InCAF PROCEEDING OF INTERNATIONAL CONFERENCE ON ACCOUNTING AND FINANCE

Volume 3, 2025, PP: 694-718

The Effects of IHSG, Trading Volume, and Foreign Transactions on the Volatility of Blue-Chip Stocks in the Mining Sector

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Abstract

This study examines the influence of the Composite Stock Price Index (IHSG), trading volume, and net foreign buy/sell transactions on the volatility of three blue-chip mining stocks (ADRO, ANTM, and HRUM) on the Indonesia Stock Exchange in 2022. Employing quantitative methods via SPSS, this research seeks to clarify the varying impacts of these factors on stock price volatility. The findings reveal that IHSG, as a general market index, does not significantly affect the volatility of these specific stocks, highlighting that broader market indicators may be less relevant to individual stock behavior within the mining sector. In contrast, trading volume exerts a significant impact on the price movements of ADRO and ANTM, but not on HRUM, suggesting that investor trading activity strongly influences price volatility in certain blue-chip stocks. Additionally, net foreign buy/sell transactions show no significant effect on the volatility of any of the stocks studied, indicating that domestic investor behavior may play a more decisive role in these stock movements than foreign investments. These insights are valuable for investors focusing on blue-chip mining stocks, as they suggest that trading volume, rather than general index trends or foreign investment flows, could serve as a reliable predictor of price movements. Future research is recommended to incorporate other variables, such as local ownership and bid-ask spread, to further enhance understanding of stock price dynamics in Indonesia's mining sector.

Keyword: IHSG; stock volume; net foreign buy or sell; volatility

INTRODUCTION

Cumulative capital formation plays a crucial role in achieving desired economic growth and development targets. Since stock markets serve as an effective venue for raising and channeling investment funds, their development is vital for supporting a robust financial system. Through the mobilization of savings, stock markets provide financing for economic projects, thereby generating new investment opportunities (Ghazo et al., 2021). Moreover, these markets facilitate the recycling of fiscal surpluses and provide liquidity to participants. The growth of stock markets in many countries aligns with the expansion of diverse companies across various sectors, leading to a broader selection of financial instruments available for investment. This diversity attracts more traders, offering numerous options to investors with surplus funds. Research shows that a stable and developed stock market contributes significantly to economic growth in both emerging and advanced economies (Tachiwou, 2009). Consequently, numerous countries, particularly developing ones, prioritize stock market performance enhancement to align with international standards and promote global integration through open market policies that support scalable investment and boost economic outcomes. However, stock markets are sensitive to macroeconomic factors, making variables such as

GDP, interest rates, inflation, exchange rates, money supply, and external debt influential in stock price volatility, ultimately affecting both domestic and foreign investor confidence (Azeez & Obalade, 2018; Xiao et al., 2018).

The capital market is essential to a country's economic infrastructure, fulfilling both an economic and a financial role that significantly contributes to overall economic development. From an economic standpoint, the capital market acts as a platform to bridge the gap between two distinct groups with complementary needs: those who have excess capital, such as individual or institutional investors, and those seeking additional funds, like corporations or other entities that issue securities. By providing this space, the capital market facilitates a flow of funds from investors to companies, enabling investors to allocate their surplus funds with the anticipation of earning returns. At the same time, companies can access capital for expansion, research and development, or other investment projects without waiting to generate sufficient funds solely through internal operations. This flow of investment capital is a critical driver for business growth and, in turn, economic progress.

In addition to its economic function, the capital market also plays a financial role by creating opportunities for fund owners to achieve returns tailored to their investment preferences and risk tolerance. Investors can select from various financial instruments with different risk and return profiles, allowing for investment that aligns with their financial goals and market outlook. This dual function—supporting both economic growth and individual wealth creation—highlights the capital market's importance in providing a range of investment vehicles that benefit both the economy and its participants (Faizah et al., 2019; Raraga & Muharam, 2014). Consequently, a well-functioning capital market becomes a vital component of a healthy, growing economy, as it not only mobilizes savings but also channels them efficiently toward productive ventures. The growth of Indonesian capital market investors has increased significantly from 2020 to 2023, where in 2021 it increased by 92.99%, in 2022 it increased by 27.37% and in 2023 it jumped by 10.97% with the number of investors reaching 11,581,533. Based on KSEI data on August 23, 2023, the number of capital market investors referring to the Single Investor Identification (SID) has reached 11,581,533.

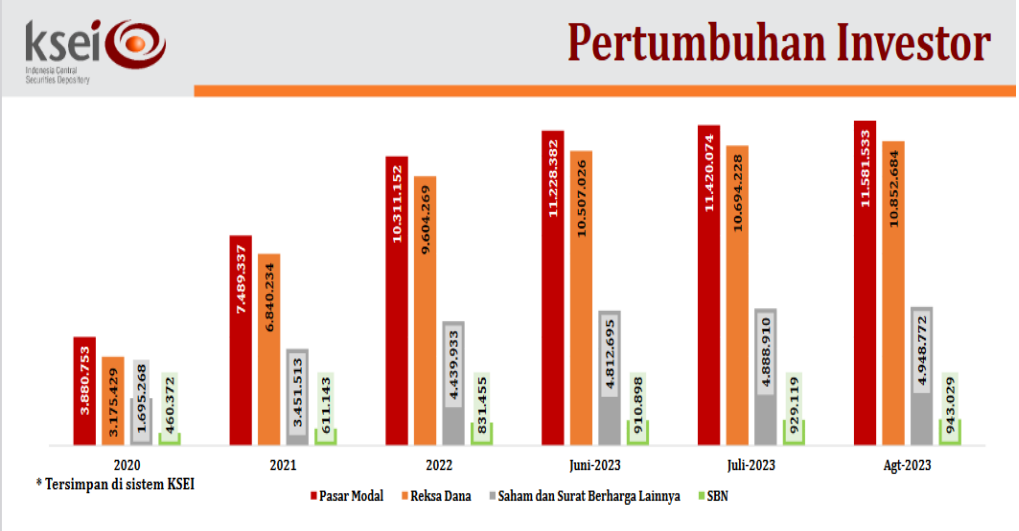

Figure 1 Growth of Indonesian Capital Market Investors
Source: Indonesian Central Securities Depository (KSEI)

One of the commodities that attracts many investors is the mining sector. Global commodity prices such as oil, coal, gold, and other precious metals have a direct impact on stock prices in the mining sector. The mining sector is often affected by currency exchange rates, especially if the mining

company has an export market. When exchange rates fluctuate, the sales value and profitability of mining companies can also be affected, and affect stock prices. Because the mining sector is a capital-intensive and high-risk industry, investors tend to speculate higher, especially when commodity prices are high. This often increases stock price volatility in the short term. Investors in buying shares will look at the company's financial report as a basis before deciding to invest their capital or not, but the problem is that the uncertainty of changes in share prices is a basic step that must be taken by investors before making an investment, so that investors do not get caught in a detrimental condition (Sadikin & Agustina, 2023).

One of the indexes that investors often pay attention to when investing in the Indonesia Stock Exchange is the Composite Stock Price Index (IHSG). The Composite Stock Price Index is a stock price index figure that has been compiled and calculated by producing a trend, where the index figure is a number that is processed in such a way that it can be used to compare events that can be in the form of changes in stock prices from time to time (Fathulloh & Agustina, 2023). Stock investors are very interested in the rise and fall of the Composite Stock Price Index (IHSG) because the value of their stock portfolio depends on this index. Most stocks or the direction of the stock portfolio moves in the same direction as the movement of the index. In macro terms, the movement of the index in a country is certainly inseparable from the economic conditions of that country. (Wulan Dari, 2023) said that many factors can affect the Stock Index, including changes in central bank interest rates, global economic conditions, world energy prices, political stability of a country, etc. IHSG acts like an indicator in the capital market, which means that index fluctuations reflect the market situation at a certain time, whether the market is strong or weak. By knowing the stock index, you will be able to understand the fluctuations in the share market price at that time, with the price fluctuations, market conditions can be analyzed whether they are experiencing a bearish, bullish or sideways trend (Taslim & Wijayanto, 2016). While (Rachmawati & Laila, 2015) in his book explains that the financial crisis that hit Indonesia in 1997 caused the JCI to fall from 635 to 398 and began to rise again in 2003. In 2004, the number of shares on the IDX decreased quite a lot because many companies did a reserve split. The capitalization value decreased because the prices of shares listed on the exchange fell. In 2002, Indonesia's macroeconomic conditions began to improve with increasing economic growth rates and decreasing interest rates. The interest rate of Bank Indonesia Certificates (an indicator of risk-free investment returns) reached 7.4% at the end of 2004.

The economic crisis resurfaced during the pandemics of 2019 and 2020, heavily impacting Indonesia's capital market as the Covid-19 virus spread. Negative sentiment affected the Indonesian Composite Index (IHSG), driven in part by the downturn in global markets, pushing the IHSG into decline. Additionally, the weakening of the rupiah contributed to the IHSG's decline. Investor concerns intensified when the government declared a National Emergency and announced a public holiday on March 7, 2020. On March 24, 2020, the IHSG closed down by 1.3%, reaching 3,937, marking its lowest point in eight years. The index dropped to levels last seen on June 24, 2012, when it stood at 3,955.58. Motivated by these developments, the researcher aims to examine the impact of Covid-19 on Indonesia's capital market for the period from March 2, 2020, to March 30, 2020, using data and infographics provided on the official IHSG website and from government press briefings.

