Performance evaluation based on economic value added in transportation companies

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Abstract

Financial performance can be measured by various measurement methods, one of which is Economic Value Added (EVA). EVA is a performance measurement that considers the benefits based on the added value that can be obtained. Measuring the performance of transportation companies is currently very necessary considering that technological developments have brought many changes to the transportation industry. This research was conducted at PT Blue Bird Tbk. Secondary data was obtained through annual financial reports for the 2019-2021 period on the IDX website and supporting websites using the documentation method. Data were analyzed in four stages of EVA Performance measurement which consisted of NOPAT (Net Operating After Taxes), Invested Capital, WACC (Weight Average Cost of Capital), and Capital Charge. The results of the study using the EVA method obtained an EVA value <0 (negative value), meaning that the company was not successful in producing economic added value. The decline in the value of EVA is suspected to be due to several factors such as the COVID-19 pandemic where restrictions on community activities and the availability of online transportation were imposed.

Keywords: Burnout; COVID-19; Nurses; Perceived organizational support; Work engagement

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1. Introduction

Transportation is an important thing today, with transportation greatly facilitating community activities. In Indonesia itself there are several companies engaged in transportation where in the economic sector itself contributes to economic activities. Each company certainly competes to be superior in various aspects with the aim of increasing profits to make profits, optimizing the value of the company's shares, and expanding market share. One way to improve a company's ability to grow and achieve its maximum goals is by maintaining its business continuity and seeking investors to invest. To attract the attention of investors and secure funds, the company must demonstrate outstanding performance by providing information on its financial statements.
Financial statements are accounting information that describe the amount of wealth owned by a company, the amount of income earned by a company, and any economic transactions that the company has carried out that can affect the company’s wealth and income (Martono, 2016; Diana & Setiawati, 2017; Tandelilin, 2017). Financial statements can be used as a reference to assess a company’s performance, providing an overview of how the company’s system operates in a given accounting period and aiding investors in analyzing the company’s use of investment funds (Ponoh, 2013; Utari & Prawirengoro, 2014; Marginingsih, 2017; Erica, 2018; Christiana & Hartanti, 2019; Herawati, 2019; Sukamulja, 2019).

Economic Value Added (EVA) is a method of analyzing a company's financial performance in a certain period by paying attention to the cost of capital so that it can see the company's performance (Suhud & Danisworo, 2022). Economic Value Added (EVA) in a company will focus on the creation of company value, EVA is an indicator of the value creation of an investment by calculating the return on the level of capital that is beneficial to the investor. EVA measures how much management provides additional to shareholders’ wealth during that period of the year. If the EVA is greater than zero it means that the company creates value for shareholders, if the EVA is smaller than zero it will damage the value of the company. In addition, EVA is an analytical tool that can be used independently without the need for comparative data such as industry standards or data from other companies. Financial policy, when measured using EVA, can present an evaluation of the company’s risk level and assist managers in making decisions (Karamoy et al., 2016; Purnamawanto et al., 2016; Rachmaniyah & Nugroho, 2019; Masyiyan & Isyuwardhana, 2019; Hamzah & Awaliyah, 2020; Malik, 2021).

Rahmah et al. (2017) explained the assessment of company performance using the EVA method at PT Bank CIMB Niaga Tbk. in 2011-2014 showed that the company was able to produce economic added value where (EVA > 0) but in 2015 the value of PT Bank CIMB Niaga Tbk. is unable to generate economic added value where (EVA < 0). Meanwhile, the research (Fadjar, 2021) gave the results that the financial performance of PT Perusahaan Gas Negara Tbk. in the period 2014 - 2018 as measured using Economic Value Added (EVA) produced a value (EVA >0), PT Perusahaan Gas Negara Tbk. generates this economic added value shows that the financial manager of PT Perusahaan Gas Negara Tbk. meets the rate of return expected by investors, both creditors and shareholders. Irawan & Manurung (2020) using the same method on PT Garuda Indonesia found that in 2017-2019 the management was unable to manage the company’s capital costs so that it was unable to create added value to the investment and even experienced a decrease in assets during the period 2017 - 2019.

