# Effects of Stock Trading Volume, Leverage, and Dividend Payout Ratio on Stock Price Volatility

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***Abstract***

*This study aims to analyze the impact of stock trading volume, leverage, and dividend payout ratio (DPR) on stock price volatility among companies included in the Kompas100 Index and listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022. The data used in this research were obtained from the financial statements available on the official IDX website and additional data from Yahoo Finance. A purposive sampling method was used to select the research sample based on specific criteria. The results of the study indicate that stock trading volume and leverage have a significant positive impact on stock price volatility, while DPR also influences volatility by showing changes that can elicit sharp market reactions. These findings provide important insights for investors and company management regarding factors that can increase risk and uncertainty in stock prices in the market.*

***Keywords:*** *Stock Market; Volatility Stock Price; Leverage; Dividend Payout Ratio; Stock Trading Volume*

## Introduction

Capital markets play a strategic role in strengthening a country's economic resilience (Octavian et al., 2022). Stocks are commodities that are in demand in the capital market (Rusiana & Program, 2018). Stock prices are highly regarded by investors because they are considered a measure of a company's performance, so companies seek to maintain and improve their performance, which in turn can affect stock returns. When investing in companies, shareholders expect to maximize their profits, which is why they invest long-term (Koleosho et al., 2022).

Stock price volatility in financial markets is an important indicator that reflects the level of risk and uncertainty of stock price movements. (Priana &; Muliartha, 2017). Stock price volatility is used as a basis for formulating investment strategies by investors (Ria Selpiana &; Bagus Badjra, 2018). High volatility indicates significant price fluctuations in a certain period of time, which can be caused by various factors (Susanto et al., 2021).

Trading volume is one of the factors that can affect volatility because the higher the trading volume, the more likely it is that stock prices experience sharp changes due

to rapid supply and demand movements (Siawan &; Lukman, 2023). The second factor is leverage because the use of high debt by companies can increase financial risk, which in turn increases the sensitivity of stock prices to market changes (Siawan &; Lukman, 2023). The third factor is the Dividend Payout Ratio, which is a company's dividend payment policy (Zainudin et al., 2018). The combination of these factors gives an idea of market dynamics and helps investors in making better investment decisions.

Stock trading volume is the total number of shares traded in a given period of time, usually calculated in one trading day. This volume includes all buying and selling transactions that occurred during the period. Trading volume is an important indicator in the stock market because it provides information about the level of liquidity and market activity.

Research conducted previously by (Septyadi & Bwarleling, 2020a), (Puji Estuti et al., 2020)), (Hidayati & Sukmaningrum, 2021), (Mupondo, 2022), (Hanh & Dut, 2022). (Siti Asriyah, 2022), shows that stock trading volume has a positive influence on stock price volatility. High trading volumes often indicate high interest from investors, whether due to news, financial reports, or other significant events. Conversely, low volume may indicate low interest or uncertainty among investors.

H1: Stock Trading Volume positively affects stock price volatility

Signal theory in a financial context states that the management of a company uses certain actions to send signals to investors about the condition and prospects of the company. One application of signal theory is in the assessment of the leverage level of companies. Leverage, which refers to the use of debt in a company's capital structure, can be an important signal regarding a company's health and prospects. This can be reflected in the company's assets or liabilities. Information about liabilities can be seen from the company's leverage. Leverage is a signal that can affect stock price volatility (Eka et al., 2021)

Previous research was conducted by (Septyadi & Bwarleling, 2020), (Marini & Sutrisna Dewi, 2019), (Sirait et al., 2021), (Rosyida et al., 2020) dan (Ria Selpiana & Bagus Badjra, 2018), (Fiorenza et al., 2023) states that leverage positively affects stock price volatility. By using leverage, companies can magnify equity returns if debt-financed investments provide higher returns. However, if the investment does not generate high enough returns, the company still has to meet its interest and principal payment obligations. This can increase the risk of bankruptcy, which in turn can increase stock price volatility.

H2: Leverage has a positive effect on stock price volatility.

