Performance of Value Added, Stock Market Liquidity to Stock Return of Manufacturing in IDX

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Abstract. Stock returns is the motivation of investors to transact shares. Stock returns on the company determined many factors that influence it. One of the factors that influence stock returns is related to the concept of added value. Then, the purpose of this study is to analyze the added value of economic (EVA) and social added value (MVA) and stock market liquidity (SML). The data used in this study is financial statement data on manufacturing companies listed on the IDX. This study uses panel data regression and in processing it using evievs. The results of the study find that EVA has a negative effect on companies and MVA and SML have positive effect on the performance of shares to the public.

Keywords: Performance · EVA · MVA · SML · IDX

1 Introduction

Company's value is one of the performance indicators that must be achieved by company's managers to prosper shareholders beside other performances. The company company's value is reflected in improvement of stock prices having prospect to improve returns gained investors. Return is profits received by the candidates for the amount of funds that have been invested and it becomes their dream [1].

Today, investors not only consider the accounting performance but also feel the importance of understanding concept of other economic profits to choose stock returns [2]. Therefore, the prospective investors try to use various ways to know the company's performance that is its investment target, which is the concept of economic value added (EVA) [3]. [4] and [5] mention EVA as a way of analyzing company's performance from the capital invested and how much returns they can earn. According to [6] and [7], EVA is more predictive than return on assets and return on equity.

Apart from EVA, to use market value added (MVA) is more interesting thing for shareholders to financial performance. EVA is used to measure the company's internal performance in providing prosperity, while MVA is used to measure external or market performance [8]. According to [9], MVA is an analysis that is more likely to look at the value of market performance since market value cannot be seen from

accounting performance. Hence, it can be concluded that EVA analyzes economic value creation and MVA predicts the expectations of shareholders in the future.

Furthermore, when the market condition has an improvement, EVA is marked by increasingly liquid markets. In the other words, a market having good performance contributes to the issuer of the stock to produce a good return as well. [10] explain stock market liquidity as a condition facilitating trade. [11] define market liquidity in which trading conditions exchange easily.

Several empirical studies show mixed results. [12] say EVA and MVA affect to changes in stock values. [1] conduct a research in Pakistan, they find there is no enough evidence of EVA affecting returns. [7] states EVA does not provide great enough evidence as a good measure in term of predicting returns. [11] finds market liquidity has a negative impact in long term and positive effect in the long term. [13] say there is a relationship between market liquid and stock returns. [14] explain that there is a return relation behavior in government and private shares. However, government shares are slightly larger. But, it economically is less relevance to connect with market liquidity.

Some studies in Indonesia highlight different results as well. Research conducted by[15] in automotive companies show EVA does not affect stock returns. [16] who conduct research in the agricultural sector find EVA and MVA do not affect stock returns. [17] who examine sharia shares show EVA has a positive effect on stock prices. [18] investigating mining and gas companies find EVA and MVA show a positive effect on firm value. The same case is also found [19] who conclude that MVA has a positive effect on stock returns.

Based on the aforementioned literature and empirical reviews show there is an inconsistency in the results on this research topic. The purpose of this study, therefore, is to examine the effect of EVA, MVA and stock market liquidity on the IDX.

2 Data and Method

This research is conducted at manufacturing companies listed on the IDX. The data used are financial statement documentation and stock price reports about stock information and profit and loss statements for the 2014-2017 period through the official IDX site. This study uses 67 manufacturing companies which have data. Hence the number of observations is 268.

This study uses panel data, so that the approach taken is in accordance with the panel regression model. Therefore, the model of this research is: $SR_{it} = \alpha + \beta_1 EVA_{it} + \beta_2 MVA_{it} + \beta_3 SML_{it} + e_{it}$, where; Y; Dependent variable Stock Return; α; Constants, β_1, β_2, β_3: regression coefficients, β_1, β_2, β_3; EVA; MVA; and SML; e: error.

3 Result

In this section, the classic assumption test and research results are discussed. The classic assumption test is performed to test the regression model whether it has met requirements or not provided biased results. The test results can be seen in table 1

below:

Table 1. Results of classic assumption tests and research results.