Stock prices can increase or decrease due to the number of shares traded in the capital market. The rise and fall or fluctuation of stock prices is called volatility (Estuti & Hendrayanti, 2020). Stock trading volume is important for an investor, because for investors, stock trading volume describes the condition of the securities traded in the capital market which can have an impact on stock prices. Various theories that explain the relationship between volatility and volume conclude that trading arises due to the asymmetric flow of information received by investors, differences in types, and characteristics of investors in interpreting each available information. However, this does not form a consensus on the things that actually drive the relationship between volatility and volume (Lara et al.,

2023). Research conducted by (Estuti & Hendrayanti, 2020) found that trading volume has a positive effect on stock price volatility. Meanwhile, research by (Ding, 2021) analyzed the heterogeneity and impact of "herd behavior" of various institutional investors under different market conditions and found that "herd behavior" of securities investment funds and securities firms exacerbates stock market volatility.

Numerous studies in behavioral finance and financial econometrics have examined the connection between trading volume and market volatility, finding that investor trading activity has a significant impact on stock market volatility, with key implications for financial regulators. While research in emerging markets has often centered on the actions of foreign investors, this paper, building on the work of (Karanasos & Kartsaklas, 2009), explores the relationship between trading volume and volatility on the Korea Stock Exchange across different types of investors (domestic versus foreign, institutional versus individual) and trade types (buy versus sell) during both the 1997 Asian financial crisis and the 2008 global financial crisis (GFC). Investors are interested in being able to predict stock price movements as a consideration in making their investment decisions. Stock price movements that show a positive direction (increasing) reflect good company growth prospects in the future. In other words, if stock price movements cannot be predicted, it will be difficult for investors to know the growth prospects of a company. Prediction of stock price movements can be done using fundamental analysis based on the information presented in the company's financial statements. One of the benefits of financial statement information is as a prediction tool, both stock price predictions, dividend distribution predictions, profit predictions, and bankruptcy predictions (Anderson et al., 2012; Aono & Iwaisako, 2011; Sun et al., 2017). The stock price movement in question is the stock market price, namely the stock price that occurs on the stock exchange at a certain time determined by the demand and supply of shares as a form of interaction between market players. The company's stock price should reflect the company's financial performance (Brealey et al., 2008; Zaimsyah, 2019; Talamati & Pangemanan, 2015). If the company's financial performance is good, the company's shares will be in demand by the market (investors) and will encourage an increase in stock prices. This shows that there is a positive relationship between the company's financial performance and stock prices. Good and growing company financial performance will be appreciated by the market in the form of increased stock prices.

Volatility is defined as the magnitude of the distance from stock volatility (Romli et al., 2017). Volatility can also be interpreted as a measure of the rapid rise and fall of stock prices (stock price fluctuations) in a certain time (Priana & Muliartha, 2017). Stock price volatility can be influenced by internal company factors or in other words the company plays a role in controlling volatility. High stock price volatility means that stock prices rise quickly and fall quickly too. This stock price volatility can be influenced by macroeconomic and microeconomic factors. Local investors often follow the investment decisions of foreign investors, and they still act based on instinct (Untari, 2017). Basically, investors are risk averse or avoid risk. Volatility can be a measure of the level of risk faced by investors. The higher the stock price volatility, the more likely it is that the stock price will increase and decrease rapidly. Traders (short-term investors) may prefer high stock price volatility because they will benefit from high capital gains. Investors who prefer risk will choose stocks with high volatility. Meanwhile, investors who prefer long-term investment tend to choose stocks with low volatility, because they tend to have more stable returns. Volatility is not only important for estimating expected returns but also the risks that may be faced (Sutrisno, 2020). The findings suggest that trading volume information is a significant factor in estimating stock volatility, as it provides valuable insights into price movements and overall market behavior. However, they observed a key difference in the foreign exchange market, where trading volume impacts prices only indirectly, rather than having a direct influence. This distinction indicates that while trading volume is crucial in understanding stock market dynamics, its role in foreign exchange markets may be more nuanced. The study further emphasizes

that the explanatory power of trading volume in predicting market fluctuations can vary depending on factors like market maturity, investor behavior, and the specific characteristics of the financial market in question. Nonetheless, trading volume remains a substantial indicator for understanding volatility and market dynamics across diverse settings. Previous research supports these findings, highlighting trading volume's importance in explaining market fluctuations and its role in volatility forecasting (Bessembinder & Seguin, 1993; Ge et al., 2018; Zhang & Ma, 2021). This underscores the relevance of trading volume as an analytical tool in behavioral finance and financial econometrics, providing investors and regulators with insights into potential volatility shifts in financial markets.

Research has consistently shown that investors are willing to pay a premium for a firm's shares when they are optimistic about its future prospects. This optimism, reflected in investor sentiment, serves as an essential predictor of stock returns and plays a role in the process of price discovery (Baker & Wurgler, 2006, 2007; Brown & Cliff, 2005; Corredor et al., 2015). Investor sentiment influences not only the returns of individual stocks but also the variations in expected returns across different markets globally (Schmeling, 2009). Additionally, studies indicate that positive and negative investor sentiments impact stock returns differently. For instance, research by (Ding et al., 2004) and (Zhang & Semmler, 2009) highlights that optimistic sentiment correlates more strongly with stock returns than pessimistic sentiment.

In parallel, foreign exchange interventions have gained empirical support, despite limited theoretical guidance on their implementation. The early skepticism in academia, largely due to the "irrelevance" theory by (Backus & Kehoe, 1989), has been countered by recent empirical findings that suggest interventions can be effective. Studies by (Kearns & Rigobon, 2005) show positive impacts, while (Gabaix & Maggiori, 2015) introduce financial frictions as a critical component in explaining the persistent puzzles in international macroeconomics. Additionally, the normative aspects of foreign exchange intervention have gained traction in recent literature (Cavallino, 2019; Liu & Spiegel, 2015). Further, the behavior of foreign investors relative to local investors also plays a crucial role in stock market dynamics. (Brennan & Cao, 1997) provide theoretical and empirical evidence indicating that foreign investors in the U.S. tend to adopt momentum strategies, often resulting in lower performance due to less access to local information compared to domestic investors. In contrast, (Grinblatt & Keloharju, 2001) observe that foreign investors, typically large institutional funds, also follow momentum strategies but can achieve superior performance. In China, (Chen et al., 2017) explore the positive correlation between foreign institutional ownership and stock return volatility, finding that even when adjusting for momentum-driven performance, foreign investors' performance remains notably strong. The influence of foreign equity trading on market volatility is further illustrated by (Wang, 2007), who finds a strong relationship between foreign trading activity and volatility in the Indonesian and Thai markets. In Indonesia, trading within both foreign and local investor groups tends to have an inverse relationship with market volatility, suggesting that investor groups are relatively homogeneous in capital and information. In Thailand, foreign net buying has a dampening effect on volatility by providing liquidity during periods when local investors are pressured to sell, helping to stabilize the market, especially during the Asian financial crisis. This interplay of foreign and local investor activity highlights the nuanced impacts of investor behavior on market stability and volatility.

Net foreign buy or sell is one of the factors that can affect stock price movements. This is supported by the dominance of the number of foreign share ownership in the Indonesian capital market. The dominance of the number of foreign share ownership in the Indonesian capital market can make the performance of the capital market fluctuate because the flow of foreign funds is short-term and very dynamic, making it easy to enter and exit the Indonesian capital market. Net foreign buy is the purchase of shares by foreign investors. Meanwhile, net foreign sell is the sale of shares by foreign investors. When foreign investors are making a net foreign buy or it can be interpreted that

foreign investors are entering and investing in the Indonesian stock market, it can provide positive sentiment to the stock market, resulting in increased stock prices and stock returns. Conversely, when foreign investors make a net foreign sell, it can provide negative sentiment to the stock market, resulting in decreased stock prices and stock returns (Arifin & Wardani, 2016). Net foreign buy occurs when foreign investors make purchases in amounts greater than the amount of sales, then the stock price will move positively and increase stock returns. Meanwhile, net foreign sell occurs when foreign investors withdraw their funds or in other words sell shares in an amount greater than the amount they bought, which can cause the stock price to move negatively and cause stock returns to fall (Zulfan et al., 2022). (Rhee & Wang, 2009) concluded from their research that foreign trading has a significant effect on price sensitivity. However, the results of (Rakhmat, 2019) research show that net foreign funds have a negative and insignificant effect on stock prices.

The objects taken by the researcher were ADRO, ANTM, and HRUM. These three stocks are blue chip stocks engaged in mining and are also included in the 10 best blue chip stocks of 2022 that can be considered as investment options. Mining companies with higher Environmental, Social, and Good Governance (ESG) ratings outperformed the market on a broader scale during the peak of the COVID-19 crisis, providing an average total return for shareholders of 34% over the past three years, ten percentage points higher than the general market index. These figures come from PwC's 18th Annual Review of the Top 40 Mining companies - Mine 2021 - which examines global trends in the mining industry. Net profit in this sector rose 15%, cash on hand rose 40%, and market capitalization rose almost two-thirds to US$1.46 trillion. This was proven in 2020 (the beginning of the COVID-19 pandemic) until 2022, ADRO, ANTM, and HRUM shares experienced a significant increase.

