FINANCIAL PERFORMANCE AS AN INTERMEDIATE VARIABLE IN DETERMINING CORPORATE SUSTAINABILITY PERFORMANCE: A COMPANY GOVERNANCE IMPLICATION

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Abstract

In the pursuit of sustainability, companies strive for a delicate balance between delivering quality products and services and maintaining enduring harmony in the social and environmental realms. Companies have responsibility for the positive and negative impacts on economic, social, and environmental aspects (Elkington, 1997). Acknowledging their dual role in shaping economic, social, and environmental impacts, companies grapple with complexities. This study aims to scrutinize the influence of innovation, environmental uncertainty on financial performance, the impact of financial performance on corporate sustainability, and the influence of innovation, environmental uncertainty on corporate sustainability. Utilizing a quantitative approach and focusing on companies listed on the Indonesia Stock Exchange (IDX) with the SRI-KEHATI index from 2009 to 2022, the research, with a sample size of 29 companies, employs partial least squares structural equation modeling (PLS-SEM). The findings reveal the positive effects of innovation on financial performance, environmental uncertainty on financial performance, and financial performance on corporate sustainability. Additionally, the study unveils the direct influence of innovation and environmental uncertainty on corporate sustainability, with financial performance acting as a mediating variable. These results hold practical implications for corporations, academics, and policymakers, given the heightened emphasis on sustainability in today's landscape.

Keywords: Corporate Innovation, Environmental Uncertainty, Financial Performance, Corporate Sustainability Performance

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1. INTRODUCTION

The shift paradigm from business to sustainability has become the need of the future. Increasing environmental and social concerns as well as governance risks challenge companies to create business opportunities that support a sustainable economy. Sustainability is an effort by companies to not only provide quality products and services but also support long-term social and environmental balance. Furthermore, businesses face pressure to comply with sustainability from internal and external stakeholders (Wilkinson et al., 2001). Improving the efficiency of the company by lowering operational costs and improving the company's competitive position are the reasons why companies address sustainability issues (Adams et al., 2010). The concept of sustainability itself is rooted in the concept of sustainable development where achieving development growth requires a balance in the economic, environmental, and social dimensions (profit-planet-people) or the triple bottom line (TBL).

Companies must be responsible for their positive and negative impacts on economic, social and environmental aspects (Elkington, 1997). If these three aspects are carried out properly, the company can produce sustainable performance so that the company will continue to grow sustainably (Dainiene & Dagiliene, 2015). In other words, sustainable performance is achieved when companies are not only concerned with profit but also pay attention to society (people) and the environment (planet). This is supported by Svenson and Wagner (2011) who state that business sustainability is the total effort of the company to reduce the impact on the life of the earth and ecosystems and that sustainable companies will only occur by recognizing environmental and social issues and incorporating them into strategic planning (Aras & Crowther, 2008).

The concept of sustainability can be associated with corporate sustainability performance, financial performance, environmental uncertainty, and innovation. Previous studies have addressed the relationship of the above issues. Regarding financial performance, innovation, and uncertainty have mixed results in their impact on financial performance. Investment in research and development (R&D) has a significant effect on financial performance in terms of profitability and risk (Lantz & Sahut, 2005), but the study of Casta et al. (2007) shows that R&D costs have a negative impact on operating income. Environmental uncertainty has a negative impact on corporate financial performance (Singh, 2019; Cadeaux & Ng, 2012) and environmental uncertainty has no significant effect on profitability fluctuations (Pourali et al., 2019). Related to corporate sustainability performance, innovation contributes to a company's sustainability performance (Shahzad et al., 2020), however, uncertainty can hinder corporate sustainability performance (Jia & Li, 2020). Related to corporate sustainability performance, if financial performance does not improve due to high corporate sustainability performance, then this is not an incentive for companies to invest in sustainability efforts in the future (Jha & Rangarajan, 2020), but some studies show no relationship between financial performance and corporate sustainability performance (Nilipour & Nilipour, 2012).

In addition, the company cannot escape problems and challenges. Sometimes, problems and challenges do not come at just one moment but can come alternately, for a long time and there is a tendency that a company is unable to overcome and face conditions and cannot even adapt to these changes. In the business world, fluctuations are a common thing experienced by companies, this occurs due to several factors including: 1) changes in government policy, 2) political uncertainty, 3) global market volatility/global market fluctuations, 4) economic or political events, 5) pandemic situations, such as the COVID-19 pandemic through its impact on the global and domestic economy, domestic economic conditions: an economic slowdown or experiencing inflationary pressure, etc. As is the case in Indonesia, especially on the Indonesia Stock Exchange (IDX), based on data from the IDX, in the last four years or more precisely 2018–2021, the Indonesia Composite Index (ICI) or IDX Composite shows a quiet fluctuating trend. For example, in 2018, the ICI 2018 was considered to be one of the worst even though it strengthened 0.06% to the level of 6,194.50. Furthermore, in 2019, the IDX closed at 6,299.54 or minus 0.47%. In 2020, IDX closed at 5,979.07 or down 0.95%. In contrast to the end of 2021, the IDX showed positive performance by rising 10.08% to reach 6,581.5 (RHB Sekuritas Indonesia, 2023). Various factors influence the rise and fall of the IDX in the Indonesian capital market, starting from company fundamentals, perceptions of market players, and government policies, to macroeconomic indicators: 1) economic growth, 2) inflation, 3) per capita income, 4) stock trading volume, 5) exchange rates, and 6) interest rates. Various methods are taken so that the company can continue to operate and generate sustainable profits.

