

# Financial Performance Analysis Using Economic Value Added in Consumption Industry in Indonesia Stock Exchange

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## Abstract

The objective this study is analyze financial performance using economic value added of industrial consumption enterprises in the Indonesia Stock Exchange. The samples used in this study was the financial statements of industrial consumption company in the Indonesia Stock Exchange. The results found that the company's financial performance as measured by using economic value added in manufacturing industries the average consumption is negative, only PT. Ades Waters Indonesia Tbk. that have a value of positive EVA. Means that it indicates the cost of capital is greater than the operating profit after tax, so the company's financial performance is not good because they can not maximize shareholder value.

**Keywords:** EVA, Industry, IDX

## 1. Introduction

Many studies were conducted to examine the comparison between the performance of the company as measured by financial ratios and return on assets with economic value added, but if a company assessed its performance with the financial ratios and generate good judgment, but when measured with the concept of economic value added not necessarily produce good judgment, because the calculation of the company's performance through the concept of economic value added elements in the input cost of capital as one of the elements of the calculation of the company's performance and it shows consideration of the risk level of the company. Economic value added is a method used to measure the performance of a company's investment center.

Methods always take into account the economic value added over capital costs . Economic value added is a measure of financial performance calculated by subtracting the net operating profit after tax to the cost of capital . Economic value added is an indicator of the existence of a value-creating investment, economic value added is positive indicating successful company creating value for the owners of the company is in line with the objective of maximizing the value of the company . The use of economic value added method makes companies focus more on the business enterprise value creation. Understanding the value is defined as the value of the utility and benefits enjoyed by the stakeholders ( employees , investors , owners , customers ) . Calculation of economic value added is quite complex and its value is not included in the financial statements so that only investors who really understand the concept of economic value added is to be used as a basis for investment decisions , so the economic value added method is relatively difficult to implement because it requires the calculation of the cost complex . But for companies listed on the stock market may be easier to count , rather than companies that have not gone public on the stock market

## 2. Literature Review

### 2.1 Financial Performance and Measurement

The financial performance used as an outcome that can provide a picture of financial performance that can be achieved by a company. To see the achievements of a company is necessary that we analyze and interpret the financial data of the company concerned and the financial data reflected in the financial statements.

Anthony and Gouvindarajan (2002:177) said financial performance is a picture of a company's financial ability to achieve financial targets and how the condition of the company's management to the public.

According to Harahap ( 2003:151 ) financial performance benefits are as corporate performance information , especially the profitability necessary to assess potential changes in economic resources may be controlled in the future. Performance information is important in this connection , information useful for predicting the performance capacity of the enterprise to generate cash and available resources . In addition, the information is also useful in the formulation of the consideration of the effectiveness of the company in utilizing resources . By analyzing the company's financial performance will determine the development of financial management , so that the analysis process can be known weaknesses of the company's activities and the results that have been achieved are considered good that can be used in the future . The management also utilizes performance to predict the capacity of the enterprise to generate cash and existing resources in the formulation and consideration of the effectiveness of the company in utilizing resources .

## **2.2. Economic Value Added**

Economic value added is the company's goal to increase the value or the value added of sunk capital shareholders in the company's operations. Therefore Economic Value Added is the difference between operating profit after tax (Net Operating Profit After Tax or NOPAT) and capital cost (Cost of Capital). According Tandelilin (2010) economic value added is a measure of the success of the company's management to increase the value added (value added) for the company. The assumption is if either or effective performance management (seen from the added value given), it will be reflected in an increase in the company's stock price. Economic value added is positive indicates that the management company managed to increase enterprise value for company owners in accordance with the objective of financial management is to maximize corporate value

## **2.3 Objectives and Benefits of Economic Value Added**

The purpose of economic value added analysis is to measure the financial performance of a company and at the same time pay attention to the interests and expectations of funders that creditors and shareholders. Economic value added method of calculation will be obtained economically realistic as economic value added is calculated based on the cost of capital weighted average. Thus the interests of creditors and shareholders are concerned. Economic value added giving a good benchmark of whether the company has been delivering value to shareholders. Therefore, if managers focus on the economic value added will help ensure that they operate in a manner consistent to maximize shareholder value.

