



Role of Corporate Governance Moderating Effect of Risk Management on Company Performance: Evidence from Manufacturing Companies MM2100 Industrial Estate, Indonesia

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OPEN ACCESS

ARTICLE HISTORY

Received: April 21, 2026

Revised: May 31, 2026

Accepted: June 24, 2026

KEYWORDS

Company Performance;
Contingency Theory
Corporate Governance;
Manufacturing Sector
Risk Management.

ABSTRACT

Purpose – In manufacturing firms situated in the MM2100 industrial region, this study intends to investigate the impact of risk management on business performance as well as the moderating function of corporate governance.

Methods – Partial Least Squares Structural Equation Modeling (PLS-SEM) is the quantitative method used in this investigation. 153 respondents in managerial roles provided the data on manufacturer company on MM2100 Industrial Estate, Indonesia, guaranteeing its applicability to strategic decision-making procedures.

Findings – The findings show that risk management improves company performance but is statistically insignificant. On the other hand, business performance is positively and significantly impacted by corporate governance. Stronger governance systems may lessen the impact of risk management methods on performance outcomes, since corporate governance is also proven to negatively and considerably modify the link between risk management and business performance.

Research Implications – These results imply that corporate governance structures' ability to facilitate flexibility and strategic integration influences risk management's efficacy in addition to its execution. Overly strict governance may make managers less adaptable when implementing risk management plans, as reflected in the significant negative moderating effect (coefficient = -0.393) and the model's explanatory power (Adjusted $R^2 = 0.562$).

Originality – By treating corporate governance as a moderating variable rather than just an independent or mediating factor, this study is unique. It contributes to a more nuanced understanding of the relationship between governance structures and risk management procedures in improving business performance by showing how better governance might lessen the efficacy of risk management.

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To cite this article : Ningrum, E. P., & Yulaeli, T. (2026). Role of Corporate Governance Moderating Effect of Risk Management on Company Performance: Evidence from Manufacturing Companies MM2100 Industrial Estate, Indonesia. Indonesian Journal of Taxation and Accounting, 4(2), 532-550. Doi: <https://doi.org/10.66053/ijota.v4i2.458>

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INTRODUCTION

In recent years, the industrial sector in Indonesia has grown significantly. Investment in the manufacturing sector rose from IDR 215.9 trillion in 2019 to IDR 325.4 trillion in 2021, surpassing the government's objective of IDR 280–290 trillion, according to data from (Ministry of Industry of the Republic of Indonesia, 2022). This increase strengthens the manufacturing sector's contribution to economic growth and worldwide competitiveness while reflecting optimism about the future of the country's industry. greater GDP contribution, employment creation, and greater production capacity are typically correlated with increasing investment. Moreover, a change in company strategy toward modernization, digital transformation, and integration into the global supply chain is also indicated by greater investment.

However, this rapid growth also introduces new challenges related to operational complexity, risk exposure, and sustainability pressures. Many manufacturing firms continue to face difficulties in implementing effective and integrated risk management systems. According to the World Economic Forum (2023), only a limited number of companies in Southeast Asia have adopted proactive and structured risk management practices.. Prior studies have extensively examined the relationship between corporate governance and firm performance, generally finding a positive association (Paniagua *et al.*, 2018; Shu & Chiang, 2020; Bhagat & Bolton, 2019). In addition, several studies have positioned corporate governance as a mediating variable that explains how internal governance mechanisms influence firm outcomes (Uyar *et al.*, 2021; Malikov *et al.*, 2021).

Addressing this gap is important because the effectiveness of risk management is contingent upon the organizational context in which it is implemented. From a theoretical perspective, contingency theory suggests that organizational effectiveness depends on the alignment between managerial practices and contextual factors (Otley, 1980). If environmental contamination is not handled right now, it could lead to the extinction of all living things on Earth. Industrial operations, transportation, trash, agricultural products, power plants, land usage and biogas combustion, fossil fuels, housing, tourism, and other industries are some of the sectors that are still expanding and contributing to the deterioration of the world's environmental quality.

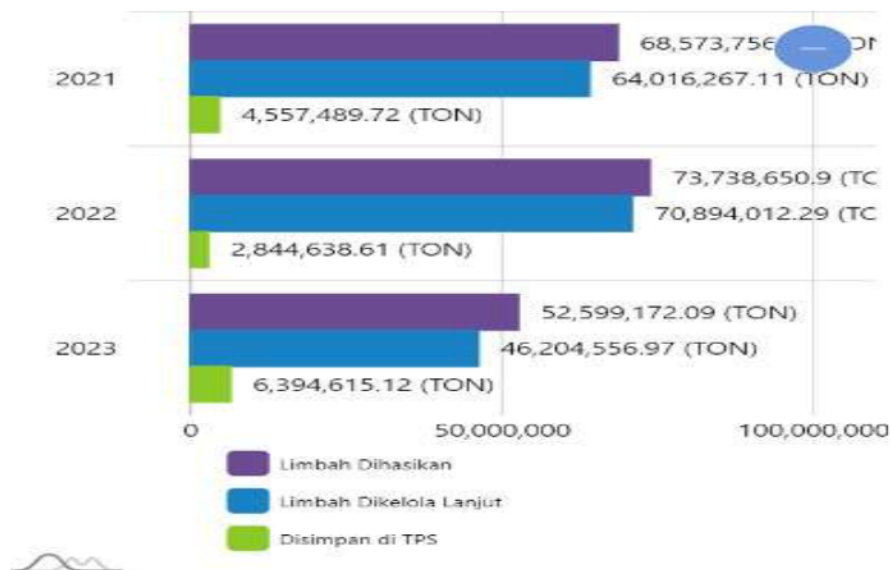


Figure 1. Summary of Hazardous Waste Data

Source: <https://pslb3.menlhk.go.id>

Hazardous waste can contaminate and harm the environment, as seen in Figure 1. Waste that comprises hazardous and poisonous compounds from industrial processes is referred to as hazardous waste. Information was obtained from the waste statistics summary available on the Ministry of Environment and Forestry's (KLHK) Directorate of Waste, Waste Management, and

Hazardous Waste website. Indonesia produced 68 million tons of hazardous garbage in 2021 alone, and that amount rose by almost 24% to 73 million tons in 2022.

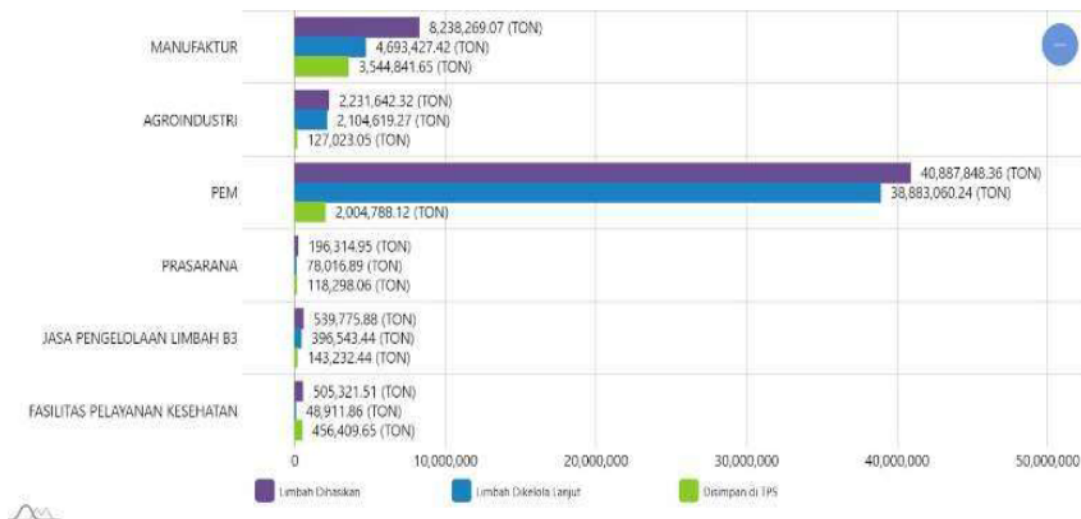


Figure 2. Hazardous Waste Data by Sector

Source: <https://pslb3.menlhk.go.id>

Figure 2 shows that manufacturing enterprises are the second greatest producers of hazardous and toxic waste, after the mining, energy, and mineral industry. In 2023, manufacturing businesses generated 8.2 million tons of harmful and hazardous waste. There is an excessive amount of poisonous and hazardous waste, and not enough is being done to treat it. This could contaminate the air, water, and soil, upsetting already-existing ecosystems. Government Rule No. 22 of 2021 concerning the Enforcement of Environmental Protection and Management is one of the regulations the government has put in place to guarantee environmentally friendly industrial practices. government regulation No. 22 of 2021 governs a number of areas, like Environmental permission: Environmental permission is a requirement for all businesses and activities.

