Effect of Liquidity Ratio, Solvability, Asset Growth and Inflation on Stock Return with Profitability as Intervening Variable at Building Construction Sector in Indonesian Stock Exchange: A Review of Theories and Evidence

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ABSTRACT

The companies have the main goal is to maximize the value of the firm by increasing net income and stock returns to shareholder wealth. Stock returns is a rewards and results in the form of profits or losses obtained from stock. The level of return obtained by investors is influenced by microeconomic and macroeconomic factors. The question is from many factors that affect stock returns, what factors are more influential on the building construction companies where has listed on the Indonesia Stock Exchange from the 2014-2018 period. The purpose of this study was to determine the effect of microeconomic and macroeconomic factors to stock return by reviewing theories and empirical evidence. After reviewing many theories and literature including some prior research, finally, this study reaches conclusions that there are some variables like liquidity, solvability, profitability, asset growth even inflation influence the stock return of the company.

Keywords: Liquidity, Solvability, Profitability, Asset Growth, Inflation, Stock Return

INTRODUCTION

The main goal of the company is to increase shareholder wealth as much as possible by maximizing net profit, so the higher profits obtained will increase the company's stock price and increasing stock return to. By obtaining maximum profit, it will also affect the welfare of the company's shareholders. Mardiyati, et al (2012) said that the value of the firm which has gone public in the capital market is reflected in the company's stock price. However, the value of the firm which not yet have to go public will realize when the company wants to sell.

The company net income can be assessed from the financial performance presented in a financial statement. A financial statement consists of a statement of financial position, statement of profit and loss, statements of changes in equity, notes to the financial statements and other statements as well as explanatory material which is an integral part of the financial statements (Ikatan Akuntan Indonesia, 2009). Tools that are often used to conduct audits are financial ratios, which include liquidity ratios, solvability, activity, and profitability.

Financial ratio analysis will make it easier for financial managers or for other interested parties to evaluate the current condition of the company, whether the company is in reasonable condition or not.
According to Brigham and Houston (2011), there is one theory that is signaling theory, which is a behavior of company management in providing instructions for investors, related to management’s views on the company’s prospects. Signaling theory disclosed how should the company giving and transfer a signal about information what has been done by management to realize the interests of the owner, namely maximizing company profits by increasing the value of the firm. In increasing value of the firm, the management can use internal and external factors to maximize this.

One factor that can be used by management is profitability, which is the most important factor for shareholders as well as potential investors in investing their capital. A high level of profitability will convince potential investors to invest so that it will have a positive impact on the value of the company’s stock prices that affect stock returns. The level of profitability of a company can be measured using the ratio of ROA (Return on Assets). ROA is a ratio that is used to show the ability of companies to generate profits using total assets (Kasmir, 2016: 201). Results of research by Artha, et al (2014) stated that fundamental factors such as ROA have an influence on stock prices.

Liquidity will also affect stock returns and is things that must be considered because the liquidity ratio is able to show the company’s ability to meet its financial obligations in the short term. One indicator in assessing company liquidity is the current ratio. The low current ratio usually indicates that there is a problem in liquidity, while the high current ratio indicates an excess of current assets and can reduce the company’s ability to make a profit (Sawir, 2009: 10).

Value of the firm and stock returns are influenced by factors capital structure. Capital structure theory explains that a company’s funding policy in determining the amount between debt and equity aims to maximize the value of the company. This the ratio is often used by analysts and investors to see how much the company 's debt compared to the equity owned by the company or shareholders (Kasmir, 2014). Capital structure can be measured using a DER (Debt to Equity Ratio). According to Hamidy (2014), if DER gets higher then the value of the firm will increase as long as DER has not reached its optimal point in accordance with the trade-off theory.

Company growth is also indicated by the growth of annual assets of the total assets of a company. This can be proven through growing companies that can be seen from the increase in assets to enlarge the size of the company.

The level of return obtained by investors is influenced by microeconomic and macroeconomic factors. When there is a change in macroeconomic factors, investors will calculate the impact, both positive and negative, on the company's performance in the next few years, then make a decision to buy or sell shares (Mahmud, 2016). In unstable economic conditions, inflation can occur at any time. As an investor must be able to anticipate these conditions when making investments. The inflation rate can have positive or negative effects depending on the degree of inflation itself. Excessive inflation can cause losses to the economy as a whole, which can make many companies get bankruptcy. (Samsul, 2006: 201).

