The Effect of Systematic Risk, Trade Volume, Size, and Market Value on Share Prices
(A Study on Transportation Industry Sub-Sectors Listed on the Indonesia Stock Exchange for the 2015-2019 Period)

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ABSTRACT

The transportation industry sub-sector is a sector with promising returns because it is supported by a variety of adequate infrastructure in Indonesia. In addition, this sector is also in accordance with the needs of the community in supporting their mobility. This study aims to assess and analyze the effect of systematic risk, trading volume, size, and market value on the stock prices in transportation industry sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2015-2019. The method used is descriptive and associative analysis methods. The population in this study is the transportation industry sub-sector companies listed on the Indonesia Stock Exchange in 2015-2019, with a total of 27 companies. Based on the sample selection criteria, there are 9 companies in the transportation industry sector that will be used as research samples. The analysis model used is a classical assumption test, including; normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. The steps taken in the hypothetical test are the model test followed by the t-statistical hypothesis test to test the partial regression coefficient, and the model test with the f-statistic with a significance level of 5%. The results of this study indicate that only Systematic Risk and Market Value variables have an effect on stock prices. Furthermore, the decline in performance during the study period resulted in the risks faced by both companies and investors becoming a fundamental issue that would become a priority. Although the Trading Volume and Company Size variables do not affect stock prices, it does not mean that these two variables are not the concern of companies and investors. However, this will still be one of the determining indicators for both parties.

Keywords
Systematic risk; trading volume; company size; market value; stock price

Introduction

One alternative for companies to be able to develop is to get additional funds through the capital market. The capital market has a very important role in a country, especially for the Indonesian economy. The capital market is a market where long-term financial instruments are traded between sellers and buyers, be it individuals, companies, or the government. In the capital market, investors sell and buy shares or other securities through companies listed officially on the stock exchange. The capital market has a function as a means for business funding or as a means for companies to get funds from investors. Judging from the growth in the number of investors, the development of capital market in Indonesia from 2013 to 2017 has increased. This is shown through the following graph:
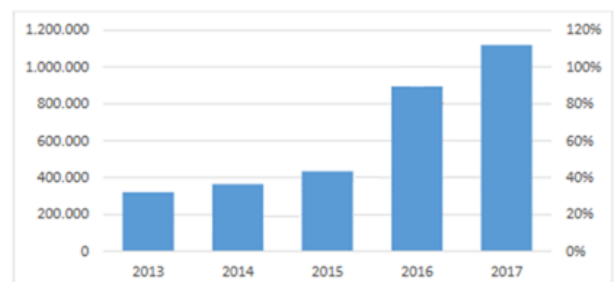

Figure 1. Percentage of capital market growth in 2013-2017

Based on the data above, it is obtained that in 2013 the number of investors who invested in the Indonesian capital market amounted to 320,506. Meanwhile, in 2014 the number of investors grew by 14% so that the number of investors in the year amounted to 364,465. Just like in the previous year, for 2015 to 2017 also experienced a growth in the number of investors. This proves that economic growth is increasingly making stocks experience an increasing trend.

An important role in studying market movements for investors is to look at stock price movements. Before buying the share price as an investment in the company, investors need accounting information to measure the company's performance so as to reduce investment risk. Because the share price is a reflection of investment decisions, funding (including dividend policies) and asset management. Risk is defined as the possibility of losses that will be experienced by investors as a result of investment activities. In addition to considering investment risks, investors also need to consider the returns that will be provided by the company. Return is defined as the expected return from investment activities.

At the Indonesia Stock Exchange (IDX), the transportation industry sub-sector is a sector with promising returns because it is supported by various adequate infrastructures in Indonesia, as well as in accordance with the needs of the community to support mobility. However, the sub-sector of the transportation industry is also a risk-prone sector. This is due to the tight competition such as in the phenomenon of the rise of online transportation as well as regulation-related regulations. Reported from https://investasi.kontan.co.id (17/5), the Composite Stock Price Index (ISHG) of the transportation industry sub-sector fell by 0.62%. Although this figure is a small decrease compared to other sectors, it does indicate that the issuer has a decrease in market capitalization.

