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The Effect of Firm Size on Firm Value of Transportation and Logistics

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Abstract---*Firm value is crucial because it can show the company's financial performance, making investors want to invest. This study aimed to determine the effect of firm value on firm value in transportation and logistics companies on the Indonesia Stock Exchange (IDX) in 2018-2020. The method of determining the sample in this study used a purposive sampling method, so the number of pieces studied was 21 companies. This study uses multiple linear regression analysis. The study results show that firm value positively and significantly affects firm value in transportation and logistics companies on the Indonesia Stock Exchange for the 2018-2020 period.*

Keywords---*financial performance, firm size, firm value, logistics, transportation.*

Introduction

Firm value can be measured by price to book value (PBV), present value approach, price earning ratio (PER), and Tobin's Q. Firm value in this study is proxied using the price to book value (PBV) which can be seen from the ratio of stock price to book value per share (Kadirya, 2018). An investor needs to know the value of a company's shares to find out whether the company's stock value is undervalued or overvalued. PBV is used as a proxy for firm value because it shows changes in the stock's market price compared to its book value. The high value of PBV shows its success in creating corporate value and shareholder welfare (Dewi & Rahyuda, 2020). PBV has an important role in determining investment decisions for investors and also for potential investors. The high firm value will generate high returns so shareholders will be more prosperous (Husna & Satria, 2019).

Investors need good, accurate, complete and timely information, which is used as an analytical tool and a benchmark for making decisions in investing in a company. The firm value will be indicated by the existence of signals in the form of information such as stock prices, funding decisions and investment activities carried out by the company which investors will later receive. Through signaling theory, firm value can be increased by overcoming unequal information between investors and company managers by providing signals to investors through reliable financial information (Adiputra & Hermawan, 2020). Firm value is a reflection of the total assets owned by a company. According to its size, existing companies can be divided into two categories, namely small-scale

companies and large-scale companies. The size of a company is considered to affect the firm value (Sudana, 2019; Sudiyatno et al., 2020; Paramitha, 2020). Companies that have a small or large size will always be taken into consideration by investors because the firm size determines the level of trust of an investor. The larger the firm size, the company will be increasingly recognized by the public and also by investors. Firm value can be seen from the total assets of a company used to finance the company's operational activities (Firdaus, 2020; Gunadi et al., 2020; Hamidah, 2019; Hirdinis, 2019; Robiyanto et al., 2020).

Firm size in this study is measured by size through the natural logarithm of total assets. Research conducted by Yanti & Darmayanti (2019); Dewi & Abundanti (2019); Husna & Satria (2019) states that firm size has a positive impact on firm value. Other research supports that firm size has a positive and significant effect on firm value, namely. In research conducted by Setiadharna & Machali (2017) stated that firm size has no effect on firm value. Another study conducted by Suwardika & Mustanda (2017) states that firm size has no significant effect on firm value. This research was conducted on transportation and logistics sector companies listed on the Indonesia Stock Exchange (IDX) in 2018-2020. In 2020 there are 28 companies in the transportation and logistics sector listed on the Indonesia Stock Exchange (IDX). Companies in the transportation and logistics sector consist of companies engaged in shipping, travel, aviation and land transportation (Sudarma & Sari, 2020; Taufik et al., 2022). One of the determinants of national development is the smooth flow of goods and services. Providers of facilities and infrastructure for sea, land and air transportation are urgently needed to realize this. For the community, companies in the transportation and logistics sector play an important role needed in everyday life, especially in facilitating and facilitating people's mobility because transportation is the lifeblood of a country's economic development. Economic growth in the second quarter of 2021 compared to the second quarter of 2020 was 7.07 percent (Shefer & Frenkel, 2005; Wagner, 2002). From a production perspective, the transportation and warehousing business sector experienced the highest growth of 25.10 percent. Based on these data, companies in the transportation and logistics sector have a major contribution and influence on Indonesia's economic growth (Fahmi, 2012; Fahmi, 2014; Fajaria & Isnalita, 2018).

