

## Effect of Economic Value Added (EVA), Market Value Added (MVA), Return on Equity (ROE), and Debt to Equity Ratio (DER) on Share Return (Study on Heavy Construction & Civil Engineering Companies Listed on the Indonesia Stock Exchange)

Unika Damau<sup>1\*</sup>, Sujono<sup>1</sup>, Nuryamin Budi<sup>1</sup>, Dwi Juliastianta<sup>1</sup>

Department of Management, Faculty of Economics and Business, Halu Oleo University, Indonesia

\*Corresponding Author, Email: [unikaoktaviani@uho.ac.id](mailto:unikaoktaviani@uho.ac.id)

---

### Abstract

This study aims to determine the effect of Economic Value Added (EVA), Market Value Added (MVA), Return on Equity (ROE), and Debt to Equity Ratio (DER) on stock returns. This study was quantitative. The nature of this research is associative-causal. The research population is 23 heavy construction and civil engineering companies on the Indonesia Stock Exchange from 2014-2021. A purposive sampling sample is 12 companies obtained using research samples. The analytical method used was panel data regression analysis, which was processed using the Eviews 9 application. Based on the results of the study, Economic Value Added (EVA) and the debt-to-equity ratio have a negative and insignificant effect on stock returns. Meanwhile, market value-added has a positive and significant effect on stock returns. On the other hand, Return On Equity (ROE) has a positive and insignificant effect on stock returns.

**Keywords:** *Debt to Equity Ratio, Economic Value-Added, Market Value-Added, Return On Equity, Stock Return.*

---

### INTRODUCTION

Stock returns are important to both investors and companies. Stock returns are used as a measure of company performance by investors to invest in companies in the stock market, and investors pay attention to the performance of companies that issue shares as a basis for their assessments of these shares. (Hanani, 2010).

The heavy construction and civil engineering industries are very important among the many companies listed on the Indonesia Stock Exchange. This is because heavy construction and civil engineering are industries that are engaged in infrastructure. In the infrastructure sector, heavy equipment is needed, so the existence of this industry is very important for the progress of development in Indonesia in the future. However, until now, the attention to this industry has been seen from the aspect of stock returns, and not much has been studied to the best of the author's knowledge. Therefore, I am interested in studying this industry.

Among the many variables that affect stock returns, the most basic and important variables that the authors study are economic value-added, market value-added, Return On Equity variables, and Debt to Equity Ratio. This has been suggested by Udiyana et al. (2022).

Based on the above description, the researcher re-examines the effect of Economic Value Added and Market Value Added on stock returns by adding the Return On Equity and Debt to Equity Ratio variables as additional variables with the title The Effect of Economic Value Added (EVA), Market Value Added (MVA), Return on Equity (ROE), and Debt to Equity Ratio (DER) on Stock Returns (Study on Heavy Construction & Civil Engineering Companies on the Indonesia Stock Exchange in 2014-2021).

### LITERATURE REVIEW

#### Economic Value Added (EVA)

Economic Value Added (EVA) is the value added by management to shareholders during a given year. (Brigham, 2006). EVA is also defined as operating profit minus taxes and interest costs on debt and minus reserves for capital costs (Raharjo, 2005). (Raharjo, 2005). According to Wijaya and Tjun (2009), economic value-added is an internal indicator that measures the wealth of shareholders of a company within a certain period of time. EVA measures how efficiently a company uses its capital to create economic added value. Economic added value is created if the company generates a return on total capital that exceeds the cost of capital”.

### Market Value Added (MVA)

Market value-added is the difference between the market value of a company's equity and the book value, as presented in the balance sheet. The higher the MVA value, the better the job management of the company's shareholders.

### Return On Equity

Return on equity is a ratio used to assess the extent to which a company uses its resources to provide return on equity. (Fahmi, 2012). According to Cashmere (2011), ROE is a ratio that measures net profit after tax with its own capital. The higher the ratio, the better. According to Sartono (2008), return on equity or return on net worth is a ratio that measures a company's ability to earn profits available to shareholders. This ratio is also influenced by the size of the company's debt; if the proportion of debt increases, this ratio will also increase.

