

## EFFECT OF RETURN ON ASSET, OPERATING CASH FLOWS AND EARNING ON RETURN OF SHARES WITH LEVERAGE AS MODERATING VARIABLES IN MINING COMPANIES

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### ABSTRACT

This study aims to analyze Return On Asset (ROA), Operating Cash Flow and Earning Per Share (EPS) on stock returns with Leverage (DAR) as a moderating variable in mining companies listed on the Indonesia Stock Exchange (BEI). The population used is 49 mining companies on the IDX for the 2017-2019 period. Sampling in this study used a purposive sampling method with the criteria for mining companies listed on the Indonesia Stock Exchange for the 2017-2019 period and companies that were delisted during the 2017-2019 period and the availability of required Annual Financial Report data for the 2017-2019 period. Based on these criteria, the number of samples in this study was determined by 41 companies. The analysis technique used in this research is moderating variable regression analysis with interaction tests with the help of SmartPLS software. The results showed that analyzing Return On Asset (ROA) and Operating Cash Flow had a positive and insignificant effect on stock returns, while the EPS variable had a negative and insignificant effect on stock returns, and leverage as a moderating variable had a positive and insignificant effect on the relationship Return On Asset (ROA), Operating Cash Flow and Earning Per Share (EPS) on the return of mining companies on the Indonesia Stock Exchange for the 2017-2019 period.

**Keywords:** Return On Asset (ROA), Operating Cash Flow, Earning Per Share (EPS), Leverage (DAR), Stock Return

### **PENGARUH RETURN ON ASSET (ROA), ARUS KAS OPERASIONAL DAN LABA ATAS SAHAM DENGAN LEVERAGE SEBAGAI VARIABEL MODERASI PADA PERUSAHAAN PERTAMBANGAN**

#### ABSTRAK

*Penelitian ini bertujuan untuk menganalisis Return On Asset (ROA), Operating Cash Flow, dan Earning Per Share (EPS) terhadap return saham dengan Leverage (DAR) sebagai variabel moderasi pada perusahaan pertambangan yang terdaftar di Bursa Efek Indonesia (BEI). Populasi yang digunakan adalah 49 perusahaan pertambangan di IDX untuk periode 2017-2019. Pengambilan sampel dalam penelitian ini menggunakan metode purposive sampling dengan kriteria perusahaan pertambangan yang terdaftar di Bursa Efek Indonesia untuk periode 2017-2019 dan perusahaan yang telah dihapus dari daftar (delisted) selama periode 2017-2019 serta ketersediaan data Laporan Keuangan Tahunan (APBN) yang dibutuhkan untuk periode 2017-2019. Berdasarkan kriteria tersebut, jumlah sampel dalam penelitian ini ditentukan sebanyak 41 perusahaan. Teknik analisis yang digunakan dalam penelitian ini adalah analisis regresi variabel moderasi dengan uji interaksi dengan bantuan perangkat lunak SmartPLS. Hasil penelitian menunjukkan bahwa analisis Return On Asset (ROA) dan Operating Cash Flow memiliki pengaruh positif dan tidak signifikan terhadap return saham, sedangkan variabel EPS memiliki pengaruh negatif dan tidak signifikan terhadap return saham, dan leverage sebagai variabel moderasi memiliki pengaruh positif dan tidak signifikan terhadap hubungan Return On Asset (ROA), Operating Cash Flow dan Earning Per Share (EPS) pada return perusahaan pertambangan di Bursa Efek Indonesia untuk periode 2017-2019.*

**Kata kunci:** Return on Asset (ROA), Operating Cash Flow, Earning Per Share (EPS), Leverage (DAR), Stock Return

Effect of Return on Asset, Operating Cash Flows and Earning on Return of Shares With Leverage as Moderating Variables in Mining Companies (Sitanggang Desmayanti, Irawati, Layla Hafni, Helly Aroza Siregar, and Febdwi Suryani)

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## INTRODUCTION

In the contemporary period, the advancement of the global economy is intensifying, evident from the multitude of structures throughout diverse sectors within the global economic landscape. In Indonesia, economic growth is undergoing quick and intricate development annually. The mining sector is a fundamental component of Indonesia's economic development, serving as a crucial supplier of energy resources vital for the nation's economic progress.

