Journal of Applied Business and Technology

Green Intellectual Capital, Enterprise Risk Management and Corporate Social Responsibility on Environmental Performance and Financial Performance

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Article History
Received
7 May 2025
Received in revised form
28 August 2025
Accepted
29 September 2025
Published Online
30 September 2025

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Abstract
The purpose of this study is to obtain an overview of green intellectual capital (GIC), corporate risk management (ERM), corporate social responsibility (CSR), company size (SIZ), company age (AGE) and company certification (CER) in influencing environmental performance and financial performance. Helping to describe the development of green-based human resources, resilient and adaptive risk management, and the role of implementing local wisdom-based corporate social responsibility in impacting the company's environmental and financial performance in the long term. The research method uses multiple linear regression analysis using SMART PLS version 4 on 105 primary consumer goods sub-sector companies (non-cyclical consumers) listed on the IDX for the 2016-2022 period. The results of the study concluded that hypothesis 1, hypothesis 4, hypothesis 5, and hypothesis 7 were accepted, while hypothesis 2, hypothesis 3, and hypothesis 6 were rejected. The recommendation of this study is that the company's green intellectual capital has a strong impact on environmental and financial performance. Corporate risk management has a strong impact on financial performance only. And corporate social responsibility has a negative impact on environmental performance and financial performance. While environmental performance has a strong impact on financial performance. Green intellectual capital and corporate risk management are important elements in enhancing a company's competitiveness, uniqueness and sustainability.

Keywords: Green Intellectual Capital; Enterprise Risk Management; Corporate Social Responsibility; Environmental Performance; And Financial Performance
DOI: https://doi.org/10.35145/jabt.v6i3.216
SDGs: Decent Work and Economic Growth (8); Industry, Innovation and Infrastructure (9); Sustainable Cities and Communities (11); Climate Action (13); Partnerships for the Goals (17)

1.0 INTRODUCTION

As a result of growing environmental awareness, corporate sustainability has changed in the realm of international regulations, where this green issue has become a global vision. In reducing environmental degradation, countries around the world have begun to promote environmental protection, ethical business, green-based operations and the development of sustainable development (Kung, Cheng-Li Huang, 2011). The development and progress of the economy, driven by industrial development and the increasing population of the world is increasing rapidly. This condition also has an impact on the rapid development of the economy in general. However, on the other hand, it is a pressure on the earth as a place for humans to live in the world and has an increasingly negative impact on the environment.

Climate Change explains that global disasters will have the same devastating impact globally as the Covid-19 pandemic, where no country in the world can escape the threat of climate change. The increase in carbon emissions that occurs throughout the world is one of the global threats that must be mitigated, anticipated, and minimized with real action. Indonesia as one part of the world's countries must start to be proactive in real efforts to prepare strategies, infrastructure, regulations and policies that can anticipate global policies related to climate change. (Kompas.com, 2021).

Environmental performance refers to the ability of an organization to reduce air emissions, liquid waste and solid waste as well as the ability to reduce the consumption of hazardous and toxic materials and reduce the

frequency of environmental accidents (Younis & Sundarakani, 2020). Environmental performance is the performance of a company that cares about the surrounding environment. Environmental performance will describe how the company cares about the surrounding environment. If the environment and resources around the company are well maintained, it is certain that the company's financial performance will also be good (Suaidah et al., 2020).

Environmental performance is the company's relationship with the environment regarding the environmental impact of the resources used, the environmental effects of organizational processes, environmental implications for products and services, product processing recovery and compliance with work environment regulations. Environmental performance refers to the results achieved by the environment whenever environmental aspects carry out processes, products, services, systems, and organizations that are managed and controlled to reduce negative impacts on the environment (Hidayat & Safitri, 2020).

It is explained that environmental performance (EP) is seen as the company's ability to cause a reduction in pollution and solid waste and its ability to reduce the use of safe materials and prevent environmental accidents. EP is defined as the extent to which a company can combine financial and non-financial resources to reduce the negative impacts of business activities that have an impact on the environment and ensure environmental sustainability by reducing air pollution, consumption of hazardous materials, and environmental accidents, as well as energy and resource conservation. EP is measured using reduced energy and material consumption, reduced air and water pollution, minimizing waste generation and reducing the use of toxic and hazardous materials, minimizing environmental accidents, and increasing renewable energy consumption, through R & D activities (Agyabeng-Mensah et al., 2020).

Financial performance is an indicator of the company's ability to achieve the company's goals of generating profits and increasing the company's value. Financial performance can be seen from the company's level of profitability. Financial ratio analysis is a common method used to measure a company's performance in the financial sector. A positive ratio trend is a comparison of a series of growth, so it can show the relationship or correlation of a financial report in the form of a balance sheet and income statement that is growing (Suaidah et al., 2020).

Financial performance is a combination of tangible and intangible financial and non-financial resources capable of achieving the organization's financial goals. Measuring financial performance is the key to an organization's core purpose, the reason for establishing an organization to make a profit. Financial performance describes return on equity, return on investment, gross profit margin, net profit, return on assets, and others based on aspects of responsibility and openness in maintaining the sustainability of the company (Agyabeng-Mensah et al., 2020). The application of green intellectual capital (GIC) is very strategic in minimizing the negative impacts of the company's operations and business through green human resource practices (green training & development and green discipline management) as important predictive variables for green intellectual capital, where positive employee pro-environmental practices improve environmental performance. Green human resource management practices (green HRM) indirectly impact environmental performance with green intellectual capital and pro-environmental practices (Nisar et al., 2021). It has been recognized that intangible assets and intellectual capital are key for companies to achieve competitive advantage (Kung, Cheng-Li Huang, 2011). Meanwhile (Yadiati, 2019) found that GIC has a positive and significant effect on environmental performance. (Thiagarajan & Sekkizhar, 2017) found that GIC research results have a positive effect on environmental performance. Research (Chandra & Augustine, 2019) concluded that the green intellectual capital index has a negative and insignificant effect on non-financial performance.

In research (Candy, 2021) enterprise risk management (ERM) has a positive and significant effect on the non-financial performance of banks. In (COSO and WBCSD, 2018) COSO-ERM aims to help practitioners integrate knowledge and awareness of ESG-related trends, issues, impacts, and dependencies as ERM tools and processes in supporting identifying, defining, assessing, responding to, and disclosing ESG-related risks (Candy, 2021). ESG-related risks that with ERM can identify and assess potential business risks that impact business strategies and objectives. ESG-related risks are issues related to ESG into the mainstream process and evaluation of ESG practice and performance achievements in companies (COSO and WBCSD, 2018). The implementation of ERM will improve the company's environmental performance (green growth) and benefit all stakeholders while providing protection for long-term investors. The enterprise risk management (ERM) variable has a positive and significant effect on the environmental performance variable (green growth firm) in O & G companies of Malaysia (Shah et al., 2024). Research (Pambudi Raharjo & Hasnawati, 2022) also found that enterprise risk management (ERM) has a positive and significant effect on environmental performance. Research (Chakroun et al., 2020) shows that CSR disclosure has a positive and significant impact with good corporate governance (GCG) proxies, namely; labor conditions, environment, and community involvement. The corporate social responsibility variable has a positive and significant effect on the environmental performance variable and pro-environmental behavior has a positive and

significant effect on the environmental performance variable (Channa et al., 2021). CSR variables have a positive and insignificant effect on environmental performance (Kraus et al., 2020).

The green intellectual capital factor is very important in the current era of information transparency and can have an impact on improving financial performance, environmental performance and the sustainability of the company in the future. The green intellectual capital index has a positive and significant effect on the company's financial performance and transparency can strengthen the positive effect of sustainability disclosure on financial performance (ROA) (Chandra & Augustine, 2019). Green intellectual capital has a significant and positive effect on the company's financial performance (ROA) which is controlled by independent commissioners (Erinos & Yurniwati, 2018). The results of (Chaudhry et al., 2016) found that GIC has a positive and significant effect on financial performance.

Enterprise risk management proxies can improve company performance, where management has a very important role in minimizing agency conflicts that cause agency costs for the company. Improving the quality of enterprise risk management is one way to minimize agency costs. The better the quality of enterprise risk management, the stronger the level of control carried out by the company's internal over the company (Chandra et al., 2024), will minimize agency costs that occur within the company and have a positive impact on company performance (Munfaida et al., 2020). The role of enterprise risk management (ERM) in managing corporate risk comprehensively and coherently in all the risks it faces, compared to managing it individually. The concept of enterprise risk management has been widely recognized as an innovative way of managing risk in an organization in an integral and comprehensive manner. ERM helps companies achieve their strategic goals, but there are several studies that show that ERM practices are not able to create added value for the company (Trianaputri et al., 2020). According to the IFRS Foundation, the meaning of risk in relation to ESG (environment, social, and governance) disclosure is the main risk that can basically disrupt the organization's ability and business model, strategy, resources or relationships (IFRS.org, 2021). Enterprise risk management (ERM) research in (Supriyadi et al., 2020) found that ERM disclosure has a positive and significant effect on financial performance (ROA). Meanwhile, in research (Ping & Muthuveloo, 2017) ERM implementation has a positive and significant effect on financial performance (Tobin's Q). Mandatory CSR disclosure is of particular concern to regulators, investors, and stakeholders, especially in developing countries. The mandate for implementing CSR Disclosure has an impact on company activities in increasing transparency which makes it easier for the government and interest groups to pressure companies to be more compliant in CSR activities. CSR disclosure of mandatory has a negative and significant effect on firm performance (ROA) (Y. C. Chen et al., 2018). The implementation of CSR by companies does not have a positive and significant effect on financial performance ROA (Erinos & Yurniwati, 2018). The findings strengthen the previous conclusion that the increase in CSR spending after the mandate causes a decrease in company performance (ROA) (Y. Chen et al., 2018). The social responsibility disclosure variable has a positive and significant effect on corporate financial performance (Purbosanjoyo, 2018). Research (Dewi, 2016) found that CSR Disclosure moderated by the audit quality variable had a negative and insignificant effect on financial performance (ROA), but had a positive and insignificant effect on ROE. The results of the study (Suaidah et al., 2020) showed that corporate social responsibility had a negative and significant effect on the company's financial performance with the ROE proxy. (Rusmaningsih & Setiadi, 2021) showed that CSR disclosure had a negative and significant effect on financial performance (Tobin's Q). Meanwhile, human rights proxies, fair operating practices, and consumer issues have a negative and significant effect on financial performance with ROA, ROE, Tobin's Q and Marris ratio proxies.

According to (Hidayat & Safitri, 2020) environmental performance has a positive and significant effect on Corporate Financial Performance (CFP). The results of the study (Suaidah et al., 2020) show that environmental performance has a positive and significant effect on financial performance. In the study (Rusmaningsih & Setiadi, 2021) showed that environmental performance has a positive and significant partial effect on Corporate Financial Performance (CFP) with the Tobin's Q proxy. The environmental performance variable has a positive and insignificant effect on financial performance (Hanif et al., 2020). The environmental performance variable has a positive and insignificant effect on corporate financial performance (Purbosanjoyo, 2018).

