

Analysis of the company's financial performance using the du pont system and economic value added (EVA)

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ABSTRACT

This research aims to determine the company's financial performance using the Du Pont System and Economic Value Added (EVA) methods and to find out whether there are differences in measuring company financial performance between the Du Pont System method and the Economic Value Added (EVA) method. The sampling technique used purposive sampling at state-owned companies in the Construction Industry Sector listed on the IDX in 2017-2021. Based on the results of the analysis, there are differences in measuring financial performance between the Du Pont System method and the Economic Value Added (EVA) method. The results of the research show that the financial performance of BUMN companies in the Construction Industry Sector, when measured using the Du Pont System method, there are 2 companies whose ROI values are above the industry average, namely PT. PP (Persero) Tbk and PT. Wijaya Karya (Persero) Tbk. Meanwhile, the results of the analysis using the Economic Value Added (EVA) method show that PT PP (Persero) Tbk is able to produce the highest average economic value, namely 306,185.

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1. Introduction

The development of an increasingly open economy needs to be based on performance assessment facilities and systems that can push companies towards increasing efficiency and competitiveness. In this era of development, many infrastructure building projects are still growing. State-owned construction companies will benefit from government efforts to increasingly force infrastructure development (Muhammad Hendra, 2022).

Growth in the construction sector during the Covid-19 pandemic reached 2.81 percent in 2021 compared to 2020 which experienced a contraction of 3.26 percent. In a decade, the construction sector achieved its highest growth in 2011, namely 9.02 percent, but in 2020, due to the Covid-19 pandemic, the growth rate experienced a decline and contraction. The growth of the construction industry is influenced by the many infrastructure projects underway, thus encouraging economic growth (Central Statistics Agency, 2022).

In order to overcome this problem, performance measurement using the Du Pont System and Economic Value Added (EVA) method can be used to measure performance based on value, because EVA is a measure of economic added value generated by the company as a result of management activities or strategies (Magrippah, 2020).

The company's financial performance is measured using Du Pont System analysis and Economic Value Added (EVA) analysis. The Du Pont System is a comprehensive analysis that is useful for determining the level of efficient use of models, efficient sales and production departments. Du Pont System analysis is used to find out which factors have the strongest influence between profit margin and total asset turnover on ROI.

The greater the ROI, the better the company's development in managing its assets to generate profits (Indriana, 2019).

Economic Value Added (EVA) analysis is a measure of the economic added value obtained by a company as a result of management activities or strategies, because EVA is used to measure performance based on value (Value). EVA is measured by looking at the company's profits after the financial value has been deducted by taxes and capital costs, so it can be used to assess the company's financial performance fairly to the company's shareholders and creditors.

There are several previous studies that have been carried out, such as research conducted by (Nardi Sunardi, 2018) showing that the financial performance of Construction Sector companies in 2013-2017 was assessed based on the Du Pont System as being classified as good, even though there was a decrease in value and fluctuations in ROI and ROE in 2013. 2017. This is caused by company expenses, increases in cost of goods sold and ineffective and inefficient use of assets from year to year, so that the company is still less effective and efficient in generating profits on the assets it owns.

2. Research Methods

This research uses a case study type of research. By using descriptive analysis. This research aims to determine financial performance as measured using the Du Pont System and Economic Value Added (EVA) methods. The data used in this research is from the annual reports of state-owned companies in the Construction Industry Sector listed on the IDX on the site <https://idx.co.id>. The sample selection method used was purposive sampling based on the researchers' criteria. Tables and Figures are presented center, as shown in Table 1 and Figure 1, and cited in the manuscript before appearing.

3. Discussion Results

Analisis Du Pont System

In table 1, it can be seen that at PT. Adhi Karya (Persero) Tbk. 2017-2021 is below the industry average, the average company financial performance is 0.011, which is below the industry average of 0.018. at PT. PP (Persero) Tbk. of 0.021 is above the industry average of 0.018 and at PT. Wijaya Karya (Persero) Tbk of 0.022 is above the industry average of 0.018. It can be said that generating profits is getting better.