### Debt to Equity Ratio

Debt to equity ratio (DER) is a leverage ratio used to measure the ability of the company's own capital to guarantee all corporate debt. The debt-to-equity ratio (DER) is part of the leverage ratio, which measures how much debt is used to finance the company's assets. The debt-to-equity ratio (DER) measures the size of the use of debt compared with the company's own capital. (Sudana 2011). According to Cashmere (2012), the debt-to-equity ratio is used to determine the ratio between total debt and capital. This ratio is useful for knowing how much the company's assets are financed from debt".

### Stock Return

Return is the result of investment. Shares are proof of a company's ownership. According to Horne and John (2005), stock returns, commonly referred to as returns, are payments received for ownership rights plus changes in market prices divided by the initial price". Brigham and Houston (2006) states that "Return or rate of return is the difference between the amount received and the amount invested." Hartono (2010) states that "Return is the result obtained from investment" Returns can be in the form of realized returns or expected returns. Realized returns were calculated based on historical data. Realizing these benefits is very important because they can be used as a measure of company performance. Expected return is the return that investors expect in the future, so return expectation has not yet occurred. Therefore, return is a company's investment income recorded in the capital

market by investors in the form of dividends or capital gains and losses (based on stock prices).

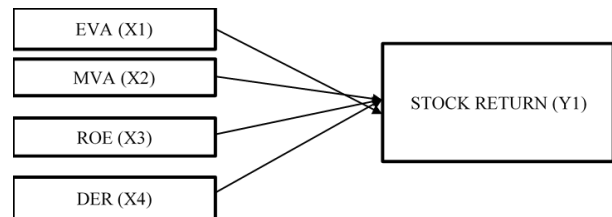


Figure 1. Research Conceptual Framework

Based on the description of the framework and problem formulation above, the summary hypothesis of this study is as follows:

- H1: Economic Value Added Has a Significant Positive Effect on Stock Returns
- H2: Market Value Added Has a Significant Positive Effect on Stock Returns
- H3: Return On Equity Has a Significant Positive Effect on Stock Returns
- H4: Debt To Equity Ratio Has a Significant Negative Effect on Stock Returns

## METHODS

### Object of Research

Sugiyono (2017) explains that the definition of a research object is "a scientific target to obtain data with specific purposes and uses about something objective, valid and reliable about a thing (certain variables)." The object of this research is the Heavy Constructions and Civil Engineering Company on the Indonesia Stock Exchange 2014-2021.

### Population and Sample

The population in this study comprised heavy construction and civil engineering companies listed on the Indonesia Stock Exchange. There were 22 heavy construction and civil engineering companies. Based on these criteria, 12 sample companies were selected.

### Operational Definition of Variables

#### Economic Value Added (EVA)

According to Rudianto (2013), economic value-added (EVA) is a financial management system that measures a company's economic benefits, which states that prosperity can only be created if the company is able to meet all operational costs. EVA is net income (operating profit minus tax) minus the total annual cost of capital; if EVA is positive, then the company creates wealth; if it is negative, then the company does not meet investor expectations.

### Market Value Added (MVA)

According to Brigham and Houston (2006), Market Value Added (MVA) is the difference between the market value of the company's shares and the amount of equity capital investors have given. According to Steward cited (Rahayu, 2007), MVA is an appropriate performance measure to assess the success or failure of the company in creating wealth for its owners. Thus, the wealth or welfare of company owners (shareholders) increases if the MVA increases.

### Return On Equity (ROE)

According to Sartono (2008), return on equity or return on net worth is a ratio that measures a company's ability to earn profits available to shareholders. This ratio is also influenced by the size of the company's debt; if the proportion of debt increases, this ratio will also increase.