Based on the above discussion, this study seeks to answer the following research questions:

RQ1: Does company innovation have an effect on financial performance?

RQ2: Does environmental uncertainty affect financial performance?

RQ3: Does financial performance influence the company's sustainability performance?

RQ4: Does innovation affect the company's sustainability performance?

RQ5: Does environmental uncertainty affect a company's sustainability performance?

RQ6: Do innovation, environmental uncertainty, and the mediating role of financial performance influence the company's sustainability performance?

This study examines the impact of innovation and environmental uncertainty on corporate sustainability performance with financial performance as an intervening variable. The basis of this research is the lack of related research between environmental uncertainty and corporate sustainability performance, there has been no research on environmental uncertainty and innovation with the mediating of corporate financial performance, and different research findings. Therefore, further research is needed to examine empirically. The novelty value of this research is that it has not been found empirically the effect of innovation and environmental uncertainty on corporate sustainability performance through the mediating role of financial performance.

This study adopts the following structure. Section 2 introduces the literature review and hypothesis development. Section 3 describes the research methodology. Section 4 and Section 5 present the results and discussion of the study, respectively. Section 6 provides a research conclusion.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Innovation, environmental uncertainty, financial performance, and corporate sustainability

Innovation is the creation, development, and application of new products, processes, or services to increase efficiency, effectiveness, or competitive advantage to sustain the company. Innovation is a research, development, or engineering activity aimed at developing practical applications of new scientific values and contexts, or new ways to apply existing science and technology to products or production processes. Maier et al. (2020) state that innovation is not only the path for organizations to succeed in the business environment but also an important condition for maintaining companies in a highly competitive market. Firms are faced with changes in customer preferences regarding products or services as well as the opportunities offered by these changes, trying to create innovative ideas that will produce new products that are in line with customer preferences to make the improvement of the firm's performance stable (Kafetzopoulos et al., 2020; Turulja & Bajgoric, 2019). Innovation is aimed at improving the firm's performance in the long term (Yin & Sheng 2019). Innovation can influence sustainability because innovative companies are more flexible and therefore better able to adopt corporate sustainability practices (Forcadell et al., 2019). However, innovation needs a large amount of money and carries a high risk because uncertainty revolves around the entire innovation process (Chatterjee & Bhattacharjee, 2021).

Uncertainty can be interpreted as a situation with limited knowledge so that it cannot accurately describe the current and future conditions so companies must adapt to the uncertainty in the company's environment. Environmental uncertainty begins from the lack of access to adequate information during the decision-making process and the inability of management to anticipate (Darvishmotevali et al., 2020). In addition, Barnard (1938) argues that organizational survival depends on the manager's ability to maintain a balance with the external environment where environmental instability can be a factor that creates uncertainty. Therefore, organizations must be able to deal with this environmental uncertainty to survive in their environment (Subkhi & Jauhar, 2013).

The company's financial performance is a description of the financial condition of a company analyzed by financial analysis tools. Assessment of the financial performance of a company is one of the ways carried out by management to fulfill its obligations to investors or owners of capital and also to achieve the goals set by the company. Financial performance can be used in a complex and difficult management decision-making process because it involves the effectiveness and efficiency of capital utilization from company activities (Haroon & Zaka, 2023; Nguyen et al., 2023; Debnath et al., 2022; Kostyuk et al., 2011).

The concept of sustainability was introduced in the context of sustainable development. This concept is then interpreted in the context of the company as follows. A sustainable company creates profits for its stakeholders while protecting the environment and improving the lives of the people with whom it interacts (Savit & Weber, 2006, as cited in Cambra-Fierro & Ruiz-Benitez, 2011). Corporate sustainability can be interpreted as adopting business strategies and activities that meet the needs of the company and stakeholders while protecting, sustaining, and enhancing the human and natural resources that will be needed in the future (Searcy, 2011).