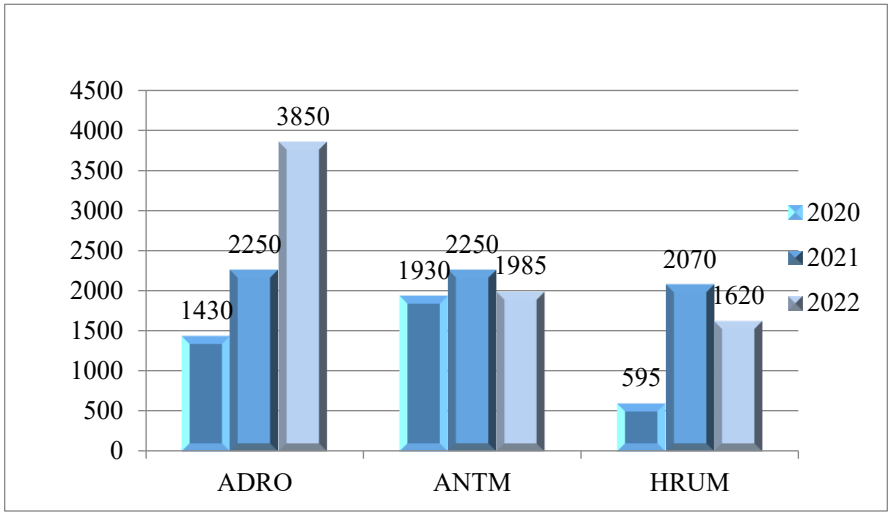

Figure 2 Stock Price Graph

Source: Data processed by researchers, 2024

Based on Figure 2, the stock price graph of ADRO, ANTM, HRUM experienced a significant increase from 2020 to 2022. ADRO rose (169.23%) with a stock price of 1430 in 2020 and a stock price of 3850 in 2022, ANTM rose (2.84%) with a stock price of 1930 in 2020 and a stock price of 1985 in 2022 and HRUM rose (172.26%) with a stock price of 595 in 2020 and a stock price of 1620 in 2022. Blue chip companies are considered to have good prospects and are relatively more stable than non-blue chip companies. One of the company's motives for implementing a share split policy is the signaling theory which encourages companies to provide information to the public about the company's good future prospects, (Akhmad & Damayanti, 2021; Hartono, 2016). Based on the

background above, the researcher intends to re-examine The Effect of IHSG, Transaction Volume, and Foreign Buying/Selling Activity on the Prices of Blue-Chip Stocks (ADRO, ANTM, HRUM) in the Mining Sector.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Literature Review and Hypothesis Development

1. Volatility

Volatility is a constant change in value per unit of time of the selling price index and is always evaluated with a certain unit of time. The way to measure volatility is by calculating the standard deviation of the change in constant value. If the change in constant value over time is not significant, the standard deviation value is small. Conversely, if that happens, the extreme value changes immediately, the standard deviation value is large (Julianto et al., 2023). The increasing rise and fall of stock prices allows for increased stock price volatility. Stocks with high volatility cause greater uncertainty for investment returns (Angesti, 2019). According to Maulana (2022), Volatility is a statistical measure of the dispersion of returns for a particular security or market index. In most cases, the higher the volatility, the riskier the security. Volatility is often measured as the standard deviation or variance between returns from the same security or market index. Volatility forecasting is a very important analytical tool in financial management such as risk management, asset allocation, and option pricing because understanding future volatility can help both institutional and individual investors minimize their losses. Volatility cannot be observed directly in practice and therefore needs to be estimated from the underlying price of an asset. The interesting part of estimating volatility with asset returns as the underlying series is that volatility has four characteristics commonly seen by (Maulana, 2022), namely:

1) The variance of the series differs between high and low at different periods, creating a "volatility cluster".
2) Volatility spikes are rare because volatility evolves continuously.
3) Volatility varies within some fixed range and does not deviate to infinity.
4) Large price declines appear to have a greater impact on volatility than equally large price increases, i.e. asymmetric impact.

The stock price volatility proxy in this study:

$$PV = \sqrt{\frac{1}{n}\sum ln\left(\frac{Ht}{Lt}\right)^2}$$

Dimana:
PV : Price share Volatility
Ht : Highest stock price in period t
Lt : Lowest stock price in period t
n : Number of observations

2. Composite Stock Price Index (IHSG)

IHSG is a composite index of all stocks listed on the Indonesia Stock Exchange, which describes the economic activities of Indonesia from various sectors. So that IHSG is used as a reference for investors to determine their investment decisions (Prayoga & Khairunnisa, 2019). IHSG reflects the performance of the stock market on the Indonesia Stock Exchange. A high IHSG indicates good stock performance, and vice versa. IHSG can function as a marker of market direction, a measuring stick for profit levels and a benchmark for portfolio performance (Basit, 2020). According to (Giffarina, 2021) the Composite Stock Price Index (IHSG) is a series of historical information related

to the movement of composite stock prices, up to a certain date and reflects a value that functions as a measurement of the performance of a composite stock on the stock exchange. The data shown by the Composite Stock Price Index at any time is a picture of the general market situation or to show whether stock prices have increased or decreased in a country.
The basis for calculating the IHSG is the amount of Market Value, the Total Market Value is the total multiplication of each listed stock (except for companies in the restructuring program) with the price on the IDX on that day. The calculation formula is:

$$\text{IHSG} = \text{"Market Value"} / \text{"Base Value"} \times 100$$

Where:
Market Value = Market value, which is the cumulative number of listed shares (used for index calculation) multiplied by the market price.
Base Value = Base value, which is the value formed based on the number of shares listed at a certain time.

The Index calculation represents the movement of stock prices in the market/exchange that occurs through the auction trading system. The base value will be adjusted quickly if there is a change in the issuer's capital or there are other factors that are not related to the stock price. Adjustments will be made if there are additional new issuers. The stock price used in calculating the JCI is the stock price on the regular market which is based on the price that occurs based on the auction system. The JCI calculation is carried out every day, namely after the close of trading each day.
The JCI reflects the movement of all stocks listed on the exchange (Handika et al., 2021). This statement is reinforced by research from (Aminda et al., 2023) which shows that volatility and the composite stock price index have a significant influence.
H_1: IHSG affects the movement of ADRO stock prices
H_2: IHSG affects the movement of ANTM stock prices
H_3: IHSG affects the movement of HRUM stock prices

3. Stock Trading Volume

For investors, stock trading volume serves as a key indicator of the activity in the securities market, which can directly affect stock prices. An increase in trading volume signifies heightened buying and selling activity among investors on the stock exchange. When there is a greater volume of supply and demand for a particular stock, it exerts a stronger influence on price fluctuations. In general, a rise in trading volume reflects growing interest and demand for the stock, which can drive up its price (Dini & Indarti, 2012; Rahayu, 2019).

(Hartono, 2016; Permatasari & Yuniarsih, 2020) further explains that stock volume is an important indicator of the volume of stocks traded, which highlights the liquidity and ease of trading for a particular stock. By tracking stock trading activities, one can gauge the trading volume through specific indicators, such as the Trading Volume Activity (TVA), which offers insights into the level of market participation and the potential for price movements. Higher trading volumes often signal a more active market, indicating greater investor confidence and a smoother trading process for the stocks involved. An increase in stock trading volume is an increase in buying and selling activity by investors in the capital market, (Effendi & Hermanto, 2017). Stock trading volume is used to measure whether individual investors are aware of the information issued by the company and use it in buying or selling shares, so that they will get above normal profits, (Halimatusyadiyah, 2020; Taslim & Wijayanto, 2016). The calculation of stock trading volume is done by comparing the number of company shares traded in a certain period with the total number of company shares outstanding during the same period, also known as Trading Volume Activity, (Nasir & Mirza, 2011; Jefri et al., 2020):

$$TVA = \frac{\text{"Number of shares traded in period t"}}{\text{"Number of shares outstanding in period t"}}$$

(Priana & Muliartha, 2017) found that trading volume had a negative effect on stock price volatility. Research results from (Estuti & Hendrayanti, 2020) found that trading volume had a positive effect on stock price volatility.

H_4: Stock volume has an effect on ADRO stock price movements

H_5: Stock volume has an effect on ANTM stock price movements

H_6: Stock volume has an effect on HRUM stock price movements

4. Net Foreign

In the capital market, there are terms such as net foreign buy and net foreign sell. This is a condition where foreign funds are considered to be entering (capital inflow) or leaving (capital outflow) from a stock exchange. When there is a net foreign buy or foreign funds entering are greater than funds leaving, the stock price will tend to move positively. In contrast, when there is a net foreign sell, which means more foreign funds leaving than entering, the stock exchange performance will weaken, (Zarika & Paramita, 2021). Foreign buy is the action of foreign investors entering and investing in the Indonesian stock market. This can provide positive sentiment to the stock market and for local investors, resulting in increased stock prices and returns. Foreign sell is the action of foreign investors leaving and selling their shares on the Indonesian stock market. This can provide negative sentiment to the stock market and for local investors, resulting in decreased stock prices and returns. In contrast to local investors, although they dominate the total transactions on the stock exchange, it is very rare for local investor actions to directly affect stock price movements. This is because foreign investors have a lot of funds to invest and follow the trend, while local investors tend to move individually in transactions (Natali & Suhendra, 2023).

- According to Article 1 Paragraph (6) of Law No. 25 of 2007 concerning investment, foreign investors are individuals who are foreign citizens, foreign business entities, and/or foreign governments that make investments in the territory of the Republic of Indonesia. As defined above, foreign investors (foreign ownership) are part of the common stock of a company owned by individuals, corporations, governments and other parts that have foreign status or individuals, corporations and governments not from Indonesia. According to Anisah & Hartono (2022), the foreign ownership structure can be calculated using the percen(Ghozali, Latan, 2012).
  tage of common stock owned by foreigners and can be calculated using the equation.

