THE EFFECT OF FUNDAMENTAL VARIABLES ON STOCK RETURN MEDIATED BY DIVIDEND POLICY

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ABSTRACT

This study aims to examine and analyze the effect between fundamental variables to stock return both directly and through dividend policy. Many studies have looked at what factors affect stock returns. However, the research results are inconsistent, so it requires another variable, dividend policy as a mediating variable, so the results of the research are clearer, especially for the property, real estate and building construction industry in Indonesia. This research was used a quantitative research methods and belongs to a type of explanatory research. The sample were property, real estate, building construction companies listed in Indonesia Stock Exchange during 2013-2018 periods, totaling 37 companies. The sampling technique has been used with saturated or census samples. Data were analyzed using Path Analysis with the SPSS 21.0 program. The results were indicated that profitability has a significant effect on stock return and dividend policy. Leverage has a significant effect on stock return, but it doesn’t effect dividend policy. Meanwhile size doesn’t affect stock return, but has significant effect on dividend policy. The results also show dividend policy is not able to mediate the effect of fundamental variables on stock return.

Keywords: fundamental variables, dividend policy, stock return

INTRODUCTION

Stock return is the goal to be achieved by investors (Ang, 2012). If an investment does not provide benefits, then investors are not interested to invest their fund, that’s why investors tend to pay attention to stock returns. Alexakis (2010), Marundha and Rachbini (2014), Pech, et al (2015), Zaheri dan Barkhordary (2015), Tudje (2016), Suciati (2018) analyze various variables that affect stock return so as to increase stock return by using variables of profitability, leverage, firm size (size). The results cannot determine the variables that can precisely affect stock return, because the results are inconsistent. Thus, it is necessary to know that there are several variables that can affect stock return according to Nazir (2010).

Based on signaling theory, where the higher the profitability, the higher the return expected by investors, because the company is considered profitable, so the demand for shares will increase (Sharpe, et al, 1997). Alexakis, et al (2010) predicts stock returns using financial information on the company, this study finds that profitability (ROE) has a significant effect on stock returns. This is supported by research by Zaheri and Barkhordary (2015) which shows that profitability has a significant effect on company stock returns in Tehran. However, there are several studies that show different results, such as Marundha and Rachbini (2014, Tudje (2016).

Companies with low debt to equity will have a small risk of loss when economic conditions weaken, but the opportunity to earn profits is also low when economic conditions improve (Brigham and Houston, 2013). The company's performance is often judged by a low level of debt, because it has a smaller risk. If the company's performance increases, then this can attract the attention of investors to own the company's shares, so that the share price will rise and then have an impact on increasing stock returns (Subramanyam and Wild, 2012). Alexakis (2010) found that liquidity has a significant effect on stock returns. This is supported by research by Angeline, et al (2020) and Kalbuana, et al (2020) which states that liquidity has a significant effect on stock returns of mining companies listed on the Indonesia Stock Exchange. However, there are several studies that show other results, such as Tudje (2016), Suciati (2018) who found that liquidity has no significant effect on stock returns.

In accordance with the signaling hypothesis theory which states that a company with a larger size indicates a good signal for investors so that the larger the size of the company or the size, the higher the stock return. Size in this study is measured using total sales. The greater the total sales, the higher the revenue, and the higher the company's ability to generate profits. If the company's ability to generate profits increases, the stock price will increase (Husnan, 2015). Zaheri and Barkhordary's (2015), Tudje (2016), Angeline, et al (2020) research found that size has a significant effect on stock returns. However, there are several studies that show different results, such as research by Aloui and Jarboui (2018), Suciati (2018) which finds that size does not have a significant effect on company stock returns.

Apart from the variables described above, another variable that determines firm value is dividend policy. Dividend policy is one of the important financial policies and is controlled directly by the company. The decision is made whether the profits earned by the company will be distributed to shareholders as dividends or will be retained in the form of retained earnings for financing future investments. In this study, dividend policy as intervening variable. The greater the addition of retained earnings means that there is an increase in the company's own capital which is obtained at a low cost. This affects the amount of dividends to be paid and affects the share price and the profits that will be obtained by the shareholders.

This research was conducted in the property, real estate and building construction industry. This industry absorbs a large workforce and has a multiplier effect on other productive sectors. The property, real estate and building construction industries have an important and strategic role in national development, because this sector produces infrastructure to support the government's program and economic growth in Indonesia (Wira, 2014). This is also shown by property, real estate, and building construction industry contributed significantly to the total GDP as a whole compared to 17 other industries, which was around 13.18% (Indonesia’s GDP Report, 2019). Growth in this industry also shown by increasing of stock index was 55.76% in 2014, and increasing of shares volume 178.7% in 2019 compared to 2013.
A purpose of this research study is to determine whether fundamental factors is still effectively applied at this time and affect to the stock return in the property, real estate and building construction companies in Indonesia both directly and through dividend policy.