Law Number 11 of 2020 concerning Job Creation is the source of this rule, which supersedes a number of earlier environmental laws. The respiratory and digestive systems of humans may be disrupted by this hazardous waste, which poses a serious threat to human health. Waste management in factories must be done correctly. Implementing an environmental management system is one method of optimizing the waste treatment system (Lestari & Dinata, 2019). In addition to identifying and mitigating risks, effective risk management adds value by safeguarding resources and assisting in strategic decision-making (Frigo & Anderson, 2011). In actuality, though, a lot of businesses still do not incorporate risk management into their corporate strategy. It is widely believed that risk management offers sufficient instruments to reconcile the inherent tension between seizing opportunities and preventing losses, mishaps, and catastrophes (Peljhan & Marc, 2021) (Yan, 2021). The rationale is that supply chain management initiatives are increasingly incorporating risk management, according to Saeidi *et al.* (2021) and Tasmin *et al.* (2020). According to (Peljhan & Marc, 2021), this kind of risk management aims to avoid interruptions, lessen their effect on performance, and hasten the supply chain's return to normal. As a member of the ISO Technical Committee (TC), which includes ISO/TC 262, Risk Management, Indonesia actively participates in the development of standards through its National Standardization Agency (BSN).

The effect of corporate governance on business performance has been the subject of extensive research. Nonetheless, there are still discrepancies among the current research findings. In order to guarantee that managerial procedures are carried out in an accountable, transparent, and responsible manner, good governance is crucial. Strong governance typically results in more strategic decision-making, improved supervision procedures, and reduced conflict of interest. In this situation, the relationship between important variables and business success may be strengthened or weakened by corporate governance acting as a moderating variable. Studies (Paniagua *et al.*, 2018;

Shu & Chiang, 2020) look at the relationship between business financial performance and ownership structure and corporate governance. The findings demonstrate the strong and positive correlation between corporate financial success and corporate governance. The study's primary goal (Uyar *et al.*, 2021) is to look into the connection between the performance of the logistics sector and the quality of corporate governance. A study (Naciti, 2019) investigates whether corporate sustainability performance is impacted by the makeup of the board of directors in corporate governance. A study (Wang *et al.*, 2021) examines how corporate governance affects business success and how cultural background affects business and environmental performance. Global disclosure of Corporate Social Responsibility (CSR).

The findings of research on the connection between internal corporate governance and business performance (Bhagat and Bolton, 2019; Cifti *et al.*, 2019; Hsu & Liao, 2022). The study's findings demonstrate how effective corporate governance can enhance a business's success in terms of trading volume and stock price volatility. Ownership of director shares is the most reliable indicator of future business success. Director share ownership is a crucial component of corporate governance that must be taken into account. Empirical data on the connection between corporate governance, technical efficiency, and financial performance may be found in research (Malikov *et al.*, 2021; Peng *et al.*, 2021). This study (Al-ahdal *et al.*, 2020; Sheikh & Alom, 2021) aims to take a closer look at board practices, corporate governance, and business performance. The regression analysis's findings support the notion that board ownership, board leadership, board size, and company size all significantly impact business performance. Furthermore, the results of the factual investigation demonstrate that board leadership significantly influences business performance.

The goal of the study (Hoang *et al.*, 2021) is to comprehend how environmental performance and transparency might be impacted by corporate governance. Gender diversity among executive leaders and board members showed similar outcomes. Environmental performance is influenced by governance. According to the study's findings (Amin *et al.*, 2022), a company's financial performance is favorably correlated with the number of women in management. The goal of the study (Sandretto *et al.*, 2025) is to ascertain how businesses are affected by good corporate governance (GCG). In Indonesia, the size and educational background of the top management team (TMT) and board of commissioners (CSP) determine Corporate Governance Sustainability Performance (CSP). Economic, social, and environmental sustainability performance are all part of CSP. From 2013 to 2017, 117 data samples were gathered from the annual reports, sustainability reports, and financial reports of non-financial enterprises listed on the Indonesia Stock Exchange (IDX). More than 250 businesses from a variety of industries, including automotive, electronics, food and beverage, and chemicals, are housed at the MM2100 Industrial Estate in Bekasi, one of the biggest and most developed industrial estates in Indonesia.

Addressing this gap is important because the effectiveness of risk management is contingent upon the organizational context in which it is implemented. From a theoretical perspective, contingency theory suggests that organizational effectiveness depends on the alignment between managerial practices and contextual factors. Meanwhile, agency theory emphasizes the role of governance mechanisms in monitoring managerial behavior and reducing conflicts of interest. Integrating these perspectives, corporate governance can be understood as a contextual factor that moderates the relationship between risk management and firm performance. These results add to the body of research by providing a fresh viewpoint on the necessity of implementing corporate governance in an adaptive manner, emphasizing flexibility and value generation in addition to control.

According to contingency theory, a company's contextual circumstances have a significant impact on the efficacy of its management techniques (Otley, 1980). Ability can be attained in the contingency approach if organizational structure and the context of specific factors have a beneficial impact on business performance. According to (Mazaya & Fuad, 2018), risk management disclosure is positively impacted by corporate governance as determined by the percentage of the board of commissioners. Furthermore, prior research has shown that businesses that use diversification techniques are highly complex, necessitating more extensive risk management disclosure.

Risk management has become a crucial component of management control and decision-making. It is widely used in many different industries, including manufacturing, insurance, and economics

(Ritchie & Brindley, 2007). While management refers to planned actions or efforts to control these events, risk refers to unpredictable events, the chance of injury or damage, or other unwanted effects, which can be conveyed through probability. Therefore, risk management can be defined as either a proactive decision-making process that aims to minimize the consequences for subsequent negative events by recognizing potential risks, analyzing them, and planning the appropriate actions for their monitoring and control (Zafeiropoulos *et al.*, 2005; Mabrouki *et al.*, 2014; Zafeiropoulos *et al.*, 2005) or an organized method designed to minimize or reduce the impact of risk (H-F. Wang & Hsu, 2009). Four steps are often involved in process risk management, and they are as follows: 1) identifying risks; 2) evaluating risks; 3) choosing and putting into practice measures to lessen the possibility of risk and lessen its impact if it materializes; and 4) monitoring risks (Hallikas *et al.*, 2004). The literature seems to agree on this general procedure (Tuncel & Alpan, 2010), albeit different researchers have different procedures to take. Each of these four phases has the following objective, according to (Tuncel & Alpan, 2010) The third is the implementation of risk management measures. The same four fundamental concepts for supply chain risk management are also suggested by (Gaonkar & Viswanadham, 2007). (Norman & Jansson, 2004) mention several instances of SC vulnerability, including flooding at the Daimler-Chrysler factory, a fire at a major Toyota supplier factory, a sharp decline in demand at Cisco, and a failure in Nike's future demand modeling. The international standard established by the International Organization for was created with the intention of offering principles and guidelines for managing all types of risk in a methodical, transparent, and trustworthy manner for a scope and context that can be applied to particular functions, tasks, and projects as well as to all organizations, in a variety of fields and levels, at any time.