### Debt to Equity Ratio (DER)

Debt to equity ratio (DER) is a leverage ratio used to measure the ability of the company's own capital to guarantee all corporate debt. The debt-to-equity ratio (DER) is part of the leverage ratio, which measures how much debt is used to finance the company's assets. The debt-to-equity ratio (DER) measures the size of the use of debt compared with the company's own capital. (Sudana, 2011).

### Stock Return

Stock returns are returns received by shareholders for investments that have been made, which can be in the form of cash dividends and differences in stock price changes (capital gain/loss). According to Jogiyanto (2000), stock returns are the results obtained by investors from investment activities that consist of capital gains or capital losses. Capital gains are also can be interpreted as the difference between the purchase and selling prices.

## RESULTS AND DISCUSSION

### Effect of Economic Value Added on Stock Return

Based on the results of the hypothesis testing, it was found that Economic Value Added has a negative

and insignificant effect on Stock Returns. This means that if the value of economic value-added increases, the stock return will decrease, and vice versa. The effect of EVA on stock returns is not significant because variations in changes in Economic Value Added cannot determine variations in changes in stock returns. The negative effect of economic value-added on stock returns is because the average growth of EVA is higher than the average growth of stock returns, where the average value of EVA growth is 31.00% and the average value of stock return growth is -63.6%.

### The Effect of Market Value Added on Stock Returns

Based on the results of the hypothesis testing, it was found that Market Value Added has a positive and significant effect on stock returns. This means that if the market value-added value increases, the Stock Return will increase, and vice versa; if the market value-added value decreases, the stock return will decrease. The effect of MVA on stock returns is significant because the average variation in debt-to-equity ratio growth is in line with the variation in stock return growth.

### The Effect of Return on Equity on Stock Returns

Based on the results of the hypothesis testing, it was found that ROE has a positive and insignificant effect on Stock Returns. This means that if the Return On Equity value increases, the stock return will also increase, and H3 is rejected.

Return On Equity (ROE) is a ratio used to measure a company's equity ability to generate net income. The description of the variables in this study shows an insignificant positive effect on stock return. It can be seen in one of the companies at PT Wijaya Karya Bangunan Gedung Tbk, where the growth of Return On Equity (ROE) was -10.72% which was followed by an average stock return growth of 21%. Other companies, such as Total Bangunan Bersada Tbk, have a growth of -11.41%, followed by an average growth of 18%. This is evidence that ROE has an insignificant positive effect on stock returns.

Table 1. Results of the t-test

Dependent Variable: RETURN

Method: Panel EGLS (Cross-section random effects)

Date: 11/10/22 Time: 14:12

Sample: 2014 2021

Periods included: 8

Cross-sections included: 11

Total panel (unbalanced) observations: 75

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.444105	0.995114	1.451195	0.1513
EVA	-0.066035	0.038251	-1.726352	0.0888
MVA	1.45E-17	6.82E-18	2.129524	0.0368
ROE	0.653387	0.541691	1.206200	0.2319
DER	-0.013224	0.033984	-0.389130	0.6984

### Effect of Debt to Equity Ratio on Stock Returns

The results of hypothesis testing show that the debt-to-equity ratio has a negative and insignificant effect on stock returns. This means that if the debt-to-equity ratio value increases, stock returns will decrease. The effect of DER on stock returns is not significant, because the average variation in debt-to-equity ratio growth and variation in stock return growth are not in line, where there are several companies whose debt-to-equity ratio value increases but their stock returns decrease.

### CONCLUSION

Based on the research results, the following conclusions were drawn:

Economic Value-Added (EVA) has a negative and insignificant effect on Stock Returns. This means that the higher the economic value-added value, the lower the stock return. Conversely, if the economic value-added value decreases, stock returns will increase.

Market Value-Added (MVA) has a positive and significant effect on stock returns. This means that the higher the market value-added, the higher the stock return. Conversely, if the market value-added value decreases, the Stock Return will decrease.

Return On Equity (ROE) has a positive and insignificant effect on stock returns. This means that high and low equity returns can affect Stock Returns.

