

## Analysis of Company Financial Performance Using EVA & MVA at PT. Adaro Energy Tbk. Period 2016-2020

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### Abstract

*This study aims to analyze and evaluate the company's financial performance using Economic Value Added (EVA) and Market Value Added (MVA) at PT. Adaro Energy Tbk. 2016-2020 period. This research uses quantitative research. Using secondary data in the form of financial reports and annual reports at PT. Adaro Energy Tbk for the 2016-2020 period published by the Indonesia Stock Exchange. Data collection techniques using the method of documentation. The results showed the results of the analysis of the financial performance of PT. Adaro Energy Tbk using EVA is said to be good because the EVA value is  $> 0$ . By using the EVA method through its translation in the form of NOPAT, Investor Capital, WACC, and Capital Charges, the final value of EVA is positive in the 2016-2020 period. The results of the analysis of the financial performance of PT. Adaro Energy Tbk using MVA is said to be good because the MVA value is  $> 0$ . Using the MVA method a positive value is obtained in the 2016-2020 period.*

*Keywords: Financial Performance, EVA, MVA*

### Abstrak

Penelitian ini bertujuan untuk menganalisis dan mengevaluasi kinerja keuangan perusahaan menggunakan *Economic Value Added* (EVA) dan *Market Value Added* (MVA) pada PT. Adaro Energy Tbk. Periode 2016-2020. Penelitian ini menggunakan jenis penelitian kuantitatif. Menggunakan data sekunder berupa laporan keuangan dan laporan tahunan pada PT. Adaro Energy Tbk periode 2016-2020 yang diterbitkan oleh Bursa Efek Indonesia. Teknik pengumpulan data menggunakan metode dokumentasi. Hasil penelitian menunjukkan bahwa Hasil analisis kinerja keuangan PT. Adaro Energy Tbk menggunakan EVA dikatakan baik karena nilai EVA  $> 0$ . Dengan menggunakan metode EVA melalui penjabarannya berupa NOPAT, Investor Capital, WACC, dan Capital Charges didapatkan nilai akhir EVA positif pada periode 2016-2020. Hasil analisis kinerja keuangan PT. Adaro Energy Tbk menggunakan MVA dikatakan baik karena nilai MVA  $> 0$ . Dengan menggunakan metode MVA didapatkan nilai positif pada periode 2016-2020.

Kata kunci: Kinerja Keuangan, EVA, MVA

## INTRODUCTION

Adaro's history begins with the global oil shock in the 1970s. This has resulted in the Government of Indonesia revising its energy policy to focus on including coal as fuel for domestic use. With the increasing emphasis on coal in 1976, the Ministry of Mines divided East and South Kalimantan

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into 8 coal blocks and opened a tender for the Tanjung area, South Kalimantan, because coal is known to exist in the area according to outcrops that Dutch geologists mapped out of high quality.

Financial performance is the determination of certain measures that can measure the success of an organization or company in forming profits (Sa'diyah & Hilabi, 2022). The financial performance of a company can be obtained from the information presented through a financial report in one period (Wahidah & Lubis, 2017). Assessment of financial performance can be seen in the financial statements owned by the company concerned which is reflected in the information obtained in the financial statements as well as other things that also support the strengthening of the financial performance (Fahmi, 2012).

**Table 1.** Summary of Financial Statements of PT. Adaro Energy Tbk.

Description	Years				
	2016	2017	2018	2019	2020
Asset	6,522,257	6,814,147	7,060,755	7,217,105	6,381,566
Liability	2,736,375	2,722,520	2,758,063	3,233,710	2,429,852
Equity	3,785,882	4,091,627	4,302,692	3,983,395	3,951,714
Profit/Loss	587,618	951,825	891,912	617,542	284,897

**Table 2.** Share Price of PT. Adaro Energy Tbk.

Years	Year-End Closing Stock Price	Difference (%)
2016	1695	-
2017	1860	10%
2018	1215	-35%
2019	1487	22%
2020	1430	-4%

From the summary of the financial statements of PT. Adaro Energy Tbk. it can be seen the total assets, liabilities and equity of PT. Adaro Energy Tbk. fluctuate. Even in 2020, the profit/loss of PT. Adaro Energy Tbk. experienced a very far decrease compared to previous years, which was around 63.64% from 2019 or amounted to 404.19 million. From the summary of stock prices at PT. Adaro Energy Tbk. also fluctuates every year. With the income statement data and stock prices, it can be seen that although the company's profits have decreased, their share prices have increased. Therefore, the financial performance of PT. Adaro Energy Tbk. listed on the Indonesia Stock Exchange. Based on the phenomena that occur, the purpose of this study is to analyze and evaluate financial performance using Economic Value Added (EVA) and Market Value Added (MVA) Ratios at PT. Adaro Energy Tbk. 2016-2020 period.