2.2. Hypotheses development

2.2.1. The effect of innovation and financial performance

Corporate innovation is an effort to improve the resources that have been owned to improve company performance and assessment of company performance includes financial performance, customers, internal business, and learning and development (Karabulut, 2015). Successful innovation can create additional value for customers. Companies that are able to deliver new products or services that better meet customer needs or provide better solutions are more likely to attract new customers and retain existing customers. This can increase revenue and profits, which in turn affects the company's financial performance. In the long term, successful innovation can help reduce operational costs and improve efficiency, which can lead to better returns. The initial outlay for innovation can be offset by the long-term benefits gained through better financial performance. Previous research shows the relationship between innovation and financial performance. Ndwiga and Maina (2018) found that financial innovation and financial performance are indeed correlated where only process innovation has a significant relationship with financial performance while product innovation does not show a significant relationship. Cherotich et al. (2015) found a strong relationship between financial innovation and financial performance. Mugane and Ondigo (2016) found a negative and significant relationship between product innovation and financial performance, as well as a positive and significant relationship between service innovation and financial performance. Sujud and Hashem (2017) found a significant positive effect of bank innovation on profitability and return on assets (ROA). Investment in R&D has a significant effect on financial performance in terms of profitability and risk (Lantz & Sahut, 2005). In contrast, the study of Casta et al. (2007) shows that R&D costs have a negative impact on operating income.

H1: There is an effect of innovation on financial performance.

2.2.2. The effect of environmental uncertainty on financial performance

To reduce the possibility of uncertainty, investors use a variety of information about company performance and other information such as economic or political. The information obtained from the company is usually based on the company's performance reflected in the financial statements (Sunarto & Kartika, 2003). Singh (2019) found that environmental uncertainty has a negative impact on the company's financial performance. Cadeaux and Ng (2012) found that increasing environmental uncertainty resulted in a decrease in sales volume which affected company performance, this condition resulted in a decrease in company profitability. Bendickson et al. (2018) proved that environmental uncertainty has a negative effect on company performance. However, Pourali et al. (2019) provided conflicting results where environmental uncertainty has no significant effect on profitability fluctuations.

H2: There is an effect of environmental uncertainty on financial performance.

2.2.3. The effect of financial performance on corporate sustainability performance

Companies that have financial performance measured by ROA and return on equity (ROE) in companies in the United States (US) have good sustainability performance (Eccles et al., 2014). If financial performance does not improve due to higher corporate sustainability performance, it may not be an incentive for companies to invest in sustainability efforts going forward (Jha & Rangarajan, 2020). Previous research shows no relationship between financial performance and corporate sustainability performance (Nilipour & Nilipour, 2012). Jha and Rangarajan (2020) found an insignificant or negative impact of corporate financial performance on corporate sustainability performance.

H3: There is an effect of financial performance on corporate sustainability performance.

2.2.4. The effect of innovation on corporate sustainability performance

Economic activities are pressured to lead to sustainable performance, especially in social and environmental aspects. One way to deal with this pressure is innovation. Service innovation performance improves corporate sustainability (Forcadell et al., 2019). However, Khairani et al. (2022) found different findings where green process innovation does not affect company sustainability.

H4: There is an effect of innovation on corporate sustainability performance.

2.2.5. The effect of environmental uncertainty on corporate sustainability performance

Jia and Li (2020) found that uncertainty due to climate change, economic policy, and political instability negatively affects corporate sustainability performance. Runlei et al. (2020) found that perceived environmental uncertainty has a direct positive impact on the application of environmental management accounting (EMA) and corporate sustainability performance.

H5: There is an effect of environmental uncertainty on corporate sustainability performance.

2.2.6. The mediating role of financial performance

Innovation and company sustainable performance

Previous research has been conducted to understand the relationship between innovation, financial performance, and corporate sustainability performance. Innovation theory includes various approaches that explain how innovation can influence performance. Diffusion of innovation theory, that innovation can spread through certain stages in society or organizations. Factors such as the relative advantage, complexity, and compatibility of an innovation can influence the adoption and acceptance of that innovation. R&D activities are part of the activities that play a role in innovation. R&D activities provide opportunities for companies to develop better products and production processes as well as more effective sales innovations. By conducting R&D, companies can utilize the resources they have to innovate which will have an impact on increasing sales and of course, will have an impact on the company's financial performance. Research by Cai et al. (2016) shows that information technology innovation has a positive relationship with the financial performance of technology companies. Research by Geng et al. (2017) concluded that environmentally friendly innovation can improve the financial performance and sustainability performance of manufacturing companies. Research on innovation and financial performance shows that innovation can contribute positively to a company's financial performance. Innovation can increase a company's revenue, profits, operational efficiency, and productivity, which in turn affects financial performance. Innovation can increase a company's competitiveness, attract investor interest, and create long-term growth opportunities, all of which contribute to increasing company value. Research on innovation and corporate sustainability performance, innovation can help companies reduce environmental impacts, adopt sustainable business practices, and develop environmentally friendly products and services. According to the TBL approach, innovation can help companies achieve TBL goals, namely integrating economic growth, social sustainability, and environmental protection.

Environmental uncertainty and company sustainable performance

Studies on environmental uncertainty and the mediating role of financial performance on corporate sustainability performance can be linked to theory and several relevant previous research. In this context, financial performance is considered a factor that links environmental uncertainty with corporate sustainability performance. Good financial performance can help companies overcome environmental uncertainty and ultimately increase the value and sustainability of the company.

