



## **Determinants of Return Stock Company Real Estate and Property Located in Indonesia Stock Exchange**

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### **ABSTRACT**

This study estimates and analyzes the factors affecting profitability performance as well as the implications for stock returns on real estate and property sectors listed on the Indonesia Stock Exchange (IDX) during the period of 2007-2014. Of the 45 listed property companies in IDX, samples taken 23 companies. Based on the results of the research, obtained empirical findings that bring important implications in the development of the theory of profitability performance of the company associated with the factors that influence it and its implications on the stock return of the company. The study developed four groups of factors that affect the performance of the company's profitability of interest rates, solvency, total asset turnover (TATO), and exchange rate. Factors that do not affect are Liquidity. Factors that affect the company's stock returns are return on assets, liquidity, solvency, TATO, and exchange rate. Factors that do not affect is the interest rate. The panel data regression model to estimate the determinants of the profitability performance of real estate and property companies in Indonesia is based on three models of common effect model, fixed effect model, random effect model. Through paired pair testing for determinant of profitability performance and implication of stock return, that Random Effect model is better. For testing each model on the determinant of profitability performance. The largest fixed-effect model that is R-squared 0,532102 and adjusted R-squared 0,451120. Paired testing of two models for stock returns, that the most satisfactory fixed effect model that is R-squared 0.845078 and Adjusted R-squared 0.816351

**Keywords:** Interest Rate, Liquidity, Solvency, Total Asset Turnover, Exchange Rate, Profitability, Stock Return

**JEL Classifications:** G11, G23, G32

### **1. INTRODUCTION**

Investment decisions are important factors in the company's financial function. Fama (1978) states that corporate value is solely determined by investment decisions. The opinion can be interpreted that the investment decision is important, because to achieve the company's goal is to maximize shareholder wealth will only be generated through corporate investment activities. The purpose of the investment decision is to obtain a high level of profit with a certain level of risk. High gains accompanied by manageable risks, are expected to increase the value of the firm, which means increasing shareholder wealth. In other words, when in investing companies are able to generate profits by using the company's resources efficiently, then the company will gain the

trust of potential investors to buy their shares. Thus, the higher the company's profit the higher the company's value.

The focus of analysis in investment decision consists of three aspects: (1) Liquidity aspect; (2) Aspects of investment opportunities and (3) Financial constraint aspects. The liquidity aspect relates to the company's ability to repay all obligations that are immediately due or are included in the category of short-term liabilities.

Aspects of opportunity the investment opportunity aspect involves how companies combine asset in place and decide on investment options in the future. While the financial constraint aspects (constraints financing) associated with the limitations of

companies in obtaining capital from sources of funding available to invest. Kaplan and Zingales (1997) argue that financial constraints occur when firms face the difference between the cost of capital and external financing.

The capital market as a means to mobilize funds sourced from the community to various sectors that implement the investment. The main requirement that investors want to be willing to channel their funds through the capital market is a feeling of security in their investment. In the capital market, the financial statements of companies that go public is very important as the basis of the company's performance appraisal, especially companies that go public is a company owned by large companies, therefore efficient corporate operations will greatly affect the public's appreciation of public companies. Measurement of efficiency can be done by using financial performance (Harianto and Sudomo, 1998).

In investing in the capital market analysts and investors can approach the investment that can be broadly divided into two approaches, namely technical analysis and fundamental analysis. Technical analysis is an attempt to estimate stock prices by observing changes in stock prices in the past (Francis, 1988). While fundamental analysis is a stock analytical technique that studies about fundamental finance and economic facts of the company as a step valuation of the company's stock price (Francis, 1988).

Investors who will invest by buying stocks in the capital market will analyze the condition of the company in advance so that investments made can provide return (return). Gaining return (profit) is the main goal of trading activities of investors in the capital market. Investors use various means to obtain expected returns, either through their own analysis of stock trading behavior, or by utilizing the tools provided by capital market analysts, such as brokers, dealers, investment managers. The pattern of stock trading behavior in the capital market can contribute to the pattern of stock price behavior in the capital market. The pattern of stock price behavior will determine the pattern of return received from the stock (Budi and Nurhatmini, 2003).