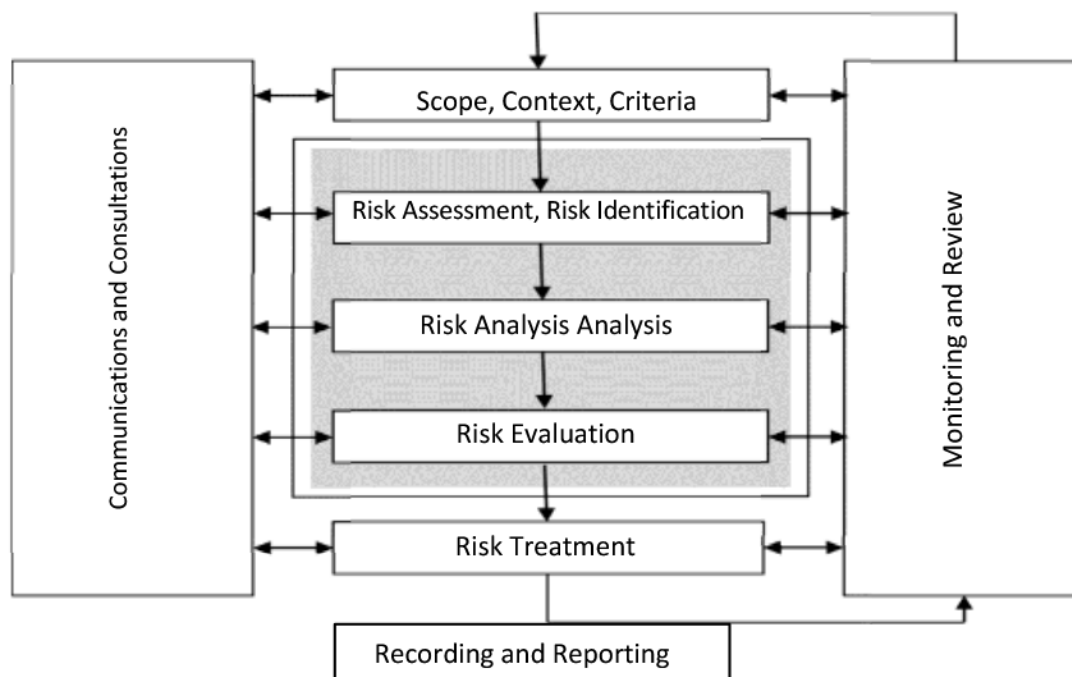


Figure 3. Risk management process proposed by ISO 31000:2009.

Laitinen defines performance as a company's capacity to meet predetermined goals and targets while achieving results in desired dimensions. According to (Flapper *et al.*, 1996), an organization's performance has a significant impact on its success and long-teviability. The goal of performance measurement is to encourage actions that result in ongoing improvements in customer satisfaction, adaptability, and productivity. Offered a more focused definition of performance in the context of product development. The effectiveness of product development initiatives can be evaluated using five parameters pertaining to the advantages realized by (new goods)):

- (1) The standard of the product the quality of what is sold as seen by different stakeholders, its dependability, durability, and capacity to satisfy client expectations.
- (2) Product cost: Production expenses comprise capital equipment purchases and product-related indirect costs.
- (3) Development time: the duration of product development activities (which establishes the speed at which the company reaps financial rewards from these endeavors).
- (4) Development cost: the sum of money spent on creating a new product.
- (5) Development capabilities are an important asset that a business may harness. A business is "a collection of activities undertaken to design, produce, market, deliver, and support its products," according. An integrated organizational performance measurement system "uses performance drivers and outcome measures to align processes with corporate strategy." (Rezaei Ortt, 2018) take into account a company's three primary functional areas (manufacturing, marketing, sales, and research and development), each of which sequentially adds value to the product. The R&D function's primary goals are to create new goods and enhance current production methods (Drongelen & Bilderbek, 1999). In an empirical study, (Sterlacchini, 1999) discovered a substantial correlation between the loss in R&D performance and the decline in the production performance of British businesses between 1973 and 1979. Production capacity is crucial for successful marketing (Ruyter & Wetzels, 2000), while production quality is crucial for increasing sales (Tsui, 1992). Businesses obtain a competitive edge by carrying out strategically significant tasks more effectively or more affordably than their rivals. 2001 The value chain is described as "a systematic way to examine all the activities a company has done and how those activities interact".

(Shleifer & Vishny, 1997) Governance of a company is the process by which investors in a corporation guarantee a return on their capital. Corporate management is also described as "a set of mechanisms by which outside investors protect themselves from takeover by managers and controlling shareholders" by Porta *et al.*, (2002) This definition reflects a limited view of business governance based on shareholder orientation, which serves as the foundation for the agency theory model of managing businesses, in which managers act as agents and shareholders act as principals, distributing risk among entities and creating latent conflicts of interest (Eisenhardt, 1989). The agency method has created a gap in connecting organizational principles and governance through stakeholder involvement because of its emphasis on regulation, control tools, and professional codes of ethics (Young & Thyil, 2009). By defining the practice of corporate governance as "a set of connections among company management, the board of directors, shareholders, and other stakeholders," the creates a model of corporate governance stakeholders that extends beyond the relationship between directors and shareholders. Additionally, the OECD definition aligns with contemporary practices. Corporate governance is defined as "the exercise of power and responsibility over a corporate entity" (Young & Thyil, 2009). The discourse on corporate social responsibility (CSR) is used to refocus corporate governance toward the interests of civil society (Werna *et al.*, 1997).

METHOD

The purpose of this empirical, quantitative study is to investigate how risk management affects business performance and how corporate governance plays a moderating role in this connection. The study employs a cross-sectional design, and primary data is gathered by distributing questionnaires to participants at predetermined intervals. The survey method was selected because it makes it possible to measure managerial opinions on risk management implementation, governance procedures, and business performance at the decision-making level. The study's primary data came from middle management, board members, and deputy directors of manufacturing enterprises situated in sizable industrial estates like the MM 2100 Cibitung Industrial Estate.

The manufacturing firms in the MM2100 industrial park serve as the study's unit of analysis. 153 respondents, including middle management, board members, and representative directors, provided the data. Particularly with regard to risk management, corporate governance, and business performance, each responder reflects the circumstances of the organization in which they are employed. Therefore, study conclusions are drawn at the organizational (business) level even though data was gathered at the individual level.

RESULTS AND DISCUSSION

Data Collection Results

The primary data gathering strategy for this study was a survey, which was part of a quantitative approach. Middle-level managers and functional staff from manufacturing enterprises in Cibitung's MM 2100 Industrial Area were the target group. Because they were thought to have a direct understanding of management, risk implementation, and governance in the workplace, representative directors, board members, and middle management were included in the assessment criteria.

Every questionnaire that was returned was subjected to a validation procedure that included verifying the accuracy of the data, identifying anomalies in the responses, and evaluating the usefulness of the questionnaire in light of pre-established inclusion criteria. As a result, information from 153 respondents was considered suitable for additional examination. A overview of the data collecting outcomes based on the quantity of questionnaires distributed, returned, and utilized in the analysis is shown in Table 1 below

Table 1. Summary of Respondent Data Collection

Description	Number
Questionnaires distributed	153
Questionnaires returned	153
Response rate (%)	100

With this database, the research proceeded to the stage of testing validity, reliability, and structural model analysis to test the established hypotheses.