Based on several previous studies, it can be concluded that the use of financial performance analysis methods using the EVA method provides different research results. This may be due to several factors such as the type of company, the financial condition of the company, and the overall economic conditions during the observation period. This study examines the performance of a transportation company, namely PT Blue Bird Tbk. The company, which provides passenger transportation and land transportation services such as taxis, limousines, car rentals, and bus rentals, is very interesting to study. The period in this study was from 2019 to 2021, during which the economy was affected by the COVID-19 pandemic and the implementation of restrictions on community activities, which impacted the performance of PT Blue Bird Tbk. During the period of 2019 to 2021, the total liabilities of PT Blue Bird Tbk increased and decreased. In 2019, the company’s total liabilities amounted to IDR 2,016,202 billion, while in 2020, the total liabilities amounted to IDR 2,017,591 billion, an increase of 0.07%. However, in 2021, the company’s liabilities amounted to IDR 1,450,558 billion, a decrease of 28.1% compared to 2020. The
decrease in liabilities in 2021 was caused by a decrease in the company’s long-term liabilities during that period, which was caused by a decrease in the value of long-term bank debt, a decrease in the company’s trade payables, and a decrease in deferred tax liabilities on fixed assets. The company’s total equity during the period of 2019 to 2020 decreased. In 2019, the company’s total equity amounted to IDR 5,408,102 billion, while in 2020, the total equity of the company decreased by IDR 5,235,523 billion or 3.19%, which was caused by a decrease in the balance of unappropriated retained earnings. In 2021, the company’s total equity decreased again by IDR 5,147,579 billion or 1.68%, which was caused by a decrease in the net profit attributable to the owners of the parent company and non-controlling interests. In 2021, the company generated a net profit of IDR 8,720 billion, an increase of 105.34% compared to 2020, due to improved operational profits and an increase in other revenue units. Based on this data, the researcher will examine the company’s condition through EVA analysis.

2. **Method, Data, and Analysis**

The research method used is descriptive quantitative with the field of study focusing on the capital market, specifically investment analysis. The source and type of data used in this research are secondary data in the form of financial reports from transportation companies listed on the Indonesia Stock Exchange (IDX). The data collection technique used in this research is documentation. The data analysis technique used in this research is quantitative descriptive analysis based on EVA.

3. **Results**

To analyze the data using the economic value added measurement method as follows:

**Calculating NOPAT (Net Operating After Taxes)**

NOPAT aims to find out how much the increase in net profit obtained from business profit (loss) before tax minus tax (Brigham & Houston, 2020). The following is the calculation of NOPAT can be seen in the Figure 1.
Based on Figure 1, it can be concluded that NOPAT PT Blue Bird Tbk. experienced fluctuations where in the 2020 period there was a very significant decline from the previous year, this was due to the COVID-19 pandemic and the emergence of online transportation certainly had an impact on the decline in PT Blue Bird’s net profit, but in 2021 it experienced an increase from the previous year. In addition, based on data from the financial statements of PT Blue Bird Tbk., in 2020 taxes are now PT Blue Bird Tbk. amounted to IDR 26,897,000,000 and deferred tax of IDR 154,212,000,000 with income tax expense of IDR 127,315,000,000. If the profit before tax is less than the current taxable or taxable income, then the tax burden will be less than the tax burden owed, so it will result in deferred tax assets (estimates that will be recovered in the future period). Profit generated by PT Blue Bird Tbk. before income tax in 2020 loss of IDR -417,813,000,000 so that the total income tax expense in 2020 of IDR 127,315,000,000 is a deferred tax asset or estimate that will be recovered in the coming period.

The amount of NOPAT PT Blue Bird Tbk. experienced fluctuations during 3 periods where in 2019 it was IDR 315,622,000,000 in 2020 it experienced a drastic decrease of IDR -417,813,000,000 and in the following year it experienced an increase of IDR 8,720,000,000.

