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The Effect of Debt-to-Equity Ratio and Firm Size on Stock Price Volatility

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Abstract

The LQ45 index consists of blue-chip stocks known for their significant market capitalization and high liquidity. Despite this, during the 2020–2024 timeframe, stock price fluctuations within this index stayed notably high and, at some points, even exceeded the volatility of the Composite Stock Price Index (IHSG), indicating persistent uncertainty and risk in the market. This study seeks to investigate how the debt-to-equity ratio and the size of a firm influence the variations in stock prices of companies listed in the LQ45 index on the Indonesia Stock Exchange. A quantitative research methodology was utilized, relying on secondary data sourced from corporate financial reports and historical stock price data. The study included 24 companies chosen via purposive sampling, and the analysis was conducted using panel data regression in EViews 12. The results show that the debt-to-equity ratio positively and significantly affects stock price volatility, while firm size negatively and significantly impacts stock price volatility. These findings imply that investors and corporate managers should prioritize prudent capital structure management and firm size considerations to mitigate stock price volatility, while future research should incorporate broader samples and additional financial and macroeconomic variables to enhance generalizability and explanatory power.

Keywords

Debt to Equity Ratio, Firm Size, LQ45, Panel Data, Stock Price Volatility.

1. Introduction

The capital market holds a strategic role in the economy, functioning both as a source of financing for companies and as an investment platform for the public. Stocks represent one of the primary instruments in the capital market, as they reflect a company's value and signal its performance to investors. Stock prices tend to fluctuate over time, and these fluctuations can be assessed through stock price volatility, which indicates the degree of risk and uncertainty encountered by investors when making investment decisions (Wati & Puspitaningtyas, 2023; Li et al., 2023).

In the corporate context, stock price fluctuations cannot be separated from the role of financial management. Financial management encompasses all activities related to obtaining and managing company funds effectively and efficiently (Candra & Yuniarwati, 2025). Financial management is reflected in three main functions, namely investment decisions, financing decisions, and dividend decisions. These decisions ultimately affect the company's financial performance and investors' perceptions of the company's future prospects, which are then reflected in stock price movements and volatility.

Financial management can be defined as both an art and a science related to the management of funds (Yulianti et al., 2022). Financial management encompasses all activities related to obtaining and managing corporate funds effectively and efficiently, which are reflected in three main functions: investment decisions, financing decisions, and dividend decisions. These decisions ultimately affect corporate financial performance and shape investors' perceptions of a firm's future prospects, which are then reflected in stock price movements and volatility.

According to Connelly et al. (2011), signaling theory, information disclosed by companies to the public, particularly through financial statements, serves as a signal for investors in assessing a firm's condition and prospects. Investors respond to these signals through their investment decisions, which subsequently influence the demand and supply of stocks in the market and, in turn, affect stock prices and their volatility. Therefore, the quality and financial condition of a firm play an important role in shaping investor expectations and behavior in the capital market.

In Indonesia, one group of stocks that attracts considerable attention from investors is those included in the LQ45 index, which are widely recognized as leading stocks with high liquidity and large market capitalization. The LQ45 index is often considered a preferred investment choice for rational investors because its constituent stocks are expected to provide attractive returns (Komara & Yulianti, 2021). Theoretically, stocks in the LQ45 index, which are supported by strong fundamentals, should exhibit lower volatility compared to the overall market, as reflected in the Composite Stock Price Index (*Indeks Harga SAHAM Gabungan/IHSG*). However, empirical evidence shows that in several periods, the volatility of LQ45 stocks has remained relatively high and has even exceeded that of the IHSG. This phenomenon indicates a discrepancy between theoretical expectations and actual market conditions.

To assess the fundamental condition of a company, investors generally use fundamental analysis based on financial statements, namely, financial ratio analysis. One of the ratios that influences stock price volatility, as shown in studies by Selpiana and Badira (2018), Rosyida et al. (2020), and Lestari (2023), is the debt-to-equity ratio and firm size. However, other studies have found that DER and firm size do not have a significant effect on stock price volatility, as shown in studies conducted by Pertiwi et al. (2020), Septyadi and Bwarleling (2020), Putri (2020), Alamsyah et al. (2022), and Khairunisa and Nazir (2022).

