INVESTMENT OPPORTUNITY SET AND CAPITAL STRUCTURE ON STOCK RETURN WITH PROFITABILITY AS THE CONTROL VARIABLE: AN EVIDENCE OF BANK COMPANIES IN INFOBANK15

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ABSTRACT

The purpose of this study aimed to look at the effect of Investment Opportunity Set and Capital Structure on Stock Return with Profitability as the control variable at bank companies that are listed in INFOBANK15. The sampling method that is used is purposive sampling. The sample that are collected is from 8 out of 15 bank companies listed in INFOBANK15 from year 2014-2018. Analysis data is done using the descriptive statistic, correlation, significant test and linear regression analysis. Investment Opportunity Set using the CAPBVA proxy and Capital Structure using the Debt to Equity Ratio with Profitability as the variable control using the Return on Asset ratio. The result shows that Investment Opportunity Set, Capital Structure and Return on Asset have a significant effect on Stock Return. This shows that the performance of the company can have an effect on investment decision on investors in the banks studied.

Keywords: Investment Opportunity Set, Capital Structure, Stock Return, Profitability

INTRODUCTION

In this modern era, investment is really needed for the community. Investment is a sacrifice taken now to be able to get big results in then days. Investors certainly expect high rates of return. Investment is also carried out to improve the economy of a country. Myers (1977) and Hasnawati (2005) introduce a set of investment opportunities to be used concerning achieving company purposes in increasing profits, it can be done by maximizing the companies value which going to be result an increase in investors. The value of the company depends on the company's expenses in the future will be demonstrated through the investment opportunity set. The shareholder and stakeholders can see the credibility and ability of a company through an investment opportunity set. A company that has high growth is considered to be able to produce high returns in the future (Warianto and Rusiti, 2014).

Kontan (2019), one of the newspaper in Indonesia, stated that The Investment Coordinating Board (BKPM) targets that investment in 2019 can increase by Rp. 792 trillion by the end of 2019, or grow by around 9% from 2018. The Head of BKPM, Thomas Trikasi Lembong added that the investment trend in 2019 will grow. He saw that since the end of quarter IV-2018 until quarter II-2019 the number of investors’ growth continued to be positive. An economist, Samuel Sekuritas Ahmad Mikail Zaini said that direct investment or investment will continue to increase in 2019. The reason is that the formation of Foreign Direct Investment
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(FDI) on Gross Domestic Product (GDP) is still small. So that the opportunity for direct investment funds is still wide open.

Investment Opportunity Set (IOS) is a chance investment owned by a company in the future. A decrease in IOS directly proportional to the decline in investment opportunities owned by the company. Investment opportunity set owned by a company shows the company's growth in the future and its effect on the rate of return obtained by investors. The other main goal of the company is to improve carried out shareholder wealth by maximizing the share price of the company. One form of investment that can be done is through stock investment. Stock investment is a sign of equity participation in a company. There is uncertainty when investing in shares that will make stock returns must be considered in managing stock investments.

Capital structure is a comparison between debt and capital which is used by companies (Husnan, 2008). In this research, the ratio of the capital structure is using Debt To Equity Ratio (DER). Debt To Equity Ratio (DER) is a ratio that shows a comparison between the amount of debt to the amount of one's capital given by the owner of the company (Husnan, 2008). This DER ratio shows how much the company's debt is compared to the equity owned by the company or its shareholders to finance the company's activities. Investors will be interested in companies that have a high DER value because debt can serve as a trigger for increasing company profits. High debt will affect the high profit that will be received by the company. If the company gets a high profit then the investor too will get a high return which is directly proportional to the increased risk that must be faced by investors because of high debt. The proportion of debt held also needs to be considered. If the total amount of current debt is higher than long-term debt, and can still be accepted. The amount of current debt is usually caused by short-term operating debt. If the long-term debt is higher, it is worried that the company will experience liquidity disruptions in the future because it can cause repayment of debt to be hampered and company profits will be disrupted because they have to finance the loan interest.