Signaling theory indicates that the announcement of a cash dividend distribution carries information that triggers a response from the stock price. The dividend payout ratio affects the volatility of stock prices (Anak et al., 2023). High dividend payments to shareholders can reduce share price volatility (Ali et al., 2023). An increase in dividend payments is often considered a positive indicator by investors and market analysts because it indicates some aspects of a company's good performance and prospects. Conversely, a decline in dividend payments is often perceived as a negative signal by

investors and market analysts as it raises concerns about a company's financial condition and future prospects.

Previous research conducted by (Septyadi & Bwarleling, 2020), (Marini & Sutrisna Dewi, 2019), (Dewi & Paramitha, 2019) (Zainudin et al., 2018),(Sugathadasa, 2018),(Nurleli & Wibisono, 2021), (Akram Ahmad et al., 2018), (Hieu Nguyen et al., 2020), (Khan, 2019), (Kayode I. et al., 2022), (Singh & Tandon, 2019), (Fiorenza et al., 2023), (Hossin & Ahmed, 2020), which states that dividend payments negatively affect stock price volatility. A high Dividend Payout Ratio (DPR) indicates the company has strong cash flow and is able to pay high dividends. This can increase investor confidence and reduce stock price volatility because investors feel more secure and confident in the company's financial prospects. Conversely, a low DPR could signal the company is choosing to reinvest its profits for future growth. While this can be viewed positively, a lack of dividend payments could increase uncertainty among investors, which could lead to higher share price volatility.

H3: Dividend Payout Ratio negatively affects stock price volatility

The purpose of this study is to examine the effect of stock trading volume, leverage, and dividend payout ratio (DPR) on stock price volatility in companies listed in the Kompas100 Index on the Indonesia Stock Exchange (IDX) from 2018 to 2022. The significance of this study is because stock price volatility is a key indicator that reflects the level of risk and uncertainty in financial markets, which greatly influences investment decisions. By understanding how trading volume, leverage, and DPR affect volatility, investors and company management can make more informed decisions. Investors can identify factors that influence stock price fluctuations, while company management can better manage their financial strategies and dividend policies to minimize risk and attract investment. The results of this study can also contribute to the academic literature, broadening the understanding of stock market dynamics in Indonesia.

**Research Methods**

This study uses a quantitative approach to examine the effect of stock trading volume, leverage, and DPR on stock price volatility in companies listed in the Kompas100 Index on the IDX for the 2018-2022 period. The data used in this study was sourced from financial statements available on the official IDX website (www.idx.co.id) and additional data from Yahoo Finance (www.finance.yahoo.com). The study population includes all companies listed in the Kompas100 Index during the specified period.

The sample was selected using purposive sampling techniques, namely the selection of companies based on certain criteria such as consistency in entry into the Kompas100 Index, availability of complete financial data during the period, and compliance with applicable financial reporting standards. This method ensures that the sample used is representative and relevant to the purpose of the study. Statistical techniques are used to analyze data and test research hypotheses, providing insight into the relationship between the variables under study and stock price volatility.

The operational definition of a variable is an explanation of a variable observed in a study. Volatility is a statistical measure for price changes over a given period, calculated by taking the average of the difference between price highs and lows. The formula used corresponds to Baskin (1989) in Camilleri et al. (2019):

$$\sigma_{i,t} = \sqrt{\frac{h_{i,t} - l_{i,t}}{\left(\frac{h_{i,t} + l_{i,t}}{2}\right)^2}}$$

Information:
$\sigma_{i,t}$ = Stock Price Volatility I at the time t
$h_{i,t}$ = The highest share price I at the time t
$l_{i,t}$ = The lowest share price I at the time t

Stock trading volume refers to the total stock transactions that occurred in a certain period on the stock exchange. The formula for calculating the trading volume of stocks is adopted from Safrani & Kusumawati (2022):

$$TVA = \frac{\Sigma saham - i \ yang \ diperdagangkan \ waktu - t}{\Sigma saham - i \ yang \ beredar \ saat - t}$$