It is clear when compared with the traditional measuring instrument of ROE and ROA, that these gauges ignore the cost of capital, making it difficult to know whether a company has created value or not. The cost of capital is determined based on the weighted average of the interest rate and the after-tax interest rate on equity capital (Weighted Average Cost of Capital, WACC), in accordance with the proportion of debt and equity in the capital structure of the company. Interest expense on the debt is reflected in the Income Statement, while the equity cost of capital is not taken into account in the report because that is the cost of capital should be taken into account. Simply put economic value added valuation can be expressed as follows (Utama, 1997)

In addition, some of the benefits that can be obtained in the use of economic value added as a performance measure and value-added enterprises. According Single (2001) The benefits include: First, Economic value added is a measure of corporate performance that can stand alone on their own without requiring another size comparison using either its peers or analyze trends (trend). Second, the economic value added calculation results encourage the allocation of funds for investment companies with low capital costs.

## **3. Sample Data and Methods**

Sample of companies used in the study included 12 of the 21 companies that went public consumption industry in Indonesia Stock Exchange for the period 2010-2012 and the Indonesian Capital Market Directory . Companies included in the study were as follows : PT. Ades Water Indonesia Tbk, PT. Indofarma (Persero) Tbk, PT. Kimia Farma Tbk, PT. Kalbe Farma Tbk, PT. Kedawung Setia Industrial Tbk, PT. Langgeng Makmur Plastic Industries Tbk, PT. Mustika Ratu Tbk, PT. Mayora Tbk, PT. Pyridam Farma Tbk, PT. Sekar Laut Tbk, PT. Siantar TOP Tbk, dan PT. Ultra Jaya Milk Indonesia Tbk. The sample should have criteria such as company publishes financial report for three consecutive years, ie 2010-2012.

The financial statements must have a fiscal year ending December 31 and have been audited and does not use financial statements as of March 2010 as per the financial statements are not audited in March 2010 and net income for the three months to lose. This is to avoid the influence of the partial calculation of financial ratios . And financial reports interest expense is not zero as sample.

### **3.1 Variable Measurement Economic Value Added**

Economic value added is a performance indicator that is reflected through the company's profits from the company after considering the cost of the invested capital. Economic value added is the result of a reduction in the total capital cost to operating profit after tax. The cost of equity capital can be either cost of debt and cost of equity. Economic value added is able to calculate the true economic profit (true economic profit) of a company in a given year and are very different when compared to the accounting profit. The steps to calculate the economic value added (Rokhayati, quoted in Widjaja, 2001):

### 1 . Calculating NOPAT ( Net Operating After Tax )

$$\text{NOPAT} = \text{EBIT} (1 - \text{Tax Rate}) \dots \quad (1)$$

## 2 . Counting Invested Capital

Invested Capital = Total Debt and Equity - Short Term Loans Without Interest ..... ( 2.1 )

### 3. Calculating WACC ( Weighted Average Cost of Capital )

### Notation :

$$\text{Capital levels (D)} = \frac{\text{Total Debt}}{\text{Total Debt and Equity}} \times 100 \% \dots \quad (3.1.1)$$

$$\text{Cost of Debt ( rd )} = \frac{\text{Interest Expense}}{\frac{\text{Total Debt}}{\text{Total Equity}}} \times 100 \% \dots \quad ( 3.1.2 )$$

$$\text{Level of Capital & Equity ( E )} = \frac{\text{Total Equity}}{\text{Total Debt and Equity}} \times 100 \% \dots\dots\dots ( 3.1.3 )$$

$$\text{Cost of Equity ( re )} = \frac{\text{Net profit after tax}}{\text{Total Equity}} \times 100 \% \dots\dots\dots ( 3.1.4 )$$

#### 4. Calculating Capital Charges

$$\text{Charges Capital} = \text{WACC} \times \text{Invested Capital} \quad \dots \quad (4.1)$$

## 5 . Calculating the Economic Value Added

$$\text{EVA} = \text{NOPAT} - \text{Capital Charges} \quad \dots \quad (5.1a)$$

or

$$\text{EVA} = \text{NOPAT} - (\text{Invested Capital} \times \text{WACC}) \quad \dots \quad (5.1b)$$

- EVA relative formulated as follows:

$$\text{EVA relative (re)} = \frac{\text{EVA}}{\text{total Assets}} \times 100 \% \quad \dots \quad (5.2)$$

EVA criteria that performs well and does well must meet the following criteria:

- When the economic value added  $> 0$ , a process of value-added enterprises, it means either the company's financial performance.

- When the economic value added = 0, it shows the position of the company to break even.
- And if the economic value added <0, means that the total cost of capital is greater than the operating profit after tax earned, so that the company's financial performance is not good.

