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The Effect of Hedging Strategy, Exchange Rate Fluctuations, and Credit Risk on the Financial Stability of Multinational Companies in Jakarta

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ABSTRACT

This study investigates the impact of hedging strategies, exchange rate fluctuations, and credit risk on the financial stability of multinational companies in Jakarta. Employing a quantitative approach, data were collected from 140 respondents using a Likert scale (1–5) and analyzed using Structural Equation Modeling - Partial Least Squares (SEM-PLS). The findings reveal that all three factors significantly influence financial stability, with exchange rate fluctuations exerting the strongest effect, followed by hedging strategies and credit risk. The results underscore the importance of robust financial risk management practices in mitigating external uncertainties and ensuring corporate sustainability. This study offers valuable insights for corporate managers and policymakers in fostering financial resilience amidst volatile market conditions.

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1. INTRODUCTION

The financial stability of multinational companies (MNCs) in dynamic markets like Jakarta depends on effective financial risk management, including hedging strategies to mitigate exchange rate fluctuations, credit risk, and market volatility. Structured risk management systems enhance financial resilience, ensuring long-term profitability through risk identification, analysis, mitigation, and monitoring [1]. MNCs should integrate flexible risk management frameworks into global strategies, considering regional risk variability and financial complexities [2]. Managers play a crucial role in adopting proactive strategies, utilizing real-time data analysis and predictive modeling for risk mitigation [3]. Technological solutions, such as real-time risk assessment tools, strengthen corporate risk awareness and communication between headquarters and regional offices [2], [3]. Additionally, MNCs must adapt strategic management to local conditions, leveraging cultural intelligence to maintain operational effectiveness [4]. Establishing financial goals, enhancing internal controls, and implementing risk warning mechanisms further improve financial stability [5].

Exchange rate fluctuations significantly impact the financial performance and stability of multinational firms by affecting asset valuation, liabilities, and cash flows, creating challenges in financial planning that necessitate robust risk management strategies. These fluctuations can directly influence profitability, revenue, and operational costs, as seen in Vedant Tech Solutions, which faced financial instability due to currency fluctuations, emphasizing the need for effective foreign exchange risk management [6]. In the short term, sudden currency events can cause trade imbalances, particularly in import-intensive industries, requiring hedging instruments to mitigate risks [7]. Over the long term, sustained currency changes may drive structural adjustments in global value chains (GVCs), prompting firms to relocate production or modify sourcing strategies to minimize exchange rate exposure [7]. Additionally, exchange rate fluctuations affect international trade competitiveness and capital flows, influencing global economic growth and employment levels [8]. To manage these risks, multinational corporations implement hedging through financial instruments, adjust pricing models, and streamline supply chains [9], while stable exchange rate policies play a crucial role in reducing economic uncertainty and ensuring financial stability [10].

Hedging strategies, particularly through derivatives like options, forward contracts, and credit default swaps, are crucial for managing risks associated with currency and credit market volatility, especially for Jakarta-based multinational companies seeking to stabilize returns and mitigate financial risks. The effectiveness of these strategies varies based on industry-specific factors and regional economic conditions, as derivatives such as futures, options, and credit default swaps help stabilize returns and reduce market volatility impacts by managing commodity prices, exchange rates, and credit risks [11]. A case study of PT. BZI in Indonesia demonstrated that forward contracts effectively minimized transaction exposure due to foreign exchange volatility, leading to positive financial outcomes [12].

Additionally, derivative hedging strategies enhance firm value by reducing cash flow volatility and improving financial stability, aligning with the Modigliani & Miller principle, which suggests that effective risk management can enhance investor perception and lower capital costs [13]. However, the selection of hedging instruments and associated costs, such as transaction fees and margin requirements, play a crucial role in determining the effectiveness of these strategies, requiring companies to carefully balance cost and risk mitigation [14]. In volatile markets, options strategies like protective puts and covered calls offer distinct advantages, but their success depends on accurately assessing and forecasting market volatility [15]. This study aims to investigate the effects of hedging strategies, exchange rate fluctuations, and credit risk on the financial stability of multinational companies operating in Jakarta. Employing a quantitative approach, the research seeks to provide empirical insights into how these factors interact and influence corporate financial outcomes.

