The Effects of Corporate Risk Management and Financial Flexibility on Firm Resilience in Indonesian Manufacturing Firms

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ABSTRACT

The period of 2020–2025 has been characterized by unprecedented global economic instability, placing the manufacturing sector under severe structural pressure and necessitating a comprehensive understanding of corporate resilience mechanisms. This study aims to investigate the integrative influence of corporate risk management and financial flexibility on the resilience of manufacturing firms in Indonesia. This study employs a quantitative causal-explanatory design to examine the relationships between corporate risk management, financial flexibility, and firm resilience in manufacturing firms listed on the Indonesia Stock Exchange (IDX) during 2020–2025. The sample was selected using purposive sampling. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings indicate that corporate risk management and financial flexibility both have significant positive effects on firm resilience, while the relationship between corporate risk management and financial flexibility is not significant. These results imply that firms can strengthen resilience through effective risk management practices and strong financial flexibility independently, highlighting the importance of developing both strategies separately to enhance organizational stability during periods of economic uncertainty.

Keywords*: Corporate Risk Management, Financial Flexibility, Firm Resilience, Manufacturing Sector.*

INTRODUCTION

The 2020–2025 period was characterized by global economic instability that posed significant challenges to corporate sustainability, particularly in the manufacturing sector due to its reliance on supply chain stability, demand fluctuations, and financing access (Krstic et al., 2020; Kaftan et al., 2023). The combined effects of the COVID-19 pandemic, rising global inflation, currency depreciation, and commodity price volatility intensified pressure on firms' operational and financial decision-making processes (Romero et al., 2025). Recent studies highlight that under such uncertainty, firm resilience is determined less by size or market share and more by internal capabilities in managing risk exposure and maintaining financial flexibility (Acharya et al., 2020; Alfaro et al., 2023; Nguyen, 2024). In Indonesia, the manufacturing sector remains a key contributor to national GDP but is also highly vulnerable during economic downturns, making corporate resilience an increasingly important focus for empirical research.

In post-2019 corporate finance literature, corporate risk management is increasingly viewed as a strategic tool for anticipating economic volatility. Studies show that the adoption of Enterprise Risk Management (ERM) and hedging practices can reduce cash flow volatility and lower the risk of financial distress, particularly during periods of macroeconomic stress (Ellul & Yerramilli, 2021; Berry-Stölzle et al., 2025). However, the effectiveness of risk management is not consistent across organizations. Prior research

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indicates that the impact of ERM on firm performance and resilience depends on factors such as institutional environments, corporate governance quality, and capital structure characteristics (Florio & Leoni, 2019; Malik et al., 2020; McShane et al., 2021). These findings raise important questions about how corporate risk management contributes to resilience in manufacturing firms within emerging economies, particularly Indonesia. At the same time, financial flexibility has been increasingly recognized as a strategic capability that enables firms to maintain adaptability and survive prolonged economic shocks.

Recent studies by Riddick and Whited (2022) show that firms maintaining adequate cash reserves, conservative leverage, and access to unused debt capacity have stronger survival prospects during crisis periods. Firms with higher financial flexibility are better able to sustain investment and operational continuity without resorting to drastic adjustment measures such as large-scale workforce reductions. However, much of the existing literature examines financial flexibility mainly as a direct determinant of firm performance or firm value, rather than integrating it with corporate risk management within a resilience framework. As a result, risk management and financial flexibility are often analyzed as separate policy domains. Recent studies suggest that these strategies should be viewed as complementary mechanisms, where risk management reduces exposure to external shocks while financial flexibility provides the capacity to adapt when shocks occur (Goldberg, 2021; Pankratz, 2021; Mizrak, 2024). Nevertheless, longitudinal empirical evidence on this integrative relationship, particularly in the post-pandemic context, remains limited and is largely concentrated in developed economies and the financial sector.