Investing in the real estate and property sector should consider two things: The returns on investments and the risk borne by investing in the sector. The investor expects a higher return on his investment than the risk he will incur. High returns have an impact on the performance of the company that affects the company's stock price. Every investment decision taken by a company has an impact on risks that can ultimately affect the value of the firm. Understanding the risk itself is a deviation of the results (return) obtained from the expected return (expected). Not achieving the expected results means storage of the results obtained compared to the planned results.

This risk occurs because the state of the time comes full of uncertainty (uncertainty).

Real estate and residential and residential property business shows rapid growth in Indonesia, as evidenced by the proliferation of housing, business and supermarkets in recent years.

The rapid development of the property sector is followed by the increasing demand for the board, thus making property issuers need funds from external sources. Funding from external sources can be obtained through the capital market (Husnan, 1998). Many people invest their capital in the property industry due to land prices that tend to rise. The cause is the supply of land is fixed while the demand will always be large as the population increases.

The increase in land prices is estimated at 40%. In addition, the price of land is rigid, meaning the price determinant is not the market but the people who control the land (Rachbini, 1997). Ang (1997) revealed that the ratio that is expected to affect the return of a stock is the Debt to Equity Ratio (DER). This ratio is a solvency ratio that measures the company's performance capability in returning its long-term debt by looking at the ratio between total debt and total equity. In Balancing Theory it is stated that the decision to add debt not only has a negative impact, but it can also have a positive impact because the company must try to balance the benefits with costs incurred due to debt (Wahyudi, 2003). As long as the benefits are still far greater than the cost of debt, then the debt can be increased. However, if the opposite happens then the debt should not be added. Proportion

The object used in this research is the real estate and property industry listed on Indonesia Stock Exchange (IDX). This sector is chosen to be the object of research because this sector has developed after the monetary crisis and began to show its contribution to the economic growth of late. The development of the property industry today also shows a very convincing growth. This is marked by the rampant construction of housing, apartments, offices and hotels. In addition, the development of the property sector can also be seen from the proliferation of real estate in big cities. From a macroeconomic perspective, the property industry has an enormous scope of business so that the excitement of the property business will in turn affect economic growth and open employment. Property is also an important indicator of a country's economic health. Therefore, this industry is the first to signal the fall or the rise of a country's economy (Santoso, 2005).

According to data from DPP Real Estate Indonesia, active members throughout Indonesia in 34 Provinces up to 2014 as many as 3,000 companies. Whereas real estate and property companies are listed on the IDX until the year 2014 as many as 45 companies.

The development of property companies listed on the Indonesia Stock Exchange (Bursa Efek Indonesia) since 2007 amounted to 30 companies. In 2014 already registered 45 companies. The total asset in 2007 is IDR 72.725.712.000.000. In the year 2014 is IDR 300.158.438.000.000.

### 1.1. LK and Return on Assets (ROA) and RS Graphics Explanation

Whereas the Liquidity of 23 Real Estate Companies listed on the IDX from 2007 to 2014 experienced up and down from 5.104.29 up to 4.673.77. Which means Current Asset goes up and down while Current Debt goes up. While its ROA rose from 1.8 to 5.22. This means that profits will continue to increase until 2014, coupled with an increase in sales. Stock returns fell, a drastic drop

in 2008 to -8.340 then rose again. The position in 2014 amounted to 18,219. The cause of the decline in stock returns in 2008 due to the world economic crisis induced into Indonesia is not large compared to 1998.

### 1.2. Graph Solutions and ROA and RS Explanations

The explanation of ROA and RS, which differs solely from Solvency 23 Real Estate companies listed on the Indonesia Stock Exchange (Bursa Efek Indonesia) from 2007 to 2014. In this graphic illustrates that from 2007 to with the year 2014 Solvency up and down. The position in 2007 with the number 6.125.84 until 2014 its position becomes 5.386.32. Which means Total Debt up and down until 2014, while Equity is also up and down.

### 1.3. Explanation of Tattoos and ROA and RS Graphics

The explanation of ROA and RS, which differ only in total asset turnover (TATO) i.e. sales turnover compared to total assets. Sales turnover decreased up from 2007 to 476.29 up to 2014 to 751.61. Which means gross sales down and down while total assets up and down up to 2014.

