-friendly infrastructures. Furthermore, the extensive accessibility of low-cost capital facilitates the funding of environmental initiatives, as noted by Tamazian et al. (2009).

H5: A positive connection exists between product innovation and financial performance of firms.

2.4 Conceptual Frame Work

This research aims to connect environmental sustainability with financial success. Environmental sustainability may be assessed by trash reduction, carbon dioxide emissions, water use, energy consumption, and product innovation. This research used financial success as a dependent variable.

Figure A: Conceptual Framework

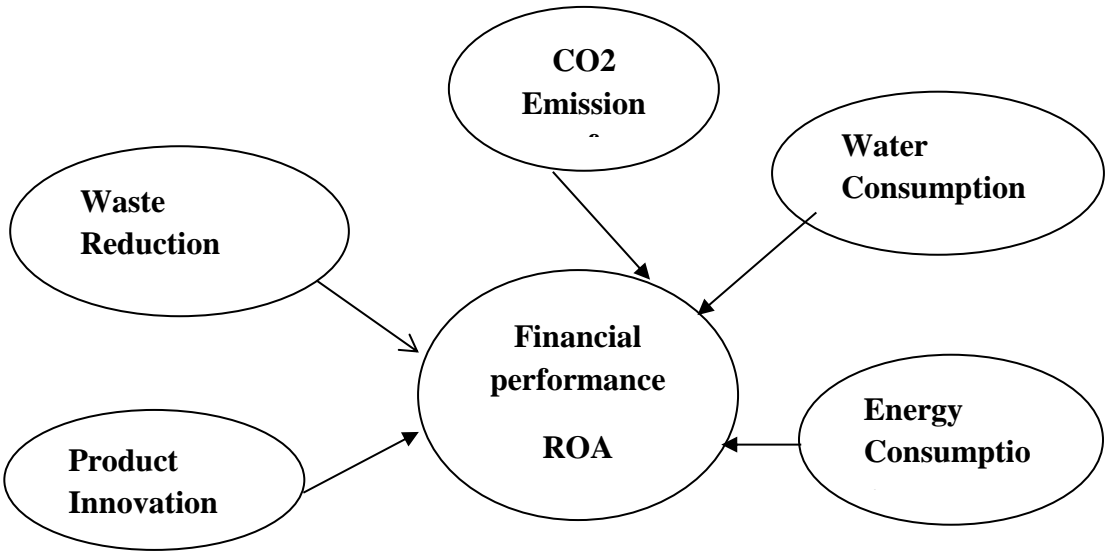


Figure A: The connection between independent and dependent variables.

RESEARCH METHODOLOGY

3.1 Data and the Sample

The analytical technique utilized in this research study was one of its defining characteristics. This study is based on easily accessible data or facts that are subsequently subjected to additional analysis to make inferences. The Panel data approach is used in this investigation. Panel data was gathered from multiple corporation and different time periods. Panel data combines characteristics of time-series and cross-sectional data. The data used in this research study was obtained from Malaysia. Non-financial companies listed on the Malaysian Stock Exchange made up the sample used in this study. The sample period used in this study was 2014–2023. The Thomson Reuter DataStream provides the information for every variable.

3.2 Variables Explanation

After thorough examination of various theories and reasons about environmental sustainability, together with an extensive evaluation of the empirical literature, the dependent and independent variables were chosen with meticulous deliberation.

In this specific investigation, the dependent variable is the measure of financial performance. The financial success in this research is assessed using return on assets (ROA). The return on assets is determined by evaluating a company's net income to its total assets. Corresponding to the references (Jamal et al., 2022; Yu et al., 2018; Ortas et al., 2015; Xie et al., 2018; Pintea et al., 2014), the Return on Assets (ROA) serves as a figure of organizations' financial success. The independent variable in this research is environmental

sustainability. This study employs the following factors to assess environmental sustainability: waste reduction, water consumption, CO2 emissions, energy consumption, and product innovation (Jamal et al.,2022; Develle, 2021; Gerged, 2021; Mirralles-Quirós et al., 2018; Xie et al., 2018). The company's age, size, and leverage serve as the control variables for this study. According to Sahut and Pasquini-Descomps (2018) and Mohammad and Wasiuzzaman (2021), the size of the company may be quantitatively expressed as the logarithm of its total assets. The age of a firm is defined by the duration from its first listing on a stock exchange. Thomas (2012).