In Indonesia, empirical research on corporate risk management and financial flexibility remains constrained, particularly with respect to methodological approaches and sectoral coverage. Recent studies by Durst et al. (2024) indicate that existing research predominantly emphasizes regulatory compliance and risk disclosure, rather than evaluating the strategic effectiveness of these practices in enhancing corporate resilience. Moreover, research on financial flexibility in Indonesia has largely focused on financial constraints, rather than its role in sustaining resilience amid recurring economic uncertainty, especially within the capital-intensive and globally exposed manufacturing sector. Recent international studies provide empirical support that integrating corporate risk management with financial flexibility yields more robust resilience outcomes compared to implementing each strategy independently (Nguyen et al., 2024). Firms that combine hedging practices with adequate cash holdings exhibit lower tail risk and faster recovery rates following economic shocks (Ogundu, 2025).

Accordingly, the novelty of this study lies in its integrated empirical investigation of corporate risk management, financial flexibility, and firm resilience within a unified analytical framework applied to manufacturing firms listed on the Indonesia Stock Exchange during the 2020–2025 period. Unlike prior research, this study conceptualizes financial flexibility not merely as a passive resource but as a strategic mechanism that mediates and strengthens the impact of risk management on firm resilience in an emerging market context. The objective of this study is therefore to empirically examine the effect of corporate risk management and financial flexibility on the resilience of Indonesian manufacturing firms during the 2020–2025 period.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

The Effect of Corporate Risk Management on Firm Resilience

Effective corporate risk management represents a fundamental responsibility of financial institutions and organizations in general, as it involves systematic processes of identifying, measuring, monitoring, and controlling various risk factors that may affect business operations (Suarmanayasa et al., 2024). Properly implemented risk management enables firms to mitigate potential losses, improve decision-making quality, and enhance operational efficiency, which ultimately supports stronger financial performance and organizational stability (Suherwan et al., 2025). In contrast, an approach that focuses

solely on complying with minimum regulatory standards and avoiding financial losses may paradoxically create additional vulnerabilities, as it limits the organization's ability to anticipate and manage broader strategic risks (Gius et al., 2018). Therefore, effective risk management requires a comprehensive and proactive framework that integrates risk awareness into corporate governance and strategic planning.

In periods of increasing economic uncertainty, firms, particularly in the manufacturing sector, face greater cash flow volatility and a higher probability of financial distress due to fixed cost structures and strong dependence on external inputs. Under such conditions, corporate risk management functions as an internal mechanism that systematically evaluates and reduces risk exposure in a planned and sustainable manner. Empirical evidence indicates that companies actively implementing risk management practices, such as enterprise risk management frameworks and hedging strategies, tend to maintain greater performance stability and reduce exposure to extreme financial risks during economic shocks (Jia, 2019; Drobyazko et al., 2020; Ellul & Yerramilli, 2021). These findings suggest that corporate risk management extends beyond regulatory compliance and serves as a strategic instrument that strengthens firm resilience when facing environmental uncertainty.

H1: Corporate risk management has a positive effect on firm resilience.

The Effect of Financial Flexibility on Firm Resilience

Financial flexibility is widely recognized as a critical capability that allows firms to survive and strategically adjust during periods of economic uncertainty. It reflects a firm's ability to access and reallocate financial resources through adequate cash holdings, relatively low leverage, and the availability of unused debt capacity. These conditions provide firms with sufficient strategic space to maintain operational and investment activities without excessive dependence on volatile external capital markets. Evidence from corporate finance research highlights the importance of internal financial capacity in strengthening firm stability. For instance, Bancel and Mittoo (2011) demonstrate that firms with stronger internal financing tend to maintain lower leverage ratios, hold higher levels of cash, and experience less severe operational disruption during economic crises. In addition, financial flexibility allows companies to avoid financial distress during negative shocks while maintaining the ability to fund profitable investment opportunities when they arise (Islam et al., 2019). These characteristics illustrate that financial flexibility serves as an essential internal mechanism that enhances firms' ability to adapt to changing economic conditions.