KA = " Amount of share ownership by foreign parties " /" Number of shares outstanding " x100

(Frensidy, 2008) found that net foreign fund flows have a positive effect on changes in the IHSG with a coefficient of 0.000936 and at a significant level at $\alpha = 1\%$. (Rhee & Wang, 2009) concluded from their research that foreign trading has a significant effect on price sensitivity, but share ownership by foreign institutions reduces price sensitivity and stock liquidity.

H_7: Net foreign buy or sell has an effect on ADRO stock price movements

H_8: Net foreign buy or sell has an effect on ADRO stock price movements

H_9: Net foreign buy or sell has an effect on ADRO stock price movements

METHODS

The type of research used in this study is quantitative research. Quantitative Research is a research method that uses data, namely numbers that are emphasized on objective measurement of results accompanied by statistical analysis. The numbers used in statistical analysis come from the objective scale of measurement of the analysis unit called a variable (Balaka, 2022). This study is used to determine how much influence the Composite Stock Price Index (IHSG), stock volume, net foreign buy or sell have on the price movements of 3 blue chip stocks in the mining sector in 2022, and will then be carried out with several research tests. The research to be carried out can be described in the following framework:

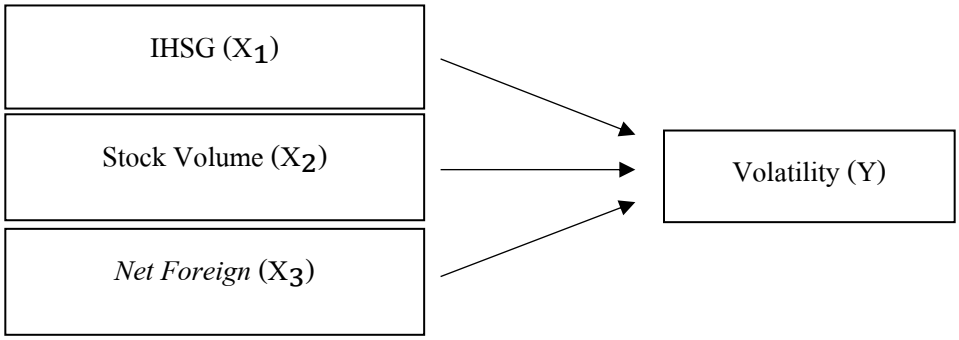

Figure 3 Research Design

Source: Data processed by researcher, 2024

This study uses secondary data obtained from the official website of the Indonesia Stock Exchange, namely https://www.idx.co.id, so that it is easy to obtain data to conduct research. The data was obtained from 3 Mining Companies (ADRO, ANTM, HRUM) in 2022.

The population in this study was obtained from 3 mining companies whose shares are included in the ranks of the 10 best blue chip stocks in 2022. The companies that are the samples of this study are 3 mining companies whose shares are included in the ranks of the 10 best blue chip stocks in 2022. The sampling technique in this study is saturated sampling, which uses all populations as samples in the study.

The variables used in this study are independent variables and dependent variables. The explanation is as follows:

a) Independent Variable

(Sugiyono, 2016) independent variables are often called independent variables. Independent variables are variables that influence or cause changes or the emergence of dependent variables (bound). The independent variables in this study are the Composite Stock Price Index (IHSG), stock volume, and net foreign buy or sell.

b) Dependent Variable

(Sugiyono, 2016) dependent variables are often referred to as dependent variables. The dependent variable is a variable that is influenced or that is the result of the independent variable. The dependent variable used in this study is stock price movements (volatility).

This study uses quantitative descriptive research, because the data to be obtained is in the form of numbers. The numbers obtained will be further analyzed in data analysis. The data taken in this study were obtained from the Indonesia Stock Exchange which can be accessed via www.idx.co.id, and stock price movement data on the Profits Anywhere platform. In this study, financial reports and stock price movement data were taken from PT Adaro Energy Indonesia Tbk (ADRO), PT Aneka

Tambang Tbk (ANTM), and PT Harum Energy Tbk in 2022. Data collection in this study used documents. Documents are records of past events. The documents are then analyzed in order to facilitate the research process. Uses the SPSS application to help determine the effect of the Composite Stock Price Index (IHSG), stock volume, net foreign buy or sell on stock price movements.

RESULT AND DISCUSSION

Classical Assumption Test

Normality Test

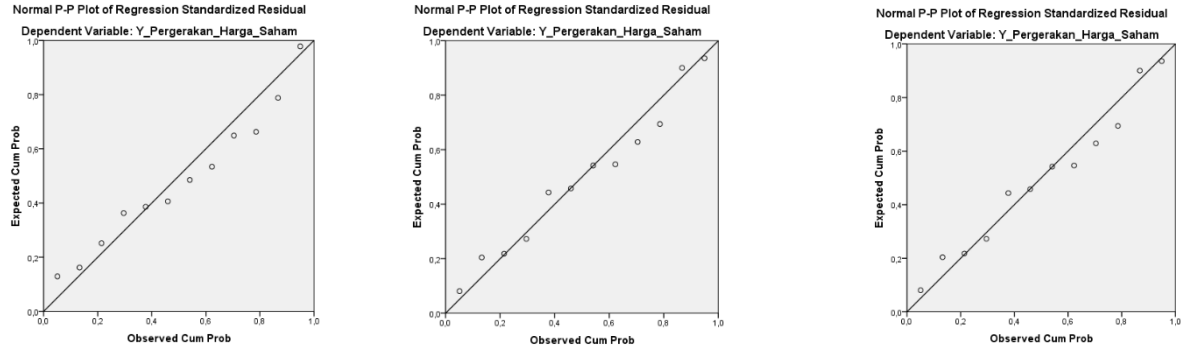

Figure 4
Results of Normality Test (Graph) ADRO, ANTM and HRUM

Source: Data processed by researchers, 2024

Based on figure 4 the results of the Normality test (graph) of ADRO, ANTM and HRUM, it can be said that the residual data is normally distributed. This can be seen from the formation of a straight diagonal line and the plotting of residual data on the graph above.

Multicollinearity Test

The Multicollinearity Test is conducted to determine whether multicollinearity occurs between X1, X2, and X3.

Table 1
ADRO Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,812	1,098		,740	,481		
	X1_IHSG	,061	,068	,146	,904	,392	,713	1,403
	X2_Volume_Saham	,469	,143	,664	3,289	,011	,457	2,188
	X3_Net_Foreign_Buy_Sell	-1,713	1,086	-,299	-1,577	,153	,519	1,928

a. Dependent Variable: Y_Pergerakan_Harga_Saham

Source: Data processed by researchers, 2024

Based on table 1 of the ADRO Multicollinearity test results, it can be said that there is no multicollinearity between X1, X2, and X3. This can be seen from the tolerance value > 0.1 or VIF < 10. The test results show that the tolerance value of IHSG (0.713), stock volume (0.457), net foreign

buy or sell (0.519) > 0.1 and IHSG VIF (1.403), stock volume (2.188), net foreign buy or sell (1.928) < 10, meaning that there is no multicollinearity between X1, X2, and X3.

Table 2
ANTM Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,119	,657		,181	,860		
	X1_IHSG	-,063	,071	-,162	-,893	,398	,859	1,165
	X2_Volume_Saham	,401	,078	,920	5,171	,001	,889	1,125
	X3_Net_Foreign_Buy_Sell	,077	,394	,033	,195	,850	,955	1,047

a. Dependent Variable: Y_Pergerakan_Harga_Saham

Source: Data processed by researchers, 2024

Based on table 2 of ANTM Multicollinearity test results, it can be said that there is no multicollinearity between X1, X2, and X3. This can be seen from the tolerance value > 0.1 or VIF < 10. The test results show that the tolerance value of IHSG (0.859), stock volume (0.889), net foreign buy or sell (0.955) > 0.1 and IHSG VIF (1.165), stock volume (1.125), net foreign buy or sell (1.047) < 10, meaning that there is no multicollinearity between X1, X2, and X3.

Table 3
HRUM Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1,224	3,731		,328	,751		
	X1_IHSG	-,175	,442	-,130	-,396	,703	,717	1,395
	X2_Volume_Saham	,656	,469	,461	1,398	,200	,714	1,401
	X3_Net_Foreign_Buy_Sell	-,304	,220	-,396	-1,382	,204	,947	1,056

a. Dependent Variable: Y_Pergerakan_Harga_Saham

Source: Data processed by researchers, 2024

Based on table 3 of the HRUM Multicollinearity test results, it can be said that there is no multicollinearity between X1, X2, and X3. This can be seen from the tolerance value > 0.1 or VIF < 10. The test results show that the tolerance value of IHSG (0.779), stock volume (0.819), net foreign buy or sell (0.944) > 0.1 and IHSG VIF (1.284), stock volume (1.221), net foreign buy or sell (1.059) < 10, meaning that there is no multicollinearity between X1, X2, and X3.

