

# Corporate Financial Performance Assessment using Economic Value Added Method

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**Abstract:** The purpose of this study is to find out the financial performance of PT Jaya Agra Wattie Tbk in 2015 up to 2017 based on the EVA method. This research uses descriptive analysis method. Data sources in the form of financial statements of PT Jaya Agra Wattie Tbk for the period 2015-2017 were obtained from the Indonesia Stock Exchange website. From data analysis based on EVA method shows poor performance because for 2 years EVA company research shows a negative value ( $EVA < 0$ ), and 1 year the company shows a positive value ( $EVA > 0$ ). In 2015 positive EVA value of Rp.7.460.451.257 shows that the company is able to create added value for its shareholders. While the year 2016 to 2017 was less good, where  $EVA < 0$ , 2016 amounted EVA -Rp.68,025,625.37. Then in 2017 the EVA value decreases to -Rp. 225,973,196,925. this indicates that the company has not been able to create added value for its shareholders.

## 1 INTRODUCTION

Economic conditions in Indonesia that are constantly changing and not fixed with the development of technology make a company continue to compete to maintain the existence of its company. This condition requires a company to make improvements in various fields. One of them is in finance.

Every company established aims to gain profits or profits and maximize the wealth of its shareholders. Besides that, it also aims to maintain the survival of the company properly so that the company can develop in accordance with the activities carried out in the future (Neysa, 2017).

Financial management has an important role in managing the company's finances, so financial management is required to carry out its functions effectively. The management of the company in carrying out its business requires a financial performance measurement tool to evaluate its company (Dewi, 2017). According to (Fahmi, 2013), financial performance is an analysis conducted to see the extent to which a company has implemented it using the rules of financial implementation properly and correctly. The measurement of the company's financial performance arises as a result of

the management decision-making process. This is a more complex job because it will involve the effectiveness of the use of capital, efficiency and profitability of the company.

Assessing financial performance by using financial ratios only oriented to profit oriented, but at this time the company is required not only to be profit oriented but also to be value oriented. To overcome these weaknesses, the Economic Value Added method is used (Dewi, 2017).

According to (Sawir, 2001) EVA (Economic Value Added) is an indicator of the addition of the value of an investment. EVA (Economic Value Added) shows a good measure to what extent the company has added value to the owners of the company. In other words, if management focuses on EVA (Economic Value Added), then they will make decisions that are consistent with the aim of maximizing the prosperity of the owner of the company. If EVA (Economic Value Added) value is positive, then operating profit after tax exceeds the capital cost needed to generate the profit, and management actions add value to shareholders (Iswandira, 2015).

Application of Economic Value Added (EVA) in a company will focusing more on the creation of corporate value, this is one of the hallmarks of Economic Value Added. With this approach,

shareholders can see how much value the company has achieved.

PT Jaya Agra Wattie Tbk. or commonly abbreviated as JAWA is one company that is engaged in agribusiness. JAWA was listed on Indonesia Stock Exchange in 2011 under the Main Board. The company was founded in 1921 and based in Jakarta, Indonesia. The company operates in the cultivation, processing, agricultural logistics and marketing activities of rubber, crude palm oil (CPO), coffee and tea.

The PT Jaya Agra Wattie Tbk profit (loss) report, based on the 2015 to 2017 financial statements, can be seen in the following table 1:

Table 1: The Profit (Loss) Report is presented in Rupiah.

Year	Loss
2015	( 11,715,503,160)
2016	(225.132,640,088)
2017	(199,929,077,450)

Source: Financial Statements of PT Jaya Agra Wattie Tbk.

From table 1, it can be seen that PT Jaya Agra Wattie Tbk from 2015 to 2017 continues to suffer losses. This continuous loss of the company will make the company considered bad in earning profits and bankruptcy can occur, thus financial performance analysis is needed to evaluate the company's performance in financial terms. The aim to be achieved in this study is to find out the financial performance of PT Jaya Agra Wattie Tbk using the Economic method Value Added (EVA).