#### **4. Discussion**

##### **Calculating the Economic Value Added**

After calculating NOPAT , Invested Capital , WACC , Capital Charges and EVA all companies sampled ( Table 3 , 4,5,6 ) . The next step is to calculate EVA . From overall calculations in the table above for all the companies of the year 2010-2012 only PT . Ades Waters Indonesia Tbk . that generate positive EVA value . Positive EVA indicates that the rate of return generated by a company exceeds the cost of capital or the rate of return demanded by investors over its investments . While a negative EVA indicates that the rate of return demanded by investors / total cost of capital is greater than the operating profit after tax earned , so that the company's financial performance is not good . This situation shows that only the most successful companies do not create value for the owners of capital . Where the company is not able to realize the goal of the company is to maximize corporate value . Negative EVA indicates that the value of the company is reduced as a result of return investors demanded . The negative EVA due to the costs for financing capital measured by capital charge is greater than the company's NOPAT obtained . Another cause is due to the company during the year are not able to produce a profit or a loss , so that the value becomes negative NOPAT ( see Table 1 ).

**Table 1: Summary of Economic Value Added Year 2010-2012 (Rupiah)**

No	Code	<b>EVA</b>		
		2010	2011	2012
1	ADES	8,482,855,102,720.75	8,325,856,288,166.28	968,787,989,707.35
2	INAF	(1,050,835,607,248.55)	(1,053,980,077,738.60)	(1,277,635,511,367.30)
3	KAEF	(2,939,129,674,681.77)	(3,579,260,662,124.20)	(3,561,007,135,096.73)
4	KLBF	(65,172,490,085,651.70)	(63,460,034,179,327.00)	(62,522,873,643,405.50)
5	KDSI	(988,230,880,474.56)	(1,605,902,426,274.64)	(835,865,078,795.03)
6	LMPI	(1,395,037,246,924.43)	1,274,560,006,554.02	(1,507,186,941,974.39)
7	MYOR	(10,713,813,431,699.30)	(14,573,525,670,325.00)	(19,646,639,614,165.50)
8	MRAT	(804,199,786,745.79)	(923,046,039,296.03)	(1,775,628,531,005.17)
9	PYFA	(254,586,882,107.43)	(272,137,673,793.19)	(311,078,943,753.48)
10	SKLT	(366,784,799,583.38)	(367,579,907,027.88)	(519,844,827,118.84)
11	STTP	(1,202,119,823,257.37)	(1,394,886,033,957.67)	(990,932,653,789.85)
12	ULTJ	(3,800,664,336,770.20)	(6,008,249,627,280.31)	(28,106,703,935,309.40)

Source: Data processed in 2014

The results of the calculation of EVA relative to see the added value of the company into investors' expectations have also found ADES Company produces relatively positive EVA ( Table 2 ) . For the financial performance. Ades Waters Indonesia Tbk . EVA relative value in 2010 is 36.37 % , then in 2011 was 46.58 % , up by 10.21 % . As for the year 2012 into a 5.24 % decrease or a decrease of 41.34 % . Then for PT . Indofarma . Financial performance in 2010 was -1.53 % , in 2011, an increase from -1.53 % to -1.04 % , a rise of 0.49 % in 2012 and a decrease of -0.28 % to the value of EVA relative of -1.32 % . Similarly to other companies , there is an increase in the first year and then decline in the second year and again increase in the third year , and vice versa . One measure of performance is directly related to the EVA intrinsic condition of the company . The concept of economic value added measures the value added by reducing the cost of capital arising from investments made by the company .

**Table 2: Summary of Relative Value EVA Years 2010-2012 (%)**

No	Code	Relative Value EVA		
		2010	2011	2012
1	ADES	36,37	46,58	5,24
2	INAF	-1,53	-1,04	-1,32
3	KAEF	-2,33	-2,58	-2,46
4	KLBF	-14,09	-12,35	-10,96
5	KDSI	-2,25	-3,06	-1,72
6	LMPI	-2,74	2,40	-2,69
7	MRAT	-6,90	-7,70	-6,72
8	MYOR	-2,76	-2,92	-5,00
9	PYFA	-3,06	-2,90	-3,15
10	SKLT	-3,87	-2,01	-2,59
11	STTP	-2,57	-2,70	-1,60
12	ULTJ	-3,04	-4,41	-16,15