Respondent Description

Respondent Description Based on Position

This study classifies data according to survey participants' positions as part of the demographic description of respondents. Questionnaires with pertinent demographic information were used to gather this data. The distribution of respondents according to their roles in manufacturing enterprises in the MM 2100 Industrial Estate is shown in Table 2.

Table 2. Distribution of Respondents Based on Position

Position	Number (People)	Percentage
Representative Director	2	1.31
Board Member	45	29.41
Middle Management	106	69.28
Total	153	100

The table's data indicates that most respondents are middle class. management, which consists of 106 individuals (69.28%), 45 board members (29.41%), and 2 board representatives (1.31%).

Outer Model Test (Measurement Model)

In this work, SmartPLS software was employed for the outer model analysis. Before moving on to the structural analysis phase of the process, the outer model assessment was carried out to guarantee construct validity and dependability.

The factor loading values of each indicator on its construct are taken into consideration while testing convergent validity. The standard factor loading values change based on the study's features. The suggested threshold values for these parameters are as follows, based on the literature (Wiyarni & Bunyamin, 2021): 1). Minimum confirmation study threshold of 0.7; 2). Minimum explanatory study threshold of 0.6; 3). Minimum threshold for production studies: 0.5

A factor loading value of ≥ 0.7 is the minimal criterion utilized to assess the validity of indicators because this study is confirmatory in nature. Indicators that satisfy this requirement are regarded as legitimate and competent to accurately depict the build.

Table 3. Convergent Validity Test Results (Outer Loading)

	KP	MR	TK	TK x MR
KP 1	0.889			
KP 2	0.945			
KP 3	0.900			
KP 4	0.863			
KP 5	0.891			
KP 6	0.856			
MR 1		0.841		
MR 2		0.841		
MR 3		0.873		
MR 4		0.860		
MR 5		0.798		
MR 6		0.862		
MR 7		0.854		
TK 1			0.877	
TK 2			0.857	
TK 3			0.844	
TK 4			0.873	
TK 5			0.854	
TK x MR				1.000

Source: Processed data, SmartPLS 2025 (4.0)

According to Table 3, all indicators meet the convergent validity requirements because their outer loading values are more than 0.70. This suggests that every indicator is reliable and able to represent the measured constructs. Convergent validity has therefore been satisfied by the model. This indicates that variables including risk management, corporate governance, and business performance have been successfully and validly characterized by the questionnaire's questions.

Discriminant Validity Test

Each variable's cross loading value which must be higher than 0.7 is used to evaluate discriminant validity. The root square AVE for each variable in the model is comparable to the correlation value between the variables (Sasmita & Trisnawati, 2024)

Table 4. Results of the *Discriminant* Validity Test

	KP	MR	TK	TK x MR
KP				
MR	0.555			
TK	0.695	0.929		
TK x MR	0.337	0.836	0.824	

Source: Processed data, SmartPLS 2025 (4.0)

Every variable in this study displays cross-sectional values, as seen in Table 4. Their AVE square root values are higher than the correlations between the variables, and their loadings exceed 0.70. It can be inferred from these test results that every variable satisfies the practical requirements for discriminant validity. The Heterotrait-Monotrait Ratio (HTMT) and the Fornell-Larcker Criterion were used to assess discriminant validity. Each construct had good discriminant validity, according to the test results, since each construct's root-mean-square error of estimate (RMSE) was higher than the correlations between the other constructs.

Table 5. VIF Test Results

	VIF
KP 1	5.356
KP 2	7,928
KP 3	6,683
KP 4	4,371
KP 5	5,211
KP 6	4,480
MR 1	2,883
MR 2	2,633
MR 3	3,040
MR 4	2,999
MR 5	2,873
MR 6	3,486
MR 7	3,296
TK 1	3,422
TK 2	2,625
TK 3	2,304
TK 4	2,361
TK 5	2,993
TK x MR	1,000

Source: Processed data, SmartPLS 2025 (4.0)

Several structures have VIF values in the range of 6-7, according to Table 7's multicollinearity test results. State that the optimal limit in PLS-SEM is typically less than 5. However, according to William H. Greene's classical econometric literature, VIF values less than 10 are still acceptable and do not suggest significant multicollinearity. Because of their great content validity, markers with VIFs of 6–7 were kept in this analysis. The theoretical dimensions of the variables may be less comprehensive if these indicators were eliminated because they are crucial conceptual representations in the formation of latent constructs.

The Variance Inflation Factor (VIF) values were examined in order to test for multicollinearity. While some literature still accepts values up to 10, VIF values below 5 are typically regarded as indicating no significant multicollinearity problems in the context of PLS-SEM. The VIF values obtained in this study are outer VIFs, which are used to assess how indicators inside a construct relate to one another. Overall, the model can still be regarded as free from serious multicollinearity problems, despite the fact that a number of indicators have VIF values that are close to the top limit.

To improve the methodological rigor and reporting quality, the study should include an HTMT (Heterotrait-Monotrait Ratio) table as part of the discriminant validity assessment. Although discriminant validity has been discussed using the Fornell-Larcker criterion, the inclusion of HTMT values is strongly recommended in recent PLS-SEM guidelines. The HTMT values should be below the threshold of 0.85 (strict criterion) or 0.90 (lenient criterion), indicating that each construct is

empirically distinct. Presenting this table will enhance the transparency and credibility of the measurement model evaluation.

In addition, the study should complete and refine the result tables. Several tables require clearer structure, including consistent labeling of variables, standardized decimal formatting, and more informative titles and notes. It is also recommended to ensure that all key statistical outputs such as loadings, AVE, composite reliability, R-square, and hypothesis testing results are presented in a comprehensive and well-organized manner.

Composite Reliability Test

To demonstrate the instrument's precision, accuracy, and consistency in measuring the build, composite reliability testing was carried out. For confirmatory research, the composite reliability value needs to be higher than 0.7; for exploratory research, a value between 0.6 and 0.7 is still acceptable (Sasmita & Trisnawati, 2024).

Table 6. Composite Reliability Test Results

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Company Performance (KP)	0.948	0.958	0.959	0.794
Risk Management (MR)	0.936	0.962	0.947	0.718
Governance (TK)	0.914	0.938	0.935	0.741

Source: Processed data, SmartPLS 2025 (4.0)

Table 6 shows that the composite reliability for corporate governance, corporate performance, and corporate risk management is 0.935, 0.959, and 0.947, respectively. According to the composite reliability test findings, every variable has a value more than 0.70, meaning that every construct satisfies the requirements for good reliability. Additionally, Cronbach's alpha evaluation reveals scores for governance of 0.914, corporate performance of 0.948, and risk management of 0.936. For every construct, the Average Variance Extracted (AVE) value is greater than 0.50, meaning that the latent variables may account for more than half of the variance in the indicators.

All constructs were deemed reliable since the composite reliability value of all variables was greater than 0.70 and Cronbach's alpha was greater than 0.60. The measurement model therefore satisfied the necessary reliability and validity requirements. The practical interpretation is that because the measuring tools in this study have proven to be accurate in capturing perceptions and real methods used in the field, they are not only statistically valid but also dependable for use in real-world situations by management professionals.

b. Internal Model Testing (Structural Model)

The degree of estimation between latent variables or constructs is displayed by internal model measurement. By examining the R-Square value, or the percentage of variation explained, the internal model is assessed.

R-Square or Coefficient of Determination

By grouping the coefficient of determination (R^2) values into strong (0.67), moderate (0.33), and weak (0.19) categories, the coefficient of determination R^2 values are used to explain the effect of independent variables on dependent variables (Sasmita & Trisnawati, 2024).