Further literature emphasizes that strengthening financial flexibility represents a practical strategy for firms operating in turbulent environments. Improving financial flexibility enables firms to sustain growth and operational continuity despite economic volatility (Zhang, 2025). Empirical findings also suggest that firms with greater financial flexibility demonstrate stronger resilience when facing economic shocks. Studies indicate that such firms are more capable of absorbing financial disturbances and recovering their performance more rapidly than firms with limited financial capacity (Arslan-Ayaydin et al., 2014; Riddick & Whited, 2022; Fahlenbrach et al., 2023). Therefore, financial flexibility is expected to play an important role in strengthening firm resilience by enabling companies to maintain stability and adapt to uncertain economic environments.

H2: Financial flexibility has a positive effect on firm resilience.

The Corporate Risk Management on Financial Flexibility

Financial flexibility plays an important role in strengthening the effectiveness of corporate risk management in enhancing firm resilience. Firms with higher levels of financial flexibility generally have greater capacity to utilize information, policies, and strategic recommendations generated by risk management systems. This condition allows companies to respond more effectively to potential risks and uncertainties, thereby

increasing their ability to maintain operational stability. In contrast, firms with limited financial flexibility often face constraints in implementing strategic adjustments, which reduces the overall benefits derived from risk management practices (Bonaimé et al., 2014). As a result, the presence of financial flexibility can determine whether risk management efforts translate into tangible resilience outcomes. Moreover, resilience is not merely shaped by the application of predetermined mitigation measures, but rather by the firm's capability to anticipate, interpret, and adapt to emerging risks in a dynamic business environment (Suprayitno, 2025).

Recent developments in corporate finance literature further emphasize that the effectiveness of risk management largely depends on a firm's financial capacity to implement the outcomes of risk management processes. Although risk management can reduce the likelihood and severity of adverse shocks, firms lacking sufficient financial flexibility may still struggle to respond adaptively to economic pressures. Empirical studies show that financial flexibility acts as a transmission mechanism that strengthens the positive relationship between risk management and firm resilience (Bolton et al., 2020; Pankratz, 2021; Dahmen, 2023). In this context, effective risk management supports cash accumulation and improves funding structure efficiency, which subsequently reinforces firm resilience.

H3: Corporate risk management has a positive effect on financial flexibility.

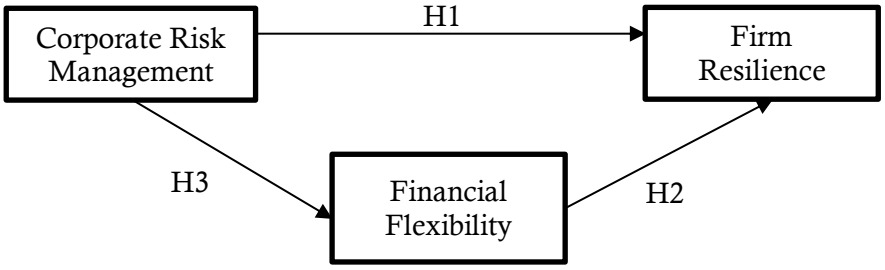

Figure 1. Research Framework

Figure 1 illustrates the research framework of this study, highlighting the relationships between corporate risk management, financial flexibility, and firm resilience. In this framework, corporate risk management is proposed to have a direct effect on firm resilience (H1), while financial flexibility is also hypothesized to have a direct effect on firm resilience (H2). In addition, corporate risk management is expected to influence financial flexibility (H3). This model suggests that both corporate risk management and financial flexibility independently contribute to strengthening firm resilience, while corporate risk management may also play a role in shaping a firm's financial flexibility.

RESEARCH METHODS

This study applies a quantitative approach with a causal-explanatory design to investigate the relationship between corporate risk management, financial flexibility, and firm resilience in manufacturing corporations listed on the Indonesia Stock Exchange (IDX) in the period 2020–2025. This study implements a quantitative approach with explanatory causal design to evaluate the relationship between corporate risk management, financial flexibility, and firm resilience in manufacturing corporations listed on the IDX during the period 2020–2025. The use of panel data facilitated this study in capturing the dynamics of corporate responses to economic uncertainty over time while controlling for differences in corporate characteristics that are fixed and unobserved.