Source: Data processed in 2014

From the data it was clear that among the 12 companies only one company , namely PT . Ades Waters Tbk appears logical that demonstrate positive financial performance or  $EVA > 0$ , which means the company is able to generate economic value through its operational activities to be able to pay all of its obligations to fund providers and the government ( taxes) and also able to generate higher profits for the company . While 11 other companies , the value is negative  $EVA$  or  $EVA < 0$  . But among all 11 companies, there is a company that is PT. Langgeng Makmur Plastic Industries Tbk in 2010  $EVA$  is negative , then in 2011 became positive  $EVA$  or  $EVA > 0$  , but the following year decline again be negative so  $EVA < 0$  . The results of this study means that the lower the  $EVA$  company Industrial Consumption means the consumption industry company performance would be lower anyway

Measurements have negative  $EVA$  meaning no added value for the company, will be responded to declining performance of the company so that the rate of return ( return ) will decline or not the company managed to create added value for the company's investors . This is not in line with the objective of maximizing the value of the company . In other words , economic value added is negative indicates that the value of the company declined due to cost of capital is higher than the operating profit after tax ( Utama, 1997) .

From the results of this analysis indicate that the consumption of industrial companies in the financial performance analysis with  $EVA$  result is negative . This is probably one of the drawbacks of  $EVA$ , this is in line as proposed by Mirza dan Imbuah (1999 ) which states that the  $EVA$  analysis has weaknesses . The weakness is caused due to the possibilities that the  $EVA$  calculation only refers to the final outcome, so that this concept does not measure activities such as the determinants of customer loyalty and retention rates . Then capital issued by the company bigger and have more debt than the operating profit earned , on the other hand the company has yet to optimize cost efficiency , as well as the possibility of expansion of the company in the future . Another possibility because  $EVA$  is too concentrated on the belief that investors rely heavily fundamental approach in assessing and making decisions to buy and sell a particular stock , but other factors are even more dominant . This concept also depends on internal transparency in the calculation of  $EVA$  accurately , less transparent corporate constraint in expressing its internal state.

### **Conclusions and Recommendations**

Based on the results of the analysis of the conclusions of this study is that the company 's financial performance is measured by using the company's Economic Value Added Industrial Average consumption is negative . Of the 12 companies that were visited only PT . Ades Waters Indonesia Tbk . which has a positive  $EVA$  or  $EVA > 0$  . While others produce negative  $EVA$  or  $EVA < 0$  , means that the total cost of capital is greater than the operating profit after tax earned , so that the company 's financial performance is not good because it can maximize the value of the company.

Researchers propose suggestions for further research that companies should be able to improve the performance of the company in generating profits and minimize costs for the company to achieve its objectives

Then the company should be more transparent in its financial reports published either profit or loss, so the company can evaluate the financial performance of the company. Even companies should demonstrate their financial statements using EVA analysis , so that investors can actually determine the condition of the performance of the company and they can make decisions about how much investment will be made in the future.

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### **Appendices**

#### 1. Calculation of NOPAT

**Table 3: Summary of NOPAT Years 2006-2008 (Rupiah)**

No	Code	NOPAT		
		2006	2007	2008
1	ADES	(127,842,000,000)	(35,875,000,000)	(37,223,000,000)
2	INAF	37,409,903,957	33,712,543,496	58,184,983,373
3	KAEF	46,290,404,314	47,219,225,790	66,324,487,354
4	KLBF	(2,185,961,481,661)	782,334,545,272	790,195,183,924
5	KDSI	19,148,891,820	26,046,765,650	29,179,800,028
6	LMPI	15,637,682,742	4,139,188,867	20,198,990,337
7	MRAT	13,578,704,515	14,612,119,809	15,745,993,687
8	MYOR	127,069,926,971	175,503,117,368	272,939,423,253
9	SKLT	2,945,776,359	3,279,495,399	4,820,379,545
10	STTP	2,518,601,998	(4,808,566,525)	10,187,170,278
11	ULTJ	21,377,784,212	34,809,644,431	28,030,483,791
12	UNVR	77,286,292,208	65,031,474,761	(102,087,390,232)

Source: Data processed in 2010

The size of NOPAT will be affected by the operating income and the tax burden borne by the company. If the operating profit and the tax burden is high, then the value will be higher NOPAT and EVA impact on the value. Conversely, if the operating profit and the tax burden is low, then the value will be lower NOPAT and EVA can lead to a negative value for the company.