Table 7. Results of the R-Square or Coefficient of Determination Test

	R-square	Adjusted R-square
Company Performance (KP)	0.571	0.562

Source: Processed data, SmartPLS 2025 (4.0)

Table 7 shows that the corporate performance variable's modified R-square value is 0.562. This suggests that corporate governance and risk management account for 56.2% of the variation in business performance, with other factors outside the research model influencing the remaining 43.8%. In the framework of social research, this value is classified as moderate to strong. Institutional Ownership (Pratiwi & Herawati, 2022), Green Accounting, and Environmental Disclosure (Durlista & Wahyudi, 2023). are other factors that, according to prior research, have an impact on business performance but are not postulated in this research model.

Table 8. Results of the HTMT Results Test

Variables	KP	MR	TK
KP	–		
MR	0.555	–	
TK	0.695	0.929	–

Source: Processed data, SmartPLS 2025 (4.0)

The HTMT values between constructs indicate that most are below the 0.90 threshold, suggesting that discriminant validity is acceptable. However, the value between MR and TK (0.929) slightly exceeds the conservative threshold, indicating a potential construct overlap and requiring further attention in interpreting the model.

Hypothesis Testing (Bootstrapping)

Based on the results of hypothesis testing using the bootstrapping method in SmartPLS 4.0, the analysis of the direct and moderating effects of variables on company performance can be explained as follows:

Hypothesis Testing Criteria

In accordance with the one-tailed hypothesis approach (one-sided test), the hypothesis is accepted if:

The t-statistic > 1.976 (refer to the t-table for $\alpha = 0.05$ and one-tailed test),

p-value < 0.05 (significant at the 5% level).

Interpretation of Hypothesis Testing Results per Hypothesis.

Table 9. Hypothesis Test Results (*Bootstrapping*)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
MR -> KP	0.188	0.194	0.131	1.436	0.151
TK -> KP	0.950	0.950	0.134	7.072	0.000
TK x MR -> KP	-0.393	-0.393	0.077	5.131	0.000

Source: Processed data, SmartPLS 2025 (4.0)

Risk Management on Company Performance

Coefficient = 0.188

t-Statistic = 1.436

p-value = 0.151

The results show that risk management improves company performance but is not statistically significant. This finding suggests that even while businesses have put risk management procedures into place, they haven't yet made a major difference in performance outcomes. The fact that risk management in the companies under observation is still mostly administrative and compliance-

focused could be one cause. Risk management may serve mainly as a statutory obligation rather than being included into strategic decision-making processes, which would restrict its possible influence on performance.

Furthermore, the advantages of risk management frequently become apparent over a longer period of time. Because of this, its effects might not show up right away in short-term performance metrics. This implies that the non-significant outcome does not necessarily mean that risk management is useless, but rather that its application has not yet attained the strategic maturity necessary to provide quantifiable performance gains.

The study's findings suggest that risk management improves business performance, albeit somewhat. These results imply that the MM2100 industrial zone's manufacturing enterprises have not yet fully benefited from the application of risk management in terms of increased corporate performance. According to study by ISO 31000, enterprise risk management (ERM) greatly enhances business performance.

This could be because risk management implementation is still mostly administrative and compliance-focused, and as a result, it has not been strategically incorporated into the organization's decision-making procedures. Furthermore, the company's success during the study period has not yet completely reflected the long-term benefits of risk management. The effect of risk management on business performance is positive but not statistically significant ($\beta = 0.188$; $p = 0.151$). This result is consistent with risk management contingency theory, which highlights the significance of adapting risk measures to the dynamics of the organization's internal and external environment. An organization's capacity to spot opportunities, handle emergencies, and distribute resources more effectively can all be enhanced with integrated enterprise risk management (ERM).

These results imply that risk management's efficacy depends not only on its presence but also on how well it is used and how well it is incorporated into the organization's business plan. The reverse is also demonstrated by research by Hoyt & Liebenberg (2011), which shows that businesses that fully embrace ERM are more likely to establish their own corporate branding. As a result, our findings do not yet substantiate the significance of strategic risk management as a major factor in enhancing organizational performance, particularly in intricate and unpredictable commercial settings.

Corporate Governance and Company Performance

Coefficient = 0.950

t-statistic = 7.072

p-value = 0.000

The findings demonstrate that corporate governance significantly and favorably affects firm performance. This conclusion implies that by improving accountability, openness, and the caliber of decision-making, stronger governance processes lead to better organizational outcomes. By ensuring that managerial actions are in line with company goals, effective corporate governance minimizes agency issues and boosts operational effectiveness. In this situation, governance structures are essential for promoting performance since they give the organization structure and oversight.

These findings show that company performance is positively and significantly impacted by corporate governance. The performance of corporations is significantly influenced by good corporate governance. This demonstrates that the primary factor in this approach is order management (Klapper & Love, 2004) demonstrate that businesses with effective order management typically have higher profitability and valuations, particularly in emerging nations.

The performance of a company is positively impacted by corporate governance in a very strong and significant way ($\beta = 0.950$; $p = 0.000$). This result is consistent with agency theory, which holds that an effective governance system can improve internal control mechanisms, boost transparency, and lessen conflicts of interest between management and shareholders.

These findings are consistent with research by Bhagat & Bolton (2019) and Klapper and Love (2004), which indicates that businesses with sound governance typically have greater Tobin's Q and ROA. In the long run, strong governance also boosts institutional power and attracts more investors.

Coefficient = -0.393

t-statistic = 5.131

p-value = 0.000

The baseline results show a substantial negative mitigating effect of corporate governance on the link between risk management and business performance ($\beta = -0.393$; $p < 0.001$). This suggests that the impact of managing risks on outcomes tends to be lessened by more robust governance processes. This result implies that management efficacy is not always improved by corporate governance. Stricter governance systems could slowed down taking decisions, restrict flexibility within the organization, and create paperwork in the setting of manufacturing enterprises.

Methods for risk management might therefore grow more inflexible and compliance-focused, which would restrict their capacity to adapt to changing company settings. As a result, risk management's potential to enhance performance is diminished. These findings emphasize how crucial it is for governance institutions to strike a balance between flexibility and control. Excessive rigidity may impede risk management's strategic role in improving business performance, even while governance is crucial for guaranteeing responsibility.

The outcomes of the test demonstrate that the relationship between risk management and business performance is significantly and negatively moderated by corporate governance. These results suggest that risk management's impact on firm performance tends to be less the more corporate governance is implemented. To avoid unfavorable trade-offs, COSO highlights the need to maximize the convergence between handling risks and management.

From a conceptual standpoint, these findings imply that corporate governance does not always serve as a tool to improve risk management. Stricter corporate governance implementation may result in more formal, bureaucratic, and rigid decision-making processes for manufacturing companies in the MM2100 industrial zone. Cultural ethical principles are not yet represented in business policies and operational procedures, nor are applied ethical values structurally incorporated into the management system. Such circumstances can make it more difficult to respond quickly to both operational and strategic risks, which makes the use of risk management less flexible in reaction to changes in the business environment. Put another way, despite the implementation of risk management, its beneal effects on enhancing business performance may be diminished by rigidity in the oversight of companies.

This result also suggests that corporate governance may be more concerned with compliance than with creating value. As a result, rather than being a strategic instrument incorporated into corporate decision-making, risk management is typically implemented as an administrative formality. These results suggest that risk management's efficacy depends not only on its existence but also on how well it is implemented and how much it is incorporated into the business strategy of the organization. It has been demonstrated that corporate governance significantly and negatively moderates the relationship between risk management and firm performance. This implies that enhancing corporate governance may actually lessen the effect of risk management on business performance, especially if the governance is excessively strict and focused on compliance.