From these three graphs it is seen that Solvency position compared to Liquidity is always greater. Solvency position in 2007 amounted to 6.125.84 while Liquidity 5.104.29. In 2014 the position of Solvency is 5.386.32 while Liquidity is 4.673.77.

## 2. LITERATURE REVIEW

### 2.1. Stock

Shares are a sign of capital participation in a limited liability company as it is well known that the investor's goal is to buy shares to earn income from those shares. The investors are categorized as investors and speculators. Investors here are people who buy shares to own companies in the hope of getting dividends and capital gains in the long run, whereas speculators are people who buy stocks for immediate resale if the exchange rate is considered the most profitable as it is known that the stock provides two kinds of income that is dividend and capital gains.

There are various definitions of shares that have been expressed by experts as well as various text books, among others: The price of shares is a sign of participation or ownership of a person or entity in a company, a piece of paper is a piece of paper that explains that the owner of the paper is the owner (regardless of portion/amount) of a company issuing such paper (shares). A piece of stock has value or price.

According Sawidji (2005) stock prices can be divided into three:

1. Nominal Price.
2. The price stated in the stock certificate set by issuer to assess every share issued. The magnitude of the nominal price gives the importance of the stock because the minimum dividend is usually set based on the nominal value. Price Prime, This price is at the time the stock price is recorded in the stock exchange.
3. Stock prices on the primary market are usually fixed by the guarantor emissions (underwriters) and issuers. Thus it will be known how the share price of the issuer will be sold to the

public usually to determine the initial price. Market Price if the initial price is the selling price of the emission agreement to the investor, then the market price is the selling price of one investor with another investor. This price occurs after the shares are listed in the stock. Transactions here no longer involves issuers from the underwriters of this price referred to as prices in the secondary market and this price really represents the price of the issuing company, because in the transaction on the secondary market, there is little investor price negotiation with the issuing company. The daily price announced in newspapers or other media is the market price.

Stock pricing can be done through technical analysis and fundamental analysis. In technical analysis the stock price is determined based on the stock price record in the past, while in the fundamental analysis the stock price is determined on the basis of the fundamental factors that influence it, such as profit and dividends. This is because the value of the stock represents the value of the company, not only the intrinsic value of a time but also is the expectation of the company's ability to improve shareholder's welfare. Fundamental analysis tries to estimate stock prices in the future by: (1) Estimating the value of fundamental factors affecting future stock prices, and (2) applying the relationships of these variables to obtain the estimated stock prices.

Stock price is the market price recorded every day at the closing time (closing price) of a stock. In this study, the stock price in question is the average stock price 5 days after the publication of financial statements in the period of observation. The financial statements may present information relevant to the decision model used by investors in making buy, hold, or sell stock decisions. Stock prices that occur in the stock market always fluctuate from time to time. The price fluctuations of such shares will be determined between the strength of supply and demand. If the offer amount is greater than the number of requests, generally the price of the stock price will decrease. Conversely, if the amount of demand is greater than the amount of supply to an effect, then the stock price will likely rise. According to

Nainggolan (2008), important things that are macro or market factors that can cause fluctuations in stock prices are the rate of inflation and interest rates, financial and fiscal policy, economic situation and international business situation. While the company's micro factors that can cause fluctuations in stock prices are corporate earnings, dividends are distributed, cash flow of the company, a fundamental change in the industry or company and changes in investment behavior such as changing its investment from stock to bond. Market forces can also be seen from data on residual purchases and residual selling. For investors who need long-term investment and short-term need to consider the liquidity of a stock and its position in the market, whether the public interest or not. Factors influencing stock price fluctuations can come from internal and external companies. Internal factors are company performance, corporate cash flow, dividends, corporate profits and sales, while external factors are interest rates, inflation rate, government policy and economic conditions.

## 2.2. Profitability

Profitability is the ability of a company to earn profit (profit) in a certain period. The same understanding is given by Husnan (2005) that Profitability is the ability of a company to generate profits (profit) at the level of sales, assets, and capital stock. Meanwhile, according to Michelle and Megawati (2005) Profitability is a company's ability to generate profit (profit) which will be the basis of dividend distribution company.

