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Analysis of Factors Affecting Stock Returns with Economic Value Added as Intervening Variables in Property and Real Estate Companies Listed on the Indonesia Stock Exchange

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Abstract

This study aims to determine the effect of cash flow, debt to equity ratio (DER), return on assets (ROA), and stock beta on stock returns with economic value added as intervening variables in Property and Real Estate Companies listed on the Indonesia Stock Exchange for the 2010-2020 period. The population used in this study were 65 Property and Real Estate Companies listed on the Indonesia Stock Exchange. The sampling method is by using purposive sampling. Based on the criteria that have been made, the number of samples is 11 companies so that a total of 121 research observations are obtained. Hypothesis testing in this study using regression analysis and to test the significance of the coefficient t test. The results of this study indicate that: (1)cash flow has a negative and insignificant effect on stock returns, (2)DER has a negative and insignificant effect on stock returns, (3)ROA has a positive and significant effect on stock returns, (4)stock beta has a negative and significant effect on stock returns, (5)cash flow, DER, ROA, and stock beta through economic value added have a significant effect on stock returns.

Keywords
cash flow; debt to equity ratio; stock beta; stock returns; economic value added

I. Introduction

In the current era of globalization, the economic growth of a country is getting tighter and increasing. The competition that occurs is an opportunity and challenge for entrepreneurs to innovate and develop in their business. The growth and development of a company cannot be separated from the funds of investors who invest their funds in the company.

For a company, the capital market is a means to get capital injections from investors. The capital market is an indicator that cannot be separated from the economic growth of a country. Capital market is an activity concerned with public offering and trading of securities, public companies relating to the securities issued, as well as institutions and professions related to securities. The capital market has a very important role for the economy of a country because the capital market performs two functions at once, namely as a means for the public to invest in financial instruments such as stocks, bonds, mutual funds, and derivative instruments. Shares are securities that are ownership. This means that the shareholder is the owner of the company, the larger the shares he has, the greater his power in the company. Profits obtained from shares are known as dividends and the distribution is determined at the General Meeting of Shareholders or GMS (Kasmir 2016:185). Investors who invest in the capital market in the form of shares will receive profits in the form of dividends, capital gains and have voting rights for common stockholders.

Before an investor invests or invests in the capital market, the investor really needs information. Information obtained by investors must be understandable, accurate, relevant and transparent because the information provides a sense of security for investors regarding their investments. This information is very useful for investors to predict and know the uncertainty of their investments and to find out the rate of return they will get in the future. Income from stock investment or return can be in the form of dividends and capital gains. Dividends are revenues from the company that come from distributed profits, while capital gains are income derived from the difference in share prices. If the stock price difference is negative, it means that the investor experiences a capital loss and vice versa. Umoru et al. (2020) in his research said that investors can predict future stock returns by considering the performance of past stocks and current stocks.

One source of information that is often used by investors to make investment decisions is financial statements. Financial statements are reports that describe the financial condition and results of operations of a company at a certain time or a certain period of time (Harahap and Effendi, 2015:105). Financial statements are prepared at the end of each period in accordance with applicable rules and standards. The purpose of financial statements is to provide information about the financial position, performance and changes in the company's financial position, which in the end the information can be used by most users such as investors to make economic decisions or investment decisions. The company's financial statements are the management's responsibility for managing the company's resources. To understand the financial statements, it can be done by means of financial statement analysis.

Financial statement analysis is an analytical tool for financial management as a whole, can be used to detect the company's health level, through analysis of cash flow conditions or company performance. Financial statement analysis is usually carried out by financiers such as creditors, investors and the company itself. Financial statement analysis serves to process data from financial statements as raw materials that will become information for users for decision making. Financial statement analysis is also very useful for companies to predict profit growth and stock prices. Financial statement analysis used in this research is cash flow statement analysis.

Cash flow information is useful for investors and other users as a basis for assessing a company's ability to generate cash flows. The purpose of a cash flow statement is to provide information regarding cash inflows and outflows for a period. The report also distinguishes the sources and uses of cash flows by separating cash flows into operating, investing and financing activities (Subramanyam, 2017:4).

According to Subramanyam (2017:5), operating cash flow is an activity related to company profits. Not only income and expense activities are represented in the income statement, operating activities also include net cash inflows and cash outflows resulting from related operating activities such as extending credit to customers, investing in inventories, and obtaining credit from suppliers. Investment cash flow is a means of obtaining and disposing of non-cash assets. These activities include assets that are expected to generate income for the company, such as buying and selling fixed assets and investing in securities. This activity also includes the provision of loan funds and collection of the principal loan principal. Funding activities are a means of distributing, attracting and providing funds to support business activities. These activities include borrowing and repaying funds with bonds and other forms of borrowing. This activity also includes the distribution and withdrawal of funds by owners of capital and returns (dividends) on their investments.