The following is empirical data about the variables used in this study which include: Current Ratio (CR), Debt to Equity Ratio (DER), Assets Growth, Rate of Inflation and Return on Assets (ROA). Can be seen in Table 1 as follows:
Table 1
Average Financial Ratio of Building Construction Subsector Companies Listed on the Indonesia Stock Exchange in 2014-2018

<table>
<thead>
<tr>
<th>Variable</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR (X)</td>
<td>1.44</td>
<td>1.45</td>
<td>1.54</td>
<td>1.48</td>
<td>1.45</td>
</tr>
<tr>
<td>DER (X)</td>
<td>2.45</td>
<td>1.85</td>
<td>1.62</td>
<td>2.08</td>
<td>2.39</td>
</tr>
<tr>
<td>AG (%)</td>
<td>16.5</td>
<td>35.1</td>
<td>33.6</td>
<td>38.2</td>
<td>16.8</td>
</tr>
<tr>
<td>Rate of Inflation (%)</td>
<td>8.36</td>
<td>3.35</td>
<td>3.02</td>
<td>3.61</td>
<td>3.13</td>
</tr>
<tr>
<td>ROA (%)</td>
<td>6.50</td>
<td>5.03</td>
<td>4.06</td>
<td>5.67</td>
<td>3.52</td>
</tr>
</tbody>
</table>

Sources: Financial statement in IDX

Based on Table 1, it shows that the average value of ROA in 2014-2018 in the building construction subsector company get a change in the level of profitability every year, where there are fluctuations in ROA from 2014 to 2018. Increase and decrease in ROA also followed by the four independent variables namely CR, DER, AG, and Inflation.

THEORY AND EMPIRICAL EVIDENCE

Signaling Theory
According to Brigham and Houston (2011), Signalling Theory is an action taken by company management that gives clues to investors about how management views the company’s prospects. Companies with favorable prospects will try to avoid the sale of shares and seek every new capital needed by other means, including the use of debt that exceeds the normal target capital structure.

Announcement of the issuance of shares by a company is a condition (signal) that management views the prospect of a bleak company. If a company offers to sell new shares more often than usual, then the share price will decrease, because issuing new shares means giving negative signals which can then suppress the stock price even though the company’s prospects are bright.

Stock Return
According to Gitman (2012: 228), stock returns is a rate of return for ordinary shares and is a cash payment received due to ownership of the stock at the initial investment. So this return is based on two sources, namely income (dividends) and changes in stock market prices (capital gain/loss).

According to Jogiyanto (2009), there are two types of stock returns, which are as follows: Actual return, which is the actual return and expected return, which is the expected rate of return that investors will obtain in the future.

Liquidity
Liquidity is an indicator that measures a company's ability to pay all short-term financial obligations at maturity using available liquid assets. The calculation of the liquidity ratio is sufficient to provide benefits for various parties interested in a company. The most interested parties are the owner of the company and also the management of the company whose job is to evaluate the company's performance. As for external parties that also have interests, such as creditors or providers of funds for the company, such as banks or distributors or suppliers. Therefore, liquidity ratio calculation is not only useful for companies, but also for parties...
outside the company. Liquidity in this study uses the current ratio, where this ratio compares the current assets owned by the company with short-term debt.

**Solvability**

Solvability ratio or often also called capital structure (Capital Structure) is a comparison of a company's long-term debt to total equity. Solvency is a reflection of company policy in determining the types of securities issued because capital structure problems are closely related to capitalization issues. Where is composed of the types of funds that make up the capitalization is the capital structure. Capital structure decisions related to the selection of sources of funds both from inside and outside, greatly affect the value of the company (Riyanto, 2008). Sources of funds obtained from internal companies come from retained earnings and depreciation. While funds obtained from external sources are funds originating from creditors and company owners. Meeting the needs of funds from creditors is a debt to the company and funds obtained from the owners of capital are their own capital.

Solvability in this study uses Debt to Equity Ratio (DER), which is the ratio used to assess debt with equity. This ratio is sought by comparing all debt, including current debt and all equity.

**Asset Growth**

Asset Growth according to Aries Heru Prasetyo (2011: 110) is defined as a company growth that is always synonymous with company assets (both physical assets such as land, buildings, buildings and financial assets such as cash, receivables, and others). The asset paradigm as an indicator of company growth is commonly used. The total value of assets in the balance sheet determines the company's wealth.

**Inflation**

Inflation is a general increase in prices, or inflation can also be said as a decrease in the purchasing power of money. The higher the price increase, the lower the value of money. Bank Indonesia defines inflation in the Inflation Targeting Framework as a tendency for prices to increase generally and continuously. Sukirno (2010: 14) defines inflation as a process of rising prices prevailing in an economy. Inflation causes a decline in people’s purchasing power. The inflation rate of a country will indicate investment risk and this will greatly affect the behavior of investors in carrying out investment activities.