HYPOTHESIS DEVELOPMENT

Previous studies related to profitability, leverage, firm size have been carried out in various models, which show the pros and cons of the research findings, especially in their effect on stock return. Empirically, the theory that states profitability, leverage, firm size is supported by the finding that capital structure has a significant effect on stock return Alexakis (2010), Marundha and Racbini (2014), Pech, et al (2015) Zaheri dan Barkhordary (2015), Tudje (2016), Suciati (2018), Angeline (2020). The results of Ahmad dan Wardani (2014), Joziwai (2015), Dabrowska (2018), Hudiwijono (2018) indicate that dividend policy effect on stock return.

H1 : Increased profitability will improve the stock return
H2 : Increasing leverage will reduce the stock return
H3 : Increasing size will improve the stock return
H4 : Increased profitability will improve the dividend
H5 : Increasing leverage will reduce the dividend
H6 : Increasing size will improve the dividend
H7 : Increasing dividend will improve stock return

This study places dividend policy as mediating variables to investigate indirect effect of fundamental variables on stock return.

H8: Increased profitability increases stock return through the mediation of dividend policy
H9: Increased leverage reduces stock return through the mediation of dividend policy
H10: Increased firm size increases stock return through the mediation of dividend policy

RESEARCH FRAMEWORK

A model was used in this study refers to the theoretical framework supported by many results of previous research, which stated that fundamental factors affects to stock return even though it shows inconsistent results. Likewise dividend policy will affect to stock return. In this study, dividend policy are used as mediating variables between the effects between fundamental factors on stock return as shown in Figure 1 as follows:

Figure 1. Research Conceptual Framework

RESEARCH METHODOLOGY

This type of research is explanatory through a quantitative approach. This research was conducted at property, real estate and building construction listed on the Indonesia Stock Exchange for six periods (2013-2018). This study uses secondary data. Secondary data relates to information collected from existing sources. The data used in this study include stock return, ROA (return on asset), DER (debt to equity ratio), total sales and DPR (dividend payout ratio). The data collection technique used is the documentation technique. This study uses the data analysis method of path analysis, Hypothesis testing and analysis using the t test and F test as well as the coefficient of determination by first doing the classical assumption test.

This study uses the data analysis method of path analysis (path analysis). Path analysis is a method for analyzing the pattern of relationships between variables with the aim of knowing the direct effect and indirect effect of a set of independent variables (exogenous) on the dependent variable (endogenous). Path analysis is an extension of multiple linear regression analysis, or path analysis is the use of regression analysis to estimate causality relationships between variables that have been previously determined based on theory (Ghozali, 2013). The research problem analyzed using path analysis can be reduced to a structural model with two steps, where the function equation can be formulated as follows:

Model 1 : Independent Path Model
Dividend \(i(t) = \beta_1 \text{Profitability}_{i(t-1)} + \beta_3 \text{Leverage}_{i(t-1)} + \beta_5 \text{Size}_{i(t-1)} + \epsilon_1 \)
RESULTS

Table 1. Regression Test Results Model I

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Effect</th>
<th>t</th>
<th>Sig.</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2</td>
<td>ROA → DPR</td>
<td>3.206</td>
<td>0.002</td>
<td>Significant</td>
</tr>
<tr>
<td>H4</td>
<td>DER → DPR</td>
<td>5.765</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H6</td>
<td>SALES → DPR</td>
<td>-1.318</td>
<td>0.189</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

Table 2. Regression Test Results Model II

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Effect</th>
<th>t</th>
<th>Sig.</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>ROA → RETURN</td>
<td>2.197</td>
<td>0.029</td>
<td>Significant</td>
</tr>
<tr>
<td>H3</td>
<td>DER → RETURN</td>
<td>-1.072</td>
<td>0.285</td>
<td>Not Significant</td>
</tr>
<tr>
<td>H5</td>
<td>SALES → RETURN</td>
<td>-2.387</td>
<td>0.018</td>
<td>Significant</td>
</tr>
<tr>
<td>H7</td>
<td>DPR → RETURN</td>
<td>0.698</td>
<td>0.486</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

Table 3. Result of Indirect Effect

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Direct Effect Coefficient</th>
<th>Indirect Effect Coefficient</th>
<th>Sig Y1→Y2</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H8</td>
<td>0.152</td>
<td>0.010251</td>
<td>0.486</td>
<td>Not Significant</td>
</tr>
<tr>
<td>H9</td>
<td>-0.087</td>
<td>0.020706</td>
<td>0.486</td>
<td>Not Significant</td>
</tr>
<tr>
<td>H10</td>
<td>-0.165</td>
<td>-0.004284</td>
<td>0.486</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

