

THE ANALYSIS OF FINANCIAL PERFORMANCE USING ECONOMIC VALUE ADDED (EVA) AND MARKET VALUE ADDED (MVA) METHODS AND ITS INFLUENCE ON STOCK RETURN OF TRANSPORTATION COMPANY LISTED IN INDONESIA STOCK EXCHANGE

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ABSTRACT

This study was conducted to examine the effect of Economic Value Added (EVA) and Market Value Added (MVA) and Its Effect on Stock Return. The research sample was taken from 5 transport company listed on the Indonesia Stock Exchange that have been through the process in accordance with the criteria of sample or random sampling method. Data analysis methods used in the study panel data analysis method using Eviews program. Results showed partial EVA has no real effect, with significant values of 0.2661, while MVA and significant influence on Return Stocks with significant value of 0.0463 as indicated by the results of the test statistic t. While simultaneously or jointly Economic Value Added (EVA) and Market Value Added (MVA) influence on Stock Return, this is evidenced by the results of the test statistic f the significant value of 0.0382.

Keywords: Economic Value Added (EVA), Market Value Added (MVA), Stock Return, Transportation Company

PROEM

In investment activities, capital market is one means for investors to invest. Investors in making decisions to invest funds in the capital market, first assess the financial performance of the company that will be a place to invest. By conducting a performance appraisal, information about the company's financial condition and position will be obtained. In other words, after measuring the company's overall performance an investor can decide whether to invest or not and expect a return on the capital he has invested. In the context of investment management, the rate of return on investment is called Return.

The US consulting firm Stern Stewart & Co., in the early 1990s, developed a new method of assessing company performance, Economic Value Added and Market Value Added. According to Abate and Bennet (2004: 1-7), EVA is a method that can be used to determine the value of a company. Because the EVA method measures the company's financial performance so as to give a real business (opportunity and profit)

company. The results of the calculation obtained from a positive EVA which means providing added value for the company so that investors are not worried to invest their shares, expected with a good company performance then the return rate to investors will be good too. The existence of economic added value becomes relevant for measuring financial performance based on firm value, since economic value added is a measure of economic added value generated by firms as a result of company activity or management strategy.

In addition to the method of Economic Value Added (EVA), in this study will also use the method of Market Value Added (MVA). The MVA method is used to assess the impact of a manager's actions on the prosperity of his shareholders since the company was established. According to Brigham (2001) in Kartini and Hermawan (2008), shareholder wealth will be maximized by maximizing the difference between the market value of the firm's equity and the amount of equity capital invested by investors, this difference is called Market Value Added (MVA). If the company has a goal to multiply shareholder wealth, then the MVA used to assess the performance of the firm should have a direct relationship with stock returns.

As a benchmark for good financial performance, EVA and MVA should have an influence on shareholder wealth represented by stock returns. If the company has a purpose to multiply shareholder wealth, then the MVA used to assess the performance of the company should have a direct relationship with the return earned by a shareholder of a company.

Transportation companies are an important and rapidly growing business sector from year to year, indicating that the demand for transportation or travel has a great relationship with existing activities in the community. Basically the demand for transportation services is a reflection of the need for transportation both on land, sea and air, both for human transport and freight transport. The demand for transportation services does not stand alone, but is hidden behind other interests. The more and more important the activity is, the level of travel or transportation needs increases. The amount of competition that occurs, forcing investors to be more selective in choosing a company that will be a place to invest.

THEORETIC

According to Bambang Riyanto (2001: 4), Financial Management as the whole activities of the company concerned with the effort to obtain the necessary funds with minimal cost and the most favorable terms and efforts to use the funds as efficiently as possible. According Sucipto (2003), financial performance is the determination of certain measures that can measure the success of an organization or company in generating profit.

EVA method is a method that can be used to know the value of a company. Because, EVA measures the company's financial performance so as to give a real business profit (profit) a company. Economic Value Added (EVA) is a financial management system to measure economic profit in a company, which states that welfare can only be created if the company meets all operating costs (Operating Cost) and cost of capital (Cost of Capital). The advantages of EVA methods include:

1. EVA can align management goals and shareholder interests. Where EVA is used as an operational measure of management that reflects the company's success in creating added value for shareholders or investors.
2. EVA provides guidance for management to increase operating profit without additional funds / capital, expose lending (receivables) and invest funds that provide high rewards.
3. EVA is a financial management system that can solve all business problems ranging from strategy and movement to the day-to-day operational decisions.