## 2 THEORICAL FRAMEWORK

Analyzing financial statements means digging up more information contained in a financial report. Definition of financial statement analysis according to (Harahap, 2011) Outlines financial statement posts into smaller units of information and see their relationships that are significant or that have meaning between one another between quantitative data and non-quantitative data with the aim of knowing deeper financial conditions that are very important in the process of producing the right decisions.

(Fahmi, 2013) financial performance is an analysis carried out to see the extent to which a company has implemented it using the rules of financial implementation properly and correctly. Financial Performance Assessment can be assessed by calculating financial ratios. It can be concluded that financial performance is an assessment

conducted to determine the extent to which the condition of the company is by using comparisons and applicable rules (Tanor, 2015).

The purpose of evaluating the performance of a company according to (Sucipto, 2007) is as follows:

1. Manage organization operations effectively and efficiently through maximum employee motivation. In managing the company, management determines the goals to be achieved in the future and in the process is called planning.
2. Helping decision making concerned with employees such as promotions, transfers and dismissals. Performance appraisal will produce data that can be used as the basis for making decisions related to employees who are judged based on their performance.
3. Identify employee training and development needs and to provide selection and evaluation criteria for employee training programs. If topmanagement does not recognize the shortcomings and weaknesses it has, it is difficult for management to evaluate and select employee training programs that are in line with employee needs.
4. Provide feedback for employees about how their supervisors assess their performance. In corporate organizations, management over delegates part of its authority to management under them.
5. Providing a basis for the distribution of awards. The results of these measurements can also be used as evaluation tools for management performance so far whether they have worked effectively or not.

Along with the development of theory and knowledge, there are many new ideas in the field of financial management to measure the financial performance of a company. One of them is Economic Value Added (EVA) that measures the performance of companies by taking into account the important role of funders (creditors and shareholders).

According to (Young, and O'Byrne, 2001) "EVA is an effective communication tool both for value creation that can be reached by line managers which ultimately drives the company's performance and to connect with the capital market". EVA is able to calculate the actual economic profit or True Economic Profit of a company in a given year and is very different compared to accounting profit.

According to (Hansen, and Mowen, 2009) "EVA is the residual profit with the cost of capital equal to the actual capital cost of the company (instead of a

minimum rate of return desired by the company for other reasons)".

(Rudianto, 2006) in EVA, the assessment of financial performance is measured by the following provisions:

1. If  $EVA > 0$ , then the company's financial performance can be said to be good, so that there is a process of changing its economic value.
2. If  $EVA = 0$ , then the company's financial performance is economically break-even.
3. If  $EVA < 0$ , then the company's financial performance is said to be less good because the profits obtained do not meet the expectations of funders, so there is no additional economic value to the company.

The purpose of implementing EVA is expected to get a more realistic calculation of the company's economic value. This is caused by EVA calculated based on the calculation of capital costs that use market value based on the interests of creditors, especially the shareholders and not based on historical book values.

### 3 RESEARCH METHOD

This research uses a descriptive method. The object of research is PT Jaya Agra Wattie Tbk. Which is one of the companies engaged in agribusiness that is listed on the Indonesia Stock Exchange. The source through the website <https://www.jawattie.com/> is in the form of information that is in the form of numbers and financial statements of PT Jaya Agra Wattie Tbk for the period 2015-2017 obtained from the Indonesia Stock Exchange.