Under these conditions, this study aims to provide empirical evidence on the effects of the Debt-to-Equity Ratio (DER) and firm size on stock price variations in

companies listed on the LQ45 index. This study seeks to contribute to the field of financial management and capital markets, while providing comprehensive insights for investors and corporate executives to understand the factors influencing stock price movements

2. Literature Review and Hypothesis Development

2.1. The Effect of Debt-to-Equity Ratio and Stock Price Volatility

Financial leverage reflects the extent to which a company finances its assets through debt. One of the most widely used indicators of leverage is the Debt-to-Equity Ratio (DER), which measures the ratio of total liabilities to shareholders' equity. A higher DER indicates that a firm relies more heavily on debt financing, implying a higher financial risk borne by the company (Sutrisno, 2017; Heller et al., 2025). According to signaling theory, financial information disclosed by firms, including capital structure indicators such as DER, plays an important role in shaping investors' perceptions. A high DER is often interpreted as a negative signal because it is associated with a higher probability of default and liquidity pressure, which may influence investors' investment decisions (Zhao et al., 2024; Prastyo & Pramudena, 2025).

Investors tend to respond to such information by adjusting their portfolios, which may lead to greater fluctuations in stock prices. Empirically, several studies support the view that leverage has a positive effect on stock price volatility. Cahyawati and Miftah (2022) found that firms with higher DER tend to experience greater stock price fluctuations due to heightened investor concern about financial risk. However, other studies report insignificant effects of DER on stock price volatility, such as those conducted by Supriyatna and Akbar (2025) and Widiono and Yuniarwati (2025). Despite these inconsistencies, the majority of theories and a few empirical results indicate a positive link between the debt-to-equity ratio and fluctuations in stock prices

H1: Debt-to-equity ratio has a positive effect on stock price volatility.

2.2. The Effect of Firm Size and Stock Price Volatility

Firm size reflects a company's scale and indicates its ability to access funding and maintain business stability. From a financing perspective, large firms generally have easier access to capital markets, enabling them to secure external funding and sustain operational performance more effectively. This financial flexibility allows companies to maintain stable earnings and consistent dividend payments, thereby strengthening investor confidence and reducing market uncertainty. Consequently, larger firms tend to experience more stable stock price movements than smaller firms, which are more vulnerable to financial constraints and market shocks (Rosyida et al., 2020; Chebbi, 2024). In addition, firm size is often associated with organizational maturity, stronger governance mechanisms, and more effective risk management practices, all of which contribute to reduced stock price fluctuations.

According to Signaling Theory, larger firm size is a positive signal because it reflects corporate stability and credibility, shaping investors' perceptions that large firms have lower risk. This perception leads to more controlled stock price movements and lower stock price volatility (Jasselyn & Edi, 2021). Empirical studies supporting this relationship include Selpiana and Badjra (2018) and Haikal (2025), which demonstrate that firm size significantly influences stock price volatility. However, conflicting findings were reported by Ardiansyah and Isbanah (2017) and Rangga and Ekadjaja (2023), who found no significant effect. Despite these variations, monitoring theory and prior empirical evidence generally support the positive role of institutional ownership in influencing stock prices.

H2: Debt-to-equity ratio has a positive effect on stock price volatility.

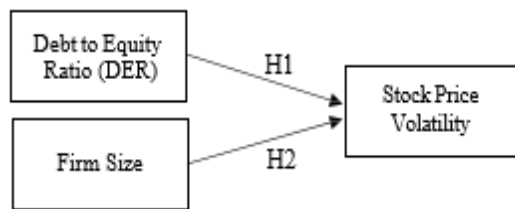


Figure 1. Conceptual Framework

As shown in Figure 1, the conceptual framework of this research examines the direct impact of the debt-to-equity ratio and company size on stock price fluctuations. The first hypothesis (H1) proposes that the debt-to-equity ratio affects stock price fluctuations, suggesting that rising corporate leverage may elevate financial risk and result in larger changes in stock prices. The second hypothesis (H2) posits that the size of a firm affects stock price volatility, suggesting that larger companies typically have more stable stock prices owing to greater financial strength and reduced perceived risk. In general, this conceptual model is based on the theoretical idea that a firm’s capital structure and size are crucial factors in clarifying differences in stock price volatility.

3. Methods

This study adopts a quantitative research approach by utilizing secondary data derived from the annual financial reports of companies listed on the Indonesia Stock Exchange (IDX) for the period 2020–2024. The analysis was conducted using panel data regression supported by EViews software. The population of this research includes all firms incorporated in the LQ45 Index on the IDX.

