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The Influence of Company Complexity and Risk Management on Sustainability Performance

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ABSTRACT: This study analyzes company complexity and Risk Management on sustainability performance. The type of research uses quantitative associative. The population in this study are industrial sector companies listed on the IDX for the period 2019-2023. The sampling technique used in this study is purposive sampling, obtained 29 company samples with a five-year period, so that 145 observation data were obtained. Data analysis used in this study uses panel data regression. The results of this study can be seen that simultaneously the company complexity and risk management variables together affect sustainability performance. Partially the Risk Management variable has a positive effect on Sustainability Performance.

KEYWORDS: Company Complexity; Risk Management; Sustainability Performance

INTRODUCTION

Addressing social, environmental, and economic elements is the goal of overall corporate management performance, especially corporate sustainability management (Epstein et al., 2003; Holiawati, 2020). Increasing and significant developments and progress have led to competition in the business world. As a result, regulators and stakeholders increasingly demand companies to demonstrate their performance to maintain and improve corporate value (Hanifah et al., 2019).

The success of a business depends on its long-term sustainability. There are a number of phenomena and issues that hinder the sustainability performance of United Tractors Tbk. The business is experiencing significant changes in the commodity market worldwide, which has an impact on its operational performance and earnings. Financial performance has been affected by the decline in commodity prices, especially in the construction and mining machinery industries. United Tractors Tbk faces environmental issues related to the impact of its operations. In sustainability efforts, issues such as waste management and carbon emissions are critical. United Tractors must adapt and meet higher standards as a result of increasing sustainability and corporate social responsibility (CSR) regulations. This can increase operational costs. The company's business strategy is influenced by changing market demands, especially due to more sustainable business practices. To meet the demands of increasingly environmentally conscious consumers, United Tractors must innovate. Although United Tractors has committed to CSR, there are problems with implementing the program and measuring its impact. Building trust requires community engagement and transparency in CSR reporting. As seen from the latest financial report, the decline in financial performance indicates that the business must find ways to increase profitability while maintaining sustainability (Vahidi Elizaei, A., & Ghaffari, M. 2015).

Company complexity is one of the components that can affect business sustainability performance. According to Rukmana et al. (2017), corporate complexity refers to the complexity of transactions in the company. Transactions in foreign currencies, the number of subsidiaries and branches, and overseas business operations can be sources of this difficulty. The complexity of the organization or operation is the result of the formation of departments and division of work that focuses on a different number of units. Organizations with different types or numbers of jobs and units produce more complex problems (Yuliandari et al., 2017). In this study, complexity is seen from the perspective of a company's business segment. According to research (A.Anggun, 2024), organizational complexity has a negative impact on sustainability performance. This shows how complex businesses can face problems in strategic and operational management. Complicated decision-making processes and excessive bureaucracy can hinder a business's ability to adapt quickly and efficiently to market or environmental changes. Complex companies tend to have more factors and variables to deal with, which can increase risks to the company's operations, finances, and reputation. The company's ability to achieve long-term sustainability goals can be hampered by these risks.

Risk management is an additional component that affects the sustainability performance of this study. Building, protecting, and

enhancing shareholder value is the goal of risk management. In addition, new strategies incorporated into risk management enable businesses to discover and manage risks (Barton et al., 2002). Bertinetti et al. (2013) stated that there is a relationship between the implementation of risk management and company value. Other researchers have found that implementing risk management can improve company performance and performance (Gordon et al., 2009; Holiawati et al., 2020). In order for risk management to be implemented effectively, certain rules must be followed. By implementing better risk management, companies will maintain their core competencies and their competitive advantages. The use of risk management requires good governance, according to Ping and Muthuvelo (2015). How well management manages the risks associated with each business activity determines how well they manage the company's performance. Companies that are able to manage risks and have a strong understanding of them can attract investors (Nocco and Stulz, 2006; Holiawati et al., 2020). Risk management helps achieve organizational goals and protects stakeholders from the negative consequences that can be caused by risks (Susilo and Kaho, 2010). Holiawati et al. (2020) show strong evidence that a company's market performance benefits from risk management. Disclosing risk management is a way to maintain relationships with investors; it can help investors know the risk profile and the actions taken against it. In addition, it can be used as a tool to monitor risks and detect potential problems, allowing investors to address problems before they arise. The results of the study support agency theory: conflicts of interest in agency theory can be reduced by implementing risk management practices. Better risk management practices improve business sustainability and provide investors with confidence that they will receive a return on their invested funds (Holiawati et al., 2020).