Reported from https://republika.co.id (5/12), the share price of PT Garuda Indonesia (Persero) Tbk decreased from Rp 515 to Rp 496. This is because GIAA has an accumulatively declining stock performance. Furthermore, reported from https://www.cnbcindonesia.com (25/7), the same thing was also experienced by PT Express Transindo Utama Tbk. Trading shares of taxi issuers experienced a correction of 34.44% to the figure of Rp 59. This is because the company experienced minimal transactions and a lack of allocation of funds for the available fleet. In principle, the better the company's achievement in generating profit, it will increase the demand for shares, so that the share price will also increase.

The companies gained a large additional capital with the issuance of shares. According to Fahmi (2016), shares are proof of capital or fund ownership in a company, paper clearly stated face value, company name, accompanied by rights and obligations described to each holder. The more shares issued, the greater the funds obtained to develop the business. This means that the greater the opportunity for the company to earn high income and cover losses that may be experienced at any time. Therefore, many companies market their shares in local and world capital markets.

Research conducted by Sussanto and Nurliana (2015) explained that one of the factors that can influence fluctuations in stock prices in the company is systematic risk. A risk assessment needs to be made by each investor before making an investment decision. Meanwhile, according to Nasution (2016), trading volume is important for an investor, because the trading volume describes the condition of shares traded in the capital market. According to Alamsyah (2019), the size of the company is an indicator that shows the financial strength of the company. The bigger the company, the higher the investor's interest in investing in a small company. Furthermore, according to research by Agustami and Syahida (2019), market value can affect the share price. The market value that the company can achieve when running its operations will make the demand for the company's shares increase, so that will cause the company's share price to rise.

Various studies have been conducted, but the results have not always been consistent. Therefore, in this study, the authors used four variables that can affect the share price, namely systematic risk, trading volume, size, and market value. The difference between this research and previous research, among others, is using financial statements for the period 2015-2019 and the company's share price in 2015-2019. The population in this study is a sub-sector of the transportation industry listed on the Indonesia Stock Exchange (IDX).

Based on the brief that has been stated above, the author is interested in conducting a study to find out if systematic risk, trading volume, size, and market value affect the share price.

Literature Review

Stock Price

Share price is the price that must be issued to obtain proof of participation or ownership of a company. According to Helfert (1996) in Nuswandari (2009), the company's performance is a full view of the company's condition over a certain period of time that describes the results or achievements influenced by the company's operational activities in using its resources. In daily stock trading activities, stock prices fluctuate either in the form of increases or decreases. The formation of the share price occurs due to the demand and supply of the shares. Supply and demand occurs due to many factors, both factors that are specific to the stock such as the performance of the company and the industry in which the company is moving, as well as macro factors such as the country's economic condition, social and political conditions, as well as rumors that develop. Performance can be seen from two views, namely financial and organizational. Performance measurement depends on the data provided on the measurement system as well as the instruments used (Budiarso, 2014). By applying an analysis of the company's performance, investors can estimate the company's prospects in the future. If the company's performance is considered good then the company's shares will be in demand by investors and the price will increase, but if the company's performance is considered poor then investors will not be willing to invest in the company because it is considered risky and will eventually lower the company's share price (Kurnia, 2013).

Systematic Risk

The risk to an investment is based on the amount of storage between the expected rate of return and the actual rate of return. The greater the level of difference means the greater the level of risk. According to Richard A. Brealey (2008), risk can be distinguished into two namely systematic risk and non-systematic risk. According to Keown (2011), "Systematic risk is part of variations in investment returns that cannot be eliminated through diversification by investors. Systematic risk is also called market risk where the risk occurs due to events outside the company, such as recession, inflation, interest rates, exchange rates and so on, so this risk is a risk that cannot be diversified."