This study offers practical implications for managers and regulators to create governance that promotes flexibility rather than just compliance, and it conceptually advances the integration of agency, contingency, and sustainability theories with governance.

Table 10. Result

Independent Variables	Results	Description
Risk Management	Positive but not significant	Risk Management has not been able to provide a significant influence on improving Company Performance.
Moderated Relationship	Governance Moderation Results	Description
Risk Management → Company Performance	Moderation	Governance weakens the relationship between risk management and company performance.

Discussion

The purpose of this study is to investigate how risk management affects business performance and how corporate governance plays a moderating role in this connection. Partial Least Squares-Structural Equation Modeling (PLS-SEM) with a bootstrapping method using SmartPLS 4.0 software was used for the testing. The study's findings demonstrate a direct and moderating effect that offers crucial information on corporate governance and strategic management.

Positive Influence of Risk Management on Company Performance

This research uses architectural analysis approaches and a qualitative method that is quantitative to assess how risk management affects business performance. SEM-PLS stands for partial least squares modeling. Heads of operations, finance, and risk management departments at cross-sector businesses with formal risk management systems were surveyed to gather data. To make sure the instruments could measure the constructs correctly, convergent validity, discriminant validity, and composite reliability were used to test the validity of constructs.

The study's conclusions demonstrate that risk management has not significantly affected business performance. These findings show that rather than being a crucial component of value creation strategies, risk management implementation in manufacturing firms in the MM2100 Industrial Estate is still administrative in character and focused on regulatory compliance. According to contingency theory, the adequacy of the applied system and the features of the organizational environment have a significant impact on how well risk management works. Risk management's influence on performance will be minimal if it is not incorporated into the strategic decision-making process. This demonstrates that improved business success has not been supported by effective risk management.

These findings are consistent with studies that find structured risk management not only lowers possible losses but also opens doors for improved stakeholder trust, operational efficiency, and reputation. This implies that a company's performance is not necessarily enhanced by its capacity to recognize, assess, and manage risks. The risk management that is implemented does not always help companies to effectively anticipate potential losses or develop appropriate preventive measures. Because of this, these initiatives might not be able to maintain financial stability, avoid operational disruptions, or encourage improved decision-making when faced with uncertainty. This implies that a company's success might not be supported even if it is becoming more adept at recognizing, evaluating, and managing risks. Risk management is supposed to enhance decision-making and lessen operational disturbances, but these advantages might not show up right once in business performance. The application of risk management in this study seems to be inadequately incorporated into strategic procedures, which restricts its quantifiable influence on performance results.

These findings are consistent with studies that effective risk management can lower the possibility of business process interruptions and boost stakeholder confidence. Companies must have an adaptable risk management strategy in the MM2100 setting due to changes in raw material pricing, regulatory unpredictability, and reliance on exports.

This demonstrates that businesses with effective risk management systems are better equipped to handle uncertainty and maximize performance. Risk management assists businesses in identifying, quantifying, and controlling a variety of hazards that may impede the accomplishment of their goals. Businesses can anticipate and address issues by using a proactive approach to risk management. According to Radiansyah *et al.*, (2023), an effective risk management system aids businesses in preventing large losses that may arise from a failure to adjust to changes in the business environment.

The study's findings demonstrate that risk management improves business performance, however somewhat. These results show that manufacturing firms in the MM2100 industrial park have not yet fully benefited from risk management adoption in terms of increased performance.

The fact that risk management procedures are still mostly administrative and compliance-focused and have not been strategically incorporated into the organization's decision-making procedures could be one explanation. Furthermore, as the advantages of risk management are typically long-term, they might not have been immediately apparent throughout the research period.

This leads also show that overall backing and program quality, including corporate culture and current governance structures, have a significant impact on the efficacy of risk management.

Corporate Governance and Company Performance

The study's findings demonstrate that business performance is positively and significantly impacted by corporate governance. This is in line with agency theory, which contends that efficient supervision procedures can lessen conflicts of interest and boost organizational effectiveness. Robust government enhances responsibility, openness, and the caliber of decision-making, all of which eventually contribute to better business success.

Governance as a Moderator in the Relationship between Risk Management and Corporate Performance

These results show that the relationship between risk management and firm performance is not strengthened by corporate governance. Rather, it can harm a connection, especially when organizational adaptability is restricted by overly rigid rules of governance .

Creating quicker and sensitive decisions is facilitated by successful risk control, which is achieved with a regular process of risk identification, assessment, mitigation, and surveillance. When risk management is done transparently and honestly, businesses are better able to foresee possible disruptions and take appropriate action. Targeted (Sari & Hanum, 2022; Emar & Ayem, 2020). This is especially important in the manufacturing sector, like the MM 2100 industrial estate, where a long-term return depends on operational effectiveness and risk reduction.

Activity Concept, especially highlights the occurrence of problems of ownership and information asymmetry between owners (principals) and management (the intermediaries), can be used to illustrate this idea. Particularly when it comes to risk handling, business oversight helps lower the dangers of ethical peril and guarantee the leadership works in the owners' best interests. Stewardship may improve candor and openness in the risk management process through efficient oversight, allowing businesses to foresee possible issues before they have a significant negative influence on performance. As a result, effective governance not only controls risk but also lessens the detrimental effects of inadequate risk management on business performance.

The Resource-Based View theory may constitute correlated with the impact that governance has in enhancing the connection link risk administration and company development . The positive association between risk management and business success is less or less significant in companies with stronger or more rigorous governance systems. For instance, let's say that Company A has a very strict and bureaucratic governance structure (e.g., every decision must go through board meetings, audits, etc.) despite having an effective handling risks system. As a result, decisions to take advantage of opportunities or steer clear of risks are hindered, and efficiency does not considerably increase even when risks are dealt with.

Organizations can benefit greatly from sound corporate governance, particularly when developing a sustained competitive advantage . Companies are more likely to manage risk proactively and preemptively when boardroom and shareholder scrutiny is subject to tougher laws (Pramanaswari, 2024). Effective governance is a strategic advantage as well as a framework for supervision. The company's persistent competitive advantage is reinforced by the fact that it is difficult to imitate . Firms possess an internal motivation to handle things risk more decisively, demonstrably, and with an emphasis on creating value over time when they have a strict governance framework, such as an active board of directors and involved ownership (Pramanaswari, 2024).

CONCLUSION

This study aims to examine the effect of risk management on company performance and to analyze the moderating role of corporate governance in this relationship. Based on the empirical findings, three main conclusions can be drawn.

First, risk management has a positive but statistically insignificant effect on company performance. This indicates that risk management practices in manufacturing firms have not yet been fully integrated into strategic decision-making processes, thereby limiting their direct contribution to performance improvement. Second, corporate governance has a positive and significant direct effect on company performance. This finding confirms that effective governance practices enhance

transparency, accountability, and the quality of decision-making, which ultimately leads to improved organizational performance.

Third, corporate governance plays a significant moderating role with a negative direction in the relationship between risk management and company performance. This result suggests that overly rigid and compliance-oriented governance mechanisms may reduce managerial flexibility, thereby weakening the effectiveness of risk management in improving performance.

From a theoretical perspective, this study contributes to the literature by extending the role of corporate governance beyond its traditional position as an independent or mediating variable, positioning it instead as a moderating variable. The findings also support contingency theory, which emphasizes that the effectiveness of managerial practices depends on organizational context. From a practical perspective, the results imply that companies should design governance systems that balance control and flexibility. Governance mechanisms should not solely emphasize compliance but also enable adaptive decision-making in managing risks. Furthermore, firms are encouraged to integrate risk management more comprehensively into their strategic processes to enhance its contribution to performance.

This study has several limitations. In particular, company performance is measured based on respondents' perceptions rather than objective financial data. Future research is therefore recommended to incorporate objective performance indicators and expand the research scope to improve generalizability.