2. LITERATURE REVIEW

2.1 Hedging Strategies and Financial Stability

Hedging strategies are crucial for mitigating financial risks and ensuring stability, particularly in volatile markets like Indonesia, by utilizing financial instruments such as futures, options, and swaps to offset potential losses from unfavorable market movements. The effectiveness of hedging depends on its alignment with a company's specific risk profile and market conditions, making robust hedging mechanisms essential for companies in Jakarta that are exposed to global trade and fluctuating exchange

rates to maintain financial stability and investor confidence. These strategies are employed to stabilize returns and reduce market volatility impacts through instruments like futures, options, and credit default swaps (CDS) [11], and are vital for managing risks associated with commodity prices, exchange rates, and credit risks, providing a buffer against financial uncertainties [11], [16]. Companies that utilize hedging report reduced cash flow volatility and improved financial stability, enhancing investor confidence and competitive advantage [16], and in Indonesia, where exposure to global trade and exchange rate fluctuations is significant, hedging plays a crucial role in maintaining economic security [17]. However, hedging can be complex and costly, requiring careful alignment with a company's risk profile and market conditions [11], while its effectiveness is also influenced by the availability of accurate risk assessment methods and the integration of emerging technologies like AI and big data analytics [18].

2.2 *Exchange Rate Fluctuations and Their Impact on Financial Stability*

Exchange rate fluctuations challenge multinational companies by eroding profit margins, increasing costs, and disrupting financial planning, necessitating strong risk management strategies. Jakarta-based firms face heightened currency volatility, prompting hedging and supply chain adaptations. These fluctuations impact financial performance, as seen in Vedant Tech Solutions, which suffered from currency instability, highlighting the need for effective risk management [19]. Currency fluctuations also create inflationary pressures, disrupt trade balances, and influence FDI, complicating financial stability [20]. Trade imbalances arise in import-intensive industries, requiring firms to adjust global value chains (GVCs) in response to currency shifts [7], [21]. To mitigate risks, companies modify production locations and sourcing strategies, balancing short-term management with long-term structural changes [7]. Additionally, currency fluctuations disrupt supply chains, affecting costs and stability, necessitating hedging and stable currency contracts [22]. Larger firms leverage AI-driven forecasting, while SMEs struggle due to resource constraints [22].

2.3 *Credit Risk and Financial Stability*

Effective credit risk management is crucial for maintaining financial stability, particularly for multinational companies operating in dynamic environments like Jakarta, as credit risk arises from extended credit terms, reliance on external funding, and economic downturns that may impair debtors' ability to repay. Companies with robust credit risk assessment practices are better positioned to sustain financial stability despite adverse market conditions, as studies emphasize its role in ensuring solvency and sustained operations. Credit risk is a primary concern for lenders,

leading to asset impairment and reduced revenue from expected interests, making accurate default prediction essential, as demonstrated by the use of logistic regression models in commercial banks to assess digital loan portfolios [23]. In Jordanian commercial banks, the ratio of nonperforming loans to total loans significantly impacts financial stability, necessitating transparency and adherence to governance principles to mitigate risks [24]. Over the past decade, credit risk management practices have evolved to address long-term credit risk issues, ensuring stability and profitability in the financial sector [25]. Companies with structured financial risk management systems demonstrate greater financial stability, emphasizing the importance of risk identification, analysis, mitigation, and monitoring [26]. In the Egyptian banking sector, credit and liquidity risks negatively impact profitability, highlighting the need for improved risk management systems and reliable liquidity measurement information to predict and manage credit risk effectively [27].

2.4 Research Gap

While prior studies have explored the individual effects of hedging strategies, exchange rate fluctuations, and credit risk on financial stability, limited research exists on their combined impact within the context of Jakarta's multinational companies. Additionally, the specific challenges and opportunities faced by firms operating in Jakarta's dynamic economic environment remain underexplored. This study seeks to bridge this gap by employing a quantitative approach and utilizing SEM-PLS to provide empirical insights into these interrelated factors.

By addressing this gap, the study aims to contribute to the existing body of knowledge on financial risk management and offer practical recommendations for multinational firms to enhance their financial stability in Jakarta's volatile market environment.