The research sample was selected through purposive sampling based on specific criteria, including companies that consistently remained in the LQ45 Index during the 2020–2024 period, published complete annual financial statements throughout the observation period, maintained their listing status on the IDX during the study timeframe, and provided complete data corresponding to the research variables. Based on these requirements, 24 companies were chosen as the sample, namely PT Adaro Energy Indonesia Tbk, PT Aneka Tambang Tbk, PT Astra International Tbk, PT Bank Central Asia Tbk, PT Bank Negara Indonesia (Persero) Tbk, PT Bank Rakyat Indonesia (Persero) Tbk, PT Bank Tabungan Negara (Persero) Tbk, PT Bank Mandiri (Persero) Tbk, PT Charoen Pokphand Indonesia Tbk, PT XL Axiata Tbk, PT Indofood CBP Sukses Makmur Tbk, PT Vale Indonesia Tbk, PT Indofood Sukses Makmur Tbk, PT Indah Kiat Pulp & Paper Tbk, PT Indocement Tunggul Prakarsa Tbk, PT Indo Tambangraya Megah Tbk, PT Kalbe Farma Tbk, PT Perusahaan Gas Negara Tbk, PT Bukit Asam Tbk, PT Semen Indonesia (Persero) Tbk, PT Telkom Indonesia (Persero) Tbk, PT Sarana Menara Nusantara Tbk, PT United Tractors Tbk, and PT Unilever Indonesia Tbk. The study spans five years and comprises a total of 120 firm-year observations.

All variables were operationalized using ratio-scale measurements. The Debt-to-Equity Ratio (DER) was measured as the proportion of total liabilities to total equity. The natural logarithm of total assets represented firm size, while stock price volatility was calculated using a designated formula, where H_i indicates the highest stock price in period i , L_i indicates the lowest stock price in period i , and n refers to the total number of observations.

$$P_{VOL} = \sqrt{\sum \left[\frac{\left[\frac{H_i - L_i}{\left(\frac{H_i + L_i}{2} \right)} \right]^2}{n} \right]}$$

This research utilizes panel data regression as its main analytical technique. The suitable panel regression model was determined through the Chow test, Hausman test, and Lagrange multiplier test to select the optimal specification from the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Upon determining the best model, standard assumption evaluations were performed, including assessments for multicollinearity and heteroscedasticity. Thereafter, hypothesis testing was performed utilizing the t-test to analyze the individual impact of each independent variable and the F-test to examine their collective effect on stock price volatility, with a significance threshold established at 5% ($\alpha = 0.05$).

4. Results

Descriptive statistics are utilized to summarize the features of the data employed in this research. Table 1 displays the descriptive statistical findings of the research variables, specifically Debt to Equity Ratio (DER), firm size (FS), and stock price volatility (SPV), encompassing the mean, median, maximum, minimum, and standard deviation values.

Table 1. Descriptive Statistics Test

Test	DER (%)	Firm Size	Stock Price Volatility (%)
Mean	241.6150	18.66511	50.21192
Median	84.80000	18.46902	41.75500
Maximum	1707.140	21.61001	208.6500
Minimum	12.88000	16.59098	13.63000
Std. Dev	334.1857	1.387728	27.90092

Table 1 presents the descriptive statistics for three variables, namely debt-to-equity ratio, firm size, and stock price volatility. It shows the central tendency (mean and median), spread (standard deviation), and range (minimum and maximum) of each variable. The data indicate that DER has a high variability with a mean of 241.62% and a large standard deviation of 334.19, suggesting significant differences among observations. Firm size is relatively stable, with a mean of 18.67 and a low standard deviation of 1.39. Stock price volatility shows moderate variation, with a mean of 50.21% and a standard deviation of 27.90, indicating some dispersion in the dataset.

Table 2. Chow Test

Test	Result
Model	Chi-Square
Statistics	79.052394
d.f	23
Prob.	0.000

The Chow test presented in Table 2 shows that the cross-section Chi-square probability value is 0.0000, which is below the significance level of 0.05. This indicates that the Common Effect Model (CEM) is not appropriate. Thus, the Fixed Effect Model (FEM) is more appropriate for analyzing the panel data in this study.

Table 3. Hausman Test

Test	Result
Model	Cross-section random
Statistics	40.386685
d.f	2
Prob.	0.000

According to the Hausman test results presented in Table 3, the cross-section random probability value is 0.0000, which is less than the significance level of 0.05. This suggests that the Fixed Effect Model (FEM) is preferable over the Random Effect Model (REM). Consequently, the panel data regression analysis must advance by utilizing the Fixed Effect Model.

