

The Analysis of Effect of Economic Value Added (EVA) and Market Value Added (MVA) on Share Price of Subsector Companies of Property Incorporated in LQ45 Indonesia Stock Exchange in Period of 2009-2013

Muhammad Mara Ikbar¹, Andrieta Shintia Dewi²

¹Telkom University, Telkom Economics and Business School, Telekomunikasi Road, Bandung, West Java 40257, Indonesia

Abstract: *After the global crisis in 2008, the Indonesian economy grew higher with maintained stability. These numbers eventually push up asset prices, including property. The increase in property prices in turn increases the demand for these properties and affects the growth of the property sector in Indonesia. This is exactly what prompted investors to invest in property companies and ultimately makes the property sub-sector became one of the sectors that look best on the stock. The purpose of this study is to determine effect of Economic Value Added and Market Value Added on share price of subsector companies of property incorporated in LQ45 Indonesia stock exchange in period of 2009-2013 partially or simultaneously. The data used are secondary data obtained from the overall company financial statements issued by the Indonesia Stock Exchange from 2009 to 2013. The analytical method used is panel data regression method and Fixed Effect model. Hypothesis testing uses t-test, test-f and the coefficient of determination. The result shows that, partially, Economic Value Added and Market Value Added significantly affects on the stock price. Furthermore, simultaneously, all independent variables have significant effect on stock prices. In addition, it is found that the coefficient of determination (R^2) of 0.869840 which means that the independent variables can explain the dependent variable of 86,98% while the remaining number 13,02% is explained by other factors beyond research.*

Keywords: Stock Price, EVA, MVA, Property.

1. Introduction

After the global crisis in 2008, the Indonesian economy grew higher with maintained stability. The development cannot be separated from the two global trends that occurred in the last few years that are the terms of and monetary stimulation policy in developed countries after the global crisis. In the end, it is encouraging domestic demand and rising asset prices, including property ^[1].

Along with improving economic conditions in Indonesia, Indonesian middle class grew to reach 150 million people with an income of Rp 55 million to Rp 200 million per year. The facts results in the increasing number of people who are buying property as an alternative investment. In addition, the current housing needs, per year in Indonesia, reached 800 thousand, but only 400 thousand that can be met ^[2].

The total demand for property which is higher than the availability (supply) which can be met by the market, makes property prices in Indonesia significantly increase. In Southeast Asia, Indonesia is leading in the list of countries with the highest residential property price throughout 2013 ^[3].

The growth in property prices in Indonesia leads to the growth in the property sector itself annually. Based on the survey of *Bank Indonesia* in 2013 concerning investment preferences of Indonesian society shows that there is an increase number in people's preference to choose the property as a means for investment. Investment preference in

property is affected by the expectation of price raising. The hike expectations of the property sector is growth in line with the rise in property prices. There is also the support of bank credit that makes demand for property, whether for residential or investment, increase. With this strong demand, the price continues to move up and will impact on the growth of the property sector in Indonesia ^[1].

One of the things that influence an investor to buy shares of a company is the performance of the industrial sector in which they operate. Therefore, by increasing the performance of an industrial sector, it will be directly proportional to the increasing demand for shares of companies that are spread in the industry ^[4].

The growth in the property sector is always rising. The property prices have increased by 100 percent in the past 18 months, and has not shown signs of receding. The condition makes the property sector growth 50 percent faster than the Composite Stock Price Index (CSPI), and it makes the property sector became one of the best dressed in the stock sector ^[5].

Fundamentally, investor demand for a stock is influenced by the performance of the company. The company's performance reflects in the company's financial performance that describes the operating profit and earnings per share as well as some other financial ratios, where it is a benchmark to see the power management in managing the company ^[6].

In general, the methods used to measure the financial performance are quite a lot. Several methods are commonly

used to measure the financial performance and two of them are the Economic Value Added (EVA) and Market Value Added (MVA).

Economic Value Added (EVA) is alternative approach as a measure of profitability that can measure managerial performance in a certain period. EVA provides a benchmark of how far the company has been adding value to shareholders within a year or period. Economic Value Added (EVA) is positive if the return is higher than the return required by investors. In addition, The negative Economic Value Added (EVA) indicates that the value of the company is reduced so that the resulting rate of return is lower than the rate of return demanded by investors, which means that the company failed to create value for the owners of capital ^[7].