Table 1.DuPont System

Name of BUMN Construction Industry Company	Year	NPM	TATTOO	ROI
PT. Adhi Karya (Persero) Tbk	2017	0.034	0.534	0.018
	2018	0.041	0.519	0.021
	2019	0.043	0.419	0.018
	2020	0.002	0.284	0,000
	2021	0.007	0.288	0.002
PT. PP (Persero) Tbk	2017	0.080	0.514	0.041
	2018	0.077	0.479	0.036
	2019	0.048	0.416	0.019
	2020	0.016	0.296	0.004
	2021	0.021	0.301	0.006
PT. Wijaya Karya (Persero) Tbk	2017	0.051	0.572	0.029
	2018	0.066	0.526	0.034
	2019	0.096	0.438	0.042



Name of BUMN Construction Industry Company	Year	NPM	TATTOO	ROI
	2020	0.019	0.242	0.004
	2021	0.012	0.256	0.003

Results of the Economic Value Added (EVA) analysis)

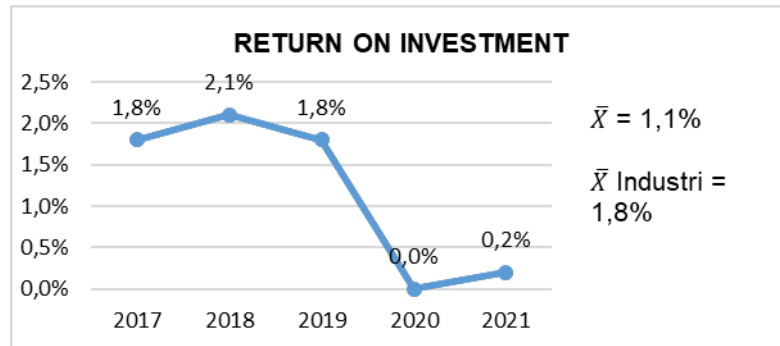
Table 2.Economic Value Added (EVA)

Name of BUMN Construction Industry Company	Year	NOPAT	Capital Charges	EVA
PT. Adhi Karya (Persero) Tbk.	2017	517,060	278,191	238,869
	2018	645,030	334,629	310,401
	2019	665,049	312,069	352,980
	2020	23,703	11,024	12,679
	2021	86,500	52,637	33,863
	Amount	1,937,342	988,550	948,792
	Average			189,758
PT. PP (Persero) Tbk.	2017	1,723,853	1,159,705	564,148
	2018	1,985,993	1,301,313	684,680
	2019	1,208,271	917,585	290,686
	2020	266,270	254,856	11,414
	2021	361,422	381,423	(20,001)
	Amount	5,545,809	4,014,882	1,530,927
	Average			306.185
PT. Wijaya Karya (Persero) Tbk.	2017	1,356,116	748,909	607,207
	2018	2,073,299	1,517,924	555,375
	2019	2,623,015	1,715,115	907,900
	2020	298,209	502,755	(204,546)
	2021	178,904	583,492	(404,588)
	Amount	6,529,543	5,068,195	1,461,348
	Average			292,269

Based on table. 2 above, at PT. Adhi Karya (Persero) Tbk in 2017-2021 produced an average added value of 189,758. At PT. PP (Persero) Tbk in 2017-2021, it produced an average added value of 306,185 and at PT. Wijaya Karya (Persero) Tbk in 2017-2021 produced an average added value of 292,269.

