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THE EFFECT OF STOCK RETURN, STOCK VARIANCE RETURN, TRADING VOLUME ACTIVITIES, AND EARNING PER SHARE TOWARDS BID ASK SPREAD

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Abstract

Spread is the difference between offer price and bid price of shares. It is important to know the spread because by knowing the spread can give the information for the investors to make their decision about investment. Investment is important for investors because they want to get return from it and investment also important for the investee because they need funding for their operating activities which can give profit for the companies, so they can achieve their goals. The objective of this research were to examine the effect of stock return, variance return, trading volume activities, and earning per share both partially and simultaneously towards bid ask spread.

The objects in this research were manufacturing companies which were entire in index Kompas 100 for 2011, 2012, and 2013, and listed at Indonesia Stock Exchange from 2011-2013. The sample was selected by using purposive sampling method and the secondary data used in this research was analyzed by using multiple regression method. In total, there were 10 manufacturing companies that fulfill the requirements set by the researcher.

The results of this research were stock return, variance return, trading volume activities, and earning per share simultaneously had significant effect towards bid ask spread. Earnings per share had significant effect towards bid ask spread, while stock return, variance return, and trading volume activities had not effect towards bid ask spread

Keywords: *Bid Ask spread, Earning Per Share ,Stock Return, Trading Volume Activities, and Variance Return*.

INTRODUCTION

In the global competitive environment with the support of information technology that exists today, making any company in developing countries one of which Indonesia , prosecuted indicate better performance. This is due to the implementation of AFTA (ASEAN Free Trade Agreement) which is a form of agreement between the ASEAN countries to establish a free trade area in order to improve the competitiveness of the ASEAN region in the world economy. AFTA requires ASEAN countries to lower tariff to 0-5 %, the elimination of quantitative restrictions and other non-tariff barriers. Recent developments related to AFTA is an agreement to abolish all import duties of goods 0 % in 2015. (www.tarif.depkeu.go.id).

The capital market efficient if it can create conditions in which the share price is able to reflect all available information. Information in the capital markets on the dynamics of share prices is the most important thing for the investors as it can reduce the uncertainty that occurs, so that the decisions taken are expected to be consistent with the objectives to be achieved. In the capital market, investors are faced with a situation of information asymmetry or imbalance of information. Spread is the difference between the bid prices and ask price of shares.

Chandra (2003) in Napitupulu (2013) stated that there are two models of spread are the dealer spread and market spread. Dealer spread represents the difference between the bid and ask price that causes the dealer wants to

ISBN: xxx-xxx-xxx-xx-x

trade securities with its own assets. Market spread is the difference between the highest buying demand by offering lowest selling that occurred at a particular time. Market spreads can be seen from the difference between the offer price and the bid price listed on the exchange.

This study was to examine the effect of stock returns, stock variance return, trading volume activities, and earnings per share towards bid ask spread. Return is defined as the relative changes of share price from previous period. Stock variance returns shows the return variability around normal stock returns caused the volatility (share price fluctuations). Trading volume activities is defined as the number of shares traded on a particular trading day. Earnings per share (EPS) is a measure of net income earned on each share of common stock.

MATERIALS AND METHODS

Signaling theory

Tengko, Tommy and Lengkong (2014) stated that in signaling theory, the information published as an announcement would give a signal to investors in making investment decisions. If an announcement contains a positive value , it is expected that the market will react to the timing of the announcement is received by the market. The behavior of managers in giving signal against the investor will certainly reduce the asymmetry of information that occurs, so that the action is expected to lower the bid-ask spread shares.

Bid Ask Spread

Ady et al (2010) stated that *bid price* is the highest price paid by a buyer of certain shares. Ask price (selling rate) is the lowest price offered by a seller to a buyer of shares. Spread is the difference of selling and buying rate. This difference is the cost incurred plus the broker expected return.

According to Stoll (1989) in Shobriati , et al (2013) determination of the amount spread by the market maker is compensation to cover the three types of costs, such as:

a. Inventory - Holding Cost
   Ownership costs reflecting the price risk and the opportunity cost of the ownership of securities.
b. Order - Processing Cost
   Order costs represent costs incurred relating to the trading of a security, recording communications and transactions clearing.
c. Adverse Information Cost
   Cost information is incurred if the dealers conduct transactions with investors who have superior information.

Spread is calculating used the formula:

$$\boxed{Spread_{it} = \left[\sum_{t=1}^{N} \frac{ASK_t - BID_t}{(ASK_t + BID_t)/2} \right] / N}$$

Stock Return

ISBN: xxx-xxx-xxx-xx-x

Jogiyanto (2009) in Maulina and Idrus (2012) stated that stock return is defined as the relative change in the stock price from the previous period. Stock returns is one of the factors that motivate investors to invest and also a reward for the courage of investors to bear risk on investments. High return usually encourage increased levels of liquidity because investors tend to prefer stocks that have high returns, in the end reduce the bid and ask spreads (Tandelilin (2010) in Santoso and Linawati (2014)). Stock return is calculated using the formula:

$$Return = \frac{P_t - P_{t-1}}{P_{t-1}}$$

Based on the explanation of the effect of stock returns toward bid ask spread , the alternative hypothesis related to it are as follows:
Ha_1 : stock return had negative effect toward bid ask spread.