Literature Review and Hypothesis Development

Firm size is a big or small picture of a company that can be seen from the size of the total assets owned by a company. A company that has significant assets followed by efforts to optimally utilize assets will be able to maximize the firm value so that the stock price will be higher than the book value and vice versa; if a company does not utilize assets optimally, it will affect the firm value which can decrease and a company's stock price will be lower than its book value (Hidayat, 2019). At firm size, optimal asset utilization is necessary because, based on signaling theory, high stock information will attract investors to invest in a company so that it can influence investors' decisions in determining investment decisions in a company (Natsir & Yusbardini, 2020). Based on this, the firm size can directly affect its firm value. In addition, research conducted by Natsir & Yusbardini (2020); Sondakh (2019); Yanti & Darmayanti (2019); Radja & Artini (2020) also states that firm size has a significant positive effect on firm value.

H1: Firm size has a significant positive effect on firm value.

Methods

This research was conducted on transportation and logistics sector companies listed on the Indonesia Stock Exchange (IDX) which can be accessed on the official website of the Indonesian Stock Exchange (IDX). The official website of the Indonesia Stock Exchange (IDX) provides information regarding financial reports which contain the data needed to conduct this research. The object of this study is firm value which is proxied by price to book value (PBV) in transportation and logistics sector companies listed on the Indonesia Stock Exchange (IDX) in 2018-2020. With price to book value (PBV), it can be seen that the company's value is below or above its book value. The method of determining the sample in this study is a non-probability sampling technique, namely purposive sampling (Brooks & Oikonomou, 2018; Brown & Caylor, 2006). Determination of the sample using a purposive sampling technique with several criteria, namely transportation and logistics sector companies that were registered successively in the year of study, namely 2018, 2019, and 2020; have financial report data during the study period, namely 2018, 2019, and 2020; and complete company data with the factors to be examined. The data collection technique used in this study is the observation method. The observation method used in this study was non-participant observation (Sukmawardini & Ardiansari, 2018; Sutanto, 2019; Tumanggor, 2019). This research was conducted by observing and recording data

related to transportation and logistics sector companies listed on the Indonesia Stock Exchange (IDX) for the 2018-2020 period. The analysis technique used in this study is multiple linear regression analysis using the SPSS (Statistical Product and Service Solution) program (Birowo & Fuadati, 2021; Brigham & Houston, 2021; Dewantari et al., 2019).

Results and Discussion

Table 1
Determination Coefficient (R^2)

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate	Durbin-Watson
1	,879a	,569		,4902,49181	2,201

Secondary Data, 2022

Based on Table 1, it is known that the coefficient of determination or R Square is 0.569. This value means that 56.9 percent of the change in firm value in transportation and logistics companies listed on the IDX during the 2018-2020 period is influenced by firm size, while other variables outside the regression model influence 43.1 percent.

Table 2
Hypothesis Test Results (t test)

Variable	B	Sig	Information
SIZE	0,372	0,000	H1 accepted

Secondary Data, 2022

The first hypothesis (H1) states that firm size has a positive and significant effect on firm value. The test results using multiple linear regression show that firm size has a significance level value of 0.000 which is smaller than alpha (0.05), so the effect is said to be significant. The linear regression coefficient value of 0.372 is positive so it can be concluded that H1 is accepted (Murray et al., 1998; Thill, 2000). A company that has a large firm size will be in demand by investors so that it can attract investors to invest in the company which will impact the company's value. Firm size is a big or small picture of a company that can be seen from the size of the total assets owned by a company (Ellinger, 2000; Taniguchi et al., 2012). A company that has large assets followed by efforts to optimally utilize assets will be able to maximize the firm value so that the stock price will be higher than the book value and vice versa, if a company does not utilize assets optimally it will affect the firm value which can decrease and a company's stock price will be lower than its book value (Hidayat, 2019). At firm size, optimal asset utilization is necessary because based on signaling theory, high stock information will attract investors to invest in a company so that it can influence investors' decisions in determining investment decisions in a company (Natsir & Yusbardini, 2020). Based on this, the firm size can directly affect the firm value. In addition, research conducted by Natsir & Yusbardini (2020); Sondakh (2019); Yanti & Darmayanti (2019); Radja & Artini (2020) also states that firm size has a significant positive effect on firm value (Davis & Albright, 2004; Chi & Gursoy, 2009).

Conclusion

Firm size positively and significantly affects firm value in transportation and logistics companies. Investors and company management are expected to pay more attention to firm size which has an impact on firm value. This is because based on the research results stating that firm size has a positive and significant effect on firm value which will improve company performance so that published information can be captured as a positive signal for investors. This study has an R square value of 56.9%. The R square value in this study states that the independent variable can only explain the effect of the firm size variable of 56.9%. Furthermore, further research can consider other variables in analyzing the factors that influence firm value.

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