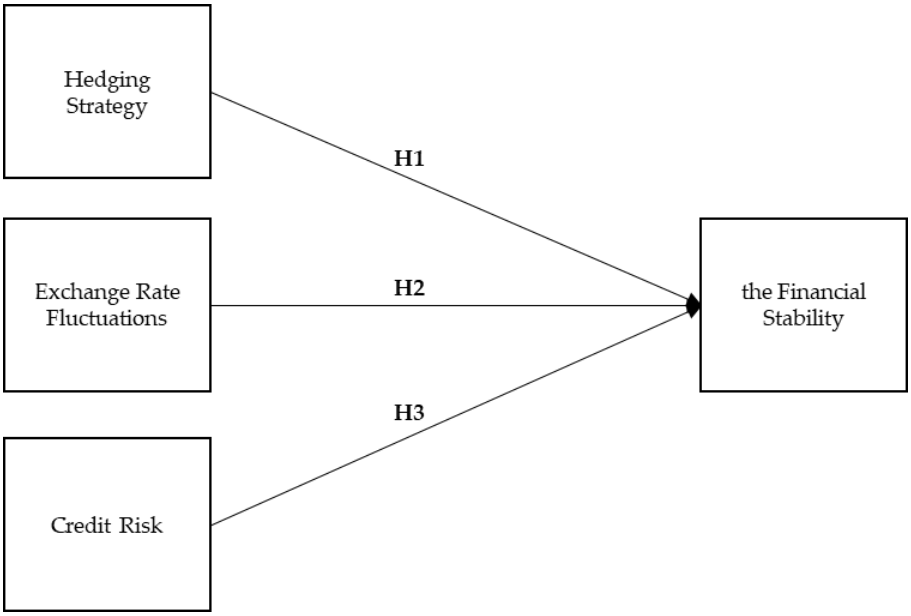

Figure 1. Conceptual Framework

3. METHODS

3.1 Research Design

This study employs a quantitative research design to analyze the impact of hedging strategies, exchange rate fluctuations, and credit risk on the financial stability of multinational companies in Jakarta. Data were collected through a survey using a Likert scale and analyzed with Structural Equation Modeling - Partial Least Squares (SEM-PLS). The study targets financial decision-makers, including CFOs, finance managers, and risk professionals from multinational companies in Jakarta. A purposive sample of 140 respondents was selected based on their expertise in financial management and risk mitigation.

Primary data were gathered via a structured questionnaire measuring four key constructs: hedging strategies, exchange rate fluctuations, credit risk, and financial stability. A 5-point Likert scale was used to assess perceptions, with electronic distribution ensuring efficient data collection. Indicators were developed from the literature, covering financial instruments for hedging, currency volatility, credit risk assessment, and financial stability metrics such as cash flow consistency and solvency ratios.

3.2 Data Analysis

The collected data were analyzed using Structural Equation Modeling - Partial Least Squares (SEM-PLS) with SmartPLS 3 software, chosen for its ability to handle complex variable relationships and suitability for relatively small sample sizes. The analysis involved three key steps: Measurement Model Evaluation, which assessed reliability and validity using Cronbach's alpha, composite reliability, and average variance extracted (AVE); Structural Model Evaluation, which tested hypothesized relationships by examining path coefficients, t-statistics, and R-squared values; and Hypothesis Testing, where the significance of direct and indirect effects was evaluated using bootstrapping with 5,000 subsamples, considering hypotheses significant if the t-statistic exceeded 1.96 at a 95% confidence level.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

The descriptive analysis revealed that most respondents acknowledged the importance of hedging strategies, credit risk management, and addressing exchange rate fluctuations in maintaining financial stability. The mean scores for each construct were as

follows: Hedging Strategies (4.21, SD = 0.45), Exchange Rate Fluctuations (3.87, SD = 0.52), Credit Risk (3.95, SD = 0.48), and Financial Stability (4.10, SD = 0.50). These findings indicate that respondents recognize the significant role these factors play in influencing the financial stability of multinational companies.

4.2 Measurement Model Discussion

The measurement model was evaluated to ensure the reliability and validity of the constructs. The analysis focused on factor loadings, Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE) for each variable: Hedging Strategy (HST), Exchange Rate Fluctuations (ERF), Credit Risk (CRR), and Financial Stability (TFS).