The control variable of company size has a positive and significant relationship with the company's financial performance (Anandamaya, 2020). The firm size variable has a negative and significant effect on financial performance (Nur Amalia, 2021). The company size variable has a negative and significant effect on the company's financial performance (Gemilang, 2023). The company size variable has a positive and significant effect on the financial performance of banking in Indonesia (Aprianingsih & Yushita, 2016).

Company age is measured precisely from the date the company was founded (Aryati, 2014). Company age is proxied by the time the company was officially established to run the business by the same management. Company age is an indicator of the extent to which the company is able to utilize past experience as one of its

operational advantages. The length of operation of a company is an important consideration for investors in making investment decisions in the company (Darma Riswan & Lidya Martha, 2024).

Implementation of quality management with ownership of quality-based certification so that the company meets the applicable index quality standards. Ownership of certification is an important factor for companies as a form of quality assurance with the aim of improving the quality of products and services produced with operational standards based on quality management. The factor of increasing consumer satisfaction and higher company competitiveness is one of the objectives of ownership of certification by companies such as; ISO 14000 certification, PROPER certification, ISPO certification, SVLK certification (Setijawan, 2012).

Studying the developing phenomenon and reviewing several previous studies, where there is still a research gap in environmental performance variables and financial performance as dependent variables and with independent variables green intellectual capital, enterprise risk management (ERM), and corporate social responsibility (CSR). Therefore, researchers want to conduct research development and reveal how the results of further research through measurement and approaches to economic performance, environmental performance and how the influence of the independent variables above affects it.

2.0 LITERATURE REVIEW

Resource-Based View Theory (RBT)

Resources-based theory (RBT) or resource-based theory is a theory developed to analyze the competitive advantage of a company that emphasizes knowledge/learning economy or an economy that relies on intangible assets (Firmansyah, 2017). RBT attempts to bring together the common themes of company heterogeneity, duplication barriers, and maintaining competitive advantage in an overall model of resource-based competitive advantage (Fahy & Smithee, 1999). The resource-based theory (RBT) explains that companies will gain competitive advantage and superior performance through acquisition, obtaining, and using the most important strategic assets to support competitive advantage and financial performance (Wernerfelt, 1984).

Stakeholder Theory

Stakeholder theory takes into account a broader group of constituents than focusing on shareholders. The consequence of the shareholder focus is that maintaining or enhancing shareholder value is paramount, but does not exclude broader stakeholder groups such as employees, credit providers, customers, suppliers, government, and other local communities. The main focus on shareholder value is one of the goals besides prospering other stakeholders (Christine A. Mallin, 2019). Stakeholder Theory states that companies must pay attention to shareholders and stakeholders. All stakeholders are affected and influence the company's activities and actions directly and indirectly (Dewi, 2016).

Legitimate Theory

Legitimacy is the status of an entity that meets the expectations of the social system. This is a curved concept rooted in institutional theory (Van der Ven, Ganco, and Hinings 2013) that involves stakeholders as a way to form social norms. Fulfillment of social requirements in company operations is considered legitimate, or if stakeholders assess that the company complies with applicable norms. (Baumann et al., 2015).

The perspective of legitimacy theory of a company will voluntarily report its activities if the management considers that the company's business activities are expected to be in accordance with the rules, policies, and norms recognized by all stakeholders in adopting strategies, including strategy disclosure, which shows the public that the organization is trying to comply with the expectations of society and stakeholders according to the social contract. Legitimacy theory states that companies have a contract with society to carry out their business activities based on justice values, and how companies respond to various interest groups to legitimize the company's actions (Hidayat & Safitri, 2020).

Environmental Performance

In the study (Younis & Sundarakani, 2020), it is claimed that environmental performance refers to the ability of an organization to reduce air emissions, liquid waste and solid waste as well as the ability to reduce the consumption of hazardous and toxic materials and reduce the frequency of environmental accidents. According to (Suaidah et al., 2020) environmental performance is the performance of a company that cares about the surrounding environment. Environmental performance describes how the company cares about the surrounding environment. The environment and resources around the company that have been well maintained will have an impact on the company's financial performance. The company's environmental performance needs to be maintained consistently to avoid demands from the community or stakeholders and the company's sustainability will continue. The Ministry of Environment and Forestry (KLHK) in Indonesia evaluates the company's action program in protecting the environment and supervising the environment against the company's business operational activities in exploring natural resources through the Company Performance Rating Assessment Program (PROPER). According to (Hidayat & Safitri, 2020) environmental performance is a company's action program with the

environment in reducing the environmental impact of the resources used, the environmental effects of organizational processes, environmental implications of products and services, product processing recovery, and complying with environmental regulations. Environmental performance focuses on the results achieved by environmental performance every time the environmental aspect carries out process activities, products, services, systems, and organizations that are managed and controlled to reduce negative impacts on the environment.

In the study (Agyabeng-Mensah et al., 2020) environmental performance (EP) is seen as a company's ability to reduce pollution and solid waste, its ability to reduce the use of hazardous materials, and minimize environmental accidents. EP is defined as how a company can combine financial and non-financial resources to reduce the negative impact of its activities on the environment and ensure environmental sustainability through reducing air pollution, consumption of hazardous materials, and environmental accidents, as well as energy and resource conservation. EP is measured through the effectiveness of trends in reducing energy and material consumption, reducing air and water pollution, minimizing waste and reducing the use of toxic and hazardous materials, minimizing environmental accidents, and the level of renewable energy consumption, which are applied to the company.

Financial Performance

Financial performance is the company's ability to achieve its goals, namely generating profits and increasing the company's value. Financial performance is measured by the company's level of profitability. Financial ratio analysis is a common method for measuring a company's performance in the financial sector. The ratio is a tool that compares one thing with another so that it can show the relationship or correlation of a financial report in the form of a balance sheet and income statement (Suaidah et al., 2020).

According to (Agyabeng-Mensah et al., 2020) financial performance is the extent to which the combination of tangible and intangible financial and non-financial resources is able to achieve the financial goals of the organization that have been set. Financial performance is one of the keys to an organization being established, namely to gain profit and prosperity for stakeholders. In addition, other goals are return on equity, return on investment, gross profit margin, net profit, return on assets, and long-term goals related to the sustainability of the company.

Green Intellectual Capital

Intellectual capital was first introduced by John Kenneth Galbraith in 1969 who described it as intelligence, knowledge, skills, and brain power activities that every time they are used, will create value. GIC represents intangible assets in a company including knowledge, wisdom, ability, experience and innovation in the field of environmental protection (Omar et al., 2017).

According to (Firmansyah, 2017) green intellectual is the total reserve of all intangible assets, knowledge, abilities and relationships related to environmental protection and green innovation both at the individual and organizational levels in the company. Organizational environmental management is a managerial activity, process, approach or concept that can help companies achieve corporate environmental goals, comply with environmental policies, anticipate the environmental impact of company operations, take measures to reduce waste and pollution from previous measurements based on parameters and regulations. According to (Thiagarajan & Sekkizhar, 2017) the positive impact of green IC on sustainability performance in the Indian automotive component industry through the adoption of a holistic approach through uniquely integrated operations referring to environmental, social, and governance (ESG) aspects adaptively. Green intellectual capital can explore the positive influence on the company's competitive advantage. However, there are still companies that try to avoid investing in environmental protection and think that such actions will reduce profits for the company and also hinder the future development of the corporation. The current growing trend shows that green intellectual capital is worth developing by innovating to create a broader competitive advantage (Y. S. Chen, 2008). Companies that are knowledge-based, adaptive, and have advanced technology in today's world economy have known that it is very important and necessary to improve the company's intellectual capital. In the modern VUCA (volatility, uncertainty, complexity, and ambiguity) economy, tangible and intangible resources are considered to be potential sources of strategic advantage. (Smriti & Das, 2018).

Enterprise Risk Management (ERM)

COSO defines ERM as the culture (Junaedi et al., 2024), capabilities, and practices, integrated with the organization's strategy and performance, and relied upon to manage risk to create, preserve, and realize enterprise value (SCCE & HCCA, 2020). Business entities, including governments, and non-profit organizations, face a landscape of environmental, social, and governance (ESG) risks that can impact the profitability, success, and even sustainability of the company (COSO and WBCSD, 2018).

Financial markets need to assess the risks and opportunities faced by each company arising from environmental, social, and governance (ESG) issues by maintaining the trend of corporate value growth (Renaldo & Murwaningsari, 2023) and reputation (Chandra et al., 2018). Stakeholders such as investors and other capital providers want global sustainability disclosure standards that meet the information needs according to regulations. The development of adaptive frameworks for environmental, social, and governance, spurs the

development of voluntary or mandatory reporting guidelines that encourage innovation and action, while increasing costs and complexity for investors, companies, and regulators (IFRS.org, 2021).

ESG-related risks are risks and/or opportunities that include environmental, social, and governance aspects that may impact an entity. The universal definition of ESG-related risks (environment, social, and governance), referred to as sustainability risks, non-financial or extra-financial. Each entity will have its own definition based on its unique business model; internal and external environment; products or services (COSO and WBCSD, 2018).

Corporate Social Responsibility (CSR)

The four-part definition of CSR extracts the four-part definition and rearranges it in the form of a CSR pyramid, which illustrates the nature of the building blocks of the four-part framework including; economic, legal, ethical, and philanthropic responsibilities. Economic responsibility is placed at the base of the pyramid because it is a basic requirement in business with the rationale that the foundation of a building must be strong to support the entire building, sustainable profitability must be strong to support the expectations of society and stakeholders towards the company. The rationale is that CSR infrastructure is built on the premise of a healthy economy and sustainable business (Carroll, 2016).

In (UU_PT_40_Tahun, 2007), it is mandatory that companies are required to carry out social and environmental responsibilities including; (1) Companies that carry out their business activities in the field of and/or related to natural resources are required to carry out Social and Environmental Responsibility. (2) Social and Environmental Responsibility as referred to in paragraph (1) is the Company's obligation which is budgeted and calculated as the Company's costs, the implementation of which is carried out by paying attention to propriety and fairness. (3) Companies that do not fulfill the obligations as referred to in paragraph (1) shall be subject to sanctions in accordance with the provisions of laws and regulations. (4) Further provisions regarding Social and Environmental Responsibility (TJSL) are regulated by government regulations.

