

Financial Performance Analysis Using Economic Value Added (EVA), Financial Value Added (FVA), and Market Value Added (MVA)

(A Study on Technology Sector Companies Listed on the Indonesia Stock Exchange
from 2019-2023)

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ABSTRACT

Financial performance assessment is a process required by companies, especially investors, as a consideration in making investment decisions. This study aims to determine and analyze financial performance using the Economic Value Added (EVA), Financial Value Added (FVA), and Market Value Added (MVA) methods in technology sector companies listed on the IDX for the 2019-2023 period. This type of research is descriptive quantitative, with a purposive sampling technique from 44 technology sector companies, of which 4 companies were used as samples. The EVA results show that 4 companies, namely MCAS, MLPT, WIFI, and MTDL, obtained an average positive value ($EVA > 0$) within 5 years. This indicated the company can generate economic value while avoiding long-term debt dependence. The FVA results for companies coded MCAS, MLPT, WIFI, MTDL obtained an average positive result in the 2019-2023 period, indicating that the company has succeeded in adding financial value and has been able to cover the company's equivalent depreciation value. and the MVA results for 4 technology sector companies that meet the research criteria, namely MCAS, MLPT, WIFI, MTDL, obtained positive results ($MVA > 0$) in the 2019-2023 company. This indicates that the company has been able to create market added value for the company and investors.

Keywords: Financial performance, EVA, FVA, MVA.

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Introduction

The technology sector experienced a significant change, evidenced by digitalization and automation through technology as, artificial intelligence (AI), big data, a lot of the Internet of Things (IoT), and computing cloud. The company had the chance to yield a profit because of the number of sectors that may enter the technology sector. The typewriter Indonesia show positive developments in the last few years (Bps, 2023). Number of companies the technology sector also increase in every year, there are 44 the listed companies until 2023. And more intense competition corporations on industrial technology led to fluctuations in the performance of companies in the technology. This brings the need to evaluate financial performance during that period.

According to (safira and usman, 2021) in his research, the majority of management for both firms and investors still rely on conventional financial indicators in the company capital brought ignoring costs resulting in difficulties to find out if the company had added value or not. This research uses Economic Value Added (EVA), Financial Value Added (FVA), and Market Value Added (MVA). Based on previous research, it can be seen that the methods used to measure financial performance have inconsistent results. This research was conducted in the technology sector listed on the Indonesia Stock Exchange because there has not been much research on financial performance in the technology sector. And unlike previous studies, this research was conducted by combining the three methods of EVA, FVA, and MVA to determine how financial performance is assessed in the technology sector, and was also conducted using a difference test to determine the differences in results and to obtain the best financial performance analysis using these methods.

Research Methods

The type of research is Descriptive Quantitative. The data source for this research is secondary data, which is data obtained from a third party or from existing sources. The secondary data in this study are the financial statements of the technology sector listed on the Indonesia Stock Exchange from 2019-2023, which were obtained from the official website of the Indonesia Stock Exchange. In this study, the sample was taken using the purposive sampling method. It was found that there were 4 companies that met the criteria, multiplied by 5 years, resulting in a total of 20 samples. The companies are M Cash Integrasi Tbk (MCAS), Multipolar Technology Tbk (MLPT), Solusi Sinergi Digital Tbk (WIFI), and Metrodata Electronics Tbk. (MTDL). The data analysis method in this study was conducted quantitatively, using secondary data that had been obtained, which was then analyzed. Here are the steps in data analysis: Obtaining financial reports according to the required components from the years 2019-2023.

Table 1 Research Methods

No	Metode	Formula	Criteria
1	Economic Value Added (EVA) S. David Young & Stephen F. O'Byrne (2001 : 74)	$EVA = NOPAT - \text{Capital Charges}$ $= (EBIT - Tax) - (Invested Capital \times \text{Cost of Capital})$ <p>The steps for calculating EVA are as follows:</p> <p>a. Net Operating Profit After Tax (NOPAT) $= EBIT - TAX$</p> <p>b. Invested Capital $IC = (\text{Total liabilities and equity}) - \text{Short Term Liabilities}$</p> <p>b. Weighted Average Cost Of Capital (WACC) $WACC = WACC = \{(D \times rd)(1 - Tax) + (E \times Re)\}$</p> $D = \text{Capital level} = \frac{\text{Total liabilities}}{\text{Total liabilities and equity}} \times 100\%$ $rd = \text{Cost Of Debt} = \frac{\text{Beban Bunga}}{\text{Total liabilities}} \times 100\%$ $E = \text{Equity} = \frac{\text{Total Equity}}{\text{Total liabilities dan Equity}} \times 100\%$ $re = \text{Cost Of Equity} = \frac{\text{Earning after Tax}}{\text{Total Equity}} \times 100\%$ $Tax = \frac{\text{Tax}}{\text{Earning before tax}} \times 100\%$ <p>d. Capital Charge $WACC \times \text{Invested Capital}$</p>	<p>$EVA > 0$ (Positive)</p> <p>$EVA = 0$ (Break-even)</p> <p>$EVA < 0$ (Negative)</p>
2	Financial Value Added (FVA) (Sandías et al., 2002)	$FVA = NOPAT - (ED - D)$ <p>ED= Equivalent Depreciations</p> <p>D = Depreciation</p> <p>a. Equivalent Depreciations (ED) $ED = (k \times TR)$ <p>ED= Equivalent Depreciations</p></p>	<p>$FVA > 0$ (Positive)</p> <p>$FVA = 0$ (Break-even)</p> <p>$FVA < 0$ (Negative)</p>