Indonesia was selected as the research context because it represents a developing economy experiencing post-pandemic macroeconomic volatility, including exchange rate fluctuations, inflationary pressures, and dependence on global commodities. The manufacturing sector, which significantly contributes to national GDP and employment,

is also highly vulnerable to supply chain disruptions and demand fluctuations, making it an appropriate setting to examine the role of risk management and financial flexibility in strengthening corporate resilience. The population consists of all manufacturing firms listed on the IDX with samples selected through purposive sampling based on three criteria: consistent listing during 2020–2025, availability of complete financial statements, and sufficient disclosure of risk management and financial policies. The study uses secondary data obtained from annual reports published on the IDX official website and company investor relations pages.

The data used is secondary data compiled from the annual financial statements published through the official website of the IDX. Corporate risk management is measured using hedging policy indicators and risk management practices reflected in financial statements and notes to financial statements. Financial flexibility is proxied through a combination of cash holdings, leverage structures, and liquidity access indicators that represent the capacity of corporations to mobilize internal and external sources of funds when dealing with economic pressures. Firm resilience is measured based on the stability of financial performance and the ability of a corporation to maintain revenue growth during periods of economic uncertainty. To reduce the potential for estimation bias, this research included control variables commonly used in the corporate financial literature, including firm size, profitability level, firm age, and characteristics of industry subsectors.

Empirical analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine relationships among latent constructs. The measurement model was evaluated using standard criteria, loading factors (>0.70), Average Variance Extracted (AVE >0.50), Composite Reliability and Cronbach's Alpha (>0.70), and VIF (<5). The structural model was tested using bootstrapping with 5,000 subsamples to assess path coefficients ($t > 1.96$; $p < 0.05$) (Hair et al., 2022). PLS-SEM was chosen for its ability to analyze complex models with latent variables and non-normally distributed data, making it suitable for heterogeneous corporate financial data.

RESULTS

This study uses manufacturing companies listed on the Indonesia Stock Exchange as an analysis unit for the period 2020–2025. The presentation of sample characteristics aims to provide a preliminary overview of the company's profile, financial condition, and variations in risk management practices that are the basis of the empirical analysis in this study. Table 1 shows the sample characteristics of manufacturing companies.

Table 1. Sample Characteristics of Manufacturing Companies (2020–2025)

Features	Category	Number of Companies	Percentage (%)
Company Size (based on total assets)	Large	61	43.0
	Intermediate	54	38.0
	Small	27	19.0
Industry Sub-Sectors	Food & Beverage	29	20.4
	Chemistry & Pharmacy	21	14.8
	Cement & Building Materials	18	12.7
	Automotive & Components	24	16.9
	Tekstil & Garmen	17	12.0
	Others	33	23.2
Leverage (Debt-to-Equity Ratio)	Low (< 0.5)	58	40.8
	Intermediate (0.5–1.0)	51	35.9
	Height (> 1.0)	33	23.3
Cash Ownership (Cash/Total Assets)	Height	47	33.1
	Intermediate	56	39.4
	Low	39	27.5
Risk Management Practice	Using hedging/risk committees	69	48.6
	Does not use	73	51.4

From the perspective of firm size, the majority of the sample consists of large and medium-sized firms. Large firms account for 43.0% of the total sample, while medium-sized firms represent 38.0%, indicating that most manufacturing companies operate at relatively substantial scales with more stable access to financing. Meanwhile, small firms comprise 19.0% of the sample, providing meaningful variation for analyzing differences in firms' adaptive capacities in response to economic uncertainty.

The subsectoral distribution shows that food and beverage companies constitute the largest proportion at 20.4%, followed by firms in the automotive and components subsector at 16.9%, as well as the chemical and pharmaceutical industries at 14.8%. Other subsectors account for 23.2%, while cement and building materials represent 12.7%, and textiles and garments comprise 12.0% of the sample. This pattern reflects the structure of Indonesia's manufacturing sector, where industries oriented toward essential and domestic consumption tend to be more dominant and resilient.