Heteroscedasticity Test

Heteroscedasticity test is conducted to test whether in the regression model there is inequality of variance and residuals from one observation to another. If the variance of the residuals from one observation to another is different, it is called heteroscedasticity (Ghozali, 2012)

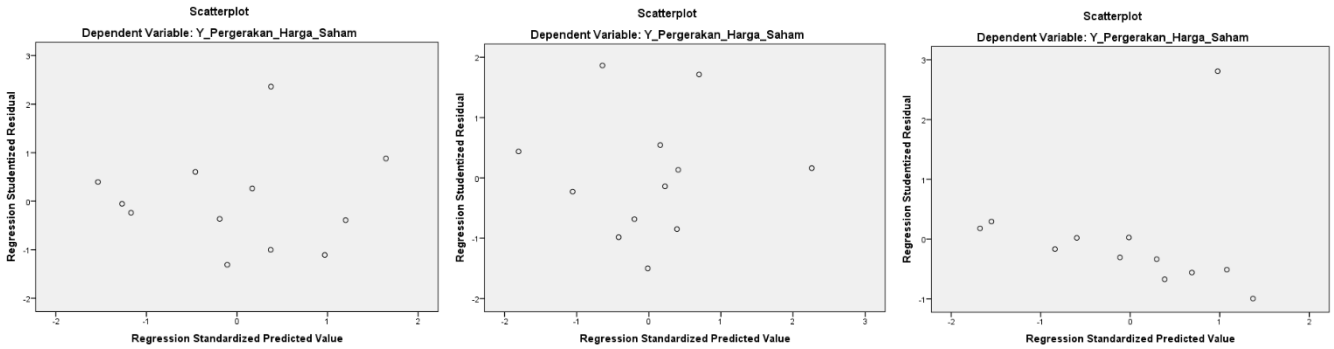

Figure 5
ADRO, ANTM and HRUM Heteroscedasticity Test

Source: Data processed by researchers, 2024

Based on figure 5, the results of the ADRO, ANTM and HRUM Heteroscedasticity tests can be said that there is no heteroscedasticity. This is because there is no particular pattern in the graph above (spread). Detection of the presence or absence of heteroscedasticity can be done by looking at the presence or absence of a particular pattern in the scatterplot graph between SRESID and ZPRED where the Y axis is the predicted Y, and the X axis is the residual (predicted Y - actual Y) which has been studentized (Ghozali, 2012).

Multiple Linear Regression

According to (Sugiyono, 2016), Multiple Linear Regression aims to predict how the dependent variable will rise and fall, if two or more independent variables as predictor factors are manipulated to increase or decrease their values.

$$Y = a + b1\ X1 + b2\ X2 + b3\ X3 + e$$

Table 4

ADRO Multiple Linear Regression Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,812	1,098		,740	,481
	X1_IHSG	,061	,068	,146	,904	,392
	X2_Volume_Saham	,469	,143	,664	3,289	,011
	X3_Net_Foreign_Buy_Sell	-1,713	1,086	-,299	-1,577	,153

a. Dependent Variable: Y_Pergerakan_Harga_Saham

Source: Data processed by researchers, 2024

Based on table 4, the results of the ADRO Multiple Linear Regression test can be seen as follows.
$Y = a + b1\ X1 + b2\ X2 + b3\ X3 + e$

Y = 0.812 + 0.061 X1 + 0.469 X2 + (-) 1.713 X3

a. The a value of 0.812 is a constant or condition when the stock price movement variable has not been influenced by other variables, namely the IHSG variable (X1), stock volume (X2), and net foreign buy or sell (X3). If the stock price movement variable does not exist, the stock price movement variable will not change.
b. B1 (regression coefficient value X1) of 0.061 indicates that increasing the X1 variable will increase the Y variable by 0.061.
c. B2 (regression coefficient value of X2) of 0.469 indicates that increasing variable X2 will increase variable Y by 0.469. d. B3 (regression coefficient value of X3) of -1.713 indicates that increasing variable X3 will increase variable Y by -1.713.

Table 5
ANTM Multiple Linear Regression Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,119	,657		,181	,860
	X1_IHSG	-,063	,071	-,162	-,893	,398
	X2_Volume_Saham	,401	,078	,920	5,171	,001
	X3_Net_Foreign_Buy_Sell	,077	,394	,033	,195	,850

a. Dependent Variable: Y_Pergerakan_Harga_Saham

Source: Data processed by researchers, 2024

Based on table 5, the results of the ANTM Multiple Linear Regression test can be seen as follows.

$Y = a + b1\ X1 + b2\ X2 + b3\ X3$

Y= 0.119 + (-) 0.063 X1 + 0.401 X2 + 0.077 X3

a. The a value of 0.119 is a constant or condition when the stock price movement variable has not been influenced by other variables, namely the IHSG variable (X1), stock volume (X2), and net foreign buy or sell (X3). If the stock price movement variable does not exist, the stock price movement variable will not change.
b. B1 (regression coefficient value X1) of -0.063 indicates that increasing the X1 variable will increase the Y variable by -0.063.
c. B2 (regression coefficient value of X2) of 0.401 indicates that increasing variable X2 will increase variable Y by 0.401. d. B3 (regression coefficient value of X3) of 0.077 indicates that increasing variable X3 will increase variable Y by 0.077.

Table 6. HRUM Multiple Linear Regression Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,224	3,731		,328	,751
	X1_IHSG	-,175	,442	-,130	-,396	,703
	X2_Volume_Saham	,656	,469	,461	1,398	,200
	X3_Net_Foreign_Buy_Sell	-,304	,220	-,396	-1,382	,204

a. Dependent Variable: Y_Pergerakan_Harga_Saham

Source: Data processed by researchers, 2024

Based on table 6, the results of the HRUM Multiple Linear Regression test can be seen as follows.

$Y = a + b1\ X1 + b2\ X2 + b3\ X3$

Y= 1.224 + (-) 0.175 X1 + 0.656 X2 + (-) 0.304 X3

a. The a value of 1.224 is a constant or condition when the stock price movement variable has not been influenced by other variables, namely the IHSG variable (X1), stock volume (X2), and net foreign buy or sell (X3). If the stock price movement variable does not exist, the stock price movement variable will not change.
b. B1 (regression coefficient value X1) of - 0.175 indicates that increasing the X1 variable will increase the Y variable by - 0.175.
c. B2 (regression coefficient value of X2) of 0.656 indicates that increasing variable X2 will increase variable Y by 0.656.
d. B3 (regression coefficient value of X3) of -0.304 indicates that increasing variable X3 will increase variable Y by -0.304.

Hypothesis Test

a. Partial Effect Test (t test)

Partial Effect Test (t test) is conducted to determine the effect of each independent variable and dependent variable. Regarding the results of the Partial Effect Test (t test) of the study can be seen in tables 4.19, 4.20, 4.21 as follows.

Table 7. Partial Effect Test (t test) ADRO

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,812	1,098		,740	,481
	X1_IHSG	,061	,068	,146	,904	,392
	X2_Volume_Saham	,469	,143	,664	3,289	,011
	X3_Net_Foreign_Buy_Sell	-1,713	1,086	-,299	-1,577	,153

a. Dependent Variable: Y_Pergerakan_Harga_Saham

Source: Data processed by researchers, 2024

Based on table 7, the results of the ADRO Partial Influence Test (t test) can be concluded as follows.

a) The IHSG variable (X1) does not affect the stock price movement variable (Y). This can be seen from sig> 0.05. The test results show that sig 0.392> 0.05, which means it has no effect (rejected).
b) The stock volume variable (X2) affects the stock price movement variable (Y). This can be seen from sig <0.05. The test results show that sig 0.011 <0.15, which means it has an effect (accepted).
c) The net foreign buy or sell variable (X3) does not affect the stock price movement variable (Y). This can be seen from sig> 0.05. The test results show that sig 0.153> 0.05, which means it has no effect (rejected).

Table 8
Partial Effect Test (t test) ANTM

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,119	,657		,181	,860
	X1_IHSG	-,063	,071	-,162	-,893	,398
	X2_Volume_Saham	,401	,078	,920	5,171	,001
	X3_Net_Foreign_Buy_Sell	,077	,394	,033	,195	,850

a. Dependent Variable: Y_Pergerakan_Harga_Saham

Source: Data processed by researchers, 2024

Based on table 8 the results of the Partial Influence test (t test) above, it can be concluded as follows.

a) The IHSG variable (X1) does not affect the stock price movement variable (Y). This can be seen from sig> 0.05. The test results show that sig 0.398> 0.05, which means it has no effect (rejected).
b) The stock volume variable (X2) affects the stock price movement variable (Y). This can be seen from sig <0.05. The test results show that sig 0.01 <0.05, which means it has an effect (accepted).
c) The net foreign buy or sell variable (X3) does not affect the stock price movement variable (Y). This can be seen from sig> 0.05. The test results show that sig 0.850> 0.05, which means it has no effect (rejected).

Table 9
Partial Effect Test (t test) HRUM

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,224	3,731		,328	,751
	X1_IHSG	-,175	,442	-,130	-,396	,703
	X2_Volume_Saham	,656	,469	,461	1,398	,200
	X3_Net_Foreign_Buy_Sell	-,304	,220	-,396	-1,382	,204

a. Dependent Variable: Y_Pergerakan_Harga_Saham

Source: Data processed by researchers, 2024

Based on table 9, the results of the HRUM Partial Influence (t-test) test can be concluded as follows.

a) The IHSG variable (X1) has no effect on the stock price movement variable (Y). This can be seen from sig> 0.05. The test results show that sig 0.703> 0.05, which means it has no effect (rejected).
b) The stock volume variable (X2) has no effect on the stock price movement variable (Y). This can be seen from sig> 0.05. The test results show that sig 0.200> 0.05, which means it has no effect (rejected).
c) The net foreign buy or sell variable (X3) has no effect on the stock price movement variable (Y). This can be seen from sig> 0.05. The test results show that sig 0.204> 0.05, which means it has no effect (rejected).

b. Determination Coefficient Test (R2)
The Determination Coefficient Test (R2) is conducted to determine the closeness of the relationship between the independent variable and the dependent variable. Regarding the results of the Determination Coefficient (R2) test, the research can be seen in tables 4.22, 4.23, 4.24 as follows.