**Calculating Invested Capital (IC) PT Blue Bird Tbk.**

IC is derived from short-term loans plus long-term loans plus shareholders’ equity or total debt and highest equity minus short-term loans (Brigham & Houston, 2020). It is formulated as follows:

\[
\text{Invested Capital (IC)} = \text{Total Debt and Equity} - \text{Short-Term Debt}
\]

![Figure 2](image_url)

Source: www.idx.co.id (data processed in 2022)

**Figure 2.** Invested Capital of PT Blue Bird Tbk. (in millions of rupiah)

Based on Figure 2, it can be seen that it shows that IC, over the past three years has decreased, of course this will affect the calculation of EVA because the value of IC and multiplied by the WACC value to produce capital charge which is then reduced by NOPAT and then will produce the value of EVA. The decrease in IC from 2019 to 2021 was caused by a decrease in total debt and equity as well as the company's short-term debt. The amount of invested capital of PT. Blue Bird Tbk. in 2019 amounted to IDR 6,670,789,000,000 in 2020 experienced a decrease of IDR 6,613,250,000,000 and then in 2021 it continued to decrease by IDR 6,033,096,000,000.
Calculating WACC (Weight Average Cost of Capital) PT Blue Bird Tbk.

WACC is the cost of equity and cost of debt multiplied by the percentage of equity and debt in the company's capital structure, respectively (Brigham & Houston, 2020) formulated as follows:

\[
WACC = \left[ (D \times rd) (1 - Tax) + (E \times Re) \right] 
\]

Source: www.idx.co.id (data processed in 2022)

Figure 3. WACC of PT Blue Bird Tbk. (in millions of rupiah)

Based on Figure 3, it can be seen that the WACC value of PT. Blue Bird Tbk. for the last three years has experienced fluctuations (0.0529, -0.0016, and 0.0052), this is due to the COVID-19 pandemic condition so that it has an effect on the decline in the WACC component, namely the equity level of PT Blue Bird Tbk. in 2019 experienced a decline, the cost of equity of PT Blue Bird Tbk. during the period 2019 to 2021 continues to experience this decline illustrates the rate of return on investment capital to the investment provider, tax PT. Blue Bird Tbk. in 2019 experienced a decrease due to the income tax burden of PT Blue Bird Tbk. in the period was minus. The amount of WACC PT Blue Bird Tbk. in 2019 amounted to 0.0529, in 2020 it decreased by -0.0016, and in 2021 it experienced an increase of 0.0052.

Calculating Capital Charge (CC) PT Blue Bird Tbk.

Capital changers are the cash flow needed to reimburse investors for the business risks of the capital they are called (Brigham & Houston, 2020). CC is formulated as follows:

\[
Capital \ Charge \ (CC) = WACC \times IC 
\]

Source: www.idx.co.id (data processed in 2022)

Figure 4. CC of PT Blue Bird Tbk. (in millions of rupiah)
Based on Figure 4, it can be seen that the value of capital charges over the past three years has fluctuated where from 2019 to 2020 there has been a significant decline where in 2020 there was a Covid-19 pandemic and in that period PT. Blue Bird Tbk. does not have material ties to capital goods investment activities, then in 2021 CC PT. Blue Bird Tbk. has increased. The amount of Capital Charge (CC) in 2019 was IDR 352,884,738,100, in 2020 it decreased by IDR -10,581,200,000, and in 2021 it increased by IDR 31,372,099,200.

**Calculating Economic Value Added (EVA)**

Economic Value Added is obtained from Net Operating After Tax minus Capital Charge. It is formulated as follows;

\[ EVA = NOPAT - \text{Capital Charge (CC)} \]

Source: www.idx.co.id (data processed in 2022)

Figure 5. EVA of PT Blue Bird Tbk. (in millions of rupiah)

In 2020, the company's EVA value has increased again and is better than the previous 2 years of IDR -22,652,099,200, which illustrates that the company is trying to rise and innovate both in collaboration and by issuing the latest breakthroughs.