**Profitability**

One important indicator for investors in assessing the company’s prospects in the future is to see the extent of the company’s profitability growth. According to Sartono (2011: 122), profitability is the company’s ability to earn profits in relation to sales, total assets, and own capital. Investors remain interested in the profitability of the company because profitability is the single best indicator of corporate financial health.

This study uses a Return On Asset (ROA) ratio because ROA is a ratio that shows the efficiency of the company in managing all assets. ROA measures the rate of return on total assets after interest expense and taxes.
Empirical Evidence

Current Ratio has an influence on stock returns, meaning that the higher the Current Ratio (CR) will result in fewer net profits generated by the company. Debt to Equity Ratio has an influence on stock returns, meaning that every company policy in determining the use of funds in company operations will affect the company to make a profit. The composition of the debt that is too large will reduce the company’s profit because in this condition the company must pay a higher loan interest expense. Assets Growth has an influence on stock returns, meaning companies that have a large growth in total assets will be easier to get the attention of investors and creditors because it reflects the company is able to generate profits that are used to increase the number of assets which can then increase the value of the company through stock returns. Inflation has an influence on stock returns, meaning that high inflation rates usually result in economic conditions experiencing demand for products that exceed the product supply capacity, so prices tend to increase. High inflation can reduce the level of corporate income and the number of stock returns obtained. Return on Assets has a positive influence on stock returns, meaning that the higher the level of profitability of the company will increase stock returns.

**Current Ratio and Return on Asset**

A higher rate of current ratio may indicate excessive cash compared to the level of need or the presence of an element of current liquidity that is low in liquidity (such as inventory). The high current ratio is indeed good from the point of view of creditors, but from the point of view of investors, this is less profitable because current assets are not utilized effectively. Conversely, a low current ratio is relatively riskier but shows that management has operated its current assets effectively (Jumingan, 2011: 123).

Current Ratio (CR) will result in a higher net profit generated by the company because the high current ratio indicates the presence of excess current assets that are not good to the profitability of the company (Sawir, 2009). This is supported by Dewi et al (2015) and Sari et al (2019) which states that the current ratio has a negative and significant effect on Return on Assets.

**H1:** Liquidity (Current Ratio) has an effect on Profitability (Return on Assets).
Debt to Equity Ratio and Return on Asset

According to Kasmir (2008: 157-158), this ratio is used to find out the number of funds provided by creditors and company owners so that this ratio is used to find out every rupiah of capital used as collateral for the debt. Solvency in relation to company profitability has a negative relationship, wherein the condition of high debt owed by the company, the company must pay high debt interest and also use profits derived from the results of its business, so that profitability from the company will decrease.

The following are the results of prior research: Adyatmika et al (2018), Dewi et al (2015), Sari V et al (2014) state that solvency has a negative and significant effect on profitability.

H2: Solvability (Debt to Equity Ratio) has an effect on Profitability (Return on Asset).

Assets Growth and Return on Asset

Profitability is the ability to make a profit in relation to sales, total assets, or own capital. Growth affects profitability, through assets owned so that it affects the productivity and efficiency of the company which ultimately affects profitability. Total assets are chosen as a measure of growth taking into account the relative value of assets relative to the value of market capitalized and sales (Wuryatiningsih, 2002 in Kusumajaya, 2011).

Research by Kusumajaya (2011) states that company growth has a positive and significant effect on profitability.

H3: Assets growth has an effect on the profitability (Return on Asset)

Inflation and Return on Asset

High inflation can reduce the level of revenue acquisition in a company and affect the profitability obtained. Conversely, if the inflation rate of a country decreases, this will be a positive signal for investors along with the decrease in the risk of purchasing power of money and the risk of decreasing real income. So high inflation causes a decline in profits of a company, thus causing the equity effect to be less competitive (Tandelilin, 2010: 342).

Research by Adyatmika et al (2018) states that inflation has a negative and not significant effect on profitability. Meanwhile according to Sahara (2013) states that inflation has a positive effect on profitability.

H4: Inflation has an effect on the profitability (Return on Asset)

Current Ratio, Debt to Equity Ratio, Assets Growth and Inflation simultaneously to Return on Asset

The high level of current ratio that is in line with asset growth can indicate where the company's activities are very good or vice versa. The current ratio is a tool to measure the company's ability to pay short-term obligations or debt that is due soon when billed as a whole (Kasmir, 2014: 134). Debt to equity ratio is a comparison between the debt held by the company with its own capital. (Sutrisno, 2012: 128). The higher the DER level, the negative impact on profitability. While inflation is a tendency for prices to rise continuously (Latumaerissa, 2011: 23). If inflation increases, it will affect the decreasing profitability of the company. Thus, it can be concluded that both the current ratio, debt to equity ratio, asset growth and inflation simultaneously affect the return on assets as an indicator of profitability.