The Market Value Added (MVA) is the difference between the market value of a company's equity and book value as presented in the balance sheet, market value is calculated by multiplying the share price by the number of shares outstanding. The greater the Market Value Added (MVA), the better it is. The negative Market Value Added (MVA) means that the value of investments run by the capital management is less than financial capital submitted to the company by the capital markets, which means that wealth has been destroyed ^[8]. Thus, Market Value Added (MVA) is a reflection of investors' expectations on the total value they expect from the company to create future value of the total capital invested less in the company ^[9].

2. Basic Theory and Methodology

2.1 Investment

Investment is a today commitment that we did with the money or other resources to expect future profits. Essentially, an investment is a sacrifice to a valuable thing today and hope an advantage to sacrifice what we have done ^[4]. Investment aims to achieve effectiveness and efficiency of the decision, the necessary firmness is important to achieve the expected goal. Similarly, in the field of investment, we need to set a goal to be achieved. The objectives are as follows:

- a) The creation of continuity in such investment.
- b) The creation of maximum profit or expected profit (actual profit).
- c) The creation of wealth for shareholders.
- d) Contributing to national development ^[10].

2.2 Financial Management

Financial management is the overall decisions and activities involving efforts to obtain funds and allocate funds based planning, analysis and control in accordance with the management principles which are demanded in obtaining and allocating resources need to take the efficiency and the effectiveness into account ^[11]. In other words, financial management are all activities related to the acquisition, financing, and asset management with some overall goals ^[12].

2.3 Financial Performance

Performance measurement is crucial done by the company, mainly to make improvements in order to compete with other companies. Financial performance is an analysis done to see whether a company has really implemented financial management by using the rules of financial performance which is good and right or not ^[13]. In general, performance analysis methods are quite a lot. Several methods are commonly used to measure the financial performance and two of them are the Economic Value Added (EVA) and Market Value Added (MVA).

2.4 Economic Value Added (EVA)

Economic Value Added (EVA) is alternative approach as measure of profitability that can measure managerial performance in a certain period. EVA provides a benchmark of how far the company has been adding value to shareholders within a year or period. EVA can be used at the level of division or corporation as a whole, so that EVA can be used as a basis for compensation or evaluation basis for managers in managing the company ^[7]. Economic Value Added (EVA) is positive if the return is higher than the return required by investors. In addition, The negative Economic Value Added (EVA) indicates that the value of the company is reduced so that the resulting rate of return is lower than the rate of return demanded by investors, which means that the company failed to create value for the owners of capital ^[9].

$$\begin{aligned} \text{EVA} &= \text{Net Operating Profit After Taxes (NOPAT)} - \text{After Tax Cost of Capital} \\ &= \text{EBIT} (1 - \text{Tax Rate}) - \{(\text{Total Net Operating Capital}) (\text{Weighted Average Cost of Capital})\} \end{aligned}$$

2.5 Market Value Added (MVA)

The Market Value Added (MVA) can be defined as the difference between the market value of a company's equity and book value as presented in the balance sheet, market value is calculated by multiplying the share price by the number of shares outstanding. Market Value Added (MVA) is a reflection of investors' expectations on the total value they expect from the company to create future value of the total capital invested less in the company The greater the Market Value Added (MVA), the better it is. The negative Market Value Added (MVA) means that the value of investments run by the capital management is less than financial capital submitted to the company by the capital markets, which means that wealth has been destroyed ^[8].

2.6 Stock Price

According to Law No. 8 of 1995 on the Capital Market, shares are securities as evidence of ownership of individual or institution in a company (usually held by individuals or institutions in a company). When someone buys a stock, then

it will be called the owner and shareholder of the company [14].

Stock prices have always fluctuated either increase or decrease. The creation of stock prices is due to the demand and supply of the stock. In other words, the stock price is formed by supply and demand on the stock. So that when an investor demands on stock is rising, then the stock price will tend to rise. In contrast, when many current shareholders sell shares they own, then the stock price tends to decline [15].

3. Discussion

3.1 Testing Model

3.1.1 Chow Test / Likelihood Ratio

Chow test / Likelihood Ratio, is performed to determine whether the model used in the study is the Common Effect Model or Fixed Effect Model with the provisions of the following decisions:

H0: Common Effect Model

H1: Fixed Effect Model

If the p-value Chi-square cross section < 0.05 or probability value (p-value) F-Test < 0.05 then H0 is rejected or model used is a model Fixed Effect. If the p-value Chi-square cross section ≥ 0.05 or probability value (p-value) F-Test ≥ 0.05 , H0 is accepted or used model is the model of the Common Effect.