Table 10
Coefficient of Determination Test (R2) ADRO

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,923[a]	,851	,795	,004579

a. Predictors: (Constant), X3_Net_Foreign_Buy_Sell, X1_IHSG, X2_Volume_Saham

b. Dependent Variable: Y_Pergerakan_Harga_Saham

Source: Data processed by researchers, 2024

Based on table 10 of the results of the ADRO Determination Coefficient (R2) test, it can be seen that the R Square (R2) value is 0.851 or 85.1%, so it can be concluded that the magnitude of the influence of the IHSG variable (X1), stock volume (X2), net foreign buy or sell (X3) on the stock price movement variable (Y) is 85.1% while the remaining 14.9% is influenced by other variables not mentioned in this study.

Table 11
Coefficient of Determination Test (R2) ANTM

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,882[a]	,777	,694	,000433

a. Predictors: (Constant), X3_Net_Foreign_Buy_Sell, X2_Volume_Saham, X1_IHSG

Source: Data processed by researchers, 2024

Based on table 11 of the ANTM Determination Coefficient (R2) test results, it can be seen that the R Square (R2) value is 0.777 or 77.7%, so it can be concluded that the magnitude of the influence of the IHSG variable (X1), stock volume (X2), net foreign buy or sell (X3) on the stock price movement variable (Y) is 0.777 or 77.7% while the remaining 22.3% is influenced by other variables not mentioned in this study.

Table 12
Coefficient of Determination Test (R2) HRUM

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,615[a]	,379	,146	,030057

a. Predictors: (Constant), X3_Net_Foreign_Buy_Sell, X1_IHSG, X2_Volume_Saham

b. Dependent Variable: Y_Pergerakan_Harga_Saham

Source: Data processed by researchers, 2024

Based on table 12 of the ANTM Determination Coefficient (R2) test results, it can be seen that the R Square (R2) value is 0.379 or 37.9%, so it can be concluded that the magnitude of the influence of the IHSG variable (X1), stock volume (X2), net foreign buy or sell (X3) on the stock price movement variable (Y) is 37.9% while the remaining 62.1% is influenced by other variables not mentioned in this study.

1. The Influence of IHSG on the Movement of 3 Blue Chip Stock Prices in the Mining Sector in 2022

Based on the theory obtained by the researcher, the Composite Stock Price Index is a stock price index number that has been compiled and calculated by producing a trend, where the index number is a number that is processed in such a way that it can be used to compare events that can be in the form of changes in stock prices from time to time (Fathulloh & Agustina, 2023). This IHSG can be used to measure whether stock prices are increasing or decreasing. IHSG acts like an indicator in the capital market, which means that index fluctuations reflect the market situation at a certain time, whether the market is strong or weak. By knowing the stock index, it will be able to understand the fluctuations in the share market price at that time, with the price fluctuations, market conditions can be analyzed whether they are experiencing a bearish, bullish or sideways trend, (Loang & Ahmad, 2024; Maulinda, 2018).

Based on the results of the analysis of research data conducted by researchers using the SPSS application, the following can be obtained and known.

a. The Effect of the Composite Stock Price Index (IHSG) on ADRO Stock Price Movements in 2022
   The results of the data analysis test show that the IHSG has no effect on ADRO stock price movements. This can be seen from the results of the ADRO t-test showing that the t-test is 0.904 <1.985 or sig 0.392> 0.05, which means it has no effect (rejected).
b. The Effect of the Composite Stock Price Index (IHSG) on ANTM Stock Price Movements in 2022
   The results of the data analysis test show that the IHSG has no effect on ANTM stock price movements. This can be seen from the results of the ANTM t-test showing that the t-test is -0.893 <1.985 or sig 0.398> 0.05, which means it has no effect (rejected).
c. The Effect of the Composite Stock Price Index (IHSG) on HRUM Stock Price Movements in 2020
   The results of the data analysis test show that the IHSG has no effect on HRUM stock price movements. This can be seen from the results of the HRUM t-test showing that the t-test - 0.396 <1.985 or sig 0.703> 0.05, which means it has no effect (rejected).

The reason the IHSG has no effect in this study is because the IHSG is used to assess the general market situation so that it cannot be used as a benchmark to measure whether the stock price (specifically) has increased or decreased. The IHSG can only be used to determine the current market trend conditions. This study is not in line with the research conducted by (Aminda et al., 2023) which shows that volatility and the composite stock price index have a significant effect.

2. The Influence of Stock Volume on the Movement of 3 Blue Chip Stock Prices in the Mining Sector in 2022

Based on the theory obtained by the researcher, the volume of stock trading is important for an investor because it affects the company's stock price, because for investors the volume of stock trading describes the condition of the securities traded on the capital market which can have an impact on stock prices. The increase in trading volume is an increase in the buying and selling activity of investors on the Stock Exchange. The greater the volume of supply and demand for a stock, the greater its influence on stock price fluctuations on the Stock Exchange and the increasing volume of stock trading shows that the stock is increasingly in demand by the public so that it will have an impact on increasing stock prices (Dini & Iin Indarti, 2012; TN Rahayu, 2019). Trading volume describes the activity of the number of shares traded on the capital market. A small trading volume shows investor uncertainty about a stock being traded. Likewise, a large trading volume shows that the stock is in demand by investors (Khoirayanti & Sulistiyo, 2020).

Based on the results of the analysis of research data conducted by researchers using the SPSS application, the following can be obtained and known.

a. The Effect of Stock Volume on ADRO Stock Price Movements in 2022

   The results of the data analysis test show that stock volume affects ADRO stock price movements. This can be seen from the results of the ADRO t-test showing that the t-test is 3.289> 1.985 or sig 0.011 <0.15, which means it has an effect (accepted).

b. The Effect of Stock Volume on ANTM Stock Price Movements in 2022

   The results of the data analysis test show that stock volume affects ANTM stock price movements. This can be seen from the results of the ANTM t-test showing that the t-test is 5.171> 1.985 or sig 0.01 <0.05, which means it has an effect (accepted).

c. The Effect of Stock Volume on HRUM Stock Price Movements in 2022

   The results of the data analysis test show that stock volume does not affect HRUM stock price movements. This can be seen from the results of the HRUM t-test showing that the t-test is 1.398 <1.985 or sig 0.200> 0.05, which means it has no effect (rejected).

The reason why stock volume has an effect on this study is because stock volume is one of the indicators in technical analysis, which has clearly been tested for accuracy. Although technical analysis indicators are not 100% accurate, their accuracy can reach 60% -70%. In addition, stock volume also reflects the number of shares traded in period t. Stock volume can indicate market strength. Because the market is rising followed by increasing stock volume, the market can be seen as strong and healthy. Likewise, when the market is falling followed by increasing stock volume, stock prices can decline.

This is in line with research conducted by (Septyadi & Bwarleling, 2020), which shows that having a stock trading volume has a positive effect on stock price volatility. So the greater the stock trading volume, the stock price volatility also tends to increase. This can happen because investors respond differently to information from companies that can affect stock price fluctuations, according to signal theory. Where the volume of stock trading can show the market's reaction to the response from these investors. Thus, information that is a signal from the company can affect stock price volatility as seen from the trading volume or the frequency of the shares being traded on the stock exchange, the stronger the trend is to the downside. This study is not in line with research conducted by (Utami & Purwohandoko, 2021), which shows that trading volume has no effect on the stock price volatility of finance companies listed on the Indonesia Stock Exchange in 2014-2018. This means that every change in the value of trading volume has no effect on the level of stock price volatility. The stock price factor that changes up and down is not only seen from the supply and demand factors, but can be seen from the trends or situations that occur in a certain period regarding the macro economy that occurred at that time.

3. The Influence of Net Foreign Buy Or Sell on the Movement of 3 Blue Chip Stock Prices in the Mining Sector in 2022

Based on the theory obtained by the researcher, Foreign buy is the action of foreign investors entering and investing in the Indonesian stock market. This can provide positive sentiment to the stock market and for local investors, resulting in an increase in the price and return of the shares. Foreign sell is the action of foreign investors leaving and selling their shares in the Indonesian stock market. This can provide negative sentiment to the stock market and for local investors, resulting in a decrease in the price and return of the shares. In contrast to local investors, although they dominate the total transactions on the stock exchange, it is very rare for local investor actions to directly affect stock price movements. This is because foreign investors have a lot of funds to invest and follow the trend, while local investors tend to move individually in transactions (Natali & Suhendra, 2023). The percentage of company shares held by foreign investors, both individuals and institutions, is called foreign ownership. The increase in foreigners investing in the company will increase the company's performance because foreigners who invest in the company have fairly good management system technology and innovation, professionalism and marketing that have a good impact (Anisah & Hartono, 2022).

Based on the results of the research data analysis conducted by researchers using the SPSS application, the following can be obtained and known.

a. The Effect of Net Foreign Buy Or Sell on ADRO Stock Price Movements in 2022

The results of the data analysis test show that net foreign buy or sell has no effect on ADRO stock price movements. This can be seen from the results of the ADRO t-test showing that the t-test -1.577 <1.985 or sig 0.153> 0.05, which means it has no effect (rejected).

b. The Effect of Net Foreign Buy Or Sell on ANTM Stock Price Movements in 2022

The results of the data analysis test show that net foreign buy or sell has no effect on ANTM stock price movements. This can be seen from the results of the ANTM t-test showing that the t-test is 0.195 <1.985 or sig 0.850> 0.05, which means it has no effect (rejected).

c. The Effect of Net Foreign Buy Or Sell on HRUM Stock Price Movements in 2022

The results of the data analysis test show that net foreign buy or sell has no effect on HRUM stock price movements. This can be seen from the results of the HRUM t-test showing that the t-test is -1.382 <1.985 or sig 0.204> 0.05, which means it has no effect (rejected).