The company's stock can be influenced by a financing strategy that uses the debt to equity ratio (DER) method which indicates the proportion of the company's own capital used as collateral for all its debts. The calculation of DER can be done with the formula presented by Septyadi &; Bwarleling (2020):

$$DER = Total \ Utang \ / \ Total \ Ekuitas$$

Dividend payments by companies to investors can be measured through the dividend payout ratio (DPR). The DPR gives an indication of the extent to which the company contributes to dividend payments. In addition to using the ratio of dividends per share and earnings per share, DPR can also be calculated by the following formula presented by Septyadi & Bwarleling (2020):

$$Dividend \ Payout \ Ratio = \frac{Dividen \ per \ Lebar \ Saham}{Laba \ per \ Lembar \ Saham}$$

Multiple linear regression analysis is a statistical method that uses parameter coefficients to assess how much the independent variable affects the dependent variable. The model equation is as follows:

$$Y = \alpha + \beta 1 X1 + \beta 2 X2 + \beta 3 X3 + \varepsilon$$

Information:
Y = Stock Price Volatility
$\alpha$ = Konstanta
$\beta 1$-$\beta 3$ = Regression coefficient for each independent variable
X1 = Stock Trading Volume
X2 = Leverage
X3 = Dividend Payout Ratio
$\varepsilon$ = Standard error

**Results and Discussion**

The data from this study have passed a series of classical assumption tests that are prerequisites for conducting multiple linear regression analysis. The assumption tests carried out include descriptive statistical tests, normality tests, multicollinearity tests, heteroscedasticity tests, and autocorrelation tests. The data that has been processed using multiple linear regression analysis models in SPSS can be seen as follows:

**Table 1. Multiple Linear Regression Analysis Results**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.003 | .000 | | 7.166 | .000 |
| | TVA (X1) | 0.005 | .000 | 0.486 | 9.594 | .000 |
| | DER (X2) | 0.002 | .000 | 0.516 | 10.759 | .000 |
| | DPR (X3) | 0.001 | .000 | 0.197 | 3.861 | .00 |

**Source:** Data processed, 2024

From the results of multiple linear regression analysis in Table 1 can be seen the following equation:

$$Y = 0{,}003 + 0{,}005X_1 + 0{,}002X_2 + 0{,}001X_3 + \varepsilon$$

The constant has a value of 0.003, which indicates that if all independent variables, namely stock trading volume, leverage, and DPR have zero values, then the volatility of the stock price is 0.003. The regression coefficient for a stock's trading volume is 0.005, meaning that if volatility increases by 1 unit, then the trading volume will increase by 0.005. The regression coefficient for leverage is 0.002, meaning that if volatility increases by 1 unit, leverage increases by 0.002 units. While the regression coefficient for DPR is 0.001, which indicates that if volatility increases by 1 unit, then DPR will increase by 0.001 units. The Coefficient of Determination is used to evaluate how well all independent variables can account for variations in the dependent variable. The test results are shown in table 2.

**Table 2. Coefficient of Determination Test Results**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0,835 | 0,696 | 0,690 | 0,00317 |

**Sumber:** Data diolah, 2024

From Table 2, it can be seen that the value of $R^2$ is 0.690, which indicates that the independent variable is able to explain about 69% of the variation in the dependent variable. The remaining 31% of the variation is explained by other factors outside the independent variable. The F Statistical Test aims to assess the effect of the independent variable on the dependent variable simultaneously. Here the results are presented in Table 3.

**Table 3. Model Feasibility Test Results**

| Model | Sum of Squares | df | Mean Square | F | Sig |
|---|---|---|---|---|---|
| Regression | 0,003 | 3 | 0,001 | 104,032 | 0,000 |
| Residual | 0,001 | 136 | 0,000 | | |
| Total | 0,004 | 139 | | | |

**Source:** Data processed, 2024

Table 3 shows that the Fcalculate value is 104.032 with a significance level of $0.000 < \alpha = 0.05$, indicating that stock trading volume, leverage, and dividend payout ratio together affect stock price volatility.

Based on Table 1, it is found that the variable significance of the stock trading volume is 0.000, lower than 0.05, and the value ß1 = 0.005. This indicates that trading volume positively affects price volatility. Therefore, the alternative hypothesis (H1) is accepted. This research provides support to signal theory, which describes how companies provide signals to stakeholders, especially investors, through their financial statements. Investors need a variety of information as signals to evaluate the company's prospects, including financial ratio analysis from financial statements. This finding is supported by (Septyadi & Bwarleling, 2020a), (Puji Estuti et al., 2020)), (Hidayati & Sukmaningrum, 2021), (Mupondo, 2022), (Hanh & Dut, 2022). (Siti Asriyah, 2022). tetapi tidak didukung oleh temuan (Priana & Muliartha, 2017).(Andiani & Gayatri, 2018). This research proves that a high level of *leverage* can signal to investors that companies that have a higher level of *leverage* have a higher risk so that investors will trade shares that will affect the volatility of their stock prices.

