# The Effect of Hedging Strategies on the Financial Performance of Import-Export Companies in Indonesia

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### **ABSTRACT**

This study examines the effect of hedging strategies on the financial performance of import–export companies in Indonesia. Due to the high exposure to foreign exchange fluctuations, firms engaged in international trade increasingly adopt hedging mechanisms to stabilize financial outcomes. Using a quantitative approach, data were collected from 115 respondents through a Likert scale–based questionnaire and analyzed using SPSS version 25. Statistical tests including validity, reliability, correlation, and regression analyses were conducted to evaluate the relationship between hedging strategies and financial performance. The results show that hedging strategies have a positive and significant effect on financial performance. The correlation coefficient (r = 0.642) indicates a strong relationship, while the regression analysis reveals that hedging explains 41.2% of the variation in financial performance. Forward contracts, options, swaps, and natural hedging contribute significantly to improving profitability, liquidity, and cash flow stability. The findings highlight the importance of systematic risk management practices in increasing the financial resilience and competitiveness of import–export companies in Indonesia. This study recommends that firms enhance their financial literacy and adopt more structured hedging policies to effectively mitigate currency risks.

Keywords: Hedging Strategies, Financial Performance, Foreign Exchange Risk, Import-Export Companies, Indonesia.

## 1. INTRODUCTION

The dynamics of global trade continue to evolve as companies increasingly engage in crossborder transactions, exposing import-export firms to substantial foreign exchange fluctuations that directly affect operational stability and financial performance. Exchange rate volatility creates both risks and opportunities; however, without effective management, it can reduce profitability, disrupt cash flow, and heighten financial uncertainty. In Indonesia – where international trade continues to expand - the volatility of the rupiah against major currencies such as the US dollar, euro, and yen has become a critical challenge for firms operating in global markets, as these fluctuations can significantly impact their operational stability and financial outcomes. To maintain profitability and ensure financial certainty, firms must manage these risks using a variety of strategies, each with its own challenges and considerations. Among the most common approaches, companies employ derivative instruments such as forward contracts, options, and swaps to hedge against currency risks, helping stabilize cash flows and protect profit margins by locking in exchange rates for future transactions [1], while operational hedging through diversifying production locations and sourcing inputs in multiple currencies also serves as an important mechanism for managing exposure [1]. In addition, foreign trade enterprises must enhance their awareness and management of exchange rate risks to minimize losses and maximize profits, including using financial instruments and internal strategies to respond to currency fluctuations [2]. Natural hedging practices—such as matching currency inflows and outflows—can further help balance exposure [3]. In Indonesia, the relationship between exchange rate fluctuations and financial performance is generally weak, particularly in the

fintech sector; nevertheless, firms can maintain stability during moderate exchange rate changes by optimizing operational efficiency and employing forward contracts [3]. Moreover, exchange rate volatility can increase production costs and reduce profit margins, ultimately influencing corporate growth and investment decisions [4].

To address exchange rate risks, companies commonly adopt hedging strategies—financial mechanisms designed to protect firms from adverse currency movements. Instruments such as forward contracts, futures, options, swaps, and natural hedging through currency matching help stabilize cash flows and enhance financial planning accuracy, although their adoption varies depending on financial literacy, market conditions, risk appetite, and organizational readiness. Consequently, hedging practices differ significantly across Indonesian companies, particularly within import-export sectors, where hedging strategies remain crucial for stabilizing financial performance. These strategies, including derivatives like forward contracts, futures, options, and swaps, help mitigate the adverse effects of currency fluctuations, yet the extent of their implementation and effectiveness varies across firms due to differences in financial capability, market dynamics, and readiness for risk management. Empirical evidence indicates that hedging can enhance firm value by reducing earnings volatility and improving liquidity, though its application among Indonesian firms-especially SMEs-remains underexplored. Companies use various derivative instruments and operational hedging techniques to manage exchange rate exposure, which can effectively reduce risk and improve firm performance, although the effectiveness of these strategies depends on firm size, financial leverage, and growth opportunities [1]. In the broader Southeast Asian context, larger and more leveraged firms with extensive foreign operations tend to engage more actively in hedging, influenced by exchange rate volatility and institutional factors such as financial market development [5].