The company operates in an uncertain and unpredictable environment, environmental uncertainty that can impact the company as a result of regulatory changes, technological developments, changes in market demand, or other economic and political factors. Companies that are able to overcome environmental uncertainty well will have better financial performance and higher company value and can be a guarantee of sustainability. Lawrence and Lorsch (1967) suggested that organizations must adapt to their uncertain environment to achieve good performance. Agency and signal theory states that financial performance can serve as a signal to external stakeholders, such as investors and creditors, about a company's ability to overcome environmental uncertainty. Good financial performance can increase the value of a company's sustainability performance. Financial performance can be a mediator of environmental uncertainty on company sustainability performance and company value. Environmental uncertainty refers to an organization's inability to predict and understand changes in the external environment. Companies that are able to anticipate change can provide competitive advantages that contribute to company value and sustainability.

3. RESEARCH METHODOLOGY

This research uses a quantitative approach based on positivism. Positivists emphasize the analysis of numerical data, testing research hypotheses, using research instruments, and analyzing them using statistical techniques. This type of research is explanatory research, namely research that explains the influence between variables, using secondary data. This research is aimed at explaining the influence between the analyzed variables and drawing conclusions that are useful for the development of science and used as a method for solving actual problems that occur in the field. This research focuses on testing the influence between variables and their measurement and analysis techniques using statistical procedures for hypothesis testing. This study will measure innovation using the R&D intensity ratio. For firms, R&D intensity is the ratio of a firm's R&D investment to its revenue (percentage of revenue reinvested in R&D). Xu and Zhang (2004) use total assets as the denominator because it reflects innovation better. Environmental uncertainty is measured by sales volatility. Sales volatility is the degree of sales dispersion or the index of dispersion of a firm's sales distribution (Dechow & Dichev, 2002). According to Ghosh and Olsen (2009), environmental uncertainty can be measured by calculating sales volatility. Financial performance variables are measured using the net income margin ratio and debt to asset ratio. According to Le Thi Kim et al. (2021), the company's financial performance is used as a tool to measure the organization's current development and potential growth. Variable corporate sustainability performance is measured using the price-earnings ratio (PER).

This research was conducted on companies listed in the SRI-KEHATI index which is a stock index that measures the share price performance of 25 listed issuers (companies) that have good performance in encouraging sustainable efforts, as well as having awareness of the environment, social, and good corporate governance or called sustainable and responsible investment (SRI). The sample data was taken from the initial period of the creation of the SRI-KEHATI index, namely from June 2009 to May period in 2022 (13 years), totaling 675.

Sampling was carried out using a purposive sampling technique. The sample selection criteria are as follows: 1) companies listed on the IDX during the observation period from 2009 to 2022, 2) companies indexed by SRI-KEHATI during the period 2009–2022, or 27 times the results of the assessment evaluation, 3) companies that have complete financial statement data, annual reports, and during the period 2009–2022, and 4) companies that are routinely indexed by SRI-KEHATI at least 11 times or 40% of the 27 times the results of the evaluation of the SRI-KEHATI index assessment during the period 2009–2022. Data obtained from the annual financial statements of companies listed on the IDX and SRI-KEHATI indexed during the period 2009–2022.

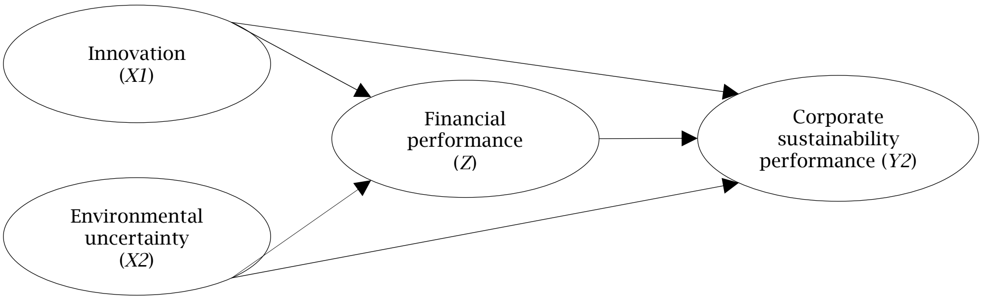
This research uses partial least squares structural equation modeling (PLS-SEM). Model evaluation in PLS-SEM goes through two stages, namely measurement model evaluation and structural model evaluation. Evaluation of the measurement model is carried out to assess the reliability and validity of indicators forming latent constructs. The evaluation of the structural model aims to predict the relationship between variables by seeing how much variance can be explained and to determine the significance of the p-value.