Trading volume has a positive influence on stock price volatility, where an increase in trading volume tends to be followed by an increase in volatility. This happens because high trading volumes reflect intensive buying and selling activity in the market, which is often caused by investor reactions to new information or significant events. When more shares are traded, stock prices become more sensitive to changes in demand and supply. In addition, in high-volume situations, large decisions made by institutional investors can lead to sharp price movements. Previous studies have shown that periods with high trading volume are often accompanied by greater price fluctuations, reflecting uncertainty and higher market dynamics. Therefore, increased trading volume is usually associated with increased stock price volatility.

From Table 1, it is found that the variable significance of leverage is $0.000 < 0.05$, with a value of ß2 = 0.002. This indicates that leverage has a positive impact on price volatility, so the alternative hypothesis (H2) is accepted. The leverage level can be used as a signal regarding the Company's conditions. Funding financed by debt will result in spending on higher interest and the Company should prioritize its payment first. As a result, investors tend to respond negatively to companies with high levels of leverage because they question the sustainability of those companies. This research is in line with (Marini & Sutrisna Dewi, 2019), (Sirait et al., 2021) (Rosyida et al., 2020) dan (Ria Selpiana & Bagus Badjra, 2018), (Fiorenza et al., 2023), but not supported by temuan

(Priana & Muliartha, 2017).(Tati et al., 2020), (Septyadi & Bwarleling, 2020), (Ridloah et al., 2022), (Octavian et al., 2022). This research proves that a high level of *leverage* can signal to investors that companies that have a higher level of *leverage* have a higher risk so that investors will trade shares that will affect the volatility of their stock prices.

Leverage has a positive impact on stock price volatility, as companies that use high leverage tend to carry a greater level of financial risk. As a company increases leverage by taking on more debt, interest expenses and debt servicing obligations also increase, which makes the company's cash flow more sensitive to changing market and operational conditions. This causes a company's share price to become more vulnerable to fluctuations, as investors tend to be more wary of the risk of bankruptcy or financial hardship. In addition, high leverage can magnify the impact of economic events or changes in a company's performance, so any small change in earnings or earnings expectations can trigger significant stock price changes. Studies show that companies with high levels of leverage often experience greater share price volatility compared to companies with low leverage, reflecting a higher level of risk and uncertainty in the eyes of investors.

From Table 1, it is found that the significance of the DPR variable is $0.000 < 0.05$, with a value of $\beta2 = 0.001$. This indicates that the DPR has a positive impact on price volatility, so the null hypothesis (H3) is rejected. When a company's ability to generate profits increases and is followed by a larger dividend distribution, it tends to increase the stock price. This phenomenon is caused by high investor interest in the company's ability to generate profitability which can increase the sale of its shares. The results of this research are in line with research conducted by (Priana & Muliartha, 2017), (Utami & Purwohandoko, 2021), but not supported by findings (Septyadi & Bwarleling, 2020), (Marini & Sutrisna Dewi, 2019), (Zainudin et al., 2018),(Sugathadasa, 2018),(Nurleli & Wibisono, 2021), (Akram Ahmad et al., 2018), (Hieu Nguyen et al., 2020), (Khan, 2019), (Martha & Lukman, 2022), (Phan & Tran, 2019). Signal theory can prove that the higher the dividend distributed by the company will give a voluntary signal to the company where investors will react to buying shares of the company so that it will increase the volatility of its stock price.