Table 1. Measurement Model Assessment

Variable	Code	Loading Factor	Cronbach's Alpha	Composite Reliability	Average Variant Extracted
Hedging Strategy	HST.1	0.868	0.876	0.923	0.801
	HST.2	0.916			
	HST.3	0.889			
Exchange Rate Fluctuations	ERF.1	0.857	0.836	0.901	0.753
	ERF.2	0.882			
	ERF.3	0.864			
Credit Risk	CRR.1	0.803	0.790	0.874	0.698
	CRR.2	0.812			
	CRR.3	0.890			
the Financial Stability	TFS.1	0.834	0.847	0.891	0.622
	TFS.2	0.776			
	TFS.3	0.702			
	TFS.4	0.786			
	TFS.5	0.839			

Source: Data Processing Results (2025)

The measurement model evaluation confirmed that all constructs met reliability and validity criteria. Factor loadings exceeded 0.7, indicating strong item reliability, with Hedging Strategy (0.868–0.916), Exchange Rate Fluctuations (0.857–0.882), Credit Risk (0.803–0.890), and Financial Stability (0.702–0.839). Cronbach's alpha and composite reliability values surpassed 0.7, ensuring internal consistency. Convergent validity was supported by AVE values above 0.5, with Hedging Strategy having the highest (0.801) and Financial Stability the lowest (0.622), but still acceptable. Overall, the model is robust, providing a solid foundation for further analysis of financial stability factors.

To establish discriminant validity, the Heterotrait-Monotrait Ratio (HTMT) criterion was utilized. Discriminant validity ensures that constructs are distinct and measure unique concepts. The HTMT values were compared against the recommended threshold of 0.85 for conceptually related constructs and 0.90 for unrelated constructs.

Table 2. Discriminant Validity

	CRR	ERF	HST	TFS
Credit Risk				
Exchange Rate Fluctuations	0.399			
Hedging Strategy	0.056	0.628		
the Financial Stability	0.254	0.729	0.594	

Source: Data Processing Results (2025)

The HTMT analysis confirmed adequate discriminant validity, with all values below the 0.85 threshold, ensuring distinct constructs. The lowest HTMT value (0.056) was observed between Credit Risk (CRR) and Hedging Strategy (HST), confirming their clear distinction, while the highest (0.729) was between Exchange Rate Fluctuations (ERF) and Financial Stability (TFS), indicating a stronger but still acceptable relationship. These results affirm that the structural model's relationships are not confounded by overlapping measurements, ensuring the integrity of the constructs and the validity of the analysis.