Significant capital is required to enhance the performance of the owned company, ensuring its economic operations function efficiently. The corporation can acquire substantial capital by issuing shares in the stock market. Investors' decisions to invest in stocks are influenced by stock price variations on the exchange, interest rates, and the company's financial performance. Consequently, investors must evaluate the elements influencing the company's success before investing to secure a satisfactory return. Investors seeking to allocate their capital in publicly traded companies typically monitor the fluctuations of the company's stock prices on the exchange. Between 2017 and 2019, the Indonesia Stock Exchange reported a substantial decrease in the stock prices of mining companies. In 2017, the mining industry stock price index was 15.11%; in 2018, it decreased to 11.45%; and in 2019, it further plummeted to -12.83%. During this period, the banking sector experienced favorable stock price fluctuations over three consecutive years, peaking in 2017 with an index of 40.52%. [www.idx.co.id](http://www.idx.co.id)

Jogiyanto (2010) defines return as the outcome derived from an investment, namely the income generated over the investment duration relative to the amount of capital invested. Returns from stock ownership manifest in two forms: dividends and capital gains. Stock returns may be affected by ratios present in financial statements. Financial factors that can influence stock returns include Return on Assets (ROA), Debt to Equity Ratio (DER), Return on Equity (ROE), Earnings Per Share (EPS), Current Ratio (CR), leverage, and more ratios. Return on Assets (ROA) is a profitability statistic that correlates earnings with a company's assets (Brigham & Houston, 2014). A higher ROA value signifies that a company performs efficiently, hence enhancing its appeal to investors. The heightened appeal to investors will also influence the increase in stock prices and the company's stock returns. The distinctive attributes of the mining business, including commodity price volatility, significantly influence ROA and, consequently, stock prices. Moreover, variations in commodity prices, particularly gold, can modify the valuation of mining assets, thus affecting ROA and stock performance. (Guedes, 2018). Studies by Safitri, Sinarwati, and Atmadja (2015) and Ginting (2012) demonstrated that Return On Assets (ROA) influences stock returns. Comparable results were also shown by Putra and Kindangen (2016), Pratiwi and Putra (2015), and Erianne (2016), who asserted that Return On Assets (ROA) influences stock performance. This research contradicts the findings of Wulandari (2014), who asserted that Return On Assets (ROA) did not influence stock returns.

Cash flow inside a corporation can be classified into three categories: cash flow from operating operations, cash flow from investment activities, and cash flow from financing activities. Cash flow from operating activities serves as a metric to assess the company's ability to create cash from its operations, which can be utilized for debt repayment, sustaining operational capacity, distributing dividends, and pursuing new investments without dependence on external financing. Consequently, cash flow from operating activities might indicate the company's financial health to investors. The studies conducted by Christiawan & Hendrawati (2012) and Trisnawati & Wahidahwati (2013) demonstrated that operating cash flow affects stock returns. Comparable findings were also demonstrated in the studies undertaken by Ginting (2012) and Irianti (2008). Conversely, the studies conducted by Yocelyn & Christiawan (2012), Pratiwi & Putra (2015), Erianne (2016), and Trisnawati (2009) indicated that cash flow from operating activities does not influence stock returns.

Earnings Per Share (EPS) is a financial metric that assesses a company's capacity to produce net profit for each outstanding common share. Accounting profit, in addition to evaluating performance, can also serve to forecast profit potential and assess risks in investment and credit. Studies by Craig Nichols and Wahlen (2004), Trisnawati and Wahidahwati (2013), and Yocelyn and Christiawan (2012) offer empirical evidence linking earnings to stock returns. Research by Christiawan & Hendrawati (2012), Irianti (2008), Trisnawati (2009), Haryanto (2012), and Erianne (2016) indicates that the earnings variable does not significantly influence the returns received by shareholders.

Leverage is a metric that quantifies the extent to which a firm depends on debt to fund its assets. (Aditya & Badjra, 2018) The debt to equity ratio (DER) serves as an indicator of leverage, reflecting the proportion of debt utilized by the organization. The company's profitability will be affected; a rise in profits will mostly benefit the debtholders, as they trust the company will meet its debt obligations. Investors may react unfavorably to this event, since they perceive that the corporation would prioritize debt repayment to creditors over dividend distribution to shareholders. Consequently, investors will react unfavorably to firms with substantial leverage, leading to a diminished correlation between Earnings Per Share (EPS) and stock returns. Nonetheless, Haryanto's (2012) research demonstrated that leverage, as a moderating variable, failed to elucidate the impact of accounting profit relevance on stock returns. Erianne's (2016) research indicated that leverage, as a moderating element, did neither enhance or diminish the impact of return on assets, operational cash flow, and earnings on stock returns.