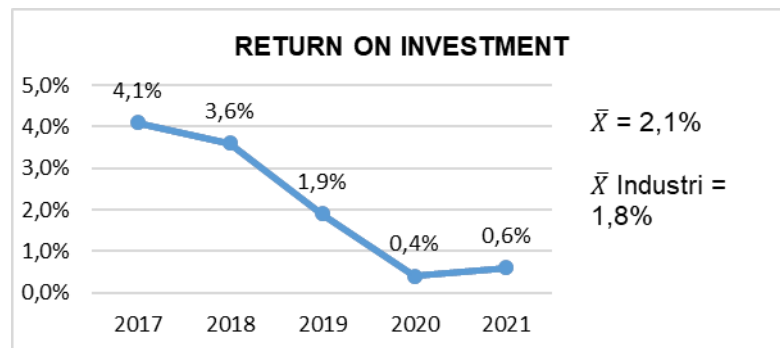
Discussion of results

a. Du Pont System



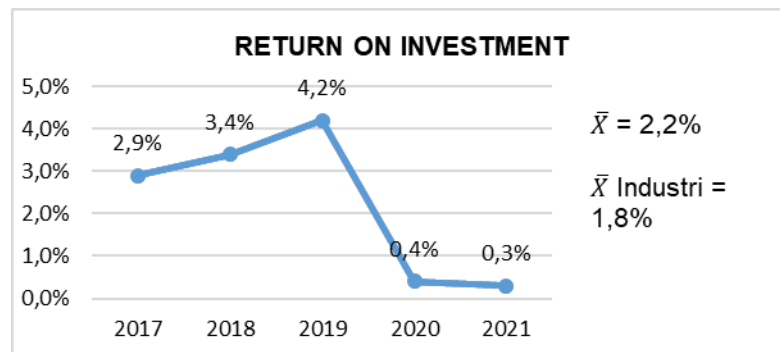
Graph 1. Analysis of the Du Pont System PT. Adhi Karya (Persero) Tbk

From graph 1, the ROI value from 2017 to 2021 shows that the average value of the company's financial performance is 1.1%, which is below the industry average of 1.8%. It can be said that the company's performance in generating profits is getting lower.



Graph 2. Analysis of the Du Pont System PT. PP (Persero) Tbk

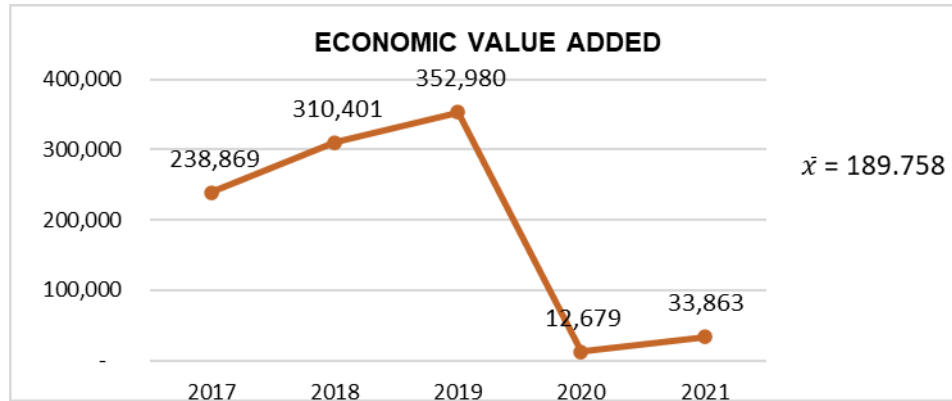
From graph .2, the ROI value from 2017 to 2021 shows that the average value of the company's financial performance is 2.1%, which is above the industry average of 1.8%. It can be said that the company's performance in generating positive profits has increased.



Graph 3. Analysis of the Du Pont System PT. Wijaya Karya (Persero) Tbk

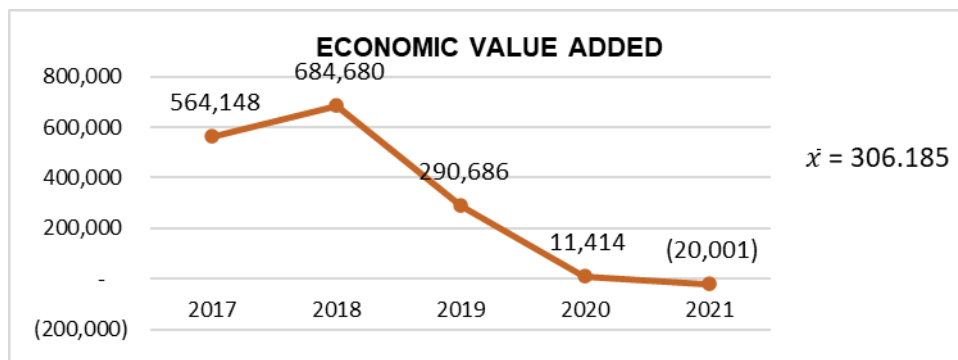
From graph .3, the ROI value for 2017 to 2021 shows the average value of PT's financial performance. Wijaya Karya (Persero) Tbk at 2.2%, this is above the industry average of 1.8%. It can be said that the company's performance in generating positive profits has increased.