DISCUSSION

The Effect of Profitability on Stock Return
Based on the test results in table 2 shows that profitability has a positive effect on stock return. The higher the profitability, the higher the return expected by investors, this is because the company is considered profitable, so the demand for shares will increase. The greater the profitability, the better the company’s performance. Investors believe that the company's management has used the company’s assets effectively to generate profits for its owners. This situation will be responded positively by investors, so that the demand for company shares increases and can increase stock prices so that it will have an impact on increasing stock returns. The results of this study are consistent with the results of research by Zaheri and Barkhordary (2015), Azis, et al (2018), Aloui and Jarboui (2018), Jabbari and Fathi (2014) which state that profitability has an effect on stock returns.

The Effect of Leverage on Stock Return
Based on the test results in table 2 shows that leverage has no effect on stock return. This is not in accordance with the statement of Subramanyam and Wild (2010) which states that a good company performance is described by a low level of debt can attract the attention of investors to own company shares so as to increase stock returns. Stock returns are closely related to investor behavior. The difference in investor perceptions can cause leverage to have no effect on stock returns. Some investors think that debt is needed by the company for operating activities and investment to develop the company. This also applies to property, real estate and construction industrial companies where the total debt composition is quite large compared to the total capital. Some investors think that debt is needed by the company for operating activities and investment to develop the company. This also applies to property, real estate and construction industrial companies where the total debt composition is quite large compared to the total capital. The results of this study are consistent with the results of research by Zaheri and Barkhordary (2015), Tudje (2016) which state that leverage has no effect on stock returns.

The Effect of Firm Size on Stock Return
Based on the test results in table 2, it shows that size has a negative effect on stock returns, where the larger the size of the company, the lower the stock return. This is contrary to the statement of Harahap (2011) that companies in the large category indicate that
the stock returns obtained by investors will also increase. Size in this study is measured by total sales. The total sales obtained by small companies tend to be lower than large companies. However, the growth rate of total sales obtained by small companies is relatively higher. This is because the income obtained by small companies tends to be lower, so that the increase in income in the following year will be easier to do. Meanwhile, in large companies with large income levels, the income growth rate is relatively low because the previous period's income tends to be higher. This situation will be responded positively by investors, so that the demand for company shares increases and can increase stock prices so that it will have an impact on increasing stock returns. The impact is that the larger the company, the smaller the stock return obtained, and vice versa. The results of this study are consistent with the results of research by Zaheri and Barkhordary (2015), Suciati (2018) which state that size affects stock returns.

The Effect of Profitability on Dividend Policy
Based on the test results in table 2 shows that profitability has a positive effect on dividend policy. The higher the level of profitability, the greater the company's ability to pay dividends. The greater the profit earned by the company, the greater the company's ability to pay dividends. If the company announces an increase in dividends, investors will consider the company's current and future conditions to be relatively good and vice versa. On the other hand, the addition of dividends strengthens the company's position to seek additional funds from the capital market so that the company's performance is monitored by the capital market supervisory team. This control causes managers to try to maintain the quality of performance and this action reduces agency conflict. Thus, profitability is absolutely necessary for the company if it wants to pay dividends. Profitability describes the company's ability to earn profits through all existing capabilities and sources. When the company's profit is high, management will allocate the profit to pay dividends. The results of this study are consistent with the results of research by Al-Makawi, (2007), Arilaha (2009), Lestari, et al (2016), Dabrowska, et al (2018) which states that profitability has an effect on dividend policy.

The Effect of Leverage on Dividend Policy
Based on the test results in table 2, it shows that leverage has a positive effect on dividends. In general, the company's main financing or source of funds in the property, real estate and building construction industries is obtained through large bank loans for construction projects, because it requires large capital. Debt is financing by borrowing funds or capital from creditors. Debt is one way to obtain sources of funds with low capital costs, where companies often ignore the risks in using debt, so companies tend to use debt compared to other financing. The low cost of capital issued by the company will affect the company's ability to earn profits. Profits are part of the company's net profit which is distributed to shareholders. Dividends are taken from the company's net income, the profit will affect the proportion of dividends to be distributed. As a result, the greater the profit earned by the company, the greater the company's ability to pay dividends. The results of this study are consistent with the results of research by Dabrowska (2018), Hudiwijono (2018) which found that leverage has a positive effect on dividend policy.

The Effect of Firm Size on Dividend Policy
Based on the test results in table 2, it shows that size has no effect on dividend policy. Meanwhile the larger the company, the greater the level of dividend distribution. Size in this study is measured by total sales. In general, the total sales of property, real estate and building construction companies have increased in the last five years due to the high demand for housing and the large number of government development projects. When total sales are high, companies tend to use the funds obtained to develop projects and divert funding to other activities such as operational activities or paying obligations that must be fulfilled rather than paying dividends to shareholders. In addition, when referring to research data, many properties, real estate, and building construction companies that are included in the small size pay dividends, but large companies do not pay dividends. This shows that the size of the company cannot be a reference for company management in paying dividends. The results of this study are consistent with the results of research by Jozwiak (2015) which states that size has no effect on dividend policy.