The Dividend Payout Ratio (DPR) has a positive impact on stock price volatility because it reflects the company's policy in distributing profits to shareholders. When companies announce significant changes in the House of Representatives, the market often responds with sharp stock price changes. An increase in the House of Representatives can be considered a signal of management's confidence in stability and future earnings prospects, which can interest investors and lead to a surge in stock prices. Conversely, the decline in the House of Representatives could be seen as a sign that the company is facing financial problems or choosing to keep more profits for other purposes, which could cause concern and lead to a drop in the stock price. House changes often create strong expectations and reactions from investors, thereby increasing stock price volatility as a result of adjustments to new information related to a company's dividend policy.

**Conclusion**

Stock trading volume, leverage, and dividend payout ratio have a significant positive impact on stock price volatility. This research can prove that signal theory can provide signals from financial statements to users of financial statements, namely investors by analyzing using financial ratios as one of the guides in investors making investment decisions. In addition, signal theory can provide signals to companies in order to position debt and dividend distribution so that it will be a clue to investors whether to sell or buy shares which will affect stock trading volume so that it will affect stock price volatility.

Hopefully, this research can provide positive benefits for various parties, especially investors and companies. Future research is expected to expand the scope to include additional variables such as asset growth or price-to-earnings ratio as the study is limited to variables of stock trading volume, leverage, and dividend payout ratio. This research is still limited to the Kompas100 Index, further studies are expected to use other populations.

**BIBLIOGRAFI**

Akram Ahmad, M., Sedeeq Mohammad, A., & Alrabba, H. (2018). The Effect Of Dividend Policy On Stock Price Volatility: Empirical Evidence From Amman Stock Exchange. 22(2). https://doi.org/10.13140/RG.2.2.26262.09289

Ali, M., Saeed, M., & Khalid, M. A. (2023). The Role of Dividend Policy on Stock Price Volatility: An analysis and Evidence from Pakistan. Research Journal for Societal Issues, 5(2), 157–170. https://doi.org/10.56976/rjsi.v5i2.106

Anak, R., Hardin, S., Binti, N., & Kadri, H. (2023). Impact Of Company Dividend Policy On Stock Price Volatility In Food And Beverage Industry In Malaysia. In Unimas Review Of Accounting And Finance (Vol. 7, Issue 1).

Andiani, N. W. S., & Gayatri, G. (2018). Pengaruh Volume Perdagangan Saham, Volatilitas Laba, Dividend Yield, dan Ukuran Perusahaan Pada Volatilitas Harga Saham. E-Jurnal Akuntansi, 2148. https://doi.org/10.24843/eja.2018.v24.i03.p19

Camilleri, S. J., Grima, L., & Grima, S. (2019). The effect of dividend policy on share price volatility: an analysis of Mediterranean banks' stocks. Managerial Finance, 45(2), 348–364. https://doi.org/10.1108/MF-11-2017-0451

Dewi, S., & Paramitha, R. A. S. (2019). Pengaruh Kebijakan Dividen, Volume Perdagangan, Earning Volatiliy, Leverage, dan Firm Size Terhadap Volatilitas Harga Saham Perusahaan LQ45. In Jurnal Ilmu Manajemen (Vol. 7).

Eka, P., Widiantari, P., & Sukartha, I. M. (2021). The Effect Of Dividend Payout Ratio, Leverage And Assets Growth On Stock Price Volatility (Empirical Study On Lq45 Company On The Indonesia Stock Exchange 2016-2019). In American Journal of Humanities and Social Sciences Research (Issue 5). www.ajhssr.com

Fiorenza, S., Wijaya, L. I., & Sutejo, B. S. (2023). The Effect of Dividend Policy, Profitability, and Leverage on Share Price Volatility of Service Sector Enterprise Indexed on the Indonesia Stock Exchange During 2015–2019 (pp. 126–133). https://doi.org/10.2991/978-94-6463-008-4_17

Ghozali, I. (2016). Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23 (Vol. 8). Badan Penerbit Universitas Dipenogoro.