The analysis tool used is Economic Value Added (EVA). The steps in calculating EVA are as follows:

1. Calculate Economic Value Added (EVA). With formula used (Sartono, 2010) :

$$EVA = NOPAT - (WACC \times \text{Invested Capital})$$

2. Determine Net Operating Profit After Tax (NOPAT). The formula used (Brigham and

Houston, 2010):

$$NOPAT = EBIT (1 - T)$$

Information:

NOPAT = Net Operating Profit After Tax

EBIT = Earnings Before Interest and Tax

T = Tax Level

3. Capital Costs (Capital Charges). The formula used is as the following (Margaretha, 2011): Cost of Capital = Invested Capital x WACC

- a. WACC counted with formula (Margaretha, 2011):

$$WACC = W_d K_d + W_e K_e$$

$W_d$  = Total liabilities / Total liabilities + Equity

$W_e$  = Total equity / Total liabilities + Equity

Information:

WACC = Weighted Average Cost of Capital

$W_d$  = Amount of Debt to Structure Capital

$W_e$  = Amount of Capital to Structure Capital

$K_d$  = cost of debt

$K_e$  = cost of equity

- 1) Cost Debt (Cost of Debt) To calculate the debt costs of a company are as follows (Margaretha,

2011):

$$K_d = k_{dbt} (1 - T)$$

$k_{dbt}$  = interest expense / long term debt

T = tax expense / net profit before tax x 100%

Information:

$K_d$  = After-tax debt costs

$K_{dbt}$  = interest expense before tax debt

T = Tax rate

- 2) Cost Equity (Cost of Equity) According to (Prawiranegoro, 2008), cost of equity could searching for with use ROE (Return On Equity). ROE can searching for with use formula :

$$k_e = ROE = \text{net income after tax} / \text{total equity}$$

- b. Invested Capital (Invested Capital) With the following formula (Young, and O'Byrne, 2008):

Invested capital = long-term debt + equity

### 4 ANALYSIS

In order to analyze and assess the financial performance of PT Jaya Agra Wattie Tbk, economic value added (EVA) is used. To calculate EVA, the financial data needed is:

1. NOPAT ( Net Operating Profit After Tax )
2. WACC ( Weight Average Cost of Capital )
3. Total Capital that Invested (Invested Capital )

- a. NOPAT Analysis ( Net Operating Profit After Tax )      NOPAT calculation results of PT Jaya Agra Wattie Tbk as shown in the table below this :

Table 2: Calculation of NOPAT 2015 – 2017 (expressed in Rupiah).

NOPAT component	Year		
	2015	2016	2017
EBIT	76,593,643,005	4.103.437.116	1,422,183,930
Tax expense	(8,916,814,827)	(2,576,736,349)	34,321,928,850
Profit before tax	-2,798,688,333	222,555,903,739	234,251,006,300
Tax	76.11%	1.14%	-17.17%
1- Tax	0.24	0.99	1.17
NOPAT	18,297,270,901	4,056,471,578	1,666,330,986

Source: PT. Jaya Agra Wattie Tbk. Processed (2018).

Based on the NOPAT (Net Operating Profit After Tax) calculation in the table above, it indicates that the value of NOPAT of PT Jaya Agra Wattie Tbk in 2015 amounted to Rp.18,297,270,901 in 2016 NOPAT decreased to Rp.4,056,471.578, this decrease is due to a decrease in Earning Before Interest Tax from Rp.76,593,643,005. in 2015 became Rp.4,103,437,116 in 2016. Then in 2017 NOPAT PT. Jaya Agra Wattie Tbk again experienced a significant decline to Rp.1,666,330,986, this is because PT. Jaya Agra Wattie Tbk has decreased again or in other words obtained EBIT (Earning Before Interest Tax) of Rp.1,422,183,930.

Based on the description above it can be seen that from 2015 to 2017 the NOPAT company

experienced a decline. The company's operating profit can be increased without additional capital, meaning that management can use the company's assets efficiently to make a profit optimal.

- b. WACC (Weight Average Cost of Capital) Analysis

After calculating NOPAT , the second step in calculating EVA is calculating the company's WACC. The weight in the average cost of capital is measured by the target capital structure of the company, which is the proportion of various components of the company's capital for its investment funds. The results of the WACC calculation of PT Jaya Agra Wattie Tbk as shown in the table below:

Table 3: WACC calculations 2015 - 2017 (expressed in Rupiah).