The standard (ISO & OECD, 2017) provides a clear and detailed description of the definition of social responsibility (corporate social responsibility) to prevent misunderstanding that an organization's responsibility for its decisions and activities in society and the environment, such as; 1.) contributing to sustainable development, including public health and welfare; 2.) taking into account stakeholder expectations; 3.) in accordance with applicable laws and consistent with international norms of behavior; and 4.) integrated throughout the organization and practiced in its relationship. The concept of CSR was discovered by John Elkington through the book Cannibals with Forks "The Triple Bottom Line of 21st Century Business", defining CSR as a company having social responsibility through the development of 3P aspects, namely Profit, People, and Planet. Profit means improving the quality of the company; People are defined as society, especially the surrounding community, and Planet has the meaning of the environment (Elkington, 1994), (Elkington, 2013).

Firm Size

Firm size can act as a representation of the financial characteristics of a company. Essentially, company size can be grouped into three main categories, namely large companies, medium-sized companies, and small companies (Darma Riswan & Lidya Martha, 2024). Company size is a company's prognosis to consistently improve its performance so that the market will be willing to pay more to buy its shares starting when the market believes it will get a profitable return from the company (Devina Stella Nabighah, 2020). Company size is expressed in total assets, sales, and market capitalization. Proxies for company size can also be measured by the book value of total assets. Because the size of the company's nominees is in the form of assets, it is usually calculated and converted into natural logarithms (Ln) (Hirdinis, 2019; Setiadharma & Machali, 2017), (Jihadi et al., 2021). The control variable is company size (firm size) which can be a consideration for investors to invest in shares or not in the company (Desmawardani & Syafruddin, 2020).

Firm Age

The age of a company can be measured precisely from the date of the company's founding (Aryati, 2014). The age of a company is measured from the time the company is officially established to run its business, the management of which is still fully held by management. The age of the company is an indicator of the extent to which the company is able to utilize past experience in its operational activities. The length of time a company has been operating is an important consideration for investors in making investment decisions in the company (Darma Riswan & Lidya Martha, 2024).

Certification

The implementation of quality management through quality assurance with ownership of quality-based certification which aims for the company to meet good quality standards and is an important factor for the company as a form of quality assurance with the aim of improving the quality of products and services produced. The implementation of quality management certification in companies can improve aspects of consumer satisfaction and increase the company's competitiveness and competitiveness (Rahman et al., 2025). The

ownership of certification by companies such as; ISO 14000 certification, PROPER certification, ISPO certification, SVLK certification (Setijawan, 2012).

Hypothesis Formulation

The Effect of Green Intellectual Capital on Environmental Performance

Green human resource management (HRM green) practices indirectly impact environmental performance with green intellectual capital and pro-environmental practices (Nisar et al., 2021). Intangible assets and intellectual capital are key for companies to achieve competitive advantage (Kung, Cheng-Li Huang, 2011). The green intellectual capital (GIC) variable has a positive and significant effect on environmental performance (Yadiati, 2019). Research (Thiagarajan & Sekkizhar, 2017) is valid that green intellectual capital (GIC) has a positive effect on environmental performance. Research (Thiagarajan & Sekkizhar, 2017) found that green HC has a positive effect on operations, environment, society and governance. Green SC has a positive effect on operations, environment, society and governance. Green RC has a positive effect on society and not on operations, environment, and governance. Research (Chandra & Augustine, 2019) concluded that the green intellectual capital index has a negative and insignificant effect on non-financial performance.
H1: Green Intellectual Capital has a positive effect on Financial Performance

The Effect of Enterprise Risk Management on Environmental Performance

The enterprise risk management (ERM) variable has a positive and significant effect on bank non-financial performance (Candy, 2021). COSO-ERM aims to help practitioners integrate their knowledge and awareness of ESG-related trends, issues, impacts, and dependencies using ERM tools and processes to support identifying, defining, assessing, responding to, and disclosing ESG-related risks (Candy, 2021). ESG-related risks where ERM identifies and assesses risks to potential business impacts on business strategy and objectives. Articulating ESG-related risks in these terms brings ESG-related issues into the mainstream and evaluation process (COSO and WBCSD, 2018). Enterprise risk management (ERM) variables have a positive and significant effect on environmental performance variables (green growth firms) in O & G companies of Malaysia (Shah et al., 2024). Enterprise risk management (ERM) has a positive and significant effect on environmental performance (Pambudi Raharjo & Hasnawati, 2022).
H2: Enterprise Risk Management has a positive effect on Environmental Performance

The Effect of CSR Disclosure on Environmental Performance

Research (Chakroun et al., 2020) shows that CSR disclosure has a positive and significant impact with GCG proxies, namely; labor conditions, environment, and community involvement. The corporate social responsibility variable has a positive and significant effect on the environmental performance variable and pro-environmental behavior has a positive and significant effect on the environmental performance variable (Channa et al., 2021). The CSR variable has a positive and insignificant effect on environmental performance (Kraus et al., 2020).
H3: CSR has a positive effect on Environmental Performance

The Effect of Green Intellectual Capital on Environmental Performance

The green intellectual capital factor is very important in the current era of information openness and can have an impact on improving financial performance, environmental performance and the sustainability of the company in the future. The green intellectual capital index has a positive and significant effect on the company's financial performance and transparency can strengthen the positive effect of sustainability disclosure on financial performance (ROA) (Chandra & Augustine, 2019). Green intellectual capital has a significant and positive effect on the financial performance of ROA companies controlled by independent commissioners (Erinos & Yurniwati, 2018). The results of (Chaudhry et al., 2016) found that GIC has a positive and significant effect on financial performance
H4: Green Intellectual Capital has a positive effect on Financial Performance

The Effect of Enterprise Risk Management on Financial Performance

Enterprise risk management variables can improve company performance, where management has a role in minimizing agency conflicts that will cause company agency costs. Improving the quality of enterprise risk management is one way to minimize agency costs. Enterprise risk management is a stronger level of internal control over the company and has a positive impact on company performance (Munfaida et al., 2020). The role of enterprise risk management (ERM) in managing corporate risk comprehensively and coherently in all the risks it faces, where the concept of enterprise risk management has been widely recognized as an innovative way to manage organizational risk integrally and comprehensively, where ERM helps companies achieve their strategic goals. Several studies have shown that ERM practices are unable to create added value for the company (Trianaputri et al., 2020).

According to the IFRS Foundation, the meaning of risk in relation to ESG (environment, social, and governance) disclosure is the main risk that can basically disrupt the organization's ability and business model, strategy, resources or relationships (IFRS.org, 2021). The enterprise risk management (ERM) disclosure proxy has a positive and significant effect on financial performance (ROA) (Supriyadi et al., 2020). The ERM implementation variable has a positive and significant effect on financial performance (Tobin's Q) (Ping & Muthuveloo, 2017).

H5: Enterprise Risk Management has a positive effect on Financial Performance

The Effect of CSR on Financial Performance

Research (Dewi, 2016) found that CSR Disclosure moderated by the audit quality variable had a negative and insignificant effect on financial performance (ROA), but had a positive and insignificant effect on ROE. The results of the study (Suaidah et al., 2020) show that corporate social responsibility has a negative and significant effect on the company's financial performance with the ROE proxy. (Rusmaningsih & Setiadi, 2021) show that CSR disclosure has a negative and significant effect on financial performance (Tobin's Q). Meanwhile, the proxies of human rights, fair operating practices, and consumer issues, have no negative and significant relationship to financial performance with the ROA, ROE, Tobin's Q and Marris ratio proxies.
H6: CSR has a positive effect on Financial Performance

The Effect of Financial Performance on Financial Performance

According to (Hidayat & Safitri, 2020) environmental performance has a positive and significant effect on CFP (Corporate Financial Performance). The results of the study (Suaidah et al., 2020) show that environmental performance has a positive and significant effect on financial performance. In the study (Rusmaningsih & Setiadi, 2021) showed that environmental performance has a positive and significant partial effect on CFP (Corporate Financial Performance) with the Tobin's Q proxy. The environmental performance variable has a positive and insignificant effect on financial performance (Hanif et al., 2020). The environmental performance variable has a positive and insignificant effect on corporate financial performance (Purbosanjoyo, 2018).
H7: Environmental Performance has a positive effect on Financial Performance

3.0 METHODOLOGY

Population and Sampling

The process carried out for selecting samples in this study refers to the techniques used in the study (Çankaya & Sezen, 2019). The target group of this study is a limited liability company of non-cyclical consumer companies listed on the Indonesia Stock Exchange. The sampling technique used in this study is purposive sampling.

The researcher distributed questionnaires to each company and the questionnaires would be filled in by at least 1 person per company with minimum qualifications at the level of operational manager, human resource manager, accounting manager, company secretary, internal auditor, audit committee, and several strategic positions in the company that are considered competent and have a minimum of three years of work experience via email at linkedIn.com respondents. This shows that respondents have the skills and experience needed to take part in the study to provide in-depth data (Agyabeng-Mensah et al., 2020). All companies that took part in this study had at least one of the positions mentioned.

According to (Bujang et al., 2017), in analyzing with an Alpha error rate of 0.05 and the number of variables tested as many as 8 variables (GIC practices, ERM practices, CSR disclosure practices, environmental performance, financial performance), and three control variables, namely company size, company age, and certification. A sample is needed in this study to facilitate data analysis, when the population that is the object of research is very large, such as in the population of companies listed on the IDX. The minimum number of samples in each study is 100 respondents.

The population in this study are companies listed on the Indonesia Stock Exchange (IDX) in 2023, namely 943 companies for the 2016-2023 period. The sample selection uses the purposive sampling method, with criteria according to table 2.

Table 2. Sampling Criteria (Purposive Sampling)

No	Criteria	Total
1.	Companies listed on the IDX in 1996-2023	943
2.	Companies listed outside the Primary Consumer Goods sector (consumer non-cyclical) on the Indonesia Stock Exchange during the 2023 study	831
3.	Companies listed in the Primary Consumer Goods Subsector Industry (consumer non-cyclical) on the Indonesia Stock Exchange during the 2023 study	112
	Number of companies used as samples	**112**

Source: Researcher Observation Results, 2023

Based on table 2 above, using the purposive sampling method, a sample of 112 primary consumer goods sub-sector industrial companies was obtained by distributing questionnaires to respondents in 112 non-cyclical consumer companies. After sending documents/questionnaires via LinkedIn.com email, 105 documents were returned.

Operationalization Variables

The independent variable is a variable that does not depend on or is predicted by other latent variables or indicators. The dependent variable is a variable that is predicted by other latent variables or indicators. The independent variables in this study are green intellectual capital practices, enterprise risk management practices, and CSR disclosure practices. While the dependent variables in this study are environmental performance and financial performance where environmental performance is a mediating/intervening variable. While the control variables in this study are firm size, firm age, and certification.

The operational definition of each variable, namely environmental performance, is a measurement that includes how companies minimize accidents, waste, product impacts on the environment and increasing stakeholder knowledge of sustainability practice literacy. Financial performance is a measurement including return on equity, return on investment, gross profit margin, return on assets, earnings per share, net profit margin, and return on sales. Green intellectual capital practices are how to implement green human capital, green capital structure, and green relationship capital. Enterprise risk management practices are how to practice risk mitigation through measuring risk nature, likelihood, impact, internal control, prevention, monitoring, internal risk, and external risk. CSR disclosure is a measurement related to organizational governance, fair operating practice, labor practice, consumer issues, human rights, the environment, and community involvement and development. The measurement of these variables uses a closed questionnaire that will be distributed to respondents, and all measurement scales are intervals. The taking of indicators that form variables is based on indicators available in several articles with modifications according to the needs of researchers.