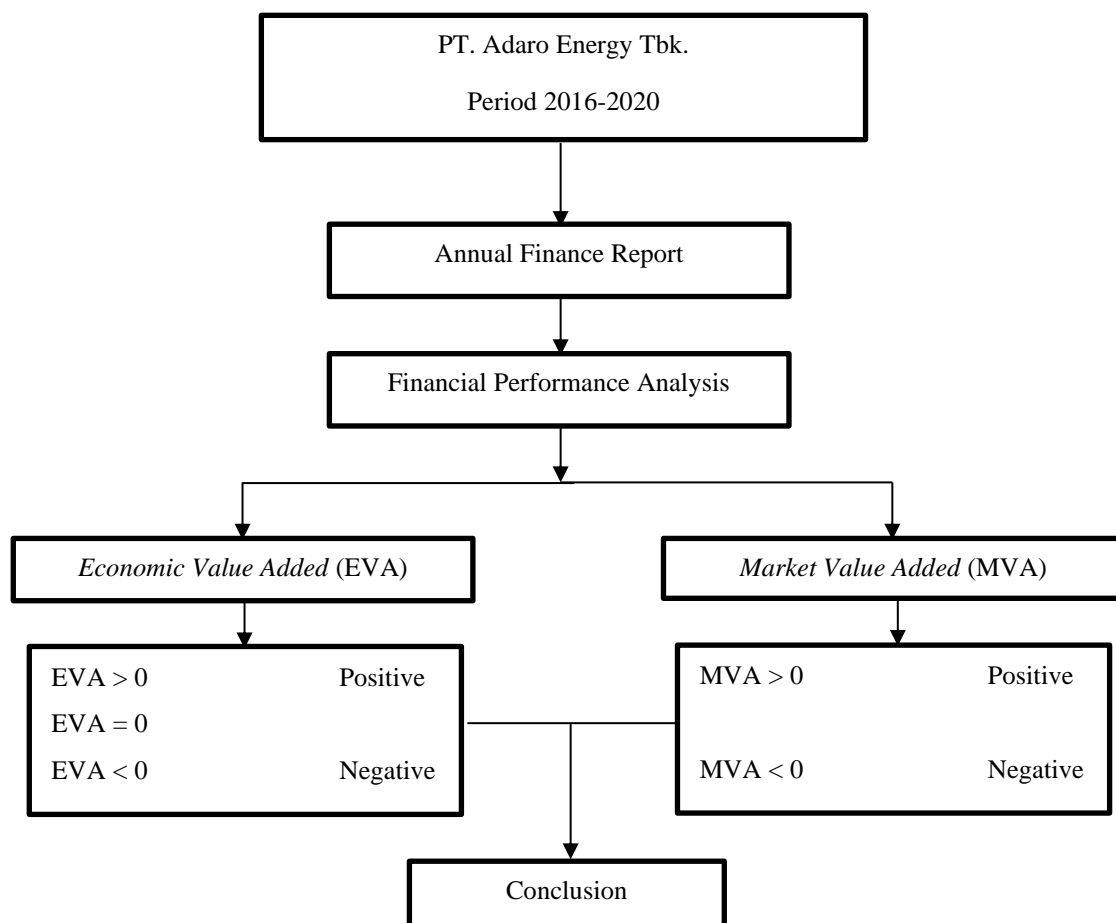
## LITERATURE REVIEW

Financial performance is basically the achievement of the company that describes the company's financial position in a certain period. Financial performance can show how healthy the company's finances (Widagdo & Sa'diyah, 2021). Company performance measurement is very important in evaluating company performance (Sa'diyah, 2021a). Company performance appraisal is a comparison process between actual performance and planned goals by management to determine follow-up improvements to ensure the achievement of company goals (Ningtias, 2014). Financial ratio analysis is the process of critically reviewing data, calculating, measuring, interpreting and then being able to provide solutions to problems that may arise in the future period (Sa'diyah, 2021b). However, financial ratio analysis still has weaknesses, one of the weaknesses based on financial ratios is the

difficulty in determining the perfect ratio that can be used for the benefit of stakeholders (Meutia Dewi, 2017).

EVA is a measure of a company's financial performance and can be easily integrated into the daily activities of a company, because all cost reductions and revenue increases are based on EVA, that is, cost reductions over a certain period of time, which corresponds to EVA growth over the same time. EVA as a company performance measurement tool has the following advantages (Salmah, 2013) that are (1) EVA is able to align the objectives of management and investors. EVA is used as a measure of management's operational performance, which can reflect the company's success in creating value for shareholders. (2) EVA can be used as a guide to increase operating profit without raising funds/equity, disclosing credit (receivables) and investing funds that offer high returns. (3) EVA as a financial management system can solve all business problems, from strategy to movement to day-to-day operational decisions.