The researcher aims to re-evaluate the determinants of stock returns, as other studies on this topic have yielded varied conclusions with inconsistent variables. A study entitled "The Influence of Return on Assets (ROA), Operating Cash Flow, and Earnings on Stock Returns with Leverage as a Moderating Variable in Mining Companies Listed on the IDX from 2017-2019" was undertaken. This study aims to examine the impact of Return On Assets (ROA), Operating Cash Flow, and Earnings on Stock Returns, with Leverage serving as a moderating variable, in mining companies listed on the IDX from 2017 to 2019.

## LITERATURE REVIEW

### **The Impact of Return on Assets (ROA) on Stock Returns**

Return on Assets (ROA) is a metric utilized to assess the relationship between net income after tax and the total assets of a company. A high Return On Asset (ROA) score signifies excellent firm operations and shows enhanced performance. As the company's performance enhances, the dividends received by shareholders will likewise rise. The substantial profits from dividends obtained by investors will increase their appeal.

The growing appeal of investors will also influence the escalation of stock values. If the company's stock price continues to ascend, the stock return will likewise augment. Return on Assets (ROA) is a metric utilized to assess the relationship between net income after tax and the total assets of a company. A high Return On Asset (ROA) score signifies that the organization is functioning efficiently and demonstrates an enhancement in its performance. As the company's performance improves, stockholders will earn increased dividends. Investors will be more enticed by the substantial gains derived from the received dividends. The growing appeal of investors will also influence the escalation of stock values. If the company's stock price persists in ascending, the stock return will likewise augment.

The studies by Safitri (2015), Ginting (2012), and Putra & Kindangen (2016) indicate that Return On Assets (ROA) affects stock returns. This research contradicts the findings of Wulandari (2014), which asserts that Return On Assets (ROA) does not affect stock performance. The hypothesis of this study is formulated based on the discrepancies observed in prior research findings:

H1: There is a positive influence of Return On Asset (ROA) on stock returns in mining companies listed on the Indonesia Stock Exchange for the period 2017-2019.

### **The Impact of Operating Cash Flow on Equity Returns**

One measure of a company's value is its operating cash flow. This indicates that a strong operating cash flow correlates with an elevated company valuation. A substantial market value will attract investors to consider purchasing the company's shares. An increase in the number of investors in the company correlates with elevated stock returns. The alteration in cash flow from operating activities will convey a favorable indication to investors, prompting them to acquire the company's shares, so enhancing the stock return. The analysis and research indicate a positive correlation between cash flow from operating activities and stock returns. Studies by Christiawan and Hendrawati (2012) and W. Trisnawati and Wahidahwati (2013) indicate that operating cash flow influences stock returns. Conversely, research undertaken by Yocelyn & Christin (2012), Pratiwi & Putra (2015), Erianne (2016), and Trisnawati (2009) indicates that cash flow from operating activities does not influence stock returns. The hypothesis of this study is formulated based on the discrepancies observed in prior research findings:

H2 : The operating cash flow positively influences stock returns in mining companies listed on the IDX from 2017 to 2019.

### **The Impact of Earnings Per Share (EPS) on Stock Returns**

Earnings Per Share (EPS) represents the money generated during a specific period for each outstanding ordinary share. Accounting profit is purported to reflect fluctuations in stock returns in the market, suggesting that this profit provides valuable information for investors. A higher EPS value correlates with a more favorable market reaction, resulting in increased stock returns, as the company is perceived to have strong performance and the ability to deliver substantial returns to investors.

The findings from the studies by Yocelyn & Christiawan (2012), Trisnawati & Wahidahwati (2013), and Craig & Wahlen (2004) demonstrate that EPS influences stock returns. Nevertheless, the studies undertaken by Christiawan & Hendrawati (2012), Irianti (2008), Trisnawati (2009), Haryanto (2012), and Erianne (2016) indicate that the earnings variable (EPS) does not exert a substantial influence on the returns accrued by shareholders. The hypothesis of this study is formulated based on the discrepancies identified in prior research findings.

H3 : The Earnings Per Share (EPS) positively influences stock returns in mining companies listed on the IDX from 2017 to 2019.

### The Impact of Leverage as a Moderating Variable on the Correlation Between Return on Assets (ROA) and Stock Returns

Leverage refers to the company's owned funds with fixed expenditures utilized to enhance prospective shareholder earnings. Return on Assets refers to the ratio of annual profit after tax to total assets. Consequently, if the firm exhibits minimal leverage and a strong Return On Assets (ROA), the stock return will rise. Nonetheless, if the company's leverage is elevated, investors would perceive this unfavorably. Investors anticipate that the corporation would prioritize servicing its obligations to creditors.