The steps in determining the size of EVA can be described as follows:

1. EVA begins with NOPAT, which aims to gain operational performance measurement in the form of cash. NOPAT is the company's profit derived from its operating activities after tax deductions. Calculate the value of net operating profit or NOPAT (Net Operating After Tax)
2. Calculating investment capital. Total debt and equity indicate some portion of each rupiah of own capital which is pledged as collateral. Short-term, non-interest bearing loan is a loan used by the repaying company and the payment will be made in the short term (less than or equal to 1 year). By using current assets owned by the company and the loan is not subject to interest such as accounts payable, taxes payable and others.

3. Calculating Weighted Average Cost of Capital
4. Calculating Capital Charges
5. Calculating Economic Value Added (EVA). Formula:

$$EVA = NOPAT - Capital Charges$$

According to Brigham and Houston (2006), Market Value Added (MVA) is the difference between the market value of a company's stock and the amount of equity the investor has given. According to Steward (in Kartini, 2008), MVA is an appropriate performance measure to assess the success of a company in creating wealth for its owner. Thus, the wealth or welfare of the company owner (shareholder) will increase if the MVA increases. The main objective of most companies is to maximize shareholder value, this goal clearly in favor of shareholder profits, but also to ensure that limited resources have been allocated efficiently that benefit the economy. Shareholder wealth will be maximized by maximizing the difference between the market value of the firm's equity and the invested equity capital. This difference is called MVA by Brigham and Houston (2006). MVA can be formulated as follows:

$$MVA = \text{stock market value} - \text{investment capital}$$

According to Van Horne and John (2005), "Stock returns are payments received due to ownership rights, coupled with 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. Stock Return can be formulated as follows.

$$Stock Return = \frac{Stock Price (Pt) - Stock Price Before (Pt - 1)}{Stock Price Before (Pt - 1)}$$

METHOD

The research method used is quantitative. while the analytical method used is regression analysis. The population in this study are transportation companies listed on the Indonesia Stock Exchange. The sample technique used is purposive sampling with criteria; (1) There is a complete annual report, and (2) Have complete data related to the variables used in the research. Furthermore, the systematic analysis performed consists of descriptive analysis, classical assumption test, partial test, determination coefficient test, and simultaneous test.

In this research, there are three stages: input, process and output stage. In the first stage is the input stage, the stage of entering data which includes the financial statements of transport companies that have been audited and listed in the Indonesia Stock Exchange (IDX) during the period 2010 to 2015. The second stage is the data processing which consists of calculating the value Economic Value Added (EVA), Market Value Added (MVA) and Stock Return. The third stage is the output stage, is the result of statistical data processing using EvIEWS software.

RESULT

In this section will be presented a number of data, data analysis and discussion of research. The following below can be seen data research obtained and processed from financial statements with EVIEWS statistical tool.

Table 1. Summary of Research Data

No.	NAMA	VARIABEL		
	PERUSAHAAN	EVA	MVA	Return Saham
1	PT. Cardig Aero Services, Tbk	140,614,155,769	933,553,917	29.89%
2	PT. Tanah Laut, Tbk	13,094,832,221	45,932,125	40.35%
3	PT. Sidomulyo Selaras, Tbk	8,707,040,858	868,079,000	19.12%
4	PT. Samudera Indonesia, Tbk	45,372,250	1,141,927,500	10.77%
5	PT. Pelayaran Tempuran Emas, Tbk	187,402,101,836	1,130,396,833	100.59%
RATA - RATA		69,972,700,587	823,977,875	40.14%

Source: Research data, 2015

Table 2. Economic Value Added (EVA), Transportation Company listed on BEI
Period 2010 – 2015

No.	Dalam Jutaan	2010	2011	2012	2013	2014	2015	RATA - RATA
1	PT. Cardig Aero Services, Tbk	101,983	90,710	129,017	168,477	170,351	183,144	140,614
2	PT. Tanah Laut, Tbk	688	94	13,804	15,969	46,583	1,428	13,094
3	PT. Sidomulyo Selaras, Tbk	6,400	4,702	4,528	10,256	15,670	10,683	8,707
4	PT. Samudera Indonesia, Tbk	97	126	10	10	17	10	45
5	PT. Pelayaran Tempuran Emas, Tb	153,187	81,478	153,976	130,105	274,103	331,561	187,402

Source: Research data, 2015

Table 3. Economic Value Added (EVA), Transportation Company listed on BEI
Period 2010 – 2015