DATA ANALYSIS

4.1 Descriptive Statistic

Descriptive statistics provide a fundamental summary of the data. The descriptive summary for assessing the impact of environmental sustainability on financial performance is presented in Table I below.

Table I: Descriptive Summary

Variable	Obs	Mean	SD	Min	Max
ROA	560	5.629	4.753	-11.98	29.54
WR	560	51.79	5.454	9.88	55.32
Co2	560	43.152	26.081	28.05	99.26
WE	560	50.426	5.929	28.05	54.95
EE	560	50.746	10.905	.38	89.82
PI	560	43.613	31.249	19	96.9
FA	560	22.639	13.582	11	85
FS	560	8.026	.553	6.718	9.382
FL	560	.452	.43	0	2.534

Descriptive statistics associated with the variables are demonstrated in the table.

4.2 Correlation matrix

The correlation matrix illustrates the relationship between independent and dependent variables. Its value ranges from +1 to -1.

Table II: Correlation matrix

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ROA	1								
WR	-0.036	1							
CO2	-0.083	0.068	1						
WE	-0.011	-0.046	0.084	1					
EE	-0.011	0.057	0.033	-0.030	1				
PI	-0.050	0.059	-0.044	0.045	-0.039	1			
FA	0.095	0.034	-0.049	-0.064	-0.044	0.072	1		
FS	-0.053	0.018	0.048	0.076	0.008	0.062	-0.056	11	
FL	-0.032	-0.005	-0.013	-0.015	-0.052	0.024	-0.016	0.098	1

The table presents the correlation matrix of the variables.

4.3 Regression Analysis

This study employs multivariate analysis to examine the linear relationship between environmental sustainability and its variables. Here, ROA serves as the dependent variable for the investigation. The independent variables are waste reduction, energy consumption, water consumption, CO2 emission, and product innovation. The control variables are leverage, firm size, as well as firm age.

$$ROA=\alpha+\beta1WR+\beta2CO2+\beta3WE+\beta4EE+\beta5PI+\beta6FA+\beta6FS+\beta6FL+\epsilon_{i,t}$$

(4.1)

The connection concerning the independent variable and the dependent variable is represented by the equation (4.1). The ROA measures the financial performance of firm, the WE measure the Waste reduction, the CO2 emission, WE measures the water consumption, the EE measures the energy consumption, PI measure the product innovation, the FA describes the age of the company, the FSIZE describes the size of the business and FL describes the firm leverage. The slope, represented by β is the beta coefficient, whereas the error term is represented by $\epsilon_{i,t}$.

Table. III: Analysis of Regression for Financial Performance

ROA	Coef.	St. Err.	P-value
WR	.031	.041**	.045
Co2	.018	.01*	.072
WE	.013	.039	.981
EE	-.094	.021***	0
PI	.014	.008	.073
FA	-.046	.018**	.011
FS	-2.759	.481***	0
FL	3.706	.533***	0
Constant	31.366	4.629***	0
R2	0.446	No. of observation	560
F-test	16.975	P > F	0.001***

This table displays the regression analysis for Financial performance. The independent variables are waste reduction(WR) ,carbon dioxide emission(CO2), water emission(WE), energy emission(EE), product innovation(PI). Firm size (FS), firm leverage (FL), and firm age (FA) are the variables that served as the study's control variables. Statistically significant at 10%, 5%, and 1% correspondingly are denoted by the symbols *, **, and ***.