The grand theories underlying this research are agency theory and signaling theory. There are several other theories (middle-range theories) used in this research, such as stakeholder theory for company sustainability performance. Diffusion theory of innovation for innovation. Contingency theory, theories of decision-making, for environmental uncertainty. Agency theory explains the relationship between managers (agents) as parties given responsibility and shareholders (principals) as parties who provide decision-making authority to other people (agents) to control company operations. Signaling theory or signal states that the owner of information provides a signal or signal that reflects the condition of the company which is used as a reference for investors. Signaling theory is an action taken by the management of a company that provides clues to investors about how management views the company's prospects. The basic premise of stakeholder theory is that "any group or individual that can influence or be influenced by the achievement of organizational goals" (Freeman, 1984, p. 46). This can be interpreted as meaning that stakeholders can influence the survival of the company it means the stronger the company's relationship with other external parties, the easier it is to fulfill the company's business goals; conversely the worse the relationship, the more difficult it is. Innovation diffusion theory is a theory that explains how innovation spreads and is accepted in society. This theory explains the process of how innovation develops from certain stages such as introduction, evaluation, adoption, and massive acceptance. Innovation in this theory is defined as a new idea, product, or process that changes the way something is done. This theory considers factors such as the nature of the innovation itself, the nature of the individuals receiving the innovation, and the social and cultural environment that influences the diffusion process. Many organizational theorists provide definitions or views of contingency theory. The basic premise of contingency theory is that adaptation and organizational survival, can be achieved in more than one way. Decision-making theory is a theory about how individuals should behave rationally under risk and uncertainty. This theory suggests that decision-making means the adoption and implementation of rational choices for the management of a private organization, business, or government in an efficient manner.

Innovation is the creation, development, and application of new products, processes, or services to increase efficiency, effectiveness, or competitive advantage in a company's sustainability efforts. Uncertainty is a change in a company's operational activities in a situation of unknown information, including predictions of unknown future events related to the company's sustainability. Financial performance is a measure of how well a company can use assets from business activities and generate income or the overall financial health of the company during a certain period in sustainability efforts. Sustainability performance is the goal of meeting current needs without compromising the ability of future generations to meet their own needs.

The research model explains the influence of innovation on financial performance, the influence of environmental uncertainty on financial performance, the influence of financial performance on corporate sustainability performance, the influence of innovation on corporate sustainability performance, and the influence of environmental uncertainty on corporate sustainability performance, and the influence of innovation, environmental uncertainty with the mediating role of financial performance on corporate sustainability performance.

Figure 1. Theoretical framework



The image above explains the relationship between research variables, which are grouped into exogenous variables, intervening variables, and endogenous variables. This research has two exogenous variables, namely *innovation* (*X1*), and *environmental uncertainty* (*X2*), and one intervening variable, namely *financial performance* (*Z*), and one endogenous variable, namely *corporate sustainability performance* (*Y2*).

4. RESEARCH RESULTS

4.1. Evaluation of measurement models

The results of the outer loading indicators of the research variables can be seen in Table 1.

Table 1. Outer loading

Variable	*Outer loadings*
Debt ratio → Financial performance	0.990
Net income margin ratio → Financial performance	0.805
PER → Corporate sustainability performance	1.000
R&D intensity → Innovation	1.000
Sales volatility → Environmental uncertainty	1.000

The results of outer loading indicators of variable innovation with R&D expenditure indicators, environmental uncertainty with sales volatility indicators, financial performance with net income margin indicators, and corporate sustainability performance with PER indicators ≥ 0.7 meet the validity level requirements. Composite reliability (CR) for innovation, and financial performance, have an acceptable level of reliability. Average variance extracted (AVE) for innovation, and financial performance, meet the requirements of convergent validity. Because the model contains only one formative or single, there are no measurements for CR and AVE, discriminant validity, namely heterotrait-monotrait (HTMT), Fornell-Larcker, and cross loading.

Table 2. Model fit

Index	*Saturated model*	*Estimated model*
Standardized root mean square residual (SRMR)	0.031	0.031
D_ULS	0.021	0.021
D_G	0.005	0.005
Chi-square	9.085	9.124
Normed fit index (NFI)	0.951	0.950

The results of measuring the fit model that the SRMR value < 0.1 to test the fit of the model has a result of 0.031, meaning that the model is accepted. Next is to evaluate the structural model (inner variance inflation factor — VIF).

4.2. Evaluation of structural models

The structural model analysis is seen through the R-square (R^2) value, which is a measure of the proportion of variation in the value of the influenced variable (endogenous) that can be explained by the variables that influence it (exogenous). R-square of *corporate sustainability performance* (0.093), *financial performance* (0.071).

Table 3. R-square

Variables	R^2	R^2 *adj.*
Corporate sustainability performance (Y2)	0.093	0.086
Financial performance (Z)	0.071	0.066

Figure 2 describes the evaluation of the structural model and Table 4 shows the path coefficient results.