b. Economic Value Added (EVA)



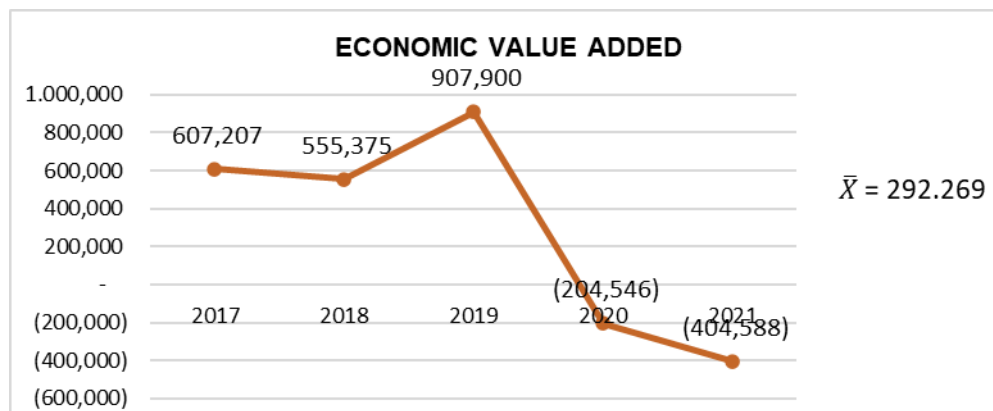
Graph 4. EVA Analysis PT. Adhi Karya (Persero) Tbk

From graph .4, the increase in the EVA value is due to the increase in NOPAT and Capital Charge. The average Economic Value Added (EVA) value of PT. Adhi Karya (Persero) Tbk in 2017-2021 amounted to 189,758, this value is positive with the assessment criteria ($EVA > 0$) which means PT. Adhi Karya (Persero) Tbk is able to create economic added value.



Graph 5. EVA Analysis PT. PP (Persero) Tbk

From graph .5 the average value of Economic Value Added (EVA) PT. PP (Persero) Tbk 2017-2021 amounted to 306,185 with assessment criteria ($EVA > 0$) which means PT. PP (Persero) Tbk is able to create economic added value. Positive EVA shows that the company in managing the company has obtained profits exceeding operational costs and capital costs.



Graph 6. EVA Analysis PT. Wijaya Karya (Persero) Tbk

From graph .6 of the total EVA values for 2017-2021, the average value of PT's Economic Value Added (EVA) is obtained. Wijaya Karya (Persero) Tbk is 292,269, this value is positive with the assessment criteria ($EVA > 0$) which means PT. Wijaya Karya (Persero) Tbk is able to create economic added value.

4. Conclusion

There are differences in measuring financial performance between the Du Pont System method and the Economic Value Added (EVA) method.

Du Pont System analysis shows that of the three state-owned construction industry sector companies listed on the IDX from 2017 to 2021, there are only 2 companies whose ROI values are above the industry average, including PT. PP (Persero) Tbk with an ROI value of 2.1% is above the industry average of 1.8%. WIKA with an ROI value of 2.2% is above the industry average of 1.8%. The largest ROI was generated by PT. Wijaya Karya (Persero) Tbk with an ROI value of 2.2%.

Economic Value Added (EVA) analysis shows that the three state-owned construction industry sector companies listed on the IDX from 2017 to 2021 received positive added value or EVA ($EVA > 0$). The highest average EVA was produced by PT. PP (Persero) Tbk amounted to 306,185. A company that produces a positive EVA value means that it has management that is able to provide more value to the company, so that it will have an impact on investors who want to invest in the company concerned.

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