Based on the test results of the Chow / Likelihood, it results probability values Chi-square cross section of 0.0002, where the result is less than the significance level of 5% or 0.05 and is resulted with a probability value of the cross section F of 0.0024, which is also smaller than the significance level of 5% or 0.05. In accordance with the provisions of decision-making, it can be deduced that H0 is rejected and the approach taken is Fixed Effect Model. Then, to determine whether the most appropriate approach to be used in this research, it needs to examine the Fixed Effect Model with Random Effect Model using the Hausman Test.

3.1.2 Hausman Test

Hausman test is done to determine whether the model used in the study was the Random Effect Model or Fixed Effect Model. Provisions of the decision are as follows:

H0: Random Effect Model

H1: Fixed Effect Model

If the cross section of random probability value (p-value) < 0.05 then H0 is rejected, so that the model used is the Fixed Effect Model. However, if the value of the cross section of random probability (p-value) ≥ 0.05 then H0 is accepted, so that the model used is the Random Effect Model.

Based on the result of Hausman test, it is found that the cross section of random probability value (p-value) is 0.05297, where the result is bigger than the significance level of 5% or 0.05. In accordance with the provisions of decision making, it means that H0 is accepted, so that the proper approach to be taken in this study is the Random Effect Model.

3.2 Panel Data Regression Equation

Based on the model test conducted, the model used in the panel data regression in this study is a model Random Effect. Panel data regression model established in this study is a model of Random Effect. Based on the calculation of the value of the constant coefficients, it can be determined the following equation:

Stock Price = (intercept of sample firms) + 0,000000207 + 0.614144 EVA + 0,319652 MVA

The above equation can be interpreted as follows:

1. The coefficient of the intercept of 0,000000207 means that if the variable EVA and MVA is constant, then the level of the company's stock price will rise 0,000000207% by subsector property.
2. The coefficient of Economic Value Added (X1) is 0.614144, which means if there is a rise of change Return on Investment of 1% (assuming other variables are constant), the company's stock price subsector property will increase by 0.614144 %.
3. Coefficient of Market Value Added (X2) is 0,319652, which means if there is a rise change of Earnings per Share of 1% (assuming other variables are constant), the company's stock price and Real Estate property subsector will increase by 0, 319652%.

3.3 The coefficient of determination (R^2)

The coefficient of determination is used to determine the percentage of independent variables in explaining dependent variables. According to the result, the value of R^2 (R-square) is 0.869840 or 86,98%. From these results, it can be concluded that the independent variables consisting of Economic Value Added and Market Value Added can explain the dependent variable. The share price of the property sub-sector company is 86,98%, while the rest, at 13,02%, is explained by variables or other factors beyond the present research.

3.4 Hypothesis Testing

3.4.1 t-test (partial)

T-test (partial) is performed to determine significance of each regression coefficient independent variable (X) independently on the dependent variable (Y). The provision of decision making in the partial test is if the probability value (p-value) ≥ 0.05 , H0 is accepted which means no significant effect of independent variables on the dependent variable partially. However, if the probability value (p-value) < 0.05 , H0 is rejected, which means the independent variables significantly influence the dependent variable partially.

Based on the calculations, it can be concluded that:

1. Variable Economic Value Added (X1) has a probability value (p-value) $0.0000 < 0.05$, in accordance with decision making, H0 is rejected, which means the Economic Value Added significantly affects on the company's stock price property subsector partially.
2. Variable Market Value Added (X2) has a probability value (p-value) $0.0139 < 0.05$, in accordance with the decision, H0 is rejected, which means the Market Value

Added significantly affects on the company's stock price property subsector partially.

3.4.2 f-test (Simultaneous)

F-test (simultaneous) is conducted to test whether the independent variable (X) simultaneously or jointly has a significant effect on the dependent variable (Y). The provisions in the decision making simultaneous test is if the probability value (F-statistic) ≥ 0.05 (significance level of 5%), H_0 is accepted which means no free variables significantly influence the dependent variable simultaneously. However, if the probability value (F-statistic) < 0.05 , H_0 is rejected, which means that the independent variable has a significant effect on the dependent variable simultaneously. By leaning on the previous calculations, it is found that the probability value (F-statistic) is equal to $(0.000000 < 0.05)$. In accordance with the provisions of the existing basis for taking a decision, then H_0 is rejected, which means that the variable Economic Value Added and Market Value Added significantly affects on the company's stock price subsector properties simultaneously.