ACKNOWLEDGMENT

The author would like to express sincere gratitude to all parties who have contributed to the completion of this study. Special appreciation is extended to the management and respondents from manufacturing companies in the MM2100 industrial area for their willingness to participate and provide valuable data for this research.

The author also gratefully acknowledges the support and guidance from academic advisors, colleagues, and reviewers whose insights and constructive feedback have significantly improved the quality of this study.

Finally, the author would like to thank family and friends for their continuous support, encouragement, and understanding throughout the research process. Their motivation has been invaluable in the completion of this work.

AUTHOR CONTRIBUTION STATEMENT

This study offers originality by positioning corporate governance as a moderating variable rather than merely an independent or mediating factor. It provides new insights by demonstrating that stronger governance can reduce the effectiveness of risk management, thereby contributing to a more nuanced understanding of the interaction between governance structures and risk management processes in enhancing firm performance.

AI DISCLOSURE STATEMENT

The author declares that artificial intelligence (AI) tools were used solely to assist in language refinement, grammar checking, and improving the clarity of the manuscript. The AI tools did not contribute to the research design, data collection, data analysis, or interpretation of results. All intellectual content, including the conceptual framework, methodology, analysis, and conclusions, remains the sole responsibility of the author.

The author has carefully reviewed and verified all outputs generated with the assistance of AI to ensure accuracy, originality, and compliance with academic integrity standards.

REFERENCES

- Al-ahdal, W. M., Alsamhi, M. H., Tabash, M. I., & Farhan, N. H. S. (2020). The impact of corporate governance on financial performance of Indian and GCC listed firms: An empirical investigation. *Research in International Business and Finance*, 51. <https://doi.org/10.1016/j.ribaf.2019.101083>.

- Amin, A., Rehman, ramiz ur, Ali, R., & Said, ridzwana mohd. (2022). Corporate Governance and Capital Structure: Moderating Effect of Gender Diversity. *Sage Journal*, 12(1). <https://doi.org/10.1177/21582440221082110>
- Bhagat, S., & Bolton, B. (2019). Corporate governance and firm performance: The sequel. *Journal of Corporate Finance*, 58, 142–168. <https://doi.org/10.1016/j.jcorpfin.2019.04.006>.
- Ciftci, I., Tatoglu, E., Wood, G., Demirbag, M., & Zaim, S. (2019). Corporate governance and firm performance in emerging markets: Evidence from Turkey. *International Business Review*, 28(1), 90–103. <https://doi.org/10.1016/j.ibusrev.2018.08.004>.
- Drongelen, I. c. K., & Bilderbeek, J. (1999). R&D performance measurement: more than choosing a set of metrics. *R&D Management*, 29(1), 35–46. <https://doi.org/10.1111/1467-9310.00115>
- Durlista, M. A., & Wahyudi, I. (2023). *THE EFFECT OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) DISCLOSURE ON COMPANY PERFORMANCE IN THE COAL MINING SUBSECTOR FOR THE PERIOD 2017-2022 JIMEA | MEA Scientific Journal (Management, Economics, and Accounting)*. 7(3), 210–232.
- Eisenhardt, K. M. (1989). Agency Theory: An Assessment and Review. *Academy of Management Review*, 14(1). <https://doi.org/10.5465/amr.1989.4279003>
- Emar, A. E. S., & Ayem, S. (2020). *The effect of enterprise risk management disclosure and intellectual capital disclosure on firm value with good corporate governance as a moderating variable. Wacana Ekonomi (Journal of Economics, Business and Accounting)*, 19(2), 79–90. <https://doi.org/10.22225/we.19.2.1956.79-90>
- Flapper, S. D. P., Fortuin, L., & Stoop, P. P. M. (1996). Towards consistent performance management systems. *International Journal of Operations & Production Management*, 16(7), 27–37. <https://doi.org/10.1108/01443579610119144>
- Frigo, Mark L., & Anderson, Richard J. (2011). Strategic risk management: A foundation for improving enterprise risk management and governance. *Journal of Corporate Accounting & Finance*, 22(3). <https://doi.org/10.1002/jcaf.20677>
- Gaonkar, Roshan S., & Viswanadham, N. (2007). Analytical Framework for the Management of Risk in Supply Chains. *IEEE Transactions on Automation Science and Engineering*, 4(2), 265–273. <https://doi.org/10.1109/TASE.2006.880540>
- Hallikas, J., Karvonen, I., Pulkkinen, U., Virolainen, V.-M., & Tuominen, M. (2004). Risk management processes in supplier networks. *International Journal of Production Economics*, 90(1), 47–58. <https://doi.org/10.1016/j.ijpe.2004.02.007>.
- Hoang, T. H. Van, Przychodzen, W., Przychodzen, J., & Segbotangni, E. A. (2021). Environmental transparency and performance: Does corporate governance matter? *Environmental and Sustainability Indicators*, 10. <https://doi.org/10.1016/j.indic.2021.100123>.
- Hoyt, R. E., & Liebenberg, A. P. (2011). The Value of Enterprise Risk Management. *Journal of Risk and Insurance*, 78(4), 795–1042. <https://doi.org/10.1111/j.1539-6975.2011.01413.x>
- Hsu, Y.-L., & Liao, L.-K. (Connie). (2022). Corporate governance and stock performance: The case of COVID-19 crisis. *Journal of Accounting and Public Policy*, 41(4). <https://doi.org/10.1016/j.jaccpubpol.2021.106920>.
- Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of Corporate Finance*, 10(5), 703–728. [https://doi.org/10.1016/S0929-1199\(03\)00046-4](https://doi.org/10.1016/S0929-1199(03)00046-4)
- Lestari, F., & Dinata, Randa Surya. (2019). Green Supply Chain Management for Environmental Management Evaluation Based on ISO 14001 Certification. *Journal of Agroindustry Technology and Management*, 8. <https://doi.org/10.21776/ub.industria.2019.008.03.5>
- Mabrouki, C., Bentaleb, F., & Mousrij, A. (2014). A decision support methodology for risk management within a port terminal. *Safety Science*, 63, 124–132. <https://doi.org/10.1016/j.ssci.2013.09.015>.
- Malikov, K., Demirbag, M., Kuvandikov, A., & Manson, S. (2021). Workforce reductions and post-merger operating performance: The role of corporate governance. *Journal of Business Research*, 122, 109–120. <https://doi.org/10.1016/j.jbusres.2020.08.042>.