Nonetheless, Erienne's (2016) research demonstrated that leverage, as a moderating element, does neither enhance or diminish the impact of return on assets on stock returns. The hypothesis of this study is delineated as follows:

H4 : Leverage positively influences the link between Return on Assets and stock returns.

### The Impact of Leverage as a Moderating Variable on the Correlation Between Operating Cash Flow and Stock Returns.

Leverage is crucial, particularly for demonstrating to financial analysts the trade-off between risk and return associated with different financial decisions. If investors are aware of the company's operational financial status, they will invest in its shares, resulting in returns for the company. Operating cash flow is fundamental to a firm as it encompasses its essential operations. A corporation is deemed successful when all its operating systems function as intended, both internally and internationally. Consequently, if the company exhibits minimal debt and substantial Operating Cash Flow, the stock return will rise.

Erienne's (2016) research determined that leverage, as a moderating element, could not elucidate the impact of operating cash flow on stock returns. The hypothesis of this study is delineated as follows:

H5: Leverage positively influences the link between Operating Cash Flow and stock returns.

### The Impact of Leverage as a Moderating Variable on the Correlation Between Earnings and Stock Returns

Leverage is a metric that signifies the degree to which a corporation employs debt financing. A company's leverage increases as its debt level rises relative to its equity. An increase in earnings benefits the debtholders, as the debtor gains assurance that the corporation can fulfill its debt obligations. This will be seen unfavorably by investors, as they assume that the company would prioritize debt repayment over dividend distributions. Naimah, 2008. Consequently, firms with elevated debt will elicit adverse reactions from the market, leading to a diminished correlation between accounting earnings and stock returns.

Research by Erienne (2016) and Haryanto (2012) indicates that leverage, as a moderating element, fails to elucidate the relationship between Earnings Per Share (EPS) and stock returns. According to the preceding explanation, the hypothesis of this investigation is as follows:

H6: Leverage positively influences the correlation between Earnings Per Share (EPS) and stock returns.

### Framework of Thought

The framework below illustrates the relationship between Return On Assets (ROA), Operating Cash Flow, and Earnings Per Share (EPS) on stock returns, with Leverage serving as a moderating component, as informed by prior theories and research.

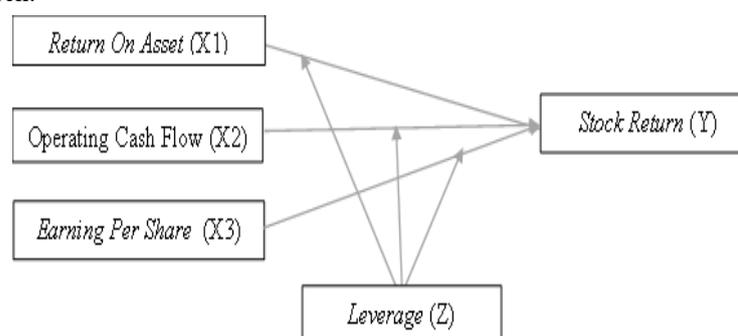


Figure 1. Theoretical Framework of Thought

### RESEARCH METHODS

This study was performed on 41 mining companies listed on the Indonesia Stock Exchange over the period from 2017 to 2019. The research period started in July 2020 and continued until completion. Population and Sample

This study's population comprises all mining businesses listed on the Indonesia Stock Exchange (IDX) from 2017 to 2019, amounting to 49 entities. The employed sample approach is purposive sampling. The criteria

for sample selection are as follows: (1) The sampled entities are mining companies listed on the Indonesia Stock Exchange from 2017 to 2019, (2) The sampled entities must have submitted complete financial statements during the same period, (3) The sampled entities are those that did not undergo delisting between 2017 and 2019.

**Table 1. Sample Selection Table**

Criteria	Number of Companies
Mining sector companies listed on the IDX for 3 consecutive years from 2017 to 2019	49
Companies studied that were delisted during the years 2017 to 2019	(2)
Annual Financial Statements data not available for the period 2017-2019	(6)
Sample Size	41

Source: Processed Data (2020)