3.5 Analysis and Result

3.5.1 The Effect of Economic Value Added (EVA) on Share Price

Based on the test results in this study, Economic Value Added has a probability value (p-value) of 0.0000 where this value is smaller than the significance level of 5% $(0.0000 < 0.05)$. This shows that the EVA variables significantly influence the company's stock price LQ45 property subsector in Indonesia Stock Exchange. These results are consistent with research conducted by Purba and Trenggana (2014)^[16]. The level of EVA majority of companies that always rises from year to year in each company is used by investors for projecting future stock price, so in this case the company has managed to provide a benchmark of how far the company can provide added value to shareholders within a year or certain period. However, these results are not consistent with the results of research conducted by Rahayu (2013)^[17] which states that the EVA does not significantly affect stock returns.

3.5.2 The Effect of Market Value Added (MVA) on Share Price

Based on the test results in this study, Market Value Added has a probability value (p-value) of 0.0139 where the value is less than the significance level of 5% $(0.0139 < 0.05)$. This suggests that MVA variables significantly influence the company's stock price subsector property LQ45 in Indonesia Stock Exchange. The results this study are consistent with the results of the research that has been conducted by Mardianto (2013)^[18] and Baadila (2010)^[19]. This is due to the positive effect of the increase in MVA majority of the company from year to year, so the company has been able to reflect well on the expectations of investors to the total value they expect from the company to create future value of the total capital invested less in the company. However, these results are not consistent with the results of research Rahayu (2013)^[17] which states that the EVA does not significantly affect stock returns.

3.5.3 The Effect of Economic Value Added (EVA) and Market Value Added (MVA) on Share Price

Based on the test results in this study, all independent variables have a probability value (F-statistic) of 0.000000 where the value is less than the significance level of 5% $(0.000000 < 0.05)$. This shows that the independent variables simultaneously significant effect on the company's stock price subsector LQ45 Indonesia Stock Exchange. The result is in line with research conducted by Mardianto (2013)^[18]. This is because the Economic Value Added and Market Value Added are a reflection of the performance of companies in which the Economic Value Added reflects the performance of the company's internally while Market Value Added reflects the company's performance externally in order to provide accurate information to investors. So, this makes the Economic Value Added and Market Value Added affects on stock prices. However, these results are not consistent with the results of research Rahayu (2013)^[17] which states that both EVA and MVA simultaneously do not significantly affect on stock returns.

4. Conclusions

The research on the influence of Economic Value Added (EVA) and Market Value Added (MVA) on stock prices subsector property belonging to the Indonesia Stock Exchange Period LQ45 2009 -2013 results following conclusion: Both EVA or MVA of LQ45 incorporated in Indonesia Stock Exchange Period 2009 - 2013 are not always positive but in majority they are increasing every year, while the overall average for each company always increases every year.

From the two independent variables namely Economic Value Added (EVA) and Market Value Added (MVA), both have a significant influence on company's stock price subsector property belonging to the Indonesia Stock Exchange LQ45 the period 2009 -2013 partially.

While simultaneously, Economic Value Added (EVA) and Market Value Added (MVA) significantly influence the company's stock price subsector property belonging to the Indonesia Stock Exchange LQ45 the period 2009 -2013.

5. Suggestions

After doing this research, as for the advice that can be given by researcher are as follows:

For Companies

Companies are advised to increase the level of communication with the investors. This is intended that the information regarding the development of the company's financial performance can be known by investors to be a material consideration in determining the investment decisions of investors.

For Investors

The results of this study are expected to provide an overview, for investors and potential investors in selecting business. Investors and prospective investors should still pay attention to the company's performance that is measured

through analysis of financial performance such as EVA and MVA because both can affect stock prices.

For Further Research

Future studies are expected to add or use other financial performance measures, such as refined economic value added (REVA), financial value added (FVA), and the other as the comparison method used in this study.

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Author Profile



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Muhammad Mara Ikbar received the S.MB degree in Business Management of Telecommunication and Information from Telkom Economics and Business School, Telkom University



Andrieta Shintia Dewi is a lecturer of Finance, Mathematical Economics, and Marketing in Faculty Economics and Business, Telkom University. She received Bachelor of Education from Indonesian University of Education (UPI) and Master of Management from Telkom Institute of Management (IM Telkom)