Jarque Berra Test : 0.1431					Prob. 0.9309
White Heteroscedasticity Test: Obs*R-squared= 0.4314					Prob. 0.5119
Breusch-Godfrey Serial Correlation LM Test: 1.6562					Prob. 0.4369

Variables	Matrix Correlation				
	SR	EVA	MVA	SML	
SR	1.0000	-	-	-	-
EVA	0.0341	1.0000	-	-	-
MVA	0.2037***	0.3487***	1.000	1.000	-
SML	0.2537***	0.2261***	0.5011***		-

Result Estimation						
Variables	Coefficient	Std. Deviation	t.statistic	t.tabel	F. statistic	F .table
C	-0.9804	1.1056	-0.8868			
Log(EVA)	-0.1064	0.0469	-2.2653*			
Log(MVA)	0.2952	0.0886	3.3313***	1.650	1.9795***	
Log(SML)	0.2687	0.0802	3.3508***			
R-squared: 0.4082						
Chow Test : 66***						
Hausman Test : 3***						

The given table 1 depicts the panel regression model in this study has been free from the classic assumption matters. Normality test for data using the Jarque-Berra test shows a value of 0.1431 with a probability value of 0.9309 and not significant at the level of5%. Hence, the data used in this study has been normal. In addition, the results of heteroscedasticity, autocorrelation, and multicollinearity tests provide results that are free from the three tests. Heteroscedasticity test using White Heteroscedasticity Test has the value of Obs * R-squared = 0.4314 with a probability of 0.5119. The test result can be concluded that the model is free heteroscedasticity or the data has been homoscedasticity. Furthermore, the autocorrelation test which examined using the Breusch-Godfrey Serial Correlation LM Test finds a value of 1.6562 with a probability of 0.4369, which is not significant at the level of 5%. In brief, the data in this study do not occur aoutocorrelation. Also, the same case applies to the multicollinearity test taken from the results of the correlation matrix test showing all variables that do not have a correlation value > 0.80%. So, the model is also free from the multicollinearity problem.

Furthermore, in choosing the best model used in this study, a fixed effect model is chosen. This is indicated by the Hausman test which is significant at the 1 percent level. The Hausman test is carried out if testing with the Chow test which also shows a significant value that is the two significant at the level of 1 %. The Chow test value is 66, which is 1% significant and the hausman test with a value of 3 which is also significant at the level of 1%.

Based on the classical assumption test and the Chow and the Hausman tests, the model in this study is as follows: SR = -0.9804 +0.1064 EVA* +0.2952 MVA*** + 0.2687 *** SML.

From the research equation model, it can be explained that the negative constant value is 0.9804, which means that if all the independent variables do not change, the constant value remains 0.9804. The EVA coefficient is 0.1064, which is significant at the level of 10%, which means that if the EVA value increases 1%, the stock return has a prospect to rise up 0.1064%. The coefficient of MVA has a value of 0.2952 and a significance of 1% which can be explained by each increase in MVA of 1%, the SR increases by 0.2952% as well. The value of stock market liquidity is 0.2587 and significant 1%. This means each increase in liquidity stock market is as many as 1%, it inclines SR by 0.2587% too. Therefore, it overall can be concluded that MVA is a factor that needs to be considered by investors when investing in the IDX. Furthermore, the SML coefficient value is 0.2687 with a significant probability of 1%, which means an increase in SML raises the value of stock returns

Besides, it can also be explained that the three variables EVA, MVA and SML affect stock returns simultaneously. This is indicated by the statistical F value of 1.9795 and a significance of 1%. The three variables are able to explain their effects of 40.82%, reflected in the value of R square (R2) as many as 0.4082 while the remaining is influenced by other factors.

Based on the table above, it can be explained that the three independent variables EVA, MVA and SML affect stock returns in manufacturing companies in Indonesia. MVA is the dominant factor influencing return followed by SML and finally EVA. This finding indicates that investors welcome the performance of manufacturing companies because it provides a good return. This finding is in accordance with [18] who conclude that MVA has a positive effect on stock returns.

From the SML side, it can be explained that manufacturing companies have good market liquidity so that investors can consider to trade on the manufacturing shares for period of the study sample. An improved stock market liquidity can provide good returns. This finding is consistent with [10] who reveal stock market liquidity is related to stock returns. Finally, EVA can also be considered for investors to buy trading shares, but it is not so dominant in explaining the relationship with return. This has been stated [1].

4 Conclussion

This research found all independent variables EVA, MVA and s ML used in this study affect to stock returns. However, the most dominant factor affecting stock returns is MVA. The results of this study do not strongly explain the three independent variables being able to explain stock returns. But there are other factors that affect stock prices, such as accounting performance and firm value.

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