In addition to cash flow, there is another component in assessing the company's financial performance, namely financial ratio analysis. According to Kasmir (2018:105) financial ratio analysis can be divided into liquidity ratios, solvency ratios, activity ratios and profitability ratios.

The most widely used ratio or measuring instrument in assessing the company's financial performance in investment activities is the profitability ratio. Profitability ratio is a ratio that describes the company's fundamental performance in terms of the level of efficiency and effectiveness of the company's operations in obtaining profits. If financial performance is measured by profitability in good condition, it will have a positive impact on investors' decisions to invest their capital. Basically, potential investors will prefer to invest in companies that have a high profitability ratio, this is because the higher the profitability ratio means the company's opportunity to provide profits to investors is greater and has a low solvency ratio, because a low solvency ratio indicates that the company is able to pay off long-term debt, which will have an impact on increasing the company's stock price. As research conducted by Ramlah (2021) which says the profitability ratio is a very dominant ratio affecting stock returns.

Systematic risk is the risk that affects all investments and cannot be reduced or eliminated by diversification. Examples of this risk are market risk, interest rate, purchasing power, political, psychological and the risk of failure due to worsening economic conditions. Meanwhile, unsystematic risk is the risk inherent in certain investments due to the unique conditions of a particular company or industry. This risk is caused, among others, by mismanagement, financial problems which will then affect the fluctuations in the price of securities in the capital market. Unsystematic risk can be eliminated by diversification. Then what is left is market risk, or the risk caused by aggregate market movements, where stocks move depending on market movements, or better known as Beta (β). Thus the proportion of unique risk in the total risk affects the beta of the stock. Unsystematic risk measures in financial theory generally use stock beta which is the sensitivity of a stock's profit level to market changes.

The property business in Indonesia is currently developing, both for own occupancy and for long-term investment and the prospects are quite promising. Even though Indonesia is currently running a tax amnesty program implemented by the government which makes most people reluctant to invest their shares, this does not necessarily make the property business plummet. The prospect of the property business is still very promising in the coming years due to improving economic conditions and large public demand. The property industry is very developed due to the increasing number of Indonesian population, so the opportunity for the property industry to develop is even greater. However, there is an obstacle in this regard, namely the limited land. This has actually become a problem faced by companies engaged in property and real estate. Some findings say that land acquisition with the aim of building housing or settlements sometimes does not escape environmental pollution. Research conducted by Chousa et al. (2020) found that investors' attention to environmental pollution has a negative relationship to stock returns, which means that if investors are aware that the company causes environmental pollution, investors are reluctant to invest their funds in the company. This situation indicates that investors are aware and feel responsible for the environmental impacts caused by the companies they invest in. Similar to other companies, property and real estate companies also use financial statement analysis to see the condition of the company's financial performance and predict the company's profit growth.

But in 2020 there was a COVID-19 pandemic that hit not only in Indonesia but globally. The rapid spread of COVID-19 has had a huge impact on the Indonesian

economy. This is indicated by the decline in the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange by 26.43%, followed by a decrease in market capitalization of 26.35% and a decrease in daily transactions of 1.49%.

The world health agency (WHO) has also announced that the corona virus, also called COVID-19, is a global threat worldwide (Ningrum et al., 2020). Covid 19 pandemic caused all efforts not to be as maximal as expected (Sihombing and Nasib, 2020). The economic turmoil caused by COVID-19 has hit Indonesia, which has had the least impact in various business sectors. The possible risks that investors and analysis of the capital market are worried about are the occurrence of a recession and an economic crisis due to an economic slowdown. Various real sectors felt the impact of COVID-19 so that business and production activities experienced many disruptions and some even decided to stop. This certainly has an impact on stock prices and stock returns expected by investors because the decline and increase in demand for services is directly proportional to the low and high shares which will also have an impact on decreasing or increasing stock returns.

This study aims to determine the effect of cash flow, debt to equity ratio (DER), return on assets (ROA), and stock beta on stock returns with economic value added as intervening variables in Property and Real Estate Companies listed on the Indonesia Stock Exchange for the 2010-2020 period.