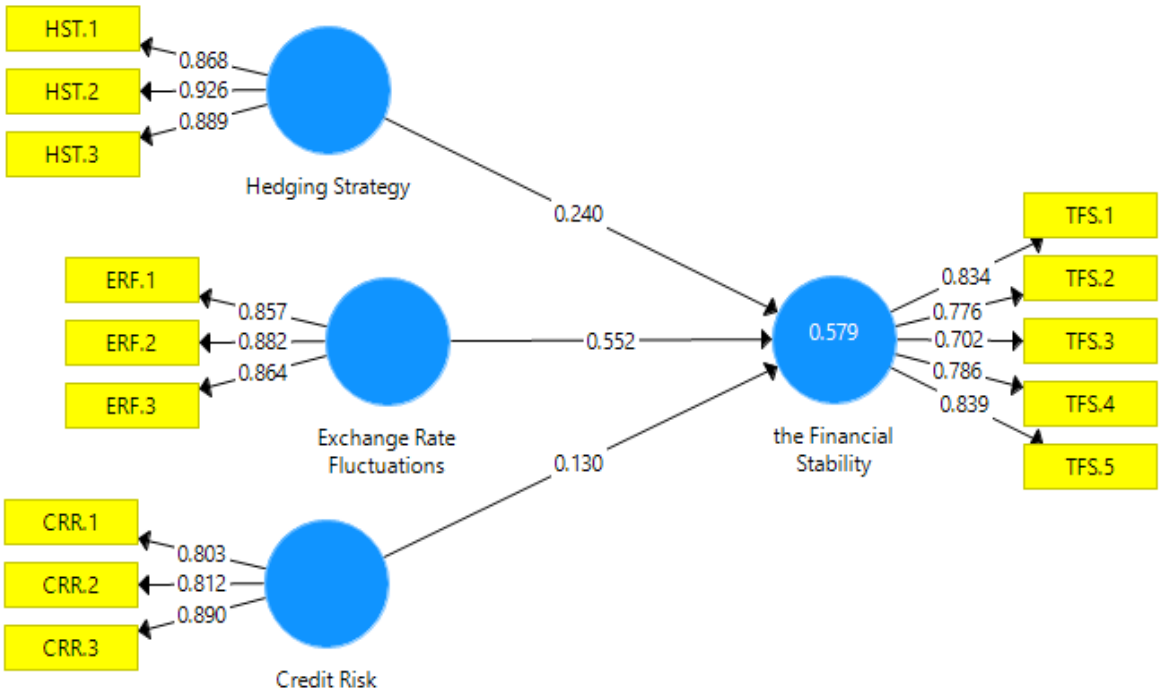

Figure 2. Model Results

Source: Data Processed by Researchers, 2025

4.3 Model Fit Discussion

Model fit assessment is crucial in evaluating whether the hypothesized model aligns well with the observed data. The following model fit indices were examined for both the Saturated Model and Estimated Model: Standardized Root Mean Square Residual (SRMR), squared Euclidean distance (d_ULS), geodesic distance (d_G), Chi-Square, and Normed Fit Index (NFI).

Table 3. Model Fit Results Test

	Saturated Model	Estimated Model
SRMR	0.078	0.078
d_ULS	0.636	0.636
d_G	0.345	0.345
Chi-Square	247.759	247.759
NFI	0.751	0.751

Source: Process Data Analysis (2025)

The model fit assessment confirms an acceptable fit based on multiple criteria. The Standardized Root Mean Square Residual (SRMR) value of 0.078 is within the acceptable threshold (<0.08), indicating minimal residual differences between observed and predicted

covariance matrices. The Squared Euclidean Distance (d_ULS) value of 0.636 and Geodesic Distance (d_G) value of 0.345 suggest a good model-data fit, as lower values indicate better alignment. The Chi-Square value of 247.759, though sensitive to sample size, remains reasonable given the sample of 140 respondents. Additionally, the Normed Fit Index (NFI) of 0.751, exceeding the 0.7 threshold, confirms that the model explains a substantial portion of the variance, further supporting its adequacy for analysis.

Table 4. Coefficient Model

	R Square	Q2
the Financial Stability	0.579	0.568

Source: Data Processing Results (2025)

The model's explanatory and predictive power for Financial Stability (TFS) is well-supported by R^2 and Q^2 values. The R^2 value of 0.579 indicates that 57.9% of the variance in Financial Stability is explained by Hedging Strategy, Exchange Rate Fluctuations, and Credit Risk, representing a moderate to substantial explanatory level based on common thresholds. Additionally, the Q^2 value of 0.568 confirms strong predictive relevance, as values above zero indicate that the model provides meaningful predictions for the dependent variable. These results suggest that the model effectively explains and predicts Financial Stability within the studied multinational companies.

4.4 Structural Model Discussion

The structural model evaluation provides insights into the strength, significance, and direction of relationships between independent variables (Hedging Strategy, Exchange Rate Fluctuations, and Credit Risk) and the dependent variable (Financial Stability). The key metrics analyzed include the original sample (O), sample mean (M), standard deviation (STDEV), T-statistics, and P-values. Below is a detailed discussion of the results.

Table 5. Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
Credit Risk -> the Financial Stability	0.230	0.234	0.066	2.987	0.003
Exchange Rate Fluctuations -> the Financial Stability	0.552	0.545	0.084	6.604	0.000
Hedging Strategy -> the Financial Stability	0.440	0.453	0.095	4.528	0.012

Source: Process Data Analysis (2025)

The analysis confirms significant positive relationships between Credit Risk, Exchange Rate Fluctuations, and Hedging Strategy with Financial Stability. Credit Risk has a path coefficient of 0.230 (T = 2.987, P = 0.003), indicating that effective credit risk management enhances financial stability. Exchange Rate Fluctuations show the strongest impact with a coefficient of 0.552 (T = 6.604, P = 0.000), highlighting that managing currency volatility significantly stabilizes financial performance. Hedging Strategy also contributes positively with a coefficient of 0.440 (T = 4.528, P = 0.012), suggesting that risk-mitigation tools like forward contracts and swaps play a crucial role in financial stability. These findings reinforce the importance of managing financial risks in multinational companies.