Hanh, N. T. Van, & Dut, V. Van. (2022). The Effect of Liquidity on Stock Price Volatility: Empirical Study on Listed Commercial Banks on Vietnamese Stock Exchange. *VNU JOURNAL OF ECONOMICS AND BUSINESS*, 2(1). https://doi.org/10.57110/jeb.v2i1.4586

Hidayati, N., & Sukmaningrum, P. S. (2021). Faktor Yang Mempengaruhi Volatilitas Harga Saham Pada Emiten Yang Terdaftar Di Jakarta Islamic Index. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 8(6), 706. https://doi.org/10.20473/vol8iss20216pp706-713

Hieu Nguyen, T., Nguyen, H. A., Tran, Q. C., & Le, Q. L. (2020). Dividend Policy And Share Price Volatility: Empirical Evidence From Vietnam. *Accounting*, 6(2), 67–78. https://doi.org/10.5267/j.ac.2019.12.006

Hossin, Md. S., & Ahmed, Md. F. (2020). Dividend Policy and Stock Price Volatility in the Bangladesh Capital Market: An Experimental Analysis. *Saudi Journal of Economics and Finance*, 4(7), 359–367. https://doi.org/10.36348/sjef.2020.v04i07.008

Kayode I., K., Gbenga, O., & Ayobami, R. L. (2022). Effect of Dividend Policy on Share Price Movement: Focusing on Companies Listed on the Nigerian Stock Exchange Market. *Financial Markets, Institutions and Risks*, 6(4), 101–118. https://doi.org/10.21272/fmir.6(4).101-118.2022

Khan, M. A. (2019). Impact Of Dividend Policy On Share Price Volatility For Companies Listed On Pakistan Stock Exchange. *Management, & Applied Sciences & Technologies*, 10(17). https://doi.org/10.14456/ITJEMAST.2019.236

Koleosho, A. O., Akintoye, I. R., & Ajibade, A. T. (2022). The Effect of Dividend Policy on Share Price Volatility of Some Selected Companies on the Nigerian Exchange. *Journal of Accounting, Business and Finance Research*, 15(1), 10–20. https://doi.org/10.55217/102.v15i1.525

Marini, N. L. P. S., & Sutrisna Dewi, S. K. (2019). *Pengaruh Kebijakan Dividen, Leverage, Dan Ukuran Perusahaan Terhadap Volatilitas Harga Saham*. E-Jurnal Manajemen Universitas Udayana, 8(10), 5887. https://doi.org/10.24843/ejmunud.2019.v08.i10.p01

Martha, A., & Lukman, H. (2022). Faktor Yang Mempengaruhi Stock Price Volatility Perusahaan PErtambangan di BEI (2015-2019). *Fakultas Ekonomi Universitas Taruma Negara*, IV(1), 327–335.

Mupondo, N. C. (2022). Liquidity, Trading Activity, and Stock Price Volatility. *Finance & Economics Review*, 4(2), 12–25. https://doi.org/10.38157/fer.v4i2.482

Nurleli, D., & Wibisono, M. (2021). The Effect of IFRS Application, Stock Price Volatility, and Fundamental Variables on Jakarta Islamic Index. *Jurnal Manajemen Dan Keuangan*, 10(1), 1–14. https://doi.org/10.33059/jmk.v10i1.2559

Phan, T. K. H., & Tran, N. H. (2019). Dividend policy and stock price volatility in an emerging market: Does ownership structure matter? *Cogent Economics and Finance*, 7(1). https://doi.org/10.1080/23322039.2019.1637051

Priana, I. W. K., & Muliartha, K. R. (2017). *Pengaruh Volume Perdagangan Saham, Leverage, dan Dividend Payout Ratio Pada Volatilitas Harga Saham*.

Puji Estuti, E., Hendrayanti, S., & Semarang, S. (2020). *Dampak Volume Perdagangan Saham, Profitabilitas Dan Dividen Terhadap Volatilitas Harga Saham*.

Ria Selpiana, K., & Bagus Badjra, I. (2018). *Pengaruh Kebijakan Dividen, Nilai Tukar, Leverage, Dan Firm Size Terhadap Volatilitas Harga Saham*. 7(3), 1682–1712. https://doi.org/10.24843/EJMUNUD.2018.v7.i03.p020

Ridloah, S., Putri, R. D., Noekent, V., & Waliuddin, A. N. (2022). Dividend Policy and Stock Price Volatility: A Study on Indonesian Manufacturing Companies. In Management Analysis Journal. http://maj.unnes.ac.id

Rosyida, H., Firmansyah, A., & Wicaksono, S. B. (2020). Volatilitas Harga Saham: Leverage, Ukuran Perusahaan, Pertumbuhan Aset. JAS (Jurnal Akuntansi Syariah), 4(2), 196–208. https://doi.org/10.46367/jas.v4i2.256

Rusiana, I., & Program, R. K. (2018). Inflasi Terhadap Volatilitas Harga Saham.