Trading Volume

The stock has a trading volume traded in one day for each share. Changes in stock trading volume in the capital market indicate stock trading activity on the exchange and reflect investor investment decisions. This trading volume activity is used to see if individual investors who rate the announcement are informative, so it can be said that the information can affect an investment. According to Jogiyanto (2009) stated: "The trading volume is the number of shares outstanding affecting the level of trading volume. The trading volume becomes a measure of the volume of certain shares traded, indicating the ease in trading the shares." Meanwhile, according to Ang (2010), "The volume of stock trading is a reflection of the strength between demand and supply which is a manifestation of investor behavior. The increasing volume of demand and supply of a stock, the greater the effect on fluctuations in stock prices on the exchange. The increasing volume of stock trading indicates the increasing interest of the stock by the public so that it will have an influence on the rising share price."

Company Size

The size of the company is a value where the size of the company can be classified and measured by total assets and sales. Both indicators can be used to determine the size of the company because it can represent how big the size of the company, if the larger the assets, the more capital is invested, and the more sales the more money turnover. According to Wahyuningsih (2017), "The size of the company is scale or value to measure the size of the company based on total assets, sales and market capitalization. The greater the assets, the more capital invested, the more sales the more debt turnover and if the larger the market capitalization, the greater the company will also be known by the public". Whereas

according to Brigham and Houston (2010), "The size of the company is the size of the size of a company indicated or assessed by total assets, total sales, total profit, tax expense and others."

Market Value

Stocks have market value as stated in the capital market quotation, i.e. another approach to estimating the net value of a business. If a stock is listed on a major securities exchange and is widely traded, an approach value can be built on market value. The market value approach is one of the most frequently used in assessing large companies. However, this value can change rapidly. Analytical factors compete with purely speculative influence and relate to public sentiment and personal decisions. According to Sartono (2010), "The market value is the selling value of a company as a business in operation. The excess selling value above the liquidation value is the value of the management organization that runs the company." Whereas, according to Sudana (2011), "Financial market valuation provides information on how much the public appreciates the company, so that the public is interested in buying shares at a higher price." The research paradigm to be discussed is described as follows:
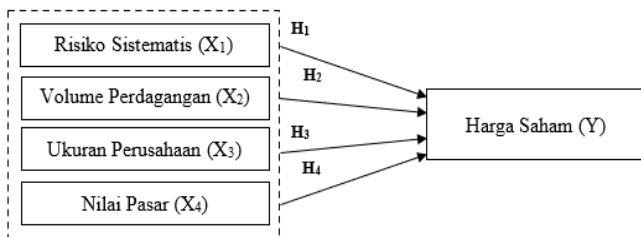
Figure 2. Research paradigm

Methodology

The analysis method used in this research is descriptive and associative analysis method. According to Amalia et al. (2019), descriptive method is a method used in a study to describe and analyze a thing, without being used for broader conclusions. With the aim of knowing there is an attachment or relationship between two or more variables. The study used a causality research model between systematic risk, company volume, company size, market value, and stock price. This research uses a data panel because it wants to see the development of transportation industry sub-sector companies listed on the Indonesia Stock Exchange for the period 2015-2019 on an annual basis for 5 years. The population in this study is a sub-sector of the transportation industry listed on the Indonesia Stock Exchange for the period 2015-2019 as many as 27 companies, based on the criteria of sample selection, there are 9 transportation industry sector companies that will be used as research samples. The analysis model used is, classical assumption test including normality test, multicolinearity test, heterosesticity test, and autocoration test. The steps in this hypothetical test include: model test followed by statistical-t hypothesis test to test partial regression coefficient and model test with f-statistics with 5% significance.