Figure 2. Structural model evaluation

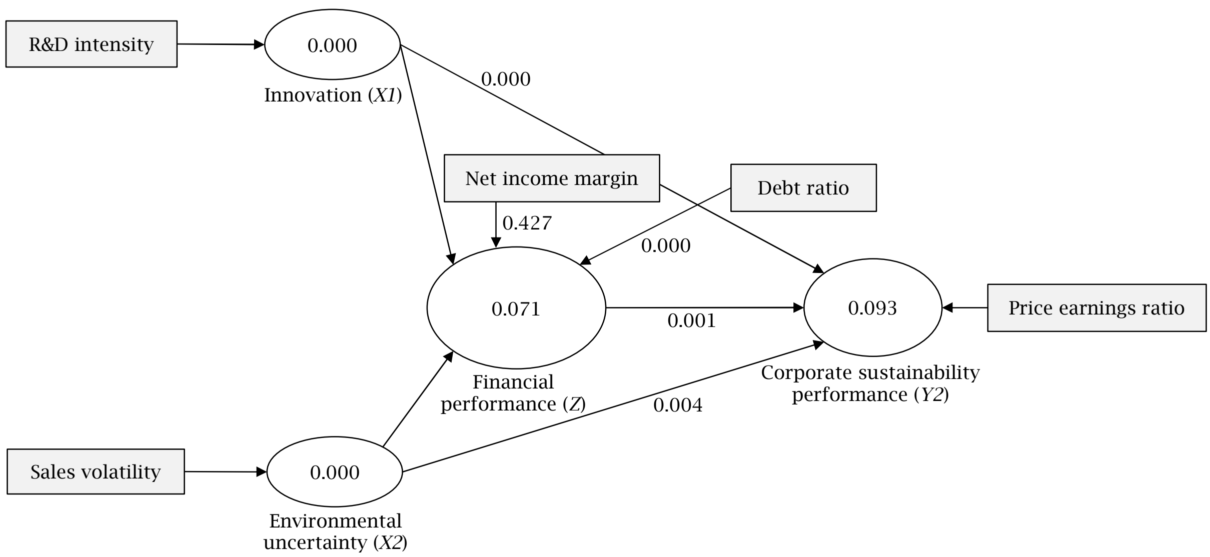


Table 4. Path coefficient results

Variables	*Original sample (O)*	*Sample mean (M)*	*St. dev. (STDEV)*	*t-statistics (|O/STDEV|)*	*p-values*
Innovation (X1) → Corporate sustainability performance (Y2)	0.301	0.301	0.073	4.118	0.000
Innovation (X1) → Financial performance (Z)	0.224	0.224	0.057	3.950	0.000
Environmental uncertainty (X2) → Corporate sustainability performance (Y2)	-0.151	-0.146	0.053	2.848	0.004
Environmental uncertainty (X2) → Financial performance (Z)	-0.288	-0.290	0.068	4.215	0.000
Financial performance (Z) → Corporate sustainability performance (Y2)	-0.216	-0.220	0.065	3.346	0.001

Source: Data processing results.

It can be seen from the table path coefficient result that the path coefficient value of the variable *innovation* (*X1*) → *corporate sustainability performance* (*Y2*) can be seen from the original sample value of 0.301, as well as the p-value of 0.000. The path coefficient value of the *innovation* variable (*X1*) → *financial performance* (*Z*) can be seen from the original sample value of 0.224, and the p-value of 0.000. The path coefficient value of the *environmental uncertainty* variable (*X2*) → *corporate sustainability performance* (*Y2*) can be seen from the original sample value of -0.151, and the p-value of 0.004. The path coefficient value of the *environmental uncertainty* variable (*X2*) → *financial performance* (*Z*) can be seen from the original sample value of -0.288 and the p-value of 0.000. The path coefficient value of the *financial performance* variable (*Z*) → *corporate sustainability performance* (*Y2*) can be seen from the original sample value of -0.216 and the p-value of 0.001.

The next step is to look at the indirect effects according to Table 5 below.

Table 5. Indirect effects

Variables	*Original sample (O)*	*Sample mean (M)*	*St. dev. (STDEV)*	*t-statistics (|O/STDEV|)*	*p-values*
Innovation (X1) → Financial performance (Z) → Corporate sustainability performance (Y2)	-0.048	-0.049	0.019	2.543	0.011
Environmental uncertainty (X2) → Financial performance (Z) → Corporate sustainability performance (Y2)	0.062	0.063	0.023	2.662	0.008

It can be seen from the table indirect effect that the path coefficient value of the variable *innovation* (*X1*) → *financial performance* (*Z*) → *corporate sustainability performance* (*Y2*) can be seen from the original sample value of -0.048, as well as the p-value of 0.011. The path coefficient value of the variable *environmental uncertainty* (*X2*) → *financial performance* (*Z*) → *corporate sustainability performance* (*Y2*) can be seen from the original sample value of 0.062, and the p-value of 0.008. The results of the indirect effect analysis show a significant p-value, indicating that there is strong enough evidence to support the existence of an indirect influence between the variables *innovation* (*X1*) → *financial performance* (*Z*) → *corporate sustainability performance* (*Y2*), and the variables *environmental uncertainty* (*X2*) → *financial performance* (*Z*) → *corporate sustainability performance* (*Y2*).

The results of the indirect influence test prove that the mediating role of financial performance, both innovation and environmental uncertainty, on corporate sustainability performance and company value is quite strong and these results strengthen the existing novelty.