The reason why net foreign buy or sell has no effect in this study is because the movement of blue chip stock prices is not too aggressive so that the size of foreign ownership does not affect the stock. Conversely, the dominance of domestic investors can increase local participation and stock ownership. Aggressive stock price increases occur more in stocks owned by local investors. The 3 stocks (ADRO, ANTM, HRUM) are blue chip stocks whose stock price movements are not too aggressive. This is in line with research conducted by (Farhan & Kim, 2023), which shows that there is a negative effect of foreign institutional ownership on stock price volatility. This finding shows that the presence of foreign institutional investors is needed by Indonesia because it can reduce stock price volatility and stabilize prices. This study is not in line with research conducted by (Romli et al., 2017), which shows that foreign ownership structure has a positive effect on stock volatility in basic industry and chemical sector companies for the 2016-2018 period. The positive relationship between foreign ownership and stock volatility is because local investors prefer stocks that have low fluctuations compared to stock market conditions. therefore foreign investors are more interested in long-term investments. Increased stock prices in the long term will increase transactions on the stock exchange market, thereby increasing volatility.

CONCLUSION

The results of the research and data analysis that have been presented regarding the influence of the composite stock price index (IHSG), stock volume, net foreign buy/sell on the price movements of 3 blue chip stocks in the mining sector in 2022, researchers can draw the following conclusions:

1. The influence of IHSG on the price movements of 3 blue chip stocks in the mining sector in 2022
   a. IHSG has no effect on the movement of ADRO stock prices in 2022
   b. IHSG has no effect on the movement of ANTM stock prices in 2022
   c. IHSG has no effect on the movement of HRUM stock prices in 2022
   The reason IHSG has no effect in this study is because IHSG is used to assess the general market situation so that it cannot be used as a benchmark to measure whether the stock price (specifically) has increased or decreased. IHSG can only be used to determine the current market trend conditions.
2. The influence of stock volume on the price movements of 3 blue chip stocks in the mining sector in 2022.
   a. Stock volume affects ADRO stock price movements in 2022
   b. Stock volume affects ANTM stock price movements in 2022
   c. Stock volume does not affect HRUM stock price movements in 2022
   The reason stock volume affects this study is because stock volume reflects the number of shares traded in period t. Stock volume can indicate market strength. Because the market is rising followed by increasing stock volume, the market can be seen as strong and healthy. Likewise, when the market is falling followed by increasing stock volume, the stock price can decrease.
3. The effect of net foreign buy or sell on the price movements of 3 blue chip stocks in the mining sector in 2022.
   a. Net foreign buy or sell does not affect ADRO stock price movements in 2022
   b. Net foreign buy or sell does not affect ANTM stock price movements in 2022
   c. Net foreign buy or sell has no effect on HRUM stock price movements in 2022
   The reason net foreign buy or sell has no effect in this study is because the movement of blue chip stock prices is not too aggressive so that the size of foreign ownership does not affect the stock. On the other hand, the dominance of domestic investors can increase local participation and stock ownership. Aggressive stock price increases occur more in stocks owned by local investors.

This study focuses on three blue-chip mining companies—ADRO, ANTM, and HRUM—which limits the ability to generalize its findings to other companies or sectors. However, this limitation can be addressed by placing the results in the appropriate context. The findings are particularly relevant to the mining sector, given its unique characteristics, such as sensitivity to global commodity prices, exchange rates, and capital intensity, and researchers should clarify that these insights may not directly apply to sectors with different market dynamics. While blue-chip stocks are considered stable and representative of leading companies, making the results valuable for investors and policymakers, the researchers should note that the conclusions are more applicable to well-established, highly capitalized firms rather than smaller or mid-cap companies.

This research stands out for its in-depth focus on Indonesia's blue-chip mining stocks—ADRO, ANTM, and HRUM—offering insights tailored specifically to this sector rather than broad market conclusions. Unlike most studies that treat the overall market index (IHSG) as a major factor in stock price volatility, this study finds that IHSG has no significant impact on these particular stocks. This challenges conventional wisdom and sheds new light on how sector-specific factors play a role. Also highlights that domestic trading volume significantly influences the volatility of ADRO and ANTM but has little effect on HRUM. Interestingly, foreign buy-and-sell activities, often seen as key in

emerging markets, appear to have minimal impact on these stocks, underscoring the stronger role of domestic investors. To deepen the understanding of what drives volatility, this study suggests future research consider additional factors like local ownership and bid-ask spreads. These findings offer practical takeaways for investors and regulators looking to navigate the blue-chip mining sector more effectively while contributing to a more nuanced view of market dynamics.

The researcher hypothesized each company—ADRO, ANTM, and HRUM—separately to account for several critical factors. First, company-specific characteristics play a significant role, as each company may respond differently to variables like IHSG, trading volume, and net foreign transactions due to distinct business models, operational scopes, and market dynamics. Even within the mining sector, variations in commodity focus, export dependencies, and risk profiles influence stock price volatility uniquely for each company. The variability in data characteristics, such as trading volume, volatility patterns, and foreign ownership levels, further justifies analyzing each company separately to capture these market nuances. Additionally, the study's use of regression analysis aligns well with this approach, as separate hypotheses allow for a clearer understanding of how independent variables impact stock volatility on a case-by-case basis, enhancing the robustness and clarity of the analysis. This method has important implications for sectoral and policy insights.

For investors, it highlights trading volume as a key factor driving stock price movements for ADRO and ANTM, while showing that foreign transactions and the broader IHSG index play a smaller role. This shifts the focus to domestic investor behavior and stock-specific factors, helping investors refine their strategies and manage risks more effectively. On a theoretical level, the findings challenge the usual belief that broad market trends dictate stock volatility, showing instead that stock and sector-specific factors often have a greater influence. The study also highlights the pivotal role of domestic investors in shaping stock dynamics in emerging markets, adding depth to existing financial theories. For policymakers, the research provides actionable insights by emphasizing the importance of fostering active domestic trading and ensuring market transparency to promote stability. It also suggests using trading volume as a tool for assessing market trends and investor sentiment. Overall, this study offers valuable guidance for investors, enriches academic understanding, and helps regulators better manage the dynamics of Indonesia's blue-chip mining stocks.

REFERENSI

Akhmad, I. M., & Damayanti, C. R. (2021). Perbedaan Saham Blue Chip dan Non Blue Chip: Analisis Volume Perdagangan dan Return Saham Atas Kebijakan Stock Split. *JURNAL BISNIS STRATEGI*, *30*(2), 139–153. https://doi.org/10.14710/jbs.30.2.139-153

Anderson, R. C., Duru, A., & Reeb, D. M. (2012). Investment policy in family controlled firms. *Journal of Banking & Finance*, *36*(6), 1744–1758. https://doi.org/10.1016/j.jbankfin.2012.01.018

Aono, K., & Iwaisako, T. (2011). Forecasting Japanese stock returns with financial ratios and other variables. *Asia-Pacific Financial Markets*, *18*, 373–384.

Azeez, B. A., & Obalade, A. A. (2018). Macroeconomic determinants of stock market development in Nigeria: (1981-2017). *Acta Universitatis Danubius. Œconomica*, *15*(1).

Backus, D. K., & Kehoe, P. J. (1989). On the denomination of government debt. *Journal of Monetary Economics*, *23*(3), 359–376. https://doi.org/10.1016/0304-3932(89)90038-X

Baker, M., & Wurgler, J. (2006). Investor Sentiment and the Cross-Section of Stock Returns. *The Journal of Finance*, *61*(4), 1645–1680. https://doi.org/10.1111/j.1540-6261.2006.00885.x

Baker, M., & Wurgler, J. (2007). Investor Sentiment in the Stock Market. *Journal of Economic Perspectives*, *21*(2), 129–151. https://doi.org/10.1257/jep.21.2.129

Basit, A. (2020). Pengaruh Harga Emas Dan Minyak Dunia Terhadap Indeks Harga Saham Gabungan (IHSG) Periode 2016-2019. *REVENUE: Jurnal Manajemen Bisnis Islam*, *1*(2), 73–82.