MVA (Marketing Value Added) is an analytical tool used to measure company performance by using market value and calculating the difference between the book value of shares (Hanafi et al, 2016). The advantages of the MVA method are (1) can see how the company administrator's market decisions have succeeded in improving the company's performance, especially financial performance, and can generate investor confidence to enter the company, (2) the application of this method in investing in companies can describe current investments with profitable prospects in the future (Irawan & Manurung, 2020). MVA also has weaknesses such as tends to ignore the opportunity cost of capital invested in the company, measure of shareholder wealth in a certain time period only, and MVA measurements usually do not take into account past cash flows to shareholders (Irawan et al, 2020).



**Figure 1.** Research Framework

Based on the background, problem formulation, research framework, and previous research, the hypothesis proposed in this study is the financial performance of PT. Adaro Energy Tbk. the 2016-2020 period is said to be healthy and provides added value for companies and investors.

## RESEARCH METHOD

The type of research used is quantitative. The data and data sources used are secondary data, in the form of financial reports and annual reports at PT. Adaro Energy Tbk for the 2016-2020 period published by the Indonesia Stock Exchange. Data collection techniques using the documentation method. Data analysis carried out using quantitative methods has the following stages:

1. Annual financial report data from 2016-2020
2. *Economic Value Added* (EVA)
  - a. *Net Operating After Tax* (NOPAT)
 
$$\text{NOPAT} = \text{EBIT} (1-T) \quad (1)$$
  - b. *Invested Capital* (IC)
 
$$\text{IC} = (\text{Total Debt} + \text{Equity}) - \text{Short Term Debt} \quad (2)$$
  - c. *Weighted Average Cost of Capital* (WACC)
 
$$\text{WACC} = (D \times R_d)(1 - T) + (E \times R_e) \quad (3)$$
  - d. *Capital Charges* (CC)
 
$$\text{CC} = \text{WACC} \times \text{IC} \quad (4)$$
  - e. *Economic Value Added* (EVA)
 
$$\text{EVA} = \text{NOPAT} - \text{CC} \quad (5)$$
3. *Market Value Added* (MVA)
  - a. *Market Value Added* (MVA)
 
$$\text{MVA} = P_t \times Q_t - P_0 \times Q_t \quad (6)$$
4. Draw conclusions based on calculations from EVA and MVA analysis (Oktary, 2018) :
  - 1) EVA Test (*Economic Value Added*)
    - a.  $\text{EVA} > 0$ , then the company is said to be healthy
    - b.  $\text{EVA} = 0$ , then the company is said to break even
    - c.  $\text{EVA} < 0$ , then the company is said to be unhealthy
  - 2) MVA Test (*Market Value Added*)
    - a.  $\text{MVA} > 0$ , the company succeeded in providing added value to investors
    - b.  $\text{MVA} < 0$ , the company does not succeed in providing added value to investors

## RESULT AND DISCUSSION

The study was conducted to determine financial performance using EVA and MVA methods at PT. Adaro Energy Tbk for the period 2016-2020. The calculation results obtained using the EVA method can be seen as follows:

**Table 3.** NOPAT Calculations

Years	(in million US\$)		
	Profit / Loss	(1-T)	NOPAT
2016	588	0,623	367
2017	952	0,577	550
2018	892	0,582	519
2019	618	0,660	408
2020	285	0,712	203

Based on table 3. of the NOPAT calculation, it is concluded that the company's NOPAT value fluctuates. In 2016-2017 there was an increase, but in 2017-2020 there was a very drastic decline in 2020. This is due to changes in profit every year seen from the difference in income and expenses, thus affecting the NOPAT value generated by the company. If the NOPAT value is low and at a higher cost of capital, the company is said to be unsuccessful in creating added value. The fluctuation in the value of NOPAT is affected by net profit after tax and interest expense.

**Table 4.** IC Calculations

(in million US\$)				
Years	Equity	Total Debt	Short-Term Debt	IC
2016	3.786	2.736	645	5.877
2017	4.092	2.723	773	6.042
2018	4.303	2.758	816	6.245
2019	3.983	3.234	1.233	5.984
2020	3.952	2.430	1.145	5.237

Based on table 4 of Invested Capital's calculation, there are fluctuations every year at PT. Adaro Energy Tbk, and the biggest decline occurred in 2020 while the highest value occurred in 2018. Where Invested Capital is a calculation of the total equity and total debt which is then reduced by short-term debt. This is intended to benefit the company in the long term, because the amount of capital invested can be used for the company's operational activities.