This is supported by the results of research from Sari et al (2019), Dewi et al (2015) and Sari V. et al (2014) which states that CR and DER simultaneously influence the return on assets, Sari V. et al's research (2014), Kusumajaya (2011) which states that asset growth simultaneously
influences profitability, as well as Sahara research (2014) which states that inflation and macroeconomic factors influence simultaneously on return on assets.

H5: Current Ratio, Debt to Equity Ratio, Assets Growth and Inflation has an effect simultaneously on the Return on Asset

**Current Ratio and Stock Return**

The higher current ratio shows that the company is able to meet its short-term debt, thus indicating that the company’s condition is in good condition. A good company condition certainly attracts investors to invest in the company, so that with the market mechanism the stock price will increase.

The following are the results of several previous studies: Basalama et al (2017) state that Current Ratio has a negative and significant effect on stock returns, while Erari (2014) states that Current Ratio has a positive but not significant effect on stock returns.

H6: Liquidity (Current Ratio) has an effect on the stock return

**Debt to Equity Ratio and Stock Return**

Debt to Equity Ratio, has a negative effect on the value of the company because with the high solvency ratio (DER), the company means it is not solvable and this will also show a high risk that will later be charged to shareholders and make the company’s stock returns decrease, so investors will respond negatively to the company. This will have an impact on the decline in the company’s stock price. On the other hand, the use of solvency can also increase the value where the use of debt will reduce tax costs so that stock returns are higher (Brigham and Houston, 2011).

The following are the results of several previous studies: Basalama et al (2017), Artha et al (2014), Kusumajaya (2011) stated that solvency has a positive and significant effect on company stock returns. In contrast to the results of research from Adyatmika et al (2018), Dewi et al (2013), Amanda WBBA et al (2013) which states that the solvency variable has a negative and significant effect on stock returns.

H7: Solvability (Debt to Equity Ratio) has an effect on the stock return

**Assets Growth and Stock Return**

Company growth is expressed as a change (decrease or increase) in total current assets compared to changes in total past assets. The company's growth is expected by internal and external parties because good company growth can give a positive signal to the company's development. Companies that have a large growth in total assets will be easier to get the attention of investors and creditors because it reflects the company is able to generate profits that are used to increase the number of assets which can then increase the value of the company through stock returns.

The following are the results of prior research: Perwira et al (2018), Kusumajaya (2011) stated that company growth has a positive and significant effect on corporate stock returns.

H8: Assets Growth has an effect on the stock return

**Inflation and Stock Return**

High in inflation is usually associated with economic conditions that are too hot. That is, inflation that is too high will also cause a decrease in the purchasing power of money (purchasing power of money). In addition, high inflation can also reduce the level of corporate
income and the number of stock returns obtained. So high inflation causes a decline in profits of a company, thus causing the equity effect to be less competitive (Tandelilin, 2010).

The following are the results of prior research: Afiyati et al (2018), Adyatmika et al (2018), Suriyani (2018) stated that macroeconomic performance such as inflation and the amount of money in circulation negatively affect the variable stock returns.

**H9:** Inflation has an effect on the stock return

**Return on Asset and Stock Return**

According to Tandelilin (2010: 372), Return On Assets illustrates the extent to which the ability of assets owned by the company can generate profits. With high profits, the level of investor confidence will increase, this will have an impact on increasing company value.


**H10:** Profitability (Return on Asset) has an effect on the return stock

**Current Ratio, Debt to Equity Ratio, Assets Growth, Inflation and Return on Asset Simultaneously to Stock Return**

The high level of current ratio that is in line with asset growth can indicate where the company’s activities are very good or vice versa. The current ratio is a tool to measure the company’s ability to pay short-term obligations or debt that is due soon when billed as a whole (Kasmir, 2014: 134). However, the higher this ratio will result in fewer net profits generated by the company because a high current ratio indicates the presence of excess current assets that are not good to the profitability of the company and will affect stock returns.

Debt to equity ratio is a comparison between the debt held by the company with its own capital. (Sutrisno, 2012: 128). The higher the DER level, the negative impact on profitability. This happens because if the higher the level of debt owed by a company, then the company will have the obligation to pay interest on loans that will be recognized as an expense and will reduce the profit/profitability of the company.