Table 3. Operationalization Variables

Attribute	Indicator	Source
	Financial performance	
FIP1	The company experienced an increase compared to last year in terms of return on equity (ROE)	(Agyabeng-Mensah et al., 2020)
FIP2	The company experienced an increase in return on investment (ROI)	
FIP3	The company experienced an increase in gross profit margin (GPM)	
FIP4	The company experienced an increase in net profit	
FIP5	The company experienced an increase in return on assets (ROA)	
FIP6	The company experienced an increase in earnings per share (EPS)	
FIP7	The company experienced an increase in net profit margin (NPM)	
FIP8	The company experienced an increase in return on sales	
	Environmental performance	(Younis & Sundarakani, 2020), (Agyabeng-Mensah et al., 2020)
	Waste Reduction Dimension	
EVP1.1	Company Minimizes waste generation	
EVP1.2	Company Reduces use of toxic and hazardous materials	
EVP1.3	Reduces environmental impact of products/services	
EVP1.4	Increases volume of recycled materials used	
EVP1.5	Reduces greenhouse gas emissions to the environment	
	Environmental Impact Dimension	
EVP2.1	Minimizing fossil energy consumption	
EVP2.2	Increasing renewable energy consumption levels	
EVP2.3	Increasing stakeholder knowledge in green activities	
EVP2.4	Increasing stakeholder knowledge for involvement in green environmental practice planning	
EVP2.5	Increasing stakeholder knowledge for involvement in green environmental practice implementation	
EVP2.6	Minimizing fossil energy consumption	
EVP2.7	Increasing renewable energy consumption levels	
	Green Intellectual Capital	
	Green Human Capital	(Chang & Chen, 2012)
GIC1.1	Employee productivity and contribution to environmental protection in the company are better than its main competitors;	

Attribute	Indicator	Source
GIC1.2	Employee competence in environmental protection in the company is better than its main competitors;	
GIC1.3	Environmental protection products and services provided by the company's employees are better than its main competitors;	
GIC1.4	The level of work team cooperation related to environmental protection in the company is higher than its main competitors;	
GIC1.5	Managers in the company can fully support their employees to achieve environmental protection goals	
	Green Structure Capital	
GIC2.1	Environmental protection management system in the company is better than its main competitors;	
GIC2.2	The company's profit gained from environmental protection activities is more than its main competitors;	
GIC2.3	The ratio of the company's environmental protection investment in R&D to its sales is greater than its main competitors;	
GIC2.4	Environmental protection innovation in the company is more than its main competitors;	
GIC2.5	Environmental protection facilities investment in the company is more than its main competitors;	
GIC2.6	Environmental knowledge management system in the company is beneficial for the accumulation and sharing of environmental management knowledge.	
	Green Relationship Capital	
GIC3.1	The company designs its products or services according to the environmental desires of its customers;	
GIC3.2	The company's cooperative relationships on environmental protection with its upstream suppliers and downstream clients are stable;	
GIC3.3	The company has stable and cooperative relationships on environmental protection with its strategic partners	
GIC3.4	Green partners deal with each other honestly and openly in environmental collaboration	
GIC3.5	Green partners observe the confidentiality of the green concepts given to each other in environmental collaboration	
GIC3.6	Green partners adhere to their shared commitments in environmental collaboration	
GIC3.7	Cooperative relationships with green partners in environmental collaboration are stable	
	Enterprise Risk Management	
	Accounting/Financial Risk Dimensions, Risk Nature, and Impact	
ERM1.1	To what extent does Accounting/Financial information contribute to your organization's management of credit risk	(Bento et al., 2018), (SCCE & HCCA, 2020)
ERM1.2	To what extent does Accounting/Financial information contribute to your organization's management of liquidity risk	
ERM1.3	To what extent does Accounting/Financial information contribute to your organization's management of compliance (legal) risk	
ERM1.4	To what extent does Accounting/Financial information contribute to your organization's management of operational risk	
ERM1.5	To what extent does Accounting/Financial information contribute to your organization's management of IT security (data) risk	
ERM1.6	To what extent does Accounting/Financial information contribute to your organization's management of reputational (strategic) risk	

Attribute	Indicator	Source
ERM1.7	To what extent does Accounting/Financial information contribute to your organization's management of employee (human capital) risk	
ERM1.8	To what extent does Accounting/Financial information contribute to your organization's management of market price risk	
	Internal Control Dimensions	
ERM2.1	How important is the role of Accounting and Finance in managing risk management activities	
ERM2.2	Staff the compliance team with individuals who have relevant expertise	
ERM2.3	Customize compliance training based on the compliance risks faced for specific roles within the organization	
	Prevention Dimension	
ERM3.1	Do prevention activities identify risks	
ERM3.2	Do prevention activities avoid incidents	
ERM3.3	The company reduces the likelihood of occurrence and its impact in a cost-effective manner	
	Monitoring Dimension	
ERM4.1	Company assesses products to ensure compliance with standards	
ERM4.2	Company assesses processes to ensure compliance with standards	
ERM4.3	Company monitors activities to detect rule violations	
ERM4.4	Company assesses products to ensure compliance with standards	
	Internal Risk Treatment	
ERM5.1	Companies reduce the risk of loss when something goes wrong within the organization	
ERM5.2	Companies correct mistakes when internal events have increased risk exposure	
ERM5.3	Consider how compliance risk is affected by internal changes, such as changes in people	
ERM5.4	Consider how compliance risk is affected by internal changes, such as changes in organizational structure	
ERM5.5	Consider how compliance risk is affected by internal changes, such as changes in processes, technology	
	External Risk Treatment	
ERM6.1	Company responds to customers about risk failures that occur outside the organization	
ERM6.2	Company responds to regulators about risk failures that have occurred outside the organization	
ERM6.3	Company responds to other external parties about risk failures that have occurred outside the organization	
ERM6.4	Company reduces loss of reputation or sales due to risk failures that have occurred	
ERM6.5	Company responds to customers about risk failures that have occurred outside the organization	
	Corporate Social Responsibility	
	Employee Dimension	
CSR1.1	The company provides fair employment opportunities	(ISO & OECD, 2017), (Chang & Chen, 2012)
CSR1.2	The company provides a suitable working environment	
CSR1.3	The company provides good welfare for families and employees	
CSR1.4	The company provides fair employment opportunities	
CSR1.5	The company provides a suitable working environment	

Attribute	Indicator	Source
	Product Dimension	
CSR2.1	The company provides new safe products to customers	
CSR2.2	The company provides new reliable products to customers	
CSR2.3	The company provides new safe services to customers	
CSR2.4	The company provides new reliable services to customers	
	Legal Dimension	
CSR3.1	The company provides new safe products to customers	
CSR3.2	The company provides new reliable products to customers	
	Social and Organizational Dimension	
CSR4.1	The company's business operations have a positive impact on society and meet legal expectations;	
CSR4.2	The company's business operations have a positive impact on society and meet ethical expectations;	
CSR4.3	The company's business operations have a positive impact on society and meet public expectations;	
CSR4.4	The company considers improving the welfare of society as its organizational mission;	

As for the control variables, company size is measured by the number of employees at the time of the study (Ren et al., 2020). Company age (firm age) is measured by how long the company has been established at the time of the study. Meanwhile, certification is measured by the number of certifications held by the company at the time of the study.

Data Analysis Method

Descriptive statistics

Descriptive statistical analysis aims to see an overview of the research data (Lind, Marchal, & Wathen, 2018). Descriptive statistics are related to data collection and presentation of data summary results. The descriptive statistical analysis that will be used in this study is mean, median, variance, standard deviation, skewness, and kurtosis.

Structure Equation Analysis

A model is created based on a certain theory, then SEM (Structural Equation Modeling) is used to check whether the model can be accepted or rejected (Ginting, 2009). The realized model is already based on a certain theory, so SEM is not used to build a new model without a previously existing theoretical basis.

The regression model used is:

$$EVP = a + \beta 1GIC + \beta 2ERM + \beta 3CSR + e$$

$$FIP = a + \beta 1GIC + \beta 2ERM + \beta 3CSR + \beta 4EVP + \beta 5SIZ + \beta 6AGE + \beta 7CER + e$$

Information:

GIC: Green Intellectual Capital, ERM: Enterprise Risk Management, CSR: Corporate Social Responsibility Disclosure, EVF: Environmental Performance, FIF: Financial Performance, SIZ: Firm Size, AGE: Firm Age, CER: Certification, a: Constant, β: Regression Coefficient, e: Error.

Dimension/Indicator Validity Test

The first stage in model evaluation, namely the evaluation of the measurement model (outer model). In PLS-SEM this stage is known as the construct validity test. Construct validity testing in PLS-SEM consists of convergent validity and discriminant validity. The way to test discriminant validity with reflective indicators is to look at the cross-loading value. This value for each variable must be greater than 0.70 (Imam Ghozali, 2014), (Anwar, 2019).

Construct reliability and validity test

Is a model evaluation, namely the evaluation of the measurement model (outer model). In PLS-SEM, this stage is known as the construct validity test. Construct validity testing in PLS-SEM consists of convergent validity and discriminant validity (Anwar, 2019).

Multicollinearity Test

The Rule of Thumb to assess convergent validity (Cronbach's Alpha and Composite Reliability) is that the loading factor value must be more than 0.7 for confirmatory research and between 0.6–0.7 for exploratory research, and the average variance inflation factor (AVE) value must be greater than 0.5 (Imam Ghozali, 2014).

R Square (R^2) Test (Coefficient of Determination)

The R Square (R^2) test or coefficient of determination is a statistical measure that shows how well a regression model predicts the results of observational data. This test is used to explain how much variation in the dependent variable is explained by the independent variable. The R Square value ranges from 0 to 1, with the value getting closer to 1 meaning the better, meaning that the independent variable can be said to be stronger in providing the information explained to predict the dependent variable. A good R Square value is more than 0.5. namely the value of the determinant coefficient that is close to 1 (one). R-Square values of 0.75, 0.50, and 0.25 indicate that the model is strong, moderate, and weak, respectively. (Imam Ghozali, 2014), (Renaldo, Suhardjo, Putri, Sevendy, & Juventia, 2021)

Hypothesis Testing

Hypothesis testing is a procedure used to test the error or truth of the results of the hypothesis proposed by the researcher. The hypothesis will be accepted if the significance value is below the specified alpha value (Suyono et al., 2021). The significance values used (two-tiled) t-value 1.65 (significance level = 10%), 1.96 (significance level = 5%), and 2.58 (significance level = 1%) (Imam Ghozali, 2014).