Table 4. Multiple Regression Analysis

Variable	Coefficient	Std. Error	t-statistic	Prob.
Constant	1474.486	257.4995	5.726171	0.0000
DER	0.142480	0.044905	3.172913	0.0020
Firm Size	-78.15112	13.72219	-5.695236	0.0000

Table 4 presents the results of the multiple regression analysis. The original hypothesis suggests that stock price volatility is affected by the DER. The regression results indicate a t-statistic of 3.172913 and a p-value of 0.0020, both of which are significant at the 5% level. Therefore, the initial hypothesis is validated. This outcome indicates that a firm’s capital structure, as illustrated by the DER, influences investors’ risk perceptions and affects changes in stock prices. The second hypothesis suggests that the volatility of stock prices is affected by the size of the firm. The regression results show a t-statistic of -5.695236 and a p-value of 0.0000, which is significant at the 5% level. Consequently, the second hypothesis is validated. This finding shows that bigger firms typically have reduced stock price fluctuations, indicating that the size of a firm influences stock price volatility and indicates increased stability along with decreased business risk among larger enterprises.

Table 5. F test

Test	Value
F-Statistic	3.852443
Prob(F-statistic)	0.000001

According to the findings of the F-test in Table 5, the probability value of the F-statistic is 0.000001, which is less than the significance threshold of 0.05. This suggests that both DER and firm size concurrently influence stock price volatility significantly.

Table 6. R Square

Test	Value
R-Square	0.506072
Adjusted R-Square	0.374708

Based on the results presented in Table 6, the R-squared value for stock price volatility is 0.506072, while the Adjusted R-squared value is 0.374708. This means that the independent variables included in the model, namely the DER and firm size, are capable of explaining approximately 50.61% of the variation in stock price volatility, whereas the remaining 49.39% is influenced by other variables not incorporated in the model. A more cautious assessment of the model’s explanatory

capacity is reflected in the Adjusted R² value of 0.374708, as it adjusts for the number of independent variables and the sample size. Thus, these results indicate that the model has a moderate level of explanatory power.

5. Discussion

The results of this study indicate that a company's financial structure significantly affects stock price volatility. One of the main findings is that the level of leverage, as measured by the Debt-to-Equity Ratio (DER), directly impacts stock price fluctuations in the market. Higher leverage increases the perceived financial risk for investors, resulting in less stable stock prices. Companies with high DER are generally regarded as riskier due to higher default risk and liquidity pressure, which leads the market to respond more sharply to any new information regarding the firm. Consequently, stock price volatility increases as leverage rises (Rosyida et al., 2020; Cahyawati & Miftah, 2022).

In addition, firm size also significantly influences stock price volatility, but in the opposite direction. Larger firms tend to exhibit more stable stock price movements compared to smaller firms. Firm size reflects credibility, reputation, and operational sustainability. Investors generally have greater confidence in larger firms, leading to more measured responses to new information and, therefore, reduced stock price fluctuations. As a result, stock price volatility in larger firms is relatively lower (Jasselyn & Edi, 2021). This stability is further supported by the stronger access to capital markets and financial flexibility typically possessed by large firms, which enable them to absorb economic shocks and maintain consistent performance (Rosyida et al., 2020; Chebbi, 2024). Moreover, from a signaling perspective, firm size conveys lower risk and higher corporate credibility, reinforcing investor trust and contributing to more controlled price dynamics in the market (Jasselyn & Edi, 2021).

These findings emphasize that a firm's financial characteristics play a critical role in shaping investor perceptions and market behavior (Padmavathy, 2024; Moolkham, 2025). Both capital structure and firm size influence how investors assess risk and respond to changes in a company's condition (Zhang & Huang, 2024). High leverage amplifies market uncertainty, triggering larger fluctuations in stock prices, whereas larger firm size contributes to greater stability. Together, these factors complement each other in determining stock price volatility.