Component WACC	Year		
	2015	2016	2017
Interest expense	79,392,331,338	226,659,340,855	235,673,190,230
Long-term Liabilities	1,626,712,445,984	1,594,844,261,850	1,197,888,515,756
Tax	76.11%	1.14%	-17.17%
1- Tax	0.24	0.99	1.17
$K_d$	1.17%	14.05%	23.05%
Total Amoun of debt	2,078,210,962,892	2,240,797,394,458	2,472,502,548,901
Total Equity	1,289,940,799,377	1,050,319,497,420	839,979,442,737
Total Amoun of debt + Total Equity	3,368,151,762,269	3,291,116,891,878	3,312,481,991,638
$W_d$	61.70%	68.09%	74.64%
$W_e$	38.30%	31.91%	25.36%
Net profit after tax	(11,715,503,160)	(225.132,640,088)	(199,929,077,450)
ROE	-0.91%	-21.43%	-23.80%
WACC	0.37%	2.73%	11.17%

Source: PT. Jaya Agra Wattie Tbk. Processed (2018),

Based on WACC calculation in table 3,it appears that the weighted average cost or WACC PT Jaya

Agra Wattie Tbk in 2015 that is equal to 0.37%. WACC in 2016 an increase of 2.73% and 2017

WACC has increased significantly to 11.17%, this was due to a decline in the cost of equity in this case ROE the company becomes -23.80%.

Based on the description above, it can be seen that from 2015 to 2017 the company has not succeeded in reducing the weighted average capital cost (WACC). This will make the company produce a negative EVA so that it can not provide economic added value for the company. A company can

increase its economic added value if it gets a greater return than WACC.

c. Analysis of Total Capital Invested (Invested Capital)

Furthermore, the third step in the calculation of EVA is to calculate the company's invested capital .

The results of the calculation of PT Jaya Agra Wattie Tbk 's Invested Capital as shown in the table below:

Table 4: Invested Capital calculations 2015 - 2017 (expressed in Rupiah)

Invested Component	Capital	Year		
		2015	2016	2017
Long-term debt		1,626,712,445,984	1,594,844,261,850	1,197,888,515,756
Equity		1,289,940,799,377	1,050,319,497,420	839,979,442,737
Invested Capital		2,916,653,245,361	2,645,163,759,270	2,037,867,958,493

Source: PT. Jaya Agra Wattie Tbk. Processed (2018).

Based on calculations, Table 4 explains that Invested Capital (IC) PT. Jaya Arga Wattie Tbk in 2015 which is Rp.2,916,653,245,361. For 2016 the IC has decreased to Rp.2,645,163,759,270. In 2017 IC PT. Jaya Arga Wattie Tbk which again decreased to Rp.2,037,867,958,493.

From this explanation shows that the total capital invested in the year 2015 until 2017 has decreased. This is due to the decrease in the number of loans and equity

Table 5: Calculation of EVA 2015 - 2017 (expressed in Rupiah).

Component EVA	Year		
	2015	2016	2017
NOPAT	18,297,270,901	4,056,471,578	1,666,330,986
WACC	0.37%	2.73%	11.17%
Invested Capital	2,916,653,245,361	2,645,163,759,270	2,037,867,958,493
Capital Costs (WACC x IC)	10,836,819,644	72,082,096,950	227,639,527,911
EVA	7,460,451,257	-68,025,625,372	-225,973,196,925

Source: PT. Jaya Agra Wattie Tbk. Processed (2018).

d. EVA Analysis (Economic Value Added)

After the calculation of NOPAT, WACC and Incested Capital (IC). Furthermore, the value of the company EVA can be calculated . Economic Value Added (EVA) is the remaining profit after deducted by all capital costs used to generate profits (Sartono, 2010).