Despite its importance, several challenges hinder the adoption of hedging strategies in Indonesia. Many firms, particularly SMEs, lack awareness or the capability to utilize formal hedging instruments, resulting in inconsistent or informal approaches to risk management [1]. Limited access to derivative markets and weak regulatory environments in some Southeast Asian countries, including Indonesia, further constrain the effectiveness of hedging practices [5]. Notwithstanding these barriers, empirical findings show that hedging exchange rate risk with derivative instruments has a positive and significant effect on firm value, as demonstrated in studies on Indonesian non-financial firms [6], [7]. Effective hedging strategies can reduce cash flow volatility, strengthen financial stability, and enhance investor perception, thereby lowering the cost of capital and increasing firm value [7]. Across emerging markets, empirical studies consistently show that hedging improves financial performance by reducing earnings volatility, enhancing profitability, and improving liquidity, yet its influence on financial outcomes among Indonesian import—export companies remains insufficiently examined, underscoring the need for more comprehensive research in this area.

This study examines the effect of hedging strategies on the financial performance of import-export companies in Indonesia using a quantitative research design. Data from 115 respondents were collected through a Likert-scale questionnaire and analyzed using SPSS version 25. The results are expected to provide empirical insights into the effectiveness of hedging practices in improving financial outcomes and strengthening firms' resilience to currency fluctuations. Ultimately, this study contributes to a deeper understanding of risk management within the Indonesian international trade landscape and offers practical implications for enhancing financial stability.

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### 2. LITERATURE REVIEW

# 2.1 Hedging Strategies

Hedging strategies refer to financial techniques used by firms to protect themselves against potential losses arising from market risks, particularly foreign exchange fluctuations. According to financial risk management theory, hedging helps reduce uncertainty and stabilize cash flows by offsetting potential adverse price movements. Common hedging instruments include forward contracts, futures, options, swaps, and natural hedging practices such as currency matching and diversification of currency exposure [8]. Forward contracts allow firms to lock in future exchange rates, while options provide the right—but not the obligation—to buy or sell currency at a predefined rate. Swaps enable the exchange of cash flows in different currencies, and natural hedging reduces risk through internal structuring of operations. Numerous studies emphasize that firms engaged in international trade typically implement hedging strategies to protect profit margins and ensure financial stability [1], [9].

## 2.2 Financial Performance

Financial performance represents an organization's ability to achieve desirable financial outcomes such as profitability, liquidity, and efficiency. Key indicators often used to measure financial performance include return on assets (ROA), return on equity (ROE), profit margin, revenue growth, and cash flow strength. The resource-based view (RBV) theory suggests that firms with superior internal capabilities, such as effective risk management systems, tend to outperform competitors financially [10], [11]. Financial performance is also influenced by external market conditions, managerial decisions, and strategic financial policies. Prior studies demonstrate that risk management activities, including hedging, can contribute to more stable income streams, lower financing costs, and enhanced investor confidence—all of which support improved financial performance [12], [13].

## 2.3 Hedging and Risk Management in International Trade

Companies engaged in international trade are particularly vulnerable to exchange rate volatility, which can significantly impact revenues, costs, and overall financial results. Effective risk management, including hedging, helps firms forecast financial outcomes more accurately, reduce uncertainty, and support long-term growth [14], [15]. Studies in emerging markets highlight that firms with higher exposure to foreign currency risks are more likely to adopt formal hedging instruments to mitigate such exposures. Research also suggests that exchange rate movements can create financial distress for firms that do not employ hedging strategies, especially during periods of high volatility. In the Indonesian context, fluctuations in the rupiah often result from global economic shifts, commodity price changes, and monetary policy adjustments, making currency risk management essential for import–export businesses [16], [17].

### 2.4 Research Gap

Despite extensive research on hedging and financial performance, limited studies specifically address the Indonesian import—export sector using quantitative methods and modern statistical tools. Moreover, inconsistent findings across previous research highlight the need for empirical evidence based on updated data and methodological rigor. The lack of studies incorporating Likert-scale measurements and SPSS-based

analysis for hedging effectiveness represents a significant gap in the literature. This study aims to fill that gap by examining how hedging strategies influence financial performance among import–export companies in Indonesia using a structured quantitative approach.

# 2.5 Conceptual Framework

Based on the reviewed literature, hedging strategies are expected to have a positive effect on the financial performance of import–export companies. The conceptual framework posits that effective implementation of hedging instruments leads to improved profitability, minimized financial risk, and enhanced liquidity. This framework serves as the basis for the formulation of research hypotheses and the subsequent empirical analysis.