The debt-to-equity ratio (DER) variable has a negative and insignificant effect on Stock Returns. This means that the higher the debt-to-equity ratio value, the lower the stock return. Conversely, if the debt-to-equity ratio value decreases, stock returns increase.

### ADVICE

#### For The Company

Companies are expected to pay attention to fundamental factors in their financial performance section through variables that are significant to stock returns, namely Market Value Added, because this will attract investors to invest in the company.

#### For Investors

Investors in investing in the company must pay attention to the internal and external factors of the company. The results show that investors need to pay attention to the value of the Market Value Added in investing because this variable has a significant positive effect on stock returns, meaning that stock returns will increase as the variable increases. In addition, investors can also see the value of the debt-to-equity ratio, which has a negative and insignificant effect on stock returns, which means that if the ratio increases, stock returns on the company will decrease.

#### For Future Researchers

For further research, it is recommended to add a period of research years because this research only uses eight years as a research period. Researchers are also expected to examine other sectors and add theoretical references to relevant studies. Further research is also expected to add independent variables because it is possible that other financial ratios that are not included in this study can affect stock returns.

### REFERENCES

- Abbass, K., Song, H., Shah, S. M. and Aziz, B. (2019). Determinants of Stock Return for Non-Financial Sector: Evidence from Energy Sector of Pakistan. *Journal of Business and Financial Affairs*, 8(1), 1-9.

- Abdillah, W. and Jogiyanto, H. M., & Hani, H. (2012). Motivation and consequences of individuals' involvement in social network sites (a study of social computing of inter-collectivist-individualist cultural value). *Indonesian Journal of Economics and Business*, 27(2), 242-270.
- Abdul-Halim, H., Kehinde, E. O., Abdeen, S., Lashin, I., Al-Hunayan, A. A., & Al-Awadi, K. A. (2005). Severe emphysematous pyelonephritis in patients with diabetes Urologia Internationalis, 75(2), 123-128.
- Brigham, E. F. & Houston, J. F. (2001). *Financial Management*. Book 1 8th edition. Jakarta: Erlangga.
- Brigham, E. F. & Houston, J. F. (2006). *Fundamentals of financial management*.
- Hakim, L., & Kusmanto. (2020). Determinants of stock return and its implications for dividend policy in the mining sector of the Indonesian stock exchange. *Utopia y Praxis Latinoamericana*, 25(Extra1), 208-224.
- Hanafi, M. M. (2008). *Financial Management*. (2004). YKPN. Yogyakarta.
- Handayani, S. & Sriyono, S. (2021). Effect of economic value-added, market value-added, earnings per Share and Net Profit Margin on Stock Returns in Metal Companies Listed on the Indonesia Stock Exchange. *Academia Open*, 5, 1-16.  
<https://doi.org/10.21070/acopen.5.2021.1797>
- Hery, S. E. (2015). *Management performance analysis*. Gramedia Widiasarana Indonesia.
- Himawan, F. A. (2009). The effect of economic value-added, market value-added, and operating income on stock returns in the mining sector industry on the Indonesian stock exchange for the 2003-2007 Period. *Journal of Economics*, 12(3).
- Jensen, M. C. (1986). Agency costs for free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323-329.
- Johan, S. (2018). The Relationship Between Economic Value-Added, Market Value-Added, And Return On The Cost Of Capital In Measuring Corporate Performance. *Journal of Business Management and Entrepreneurship*, 2(1), 23-36.
- Kartini, & Hermawan, G. (2008). Economic value-added and market value-added to stock returns. *Journal of Finance and Banking*, 12(3), 355-368.
- Cashmere, K. (2011). *Financial Statement Analysis*, Edition 1, print 4. Jakarta: Grafindo Persada.
- Khan. (2017). Macroeconomic Determinants of Stock market Development of South Asian Countries. 1-57.
- Khan, W., Naz, A., Khan, M., Khan, W. K. Q., & Ahmad, S. (2013). The Impact of Capital Structure and Financial Performance on Stock Returns "A Case of Pakistan Textile Industry." *Middle East Journal of Scientific Research*, 16(2), 289-295.