The variables used in this study is to find the effect of the Investment Opportunity Set and Capital Structure on Stock Return. The premises of the study is based on the signaling theory where the positive signal from companies performance can help investor in their decision making. Bank is often referred to many companies in their search of credit or loan to fund its own operation and achieve their company goals. A healthy bank surely is a goal to pursue, nonetheless, what is the perception of the stock holders and the investors regarding the top banks in Indonesia Stock Exchange (IDX). PT Indonesia Stock Exchange (IDX) in cooperation with PT Infoarta Pratama (publisher of Infobank Magazine) launched a new stock index namely INFOBANK15. INFOBANK15 is comprised of 15 top performance bank companies in Indonesia Stock Exchange (IDX) and considered as top confirming banks. Bank often are measured by their soundness or health level. A healthy bank is suggested to be worthy of investing. The level of debt is often used as signal for any investors whether to invest or not. Chemutai et. al (2016), used debt ratio as capital structure measurement.

This research uses Capital Expenditure to Book Value of Assets (CAPBVA) as an indicator of Investment Opportunity Set, by dividing the total difference of fixed assets t by the total value of fixed assets t-1 divided by total assets. Based on previous study by Chemutai (2016), debt ratio is used as the indicator of capital structure to find its relationship on share price in commercial banks. This Debt Ratio shows the composition of structure of liabilities and equity that act as two type of investors whether they trust on firm with debt or firm that used equity to finance its own asset. According to Hanafi and Halim (2012), return stock is a change value of the period t stock price with t-1. It means higher changes in stock prices, the higher the stock returns generated. Tandelin (2010) added in his book, a stock return is one of the factors triggers the attention of investors in investing and is also a reward for the decision to bear the risks of investing activities done.
Objective of the Study
This research was conducted to prove empirically whether the Investment Opportunity Set and Capital Structure affect Stock Return. This research is to explain between each variable; between Investment Opportunity Set and Stock Return and Capital Structure to Stock Return. The data that is used in this research is secondary data, which means the writer needs to collect and process data into information that can be used to obtain results for the research. This study needs to be improved, researchers who want to examine in the same discussion needed to evaluate so that may be able to prove whether the results of the research are still pertinent to the incident happens today. This research was conducted to prove empirically whether the Investment Opportunity Set and Capital Structure affect Stock Returns.

THEORETICAL FRAMEWORK

Signaling Theory

This signaling theory describes the importance of performance measurement. Moreover, this signaling theory explains why companies have the incentive to provide financial statement information to external parties. Signaling theory discusses how the signals of success or failure of management (agent) are conveyed to the owner (principal). Signal theory explains that giving signals is done by management to reduce asymmetric information. In signaling theory, management's motivation to present financial information is expected to provide a signal of prosperity to owners or shareholders.

The level of bank healthiness is a value that must be maintained by all banks because the good or bad level of a bank health will greatly affect the confidence of parties both external and internal associated with the bank concerned. A bank that is sound or healthy is also an important aspect because as a barometer of business competition from the bank. Based on one of the Bank Indonesia Regulations concerning the assessment of bank soundness, namely Bank Indonesia Regulation (PBI) No.13 / 1 / PBI / 2011, a bank health assessment is one of the things regulated by Bank Indonesia. Soundness rating will be able to provide a positive signal especially for shareholders in making investment decisions. Bank health assessment is the final result of aspects in terms of banking regulation and supervision that shows the performance of national banks.

Capital Structure

Capital structure theory describes how the company's financial policy in determining capital structure (the mix of debt and equity) aims to optimize the value of the firm. Debt is used as a source of corporate funding has the advantages and disadvantages. The advantage of using debt is obtained from taxes (debt interest is tax deduction) and manager discipline (the obligation to pay debts causes management discipline), while the loss of debt usage is related to agency costs and bankruptcy costs. As has been advised, the capital structure is just a part of the financial structure, that concerns long-term shopping containing long-term and capital loans. theory of capital structure explains the influence of capital structure on corporate value, capital costs, and market price (Sudana, 2011).

Profitability

Profitability is the ratio used by management based on returns resulting from sales and investments. Profitability ratios can be calculated using profit margins, basic earning power, return on assets (ROA), and return on equity (ROE) (Brigham & Houston, 2013). ROA is a ratio that states how the company's ability to generate net income using total assets. The greater
the ROA results, the better the company's performance. Through the ROA calculation results can show the company's prospects are getting better because of the potential benefits of the company.