II. Review of Literature

The results of Bash's research (2020) which examined the impact of COVID-19 in 30 countries showed that COVID-19 resulted in a downward trend of stock returns and tended to have a negative value. More specifically, Mazur et al. (2021) examined the impact of COVID-19 on the US stock market when COVID-19 first struck in March and they found that companies operating in the gas, food and beverage, health and software sectors experienced a positive increase in stock returns while companies operating in the gas, food and beverage, health and software sectors experienced a positive increase in stock returns those operating in the oil, real estate, entertainment and service sectors experienced a significant decline in returns. After that, Xu (2021) researched the impact of COVID-19 in Canada and the United States which found that COVID-19 did have a negative effect on stock returns, but the increase and decrease in returns could not be predicted due to the uncertainty faced during COVID-19. Herwany et al. (2021) examined the impact of COVID-19 on companies in Indonesia and found that companies engaged in property, real estate and construction experienced an abnormal decline in returns. This is different from the research conducted by Mujib and Candraningrat (2021) which found that when COVID-19 was announced in Indonesia as a pandemic, it did affect stock returns but not significantly. Meanwhile, Lalwani and Vedprakash (2020) in their research said that during the COVID-19 pandemic, the efficiency of the stock market decreased in providing information. However, Neukirchen et al. (2021) said in their research that companies that can move or operate efficiently can increase at least 9.44% of returns in crisis periods such as the COVID-19 pandemic.

III. Research Methods

This research is causality research. Causality research is research that shows the direction of the relationship between the independent variable and the dependent variable, in addition to measuring the strength of the relationship.

Population is a complete group of elements, which are usually people, objects, transactions, or events in which we are interested in studying or being the object of research. According Pandiangan et al. (2018) in Sugiyono, sampling is the selection of samples based on certain characteristics that are considered to have relevance to the characteristics of the population that have been known previously. The population used in this study were 65 Property and Real Estate Companies listed on the Indonesia Stock Exchange. The sampling method is by using purposive sampling. Based on the criteria that have been made, the number of samples is 11 companies so that a total of 121 research observations are obtained.

The method used for data collection in this study is documentation by collecting secondary data. In addition to using documentation techniques, researchers also conducted a literature study in collecting data. Library research is a form of research that uses library facilities by examining theoretical discussions from various books, articles, and scientific works related to writing (Pandiangan, 2018).

Hypothesis testing in this study using regression analysis and to test the significance of the coefficient t test.

IV. Results and Discussion

4.1 General Description

In this study, the population used is Property and Real Estate Companies listed on the Indonesia Stock Exchange with a total of 65 companies in 2010-2020. Sampling was done by purposive sampling method. Based on the criteria and a span of 11 years, the total sample obtained was 121 observations (11 Property and Real Estate Companies for 11 years) in this study.

4.2 Descriptive Statistical Analysis

Descriptive statistics provide a general description or description of the data used as research samples, seen from the minimum, maximum, average, and standard deviation values.

From the results of descriptive statistical tests, it can be seen that:

a. The number of observations is 121 consisting of 11 Property and Real Estate Companies for 11 years.
b. The minimum value of cash flow is -31.66726 obtained by PT. Intiland Development Tbk. (DILD) in 2020, while the maximum value of 258,23184 was obtained by PT. Agung Podomoro Land Tbk. (APLN) in 2019. The average value of cash flows in Property and Real Estate Companies during the 2010-2020 year period is 6.0415083 with a standard deviation of 28.03663255. There are 4 Property and Real Estate Companies that have cash flow values above the mean and 7 companies that have cash flow values below the mean. A standard deviation value that is higher than the mean indicates that there is a high data deviation.
c. The minimum value of debt to equity ratio (DER) of 0.23632 was obtained by PT. Duta Pertiwi Tbk. (DUTI) in 2013, while the maximum value of 2.226962 was obtained by PT. Summarecon Agung Tbk. (SMRA) in 2011. The average debt to equity ratio in Property and Real Estate Companies during the 2010-2020 period is 0.9247719 with a standard deviation of 0.46581058. There are 6 Property and Real Estate Companies that have a debt to equity ratio value above the mean and 5 companies that have a debt to equity ratio value below the mean. The standard deviation value that is lower than the mean indicates that there is no high data deviation.

d. The minimum value of return on assets (ROA) of 0.00371 obtained by PT. Kawasan Industri Jababeka Tbk. (KIJA) in 2020, while the maximum value of 0.18139 was obtained by PT. Metropolitan Kentjana Tbk. (MKPI) in 2016. The average return on assets of Property and Real Estate Companies during the 2010-2020 period is 0.594404 with a standard deviation of 0.04022246. There are 4 Property and Real Estate Companies that have a return on assets value above the mean and 7 companies that have a return on assets value below the mean. The standard deviation value that is lower than the mean indicates that there is no high data deviation.

e. The minimum stock beta value of -177,00000 was obtained by PT. Duta Pertiwi Tbk. (DUTI) in 2010, while the maximum value of 70.90000 was obtained by PT. Bumi Serpong Damai Tbk. (BSDE) in 2010. The average value of stock in Property and Real Estate Companies during the 2010-2020 year period is -1.2607064 with a standard deviation of 17.72414700. There is 1 Property and Real Estate Company that has a stock beta value above the mean and 11 companies that have a stock beta value below the mean. A standard deviation value that is higher than the mean indicates that there is a data deviation.