# 3. METHODS

This study employs a quantitative research design to examine the effect of hedging strategies on the financial performance of import–export companies in Indonesia. A quantitative approach was chosen because it enables systematic measurement of variables, statistical hypothesis testing, and objective interpretation of data. The research uses a survey method with a structured questionnaire designed to capture respondents' perceptions regarding the implementation of hedging strategies and financial performance indicators. The population consists of all import–export companies operating in Indonesia that are exposed to foreign exchange risks, and due to their wide geographical spread and varied characteristics, the study adopts purposive sampling to select respondents knowledgeable in financial risk management. A total of 115 respondents—including financial managers, accountants, treasury staff, and risk management officers—participated in the survey, and this sample size is considered adequate for quantitative analysis using SPSS. Data were gathered through online platforms and email using a structured questionnaire based on a 5-point Likert scale. Before distribution, the instrument underwent a pilot test with a small respondent group to ensure clarity and reliability.

The study focuses on two primary variables: Hedging Strategies as the independent variable (X), and Financial Performance as the dependent variable (Y). The hedging strategies variable measures the implementation of hedging tools and practices used to mitigate foreign exchange risks, with indicators including the use of forward contracts, option contracts, currency swaps, natural hedging practices, and risk analysis and monitoring activities. Meanwhile, the financial performance variable assesses organizational outcomes across several dimensions, including profitability, liquidity, revenue stability, cash flow efficiency, and overall financial management effectiveness. The questionnaire includes sections dedicated to these two variables to capture the extent of hedging utilization and the resulting financial outcomes experienced by companies. Together, these variables form the basis for examining how risk management practices influence corporate performance in Indonesia's import–export sector.

Data processing and analysis were conducted using SPSS version 25, employing several statistical techniques to ensure robust and accurate results. Descriptive statistics were used to summarize respondent demographics and provide an overview of responses, generating means, standard deviations, frequencies, and percentages. Reliability was tested using Cronbach's Alpha, with values  $\geq 0.70$  considered acceptable, while validity was assessed using the Pearson Correlation (Corrected Item-Total Correlation), where items exceeding 0.30 were deemed valid. The Kolmogorov–Smirnov test was applied to assess normality, with significance values above 0.05 indicating normally distributed data. Pearson correlation analysis examined the strength and direction of the relationship between hedging strategies and financial performance, followed by multiple linear regression to test the main hypothesis. The regression model used is  $Y=\beta 0+\beta 1X+\epsilon$ ,

where Y represents financial performance, X represents hedging strategies,  $\beta 1$  is the regression coefficient, and  $\epsilon$  is the error term. Hypothesis testing was carried out at a 5% significance level, with p-values below 0.05 indicating a statistically significant effect of hedging strategies on financial performance.

## 4. RESULTS AND DISCUSSION

## 4.1 Descriptive Statistics

Descriptive analysis was conducted to provide an overview of respondents' characteristics and the distribution of responses for each research variable; a total of 115 respondents participated in this study, consisting of financial managers, accountants, treasury staff, and risk management officers within various import–export companies, and most respondents had more than three years of experience in handling financial risk exposure, ensuring reliable responses regarding hedging practices. The overall mean value for the Hedging Strategies variable was 4.12, indicating that respondents generally agreed that they actively implemented hedging instruments such as forward contracts, options, swaps, and natural hedging mechanisms, while the mean value for the Financial Performance variable was 4.08, suggesting that import–export firms perceived improvements in profitability, liquidity, and cash flow stability associated with their risk management practices.

# 4.2 Validity and Reliability Testing

All questionnaire items were tested using Pearson's Product–Moment correlation, and the results show that all items had correlation values above 0.30, meeting the criteria for construct validity, indicating that each item was suitable for measuring the intended components of hedging strategies and financial performance. Reliability testing using Cronbach's Alpha further supported this, with values of 0.892 for Hedging Strategies (X) and 0.874 for Financial Performance (Y), both exceeding the minimum threshold of 0.70, thereby confirming that the instruments possessed strong internal consistency and were reliable for further analysis.

### 4.3 Correlation Analysis

Pearson correlation analysis was conducted to determine the strength and direction of the relationship between hedging strategies and financial performance. The results indicate a strong and positive relationship (r = 0.642, p < 0.01). This means that better implementation of hedging strategies is associated with improved financial performance. The significance level below 0.01 confirms that the correlation is statistically significant.