#### 2. Calculation of Invested Capital

**Table 4: Summary of Invested Capital Years 2006-2008 (Rupiah)**

No	Code	Invested Capital		
		2006	2007	2008
1	ADES	188,207,000,000	137,153,000,000	154,049,000,000
2	INAF	338,937,870,603	572,922,238,542	630,265,341,122
3	KAEF	1,022,099,726,124	1,050,126,356,080	1,148,269,184,184
4	KDSI	4,004,522,159,951	4,429,735,797,425	4,858,473,528,512
5	KLBF	305,822,571,954	316,815,689,472	360,626,686,146
6	LMPI	462,177,746,261	487,394,411,218	509,733,990,050
7	MRAT	1,369,704,222,709	1,607,052,257,636	2,383,198,142,066
8	MYOR	273,472,380,634	290,370,763,610	315,570,023,377
9	PYFA	79,854,610,535	86,589,035,569	90,234,074,103
10	SKLT	57,850,203,867	135,521,492,817	149,686,596,369
11	STTP	385,621,272,511	447,116,686,832	519,605,442,349
12	ULTJ	1,178,522,334,496	1,255,862,363,068	1,468,561,302,418

Source: Data processed in 2010

Value "Invested Capital" will greatly affect the value of EVA. Because "Invested Capital" as a multiplier above "Weighted Average Cost of Capital" which will produce "Capital Charges," The greater the "Invested Capital", the larger the value of "Capital Charges" as a reduction of NOPAT.

### 3. Computation of Weighted Average Cost Of Capital (WACC)

**Appendix: Table 5 Summary of WACC Years 2006-2008 (%)**

No	Code	Weighted Average Cost Of Capital (%)		
		2006	2007	2008
1	ADES	(45.75)	(69.07)	(6.53)
2	INAF	3.13	1.90	2.12
3	KAEF	2.92	3.45	3.16
4	KDSI	15.73	14.50	13.03
5	KLBF	3.29	5.15	2.40
6	LMPI	3.05	(2.61)	3.00
7	MRAT	7.83	9.08	8.22
8	MYOR	3.41	3.78	6.49
9	PYFA	3.23	3.18	3.50
10	SKLT	5.95	2.68	3.54
11	STTP	3.17	3.20	1.96
12	ULTJ	3.29	4.84	19.07

Source: Data processed in 2010

At the company experienced an increase or decrease in the value of the WACC can be caused on two factors, namely the decrease or increase in the value of the cost of debt ("cost of debt") or due to decline or rise in the cost of equity ("cost of equity"). While the proportion of debt and equity as a proportion of the variables that have no effect because the results of the composition of total capital (debt plus equity). Overall WACC value determines the size of the acquired company's EVA. Because the WACC as multiplication on capital ("capital charges").

### 4. Calculate "Capital Charges"

**Appendix: Table 6 Summary of "Capital Charges" Year 2006-2008 (Rupiah)**

No	Code	<b><i>Capital Charges</i></b>		
		2006	2007	2008
1	ADES	(8,610,697,102,720.75)	(9,473,133,860,054.10)	(1,006,010,989,707.35)
2	INAF	1,060,464,542,377.15	1,087,692,621,234.60	1,335,820,494,740.30
3	KAEF	2,985,420,078,995.77	3,626,479,887,914.20	3,627,331,622,450.73
4	KLBF	62,986,528,603,990.70	64,242,368,724,599.00	63,313,068,827,329.50
5	KDSI	1,007,379,772,294.56	1,631,949,191,924.64	865,044,878,823.03
6	LMPI	1,410,674,929,666.43	(1,270,420,817,687.02)	1,527,385,933,390.11
7	MRAT	10,727,392,136,214.30	14,588,137,790,134.00	19,580,226,152,426.60
8	MYOR	931,269,713,716.79	1,098,549,153,259.09	2,048,567,954,258.17
9	PYFA	257,532,658,466.43	275,417,169,192.19	315,899,323,298.48
10	SKLT	343,967,182,729.15	362,771,340,502.88	530,031,997,396.84
11	STTP	1,223,497,607,469.37	1,429,695,678,388.67	1,018,963,137,580.85
12	ULTJ	3,877,950,628,978.20	6,073,281,102,041.31	28,004,616,545,077.40

Source: Data processed in 2010

For reducing NOPAT, Capital charges significantly influence the EVA. If the capital charges is greater than the value of NOPAT will produce a negative EVA value. This indicates that the value of the firm is reduced as a result of the rate of return was lower than the rate of return demanded by investors. On the other hand, if the "capital charges" is smaller than the value of NOPAT, it will generate positive EVA value. This indicates that the rate of return generated in excess of the cost of capital rate.