**Investment Opportunity Set**

Investment opportunities owned by companies can affect the value of the company by using the stock market value indicator. Myers (1977) states that investment opportunities are a combination of assets owned by companies with future choices for investment using a positive present value or NPV (Net Present Value). Furthermore, Hasnawati (2005) introduces a set of investment opportunities to achieve company goals.

**Stock Return**

Return is the level of profit obtained by investors for an investment that has been done before that will be received in the future (Ang, 1997). The cash situation or the level of liquidity of a company is a major concern that must be considered before deciding on a decision to determine the amount of dividends to be paid to shareholders. To assess the financial condition and achievements of a company, financial analysis requires several factors including the ratio. Analysis and interpretation of various ratios can provide additional information about the financial condition and financial achievements of the company (Kristiana and Sriwidodo, 2012).

**Investment Opportunity Set and Stock Return**

Investment Opportunity Set (IOS) is a decision investment in the form of the number of assets owned (assets in place) and investment options in the future, where the IOS value will affect a value company (Pagalung, 2003). According to Gaver and Gaver (1993), IOS is not observable because of the nature of IOS which is a hidden variable. The size of an IOS can be determined by using an IOS proxy that can be linked to other variables in the company. IOS Proxy is classified into 3 types, namely: IOS Proxy based on price (price-based proxies); IOS-based investment proxy (investment-based proxies); IOS proxy based on variance (Variance measures) (Gaver and Gaver, 1993; Jones and Sharma, 2001; Kallapur and Trombley, 1999, in Gagaring 2003).

The author used the Capital Expenditure to Book Value Assets Ratio in this study. This ratio shows the additional flow of company stock capital for additional productive assets so that the potential for company growth (Jogiyanto, 2003). Investment Opportunity Set can be measured using the ratio of the difference in the value of the company's fixed assets divided by the company's total assets (CAPBVA).

A quite a lot of research from the other researcher results that indicates the variety of the influence of Investment Opportunity Set on Stock Return, with positive and negative result. Several studies represent that the investment opportunity set does not have a significant effect on stock returns (Aji and Khusniyah, 2015). There is also a positive relationship between Investment Opportunity Set (IOS) and Stock Return (Prawiranegara, 2015)

H1: Significant relationship between Investment Opportunity Set and Stock Return

**Capital Structure and Stock Return**

Capital is one of the most important factors in the formation of a company is needed. The capital needed is used to develop the business and therefore, the company must determine how much capital needed to finance. The capital structure of a company can be determined through the measurement of Debt to Equity Ratio, which measures the level of the debt used to the total of equity owned by the company (Ang, 1997). In Indonesia, some research results show that
Debt to Equity Ratio has no significant effect on stock returns. This was stated by Yulianti and Suratno (2015) and Surya (2017). This result is not the same as the results of a study conducted by (Ihsan et al., 2017), which states that Debt to Equity Ratio has a significant effect on stock return.

H2: Significant relationship between Capital Structure and Stock Return

RESEARCH METHOD

In this study, the authors used an explanatory method. Explanatory research is research that aims to explain the relationship between one variable with another and this study will also used hypothesis testing in doing so. Explanatory research explains how the effect of the investment opportunity set on stock returns, the effect of capital structure on stock returns, and the effect of the investment opportunity set on capital structure with profitability as control variable. Therefore, the variable used in the study are dependent variable which is Stock Return with proxy Stock Price, and independent variable which is Investment Opportunity Set with proxy CAPBVA and Capital Structure with proxy Debt to Equity Ratio, and also with control variable which is Profitability with proxy Return on Asset. Sample taken for this research is from the financial statements of bank companies in Indonesia registered in INFOBANK15 that have been examined for the year 2014-2018. The sampling method is done using the Purposive Sampling. Purposive sampling is used in this research because the option of samples is based on the accurate reasoning that will fulfill the standard needed to be examined.