## 4.4 Regression Analysis

Multiple linear regression was performed to empirically test the effect of hedging strategies on financial performance. The model summary shows R = 0.642 and  $R^2 = 0.412$ , indicating that 41.2% of the variation in financial performance can be explained by hedging strategies, while the remaining portion is influenced by other factors not examined in this study, such as market conditions, operational efficiency, and managerial capability. The ANOVA test produced a significance value of p = 0.000, confirming that the regression model is fit and that hedging strategies collectively have a significant effect on financial performance.

Coefficient analysis further supports these findings, with the regression coefficient for hedging strategies recorded as  $\beta$  = 0.588, t = 8.714, and p = 0.000, demonstrating that hedging strategies have a positive and statistically significant effect on financial performance because the p-value is less than 0.05. The regression equation obtained from the SPSS output is Y=1.215+0.588X, indicating that for every one-unit increase in hedging strategy effectiveness, financial performance improves by 0.588 units.

#### Discussion

The findings demonstrate that hedging strategies play a crucial role in enhancing the financial performance of import–export companies in Indonesia. The positive influence of hedging aligns with the theoretical perspective of financial risk management, which asserts that hedging helps reduce cash flow volatility and stabilize profitability. This study provides empirical evidence that firms utilizing hedging instruments—such as forward contracts, options, swaps, and natural hedging—gain measurable financial benefits, reinforcing the importance of structured risk mitigation practices [16], [18], [19].

The strong correlation and significant regression results confirm that hedging is not only a protective mechanism against currency fluctuations but also a strategic tool that enhances financial decision-making, revenue certainty, and long-term stability. This finding is consistent with previous research suggesting that firms engaging in proactive hedging practices tend to outperform those lacking formal or structured risk management policies, indicating that hedging contributes to stronger financial resilience and improved operational outcomes.

Furthermore, the R² value of 0.412 indicates that while hedging is an important determinant of financial performance, a substantial proportion of performance variation is influenced by other operational and strategic factors. This opens avenues for future research to explore additional predictors such as financial literacy, firm size, market volatility, managerial competence, or technological readiness in foreign exchange management. Overall, the discussion reinforces the importance of adopting comprehensive and well-designed hedging policies to ensure financial resilience, especially within Indonesia's dynamic and globally connected trade environment.

### CONCLUSION

This study concludes that hedging strategies have a positive and significant effect on the financial performance of import–export companies in Indonesia. The implementation of hedging instruments—including forward contracts, options, swaps, and natural hedging—plays an essential role in reducing the negative impact of foreign exchange volatility. The statistical results indicate a strong correlation between hedging and financial performance, demonstrating that effective hedging contributes to improved profitability, liquidity, revenue stability, and overall financial management. The regression analysis further shows that hedging strategies account for 41.2% of the variance in financial performance, confirming that risk management through hedging is a crucial determinant of financial success for companies engaged in international trade, consistent with financial risk management theory and aligned with previous empirical studies emphasizing the benefits of hedging in emerging markets.

The study also highlights the need for companies to strengthen their capabilities in financial risk management by increasing financial literacy, training staff, and utilizing more sophisticated hedging instruments offered by financial institutions. Although hedging significantly enhances financial outcomes, the remaining variation in performance suggests that future research should explore other influential factors such as operational efficiency, technological readiness, market competition, and managerial expertise. Overall, this research provides valuable insights into the importance of hedging as a financial strategy and encourages import—export companies in Indonesia to adopt comprehensive and proactive risk management practices to maintain stability and competitiveness in an increasingly volatile global market.