With respect to capital structure, 40.8% of firms maintain low leverage levels, while 35.9% fall within the moderate range, indicating a tendency toward more conservative financing strategies. Firms with high leverage account for 23.3% of the sample, allowing for comparative analysis across varying levels of financial risk. In terms of liquidity, most firms exhibit moderate to high cash holdings, with 39.4% in the intermediate category and 33.1% in the high category, while 27.5% maintain low cash levels. This distribution suggests that many firms prioritize financial flexibility to mitigate uncertainty.

Regarding risk management practices, 48.6% of firms have implemented hedging strategies or established formal risk management committees, while 51.4% have not adopted such practices. This near-balanced distribution indicates a heterogeneous approach to risk management within the manufacturing sector, providing a strong basis for examining how differences in risk management practices influence financial flexibility and firm resilience. The sample characteristics demonstrate sufficient diversity in firm size, industry subsector, capital structure, liquidity, and risk management practices. This diversity supports the appropriateness of employing the PLS-SEM approach and enhances the external validity of the study's findings. Given these sample characteristics, the empirical results are expected to provide a comprehensive representation of the conditions faced by manufacturing firms in Indonesia during the 2020–2025 period.

Before analyzing the causal relationship between variables in the structural model, this study first tested the quality of the measurement model. This stage is an essential step in Structural Equation Modeling (SEM)-based research, because the accuracy of structural analysis results is largely determined by the ability of the indicator to represent latent constructs in a valid and reliable manner. Weak measurement models have the potential to result in biased and inaccurate empirical interpretations. In this study, the constructs of corporate risk management, financial flexibility, and firm resilience are latent variables that cannot be observed directly, so they are operationalized through a number of reflective indicators. Therefore, evaluation of the measurement model is important to ensure the suitability of the indicators with the theoretical concepts they represent. Referring to the PLS-SEM approach, the analysis is focused on testing convergent validity, discriminant validity, and internal reliability as a methodological basis before structural model testing is performed.

The measurement model (outer model) analysis in Figure 2 was conducted to evaluate the quality of the indicators in representing the latent constructs employed in this study. The purpose of the outer model assessment is to ensure that each construct demonstrates adequate levels of validity and reliability, thereby allowing the structural relationships among variables to be interpreted accurately and defended scientifically (Hair et al., 2022). The estimation results indicate that the firm resilience construct has an R^2 value of 0.250, suggesting that corporate risk management and financial flexibility jointly explain 25% of the variance in firm resilience. This explanatory power can be classified as moderate, reflecting the notion that firm resilience is a complex phenomenon influenced not only by internal organizational factors but also by external dynamics that fall beyond the scope of the research model.

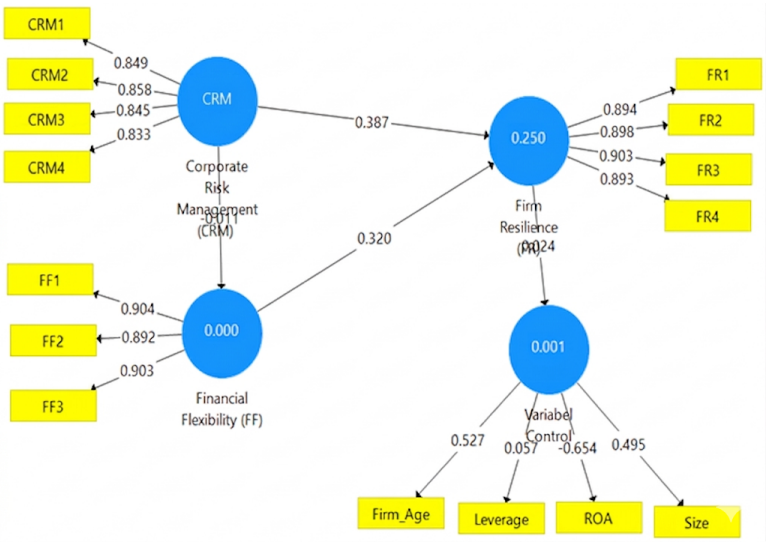

Figure 2. SEM-PLS Construct

The results in Table 2 indicate that all indicators across the constructs exhibit high outer loading values, exceeding the minimum threshold of 0.70. Indicators of CRM show loading values ranging from 0.833 to 0.858, suggesting that each indicator consistently reflects the underlying concept of corporate risk management. Similarly, the financial flexibility construct demonstrates strong measurement properties, with indicator loadings ranging from 0.892 to 0.904. These results indicate that firms' financial flexibility is accurately captured through the liquidity and financing structure indicators applied in this study. Furthermore, the indicators measuring firm resilience exhibit loading values between 0.893 and 0.903, confirming that all indicators consistently represent firms' ability to maintain stability and adapt to economic pressures.