Which is conformable with the purpose of purposive sampling, a sampling technique with certain considerations. Companies researched must fulfill the following:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Population (Data from bank companies in INFOBANK15 from year 2014-2018)</td>
<td>75</td>
</tr>
<tr>
<td>2.</td>
<td>Sample used</td>
<td>40</td>
</tr>
<tr>
<td>a.</td>
<td>Sample is banks in Indonesian Stock Exchange;</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>Bank companies is state owned banks and BBCA listed in INFOBANK15 for five years, from 2014-2018</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>Banks are not suspended on the date it was access. (September 18, 2019).</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Sample not used</td>
<td>35</td>
</tr>
</tbody>
</table>

The sample option process is based on the criteria that is made and the finalization that there are 40 data that is collected from 8 banking companies, namely: PT. Bank Mandiri (Persero) Tbk. (BMRI), PT. Bank Negara Indonesia (Persero) Tbk. (BBNI), PT. Bank Tabungan Negara (Persero) Tbk. (BBTN), PT. Bank Rakyat Indonesia (Persero) Tbk. (BBRI), PT. Bank Central Asia Tbk. (BBCA), PT. Bank Pembangunan Daerah Jawa Barat (Persero) Tbk. (BJBR), PT. Bank Rakyat Indonesia Agro Niaga (Persero) Tbk. (AGRO), PT. Bank Pembangunan Daerah Jawa Timur (Persero) Tbk. (BJTM). The reason why the researchers used this data is to look on the performance of state owned banks and prominent bank in Indonesia which is BCA which presently most customer used in Indonesia and in the regional area; which listed in INFOBANK15 index that are performed during the government of President Joko Widodo from year 2014-2018. INFOBANK15 can be used as a reference for investors in
investing in banking stocks, especially those who want to invest in stocks with good fundamentals, large capitalization, and high transaction activity. This study views at statistical analysis to obtain answer in this research on the Investment Opportunity Set and Capital Structure on Stock Return and Return on Asset as control variables, with using a statistical analysis through descriptive statistics, correlational analysis, t-test, F-test and regression analysis. The following research models are functions that are given in research:

\[
\text{Return} = \alpha + \beta_1 \text{IOS} + \beta_2 \text{DER} + \beta_3 \text{ROA}
\]

Where:
- \( \text{Return} \): Stock Return
- \( \alpha \): Constant
- \( \beta_1, \beta_2, \beta_3 \): Regression Coefficient
- \( \text{IOS} \): Investment Opportunity Set
- \( \text{DER} \): Capital Structure
- \( \text{ROA} \): Return on Assets

**RESULT**

**Descriptive Statistics**

<table>
<thead>
<tr>
<th>Table 1. Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPBVA</td>
<td>40</td>
<td>0.00</td>
<td>0.03</td>
<td>0.0048</td>
<td>0.00741</td>
</tr>
<tr>
<td>DER</td>
<td>40</td>
<td>4.25</td>
<td>11.40</td>
<td>6.6968</td>
<td>2.08022</td>
</tr>
<tr>
<td>ROA</td>
<td>40</td>
<td>0.00</td>
<td>0.03</td>
<td>0.0185</td>
<td>0.00824</td>
</tr>
<tr>
<td>RETURN</td>
<td>40</td>
<td>86.00</td>
<td>26000.00</td>
<td>5721.0750</td>
<td>6215.09883</td>
</tr>
</tbody>
</table>

The table above shows the results of a descriptive statistical study which shows that banking companies listed in INFOBANK15 in Indonesia. The investment opportunity set shows that the growth of banks in INFOBANK15 index has mean of 0.0048 with minimum value of 0.00. The capital structure shows that the DER has a mean of 6.6968 with minimum value of 4.25 and maximum value is 11.40. That indicates that the company rely on debt in their capital structure. In terms of stock return, the bank in INFOBANK15 has a positive mean result of 5721.0750 with maximum return value of 26000.00 and minimum value of 86.00. Overall, the result indicate the performance of the companies, they have positive and good profitability with mean 1.85% above the standard from Bank Indonesia of 1.5%, in terms of capital structure, banks studied rely more on debt, and in terms of investment opportunity in overall has a positive result.

**Correlation Matrix**

This multicollinearity test examined whether the data could be normally distributed or not which used the correlation matrix with the following hypothesis test.