The results of the calculation of EVA PT. Jaya Arga Wattie Tbk as shown in table 5 below. Based on the results of the EVA calculation in Table 5 shows that the value of EVA PT. Jaya Arga Wattie Tbk in 2015 was Rp.7,460,451.257 positive EVA values indicate that the management of PT. Jaya Arga Wattie Tbk is able to create added value for its shareholders. In 2016 the value of EVA negative ie -Rp.68,025,625,372 due to an increase in the WACC to 2.73%, so that the cost of capital is greater than

the operating profit after tax, the management of PT. Jaya Arga Wattie Tbk has not been able to create added value for its shareholders. In 2017 EVA value has a significant decrease and is still negative, namely -Rp.225,973,196,925, which was caused by a decrease in NOPAT to Rp.1,666,330,986, the management of PT. Jaya Arga Wattie Tbk has not been able to create added value for its shareholders.

From this explanation it can be concluded that in the year 2015 the company produced the value of  $EVA > 0$ , meaning EVA is positive That is because the company is able to generate a return on operating profit after tax that exceeds the cost of capital. But in 2016 to 2017 the company produces an value  $EVA < 0$ , meaning EVA is negative because the company is unable to produce a return on operating profit after tax that exceeds the cost of capital.



Negative EVA indicates that the company has not been able to create value added wealth of the company and its shareholders.

## 5 RESULTS

In this study, performance appraisal measured using the EVA (Economic Value Added) method can be restated in a summary of the results of EVA calculations derived from table 2 and table 5 displayed again in table 6:

Table 6: Calculation of Company Performance 2015 – 2017 (expressed in Rupiah):

Information	Year		
	2015	2016	2017
NOPAT	8,297,270,9014,056,471,578	1,666,330,986	
Capital Costs	10,836,819,64472,082,096,950	227,639,527,911	
EVA	7,460,451.257 -68,025,625,372	-25,973,196,925	

Source: Table 2 and Table 5, processed (2018).

Based on Table 6, it can be seen that the fluctuations in the NOPAT value achieved by PT. Jaya Arga Wattie Tbk from 2015 continued to decline until 2017. The decline in NOPAT companies from 2015 to 2016 reached by 78%. NOPAT then again decreased in 2017 by 59%.

Capital costs at PT. Jaya Arga Wattie Tbk from 2015 to 2016 there was an increase of 85%. And from 2016 to 2017 capital costs have increased again by 68.3%. The cost of capital incurred by the company is greater than the operating profit after tax achieved by the company. This is what resulted in the value of EVA at PT. Jaya Arga Wattie Tbk is worth negative.

EVA achieved by PT. Jaya Arga Wattie Tbk in 2015 of Rp.7,460,451.257 . Then in 2016 until 2017 there was a drastic decrease of -232% from -Rp. 68,025,625,372 to -Rp.225,973,196,925. The EVA value achieved by PT. Jaya Arga Wattie Tbk is  $EVA < 0$ , which means EVA is negative because the after-tax operating profit (NOPAT) is smaller than the capital cost (WACCx IC) resulting in a negative EVA (Sawir, 2009).

Based on EVA calculations from the year 2015-2017, company management has not been able to create a positive EVA value, which means the company has not been able to increase operating profit after tax and the company has not been able to reduce the cost of capital. Although the value of EVA is still negative, but by entering EVA values

into the company's financial statements, investors can see the true value of the company. To be able to create added value the company can be done by means of companies must be able to increase operating profit without additional capital. Because if NOPAT increases while the cost of fixed capital, then the company EVA increase.

The results of the research on the development of Teaching Materials for Problem Based Learning Strategy include: 1) student worksheet; 2) learning strategy material; and 3) problem-based evaluation instruments.

Student worksheets are developed to help students understand the teaching material for learning strategies. Student worksheets are designed to adopt problem-based learning steps which include: 1) problem orientation; 2) learning organization; 3) individual or group investigations; 4) development and presentation of problem solving results; 5) analysis and evaluation of the problem solving process.