LITERATURE REVIEW

The stakeholder concept was first used by Freeman in 1984 to explain corporate behavior and social performance (Ghomi and Leung, 2013). Stakeholder theory emphasizes that considering and managing relationships with various stakeholder groups is essential to achieving long-term success. By understanding the issues and interests of each stakeholder, companies can make better decisions, reduce risks, and create value for all stakeholders. Stakeholder theory of sustainability performance states that stakeholders can influence a company's sustainability performance. If a company can build a good relationship with its stakeholders and meet their needs, it will be easier to gain support and work together to achieve better sustainability performance. Sustainability performance assessments often involve indicators that cover social, environmental, and economic aspects to ensure that all relevant sustainability aspects have been considered. According to Holiawati (2020), consultation and discussion with stakeholders are two of the best ways to obtain this information.

Jensen and Meckling (1976) first created the agency theory, which is considered a theory of the imbalance of interests between agents and principals. This theory provides an explanation of how personal interests and their relationship to business organizations. This theory discusses the relationship between the principal or director and the delegation of control. Therefore, the company has two different interests, each trying to generate the desired profit. As a result, there is an imbalance of information between management and owners, which can allow managers to take advantage of opportunities (Puspitasari et al., 2023). In agency theory, aspects of human behavior are interrelated if managers (agents) and capital owners (principals) are rational parties with their own interests. People who use common sense will definitely maximize profits. According to Triyuwono (2018), agents may not always act in the interests of the principal if both parties to the relationship seek to maximize their utility.

Porter (2010) suggests that the study of complexity theory and complex adaptive systems refers to the conceptual and practical framework for sustainable common interests. According to M. Eisenhardt et al. (2011), complexity theory, also known as "complexity strategy" or "complex adaptive organization", is a concept that discusses complexity systems in the fields of organizational studies and strategic management. According to M. Eisenhardt et al. (2011), modern companies are complex systems in which internal and external factors are interconnected and influence each other. Problems, measurements, and communications often arise as a result of the complexity of corporate sustainability as a collection of interconnected goals.

Many businesses have considered their business sustainability performance, according to Gassing (2016:163). Companies use a sustainability approach to meet the needs of their consumers and employees in the long term. To achieve this goal, companies use a green strategy, which is a business strategy that focuses not only on financial profit, but also on how the company can contribute to the social, cultural, and economic environment. According to Haholongan (2016), environmental performance is a way for businesses to voluntarily incorporate environmental concerns into their operations and interactions with stakeholders. This action goes beyond the company's legal responsibilities. Environmental performance can be measured as a result of the environmental management system, which controls its environmental aspects (Andriana & Panggabean, 2017). According to Kacperczyk (2009) and Holiawati (2020), companies should consider their performance in addition to financial performance. They should also consider their impact on the environment and society. This includes how the business manages natural resources, how it impacts the environment, and how it impacts local communities and the wider community. A company's social and environmental performance can greatly help predict a company's long-term performance and sustainability. Companies that are able to manage environmental and social issues well tend to achieve better sustainability and generate value for stakeholders in the long term. Financial performance shows how a company's finances are performing over a period of time. However, sustainability and future results require social and environmental considerations.

Holiawati (2020) said that assessing business sustainability means evaluating the social and environmental impacts of a company's profitability. Business performance assesses the trade-offs that must be made and requires comprehensive data on the relationships and impacts of different functional decisions on business profits. Company management must understand how the company's products, services, processes, and activities affect relevant stakeholders and the internal and external environment. This helps make better decisions to manage social and environmental impacts. Corporate performance that covers all aspects of the company and aims to achieve long-term sustainability is part of sustainability performance. Sustainability performance includes the company's ultimate goal of achieving conformity and compliance with established standards in managing social and environmental impacts and to achieve long-term goals to achieve sustainability. (Schaltegger et al, 2006; Holiawati, 2020).