Table 2. Measurement Model Test Results (Outer Model)

Construct	Indicator	Outer Loading	AVE	Composite Reliability	Cronbach's Alpha	Information
Corporate Risk Management (CRM)	CRM1	0.849	0.72	0.91	0.88	Valid & Reliable
	CRM2	0.858				
	CRM3	0.845				
	CRM4	0.833				
Financial Flexibility (FF)	FF1	0.904	0.81	0.93	0.88	Valid & Reliable
	FF2	0.892				
	FF3	0.903				
Firm Resilience (FR)	FR1	0.894	0.80	0.94	0.91	Valid & Reliable
	FR2	0.898				
	FR3	0.903				
	FR4	0.893				

The Average Variance Extracted (AVE) values for all constructs exceed 0.50, indicating that more than 50 percent of the variance in the indicators is explained by their respective latent constructs. This finding confirms that all constructs meet the criteria for convergent validity. In addition, the results show that all constructs demonstrate strong internal reliability, as both Composite Reliability and Cronbach's Alpha values exceed the recommended cut-off value of 0.70. This evidence indicates a high degree of internal consistency among the indicators within each construct. Given that all validity and reliability criteria are satisfied, the measurement model is deemed valid and reliable, and therefore suitable for proceeding to the structural model (inner model) analysis.

The structural model (inner model) analysis was conducted to evaluate the causal relationships among the latent constructs and to assess the model's explanatory power with respect to the endogenous variables. In this study, the inner model assessment focuses on the estimation of path coefficients, the coefficient of determination (R^2), and

the statistical significance of the relationships between variables based on the bootstrapping procedure within the Partial Least Squares–Structural Equation Modeling (PLS-SEM) approach. This stage aims to ensure that the theoretical relationships formulated in the hypotheses receive adequate empirical support.

Table 3. Structural Model (Inner Model) Test Results

Variable Relationships	β	t-statistic	p-value	R^2 Variable Endogenous	Information
Corporate Risk Management → Firm Resilience	0.387	4.216	0.000	0.250	Supported
Financial Flexibility → Firm Resilience	0.320	3.587	0.000	0.250	Supported
Corporate Risk Management → Financial Flexibility	-0.011	0.214	0.831	0.000	Not Supported

The structural path analysis in Table 3 shows that corporate risk management has a positive effect on firm resilience (β = 0.387), indicating that more effective risk management enhances firms' ability to maintain stability and adapt to economic pressures. Financial flexibility also positively influences firm resilience (β = 0.320), suggesting that firms with stronger liquidity and more conservative capital structures are better able to withstand economic uncertainty. In contrast, the relationship between corporate risk management and financial flexibility is negligible and slightly negative (β = –0.011), indicating that risk management practices do not directly increase financial flexibility. This implies that both strategies tend to be implemented independently rather than functioning as mutually reinforcing mechanisms within firms.

DISCUSSION

The empirical results indicate that corporate risk management has a positive and significant effect on firm resilience. Therefore, Hypothesis 1 is supported. This finding suggests that manufacturing firms implementing more systematic risk management practices are better able to maintain operational stability and adjust their strategies when confronted with economic pressures. In an environment characterized by persistent uncertainty, risk management functions as an internal mechanism that enables firms to identify potential threats at an early stage and mitigate adverse impacts that could undermine business continuity (Graham & Kaye, 2015).