Mediation Test

Mediation occurs when the mediator variable acts as a link between two interrelated constructs. Specifically, changes in the exogenous construct affect the mediator variable, which then contributes to changes in the endogenous construct in the PLS path model. In other words, the mediator variable determines the mechanism or process underlying the relationship between the two constructs (Hair et al., 2017). The significance values used (two-tiled) t-value 1.65 (significance level = 10%), 1.96 (significance level = 5%), and 2.58 (significance level = 1%) (Imam Ghozali, 2014).

4.0 RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive analysis is used to provide a description of the data variables. The results of this descriptive statistical analysis are summarized in the following table 4.

Table 4. Descriptive Statistics of Research Samples

No.	Variable	N	Max	Min	Mean	StaDev
1.	FIP	105	6	2,1250	4,5274	0.8695
2.	EVP	105	6	2,6000	4,8752	0,8376
3.	GIC	105	6	1,3111	4,7898	0,7845
4.	ERM	105	6	2,8450	4,8483	0,6506
5.	CSR	105	6	3,0769	4,9282	0,7253
6.	SIZ	105	5	1	2,2190	1,6052
7.	AGE	105	55	1	12,5238	8,1972
8.	CER	105	30	0	1,5905	3,8994

FIP: Financial Performance; GIC: Green Intellectual Capital; ERM: Enterprises Risk Management; CSR: Corporate Social Responsibility; SIZ: Company Size; AGE: Age; CER: Certification.

Source: SMART PLS Output version 4, 2023

Table 4 explains the descriptive statistics of the FIP variable has a maximum value of 6, a minimum value of 2,125, an average value of 4.5274, and a standard deviation of 0.8695, meaning that if the standard deviation value is lower than the mean, it shows that the smaller the range of data variation, this indicates that the financial performance of the company studied has a narrow range of financial performance that is not spread out and the data is homogeneous (low outliers).

The standard deviation of the EVP variable has a maximum value of 6, a minimum value of 2.6, an average value of 4.8752, and a standard deviation of 0.8376. The standard deviation is lower than the mean, meaning that the data can be said to be homogeneous, which means that the average environmental performance has a low level of deviation, all companies have produced good environmental performance.

The standard deviation of the GIC variable has a maximum value of 6, a minimum value of 1,311, an average value of 4.7898, and a standard deviation of 0.7845. The standard deviation is lower than the mean,

meaning that the data can be said to be homogeneous, which means that the average green intellectual capital has a low level of deviation, all companies have implemented green intellectual capital well.

The standard deviation of the ERM variable has a maximum value of 6, a minimum value of 2.8450, an average value of 4.8483, and a standard deviation of 0.6506. The standard deviation is lower than the mean, meaning that the data can be said to be homogeneous, which means that the average enterprise risk management has a low level of deviation, all companies have implemented enterprise risk management effectively. The standard deviation of the CSR variable has a maximum value of 6, a minimum value of 3.0769, an average value of 4.9282, and a standard deviation of 0.7253. The standard deviation is lower than the mean, meaning that the data can be said to be homogeneous, which means that the average corporate social responsibility has a low level of deviation, all companies have implemented corporate social responsibility effectively.

The standard deviation of the SIZ variable has a maximum value of 5, a minimum value of 1, an average value of 2.2190, and a standard deviation of 1.6052. The standard deviation is lower than the mean, meaning that the data can be said to be homogeneous, which means that the average firm size has a low level of deviation and the data is homogeneous.

The standard deviation of the AGE variable has a maximum value of 55, a minimum value of 1, an average value of 12.5238, and a standard deviation of 8.1972. Standard deviation is lower than the mean, meaning that the data can be said to be homogeneous, which means that the average age of the company (ages firm) has a low level of deviation of homogeneous data. Descriptive statistics of the CER variable have a maximum value of 30, a minimum value of 0, an average value of 1.5905, and a standard deviation value of 3.8994, meaning that the standard deviation is higher than the mean indicating the width of data variation (outlier height), and certification ownership is still not evenly distributed in the companies studied, namely there is a gap in certification ownership.

Dimension/Indicator Validity Test

In table 5, the first validity test is to look at the loading factor value. The convergent validity test looks at the loading factor value produced by each indicator.

Table 5. Validity Test/Outer Loading

Variable	Indicator	Outer Loading	Result
Financial Performance (FIP)	FIP1	0.757	Valid
	FIP2	0.818	Valid
	FIP3	0.843	Valid
	FIP4	0.803	Valid
	FIP5	0.833	Valid
	FIP6	0.865	Valid
	FIP7	0.846	Valid
	FIP8	0.823	Valid
Environment Performance (EVP)	WAS	0.933	Valid
	ENV	0.940	Valid
Green Intellectual Capital (GIC)	GHC	0.928	Valid
	GRC	0.931	Valid
	GSC	0.957	Valid
Enterprise Risk Management (ERM)	AKU	0.834	Valid
	INT	0.867	Valid
	PRE	0.869	Valid
	MON	0.921	Valid
	INT	0.901	Valid
	EXT	0.902	Valid
CSR	CSR1	0.904	Valid
	CSR2	0.951	Valid
	CSR3	0.810	Valid
	CSR4	0.932	Valid

Source: Processed data, 2023

The test results in table 5 show that the loading factor value data for each indicator from the model shows results with values greater than 0.05, so it can be concluded that the research model has met convergent validity. Then the construct reliability and validity tests were carried out.

Table 6. Construct reliability and validity test

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Corporate Social Responsibility	0,922	0,938	0,945	0,811
Enterprise Risk Management	0,926	0,930	0,944	0,772
Environmental Performance	0,860	0,862	0,934	0,877
Financial Performance	0,932	0,935	0,944	0,679
Green Intellectual Capital	0,933	0,933	0,957	0,881

Source: Processed data, 2023

Results of construct reliability and validity model testing table 6. Cronbach's alpha, Composite reliability (rho_a), and Composite reliability (rho_c) show results above 0.7 for all variables, which means they are reliable, and the Average Variance Extracted (AVE) value meets the rule of thumbs, namely; providing results above 0.5, this means that the model is valid and the criteria for all variables have been met.

Multicollinearity Test

Table 7. Multicollinearity Test Results

No	Variable	Collinearity Statistic VIF	Information
1	GIC => EVP	1.829	No multicollinearity
	GIC => FIP	3.527	No multicollinearity
2	ERM => EVP	4.275	No multicollinearity
	ERM => FIP	4.324	No multicollinearity
3	CSR => EVP	3.629	No multicollinearity
	CSR => FIP	3.630	No multicollinearity
4	EVP => FIP	3.204	No multicollinearity
5	SIZ => FIP	1.101	No multicollinearity
6	AGE => FIP	1.137	No multicollinearity
7	CER => FIP	1.073	No multicollinearity

Source: SMART PLS Output version 4, 2023

From table 7, it can be explained that all independent variables against the dependent variable have a tolerance value below 1 and the VIF value is far below 10, which means that there are no problems in the tested model and it is free from multicollinearity.

R Square Test (R^2)

Table 8. R Square Test (R^2)

Variable	R-square	R-square adjusted
Environmental Performance	0,688	0,669
Financial Performance	0,603	0,574

Source: Processed data, 2023

R Square (R^2) test or coefficient of determination in table 8 shows that FIP, EVP is greater than 0.5, meaning that the independent variable in the empirical model of this research can explain (strength of relationship) the dependent variable well. The results of the R Square value range from 0 to 1, with the value getting closer to 1 meaning the better. A good R Square value is more than 0.5. The results of the R Square (R^2) test for environmental performance are 0.688 (68.8%) and financial performance is 0.603 (60.3). While the adjusted R-square (R^2) for environmental performance is 0.669, meaning that the GIC, ERM, and CSR variables influence environmental performance by 66.9% and the rest is influenced by other factors. And financial performance is 0.574, meaning that the environmental performance, GIC, ERM, and CSR variables influence financial performance by 57.4% and the rest is influenced by other factors outside the research variables.

SEM Analysis

Table 9. SEM Analysis

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values (1-tailed)
Age -> Environmental Performance	0,079	0,082	0,068	1,169	0,121
Age -> Financial Performance	(0,016)	(0,016)	0,074	0,215	0,415
Certification -> Environmental Performance	0,094	0,097	0,049	1,921	0,027
Certification -> Financial Performance	(0,007)	(0,010)	0,040	0,172	0,432
Corporate Social Responsibility -> Environmental Performance	0,012	0,014	0,153	0,080	0,468
Corporate Social Responsibility -> Financial Performance	(0,216)	(0,230)	0,122	1,773	0,038
Enterprise Risk Management -> Environmental Performance	0,124	0,095	0,164	0,756	0,225
Enterprise Risk Management -> Financial Performance	0,304	0,305	0,124	2,446	0,007
Environmental Performance -> Financial Performance	0,215	0,242	0,157	1,368	0,086
Green Intellectual Capital -> Environmental Performance	0,728	0,756	0,099	7,347	0,000
Green Intellectual Capital -> Financial Performance	0,486	0,470	0,156	3,110	0,001
Size -> Environmental Performance	(0,039)	(0,039)	0,062	0,621	0,267
Size -> Financial Performance	0,083	0,084	0,058	1,429	0,077

EVP: Environmental Performance; FIP: Financial Performance; GIC; Green Intellectual Capital; SIZ: Firm Size; AGE: Firm Age; CER: Firm Certification. *, **, *** are significant on 10%, 5%, and 1%

Structural Equation Model

The results of the determination coefficient (R2) calculation can be seen in table 6 above.

$$EVP = 7.347GIC + 0.756ERM + 0.080CSR$$

$$FIP = 3.110GIC + 2.446ERM + 0.038CSR + 1.368EVP + 1.429SIZ + 0.215AGE + 0.172CER$$

Hypothesis Test Discussion

The results of testing the influence of green intellectual capital on environmental performance provide a positive and significant direction, so the first hypothesis stating that green intellectual capital has a positive influence on environmental performance is accepted.

The results of testing the influence of enterprise risk management on environmental performance provide a positive and insignificant direction, so the second hypothesis stating that enterprise risk management has a positive influence on environmental performance is rejected.

The results of testing the influence of corporate social responsibility on environmental performance provide a positive and insignificant direction on environmental performance. significant direction, so the third hypothesis stating that corporate social responsibility has a positive impact on environmental performance is rejected. The results of testing the influence of green intellectual capital on financial performance provide a positive and significant direction, so the fourth hypothesis stating that green intellectual capital has a positive impact on financial performance is accepted.

The results of testing the influence of enterprise risk management on financial performance provide a positive and significant direction partially. So, the fifth hypothesis stating that enterprise risk management has a positive impact on financial performance is accepted.

The results of testing the influence of corporate social responsibility on financial performance provide a negative and significant direction at 10%, so the sixth hypothesis stating that corporate social responsibility has a positive influence on financial performance is rejected.