$k = \text{Weighted Average Cost of Capital (WACC)}$			
$\text{b. Total Resource (TR)} = \text{b. Long-term liabilities} + \text{Total equity}$			
3	<i>Market Value Added (MVA)</i> Brigham dan Houston (2014:111)	$\text{MVA} = \text{Market Value of Shares} - \text{Book Value of Shares}$ a. $\text{Market Value of Shares} = \text{Number of Shares Outstanding} \times \text{Share}$ b. $\text{Price Book Value of Shares} = \text{Number of Shares Outstanding} \times \text{Par Value of Shares}$	$\text{MVA} > 0$ (Positive) $\text{MVA} = 0$ (Break-even) $\text{MVA} < 0$ (Negative)
4	One Way Anova Test (Priyanto, 2024)	1. Normality Test 2. Homogeneity Test 3. Kruskal-Wallis Test	$\text{Normality test} > 0.05$, then the assumption is met; < 0.05 , the data is not normally distributed. If it is not normal, then the Kruskal-Wallis test is performed. With the criteria: if the significance value > 0.05 , there is no difference; if < 0.05 , there is a difference.

Result

1. Economic Value Added (EVA)

Table 2 Economic Value Added (EVA) results

(In Rupiah)

(processed by the researcher, 2025)

Company Code	Period					Average
	2019	2020	2021	2022	2023	
MCAS	-41.328.459	-27.281.775	9.232.307	2.545.330	-1.914.097	-11.749.339
MLPT	48.508.391	85.010.468	161.905.591	144.723.156	142.311.976	116.491.916
WIFI	5.266.835	-4.504.439	-8.073.118	-38.478.527	-29.445.771	-15.047.004
MTDL	347.865.213	401.233.447	63.935.125	80.054.674	765.128.804	331.643.453
Rata-Rata Industri	90.077.995	113.614.425	56.749.976	47.211.158	219.020.227	105.334.756

The average EVA value for companies with the codes MCAS and WIFI from 2019-2023 is negative. This is because the capital charges or cost of capital are greater than the after-tax profit. This means the company is unable to add value to the company and shareholders because the EVA value is negative ($\text{EVA} < 0$), indicating poor performance. The high cost of capital for MCAS and WIFI is a result of the significant costs or investments made as part of the company's strategy to expand its digital strategy. On the other hand, for companies with the codes MLPT and MTDL, the value is positive ($\text{EVA} > 0$) because after-tax profits are greater than the cost of capital. This indicates that the companies are

performing well and have already added economic value, and that they have avoided high-risk debt dependence.

From the table above, the average EVA for technology companies listed on the IDX from 2019-2023 is 105,334,756. This indicates that the companies are able to provide added value for the company and investors because the EVA value is positive ($EVA > 0$), indicating good performance.

2. Financial Value Added (FVA)

Table 3 Financial Value Added (FVA) result

(In Rupiah)

(processed by the researcher, 2025)

Company Code	Period					average
	2019	2020	2021	2022	2023	
MCAS	-32.865.577	-12.091.300	38.522.183	51.609.358	63.895.041	21.813.940
MLPT	181.289.391	244.637.468	312.276.591	283.522.156	336.433.976	271.631.916
WIFI	18.065.027	19.015.480	25.321.153	21.056.417	74.459.187	31.583.452
MTDL	369.758.213	423.574.447	89.996.125	86.130.674	787.618.804	351.415.653
Average of Industry	134.061.763	168.784.023	116.529.013	110.579.651	315.601.752	169.111.240

The average FVA value for companies with codes MCAS, MLPT, WIFI, and MTDL from 2019-2023 is positive ($FVA > 0$), which means the companies created financial added value, and ($FVA > 0$) indicates the companies performed well. This means the company has operating profit after tax (NOPAT) and depreciation expense that are sufficient to cover the company's equivalent depreciation, and the digital distribution expansion strategy investments are starting to become active and the profits generated are enough to cover the depreciation.

From the table above, the average FVA in the technology sector listed on the IDX from 2019-2023 is 169,111,240. This means that financial value for companies and investors was successfully created because the FVA value is positive ($FVA > 0$), indicating good performance.