# **REFERENCES**

- [1] F. S. Zai and A. Mansur, "Hedging Strategy to Mitigate Exchange Rate Risk in Cross-Border Transactions: Literature Review," J. Bus. Manag. Econ. Dev., vol. 2, no. 03, pp. 1155–1168, 2024.
- [2] M. Xu, Q. Xu, C. Jiang, and X. Zhuo, "High-frequency Growth-at-Risk of China: the Role of Macro-financial Environment," *Comput. Econ.*, pp. 1–38, 2025.
- [3] A. Ridwan and H. Fakhrurroja, "Predictive Analysis of the Impact of Exchange Rate Fluctuations on the Financial Performance of Multinational Fintech Companies in Indonesia," Eduvest-Journal Univers. Stud., vol. 5, no. 7, pp. 9313–

- 9325, 2025.
- [4] B. E. Napitupulu, J. S. S. Rajagukguk, and S. Siswono, "The Managerial Economics Implications Of Rupiah Exchange Rate Fluctuations On Investment And Corporate Growth," Int. J. Informatics, Econ. Manag. Sci., vol. 3, no. 2, pp. 174– 187, 2024.
- [5] H. Kim, "Financial derivatives use and firm value in East Asian non-financial firms." Middlesex University, 2016.
- [6] N. Almas, C. Wijaya, F. Indriati, and S. Anindyaswari, "The effect of hedging exchange rate risk, interest rate risk and commodity price risk with derivative instruments on firm value," *Manag. Sci. Lett.*, vol. 11, no. 5, pp. 1707–1714, 2021.
- [7] H. Purnomo, B. Sugeng, and P. Handayati, "Strategy of Derivatives Hedging: Maintaining and Increasing Firm Value amidst Market Volatility in Indonesia," *Shafin Sharia Financ. Account. J.*, vol. 4, no. 2, pp. 66–84, 2024.
- [8] H. Windcliff, P. A. Forsyth, and K. R. Vetzal, "Pricing methods and hedging strategies for volatility derivatives," *J. Bank. Financ.*, vol. 30, no. 2, pp. 409–431, 2006.
- [9] X. Bai, L. Cheng, and Ç. Iris, "Data-driven financial and operational risk management: Empirical evidence from the global tramp shipping industry," *Transportation Research Part E: Logistics and ....* Elsevier, 2022.
- [10] C. L. Alayón, K. Säfsten, and G. Johansson, "Barriers and Enablers for the Adoption of Sustainable Manufacturing by Manufacturing SMEs," Sustain., vol. 14, no. 4, pp. 1–34, 2022, doi: 10.3390/su14042364.
- [11] O. Korniienko, "Investment of Intellectual Capital in the Innovative Development of the Enterprise," *Intellect XXI*, no. 1, 2023, pp. 43–46, 2023, doi: 10.32782/2415-8801/2023-1.8.
- [12] A. L. GHOFAR, R. N. P. PUTRA, and S. N. HAMIDAH, "Implementation Of Gateway Technology (Go-Pay) In Increasing Transaction Efficiency In MSMEs Dapur Restu," J. Inf. Syst. Digit. Bus., vol. 1, no. 1, pp. 08–14, 2022, doi: 10.38142/jisdb.v1i1.651.
- [13] R. Setyorini and R. O. Rey, "Analisis Model Bisnis pada Eighteen Nineteen Laundry dengan Pendekatan Business Model Canvas," *J. Secr. Bus. Adm.*, vol. 1, no. 1, p. 70, 2017, doi: 10.31104/jsab.v1i1.2.
- [14] N. Titova and B. Sloka, "Impact of Intellectual Capital Efficiency on Growth Rate and Profitability of a Company: NASDAQ Baltic Case," Eur. Integr. Stud., no. 16, pp. 150–165, 2022, doi: 10.5755/j01.eis.1.16.31492.
- [15] C. Guan, J. Mou, and Z. Jiang, "Artificial intelligence innovation in education: A twenty-year data-driven historical analysis," *International Journal of Innovation Studies*. Elsevier, 2020.
- [16] M. Fang, F. Liu, S. Xiao, and K. Park, "Hedging the bet on digital transformation in strategic supply chain management: A theoretical integration and an empirical test," ... Distrib. &Logistics Manag., 2023, doi: 10.1108/IJPDLM-12-2021-0545.
- [17] M. Rettinger, C. Mandl, and S. Minner, "A Data-Driven Approach for Optimal Operational and Financial Commodity Hedging," Available SSRN 3918159, 2022.
- [18] P. Kouvelis and D. Turcic, "Supporting operations with financial hedging: Cash hedging vs. cost hedging in an automotive industry," *Prod. Oper. Manag.*, 2021, doi: 10.1111/poms.13314.
- [19] M. Rettinger, C. Mandl, and S. Minner, "A Data-Driven Approach for Optimal Operational and Financial Commodity Hedging," A Data-Driven Approach for Optimal .... [SI]: SSRN, 2023.