This result is consistent with the view that risk management should no longer be regarded solely as a control tool, but rather as an integral component of a firm's strategic capabilities. Prior studies by Ellul and Yerramilli (2021) demonstrate that firms with well-developed risk management systems tend to experience lower performance volatility during periods of crisis. Integrating risk management into strategic decision-making processes significantly enhances firms' ability to withstand and recover from economic shocks (Malynovska et al., 2025). Within the context of manufacturing firms in emerging economies, these findings reinforce the notion that effective risk management represents a critical factor in building firm resilience. High dependence on global supply chains and exposure to input cost fluctuations make manufacturing firms particularly vulnerable to external risks. Accordingly, the present findings provide strong empirical support for the argument that strengthening corporate risk management is a fundamental prerequisite for sustaining firms' medium-term resilience.

The results of the study indicate that financial flexibility has a positive and significant effect on firm resilience. Therefore, Hypothesis 2 is also supported. This finding suggests that firms with higher levels of financial flexibility possess greater adaptive capacity when facing economic pressures, both through their ability to maintain adequate liquidity and to adjust financing structures as conditions evolve. Financial flexibility enables firms to sustain core operational activities without resorting to extreme adjustments, such as cutting strategic investments or undertaking drastic workforce restructuring. Prior research by Graham and Leary (2018) emphasizes that firms with sufficient cash reserves

and controlled leverage levels exhibit stronger resilience during periods of crisis. In addition, Riddick and Whited (2022) and Wu et al. (2024) find that financial flexibility plays a critical role in accelerating firms' performance recovery following macroeconomic shocks. Within the context of Indonesia's manufacturing sector, these findings reflect the practical reality that limited access to external capital markets renders financial flexibility a particularly vital strategic resource. Firms with more adaptive financial structures are better positioned to absorb external pressures without jeopardizing business continuity. This evidence reinforces the argument that financial flexibility constitutes a key determinant in building firm resilience, especially in unstable and uncertain business environments (Zahedi et al., 2022; Sağlam, 2025)

The results show that corporate risk management does not affect financial flexibility, meaning Hypothesis 3 is not supported. This suggests that improvements in risk management practices do not automatically lead to greater financial flexibility, as the two concepts are driven by different policy orientations: risk management focuses on reducing uncertainty, while financial flexibility depends on capital structure, liquidity, and access to financing. Prior studies also report similar patterns, indicating potential trade-offs between risk management activities and financial resource allocation, and showing that stronger risk management does not necessarily increase cash reserves or reduce leverage, particularly in capital-intensive industries (Bolton et al., 2020; Bates et al., 2021; Zhao et al., 2023). In manufacturing firms, these findings suggest that risk management and financial flexibility operate as relatively independent strategies, each contributing directly to firm resilience.

CONCLUSION

The results demonstrate that both corporate risk management and financial flexibility play important roles in strengthening firm resilience. Corporate risk management shows a significant positive effect on firm resilience, indicating that effective identification and control of risks enhance a firm's ability to maintain stability and respond to economic pressures. Similarly, financial flexibility also contributes positively to firm resilience, suggesting that firms with stronger liquidity and adaptive financing capacity are better able to withstand external shocks. However, the analysis finds no significant relationship between corporate risk management and financial flexibility, indicating that these strategies tend to operate independently rather than reinforcing one another in improving firm resilience. Based on the findings of this study, manufacturing companies are advised to strengthen the implementation of corporate risk management in an integrated and sustainable manner. Risk management should not be positioned as a mere compliance function, but as a strategic instrument that supports financial stability and corporate resilience in the long term. Company management also needs to simultaneously build and maintain financial flexibility through prudent liquidity management, balanced funding structures, and investment policies that are adaptive to the dynamics of the business environment.

This study has several limitations. It focuses only on manufacturing firms listed on the Indonesia Stock Exchange, which may limit the generalizability of the findings. Additionally, the study does not include other relevant factors such as corporate governance or macroeconomic conditions and uses a non-longitudinal approach, which may not fully capture dynamic changes over time. These findings provide important implications for regulators and policymakers to promote stronger risk management practices and financial transparency. For future research, scholars are encouraged to incorporate additional variables such as corporate governance, industry characteristics, and macroeconomic factors, as well as to apply cross-sectoral and longitudinal research designs to better capture the dynamic nature of firm resilience.

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