Stock Variance Return

Maulina and Idrus (2012) stated that stock variance return is the level of risk arising from an investment activity, primarily as a result of share transactions in the stock market caused by the volatility of the stock price. Ady et al (2010) stated that high variance return means the risk faced is also quite high, because the broker will provide a relatively large spread to anticipate the risks. Stock variance return is calculated using the formula:

$$\text{Varian } return = \sqrt{\frac{\sum_{i=1}^{n}[X_i - \overline{X}\ ]^2}{N-1}}$$

Based on the explanation of the effect of stock variance return toward bid ask spread, the alternative hypothesis related to it are as follows:
Ha_2 : stock variance return had positif effect toward bid ask spread.

Trading Volume Activities

Husnan (2005) in Anwar and Asandimitra (2014) said that the volume of stock trading is the ratio between the number of shares traded at certain times of the number of shares outstanding at any given time. According Ambarwati (2008) in Rasyidi and Murdayanti (2013) trading of a stock that is active, with large trading volume indicates that the stock is favored by investors, which means the stock quickly traded. There is a possibility that the dealer will change its ownership position at the time when higher the stock trading or the dealer does not have to hold stock in large quantities too long. Trade volume will lower the cost ownership of shares resulting in lower spreads . Thus the more active trading of a stock or the greater the trading volume of a stock, the lower the cost of ownership of the shares which means it will narrow the bid- ask spread of these shares. Trading volume activities is calculated using the formula:

$$TVA_{i,t} = \frac{Number\ of\ shares\ of\ firm\ i\ trading\ in\ time\ t}{Number\ of\ shares\ of\ firm\ i\ outstanding\ in\ time\ t}$$

Based on explanation of the effect of trading volume activities toward bid ask spread, the alternative hypothesis related to it are as follows:

ISBN: xxx-xxx-xxx-xx-x

Ha_3: trading volume activities had negative effect toward bid ask spread.

Earning per share

Weygandt *et al*. (2013) stated that earnings per share (EPS) is a measure of net income earned on each share of common stock. Calculated by dividing net income available to common stockholders by the weighted average number of ordinary shares outstanding during the year. According to Fitriyah (2012) earnings per share are high indicates that the shares of the company has good prospects, so the stock is trading actively. When a stock is trading actively, then the dealer not keep these shares before trading. This will result in reduced cost of ownership of stocks, which in turn lower the cost of ownership and ultimately reduce the level of bid ask spread. Fitriyah (2012) showed that earnings per share had effect toward the bid ask spread. EPS is calculated using the formula:

$$EPS = \frac{Net\ income - preference\ dividends}{Weighted - Average\ Ordinary\ Share\ Outstanding}$$

Based on explanation of the effect of earning per share toward bid ask spread, the alternative hypothesis related to it are as follows:
Ha_4: Earning per share had negative effect toward bid ask spread.

RESULTS AND DISCUSSION

The dependent variable in this study is the bid ask spread which measured by ratio scale. Stock return, stock variance return, trading volume activities and earning per share measured by ratio scale. Testing of the hypothesis using multiple linear regressions. Tests were performed in this research using descriptive statistics, normality test, multicollinearity, heteroscedasticity test, autocorrelation test, coefficient of determination test, statistical F and t test.

This research has met normality test and all the classical assumption test consisting of multicollinearity test, autocorrelation test, and heteroscedasticity test. From the F test we know that all the independent variables simultaneously had significant effect towards bid ask spreads.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.936E-005	.000		7.188	.000
	RETURN	6.799E-008	.000	.002	.021	.984
	VARIAN	-3.222E-005	.000	-.016	-.157	.876
	VOLUME	-.001	.001	-.047	-.435	.668
	EPS	-1.221E-008	.000	-.892	-8.728	.000

a. Dependent Variable: SPREAD

Results of this study explained that the stock return had not negative effect toward bid ask spread. This can be seen from t value of 0,021 with a significance level above 0,05, that is equal to 0,984. Based on these results, we can conclude that Ha_1 rejected. It is clear that stock return had not a negative effect toward bid ask spread. Stock variance return obtained t value of -0,157 with a significance level above 0,05, that is equal to 0,876. Based on these results, we can conclude that Ha_2 rejected. It is clear that stock variance return had not a positive

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effect toward bid ask spread. Trading volume activities variable obtained t value of -0,435 with a significant level above 0,05, that is equal to 0,668. Based on these result, we can conclude that Ha_3 rejected. That explain that trading volume activities had not effect toward bid ask spread. Earning per share variable obtained t value of -8,728 with a significant level below 0,05 that is equal to 0,000. Based on these result, we can conclude that Ha_4 accepted. That explain that earning per share had significant effect toward bid ask spread.

The conclusions obtained from results of this research were stock return, variance return, trading volume activities, and earning per share simultaneously had significant effect towards bid ask spread. Earnings per share had significant effect towards bid ask spread, while stock return, variance return, and trading volume activities partially had not effect towards bid ask spread

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