5. DISCUSSION

5.1. The effect of innovation and financial performance

The result of p-values for *H1* is below 0.05 thus innovation influences financial performance. The results of this study also support the research of Cherotich et al. (2015), Mugane and Ondigo (2016), Sujud and Hashem (2017), and Ndwiga and Maina (2018). Innovation should be seen as part of an integrated business strategy and should be guided by the company's long-term business goals and strategies. Therefore, companies should continue to innovate and invest in innovation to ensure financial performance that can help the company gain long-term value by building a strong business legacy and help ensure the sustainability of the company. Innovation can affect the company's financial performance if done properly and implemented properly. Innovation has a significant positive influence on the company's financial performance through revenue growth, cost efficiency, competitiveness, added value, and cash flow. Therefore, companies should invest in innovation and ensure that their innovations are implemented effectively and efficiently to ensure good financial performance.

5.2. The effect of environmental uncertainty on financial performance

H2 states that there is an effect of environmental uncertainty on financial performance and is supported by a p-value of 0.000. The results of this study support the research of Singh (2019), Cadeaux and Ng (2012), and Bendickson et al. (2018). Environmental uncertainty can have a major influence on a company's financial performance, and companies should strive to consider and address these risks in their business planning and actions. Environmental uncertainty can negatively affect a company's financial performance by increasing costs, reducing revenue, and making the company less competitive. This can cause companies to have difficulty in achieving profit targets, reduce revenue, and reduce share value. Although environmental uncertainty can have a negative influence on financial performance, there is also the potential to capitalize on environmental changes to gain an advantage. Fast and innovative companies can take advantage of uncertain situations to increase market share, introduce new products, or expand the customer base. Thus, it is important for companies to ensure that they understand and monitor environmental developments and have effective strategies in place to cope with uncertainty and capitalize on opportunities. However, the results of this study contradict Pourali et al. (2019), where environmental uncertainty has no significant effect on profitability fluctuations. In general, addressing environmental uncertainty and capitalizing on opportunities can help companies improve long-term financial performance.

5.3. The effect of financial performance on corporate sustainability performance

The result of the p-value of *H3* is 0.001, therefore, there is an effect of financial performance on corporate sustainability performance. The results of this study support the research of Eccles et al. (2014) but do not support the research of Nilipour and Nilipour (2012), and Jha and Rangarajan (2020). Financial performance is an important factor affecting the sustainability performance of a company. Good financial performance helps companies manage resources and pursue their goals effectively and efficiently, allows companies to finance environmental and social programs, manage environmental and social risks, and ensure transparency and good reporting. Financial performance plays an important role in ensuring a company's sustainability performance in the long term. Good financial performance can help companies maintain long-term sustainability performance. Financial performance should be seen as one aspect of sustainability performance and should be considered along with social and environmental aspects related to business. Financial performance and corporate sustainability performance have an interrelated relationship, financial performance can influence corporate sustainability performance, and good financial performance can help companies achieve their goals in terms of sustainability and ensure that companies have the resources and capital to operate in a responsible manner and accordance with sustainability standards.

5.4. The effect of innovation on corporate sustainability performance

H4 states that there is an effect of innovation on the company's sustainability performance and is supported by a p-value of 0.000. The results of this study support Forcadell et al. (2019), Khairani et al. (2022), and Lii and Lee (2012). Innovation can help companies improve energy and resource efficiency, strengthen relationships with stakeholders, and help meet environmental demands, all of which can positively affect a company's sustainability performance. Innovation can help a company strengthen its position as a responsible company and promote practices that contribute to sustainability performance. Innovation should be an integral part of a company's sustainability strategy to ensure positive contributions to the environment and society and strengthen social responsibility. That innovation should be implemented wisely and take into account factors such as costs, risks, potential customer acceptance, and social and environmental impacts.

5.5. The effect of environmental uncertainty on corporate sustainability performance

H5 states that there is an effect of environmental uncertainty on corporate sustainability performance. It is also supported by the result of a p-value of 0.004. The results of this study support the research of Setiono and Hartomo (2016), Rubera and Kirca (2017), Anjelina et al. (2019), and Handriani (2020). Environmental uncertainty can have a significant impact on a company's sustainability performance. Environmental uncertainty refers to the uncertainties associated with changes in the physical, social, and regulatory environment that can affect a company's business operations and strategies. While environmental uncertainty brings risks, it can also create opportunities for responsive companies. Companies that can anticipate environmental changes and innovate in developing more sustainable products and services can take advantage of the growing market and improve sustainability performance. Companies that adopt proactive and responsive approaches such as careful environmental monitoring, business strategy adjustments, resource diversification, investment in sustainable technologies, and collaboration with various stakeholders are part of the effort to achieve optimal sustainability performance. Environmental uncertainty can affect a company's sustainability performance through regulatory, reputational, market, resource, and product quality risks. Therefore, companies should take environmental factors into account in their business planning and seek to mitigate environmental risks to maintain or improve sustainability performance.