- Mazaya, N., & Fuad, F. (2018). Business Strategy, Corporate Governance, Firm Characteristics, and Risk Disclosure in the Indonesian Stock Exchange. *Jurnal Keuangan Dan Perbankan*, 22(3). <https://doi.org/10.26905/jkdp.v22i3.2167>
- Ministry of Industry of the Republic of Indonesia. (2022, February 10). *Indonesia's manufacturing industry is becoming increasingly expansive*. <https://kemenperin.go.id/artikel/23125/Industri-Manufaktur-Indonesia-Semakin-Ekspansif>
- Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, 237. <https://doi.org/10.1016/j.jclepro.2019.117727>.
- Norman, A., & Jansson, U. (2004). Ericsson's proactive supply chain risk management approach after a serious sub-supplier accident. *International Journal of Physical Distribution & Logistics Management*, 34(5), 434–456. <https://doi.org/10.1108/09600030410545463>
- Otley, D. T. (1980). The contingency theory of management accounting: Achievement and prognosis. *Accounting, Organizations and Society*, 5(4), 413–428.
- Paniagua, J., Rivelles, R., & Sapena, J. (2018). Corporate governance and financial performance: The role of ownership and board structure. *Journal of Business Research*, 89, 229–234. <https://doi.org/10.1016/j.jbusres.2018.01.060>.
- Peljhan, D., & Marc, M. (2021). Risk management and strategy alignment: influence on new product development performance. *TECHNOLOGY ANALYSIS & STRATEGIC MANAGEMENT*, 35(12). <https://doi.org/10.1080/09537325.2021.2011192>
- Peng, H., Zhang, J., Zhong, S., & Li, P. (2021). Corporate governance, technical efficiency and financial performance: Evidence from Chinese listed tourism firms. *Journal of Hospitality and Tourism Management*, 48, 163–173. <https://doi.org/10.1016/j.jhtm.2021.06.005>.
- Porta, R. La, Lopez-De-Silanes, F., & Shleifer, A. (2002). Corporate Ownership Around the World. *The Journal of Finance*, 54(2), 471–517. <https://doi.org/10.1111/0022-1082.00115>
- Pramanaswari, A. S. I. (2024). Analisis Good Corporate Governance terhadap Kinerja Keuangan pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi yang Terdaftar di BEI Tahun 2020-2023. *JURNAL ECONOMINA*, 3(6), 714–723. <https://doi.org/10.55681/economina.v3i6.1343>
- Pratiwi, R., & Herawati. (2022). THE EFFECT OF INSTITUTIONAL OWNERSHIP, LEVERAGE, AND COMPANY SIZE ON COMPANY PERFORMANCE. *Journal of Accounting and Auditing Studies*, 17(1). <https://doi.org/10.37301/jkaa.v17i1.76>
- Radiansyah, A., Baroroh, N., Fatmah, F., Hulu, D., Syamil, A., Siswanto, A., Violin, V., Purnomo, I. C., & Nugroho, F. (2023). *CORPORATE RISK MANAGEMENT: Theory & Case Studies*. PT Sonpedia Publishing Indonesia.
- Rezaei, J., & Ortt, R. (2018). Entrepreneurial orientation and firm performance: the mediating role of functional performances. *Management Research Review*, 41(7), 878–900. <https://doi.org/10.1108/MRR-03-2017-0092>
- Ritchie, B., & Brindley, C. (2007). Supply chain risk management and performance: A guiding framework for future development. *International Journal of Operations & Production Management*, 27(3), 303–322. <https://doi.org/10.1108/01443570710725563>
- Ruyter, K. de, & Wetzels, M. (2000). Customer equity considerations in service recovery: a cross-industry perspective. *International Journal of Service Industry Management*, 11(1), 91–108. <https://doi.org/10.1108/09564230010310303>
- Saeidi, P., Saeidi, S. P., Gutierrez, L., Alrasheedi, M., Saeidi, S. P., & Mardani, A. (2021). The influence of enterprise risk management on firm performance with the moderating effect of intellectual capital dimensions. *Economic Research-Ekonomska Istraživanja*, 34(1), 122–151. <https://doi.org/10.1080/1331677X.2020.1776140>
- Sandretto, D., Rizzi, A. dan Esposito, G. (2025), Kepemimpinan Keragaman Gender dan Kinerja ESG: Pengaruh Perempuan pada Dewan dan Manajemen. *Lingkungan Strategi Bus*, 34: 5075-5094. <https://doi.org/10.1002/bse.4241>
- Sari, M., & Hanum, S. (2022). *Analysis of Risk Management in the Implementation of Good Corporate Governance: A Study of Banking Companies in Indonesia*. 6(April), 1540–1554.

- Sasmita, A., & Trisnawati, R. (2024). The influence of audit opinion, audit delay, kap size, client company size, and financial distress on auditor switching. *Enrichment : Journal of Management*, 14(4), 722-732. <https://doi.org/10.35335/enrichment.v14i4.2099>
- Sheikh, W., & Alom, K. (2021). Corporate governance, board practices and performance of shipping firms in Bangladesh. *The Asian Journal of Shipping and Logistics*, 37(3), 259–267. <https://doi.org/10.1016/j.ajsl.2021.06.005>.
- Shleifer, A., & Vishny, R. W. (1997). The Limits of Arbitrage. *The Journal of Finance*, 52(1), 35–55. <https://doi.org/10.1111/j.1540-6261.1997.tb03807>.
- Shu, P., & Chiang, S. (2020). The impact of corporate governance on corporate social performance: Cases from listed firms in Taiwan. *Pacific-Basin Finance Journal*, 61. <https://doi.org/10.1016/j.pacfin.2020.101332>.
- Sterlacchini, A. (1999). Do innovative activities matter to small firms in non-R&D-intensive industries? An application to export performance. *Research Policy*, 28(8), 819–832. [https://doi.org/10.1016/S0048-7333\(99\)00023-2](https://doi.org/10.1016/S0048-7333(99)00023-2)
- Tasmin, R., Muazu, M. H., Aziati, A. H. N., & Zohadi, N. L. (2020). The mediating effect of enterprise risk management implementation on operational excellence in the Malaysian oil and gas sector: a conceptual framework. *Future Business Journal*, 6(1), 1–6. <https://doi.org/10.1186/s43093-020-00011-2>
- Tsui, K.-L. (1992). AN OVERVIEW OF TAGUCHI METHOD AND NEWLY DEVELOPED STATISTICAL METHODS FOR ROBUST DESIGN. *IIE Transactions*, 24(5), 44–57. <https://doi.org/10.1080/07408179208964244>
- Tuncel, G., & Alpan, G. (2010). Risk assessment and management for supply chain networks: A case study. *Computers in Industry*, 61(3), 250–259. <https://doi.org/10.1016/j.compind.2009.09.008>.
- Uyar, A., Fernandes, V., & Kuzey, C. (2021). The mediating role of corporate governance between public governance and logistics performance: International evidence. *Transport Policy*, 109, 37–47. <https://doi.org/10.1016/j.tranpol.2021.05.023>.
- Wang, H.-F., & Hsu, F.-C. (2009). An integrated operation module for individual risk management. *European Journal of Operational Research*, 198(2), 610–617. <https://doi.org/10.1016/j.ejor.2008.09.039>.
- Wang, Y., Lu, T., & Qiao, Y. (2021). The effect of air pollution on corporate social responsibility performance in high energy-consumption industry: Evidence from Chinese listed companies. *Journal of Cleaner Production*, 280. <https://doi.org/10.1016/j.jclepro.2020.124345>.
- Werna, E., Keivani, R., & Murphy, D. (1997). *Corporate Social Responsibility and Urban Development: Lessons from the South*. Palgrave Macmillan. <https://doi.org/10.1057/9780230236677>
- Wiyarni, & Bunyamin. (2021). The Mediating Effect of Financial Distress on Audit Tenure and Auditor Switching Towards Audit Delay. *Proceedings of 2nd Annual Management, Business and Economic Conference*, 35–40. <https://doi.org/10.2991/aebmr.k.210717.008>.
- World Economic Forum. (2023, January 11). *Global risks report 2023*. <https://www.weforum.org/publications/global-risks-report-2023/>
- Yan, Z. (2021). Research on enterprise risk prevention and control countermeasures based on business model innovation --Taking Shandong as an example. *International Conference on Education, Knowledge and Information Management*, 616–620. <https://doi.org/10.1109/ICEKIM52309.2021.00139>
- Young, S., & Thyl, V. (2009). Governance, employees and CSR: Integration is the key to unlocking value. *Asia Pacific Journal of Human Resources*, 47(2). <https://doi.org/10.1177/1038411109105440>
- Zafeiropoulos, I., Metaxiotis, K., & Askounis, D. (2005). Dynamic risk management system for the modeling, optimal adaptation and implementation of an ERP system. *Information Management & Computer Security*, 13(3), 212–234. <https://doi.org/10.1108/09685220510602031>.