The results of testing the influence of environmental performance on financial performance provide a positive and significant direction at 10%, so the seventh hypothesis stating that environmental performance has a positive influence on financial performance is accepted.

Mediation Test

The mediation test is conducted to see whether the mediating variables are able to mediate the influence between variables.

Table 10. Mediation Test

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values (1-tailed)
Age -> Environmental Performance -> Financial Performance	0,017	0,020	0,024	0,710	0,239
Certification -> Environmental Performance -> Financial Performance	0,020	0,022	0,019	1,043	0,148
Corporate Social Responsibility -> Environmental Performance -> Financial Performance	0,003	0,006	0,045	0,058	0,477
Enterprise Risk Management -> Environmental Performance -> Financial Performance	0,027	0,025	0,048	0,550	0,291
Green Intellectual Capital -> Environmental Performance -> Financial Performance	0,157	0,181	0,120	1,309	0,095
Size -> Environmental Performance -> Financial Performance	(0,008)	(0,006)	0,017	0,487	0,313

Source: Processed data, One Tailed, 2023

Based on the results of the mediation test, the environmental performance variable (intervening variable) mediates the effect of green intellectual capital on financial performance by 10% alpha, resulting in an accepted evaluation. This means that good green intellectual capital practices supported by good environmental performance will improve financial performance. Meanwhile, environmental performance (intervening variable) cannot mediate the effect of enterprise risk management and corporate social responsibility on financial performance resulting in a rejected evaluation, meaning that enterprise risk management and corporate social responsibility practices in this study cannot be mediated by environmental performance (intervening variable) on financial performance.

Discussion

The Effect of Green Intellectual Capital on Environmental Performance

The results of the study show that green intellectual capital has a positive and significant effect on environmental performance. Changes in green intellectual capital have a unidirectional and significant effect on environmental performance, where green intellectual capital has a strong influence on environmental performance. In line with the results of this study (Nisar et al., 2021), (Kung, Cheng-Li Huang, 2011), and (Yadiati, 2019). This study is not in line with the findings of the study (Chandra & Augustine, 2019), where the green intellectual capital index has a negative and insignificant effect on non-financial performance.

The implementation of green intellectual capital strategies and concepts that holistically include green human capital, green capital structure, and green relationship capital based on resource base will be able to increase the Company's competitiveness. Where the impact on environmental performance is obtained through process innovation strategies (Zulkifli et al., 2023), waste reduction and increased recycling processes, maintaining compliance with regulations, and creating added value for stakeholders including economic, social, and environmental aspects.

The Effect of Enterprise Risk Management on Environmental Performance

The results of the study show that enterprise risk management has a positive and insignificant effect on environmental performance. Changes in enterprise risk management have a unidirectional and insignificant effect on environmental performance, where the implementation of good enterprise risk management does not have a significant effect on environmental performance. In contrast to this study, (Candy, 2021) found that enterprise risk management (ERM) has a positive and significant effect on bank non-financial performance. In (COSO and WBCSD, 2018) COSO-ERM ESG-related risks where ERM identifies and assesses risks for potential business impacts on business strategies and objectives (COSO and WBCSD, 2018). Likewise, it is not in line with (Shah et al., 2024),

(Pambudi Raharjo & Hasnawati, 2022), where enterprise risk management (ERM) has a positive and significant effect on environmental performance. The implementation and strategy of enterprise risk management that have not had a significant impact on environmental performance can be explained that the implementation and strategy of ERM have not been carried out optimally related to the identification of environmental risks such as pollution and waste processing, mitigation of negative impacts of business operations have not been optimal, lack of green innovation strategies, and compliance with regulations, especially related to sustainability indicators. This means that the implementation and strategy of ERM have not touched on aspects of environmental performance assessment related to reducing the negative impact of the company's business operations on environmental aspects. It is necessary to formulate a re-planning and implement a more comprehensive enterprise risk management strategy related to better risk identification, integration of sustainability concepts into strategy, reduction of negative impacts, increasing compliance with regulations, and strengthening green innovation, so that it has an impact on the company's environmental reputation. Companies must ensure that ERM is not only implemented at a strategic level, but also integrated into the company's daily operations. The role of leaders who are accommodating to ERM is needed, so that ERM governance programs can really run well in addition to minimizing agency costs.

The Influence of Corporate Social Responsibility on Environmental Performance

The results of the study indicate that corporate social responsibility (CSR) has a positive and insignificant effect on environmental performance. Changes in corporate social responsibility have a unidirectional effect but do not significantly affect environmental performance, where good corporate social responsibility management does not have a significant effect on environmental performance. In contrast to this study, the findings (Chakroun et al., 2020) show that CSR disclosure has a positive and significant impact with GCG proxies, namely; workforce conditions, environment, and community involvement. The corporate social responsibility variable has a positive and significant effect on the environmental performance variable (Channa et al., 2021). However, this study is in line with the findings where the CSR variable has a positive and insignificant effect on environmental performance in the study (Kraus et al., 2020).

The implementation and strategy of corporate social responsibility (CSR) in order to have a more optimal impact, it is necessary to implement an adaptive CSR implementation and design strategy based on local wisdom. The CSR program that is implemented is truly integrated through an approach to economic, social, and environmental aspects and adapts to the conditions of the local community. The impact of the CSR program must be able to increase the economic, social, and environmental added value of stakeholders as a whole. In addition, it is necessary to make changes in the implementation of charity-based CSR to sustainability-based CSR, so that the CSR program implemented has a long-term impact on the sustainability of the company from the triple bottom line approach, namely; profit, planet, and people.

The Influence of Green Intellectual Capital on Financial Performance

The results of the study show that green intellectual capital has a positive and significant influence on financial performance. Changes in green intellectual capital have a unidirectional and significant influence on financial performance, where good green intellectual capital has an influence on financial performance. In line with this study, the green intellectual capital index variable has a positive and significant effect on the company's financial performance in the studies (Chandra & Augustine, 2019), (Erinos & Yurniwati, 2018), and (Chaudhry et al., 2016).

The implementation of a green intellectual capital strategy is a long-term investment by the company in intellectual capital that is oriented towards sustainability. GIC, which includes green human capital, green structural capital, and green relational capital, not only supports the achievement of environmental goals but also has a significant impact on the company's financial aspects. The impact of implementing a green intellectual capital strategy will be able to increase operational efficiency, increase product and service innovation, improve regulatory compliance, build stakeholder reputation and trust and as a result will increase easier and cheaper access to funding.

The Effect of Enterprise Risk Management on Financial Performance

The results of the study show that enterprise risk management has a positive and significant effect on financial performance. Changes in enterprise risk management have a unidirectional and significant effect on financial performance, where the implementation of good enterprise risk management has a significant effect on financial performance. In line with this study, (Munfaida et al., 2020) found that enterprise risk management has a positive and significant impact on company performance (Munfaida et al., 2020), (Supriyadi et al., 2020), and (Ping & Muthuveloo, 2017). However, this study has different results from the findings showing that ERM practices were unable to create added value for the company in the study (Trianaputri et al., 2020).

Implementing a good enterprise risk management strategy is the key to managing risk proactively and strategically, and supporting the achievement of organizational goals. Optimizing ERM strategy through a holistic approach by identifying, assessing, mitigating, and monitoring various risks that can affect the company's operations, strategy, and sustainability. In addition, commitment from leadership (tone at the top), integration of ERM into the company's strategy, comprehensive risk identification, systematic risk assessment, effective risk mitigation, consistent risk monitoring and evaluation, and utilization of technology that supports ERM strategy will be able to improve the company's financial performance in the long term.

The Influence of Corporate Social Responsibility on Financial Performance

The results of the study indicate that corporate social responsibility has a negative and significant effect on financial performance. Changes in corporate social responsibility have an opposite and significant effect on financial performance, where good corporate social responsibility management has an opposite and significant effect on financial performance. This study is in line with the results of research (Y. C. Chen et al., 2018), (Dewi, 2016), (Suaidah et al., 2020), and (Rusmaningsih & Setiadi, 2021). However, this study has different results from research where the social responsibility disclosure variable has a positive and significant effect on corporate financial performance in research (Purbosanjoyo, 2018), and (Erinos & Yurniwati, 2018). Improper and costly implementation and strategy of corporate social responsibility (CSR), and does not refer to economic, social, and environmental aspects, is one of the reasons why CSR programs do not have a positive and significant impact on financial performance. CSR programs are needed that focus and are integrated with more strategic aspects including economic, social, and environmental aspects of the local wisdom of the local community. Program adaptation is needed with the aim that the added value generated has an impact on the local wisdom owned and controlled by the community involved in the CSR program. In addition, a transition is needed from charity-based CSR to sustainability-based CSR, so that the CSR programs implemented have an impact on the sustainability of the company, community, and customers in the long term

The Effect of Environmental Performance on Financial Performance

The results of the study show that environmental performance has a positive and significant effect on financial performance. Changes in environmental performance have a unidirectional and significant effect on financial performance, where good environmental performance management has an effect on financial performance. In line with this study, research (Hidayat & Safitri, 2020) shows that environmental performance has a positive and significant effect on CFP (Corporate Financial Performance). Likewise in the research (Suaidah et al., 2020), (Rusmaningsih & Setiadi, 2021). However, the results are different where the environmental performance variable has a positive and insignificant effect on financial performance in the research (Hanif et al., 2020), and (Purbosanjoyo, 2018). The finding that environmental performance has a positive and significant effect on financial performance shows that sustainability strategies provide added value to companies. By integrating environmental initiatives into business operations and strategies, companies can achieve operational efficiency, improve reputation, and open up new market opportunities, while providing significant financial benefits. Sustainability is no longer an additional option, but an important element of long-term business success in supporting the positive trend of long-term financial performance. Increasing consumer awareness of the concept of sustainability including economic, social, and environmental aspects requires companies to make comprehensive adaptations in developing sustainable businesses. Strategic policies that can be implemented include; investment in green technology, periodic measurement and reporting of environmental performance, increasing innovation of environmentally friendly products and services, and collaboration with other stakeholders including government, investors, and local communities to achieve broader sustainability goals.

Company size (SIZE) has a positive and insignificant effect on environmental performance with the original negative sample meaning in the opposite direction and a positive and significant effect on financial performance with the original positive sample meaning in the same direction. It can be explained that the larger the company size, the negative but not strong environmental performance will be. Meanwhile, company size (SIZE) has a positive and significant effect on financial performance, meaning that company size (SIZE) increases the company's financial performance. This shows that the contribution of employee productivity is high and has good intellectual capital, so that it has an impact on positive financial performance in the companies studied.

Firm age has a positive and insignificant effect on environmental performance and financial performance, but with the original sample (0) negative on financial performance, meaning that the higher the Firm age, the positive but not strong impact on environmental performance. While the age of the company has a positive and insignificant effect but in the opposite direction to financial performance, meaning that the age of the company has a negative impact on financial performance. It is possible that the high operational costs of old company assets, thus affecting the financial performance of the companies studied.