https://doi.org/10.24042/revenue.v1i2.6073
Bessembinder, H., & Seguin, P. J. (1993). Price Volatility, Trading Volume, and Market Depth: Evidence from Futures Markets. *The Journal of Financial and Quantitative Analysis*, *28*(1), 21. https://doi.org/10.2307/2331149
Brealey, R. A., Myers, S. C., & Allen, F. (2008). Real Options. *Journal of Applied Corporate Finance*, *20*(4), 58–71. https://doi.org/10.1111/j.1745-6622.2008.00204.x
Brennan, M. J., & Cao, H. H. (1997). International Portfolio Investment Flows. *The Journal of Finance*, *52*(5), 1851–1880. https://doi.org/10.1111/j.1540-6261.1997.tb02744.x
Brown, G. W., & Cliff, M. T. (2005). Investor Sentiment and Asset Valuation. *The Journal of Business*, *78*(2), 405–440. https://doi.org/10.1086/427633
Cavallino, P. (2019). Capital Flows and Foreign Exchange Intervention. *American Economic Journal: Macroeconomics*, *11*(2), 127–170. https://doi.org/10.1257/mac.20160065
Chen, Y., Koenigsberg, O., & John, Z. (2017). Pay-as-you-wish pricing. *Marketing Science*, *36*(5), 780–791. https://doi.org/10.1287/mksc.2017.1032
Corredor, P., Ferrer, E., & Santamaria, R. (2015). The Impact of Investor Sentiment on Stock Returns in Emerging Markets: The Case of Central European Markets. *Eastern European Economics*, *53*(4), 328–355. https://doi.org/10.1080/00128775.2015.1079139
Ding, D. K., Charoenwong, C., & Seetoh, R. (2004). Prospect theory, analyst forecasts, and stock returns. *Journal of Multinational Financial Management*, *14*(4–5), 425–442. https://doi.org/10.1016/j.mulfin.2004.03.005
Dini, A. W., & Iin Indarti. (2012). Pengaruh Net Profit Margin (NPM), Return on Assets (ROA) Dan Return on Equity (ROE) Terhadap Harga Saham Yang Terdaftar Dalam Indeks Emiten LQ45 Tahun 2008 – 2010. *Jurnal Kajian Akuntansi Dan Bisnis, 1*(1).
Faizah, N. I., Rachmansyah, Y., & Anoraga, P. (2019). Analisis Pengaruh Inflasi, Harga Minyak Dunia Dan Nilai Kurs Dolar (Usd/Idr) Terhadap Indeks Harga Saham Gabungan (Ihsg) Di Bursa Efek Indonesia (BEI) Periode 2011-2014. *Magisma: Jurnal Ilmiah Ekonomi Dan Bisnis*, *5*(2), 34–38. https://doi.org/10.35829/magisma.v5i2.25
Farhan, M., & Kim, S. S. (2023). Pengaruh Kepemilikan Investor Institusi Asing Terhadap Volatilitas Harga Saham di Indeks Kompas100. *Owner*, *7*(2), 1382–1390. https://doi.org/10.33395/owner.v7i2.1403
Fathulloh, M., & Agustina, R. (2023). Pengaruh Inflasi, Suku Bunga dan Pertumbuhan PDB Terhadap IHSG. *JFAS : Journal of Finance and Accounting Studies*, *5*(3), 134–142. https://doi.org/10.33752/jfas.v5i3.5247
Frensidy, B. (2008). Analisis Pengaruh Aksi Beli-Jual Asing, Kurs, Dan Indeks Hang Seng Terhadap Indeks Harga Saham Gabungan Di Bursa Efek Indonesia Dengan Model Garch. *Media Riset Bisnis & Manajemen*, *8*(1), 25–42. https://doi.org/10.25105/mrbm.v8i1.651
Gabaix, X., & Maggiori, M. (2015). International Liquidity and Exchange Rate Dynamics *. *The Quarterly Journal of Economics*, *130*(3), 1369–1420. https://doi.org/10.1093/qje/qjv016
Ge, B., Yang, Y., Jiang, D., Gao, Y., Du, X., & Zhou, T. (2018). An Empirical Study on Green Innovation Strategy and Sustainable Competitive Advantages: Path and Boundary. *Sustainability*, *10*(10), 3631. https://doi.org/10.3390/su10103631
Ghazo, A., Abu-Lila, Z., & Ajlouni, S. (2021). The macroeconomic determinants of stock price fluctuations in Amman Stock Exchange. *Accounting*, 23–32. https://doi.org/10.5267/j.ac.2020.10.018
Grinblatt, M., & Keloharju, M. (2001). How Distance, Language, and Culture Influence Stockholdings and Trades. *The Journal of Finance*, *56*(3), 1053–1073. https://doi.org/10.1111/0022-1082.00355
Halimatusyadiyah, N. (2020). Reaksi Pasar Modal Indonesia Terhadap Peristiwa Pengumuman Kasus Pertama Virus Corona Di Indonesia (Studi Kasus Pada Saham Lq45). *Prisma (Platform Riset*

Mahasiswa Akuntansi), *1*(6), 38–50.

Hartono. (2016). *Teori Portofolio Dan Analisis Investasi*. BPFE.

Jefri, J., Siregar, E. S., & Kurnianti, D. (2020). Pengaruh ROE, BVPS, dan Volume Perdagangan Saham Terhadap Return Saham. *Jurnal PROFIT Kajian Pendidikan Ekonomi Dan Ilmu Ekonomi*, *7*(2), 101–112. https://doi.org/10.36706/jp.v7i2.11875

Karanasos, M., & Kartsaklas, A. (2009). Dual long-memory, structural breaks and the link between turnover and the range-based volatility. *Journal of Empirical Finance*, *16*(5), 838–851. https://doi.org/10.1016/j.jempfin.2009.06.001

Kearns, J., & Rigobon, R. (2005). Identifying the efficacy of central bank interventions: evidence from Australia and Japan. *Journal of International Economics*, *66*(1), 31–48. https://doi.org/10.1016/j.jinteco.2004.05.001

Liu, Z., & Spiegel, M. M. (2015). Optimal Monetary Policy and Capital Account Restrictions in a Small Open Economy. *IMF Economic Review*, *63*(2), 298–324. https://doi.org/10.1057/imfer.2015.8

Loang, O. K., & Ahmad, Z. (2024). Does Volatility Cause Herding in Malaysian Stock Market? Evidence from Quantile Regression Analysis. *Millennial Asia*, *15*(2), 197–215. https://doi.org/10.1177/09763996221101217

Masruri Zaimsyah, A. (2019). Analisis Fundamental Terhadap Harga Saham yang Terdaftar di Jakarta Islamic Index Tahun 2010-2017. *Jurnal Ilmiah Ekonomi Islam*, *5*(2). https://doi.org/10.29040/jiei.v5i2.517

Maulinda, T. S. (2018). Pengaruh Harga Minyak Dunia, Nilai Tukar, Inflasi, Suku Bunga SBI, Indeks Dow Jones, dan Indeks Nikkei 225 terhadap Indeks Sektor Pertambangan yang Terdaftar Di Bursa Efek Indonesia (BEI) Periode 2011-2017. *Jurnal Ilmu Manajemen (JIM)*, 314–322.

Nasir, A & Mirza. A (2011). Pengaruh Nilai Kurs, Inflasi, Suku Bunga Deposito Dan Volume Perdagangan Saham Terhadap Return Saham Pada Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Ekonomi*, *19*(04).

Permatasari, A., & Yuniarsih, N. (2020). Analysis Of Factors That Affect Composite Stock Price Index Movement In Indonesia Stock Exchange. *Asian Journal of Management Sciences & Education*, *9*(2). www.ajmse.

Raraga, F., & Muharam, H. (2014). VAR analysis on mutual relationship between stock price index and exchange rate and the role of world oil price and world gold price. *11th International Annual Symposium on Management*.

Rhee, S. G., & Wang, J. (2009). Foreign institutional ownership and stock market liquidity: Evidence from Indonesia. *Journal of Banking & Finance*, *33*(7), 1312–1324. https://doi.org/10.1016/j.jbankfin.2009.01.008

Sadikin, M., & Agustina, R. (2023). Analisis Fundamental dan Teknikal Saham BCA dan BRI (Tahun 2019-2021). *Seminar Nasional Akuntansi Dan Call for Paper* , 57–67.

Schmeling, M. (2009). Investor sentiment and stock returns: Some international evidence. *Journal of Empirical Finance*, *16*(3), 394–408. https://doi.org/10.1016/j.jempfin.2009.01.002

Sun, J., Yuan, R., Cao, F., & Wang, B. (2017). Principal–principal agency problems and stock price crash risk: Evidence from the split-share structure reform in China. *Corporate Governance: An International Review*, *25*(3), 186–199. https://doi.org/10.1111/corg.12202

Tachiwou, A. M. (2009). Causality tests between stock market development and economic growth in West African Monetary Union. Economia. *Seria Management*, *12*(2), 14–27.

Talamati, & Pangemanan. (2015). The Effect Of Earnings Per Share (Eps) & Return On Equity (Roe) On Stock Price Of Banking Company Listed In Indonesia Stock Exchange (IDX) 2010-2014. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *3*, 1008–1123.

Taslim, A., & Wijayanto, A. (2016). Pengaruh Frekuensi Perdagangan Saham, Volume Perdagangan Saham, Kapitalisasi Pasar Dan Jumlah Hari Perdagangan Terhadap Return Saham. *Management*

Analysis Journal, *5*(1), 1–6.

Rahayu, T.N. (2019). Pengaruh Tingkat Suku Bunga, Nilai Tukar Rupiah dan Volume Perdagangan Saham Terhadap Harga Saham Perusahaan Manufaktur. *PARADOKS: Jurnal Ilmu Ekonomi*, *2*(2), 35–46.

Wang, J. (2007). Foreign equity trading and emerging market volatility: Evidence from Indonesia and Thailand. *Journal of Development Economics*, *84*(2), 798–811. https://doi.org/10.1016/j.jdeveco.2006.05.001

Xiao, J., Zhou, M., Wen, F., & Wen, F. (2018). Asymmetric impacts of oil price uncertainty on Chinese stock returns under different market conditions: Evidence from oil volatility index. *Energy Economics*, *74*, 777–786. https://doi.org/10.1016/j.eneco.2018.07.026

Zhang, Q., & Ma, Y. (2021). The impact of environmental management on firm economic performance: The mediating effect of green innovation and the moderating effect of environmental leadership. *Journal of Cleaner Production*, *292*. https://doi.org/10.1016/j.jclepro.2021.126057

Zhang, W., & Semmler, W. (2009). Prospect theory for stock markets: Empirical evidence with time-series data. *Journal of Economic Behavior & Organization*, *72*(3), 835–849. https://doi.org/10.1016/j.jebo.2009.08.003