### Operationalization of Research Variables

In this study, the dependent variable, independent variable, and moderating variable used consist of: Return On Asset (ROA). Return On Asset (ROA) is a ratio used to measure the net profit obtained from the use of assets (Wulandari, 2014). Return On Asset (ROA) can be formulated as follows:

$$\text{ROA} = \frac{\text{EBIT}}{\text{Total Asset}} \times 100\% \quad (1)$$

### Operating Cash Flow

The amount of cash flow generated from operating activities is an indicator that determines whether the company's operations can generate sufficient cash flow to repay loans, maintain the company's operational capacity, pay dividends, and make new investments without relying on external funding sources. (Christiawan & Hendrawati, 2012). Operating cash flow can be determined by looking at the company's financial statements, specifically in the cash flow statement where net cash flow from operating activities is reported. Operating cash flow can be formulated as follows:

$$\text{Netto Cash Flow} = \text{Operating Activities} \quad (2)$$

### Earnings

Earnings or accounting profit is the profit or loss from a company's business activities over a period based on accrual accounting. According to (Tandelilin, 2010: 365): "The comparison between the amount of earnings (in this case, net profit ready to be distributed to shareholders) and the number of shares of the company will yield the Earning Per Share component." (EPS). For investors, EPS information is considered the most fundamental and useful information, as it can illustrate the company's future earning prospects. Earnings can be calculated using the following formula:

$$\text{EPS} = \frac{\text{Profit For Current Year}}{\text{Weight Average Shares Outstanding}} \quad (3)$$

### Leverage

The Leverage Ratio is a financial ratio that measures a company's ability to meet its long-term obligations, such as interest payments on debt, principal repayments on debt, and other fixed obligations. In this study, leverage is proxied by the Debt To Asset Ratio (DAR).

The Debt to Asset Ratio (DAR) is a ratio used to measure the extent to which a company relies on debt to finance its assets. This ratio is measured by comparing total debt to total assets and is calculated as follows (Naimah, 2008):

$$\text{DAR} = \frac{\text{Total Payable}}{\text{Total Assets}} \quad (4)$$

### Stock Return

According to Tandelilin (2010), stock return is the reward for the investor's willingness to bear the risk of the investment they make. Meanwhile, according to (Jogiyanto, 2010), return is the result obtained from an investment.

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According to (Horne & Wachowicz, 2012), return is the income received from an investment plus the change in market price or can be expressed as a percentage of the initial market price of the investment. Stock returns can be calculated using the following formula:

$$R_t = \frac{P_t - (P_{t-1})}{P_{t-1}} \tag{5}$$

Where:

R<sub>t</sub> = Actual return of company i in year t

P<sub>t</sub> = Closing stock price of company i on day t

P<sub>t-1</sub> = Closing stock price of company i on the day before t

**Data Analysis Techniques**

**Descriptive Analysis**

Descriptive statistics are used to provide an overview or description of data based on the mean, standard deviation, maximum, and minimum values. (Ghozali, 2012).

**Moderating Variable Regression Analysis with Interaction Test**

To test the influence of the moderating variable using the interaction test or Moderate Regression Analysis (MRA). According to (Ghozali, 2012), Moderate Regression Analysis uses an analytical approach that maintains sample integrity and provides a basis for controlling the influence of the moderator variable. Moderating variable regression analysis with interaction tests is applied in this study to examine whether there is an influence of Return on Assets (ROA), Operating Cash Flow, and Earnings Per Share (EPS) with Leverage (DAR) both simultaneously and partially on Stock Return, as well as to determine the magnitude of the influence.

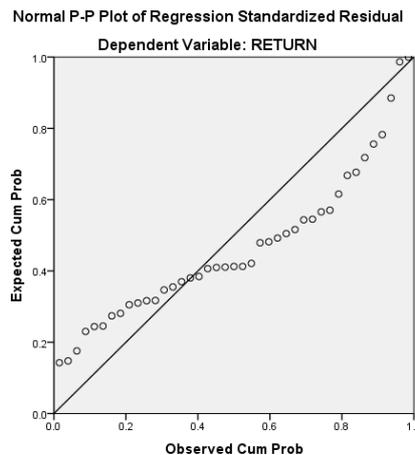
$$Y = \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_5X_1Z + \beta_6X_2Z + \beta_7X_3Z + e \tag{6}$$

Note :

- Y = Return Saham
- β<sub>1</sub>,β<sub>2</sub>,β<sub>3</sub>,β<sub>4</sub>,β<sub>5</sub>,β<sub>6</sub>,β<sub>7</sub> = Koefisien Regresi
- X<sub>1</sub> = Return On Asset
- X<sub>2</sub> = Operational Cash Flow
- X<sub>3</sub> = Earning
- Z = Leverage
- e = Error (Variabel pengganggu)

**RESULTS AND DISCUSSION**

**Normality Test**



Source: Processed Data (2020)

Figure 2. Normal Probability Plot Graph

From Figure 2, the normal Probability plot shows the points spreading away from the diagonal line and their distribution does not follow the direction of the diagonal line. Therefore, it can be concluded that the regression model in this study does not meet the normality assumption.