The results of this study indicate that ownership of company certification (CER) has a positive and significant effect on environmental performance and a positive and insignificant effect on financial performance. Company. This means that the more certifications a company has, the better it will be on environmental performance because green governance and green behavior from ownership of certification have a positive effect on the company's environmental performance. While ownership of certification has an opposite effect on financial performance. It is possible that ownership of certification incurs short-term costs that cause operational costs of ownership of certification to the company's financial performance.

5.0 CONCLUSION

Conclusion

From this study, it can be concluded that: 1) Green intellectual capital has a positive and significant effect on environmental performance, so the hypothesis is accepted. 2) Enterprise risk management has a positive and insignificant effect on environmental performance, so the hypothesis is rejected. 3) Corporate social responsibility has a positive and insignificant effect on environmental performance, so the hypothesis is rejected. 4) Green intellectual capital has a positive and significant effect on financial performance, so the hypothesis is accepted 5) Enterprise risk management has a positive and significant effect on financial performance, so the hypothesis is accepted. 6) Corporate social responsibility has a negative and significant effect on financial performance, so the hypothesis is rejected. 7) Environmental performance has a positive and significant effect on financial performance, so the hypothesis is accepted. The limitations of the study are that the study only uses three variables, namely green intellectual capital, enterprise risk management and corporate social responsibility in the primary consumer goods sub-sector (consumer non-cyclicals) listed on the Indonesia Stock Exchange (IDX) in 2022. For future research, it is necessary to use other variables or modify variables that are important issues for investors and stakeholders, so that they can provide information for positive issues and signals that have an impact on the interest of domestic and foreign investors to increase investment in the capital market both in the short and long term. The study also used a sample limited to only 106 companies and the 2016-2022 consumer non-cyclicals period consisting of 112 companies and 105 companies returned questionnaires.

Implication

The implications of the research are; that technological advances are changing the competitive landscape in the global business world. Environmental, social, and governance issues are practices that must be of concern to stakeholders. The government, investors, employees, and customers have a common interest that sustainability issues become a common goal through strong cooperation. Collaboration across stakeholders is needed, so that common goals, namely; profit, people, and planet in business operations can run smoothly and harmoniously towards the environment and society.

Recommendation

Recommendations from the research results are; the government as a regulator must begin to increase attention, that environmental, social, and governance (ESG) issues are of concern to stakeholders. The role of the government is very strategic and crucial in building regulations and an adaptive business environment and supporting issues that are entry barriers for the business world, especially for companies that will go international. The government policy maker must currently support the implementation of the triple bottom line concept, namely profit, people, and planet by issuing policies that are synchronous and support the implementation of the triple bottom line concept in companies that go public.

Future Research

Future research needs to add variables and indicators related to new issues that are of interest to investors, stakeholders, creditors, customers, and the general public, in order to provide a positive signal for company performance such as; artificial intelligence (AI) proxies, environment and social, green-based R&D, green-based digital technology innovation, and green-based governance.

References

Agyabeng-Mensah, Y., Afum, E., & Ahenkorah, E. (2020). Exploring financial performance and green logistics management practices: Examining the mediating influences of market, environmental and social performances. Journal of Cleaner Production, 258. https://doi.org/10.1016/j.jclepro.2020.120613

Anandamaya. (2020). Pengaruh Good Corporate Governance dan Ukuran Perusahaan. Konferensi Ilmiah Akuntansi, 1–13.

Anwar, R. S. H. dan S. M. (2019). STRUCTURAL EQUATION MODELING (SEM) BERBASIS VARIAN: Konsep Dasar dan Aplikasi dengan Program SmartPLS 3.2.8 dalam Riset Bisnis.

Aprianingsih, A., & Yushita, A. N. (2016). Pengaruh Penerapan Good Corporate Governance, Struktur Kepemilikan, Dan Ukuran Perusahaan Terhadap Kinerja Keuangan Perusahaan. Jurnal Profita, 4(5), 1–16.

Aryati, T. (2014). PENGARUH KINERJA PERUSAHAAN TERHADAP CORPORATE GOVERNANCE REPORTING DENGAN VARIABEL MODERATING CEO TENURE. MEDIA EKONOMI DAN MANAJEMEN Vol. 29 No. 1 Januari 2014, Universitas Trisakti, Jakarta, 29(1).

Baumann, S., Lehner, O. M., & Losbichler, H. (2015). A push-and-pull factor model for environmental management accounting: a contingency perspective. Journal of Sustainable Finance and Investment, 5(3), 155–177. https://doi.org/10.1080/20430795.2015.1100036

Bento, R. F., Mertins, L., & White, L. F. (2018). Risk management and internal control: A study of management accounting practice. Advances in Management Accounting, 30, 1–25. https://doi.org/10.1108/S1474-787120180000030002

Bujang, M. A., Sa'at, N., & Sidik, T. M. I. T. A. B. (2017). Determination of Minimum Sample Size Requirement for Multiple Linear Regression and Analysis of Covariance Based on Experimental and Non-experimental Studies. Epidemiology Biostatistics and Public Health, 14(3), e12117-1-e12117-9. https://doi.org/10.2427/12117

Candy. (2021). Best Practice of Enterprise Risk Management: the Impact on Rurals' Bank Performance. 2021(2), 231–237.

Çankaya, S. Y., & Sezen, B. (2019). Effects of green supply chain management practices on sustainability performance. Journal of Manufacturing Technology Management, 30(1), 98–121. https://doi.org/10.1108/JMTM-03-2018-0099

Carroll, A. B. (2016). Carroll's pyramid of CSR: taking another look. International Journal of Corporate Social Responsibility, 1–8. https://doi.org/10.1186/s40991-016-0004-6

Chakroun, S., Salhi, B., Ben Amar, A., & Jarboui, A. (2020). The impact of ISO 26000 social responsibility standard adoption on firm financial performance: Evidence from France. Management Research Review, 43(5), 545–571. https://doi.org/10.1108/MRR-02-2019-0054

Chandra, M., & Augustine, Y. (2019). Pengaruh Green Intellectual Capital Index Dan Pengungkapan Keberlanjutan Terhadap Kinerja Keuangan Dan Non Keuangan Perusahaan Dengan Transparansi Sebagai Variabel Moderasi. Jurnal Magister Akuntansi Trisakti, 6(1), 45. https://doi.org/10.25105/jmat.v6i1.5066

Chandra, T., Renaldo, N., Chandra, S., & Ng, M. (2024). Blue Management Accounting: Water Footprint, Cost, Efficiency, and Internal Control at WKP Corporation Headquarters. Journal of Environmental Accounting and Management, 12(2), 185–200. https://doi.org/10.5890/JEAM.2024.06.006

Chandra, T., Renaldo, N., & Putra, L. C. (2018). Stock Market Reaction towards SPECT Events using CAPM Adjusted Return. Opción, Año 34(Especial No.15), 338–374.

Chang, C. H., & Chen, Y. S. (2012). The determinants of green intellectual capital. Management Decision, 50(1), 74–94. https://doi.org/10.1108/00251741211194886

Channa, N. A., Hussain, T., Casali, G. L., Dakhan, S. A., & Aisha, R. (2021). Promoting environmental performance through corporate social responsibility in controversial industry sectors. Environmental Science and Pollution Research, 28(18), 23273–23286. https://doi.org/10.1007/s11356-020-12326-2

Chaudhry, N. I., Bilal, A., Awan, M. U., & ... (2016). The role of environmental consciousness, green intellectual capital management and competitive advantage on financial performance of the firms: an evidence …. In Journal of Quality and …. researchgate.net. https://www.researchgate.net/profile/Adil-Bilal/publication/313887870_The_Role_of_Environmental_Consciousness_Green_Intellectual_Capital_Management_and_Competitive_Advantage_on_Financial_Performance_of_the_Firms_An_Evidence_from_Manufacturing_Sector_of_Pa

Chen, Y. C., Hung, M., & Wang, Y. (2018). The effect of mandatory CSR disclosure on firm profitability and social externalities: Evidence from China. Journal of Accounting and Economics, 65(1), 169–190. https://doi.org/10.1016/j.jacceco.2017.11.009

Chen, Y., Hung, M., & Wang, Y. (2018). The effect of mandatory CSR disclosure on firm profitability and social externalities: Evidence from China. Journal of Accounting and Economics, 65(1), 169–190. https://doi.org/10.1016/j.jacceco.2017.11.009

Chen, Y. S. (2008). The positive effect of green intellectual capital on competitive advantages of firms. Journal of Business Ethics, 77(3), 271–286. https://doi.org/10.1007/s10551-006-9349-1

Christine A. Mallin. (2019). Governance, Corporate (SIXTH EDIT). Great Clarendon Street, Oxford, OX2 6DP, 3 United Kingdom.

COSO and WBCSD. (2018). Enterprise risk management: Applying enterprise risk management to environmental, social and governance-related risks. Enterprise Risk Management: Applying Enterprise Risk Management to Environmental, Social and Governance-Related Risks, 300–317. https://www.coso.org/Documents/COSO-WBCSD-ESGERM-Guidance-Full.pdf

Darma Riswan, & Lidya Martha. (2024). Pengaruh Struktur Modal, Likuiditas, Ukuran Perusahaan, dan Umur Perusahaan Terhadap Kinerja Keuangan pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2018-2022. Jurnal Pemimpin Bisnis Inovatif, 1(4), 20–38. https://doi.org/10.61132/jpbi.v1i4.297

Desmawardani, D. A., & Syafruddin, M. (2020). Penilaian Penerapan Tata Kelola Perusahaan Di Indonesia Dan Pengaruhnya Terhadap Kinerja Keuangan. Diponegoro Journal of Accounting, 9(2), 1–12.

Devina Stella Nabighah. (2020). THE INFLUENCE OF CORPORATE SOCIAL RESPONSIBILITY (CSR), PROFITABILITY, AND FIRM SIZE ON FIRM VALUE (A STUDY ON JAKARTA ISLAMIC INDEX IN THE PERIOD OF 2014-2018) Devina Stella Nabighah Faculty of Economics and Business, Universitas Brawijaya Supervis.

Dewi, K. (2016). EFFECT OF CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE ON FINANCIAL PERFORMANCE. 7(August), 149–155. https://doi.org/10.21512/bbr.v7i2.1687

Elkington, J. (1994). Towards the Sustainable Corporation: Win-win-win business strategies for sustainable development. Towards the Sustainable Corporation.

Elkington, J. (2013). Enter the triple bottom line. The Triple Bottom Line: Does It All Add Up, 1(1986), 1–16. https://doi.org/10.4324/9781849773348

Erinos, N. R., & Yurniwati, Y. (2018). Green intellectual capital and financial performance of corporate manufacture in Indonesia. 1ST PICEEBA 2018. http://piceeba.fe.unp.ac.id/index.php/piceeba1/1st/paper/view/163

Fahy, J., & Smithee, A. (1999). Strategic Marketing and the Resource Based View of the Firm. Academy of Marketing Science Review, 10.