Rukmana et al. (2017) said that the complexity of the company refers to the complexity of transactions that occur within a company. It is possible that this is caused by transactions in foreign currencies, many subsidiaries, branches of the company, and business operations abroad. The main factor that auditors must consider before conducting an audit is the complexity of the company's structure and transactions. The more complex the company's structure and transactions, the more complex and in-depth the audit that the auditor must conduct to ensure that the company's financial statements are accurate and reliable. One form of growth that can cause increased company complexity is establishing subsidiaries. Companies can operate in various locations and businesses, but establishing subsidiaries also makes it difficult to coordinate and manage the activities and decisions of each subsidiary (Rukmana et al., 2017).

Triyanti, D. I. (2019) said that the complexity of a company can be seen from various aspects, one of which is the business segment. A business segment is a part or operational unit in a company that has different features and business activities. Companies that have many business segments and operate in various industries or sectors will be more complex. Some factors that can cause a company to become complicated in terms of business segments include:

- 1. Business Diversification: A broad and diverse business portfolio may have multiple business segments. This may include different industries or types of services.
- 2. Subsidiaries and Branches: Many subsidiaries and branches of a company may have many different business segments and operate in different locations.
- 3. Global Business: A company that operates worldwide may have different business segments in different countries or regions, which can increase the complexity of the business.
- 4. Acquisitions and Mergers: Acquisitions or mergers of a company with another company may result in additional business segments that must be incorporated into the corporate structure.
- 5. Diverse Products and Services: A business can have multiple business segments if it has a wide variety of products and services. Companies with multiple, complex segments must carefully manage and monitor each segment to operate efficiently and effectively. Management must consider the specific characteristics of each segment and how they contribute to the company's overall performance and objectives when making strategic decisions and allocating resources. They must also consider the use of information technology and sound management systems.

Risk is the possibility that something will cause you to lose something. Risk management, on the other hand, is a set of techniques and methods used to identify, measure, monitor, and control risks arising from all business operations. In terms of governance, the board of directors is responsible for setting strategic risk objectives and ensuring that operational risk management is implemented at the managerial level. In addition, top management and the board of directors have the responsibility to carry out risk management as part of their duties. According to Financial Services Authority Regulation No. 18/POJK.03/2016, commercial banks must implement risk management. Lately, enterprise risk management (ERM) has become an interesting subject of discussion. This is related to the increasing level of uncertainty caused by the global and local economic situation. Investors want a high rate of return and the security of their funds. According to Muthohirin et al. (2012), the business environment affects the implementation of ERM. According to agency theory, the ERM mechanism is used to ensure that funds deposited by the owner will not be at risk in the future. The existence of ERM means that agents have guidelines in carrying out company operations in the future so that ERM optimization can influence the improvement of the company's financial performance (Hanafi: 2010) in (Linda Agustina, 2016).

The purpose of risk management is to create, protect, and enhance shareholder value. Risk management is a new approach for companies to identify and manage risks (Barton et al., 2002). According to Bertinetti et al. (2013), there is a relationship between firm value and the implementation of risk management. Other researchers have found that the implementation of risk management affects firm performance and can improve performance (Gordon et al., 2009; Hoyt & Liebenberg, 2009; COSO, 2004; Nocco & Stulz, 2006; Bartonet et al., 2002; Stulz, 1996; Ping & muthuvelo, 2015). Companies must ensure that the implementation of risk management goes hand in hand with the implementation of good governance. By implementing good risk management, they will add risk control to their core competencies and their advantages over their competitors. The relationship between risk management and governance will be stronger, which will have an impact on business survival (Drew and Kendrick, 2005).

RESEARCH METHOD

This study conducted associative quantitative research, which involves hypothesis testing. The data used came from the financial and annual reports of industrial sector companies listed on the Indonesia Stock Exchange (IDX). In addition, literature related to the research topic, found in print and online media, can be used to obtain secondary data sources. Three variables are used in this study: dependent variable, independent variable, and moderating variable. Sustainability Performance is the dependent variable, and corporate complexity and risk management are independent variables. Corporate governance is the moderating variable.