3. Market Value Added (MVA)

Table 4 Market Value Added result

(In Rupiah)

Company Code	Period					Average
	2019	2020	2021	2022	2023	
MCAS	2.412.854.574	3.376.260.537	8.180.271.352	6.878.371.402	3.688.716.525	4.907.294.878
MLPT	652.500.000	1.143.750.000	6.393.750.000	3.618.750.000	2.756.250.000	2.913.000.000
WIFI	412.500	1.090.363.120	912.380.067	67.659.638	127.405.176	439.644.100
MTDL	607.500.000	3.756.726.683	9.256.770.977	6.997.824.213	6.445.364.407	5.412.837.256
Average of industry	918.316.768	2.341.775.085	6.185.793.099	4.390.651.313	3.254.434.027	3.418.194.058

(processed by the researcher, 2025)

Based on the average calculation results, the MVA for MCAS, MLPT, WIFI, and MTDL, as well as the average value for technology sector companies during the 2019-2023 period, showed positive results, amounting to 3,418,194,058. The company is considered to create market value added for investors because the MVA value is positive ($MVA > 0$), indicating good performance. This indicates that the company is valued better in the market compared to its own valuation because investors perceive technology sector companies as having better growth potential than what is reflected in the company's financial statements. Better stock performance and active trading resulted in an increase in the company's stock price offered by the market. So that the company can generate profits and meet investor expectations.

4. Analysis of the Differences Between EVA, FVA, and MVA

The differences in EVA, FVA, and MVA results for technology sector companies can be determined by considering the company average for the period 2019-2023, as shown in the table below:

**Table 5 Average EVA, FVA, and MVA
for Technology Sector Companies from 2019-2023**

(In Rupiah)

Company Code	EVA	FVA	MVA
MCAS	(11.749.339.121)	21.813.940.783	4.907.294.878.200
MLPT	116.491.916.939	271.631.916.939	2.913.000.000.000
WIFI	(15.047.004.483)	31.583.452.950	439.644.100.450
MTDL	331.643.453.264	351.415.653.264	5.412.837.256.135

(processed by the researcher, 2025)

After knowing the average results of EVA, FVA, and MVA, an ANOVA test can be performed. To meet the requirements of the ANOVA test, a normality test must be conducted first. The results of the normality test can be seen in the table below:

Table 6 Test of Normality Results

	Tests of Normality						
	Method	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
company	EVA	.295	4	.039	.698	4	.002
	FVA	.301	4	.032	.768	4	.033
	MVA	.153	4	.200*	.944	4	.650

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the normality test above, there are two variables that show non-normal results or obtain a significance level < 0.05 , therefore the overall normality assumption is not met. In this test, if the data is not met, it results in the inability to continue the ANOVA test, and a non-parametric test can be performed, namely using the Kruskal-Wallis test, which is used to test whether there are differences in variables related to the company's financial performance. The results of the Kruskal-Wallis test can be seen in the following table:

Table 7 Kruskal-Wallis Test Results

Test Statistics^{a,b}

	Company
Kruskal-Wallis H	16.205
df	2
Asymp. Sig.	.001

a. Kruskal Wallis Test

b. Grouping Variable: Metode

Based on these test results, the average financial performance for Economic Value Added (EVA), Financial Value Added (FVA), and Market Value Added (MVA) shows a significant value of 0.001. A significance value less than 0.05 indicates that the average variables are not equal or there is a difference. This means that based on these test results, there is a significant difference in financial performance for technology sector companies using Economic Value Added (EVA), Financial Value Added (FVA), and Market Value Added (MVA).

Conclusion

Based on Economic Value Added (EVA) calculations, it is known that the technology sector as a whole achieved positive EVA throughout the period 2019-2023. Because after-tax profit is greater than the cost of capital, it is said that the company is performing well and has avoided high-risk debt dependence, indicating that the company is able to provide added value for the company and investors. Based on the Financial Value Added (FVA) value for technology sector companies, it shows an average positive value each year from 2019-2023. This means that the company's operating profit after tax (NOPAT) and depreciation value have been able to cover the company's equivalent depreciation value, and the digital distribution expansion strategy investment has become active and generated sufficient profit to cover depreciation.

Based on the MVA results, the technology sector achieved a positive average each year from 2019-2023. This indicates that investors believe companies in the technology sector have better growth potential than other sectors. Better stock performance and active trading resulted in an increase in the company's stock price offered by the market. So that the company can generate profits and meet investor expectations.

Based on the results of the non-parametric test, namely the Kruskal-Wallis test, it shows that there is a significant difference in financial performance among technology sector companies using these three methods, where EVA focuses on operational performance and capital costs. The FVA value focuses on the effectiveness of investment and financing in fixed assets. In contrast, the MVA value focuses on investor perception of future performance, influenced by the market value of shares being higher than the book value of shares. This is due to the good potential in the technology sector, which leads to significant financial differences for technology companies.

Suggestions

Based on the content and conclusions above, the researcher recommends that future researchers add variables to the financial performance evaluation, such as Net Value Added (NVA) and Refined Economic Value Added (REVA), to provide more accurate financial performance analysis results.

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