**Table 2. Results of the Data Normality Test**

		Unstandardized Residual
N		41
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.39264296
Most Extreme Differences	Absolute	.203
	Positive	.203
	Negative	-.135
Test Statistic		.203
Asymp. Sig. (2-tailed)		.000 <sup>c</sup>

Source: Processed Data (2020)

The results of the Kolmogorov-Smirnov (K-S) statistical test show a value of 0.203 with a data normality test result of 0.000. Basis for decision-making, if the value of Asymp Sig (2-tailed) is less than 0.05, then H0 is rejected, indicating that the residual data is not normally distributed. Conversely, if the value of Asymp Sig (2-tailed) is greater than 0.05, then H0 is accepted, indicating that the residual data is normally distributed. Table 2 shows that the Asymp Sig (2-tailed) value is less than 0.05, so H0 is rejected, indicating that the residual data is not normally distributed.

Based on Figure 3 and Table 2, this study uses partial least squares (PLS) regression analysis to test the proposed hypothesis. Hypotheses will be analyzed using SmartPLS software to test the relationships between variables.

### Multikolinearitas Test

**Table 3. Result of Multikolinearitas Test**

No	Variabel	Collinearity Statistics (VIF)	Conclusion
1	ROA	1,849	No Multicollinearity
2	AKO	1,233	No Multicollinearity
3	EPS	1,360	No Multicollinearity
4	DAR	2,764	No Multicollinearity
5	DAR*ROA (Moderating Effect 1)	2,397	No Multicollinearity
6	DAR*AKO (Moderating Effect 2)	1,647	No Multicollinearity
7	DAR*EPS (Moderating Effect 3)	1,483	No Multicollinearity

Source: Processed Data (2020)

From Table 3 above, it can be seen that the VIF values for all research variables are less than 10, so it can be concluded that the independent variables used in this study do not show multicollinearity. Coefficient of Determination Test ( $R^2$ )

**Table 4. Results of the Determination Coefficient Test ( $R^2$ )**

No	Variabel	R Square Adj	Conclusion
1	Return Saham	0,149	Eligible Model

Source: Processed Data (2020)

From the results of the tests conducted, an  $R^2$  value was obtained for the variables ROA, AKO, EPS, and DAR, against stock return of 0.189 or equal to 14.9%. Meanwhile, the remaining value of 85.1% (100% - 14.9%) is explained by other variables that are not disclosed in this study.

### Multiple Linear Regression Analysis

**Table 5. Multiple Linear Regression Test Results**

	Original Sample (O)	Sample Mean (M)	Standard Error (STERR)	T Statistics ( O/STERR)	P Values	Conclusion
DAR*ROA > Y	0,253	0,009	0,328	0,773	0,440	No Signifikan
DAR*AKO > Y	0,415	0,209	0,499	0,832	0,406	No Signifikan
DAR*EPS > Y	0,051	0,011	0,702	0,073	0,942	No Signifikan
ROA > Y	0,080	0,024	0,242	0,330	0,741	No Signifikan

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	Original Sample (O)	Sample Mean (M)	Standard Error (STERR)	T Statistics ( O/STERR)	P Values	Conclusion
AKO > Y	0,458	0,418	0,225	2,031	0,043**	Signifikan
EPS > Y	-0,048	0,013	0,687	0,070	0,944	No Signifikan
DAR > Y	0,117	0,087	0,363	0,323	0,747	No Signifikan

Source: Processed Data (2020)

Based on Table 5 above, the regression model in this study is as follows:

$$\text{Stock Return} = 0,080X1 + 0,045X2 - 0,048X3 + 0,253X1Z + 0,415X2Z + 0,051X3Z \quad (7)$$

The interpretation of the aforementioned regression model results is as follows: The regression coefficient for the Return on Assets (ROA) variable is 0.080. An increase of one unit in the Return On Asset (ROA) will result in a corresponding increase of one unit in the Stock Return, particularly by 0.080, and vice versa. The regression coefficient for the Operating Cash Flow (AKO) variable is 0.045. An increase of one unit in Operating Cash Flow (AKO) will result in a corresponding rise of one unit in Stock Return, particularly by 0.045, and vice versa. The regression coefficient for the Earnings Per Share (EPS) variable is -0.048. An rise of one unit in Earnings Per Share (EPS) will result in a drop of one unit in Stock Return, particularly by -0.048, and conversely. The regression coefficient for the Moderating Effect 1 variable is 0.253. An increase of one unit in Moderating Effect 1 will enhance the link between the Return On Asset (ROA) variable and Stock Return by 0.253 units, and conversely.