Sustainability performance

Research conducted by (Holiawati, 2020) uses the Balanced Scorecard (BSC) as a measurement tool for the company's sustainability performance. BSC is a strategic management method consisting of six perspectives covering financial aspects, customers, internal business processes, and learning and growth, as well as two additional perspectives, namely social and environmental perspectives. In the context of BSC, the study measured the company's sustainability performance by assigning scores to 39 indicators relevant to the six perspectives mentioned above. The scores given range from 1 to 3, with 1 representing low performance, 2 representing medium performance, and 3 representing high performance. The formula for calculating SBSC is:

SBSC index = $(\sum di/M) \times 100 \%$(1)

Company Complexity

Company complexity proxied by business segments is a form of business development by expanding the number of business segments and geographic segments, expanding existing market share or developing a variety of diverse products. Measured using the number of operating segments of the company obtained from the annual report data in the segment information section. Company complexity in this study is measured by the number of business segments in a company (Holiawati et al, 2020).

Business Segment: \(\sum \) Number of Company Segments.....(2)

Risk Management

Risk management is one of the tasks of the board and top management to define an integrated and future-oriented risk management concept. In the case of governance, the board is responsible for determining the objectives of the risk strategy and for ensuring that operational risk management is carried out at the managerial level. According to the Financial Services Authority Regulation No. 18/POJK.03/2016 concerning the implementation of risk management for commercial banks. Gordon (2009) measurement. The internal structure and components of the ERM Index (Gordon et al. 2009) and the measurements used (Holiawati, 2020) are as follows:

Risk management

Risk Management Index (RMI) = Σ Strategy + Operations + Reporting + Compliance

 $Strategy\ 1 = Sales - Average\ industrial\ sales / Standard\ deviation\ of\ industrial\ sales$

Strategy $2 = -(Beta\ i - Beta\ i - I) - average\ \Delta$ of the industry beta / Standard deviation Δ industry beta

Operation 1 = Sales / Total Assets

Operation2 = *Sales / Number of employees*

Reporting 1 = auditor's opinion

Reporting 2 = Normal Accrual / Normal accrual + abnormal accrual

Compliance 1 = Tax Expense / Total Profit

Compliance 2 = Company given sanctions by IDX

Risk management in this research only uses one stage, the following measurements are used:

Risk management

Risk Management Index (RMI) = Σ Strategy + Operations + Reporting + Compliance

Strategy 1 = Sales - Average industrial sales / Standard deviation of industrial sales

Operation 1 = Sales / Total Assets

Reporting 1 = auditor's opinion

Compliance 1 = Tax Expense / Total Profit

The type of research data is secondary data obtained from annual reports and financial reports of industrial companies listed on the Indonesia Stock Exchange for the 2019-2023 period which can be accessed through the website www.idx.co.id and the official website of PT. each company. The population in this study were industrial companies listed on the IDX during the 2019-2023 period, namely 60 companies. The sampling method used was the non-probability sampling method with a purposive sampling technique so that 29 companies were obtained using 5 years of observation. This study uses a non-participatory observation method to collect data. This data comes from books, previous research journals, official websites, and annual and longing reports of companies listed on the Indonesia Stock Exchange from 2019 to 2023. All of this information can be accessed through the official website of each company and the identifier www.idx.co. The data analysis technique used in this study begins with descriptive

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statistical analysis which is then continued with classical assumption tests including normality tests, autocorrelation tests, multicollinearity tests, and heteroscedasticity tests. After conducting classical assumption tests, the study continued by conducting determination coefficient tests (R2), model feasibility tests (F tests), and individual significance tests (t tests). The regression equation in this study is formulated as follows.

 $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \dots (4)$

Information:

Y = Sustainability Performance

 α = Constant

 β 1-2 = Regression coefficient X1 = Company Complexity X2 = Risk Management = Error term.

RESULTS

Companies listed on the Indonesia Stock Exchange for the period 2019-2023 were included in this research field with data obtained through the official website of the Indonesia Stock Exchange, especially www.idx.co.id and the official website of each company. To determine the sample, a non-probability sampling method was used combined with a purposive sampling technique, so that the number of samples used in this study was 29 companies for 5 years with a total data of 145.