Return on assets is one of the profitability ratios used to measure the effectiveness of the company in generating profits by utilizing the assets it has (Kasmir, 2014: 201). The higher the level of ROA, it will have an impact with an increase in the company's stock return. Return on assets itself is influenced by the current ratio, debt to equity ratio, asset growth, and inflation. Where if the level of the current ratio, debt to equity ratio and inflation increase, it will result in a decrease in the level of profitability/profits of the company.

While inflation is a tendency for prices to rise continuously (Latumaerissa, 2011: 23). With the increase in domestic inflation, it will affect the company’s internal conditions resulting in a decrease in the level of profitability of the company. Thus, it can be concluded that both the current ratio, debt to equity ratio, asset growth and inflation through return on assets simultaneously affect the company’s stock returns.

This is supported by the results of research from Basalama et al (2017), Erari (2014) which states that CR, DER, asset growth, and ROA simultaneously influence stock returns, Afiyati et al (2018) states that inflation simultaneously influences returns stock.
H11: Current Ratio, Debt to Equity Ratio, Assets Growth, Inflation and Return on Asset has an effect simultaneously on the Stock Return

Current Ratio, Debt to Equity Ratio, Assets Growth, Inflation to Stock Return with Return on Asset as Intervening

The higher the current ratio shows that the company is able to meet its short-term debt, so the higher this ratio indicates that the company's condition is good. A good company condition certainly attracts investors to invest in the company, so that with the market mechanism the stock price will increase.

Debt to Equity Ratio has a negative effect on the value of the company because with the high solvency ratio (DER), the company means it is not solvable and this will also show a high risk that will later be charged to shareholders and make the company's stock returns decrease, so investors will respond negatively to the company. This will have an impact on the decline in the company's stock price. Solvency in relation to the profitability of the company has a negative relationship as well, wherein the condition of high debt owed by the company, the company must pay high debt interest and also use profits derived from its business results, so that profitability from the company will decrease.

The company's growth is expected by internal and external parties because good company growth can give a positive signal to the company's development. Companies that have a large growth in total assets will be easier to get the attention of investors and creditors because it reflects the company is able to generate profits that are used to increase the number of assets which can then increase the value of the company through stock returns.

High inflation can reduce the level of revenue acquisition in a company and affect the profitability obtained. Conversely, if the inflation rate of a country decreases, this will be a positive signal for investors along with the decrease in the risk of purchasing power of money and the risk of decreasing real income. So high inflation causes a decline in profits of a company, thus causing the equity effect to be less competitive and will affect the company's stock returns (Tandelilin, 2010: 342).

Based on the description above, it can be seen that the independent variables with intervening variables in research affect each other and have a relationship with the dependent variable.

RESEARCH METHODS

The object of this research is the building construction subsector company listed on the Indonesia Stock Exchange for the period 2014 - 2018. The type of data used in this study is secondary data, namely in the form of panel data for all related variables. The population in this study is the building construction subsector with a total of 16 companies.

Based on sample selection, the total sample of building construction sub-sector industries that met the criteria was 9 companies listed on the Indonesia Stock Exchange in 2014-2018.

URL: http://dx.doi.org/10.14738/abr.78.6928.
Table 2
Research Sample

<table>
<thead>
<tr>
<th>No</th>
<th>Company Name</th>
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<tbody>
<tr>
<td>1</td>
<td>PT Acset Indonusa Tbk</td>
</tr>
<tr>
<td>2</td>
<td>PT Adhi Karya Persero Tbk</td>
</tr>
<tr>
<td>3</td>
<td>PT Jaya Konstruksi Mangala Pratama Tbk</td>
</tr>
<tr>
<td>4</td>
<td>PT Nusa Raya Cipta Tbk</td>
</tr>
<tr>
<td>5</td>
<td>PT Pembangunan Perumahan (Persero) Tbk</td>
</tr>
<tr>
<td>6</td>
<td>PT Surya Semesta Internusa Tbk</td>
</tr>
<tr>
<td>7</td>
<td>PT Total Bangun Persada Tbk</td>
</tr>
<tr>
<td>8</td>
<td>PT Wijaya Karya (Persero) Tbk</td>
</tr>
<tr>
<td>9</td>
<td>PT Waskita Karya (Persero) Tbk</td>
</tr>
</tbody>
</table>

In this research, the method of analysis which is done by path analysis which is the development of the regression model and involves the Sobel Test. Through this path analysis, the regression equation involves independent and dependent variables with testing of intervening variables. Path analysis can also measure the relationship between variables in the model both directly and indirectly.

Reference


Jakarta: Raja Grafindo Persada.


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