The regression coefficient for the Moderating Effect 2 variable is 0.415. An increase of one unit in Moderating Effect 2 will enhance the link between Operating Cash Flow (AKO) and Stock Return by 0.415 units, and conversely. The regression coefficient for the Moderating Effect 3 variable is 0.051. This indicates that an increase of one unit in Moderating Effect 3 will enhance the correlation between the Earnings Per Share (EPS) variable and Stock Return by one unit, specifically 0.051, and conversely.

## Discussion

### The Impact of Return on Assets (ROA) on Stock Returns

Return on Assets (ROA) is the ratio of net profit to total assets utilized for profit generation. Kasmir (2012: 201) elucidates that Return On Assets (ROA) is a metric that signifies the return generated from the total assets employed by the organization. Return On Asset (ROA) is a ratio that indicates the net profit generated from the total assets possessed by the company. The research findings indicate that Return On Asset (ROA) exerts a favorable although minor influence on Stock Return. The findings of this study align with the research conducted by Safitri et al. (2015), Ginting (2012), Putra and Kindangen (2016), Pratiwi and Putra (2015), Erianne (2016), Pangestu et al. (2019), and Nasution and Sukmadilaga (2019), which concluded that Return On Assets (ROA) positively influences stock returns.

The findings of this study contradict the research conducted by Wulandari (2014), which asserted that Return On Asset (ROA) does not influence stock returns, and by Angela & Masjud (2019), which determined that Return On Asset (ROA) negatively impacts stock returns.

### The Impact of Operating Cash Flow on Stock Returns

The cash flow statement categorizes cash inflows and outflows into operating operations, investment activities, and financing activities. Operating activities constitute the primary revenue-generating functions of a corporation. The cash flow from operating activities serves as a metric to assess the company's ability to create adequate cash to service debt, sustain operational capacity, distribute dividends, and pursue new investments without dependence on external financing. The research findings indicate that Operating Cash Flow exerts a positive although minor influence on Stock Return.

The findings of this study align with the research conducted by Ginting (2012), Christiawan and Hendrawati (2012), W. Trisnawati and Wahidahwati (2013), Irianti (2008), Azizah et al. (2021), and Hakim (2023), which concluded that Operating Cash Flow positively influences stock returns. Nonetheless, the findings of this study contradict the research conducted by Pratiwi & Putra (2015), Yocelyn & Christiawan (2012), I. Trisnawati (2009), and Erianne (2016), which determined that Operating Cash Flow adversely affects stock returns.

### The Impact of Earnings Per Share (EPS) on Stock Returns

Earnings Per Share (EPS) is a commonly utilized ratio in annual shareholder reports, calculated by subtracting dividends from net income and dividing the result by the weighted average of outstanding common shares (Putra & Kindangen, 2016). Earnings Per Share (EPS) represents the money generated during a specific period for each outstanding ordinary share. A higher EPS figure indicates a greater profit accessible to shareholders.

The findings of this study align with the conclusions of research by Putra & Kindangen (2016), Christiawan & Hendrawati (2012), I. Trisnawati (2009), Irianti (2008), Haryanto (2012), Erianne (2016), and

Lamichhane (2023), which determined that Earnings Per Share (EPS) negatively impacts stock returns. Nonetheless, the findings of this study contradict the studies conducted by W. Trisnawati and Wahidahwati (2013), Yocelyn and Christiawan (2012), and Craig Nichols and Wahlen (2004), as well as Bouteska and Regaieg (2017), which determined that Earnings Per Share (EPS) positively influences stock returns.

#### **The Impact of Leverage (DAR) as a Moderating Variable on the Correlation Between Return on Assets (ROA) and Stock Returns**

Leverage refers to the company's owned funds with fixed expenditures utilized to enhance prospective shareholder earnings. Return on Assets denotes the ratio of annual after-tax profit to total assets. Consequently, if a firm exhibits minimal leverage and a high Return on Assets (ROA), its stock return will rise. This study's findings demonstrate that Leverage (DAR) can enhance the correlation between Return On Asset (ROA) and Stock Return. This study aligns with the studies conducted by Allozi and Obeidat (2016), Lamichhane (2023), and Abdurachman (2023). Nonetheless, the findings of this study contradict the research conducted by Erianne (2016), which determined that Leverage (DAR) does not positively affect the link between Return on Assets (ROA) and Stock Return.