**4. Discussion**

In this study, it uses the economic value added method in measuring the financial performance of PT. Blue Bird Tbk. for the period 2019 - 2021. EVA is an analysis of a company’s financial performance method based on the value of costs to obtain added value so as to increase the prosperity of the company and its shareholders. EVA will provide easy information to stakeholders such as companies and investors to choose the right steps to improve performance for the company and make investors invest in it. EVA measurement consists of calculating NOPAT, IC, and CC. The amount of NOPAT of PT Blue Bird Tbk. experienced fluctuations during 3 periods where in 2019 it was IDR 315,622,000,000 in 2020 it experienced a drastic decrease of IDR -417,813,000,000 and in the following year it experienced an increase of IDR 8,720,000,000. IC of PT Blue Bird Tbk. in 2019 amounted to IDR 6,670,789,000,000 in 2020 experienced a decrease of IDR 6,613,250,000,000 and then in 2021 it continued to decrease by IDR 6,033,096,000,000. WACC of PT. Blue Bird Tbk. in 2019 amounted to 0.0529, in 2020 it decreased by -0.0016, and in 2021 it experienced an increase of 0.0052. CC in 2019 was IDR 352,884,738,100, in 2020 it decreased by IDR -10,581,200,000. and in 2021 it increased by IDR 31,372,099,200. EVA PT,Blue Bird Tbk. in 2019 amounted to IDR -37,222,738,100, in 2020 it experienced a slight IDR decline of IDR -407,231,800,000. A
negative EVA value indicates that the company is not generating enough value-added to offset the use of capital invested in its activities. This does not mean that the company is not generating profit. However, the profit may not be sufficient to cover the cost of capital expended. One possible scenario is that the company is investing in activities with very high capital costs, resulting in negative value-added despite positive net income. In the observed year, it shows that COVID-19 can affect EVA, as there is a decrease in consumer demand, with people choosing not to travel or reducing their frequency of travel to avoid the risk of virus spread. Investments in service improvement, procurement of personal protective equipment (PPE), and increased sanitation costs. Travel restrictions implemented during COVID-19 affect the transportation company’s operations, as these restrictions, strict health protocols, and quarantine measures can disrupt transportation routes and reduce operational efficiency.

All of these impacts can affect the value-added generated by the transportation company and therefore its EVA. In this situation, the company can take several actions to increase its value-added, such as evaluating unprofitable projects, improving operational efficiency, or reducing capital costs. In this way, the company can create greater value-added, increase its EVA, and make it more attractive to investors.

5. Conclusion

Based on results analysis could pulled conclusion that performance PT Blue Bird Tbk. finances in the period 2019 to 2021 are measured use method analysis EVA, namely PT Blue Bird Tbk. no produce mark plus economical or EVA < 0. The EVA value in 2019 was IDR -37,262,738,100, in 2020 it experienced drastic decline of IDR -407,231,800,000 in 2020 increased again compared to with mark EVAs year previously in the amount of IDR -22,652,099,200. Decline EVA values are caused by conditions the economy in the period 2019 to 2021 was hit COVID-19 pandemic. The pandemic caused by COVID-19 can have a significant impact on the EVA of transportation companies worldwide. This industry, which includes air, land, and sea transportation, has been hit hard by the pandemic. Among the effects of COVID-19 on the transportation industry are reduced demand, additional costs, and operational challenges. The pandemic has caused many people to avoid traveling, resulting in reduced revenue and net profit for transportation companies, especially those in the air and land sectors. Additionally, transportation companies have had to spend more money on personal protective equipment (PPE) and sanitation costs to cope with the pandemic, which can lower their value added and affect their EVA. Furthermore, travel restrictions, strict health protocols, and quarantine measures have disrupted transportation routes and reduced the operational efficiency of companies. All these impacts can have an adverse effect on the value added generated by transportation companies and hence their EVA. Nevertheless, transportation companies that can adapt to these challenges and continue to generate value added even in difficult circumstances have a better chance of maintaining a positive EVA and gaining investor confidence in the long run.

In a post-pandemic scenario, PT Bluebird Tbk should reassess its projects and investments to identify the ones that are not profitable. Then, the company can choose to either halt or postpone these projects to enable the allocation of resources to more profitable ventures that can increase their added value and EVA. Secondly, companies can enhance their operational efficiency by reducing costs and improving performance. Thirdly, companies can lower their capital costs by exploring cheaper funding sources. Fourthly, companies can introduce new innovations to cater to the evolving consumer needs after
the pandemic. Equally important, as the companies strive to cut costs, they must maintain their service quality to stay competitive and retain customers. For future researchers, it is recommended to include longer observation periods to capture the patterns of PT Blue Bird’s performance over time. This is expected to provide a better understanding of PT Blue Bird’s ability to deliver positive results from its activities.

References