5.6. The mediating role of financial performance

The results of the indirect effect analysis show a significant p-value, indicating that there is strong enough evidence to support the existence of an indirect influence between these variables. The results of the indirect influence test prove that the mediating role of financial performance from innovation or environmental uncertainty on company sustainability performance is quite strong. Innovations, such as new product development, operational efficiency, or selecting innovative marketing strategies, can increase revenue, reduce costs, or create a competitive advantage for a company. Innovation can also influence a company's sustainability performance through better financial performance. Innovations that focus on aspects of sustainability, such as reducing carbon emissions, energy efficiency, or using more sustainable raw materials, can generate long-term benefits for companies in terms of sustainability performance. Strong financial performance can provide companies with the resources and flexibility necessary to implement sustainability initiatives. Financial performance functions as a mediator variable. This means that the company's financial performance links innovation with company value and the company's sustainability performance. Financial performance can reflect the results of implementing innovation and influence how the company's value is assessed by the market and investors. In addition, financial performance can also influence a company's ability to implement sustainability initiatives and achieve long-term sustainability goals. Environmental uncertainty can create challenges and risks for companies, such as additional costs to comply with new regulations, the risk of unstable supplies of raw materials, or changes in consumer preferences towards more sustainable products and services. This can have an impact on the company's financial performance, which in turn can affect company value. Environmental uncertainty can also affect a company's sustainability performance through financial performance which is influenced by these uncertainty factors. Environmental uncertainty can both support and hinder companies in implementing sustainability initiatives, such as investing in sustainable technology, developing environmentally friendly products, or energy efficiency. This can impact a company's ability to achieve long-term sustainability goals.

6. CONCLUSION

This study investigated the interrelationships of innovation, environmental uncertainty, financial performance, and a company's sustainability performance. The results revealed that Innovation and environmental uncertainty influence financial performance, financial performance influences the company's sustainability performance, and innovation and environmental uncertainty influence the company's sustainability performance both directly and indirectly with the mediating role of financial performance.

The development of new products, more efficient production processes, the use of new technologies, or significant improvements in marketing and distribution strategies have a positive impact on an entity's financial performance by increasing revenue, reducing costs, and creating additional value. Further, any changes in macro (economic, political, social, technological, or environmental factors) and micro (market demand, raw material prices, labor costs, regulatory policies, etc.,) affect a company's operations and financial results. Through innovation, companies can reduce environmental impacts, respond to social and regulatory changes, and create competitive advantages in increasingly sustainable markets. In the meantime, climate change, fluctuations in resource prices, changing regulations, or shifts in consumer preferences towards sustainable products and services. Thus, it is necessary to invest in sustainable business practices to minimize negative impacts on the environment, increase operational efficiency, and meet the demands of consumers who are increasingly concerned about sustainability.

There are multiple implications of this research. These findings will be helpful for academicians to develop new theories and improve their understanding of phenomena related to corporate sustainability performance.

Helps strengthen the position of academics as thinkers and advisors: This research helps academics strengthen their position as thinkers and advisors in the area of corporate sustainability performance.

Improve the quality and relevance of research: This research helps improve the quality and relevance of academic research because it provides better information and understanding of how certain factors influence corporate sustainability performances. This research also enriches the literature on innovation, environmental uncertainty, financial performance, and sustainability performance.

Corporate managers may use this study in strategic planning and decisions: Information obtained from research on a company's sustainability performance helps management make informative and informed strategic planning and decisions on how to improve environmental, social, and governance performance. This helps ensure that the company meets the standards set by the community and helps maintain a good reputation.

Provide feedback on company performance: Corporate sustainability performance research provides feedback on how company performance is received by the market and how companies can improve it.

Helps in meeting industry standards: Research on corporate values and sustainability performance helps company management understand industry standards and ensure that the company meets those standards.

This study provides important information for investment decisions: Research on corporate sustainability performance can provide useful information for investors in making investment decisions. Investors can use this information to understand how factors such as innovation, environmental uncertainty, and financial performance affect a company's sustainability performance it also can help investors make future-oriented investment decisions, and estimate a company's level of commitment to responsible business practices.

This research is not without limitations. As corporate sustainability performance is measured using PER, we may not be sure whether it has exhaustive coverage for corporate sustainability performance factors. This study can be enhanced further by using reputational indices like non-financial performance. This study has only been conducted for companies listed on the IDX and SRI-KEHATI indexed, and can be extended further to have a cross-country comparative study where the results can be compared among the developed and developing economic world. To minimize these limitations, the following recommendations can be implemented by using a more comprehensive methodology that will help understand and evaluate variables thoroughly (innovation, environmental uncertainty, financial performance, and sustainability performance), and can help strengthen the validity of research results. Involving a wider sample will help reflect the general condition of the population.

By paying attention to these recommendations, it is hoped that research on corporate sustainability performance can improve research limitations and produce a more accurate and will provide a more comprehensive picture of company sustainability performance.

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