#### **The Impact of Leverage (DAR) as a Moderating Variable on the Correlation Between Operating Cash Flow (AKO) and Stock Returns**

Leverage is crucial, particularly for financial analysts assessing the trade-off between risk and return associated with diverse financial decisions. (Erianne, 2016). Operating cash flow is fundamental to a firm since it encompasses its operational activities. A corporation with low leverage and high operating cash flow will experience a rise in stock return. The findings of this study demonstrate that Leverage (DAR) can enhance the correlation between Operating Cash Flow and Stock Return. This research aligns with the investigations conducted by Allozi and Obeidat (2016), Sugito et al. (2020), Kipngetch et al. (2021), Kinyua (2023), and Shubita (2023). Nonetheless, the findings of this study contradict the research conducted by Erianne (2016), which determined that Leverage (DAR) does not positively influence the link between Operating Cash Flow and Stock Return.

#### **The Impact of Leverage (DAR) as a Moderating Variable on the Correlation Between Earnings Per Share (EPS) and Stock Returns**

Leverage is a metric that signifies the extent to which a corporation employs debt financing. A company's leverage increases as its debt rises relative to its equity. Firms with elevated debt will be adversely viewed by the market, leading to a diminished correlation between accounting profit and stock returns. This study's results demonstrate that Leverage (DAR) can enhance the link between Earnings Per Share (EPS) and Stock Return. This research aligns with the investigations conducted by Assagaf et al. (2019) and Nalarreason et al. (2019). Nonetheless, the findings of this study contradict the research conducted by Haryanto (2012) and Erianne (2016), which determined that Leverage (DAR) did not exert a beneficial influence on the link between Earnings Per Share (EPS) and Stock Returns.

### **CONCLUSION**

The research and data collection indicate that Return On Asset (ROA) has a favorable yet minor impact on the stock returns of mining companies listed on the Indonesia Stock Exchange for the period 2017-2019. An increase in Return On Assets (ROA) correlates with an increase in stock returns. Operating Cash Flow (OCF) exerts a substantial positive influence on the stock returns of mining companies listed on the Indonesia Stock Exchange throughout the period from 2017 to 2019. An rise in Operating Cash Flow (OCF) correlates with an increase in stock returns. Earnings Per Share (EPS) exerts a negative although minor influence on the stock returns of mining companies listed on the Indonesia Stock Exchange during the period from 2017 to 2019. If Earnings Per Share (EPS) declines, stock returns rise. The Leverage (DAR) variable exerts a positive but statistically insignificant moderating effect on the relationship between Return On Assets (ROA), Operating Cash Flow, Earnings Per Share (EPS), and stock returns in mining companies listed on the Indonesia Stock Exchange during the period 2017-2019.

According to path analysis, the coefficient of determination for the Leverage (DAR) variable exhibits a positive yet insignificant effect on the dependent variable. Additionally, in moderating effect 1 and moderating effect 3, it similarly demonstrates a positive but insignificant impact on the dependent variable, thus categorizing this variable as a potential moderating variable. The coefficient of determination for the Leverage (DAR) variable exhibits a positive yet minor influence on the dependent variable; nevertheless, in moderating effect 2, it demonstrates a considerable positive impact on the dependent variable, thereby categorizing this variable as a quasi-moderating variable.

The hypothesis test of the coefficient of determination (Adjusted R<sup>2</sup>) indicates that Return On Asset (ROA), Operating Cash Flow (AKO), Earnings Per Share (EPS), and Leverage (DAR) collectively account for

14.9% of the variance in Tax Aggressiveness. Conversely, the remaining 85.1% is affected by additional undisclosed variables in this study. This study is limited by its emphasis on a population comprising exclusively mining businesses listed on the IDX throughout a three-year period, specifically from 2017 to 2019. This analysis determined that the factors Return On Assets (ROA), Operating Cash Flow, and Earnings Per Share (EPS) account for just 14.9%, with the remaining 81.1% attributable to additional variables not examined in this research. Given the limits and conclusions of this study, future researchers are advised to investigate research subjects beyond mining businesses to analyze the impact of Return On Assets (ROA), Operating Cash Flow, and Earnings Per Share (EPS) on stock returns in various industries. Furthermore, they could incorporate additional moderating variables, including profit growth, profit persistence, company size, and audit quality, among others, to elucidate the impact of Return On Assets (ROA), Operating Cash Flow, and Earnings Per Share (EPS) on stock returns and to extend the research duration. Investors must scrutinize published financial data to enhance their investment judgments. The propensity for mass behavior among investors in Indonesia may result in erroneous decision-making. Mining firms must enhance their performance measures, including Return on Assets (ROA), Operating Cash Flow, and Earnings Per Share (EPS), to attract investor interest.

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