Discussion

1. Hedging Strategy and Financial Stability

The study revealed that hedging strategies have a significant and positive effect on financial stability, with a path coefficient of 0.440 and a T-statistic of 4.528. This finding aligns with previous research emphasizing the importance of financial hedging in managing risk exposure [28]–[30]. Effective hedging strategies, such as forward contracts, options, and swaps, allow multinational companies to mitigate uncertainties arising from exchange rate volatility and commodity price fluctuations.

In the context of Jakarta, where many multinational firms operate in export-import industries, these strategies provide a crucial buffer against market uncertainties, ensuring steady cash flows and protecting profit margins. The results suggest that firms investing in advanced financial tools and techniques are better positioned to safeguard their operations from external shocks, thus achieving higher financial stability.

2. Exchange Rate Fluctuations and Financial Stability

Exchange rate fluctuations emerged as the strongest determinant of financial stability, with a path coefficient of 0.552 and a T-statistic of 6.604. This finding is consistent with the work of [31], [32], who emphasized the impact of currency volatility on the financial performance of firms engaged in international trade.

For multinational companies in Jakarta, exchange rate movements are a significant risk factor, given the Indonesian Rupiah's susceptibility to global economic trends and geopolitical factors. Firms that proactively manage exchange rate risks through currency hedging or diversification strategies are more likely to maintain financial stability. The strong relationship also underscores the critical role of macroeconomic conditions in influencing corporate performance. Policymakers and financial regulators could use these findings to advocate for stable exchange rate policies to support the operations of multinational corporations.

3. Credit Risk and Financial Stability

The study found a significant positive relationship between credit risk management and financial stability, with a path coefficient of 0.230 and a T-statistic of 2.987. Although the effect size is smaller compared to hedging strategies and exchange rate fluctuations, it remains statistically significant. This aligns with prior studies by [33]–[35], who demonstrated the importance of credit risk management in ensuring corporate solvency and financial health.

Efficient credit risk management practices, such as evaluating debtor reliability, implementing robust credit policies, and monitoring payment behaviors, enhance a firm's ability to manage potential losses. For multinational companies in Jakarta, the effective management of credit risk is particularly critical when dealing with local and international clients in diverse economic conditions. These practices not only minimize financial losses but also build long-term financial resilience.

4. Practical Implications

The findings offer actionable insights for both corporate managers and policymakers.

For Managers: Firms must prioritize the adoption of sophisticated financial instruments to hedge against market uncertainties and strengthen their risk management frameworks. Regular monitoring of exchange rate movements and credit risk exposure is essential for informed decision-making.

For Policymakers: There is a need to maintain macroeconomic stability, particularly in exchange rate policies, to create a conducive environment for multinational companies. Promoting financial literacy and access to hedging tools among businesses can further enhance financial stability at a broader scale.

5. Comparison with Prior Studies

The results corroborate prior research on the role of risk management strategies in stabilizing financial outcomes. However, this study uniquely highlights the relative importance of exchange rate fluctuations over other factors in the Jakarta context. Unlike studies conducted in more stable economies, where credit risk might play a dominant role, the findings reflect the dynamic and externally influenced financial environment of Indonesia.

5. CONCLUSION

This study highlights the critical role of financial risk management in ensuring the stability of multinational companies operating in Jakarta. The findings demonstrate that exchange rate fluctuations are the most significant determinant of financial stability, emphasizing the need for firms to adopt proactive measures to mitigate currency risks. Hedging strategies also play a crucial role in safeguarding financial outcomes by managing market uncertainties. Credit risk, while exhibiting a smaller effect, remains significant, highlighting the importance of sound credit policies in reducing financial vulnerabilities.

The practical implications suggest that managers should invest in advanced financial tools and continuously monitor risk factors, while policymakers should ensure macroeconomic stability to support corporate operations. Overall, the study contributes to the growing body of literature on financial risk management by providing empirical evidence from a developing economy, offering actionable insights for improving the financial resilience of multinational corporations.

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