Table 1. Descriptive Statistical Results

	SP	CC	RM
Mean	3.388833	0.896389	0.640286
Median	2.486950	0.960000	0.692172
Maximum	51.19710	1.000000	2.391200
Minimum	-1.618100	0.400000	-2.956512
Std. Dev.	4.873552	0.140998	0.460459
Skewness	7.361535	-1.636944	-2.986676
Kurtosis	67.51754	5.210073	28.82604
Jarque-Bera	26275.69	93.61656	4215.992
Probability	0.000000	0.000000	0.000000
Sum	487.9919	129.0800	92.20119
Sum Sq. Dev.	3396.466	2.842922	30.31915
Observations	145	145	145

Source: Research Data, 2024

Table 1 shows the results of descriptive statistics with a sample of 27 companies during the period 2018 - 2022. The sampling technique used purposive sampling, the results of the descriptive analysis of the table above show that the amount of data observed is 135 data obtained from 27 companies multiplied by the observation period for 5 years, from 2018 to 2022.

- 1. The sustainability performance variables observed during the research period can be seen from the output results, that the sustainability performance value has the lowest value of -1.618100 while the highest value is 51.19710. The average value (mean) is 3.388833 with a standard deviation of 4.873552. The results of the descriptive analysis based on these values, it can be concluded that sustainability performance can be said to have uneven characteristics, with some entities showing excellent performance, while others may experience significant challenges. This could be an indication that there are certain factors that affect sustainability performance, both positively and negatively.
- 2. The company complexity variables observed during the research period can be seen from the output results, that the company complexity value has the lowest value of 0.400000, while the highest value is 1.000000. The average value (mean) is 0.896389 with a standard deviation of 0.140998. The results of the analysis based on these values, it can be concluded that most companies in this study operate at a high level of complexity. This may reflect factors such as complex organizational structures, many product lines, or complexity in operational processes.
- 3. The Risk Management variables observed during the research period can be seen from the output results, that the Risk Management value has the lowest value of -2.956512, while the highest value is 2.391200. The average value (mean) is 0.640286 with a standard deviation of 0.460459. The results of the descriptive analysis based on these values, it can be concluded that although many companies show good risk management practices, there are also companies that face difficulties in this regard. The lowest negative value may reflect companies that are not only less effective in managing risk, but may also

experience negative impacts from risks that are not managed properly.

After conducting descriptive statistical analysis, a panel data model selection test is then carried out in which data is collected from the same observation unit repeatedly in a certain period of time:

Table 2. Chow Test Results

Redundant Fixed Effects Tests

Equation: Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	5.876733	(28,113)	0.0000

The results of the chow test shown in table 2 above, the Probability Cross-section F value is 0.0000. This shows that the probability value is smaller than the significance level of 0.05, so in the Chow Test the selected model is Fixed Effect, then the next estimation model is the Hausman Test (Ghozali, 2016).

Table 3. Hausman Test Results

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	9.461092	2	0.0088

The results of the Hausman test table above obtained a probability value (Prob.) of cross section random of 0.0088 <0.05. This means that the model selected in this study is the Fixed effect model (FEM). Based on Table 3, it can be concluded that the appropriate model used in estimating the variables of Company Complexity and Risk Management with Sustainability Performance is the Fixed Effect Model. After conducting the model selection test, the next step is to conduct a classical assumption test, the results of which show that the regression model has met the classical assumption test which includes the normality test, autocorrelation test, heteroscedasticity test, and multicollinearity test. In this study, no symptoms of classical assumptions were found. After conducting the classical assumption test, the next step was to conduct a panel data regression analysis test with the common effect model which obtained the following results.

Table 4. Panel Data Regression Analysis Test Results (Fixed Effect)

Dependent Variable: SP

Method: Panel EGLS (Cross-section weights)

Date: 01/06/25 Time: 15:00

Sample: 2019 2023 Periods included: 5 Cross-sections included: 29

Total panel (unbalanced) observations: 145 Linear estimation after one-step weighting matrix

White cross-section standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.290942	0.426127	3.029475	0.0030
CC	1.021758	0.479353	2.131536	0.0352
RM	1.846048	0.111188	16.60301	0.0000
	Effects Spec	ification		

	Weighted Sta	atistics		
R-squared Adjusted R-squared S.E. of regression F-statistic Prob(F-statistic)	0.704968 0.626641 4.672200 9.000326 0.000000	Mean dependent var S.D. dependent var Sum squared resid Durbin-Watson stat	36.65173 40.77396 2466.728 2.031993	
	Unweighted Statistics			
R-squared Sum squared resid	0.176365 2797.448	Mean dependent var Durbin-Watson stat	3.388833 2.876907	

Source: Research Data, 2023

- 1. Based on the results of the regression equation presented in Table 4, the constant value shows the number 1.290942, which means that if the value of the independent variables including company complexity, risk management, and corporate governance is equal to zero, then the relative value of the company is 1.290942 assuming the independent variables are constant.
- 2. The CC regression coefficient value obtained is 1.021758, which is positive, meaning that every increase in CC will increase SP by 1.021758 and vice versa.
- 3. The RM regression coefficient value obtained is 1.846048, which is positive, meaning that every increase in RM will increase SP by 1.846048 and vice versa.