Firmansyah, A. (2017). Pengaruh green intellectual capital dan manajemen lingkungan organisasi terhadap green organizational identity dan dampaknya terhadap green competitive …. Substansi: Sumber Artikel Akuntansi Auditing …. https://jurnal.pknstan.ac.id/index.php/SUBS/article/view/215

Gemilang, M. R. (2023). GOOD CORPORATE GOVERNANCE, STRUKTUR MODAL, LEVERAGE, DAN UKURAN PERUSAHAAN TERHADAP KINERJA KEUANGAN. Jurnal Akuntansi Dan Bisnis, 9(1), 529–542. https://doi.org/10.47686/jab.v9i1.592

Ginting, D. B. (2009). Structural Equation Model (SEM). Media Informatika, 8(3), 121–134. https://doi.org/10.3109/9781439822463.209

Hair, J. F., Hult, G. T., Ringle, C., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) - Joseph F. Hair, Jr., G. Tomas M. Hult, Christian Ringle, Marko Sarstedt. In Sage.

Hanif, A., Fitriyah, H., & Febriansah, R. E. (2020). Peran Environmental Performance Terhadap Kinerja Perusahaan Dengan Corporate Social Responsibility Sebagai Variabel Mediasi. JIAFE (Jurnal Ilmiah Akuntansi Fakultas Ekonomi), 6(2), Inpress. https://doi.org/10.34204/jiafe.v6i2.2264

Hidayat, M., & Safitri, D. A. (2020). Pengaruh Lingkungan terhadap Kinerja Perusahaan melalui Implementasi CSR seagai Variabel Intervening. Jurnal Mirai Managemnt, 5(1), 2597–4084.

IFRS.org. (2021). IFRS Foundation announces International Sustainability Standards Board, consolidation with CDSB and VRF, and publication of prototype disclosure requirements. News and Events. https://www.ifrs.org/news-and-events/news/2021/11/ifrs-foundation-announces-issb-consolidation-with-cdsb-vrf-publication-of-prototypes/

Imam Ghozali. (2014). Partial Least Squares: Konsep, Teknik, Dan Aplikasi Menggunakan Program SmartPLS 3.0. Universitas Diponegoro: Semarang.

ISO, & OECD. (2017). Practical overview of the linkages between ISO 26000:2010, Guidance on social responsibility, and OECD Guidelines for Multinational Enterprises. Swedish Standards Institute ABNT, 76.

Jihadi, M., Vilantika, E., Hashemi, S. M., Arifin, Z., Bachtiar, Y., & Sholichah, F. (2021). The Effect of Liquidity, Leverage, and Profitability on Firm Value: Empirical Evidence from Indonesia. Journal of Asian Finance, Economics and Business, 8(3), 423–431. https://doi.org/10.13106/jafeb.2021.vol8.no3.0423

Junaedi, A. T., Renaldo, N., Yovita, I., Veronica, K., & Jahrizal. (2024). Digital Culture Revolution in Improving Firm Performance in Indonesia. Journal of System and Management Sciences, 14(1), 452–470. https://doi.org/10.33168/JSMS.2024.0126

Kompas.com. (2021). Bumi Makin Panas Suhu Naik1,5 Derajat Celsius Dalam Setahun? Climate Change. https://www.kompas.com/sains/read/2021/05/31/110200923/bumi-makin-panas-suhu-naik-1-5-derajat-celsius-dalam-setahun?page=all

Kraus, S., Rehman, S. U., & García, F. J. S. (2020). Corporate social responsibility and environmental performance: The mediating role of environmental strategy and green innovation. Technological Forecasting and Social Change, 160(August), 120262. https://doi.org/10.1016/j.techfore.2020.120262

Kung, Cheng-Li Huang, and F.-H. (2011). Environmental consciousness and intellectual capital management Evidence from Taiwan's manufacturing industry. Management Decision Vol. 49 No. 9, 2011 Pp. 1405-1425, 34(1), 1–5.

Lind, D. A., Marchal, W. G., & Wathen, S. A. (2018). Statistical Techniques in Business & Economics. In Economics (Seventeent). McGraw-Hill Education.

Munfaida, L., Amin, M. Al, & Magelang, U. M. (2020). Pengaruh Enterprise Risk Management Terhadap Kinerja Perusahaan Dimoderasi oleh Struktur Dewan Komite . 481–494.

Nisar, Q. A., Haider, S., Ali, F., Jamshed, S., Ryu, K., & ... (2021). Green human resource management practices and environmental performance in Malaysian green hotels: The role of green intellectual capital and pro-environmental …. Journal of Cleaner …. https://www.sciencedirect.com/science/article/pii/S0959652621017236

Nur Amalia, A. (2021). Pengaruh Ukuran Perusahaan, Leverage Dan Struktur Modal Terhadap Kinerja Keuangan. Jurnal Ilmu Dan Riset Manajemen, 10(5), 1–17.

Omar, M. K., Yusoff, Y. M., & Zaman, M. D. K. (2017). The role of green intellectual capital on business sustainability. In World Appl. Sci. J.

Pambudi Raharjo, T., & Hasnawati, H. (2022). The Influence of Company Strategy, Enterprise Risk Management, Company Size and Leverage On Environmental Performance. Devotion : Journal of Research and Community Service, 3(12), 1989–2001. https://doi.org/10.36418/dev.v3i12.246

Ping, T. A., & Muthuveloo, R. (2017). The Impact of Enterprise Risk Management on Firm Performance : Evidence from Malaysia. 11(22), 149–159. https://doi.org/10.5539/ass.v11n22p149

Purbosanjoyo, P. (2018). Effect of Corporate Social Responsibility Disclosure on Financial Performance. Asian Journal of Finance & Accounting, 10(1), 40. https://doi.org/10.5296/ajfa.v10i1.12592

Rahman, S., Fadrul, Suyono, Setyawan, O., Junaedi, A. T., & Renaldo, N. (2025). Digital competitive advantages of MSMEs and the antecedents factor (digital creativity and digital culture). Journal of Open Innovation: Technology, Market, and Complexity, 11(3). https://doi.org/10.1016/j.joitmc.2025.100585

Ren, S., Tang, G., & Jackson, S. E. (2020). Effects of Green HRM and CEO ethical leadership on organizations' environmental performance. International Journal of Manpower, 42(6), 961–983. https://doi.org/10.1108/IJM-09-2019-0414

Renaldo, N., Suhardjo, Putri, I. Y., Sevendy, T., & Juventia, J. (2021). Penilaian Harga Saham Berbasis Web pada Perusahaan Sektor Aneka Industri Tahun 2020. Kurs: Jurnal Akuntansi, Kewirausahaan Dan Bisnis, 6(1), 91–102.

Renaldo, N., & Murwaningsari, E. (2023). Does Gender Diversity Moderate the Determinant of Future Firm Value? Review of Economics and Finance, 21, 680–689. https://doi.org/https://doi.org/10.55365/1923.x2023.21.72

Rusmaningsih, R., & Setiadi, I. (2021). PENGARUH KINERJA LINGKUNGAN TERHADAP CORPORATE FINANCIAL PERFORMANCE DENGAN CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE. 19(1), 25–40.

SCCE, & HCCA. (2020). Compliance Risk Management: Applying the COSO ERM Framework. Coso, 48. x

Setijawan, I. (2012). SERTIFIKASI ISO 9000 DAN KINERJA KEUANGAN PERUSAHAAN. 29–44.

Shah, S. Q. A., Lai, F. W., Shad, M. K., Hamad, S., & Ellili, N. O. D. (2024). Exploring the effect of enterprise risk management for ESG risks towards green growth. International Journal of Productivity and Performance Management. https://doi.org/10.1108/IJPPM-10-2023-0582

Smriti, N., & Das, N. (2018). The impact of intellectual capital on firm performance: a study of Indian firms listed in COSPI. Journal of Intellectual Capital, 19(5), 935–964. https://doi.org/10.1108/JIC-11-2017-0156

Suaidah, Y. M., Ayuprilia, C., & Putri, K. (2020). Pengaruh Kinerja Lingkungan Dan Corporate Social Responsibility Terhadap Kinerja Keuangan Perusahaan. 3(2), 101–109.

Supriyadi, A., Akuntansi, M., Universitas, B., Soedirman, J., Setyorini, C. T., & Soedirman, U. J. (2020). Pengaruh Pengungkapan Manajemen Risiko Terhadap Nilai Perusahaan Melalui Kinerja Keuangan Di Industri Perbankan Indonesia. 4, 467–484.

Suyono, Suhardjo, Renaldo, N., Sudarno, & Sari, S. F. (2021). Faktor-faktor yang mempengaruhi Corporate Social Responsibility dan Nilai Perusahaan. Procuratio: Jurnal Ilmiah Manajemen, 9(1), 88–100.

Thiagarajan, A., & Sekkizhar, J. (2017). The Impact of Green Intellectual Capital on Integrated Sustainability Performance in the Indian Auto-component Industry. Journal of Contemporary …. http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=09739785&AN=130659876&h=DVQnVeX3MyR5vV0e2zYhyN7e6s4E5YT8h66foFYKHjZ6xsN22Xvdl5sDwUltzJ2VvR8JtJE5NVYjU0NzWALRGA%3D%3D&crl=c

Trianaputri, A. R., Primadyan, M., Sitorus, S. M., & Pirenne, F. (2020). Strategi bisnis, enterprise risk management , dan kinerja organisasi. 1(2), 115–125. https://doi.org/http://dx.doi.org/10.19166/jpa.v1i2.2774

UU_PT_40_Tahun. (2007). UNDANG-UNDANG REPUBLIK INDONESIA NOMOR 40 TAHUN 2007 TENTANG PERSEROAN TERBATAS. UU PT No. 40 Tahun 2007.

Wernerfelt, B. (1984). A Resource Based View of the Firm. Strategic Management Journal 5(2):, 171–180.

Yadiati, W. (2019). The role of green intellectual capital and organizational reputation in influencing environmental performance. In 670216917. zbw.eu. http://www.zbw.eu/econis-archiv/bitstream/11159/4743/1/1736853643.pdf

Younis, H., & Sundarakani, B. (2020). The impact of firm size, firm age and environmental management certification on the relationship between green supply chain practices and corporate performance. Benchmarking, 27(1), 319–346. https://doi.org/10.1108/BIJ-11-2018-0363

Zulkifli, Z., Purwati, A. A., Renaldo, N., Hamzah, Z., & Hamzah, M. L. (2023). Employee performance of Sharia Bank in Indonesia : The mediation of organizational innovation and knowledge sharing. Cogent Business & Management, 10(3), 1–25. https://doi.org/10.1080/23311975.2023.2273609