Results and Discussion

After ensuring that the data is feasible to continue to answer the hypothesis specified in the previous point, it can be seen from each data as follows:

Table 1. Descriptive statistics

	Stock Price	Systematic Risk	Trading Volume	Size	Market Value
Mean	1728.790	1.19E+15	9.62E+09	29.05251	5.71E+12
Median	368.8750	4.84E+12	45697942	28.72078	1.21E+12
Maximum	10000.00	3.18E+16	2.84E+11	34.30433	4.78E+13
Minimum	50.00000	-7.54E+14	295.0000	26.24906	1.08E+09
Std. Dev.	2493.510	5.26E+15	4.28E+10	1.976944	9.93E+12
Skewness	1.695986	5.062604	6.199765	0.997354	2.613535
Kurtosis	4.985472	28.52761	40.26284	4.072754	10.03643
Jarque-Bera	28.32054	1382.661	2827.490	9.404379	140.8616
Probability	0.000001	0.000000	0.000000	0.009075	0.000000
Sum	76066.75	5.25E+16	4.23E+11	1278.310	2.51E+14

Sum Sq. Dev.	2.67E+08	1.19E+33	7.88E+22	168.0573	4.24E+27
Observations	44	44	44	44	44

Source: processed data processed

It appears that the average value for the share price is 1728,790 for systematic risk of 1.19E+15 for the trading volume of 9.62E+09 for the company size of 29,053 and for the market value of 5.71E+12. After obtaining the best model using chow test, hausmann test and lagrange multiplier test, namely fixed effect model model, as follows:

Table 2. Fixed effect model

Dependent Variable: STOCK PRICE__Y_
Method: Panel Least Squares
Date: 01/31/21 Time: 10:42 AM
Sample: 2015 2019
Periods included: 5
Cross-sections included: 9
Total panel (unbalanced) observations: 44

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SYSTEMATIC RISK__X1_	-4.03E-14	6.16E-14	-2.653112	0.0415
TRADING VOLUME__X2_	2.37E-09	6.32E-09	1.374325	0.0717
SIZE__X3_	101.1873	246.7737	1.410041	0.0646
MARKET VALUE__X4_	7.86E-11	4.65E-11	2.690165	0.0110
C	-1634.406	7147.560	-0.228666	0.8206

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.701049	Mean dependent var.	1728.790
Adjusted R-squared	0.585326	S.D. dependent var.	2493.510
S.E. of regression	1605.700	Akaike info criterion	17.84121
Sum squared resid.	79926414	Schwarz criterion	18.36836
Log likelihood	-379.5067	Hannan-Quinn criter.	18.03670
F-statistic	6.058001	Durbin-Watson stat	0.888642
Prob. (F-statistic)	0.000026		

Source: processed data

Based on the results above, it appears that the equations formed are as follows:

$$Y = -1634,406 - 4.03E\text{-}14X_1 + 2.37E\text{-}09X_2 + 101.1873X_3 + 7.86E\text{-}11X_4 + 101.1873X_3 + 7.86E\text{-}11X_4 + 1$$

In addition, by comparing the significance value in F-statistics with the result < alpha (0.000026 < 0.05) which means that the equation above is good. So furthermore, it can be done hypothesis testing where it is known that only systematic risk variables and market value variables affect the share price of transportation subsectors with significance value of each variable < alpha (0.0415 < 0.05 and 0.0110 < 0.05). while for variable trading volume and company size must be rejected hypothesis, in other words both variables do not affect the same price because the significance value of each variable > alpha (0.0717 > 0.05 and 0.0646 > 0.05). The share price can be explained by systematic risk variables, trading volume, company size and market value of 58.53%, while the remaining 41.47% by other variables not included in the variables studied.

Conclusion

Based on the previous point discussion, it is known that only systematic risk variables and market value variables affect the share price, this indicates that in the transportation subsector, with the decrease in performance during the research

period, the risks faced by both companies and investors will be fundamental things that will be a priority. In addition, the decrease in performance has an impact on the market value of the transportation subsector which is correlated with the company's share price. Although the variable trading volume and size of the company have no effect on the share price, it does not mean that the two variables are not of concern to the company or investors, it will still be one of the indicators that will determine for both parties.

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