The findings also have practical implications for corporate management. Firms need to exercise caution in managing debt levels to avoid excessive financial risk, which may lead to high stock price volatility. At the same time, firm size can serve as a strategic advantage, enhancing investor confidence and stabilizing stock price movements. Therefore, prudent management of capital structure, combined with leveraging firm size as an indicator of stability, is crucial for mitigating market fluctuations and maintaining investor trust (Rosyida et al., 2020; Cahyawati & Miftah, 2022; Karim et al., 2022). Thus, this study demonstrates that leverage and firm size are primary factors influencing stock price volatility. By understanding and managing these factors effectively, companies can enhance market stability and strengthen positive investor perceptions regarding firm risk.

6. Conclusion

This study establishes that the debt-to-equity ratio and firm size significantly influence stock price movements for companies included in the LQ45 Index on the Indonesia Stock Exchange from 2020 to 2024. Debt-to-equity ratio positively and significantly influences, suggesting that increased leverage elevates financial risk, influences investor risk perceptions, and causes larger stock price variations. Conversely, firm size exhibits a negative and significant influence, indicating that

larger companies, bolstered by greater financial stability, improved funding access, and enhanced investor confidence, generally face reduced stock price volatility. Both variables simultaneously account for changes in volatility, emphasizing their significance in investment choices, especially regarding LQ45 stocks.

The implications of these findings emphasize that investors should consider capital structure and firm size when assessing investment risk, while corporate managers need to maintain optimal leverage and strengthen firm fundamentals to enhance stock price stability. However, this study has limitations. The sample is restricted to LQ45 companies, limiting generalizability to all listed firms. The five-year observation period may not fully capture long-term volatility dynamics. The model includes only DER and firm size, excluding other potential determinants, and relies solely on secondary financial data without incorporating macroeconomic or market sentiment factors. It is suggested that future studies broaden the sample beyond the LQ45 Index, lengthen the observation duration, and include more variables like liquidity, profitability, dividend policy, corporate governance, and macroeconomic elements to achieve a more thorough insight into the factors influencing stock price volatility.

References

- Alamsyah, S., Suharti, E., & Suryani, S. I. (2022). Volatilitas harga saham perusahaan properti di BEI. *Jurnal Sekuritas (Saham, Ekonomi, Keuangan dan Investasi)*, 5(3), 211-222.
- Ardiansyah, I., & Isbanah, Y. (2017). Analisis pengaruh deviden, pertumbuhan aset, ukuran perusahaan, dan leverage terhadap volatilitas harga saham. *Jurnal Riset Akuntansi dan Keuangan*, 5(3), 1565-1574.
- Cahyawati, R. P., & Miftah, M. (2022). Pengaruh volatilitas laba, kebijakan dividen, dan leverage terhadap volatilitas harga saham IDX30. *Jurnal Riset Akuntansi Dan Keuangan*, 10(3), 541-554.
- Candra, A., & Yuniarwati. (2025). The effect of financial behavior on financial performance of transportation companies in Indonesia. *Research Horizon*, 5(6), 2305-2316.
- Chebbi, K. (2024). Examining the interplay of sustainable development, corporate governance, and stock price crash risk: Insights from ESG practices. *Sustainable Development*, 32(1), 1291-1309.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39-67.
- Haikal, F. (2025). The impact of trading volume, leverage, earning volatility, firm size, and dividend yield on stock price volatility. *Jurnal Maneksi (Management Ekonomi Dan Akuntansi)*, 14(1), 194-204.
- Heller, D., Karapanagiotis, P., & Nilsen, Ø. A. (2025). Small and vulnerable during crises? Firm size and financing constraint dynamics. *Small Business Economics*, 65(1), 451-473.
- Jasselyn, J., & Edi, E. (2021). Analisis pengaruh dividend yield, dividend payout, ukuran perusahaan, pertumbuhan perusahaan, volatilitas laba dan leverage terhadap volatilitas harga saham. *CoMBInES-Conference on Management, Business, Innovation, Education and Social Sciences*, 1(1), 1220-1233.
- Karim, M. E., Foyosal, M., & Das, S. (2022). Stock price prediction using Bi-LSTM and GRU-based hybrid deep learning approach. In *Proceedings of Third Doctoral Symposium on Computational Intelligence: DoSCI 2022* (pp. 701-711). Singapore: Springer Nature Singapore.
- Khairunisa, N., & Nazir, N. (2022). Pengaruh leverage, kebijakan dividen dan ukuran perusahaan terhadap volatilitas harga saham. *Jurnal Ekonomi Trisakti*, 2(2), 833-844.
- Komara, E. F., & Yulianti, E. (2021). Pembentukan portofolio optimal dengan menggunakan Capital Asset Pricing Model (CAPM) pada Indeks LQ-45 periode 2016-2018. *Jurnal Ilmu Manajemen dan Bisnis*, 12(2), 173-184.
- Lestari, E. (2023). Debt to equity ratio (DER) and firm size toward firm value: The mediating role of return on asset. *Return: Study of Management, Economic and Business*, 2(11), 1095-1109.