The Effect of Dividend Policy on Stock Return
Based on the test results in table 2, it shows that dividend policy has no direct effect on stock returns. This is not in accordance with the signaling hypothesis theory which states that an increase in dividends is often followed by an increase in stock prices. Stock returns are closely related to investor behavior. There are two types of investors, namely short-term investors and long-term investors. Investors who are short-term oriented tend to get profits in the form of capital gains obtained from the difference in stock prices. While investors with long-term orientation tend to expect profits in the form of dividends, namely the distribution of profits to shareholders based on the number of shares owned. The results of the study which show that dividend policy has no effect on stock returns can be influenced by differences in investor orientation. Investors who invest their capital in the form of shares in property, real estate, and building construction companies are short-term oriented investors. Short-term investors pay more attention to the acquisition of capital gains, so they do not pay attention to information about dividends as a reference for investing in stocks. As a result, dividend policy in property, real estate, and building construction companies has no effect on stock returns. The results of this study are consistent with the results of research by Oktaryani (2016), Haryanti and Murtiasih (2019) which show that dividend policy has no effect on stock returns.

The Effect of Profitability on Stock Return through Dividend Policy
The results show that dividend policy has no effect on stock return, it can be influenced by differences in investor orientation. Investors who invest their capital in the form of shares in property, real estate, and building construction companies are short-term oriented investors. Short-term investors pay more attention to the acquisition of capital gains, and do not pay attention to information about dividends as a reference for investing in stocks, so that dividend policies in property, real estate, and building construction companies have no effect on stock returns. The impact is that profitability has no effect on stock returns through dividend policy.
The Effect of Leverage on Stock Return through Dividend Policy
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The Effect of Firm Size on Stock Return through Dividend Policy
The results of the study which show that dividend policy has no effect on stock returns can be influenced by differences in investor orientation. Investors who invest their capital in the form of shares in property, real estate, and building construction companies are short-term oriented investors. Short-term investors pay more attention to the acquisition of capital gain, do not pay attention to information about dividends as a reference for investing in stocks, so that dividend policies in property, real estate, and building construction companies do not directly affect stock returns. The impact is that size has no effect on stock returns through dividend policy.

CONCLUSIONS AND SUGGESTIONS

Conclusions
- Profitability has a positive effect on stock returns. The higher the profitability and growth of the company, it will increase stock return of property, real estate, and building construction companies.
- Size has a negative effect on stock returns, the larger the size of the companies, it will reduce stock returns in property, real estate, and building construction companies.
- Leverage has no effect on stock returns. This indicated that leverage does not have a direct impact or influence on stock return of property, real estate, and building construction companies
- Profitability have a positive effect on dividend policy. The higher the value of profitability, will increase dividend of property, real estate, and building construction companies.
- Leverage have a positive effect on dividend policy. The higher the value of leverage, will increase dividend of property, real estate, and building construction companies.
- Size has no effect on dividend policy. This indicated that leverage does not have a direct impact or influence on dividend of property, real estate, and building construction companies.
- Dividend policy has no effect on stock returns. This is presumably because investors who invest their capital in shares in property, real estate, and building construction companies are short-term oriented investors.
- Profitability, leverage, size have no effect on stock returns through dividend policy. This is because dividend policy has no direct effect on stock returns, so dividend policy cannot be an intervening variable between the company's fundamental variables and stock returns. Investors who invest their capital in the form of shares in property, real estate, and building construction companies are short-term oriented investors.

Suggestions & Contributions
- The researcher noted that there were limitations to this study. Further research can add exogenous variables and other intervening variables to provide a better picture of stock returns, such as macroeconomic variables and consider industry conditions because these conditions always develop and change every year. The object of this research is limited to property companies, real estate, building construction. Further research can add to or conduct research on other industries, because there are still nine other sectors on the Indonesia Stock Exchange that can be researched.
- Investors, candidates, investors, and investment analysts need to pay attention to and analyze the company's fundamental conditions as an initial consideration before investing in shares, especially in property, real estate, and building construction industry companies. In addition, some of the company's fundamental variables also affect dividend policy, this is also important information, because some long-term oriented investors tend to prefer dividend payments to capital gains.
- The results show that the company's fundamental variables have an effect on dividend policy and stock returns. Companies need to maintain financial performance because the company's financial information has a direct and indirect effect on investor demand and decisions in buying shares, which can be seen in the performance of stock returns.

REFERENCES


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