Teaching materials designed include: 1) learning theory in learning; 2) basic concepts of learning strategies; 3) 21st century learning strategies; 4) learning approach; 5) learning methods and techniques; 6) learning models; 7) teaching factory; 8) strengthening character education.

Evaluation instruments designed include: 1) problem-based problem instruments; and 2) assessment guidelines.

## 6 CONCLUSIONS

Based on the results of research and discussion conducted by researchers at PT. Jaya Arga Wattie Tbk, it can be concluded that company performance based on analysis of Economic Value Added (EVA) from 2016 to 2017 is not good , where  $EVA < 0$ , that is, for 2 consecutive years EVA companies show negative values. In 2016 the EVA value was -Rp. 68,025,625.37. Then in 2017 the EVA value decreases to -Rp.225,973,196,925 .

Value  $EVA < 0$ , which means EVA is negative because the company is unable to produce a return on operating profit after tax that exceeds the cost of capital. This means that the company's management has not been able to create added value for the company and has not been able to create added value for shareholders.

## REFERENCES

- Brigham, Eugene and Houston, Joel F. (2010) *Financial Management*. Jakarta: Erlangga.
- Dewi, M. (2017) 'Penilaian Kinerja Keuangan Perusahaan dengan Menggunakan Metode EVA (Economic Value Added) (Studi Kasus pada PT. Krakatau Steel Tbk Periode 2012-2016)', *Jurnal Manajemen dan Keuangan*, 6(1), pp. 648–659.
- Fahmi, I. (2013) *Analysis of Financial Statements*. Bandung: Alfabeta.
- Hansen, Dor R and Mowen, M. (2009) *Managerial Accounting*. Jakarta: Salemba Empat.
- Harahap, S. S. (2011) *Critical Analysis of the First Edition of Financial Statements*. Jakarta: PT. Raja Grafindo Persada.
- Iswandira, A. Nurhayati, I. dan Suharti, T. (2015) 'Analisis Economic Value Added (Eva) Dan Market Value Added (Mva Sebagai Alat Untuk Mengukur Kinerja Keuangan Perusahaan Pt.Indofood Sukses Makmur Tbk.', *jurnal ilmiah inovator*.
- Margaretha, F. (2011) *Financial Management for Non-Financial Managers*. Jakarta: Erlangga.
- Neysa, Irena A. Murni, S dan Tumiwa, J. (2017) 'Analisis Kinerja Keuangan Dengan Menggunakan Metode Economic Value Added (Eva) Pada Perusahaan Plastik Dan Kemasan Yang Terdaftar di Bursa Efek Indonesia Periode Tahun 2011-2015', *jurnal EMBA*, 5(2), pp. 433–442.
- Prawiranegoro, and Purwati. (2008) *Management Accounting*. 2nd edn. Jakarta: Mitra Wacana Media.
- Rudianto (2006) *Management Accounting*. Jakarta: Gransindo.
- Sartono, A. (2010) *Financial Management Theory and Application*. Yogyakarta: BPFE.
- Sawir, A. (2001) *Financial Performance Analysis and Corporate Financial Planning*. Jakarta: PT Gramedia
- Main Library. Sucipto (2007) *Financial Performance Assessment*. Jakarta: Salemba Empat.
- Tanor, Melissa O. Sabijono, H dan Walandouw, Stanley Kho. (2015) 'Analisis Laporan Keuangan Dalam Mengukur Kinerja Keuangan Pada Pt. Bank Artha Graha Internasional, Tbk', *jurnal EMBA*, 3, pp. 639–649.
- Young, S. David and O'Byrne, S. F. (2001) *Value Based Management*. Jakarta: Salemba Empat.
- Young, S. David and O'Byrne, S. F. (2008) *EVA and Value Based Management*. Jakarta: Salemba Empat.