- Li, C., Huang, W., Wang, W. S., & Chia, W. M. (2023). Price change and trading volume: Behavioral heterogeneity in stock market. *Computational Economics*, 61(2), 677–713.
- Moolkham, M. (2025). How do firm characteristics amplify the importance of ESG ratings for investors? *Economics & Sociology*, 18(1), 90–115.
- Padmavathy, M. (2024). Behavioral finance and stock market anomalies: Exploring psychological factors influencing investment decisions. *Shanlax International Journal of Management*, 11(1), 191–197.
- Pertiwi, P. T., & Wiagustini, N. L. (2020). The impact of dividend payout ratio (DPR), leverage and firm size on stock price volatility in manufacturing companies listed on the Indonesia Stock Exchange. *American Journal of Humanities and Social Sciences Research*, 4(3), 399–405.
- Prastyo, M., & Pramudena, S. M. (2025). Analysis the influence of liquidity, solvency activity and profitability on profit growth. *Journal of Sustainable Economic and Business*, 2(4), 435–446.
- Putri, A. F. A. (2020). Faktor-faktor penentu volatilitas harga saham sektor perusahaan properti, real estate dan building construction. *Jurnal Akuntansi dan Keuangan*, 8(2), 109–118.
- Rangga, A., & Ekadjaja, A. (2023). How asset growth, earnings volatility, firm size, and leverage affect stock price volatility. *International Journal of Application on Economics and Business*, 1(4), 1889–1900.
- Rosyida, H., Firmansyah, A., & Wicaksono, S. B. (2020). Volatilitas harga saham: Leverage, ukuran perusahaan, pertumbuhan aset. *JAS (Jurnal Akuntansi Syariah)*, 4(2), 196–208.
- Selpiana, K. R., & Badjra, I. B. (2018). Pengaruh kebijakan dividen, nilai tukar, leverage, dan firm size terhadap volatilitas harga saham. *E-Jurnal Manajemen Universitas Udayana*, 7(3), 1682–1692.
- Septyadi, M. A., & Bwarleling, T. H. (2020). Pengaruh volume perdagangan saham, leverage, dan kebijakan dividen terhadap volatilitas harga saham. *Akurasi: Jurnal Riset Akuntansi dan Keuangan*, 2(3), 149–162.
- Supriyatna, Y., & Akbar, T. (2025). The effect of liquidity, leverage, and firm size on firm value with profitability as a moderating variable. *Research Horizon*, 5(5), 1829–1842.
- Sutrisno. (2017). *Manajemen keuangan: Teori, konsep & aplikasi* (2nd ed.). Yogyakarta: Ekonisia.
- Wati, N., & Puspitaningtyas, A. (2023). Pengaruh volume perdagangan saham, tingkat inflasi dan nilai tukar terhadap volatilitas harga saham sub sektor batu bara yang terdaftar di Bursa Efek Indonesia. *Jurnal Manajemen Bisnis Krisnadwipayana*, 11(2), 881–890.
- Widiono, R., & Yuniarwati. (2025). The effect of managerial ownership, institutional ownership, dividend payout ratio, and debt to equity ratio on stock price. *Research Horizon*, 5(6), 2331–2344.
- Yulianti, E., Nurmansyah, A. A. H., Kurniawan, A., Evangelista, L., & Sigarlaki, F. F. (2022). Penerapan sistem keuangan berbasis digital pada UMKM di Kecamatan Batujajar, Kabupaten Bandung Barat. *Dinamisia: Jurnal Pengabdian Kepada Masyarakat*, 6(1), 136–146.
- Zhang, X., & Huang, C. H. (2024). Investor characteristics, intention toward socially responsible investment (SRI), and SRI behavior in Chinese stock market: The moderating role of risk propensity. *Heliyon*, 10(14), 1400–1412.
- Zhao, L., Mollica, V., Shen, Y., & Liang, Q. (2024). Liquidity, informational efficiency and firm default risk: A systematic literature review. *Journal of Accounting Literature*, 46(3), 321–342.

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Data Disclosure Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.



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