- \( H_0 \): Multicollinearity does not occurs (coefficient correlation < 0.9)
- \( H_1 \): Multicollinearity occurs (coefficient correlation > 0.9)
The table explains that multicollinearity does not occur or there is no relationship between independent variables. Hence, there is no multicollinearity since each independent coefficient matrix generated is \(-0.128 < 0.9\).

**Regression Model**

Based on the table above, the statistics result shows that between IOS and Capital Structure and also ROA as control variables have simultaneously significant relationship, with \(F\)-value 6.652, and \(p\)-value 0.001. Thus the study can assess the \(t\) test further, with results of ROA and Return with \(t\)-value of 3.724 and sig. value of 0.001 lower than the standard 5% or 0.05. Hence, regression model made in the study is:

\[
\text{RETURN} = 34.948 - 51503.421\text{CAPBVA} - 264.446\text{DER} + 417285.573\text{ROA}
\]

The hypothesis is answered in the discussion section below.

**Discussion**

This study uses the theory signal as a reference theory in this study. Signally theory premises that positive signal from the soundness of bank performance can affect the investment decision of investors or stock holders. The first hypothesis of the study suggests that there is a significant relationship between Investment Opportunity Set and Stock Return. However, the result of the study shows that for banks studied there is no significant correlation between IOS and Stock Return. This result is supported by the previous research by the prior research that indicates in negative impact between Investment Opportunity Set (IOS) and Stock Return (Assagaf, 2016; Anugrah, 2009) and a previous research stated that there is a positive impact between IOS and Capital Structure (Rosliita and Hartono, 2017; Ramdayana, 2016; Putri and Setiawan, 2019).
The second hypothesis of the study suggests that there is significant relationship between Capital Structure and Stock Return. However, the result shows that for banks studied there is no significant correlation between Capital Structure and Stock Return. This result is supported by the previous research that indicates in negative impact between Capital Structure and Stock Return (Ramdayana, 2016; Puspitadewi and Rahyuda, 2016; Roslita and Hartono, 2017). For profitability as control variables, the study suggests that there is significant relationship between Profitability and Stock Return. And, the result shows that for banks studied there is significant correlation between Profitability and Stock Return. This result is supported by the previous research that indicates in positive impact between Profitability and Stock Return (Mariani et. al, 2016; Dwi Putra and Dana, 2016).

Based on the signaling theory, that the positive signaling can affect investment decision making, the study combined the implementation of Investment Opportunity Set and Capital Structure with profitability as its control variable that seek its effect on Stock Return. The result for the banks studied shows that when Investment Opportunity Set, Capital Structure and Profitability is implemented together, it can affect investor decision, and thus effect the Stock Return.

With this result the management, need to ponder their decision making to attract investors that result in favorable stock return. Management decision making includes not only to seek investment opportunity but can manage the use of debt in the Capital Structure and also maintain or improve their level of profitability that by doing so, may attract current investors or future investors to their company.

CONCLUSION

Based on the result of this research, the conclusion that is drawn from the study is that Investment Opportunity Set and Capital Structure collectively have significant influence on Stock Return with Return on Asset as the control variable. However in terms of Investment Opportunity Set, the variable could not explain the variability of the stock return. This is evidence by the results of the t-test analysis and the p-value 0.05. Hence, H1 rejected. In terms of capital structure, the result is the same, hence, H2 rejected.

This result shows that the capital structure of the company didn’t affect the decision of the investor on the stock price of the company. On the other hand, the result on the control variable which is return on asset shows that profitability can explain the variability of the stock return. This is evidence by the result of t-test with 3.724 and sig. value 0.001 lower than the standards of 5% or 0.05. Therefore, it is recommended for the academician and practitioners in their future studies to expand their studies in terms of sector and number of banks studied and include external factors such as microeconomic sectors. And for the investors to look for the profitability ratio company for their investment decision. Furthermore, instead of using financial statement from Indonesia Stock Exchange (IDX), the future studies is recommended to use banks in ASEAN and also using other variables for signaling such as dividend policy to influence investment decision of the stock holders.
REFERENCES


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