Profitability describes the ability of a business entity to generate profits by using all of its capital. This is in accordance with Shapiro's (1991, p. 731) statement "Profitability ratios measure managements objectiveness as indicated by asset on sales, assets and owners equity."

Profitability of a company will affect the policy of investors on the investment made. The ability of firms to generate profits will be able to attract parent investors to invest funds in order to expand their business, whereas a low level of profitability will cause investors to withdraw their funds. While the company itself profitability can be used as an evaluation of the effectiveness of the business entity management. According to Brigham and Weston (1989) "Profitability is the net result of a large number of policies and decisions. The ratio examination of the firm operates, but the profitability ratio shows the combined objects of liabilities, asset management, and debt management on mult operating." Profitability of the company is one of the basic assessment of a company's condition, for it needed an analytical tool to be able to judge. The analytical tool in question is the ratio-rasiokeuangan. Profitability ratios measure the effectiveness of management based on returns derived from sales and investments.

Profitability also has an important meaning in the effort to maintain its long-term survival, because profitability indicates whether the business entity has a good prospect in the future. Thus each business entity will always try to improve profitability, because the higher level of profitability of a business entity then the survival of the business entity will be more secure. As revealed by Giulio Battazzi, Angelo Secchi, and Federico Tamagni (July, 2008) in his journal entitled "Productivity, Profitability, and Financial Performance" states that A comparative analysis of two crucial dimensions of firms performance: Profitability and productivity, and find independently from the particular sector of activity and from financial conditions, there seems to be weak market pressure and little behavioral inclination for more efficient and more profitable firms to grow faster.

According Halim (2007, p. 83) profitability is the ability of companies to generate profits at the level of sales, assets and capital stock. While Sartono (2001) in Mona (2008) states that profitability is a company's ability to earn profits in relation to sales, total assets and own capital. Profitability is the net result of a series of policies and decisions. The profitability ratio shows the combined effect of liquidity, asset management, and debt management on Brigham's et al. operating results (2001, p. 304).

## 2.3. Interest Rate

According to Samuelson (1993), the interest rate is the price that the bank or other borrower must pay to use the money over a period

of time. Interest rates are one of the monetary policy targets that are very large because the interest rate plays an important role in economic activity. This interest rate is a stimulus from the bank for the public to want investing in the bank. The higher the deposit interest rate, the more aggressive the public will be to invest in the bank, due to their expectation of profit. And vice versa, the lower the deposit interest rate, the community's interest in saving will decrease because the society view the profit level they will earn in the future from the interest is small.

According to the Classics, the interest rate determines the amount of savings and investments made in the economy that cause the savings created in full employment usage will always be the same as that of the entrepreneur. According to the Classical notion, interest is the "price" of the use of leonable funds. The immediate translation of the term is "funds available to lend."

In Fisher's theory of Leonable Funds Theory, that general interest rates are determined by the complex interaction of two factors, namely the total demand for funds by corporations, governments, and households, or individuals. This demand is negatively related to the interest rate (except with government requests that are often unaffected at the interest rate). What affects the interest rate is the total offer of funds from government companies and individuals. Offerings are positively related to interest rates if all other economic factors are constant. Based on the classical interest rate theory, the interest rate in equilibrium (meaning no incentive to rise or fall) occurs when the desire to save the community is equal to the desire of the entrepreneur to invest.

According to Keynes that the interest rate is only a monetary phenomenon in which its formation occurs in the money market. Thus, household savings are not dependent on the high interest rates but depend on the size of household income. In the sense that the greater the amount of income the greater the money can be combined. If the number of household incomes increases or decreases, substantial changes in the interest rate will not have a significant effect on the amount of savings to be made by the household.

The difference with the classical theory is that Keynes assumes that the economy has not reached the full employment level. Therefore, production can be increased without changing the wage rate or price level. By lowering interest rates, investment can be stimulated to increase national production.

Similarly with investment, Keynes believes that the interest rate is not the main factor determining the level of investment, although it is recognized that one of the considerations to invest is the interest rate. The level of investment according to him more influenced by other factors other than the interest rate.