Safrani, D. R., & Kusumawati, E. (2022). Pengaruh Volume Perdagangan Saham, Dividend Yield, Earning Volatility, Firm Size, dan Nilai Tukar Terhadap Volatilitas Harga Saham (Studi Empiris Perusahaan yang Terdaftar Indeks LQ45 Periode 2016-2020). E-QIEN: Jurnal Ekonomi dan Bisnis, 9(2), 123-134

Septyadi, M. A., & Bwarleling, T. H. (2020a). Pengaruh Volume Perdagangan Saham, Leverage, dan Kebijakan Dividen Terhadap Volatilitas Harga Saham. AKURASI: Jurnal Riset Akuntansi Dan Keuangan, 2(3), 149–162. https://doi.org/10.36407/akurasi.v2i3.251

Septyadi, M. A., & Bwarleling, T. H. (2020b). Pengaruh Volume Perdagangan Saham, Leverage, dan Kebijakan Dividen Terhadap Volatilitas Harga Saham. AKURASI: Jurnal Riset Akuntansi Dan Keuangan, 2(3), 149–162. https://doi.org/10.36407/akurasi.v2i3.251

Siawan, R. M., & Lukman, H. (2023). The Determinants Of Stock Price Volatility In Plantation Industry In Indonesia During 2016-2020. International Journal of Application on Economics and Business (IJAEB), 1(3), 2987–1972. https://doi.org/10.24912/ijaeb.v1.i3.1371-1381

Singh, N. P., & Tandon, A. (2019). The Effect of Dividend Policy on Stock Price: Evidence from the Indian Market. Asia-Pacific Journal of Management Research and Innovation, 15(1–2), 7–15. https://doi.org/10.1177/2319510x19825729

Sirait, J., Purwohedi, U., & Noviarini, D. (2021). Pengaruh Volatilitas Laba, Leverage Keuangan, Kebijakan Dividen, Dan Price To Book Value Terhadap Volatilitas Harga Saham. 2(1).

Siti Asriyah. (2022). Pengaruh Volume Perdagangan, Dividend Yield Dan Firm Size Terhadap Volatilitas Harga Saham : Studi Pada Perusahaan Subsektor Makanan dan Minuman Yang Terdaftar di BEI Periode 2017-2021 Siti Asriyah. www.idx.com.

Sugathadasa, D. (2018). The Impact of Dividend Policy on Share Price Volatility: Empirical Evidence with Colombo Stock Exchange in Sri Lanka. 7(8). https://doi.org/10.24940/ijir

Sugiyono. (2019). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Alfabet.

Susanto, H., Prasetyo, I., Indrawati, T., Aliyyah, N., Rusdiyanto, Tjaraka, H., Kalbuana, N., Syafi'ur Rochman, A., Gazali, & Zainurrafiqi. (2021). The Impacts Of Earnings Volatility, Net Income And Comprehensive Income On Share Price: Evidence From Indonesia Stock Exchange. Accounting, 7(5), 1009–1016. https://doi.org/10.5267/j.ac.2021.3.008

Tati, P., Pertiwi, D., Luh, N., & Wiagustini, P. (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. In American Journal of Humanities and Social Sciences Research. www.ajhssr.com

Utami, A., & Purwohandoko. (2021). Pengaruh Kebijakan Dividen, Leverage, Earning Volatility, dan Volume Perdagangan Terhadap Volatilitas Harga Saham Pada

Perusahaan Sektor Finance yang Terdapat di BEI Tahun 2014-2018. Ilmu Manajemen Fakultas Ekononomi Universitas Negeri Surabaya, 9(1).

Zainudin, R., Mahdzan, N. S., & Yet, C. H. (2018). Dividend Policy And Stock Price Volatility Of Industrial Products Firms In Malaysia. International journal of Emerging Markets, 13(1), 203–217. https://doi.org/10.1108/IJoEM-09-2016-0250.

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