No.	Dalam Jutaan	2010	2011	2012	2013	2014	2015	RATA - RATA
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2	PT. Tanah Laut, Tbk	688	94	13,804	15,969	46,583	1,428	13,094
3	PT. Sidomulyo Selaras, Tbk	6,400	4,702	4,528	10,256	15,670	10,683	8,707
4	PT. Samudera Indonesia, Tbk	97	126	10	10	17	10	45
5	PT. Pelayaran Tempuran Emas, Tb	153,187	81,478	153,976	130,105	274,103	331,561	187,402

Source: Research data, 2015

Table 4. Market Value Added (MVA), Transportation Company listed on BEI Period
2010 – 2015

No	Companies	2010	2011	2012	2013	2014	2015	Average
1	PT. Cardig Aero Services, Tbk	5,160,730,000	76,402,500	84,420,000	70,200,000	199,065,000	10,506,000	933,553,917
2	PT. Tanah Laut, Tbk	1,832,250	3,664,500	717,500	2,200,000	266,526,000	652,500	45,932,125
3	PT. Sidomulyo Selaras, Tbk	2,359,340,000	30,887,500	2,187,500	87,400,000	168,059,000	2,560,600,000	868,079,000
4	PT. Samudera Indonesia, Tbk	18,125,000	3,200,000	10,575,000	2,400,000	5,633,810,000	1,183,455,000	1,141,927,500
5	PT. Pelayaran Tempuran Emas, Tbk	8,236,000	98,325,000	56,962,500	42,500	2,572,790,000	4,046,025,000	1,130,396,833

Source: Research data, 2015

Table 5. Stock Return, Transportation Company listed on BEI Period 2010 – 2015

No	PERUSAHAAN	2010	2011	2012	2013	2014	2015	Average
1	PT. Cardig Aero Services, Tbk	0.25	0.03	0.80	0.12	0.52	0.06	0.30
2	PT. Tanah Laut, Tbk	0.18	0.03	0.27	0.40	1.51	0.03	0.40
3	PT. Sidomulyo Selaras, Tbk	0.02	0.25	0.25	0.10	0.55	-0.02	0.19
4	PT. Samudera Indonesia, Tbk	0.09	-0.10	0.09	-0.28	0.74	0.11	0.11
5	PT. Pelayaran Tempuran Emas, Tbk	0.66	0.09	0.86	0.14	4.27	0.02	1.01

Source: Research data, 2015

1. Hypothesis testing

Based on data processing with Eviews software obtained the following results.

- Based on Eviews output obtained F_{count} of 4.928243, while F_{table} with the level of significance or probability 5%, $df = k - 1$ so $3 - 1 = 2$ and $df_2 = n - k = 30 - 3 = 27$, obtained F table for 3.35. Thus $F_{\text{count}} > F_{\text{table}}$ ($4.928243 > 3.35$). Then seen from the value Probability (F-statistic) is $0.0382 < 0.05$, so it can be concluded that H_0 rejected and H_1 accepted. It means that independent variables EVA and MVA simultaneously or together have a significant influence on the dependent variable Return of Stock.

- b. Economic Value Added (EVA) has an effect but not significant on Stock Return. It can be seen on t_{count} for independent variable Economic Value Added (EVA) is equal to 1.139831, while t_{table} value with degree of freedom (df) = 5%, $df = n - k = 30 - 3 = 27$, obtained value t_{table} is 2.05183. So $t_{\text{count}} < t_{\text{table}}$ is $1.139831 < 2.05183$. This finding explains that H_0 is accepted and H_1 is rejected. So the sound of this hypothesis is no significant effect of Economic Value Added (EVA) on Stock Return.
- c. The test result with panel data regression analysis shows the result of t arithmetic for independent variable of Market Value Added (MVA) is equal to 2.993888, while t value table with degrees of freedom (df) = 5%, $df = n - k = 30 - 3 = 27$, the obtained t value of the table is 2.05183. So $t_{\text{count}} > t_{\text{table}}$ is $2.99388 > 2.05183$, it shows H_0 rejected and H_1 accepted. This shows that there is a significant influence of Market Value Added (MVA) on Stock Return.
- d. From the output of Eviews obtained the amount of Adjusted R-Squared is 0.661109. This shows that there are 66,11% influence of independent variable of EVA and MVA to dependent variable of Return of Stock, while the rest 33.88% influenced by other factors outside this research.

The above results clearly demonstrate many factors that influence whether or not EVA and MVA have an effect on stock returns. As the effect of EVA proved to have no significant effect. this is because the national economic conditions in particular and generally the global economy is in a state of unstable. Moreover, in addition to the inconsistent political and economic policy in Indonesia. The existence of political interference in the economy makes the capital market value is less healthy. So no wonder since 2008, many companies in Indonesia are stagnant growth rate.