Table III displays the regression results according to financial performance. The total number of observations is 560. Using the F-value and the R-squared statistic, the fitness of the model is evaluated. The R squared score is 0.446, demonstrating that the whole variance in the financial performance of businesses in Malaysia can be attributed to independent causes to the satisfaction of 44% of the total variation. The F-value findings specify that the entire model is significant at the 1% level and is suitable for further examination. WR, CO2, EE, PI, and FL have a favourable correlation with financial success. Enhancing environmental sustainability improves the financial performance of non-financial organizations operating in Malaysia. FS and FA have a negative and substantial correlation with financial success. company age and company size negatively influence the financial performance of non-financial corporations in Malaysia. Water emissions demonstrate negligible consequences.

DISCUSSION AND RESULTS

This research analysis used multivariate analysis in order to evaluate the influence of environmental sustainability on the financial performance of enterprises in Malaysia. Table III illustrates that environmental sustainability impacts the financial success of corporations in Malaysia. The outcomes of environmental sustainability variables align with shareholder theory, indicating that environmental sustainability initiatives enhance business performance. Previous studies (Jamal et al., 2024; Muslichah, 2020; Mohammad & Wasiuzzaman, 2021; Ahmad et al., 2020) have shown a progressive association amongst sustainability criteria and company performance. The institutional theory posits that a business's external and internal environment, together with its corporate culture, are most applicable in attaining entire facets of sustainability. For the sake of this concept, the organisation might be likened to an institution with a common goal. The findings of Davelle (2021) and Zhaang et al. (2022) indicated that the environmental component demonstrates substantial performance outcomes. Broadstock (2021) and Muslichah (2020) have researched the influence of sustainability methods on business value. They observed that improved environmental mechanisms enhance corporate performance. An effective environmental sustainability method enhances investor confidence, hence increasing the firm's value.

The findings indicate that business size negatively impacts the financial performance of Malaysian firms. Li et al. (2018) also Mohammad and Wasiuzaman (2021) confirmed that firm size has a negative link with Tobin's Q. The FA (age of firm) is also diminishing financial performance. The firm's leverage is also diminishing financial performance. The age of the firm has a statistically significant and optimistic association with physical investment, as quantified by fixed assets. The results indicate that firms with more leverage will achieve better profitability, whereas smaller organisations are expected to exhibit greater productivity. Jamal et al. (2023), Crisóstomo et al. (2011), also Ingram and Frazier (1980) assert that leverage favorably and considerably enhances financial performance.

5.1 Study Implications

The conclusion of this research investigation has numerous diverse implications. This research revealed that environmental considerations enhance the financial success of enterprises in rising nations such as Malaysia. This report provides governments and authorities with strategies to enhance national financial performance via improved environmental sustainability. Shareholders and buyers may use the study data to evaluate their investment decisions on environmental sustainability. The rationale for this is that research indicates environmental sustainability factors are crucial pertaining to both in the long run and in the near term success. The findings of this research are also beneficial for legislators and the administration. They manage their resources and invest in environmental sustainability initiatives. With time, they will develop more rapidly and robustly.

5.2 Future Research Recommendations

Future research should examine a more extensive sample period together with other environmental factors. By doing so, the researcher will elucidate the influence of additional and complex environmental sustainability challenges on financial performance. Additionally, it is proposed that the indirect impact of environmental sustainability on another variable, like as regulatory excellence, would be examined.

5.3 Conclusion

Environmental sustainability problems are critical variables to consider in the attainment of the objectives of company. The major aim and objective of this analysis to ascertain the extent of the effect of environmental sustainability elements on the financial performance of companies performing in Malaysia.

This study is characterised by a significant differentiating trait. This study examines the main environmental sustainability issues that influence financial success.

This analysis chose a sample of non-financial firms listed on the Malaysia Stock Exchange from 2014 to 2023. Multivariate analysis was conducted on panel data as part of this inquiry. The study results indicate that waste reduction, CO2 emissions, energy consumption, product innovation, firm age, company size, and firm leverage are significant variables influencing business financiers in Malaysia. The research study results align with previous empirical investigations. Management and policymakers may get advantages from the results of this study, since they specify effective insights. Their resources are administered, and they allocate investments towards ecologically sustainable operations. The state of the economy is going to improve over the course of the coming decades.

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