**Table 5.** WACC Calculations

(in million US\$)							
Years	D (%) (a)	$R_d$ (%) (a)	1-T (c)	E (%) (d)	$R_e$ (%) (a)	WACC (%) (a)*(b)*(c)+(d)*(e)	
2016	0,420	0,011	0,623	0,580	0,090	0,055	
2017	0,400	0,014	0,577	0,601	0,131	0,082	
2018	0,391	0,019	0,582	0,609	0,111	0,072	
2019	0,448	0,019	0,661	0,552	0,109	0,066	
2020	0,381	0,022	0,712	0,619	0,040	0,031	

Based on table 5. WACC calculations, in 2017 there was an increase compared to 2016, then in 2018 it decreased until 2020 which experienced a drastic decline. This value is a weighted average of the cost of debt and equity which describes the minimum rate of return on investment expected by investors. In companies that experience an increase or decrease in the value of WACC, it can be caused by two factors, namely a decrease or increase in the value of the cost of debt or due to a decrease or increase in the cost of equity. Overall, the WACC value determines the size of the EVA obtained by the company.

**Table 6.** CC Calculations

Years	WACC (%)	(in million US\$)		
		(a) IC	(b) CC	(a)*(b)
2016	0,055	5.877		323,567
2017	0,082	6.042		494,217
2018	0,072	6.245		449,537
2019	0,066	5.984		394,094
2020	0,031	5.237		162,011

Based on table 6. of the calculation of Capital Charges, it is obtained from the result of multiplying the WACC with the invested capital. The table above shows that there are fluctuations from year to year and experienced a very drastic decline in 2020 even though Capital Charges are still positive. The data means that the higher the capital required, the greater the costs incurred. Capital Charges have an inverse relationship with EVA, the higher the value of Capital Charges it will reduce the EVA value.

**Table 7.** EVA Calculations

Years	NOPAT	(in million US\$)		
		(a) CC	(b) EVA	(a)-(b)
2016	367	323,567		42,992
2017	550	494,217		55,486
2018	519	449,537		69,801
2019	408	394,094		13,842
2020	203	162,011		40,827

Based on table 7. EVA calculations, it is found that in 2016-2020 EVA value  $> 0$  which means that the company is able to provide added value, meaning that the company is said to be in a healthy condition (Oktary, 2018).

**Table 8.** MVA Calculations

Years	Equity Market Value	(in million US\$)		
		(a) Total Value Equity	(b) MVA	(a)-(b)
2016	54.216.205.590.000	35.184.558.200.000		19.031.647.390.000
2017	59.493.889.320.000	35.184.558.200.000		24.309.331.120.000
2018	38.862.943.830.000	35.184.558.200.000		3.678.385.630.000
2019	47.563.125.494.000	35.184.558.200.000		12.378.567.294.000
2020	45.739.925.660.000	35.184.558.200.000		10.555.367.460.000

Based on table 8. of MVA calculations, it is found that in 2016-2020 the MVA value  $> 0$  which means that the company has succeeded in providing added value to investors or shareholders even though it experienced a decline in 2013 and 2020 (Oktary, 2018). The results of the analysis of the financial performance of PT. Adaro Energy Tbk is said to be good because the EVA value is  $> 0$ . By using the EVA method through its translation in the form of NOPAT, Investor Capital, WACC, and Capital Charges, the final EVA value is positive in the 2016-2020 period even though the resulting

value is still fluctuating. The results of this EVA calculation are influenced by the ability to obtain operating profit and efficiency in suppressing the company's capital costs in that year. The results of the analysis of the financial performance of PT. Adaro Energy Tbk is said to be good because the MVA value is  $> 0$ . By using the MVA method, a positive value is obtained in the 2016-2020 period even though the resulting value is still volatile. The positive MVA value in that year was caused by the movement of stock prices in the previous year, so the current market value is higher before.

## CONCLUSION

Based on the results of the analysis and discussion that has been carried out in the previous chapter to measure financial performance using EVA (Economic Value Added) and MVA (Market Value Added) at PT. Adaro Energy Tbk for the 2016-2020 period, the results of the calculation of the financial performance of PT. Adaro Energy Tbk using EVA (Economic Value Added) from the 2016-2020 period is said to be healthy or positive value, so that it can provide added value for the company and investors in accordance with the expected profit. The results of the calculation of the financial performance of PT. Adaro Energy Tbk using MVA (Market Value Added) from the 2016-2020 period fluctuates every year but it can be said to be healthy or positive value because these changes create added value that will attract investors to invest in the company.

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