However, an interesting thing happens is, proved the influence of MVA on stock returns. This means that despite the unstable market conditions, economic conditions are less stable, national political conditions are less stable, and the rate of economic growth slows down. However, the level of investor confidence is still there, this is what causes the capital market and incoming capital investment does not decline. Besides, we can see the facts of the field, since

2015 Indonesia investment in infrastructure continues to run. This proves that investors still put confidence in Indonesia capital market, which impact on increasing stock market value.

2. Discussion

Based on the above research, it can be explained as follows.

a. Effect of EVA on Stock Return

The result of partial hypothesis testing stated that EVA variable has no significant effect on Stock Return because the level of significance is greater than 0.05 ie 0.2661. Thus it can be concluded that the partial EVA has no effect and not significant on Return Shares on transportation companies listed on the Indonesia Stock Exchange. This is because there are other factors outside the company's financial performance, such as capital market conditions as well as external factors (state, social and political economy) that affect the Return of Shares obtained by investors in conducting investment activities

b. Effect of MVA on Stock Return

The results of partial hypothesis testing states that the variable MVA significant effect on Stock Return, because the level of significance smaller than 0.05 is 0.0463. Thus it can be concluded that partially MVA has a significant influence on Return Shares on transportation companies listed on the Indonesia Stock Exchange. The value of this MVA can be used as a reference investor in investing because the higher the value of MVA then the higher the company is able to create the value of return on investment in this case is the stock return

c. Effect of EVA and MVA on Stock Return

The results of hypothesis testing, the effect of EVA and MVA values simultaneously to the Return of Shares, shows that jointly significant effect on stock return, with nignifikansi value of $0.0382 < 0.05$, so H_0 rejected and H_a accepted, which means independent variables together -the significant effect on the dependent variable. Thus it can be concluded that simultaneously or together the value of EVA and MVA have influence and significant to Return Shares at transportation companies listed in Indonesia

Stock Exchange. In this case we can know that there are other factors that affect the Return of Shares because previously expected that the positive EVA value can have a positive effect also on the Stock Return. Still the discovery of a negative Stock Return caused by market factors, economic situation, social and political as well as natural disasters.

The above results prove, if transportation companies in Indonesia can survive from global economic conditions. this is evidenced by proven EVA and MVA have significant effect together. although partially EVA variable is not significant. This does not mean that the value of the stock market in the stock market tumbles. However, the fundamental thing that Indonesia's transportation companies must keep in mind is to continue to increase the value of the company by strengthening the assets and capital aspects, so investor confidence continues to increase.

Furthermore, transport companies need to continually improve internal company weaknesses. For example by reducing operational costs, maximizing HPP, exploiting policy space as acceleration and so forth so EVA companies can improve in the future. Another thing to consider is to build both domestic and international cooperation. The goal is to build a thriving business network, where Indonesian transport companies not only thrive in but can expand internationally

CONCLUSION

Based on hypothesis test and data analysis about the influence of Economic Value Added (EVA) and Market Value Added (MVA) to Stock Return in the transportation companies listed in Indonesia Stock Exchange period 2010-2015, it can be concluded.

1. Economic Value Added (EVA) has no significant effect on Stock Return.
2. Market Value Added (MVA) has a significant effect on Stock Return.
3. Economic Value Added (EVA) and Market Value Added (MVA) simultaneously affect the Stock Return.

REFERENCES

- Abate, James A., James L. Grant, & G. Bennet Stewart III. (2004) *The EVA Style of Investing, The Journey of Portfolio Management*, 61-74
- Bambang Riyanto. 2001. *Dasar-dasar Pembelanjaan Perusahaan*. Yogyakarta: BPFE.
- Brigham, E.F. & Houston, J.F. 2001. *Manajemen Keuangan*. Edisi Kedelapan. Jakarta: Erlangga.
- Kartini, Gatot Hermawan. 2008. *Economic Value Added dan Market Value Added terhadap Return Saham*. Jurnal Keuangan dan Perbankan, Volume 12, hal 355-368.
- Sucipto. 2003. *Penilaian Kinerja Keuangan*. Jurnal Akuntansi. Universitas Sumatra Utara. Medan
- Van Horne, James C. and John M. Wachowicz. 2005. *Fundamentals of Financial: Management Prinsip-Prinsip Manajemen Keuangan*. Penerjemah: Dewi Fitriasari dan Deny Arnos Kwary. Jakarta: Salemba Empat.