The results of the individual significance test (t-test) presented in Table 5, the regression coefficient of the company complexity variable shows a value of 0.0352 with a p-value of 0.0352 <0.05 and seen from the t-statistic value of 2.131536> 1.65566 so that it can be concluded that company complexity has a positive effect on sustainability performance. Companies with high levels of complexity often have a more diverse portfolio of products or services. This diversification can provide opportunities for innovation and development of more sustainable products, which in turn can improve sustainability performance. Complex companies tend to have more variables and factors to manage, which can increase operational, financial, and reputational risks. These risks can hinder a company's ability to achieve sustainability goals in the long term. These concepts come from the field of business complexity theory. Organizations that are complex and flexible systems have concentrated on finding new ways to innovate or improve their financial efficacy. Companies need to be more flexible by accelerating changes in global demand and interdependence due to complex uncertainties in the global environment and worldwide competitive expectations in terms of innovation, product quality, productivity, customer service, and corporate ethics. Globally active businesses usually have complex supply networks spread across many countries. This can increase the possibility of negative social and environmental impacts in each place. As a result, sustainability management becomes more difficult. (Mubarok, M. H., 2018). Research findings (Agusniwar, I. et al., 2017) show that task complexity has a significant effect on organizational performance. This is because complex work usually requires more variables, aspects, and interactions that require in-depth understanding and analysis. This level of difficulty can hinder the organization's capacity to achieve its goals effectively. The results of this study support the complexity theory, (M. Eisenhardt, et al, 2011) Complexity Theory recognizes that modern companies are complex systems, where internal and external factors are interrelated and influence each other. The complexity of corporate sustainability as a collection of interconnected goals often raises problems, measurement, and communication.

The results of the individual significance test (t-test) presented in Table 5, the regression coefficient of the risk management variable shows a value of 0.0000 with a p-value of 0.0000 <0.05, while when viewed from the t-statistic value of 16.60301> 1.65566, it can be concluded that risk management has a positive effect on sustainability performance. A good risk management process provides better information for decision making. When companies have a clear understanding of the risks they face, they can make more appropriate and strategic decisions related to sustainability initiatives. Companies that can manage risk well and have a strong understanding of risk can attract investors (Nocco and Stulz, 2006; Holiawati et al., 2010). Risk management ensures that organizational goals are achieved and protects stakeholders from the adverse consequences that can be caused by risk (Susilo and Kaho, 2010). (Holiawati et al., 2020) shows clear evidence that risk management has a positive impact on sustainability performance. Risk management is one way to maintain relationships with investors, this can help investors understand their risk profiles and management. Agency theory supports this study. Agency theory states that conflicts of interest can be eliminated by implementing better risk management practices. This practice also improves business sustainability and provides investors with confidence that they will receive a return on the funds they invest (Holiawati et al., 2020).

CONCLUSION

A series of studies show that corporate complexity has a positive effect on sustainability performance, risk management has a positive effect on sustainability performance. Based on the results of the tests that have been carried out, a low adjusted R2 value of 62.66% was obtained, indicating that there are limitations to the independent variables used in explaining the dependent variable and 37.34% of the sustainability performance value can be explained by other variables not included in the research model. For further researchers who will conduct similar research, it is hoped that they can consider expanding the sample and context in further research. Research can include companies from various industrial and geographical sectors to gain a more comprehensive understanding of how the relationship between corporate complexity, risk management, and sustainability performance. For shareholders, the advice given by researchers based on the results of the study is to increase awareness of the importance of good corporate governance in managing corporate complexity and related risks to achieve optimal sustainability performance. Shareholders and regulators must formulate policies that support risk management and sustainability practices in companies. This includes incentives for companies that implement best practices in risk management and sustainability. This can help improve transparency, accountability, and corporate sustainability performance.

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