f. The minimum value of economic value added is -3.77724 obtained by PT. Kawasan Industri Jababeka Tbk. (KIJA) in 2013, while the maximum value of 4.22025 was obtained by PT. Bumi Citra Permai Tbk. (BCIP) in 2014. The average economic value added in Property and Real Estate Companies during the 2010-2020 period is -0.0147512 with a standard deviation of 0.82019167. There are 5 Property and Real Estate Companies that have an economic value added value above the mean and 6 companies that have a stock beta value below the mean. A standard deviation value that is higher than the mean indicates that there is a data deviation.

g. The minimum return value of -0.87529 was obtained by PT. Bumi Citra Permai (BCIP) in 2016, while the maximum value of 2.08824 was obtained by PT. Duta Pertiwi Tbk. (DUTI) in 2010. The average return on Property and Real Estate Companies during the 2010-2020 period was 0.1265981 with a standard deviation of 0.42769649. A standard deviation value that is higher than the mean indicates that there is a high data deviation.

4.3 Hypothesis Test

Hypothesis testing can be done after the data to be used has passed the classical assumption test. Hypothesis testing in this study was conducted using regression analysis. In this study, two regression analyzes were performed, namely simple linear regression analysis and multiple linear regression analysis. Simple linear regression analysis was used to test the effect of one independent variable on one dependent variable, while multiple linear regression analysis was used to analyze the effect of several independent variables on one dependent variable. This study aims to determine the effect of cash flow, debt to equity ratio (DER), return on assets (ROA), and stock beta on stock returns with economic value added as intervening variables.

Table 1. Results of Simple Linear Regression Analysis I

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.786	.024		32.920	.000
	Cash Flow	-.002	.001	-.113	-1.134	.259

a. Dependent Variable: Stock Returns

Table 2. Results of Simple Linear Regression Analysis II

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.800	.051		15.816	.000
	DER	-.022	.049	-.045	-.454	.651

a. Dependent Variable: Stock Returns

Table 3. Results of Simple Linear Regression Analysis III

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.667	.043		15.494	.000
	ROA	1.718	.561	.293	3.065	.003

a. Dependent Variable: Stock Returns

Table 4. Results of Simple Linear Regression Analysis IV

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.775	.022		35.285	.000
	Stock Beta	-.004	.001	-.334	-3.547	.001

a. Dependent Variable: Stock Returns

Table 5. Results of Path Analysis Model I

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.690	.073		9.442	.000
	Cash Flow	-.001	.001	-.061	-.608	.545
	DER	.062	.049	.134	1.273	.206
	ROA	1.063	.596	.190	1.784	.078
	Stock Beta	-4.294E-5	.001	-.004	-.037	.971

a. Dependent Variable: Economic Value Added

Table 6. Results of Path Analysis Model II

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.441	.093		4.744	.000
	Cash Flow	-.001	.001	-.057	-.645	.520
	DER	.015	.045	.030	.323	.747
	ROA	1.425	.556	.243	2.562	.012

	Stock Beta	-.004	.001	-.333	-3.815	.000
	Economic Value Added	.283	.093	.270	3.028	.003

a. Dependent Stock Returns

The results from Table 1,2,3,4,5,6 of this study indicate that: (1)cash flow has a negative and insignificant effect on stock returns, (2)DER has a negative and insignificant effect on stock returns, (3)ROA has a positive and significant effect on stock returns, (4)stock beta has a negative and significant effect on stock returns, (5)cash flow, DER, ROA, and stock beta through economic value added have a significant effect on stock returns.

V. Conclusion

The results of this study indicate that: (1)cash flow has a negative and insignificant effect on stock returns, (2)DER has a negative and insignificant effect on stock returns, (3)ROA has a positive and significant effect on stock returns, (4)stock beta has a negative and significant effect on stock returns, (5)cash flow, DER, ROA, and stock beta through economic value added have a significant effect on stock returns.

Some suggestions that can be given by researchers related to this research are as follows:

a. For Investors, from the results of this study, it is expected that before making investment decisions, they must pay attention to how much profit the company generates and how much economic value added the company can provide because these 2 things have a very positive and significant impact on stock returns. In addition, the beta of a stock that has a negative and significant effect on stock returns, which indicates that not always a large risk produces a large return.
b. For Company Management, from the results of this study, it is hoped that if management wants to attract investors to invest their money in order to increase stock prices, management must focus on return on assets and economic value added because these two variables greatly influence investors in making investment decisions, but that does not mean they have to ignore other financial ratios.
c. For Further Researchers, it is hoped that the number of observations will be longer with a larger number of companies because in this study only property and real estate companies were used for 11 years.

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