According to Hicks, interest rates are in a state of equilibrium in an economy when the interest rate meets the balance of the monetary sector and the real sector. This view is a combination of Classical and Keynesian opinion, where the Classics say that interest arises because money is productive, meaning that if someone has the funds then they can increase the means of production in order to

increase the profit gained. Meanwhile, according to Keynes that money other than used for productive purposes jugaspekulatif to gain profit (<http://iswandivaqih.blogspot.com/2013/04/pengaruh-suku-bunga-dan-mata-uang.html> accessed November 24, 2013).

## 2.4. Liquidity

Liquidity, is indicating the ability of a company to meet its financial obligations that must be met, or the ability of the company to meet financial obligations when billed. The amount of the means of payment (liquid tools) owned by a company at a certain time is a "zakah power" (zahlungskraft) of the company concerned.

In addition, liquidity is also classified as:

- a. The liquidity of a business entity, the ability of a company to meet its financial obligations on the outside of the company (creditor).
- b. Likuiditas company, the company's ability to meet its financial obligations to parties within the company.

In this case the company should pay attention to whether the company at any time can meet the payments - payments necessary for the smooth labor and etc. In other words it can be said that the notion of liquidity is intended.

## 2.5. Included in the Liquidity Ratio Are

### 2.5.1. Current ratio

The most commonly used ratio to analyze the working capital position of a company is the current ratio that is the ratio between current assets amount with current liabilities. This ratio indicates that the value of current wealth (which can soon be made money) there are so many short-term debt. The current ratio of 200% is sometimes satisfactory for a company, but the amount of working capital and the magnitude of the ratio depends on several factors, a common standard or ratio can not be determined for the whole company.

### 2.5.2. Quick ratio

This ratio is a measure of the company's ability to meet its obligations by not taking into account inventory, since inventory takes a relatively long time to be realized into cash and assumes that receivables can be realized immediately as cash, even though the facts may be more liquid than receivables.

### 2.5.3. Cash ratio

Cash ratio shows the company's ability to pay its short-term debts that must be immediately filled with cash and securities in the company that can be cashed. Increasing the high cash ratio, means the amount of cash available is greater, so the repayment of debt in time will not experience difficulties.

## 2.6. Solvency (Debt Equity Ratio)

Referring to Cashmere (2004) solvency ratio is the ratio used to measure how much the company is financed by debt, and the extent to which the company's ability to pay all its obligations.

### 2.6.1. Debt to asset

Referring to Cashmere (2008) debt to asset ratio is the debt used to measure comparison between total debt with total assets. In

other words, how much the company's assets are financed by debt or how big the company's debt affects the management of assets.

### 2.6.2. DER

Referring to Cashmere (2008) Debt-to-equity ratio is the ratio used to calculate the value of debt with equity. This ratio is sought by "comparing the entire debt, including current debt to equity."

### 2.6.3. Longterm DER

According to Cashmere (2008) long term debt to equity is a long-term debt ratio with own capital. The objective is to measure how much of each rupiah's own capital is used as a guarantee of long-term debt by comparing long-term debt with its own capital provided by the company.

## 2.7. TATO

According to (Sawir, 2005. p. 17) suggests that the Total Assets Turnover Ratio shows the effectiveness of the use of all company property in order to generate sales or describe how the Net Sales that can be generated by each dollar invested in the form of assets company. If the turn is slow, it indicates that the assets owned are too large compared to the ability to sell. According Djarwanto (2004. p. 203), the ratio of TATO aims to measure the utilization of business assets (Operating Asset) i.e., whether for example there is a tendency of excess investment in assets in relation to the volume of sales achieved. In general, the higher the asset turnover, the more efficient the use of such assets.

Total Assets (Total Assets Turnover) is the ratio of activities used to measure to how much effectiveness of the company in using its resources in the form of assets. The higher the efficient use of assets the faster the refund in cash (Abdul Halim, 2007).

## 2.8. Currency Rate/Currency

Understanding Foreign Exchange (foreign exchange) or foreign currency is foreign currency that functioned as a means of payment to finance international financial economic transactions and also has a record of the official exchange rate at the central bank (Hamdy, 2007).

Currency is often used as a means of payment in international financial economic transactions called hard currency, the currency derived from developed countries and its value is relatively stable and sometimes experienced appreciation or increase in value compared to currencies from other countries.

Conversely, currencies originating from developing countries or third world countries are rarely used as a means of payment between countries because the value is relatively unstable and sometimes depreciate or decrease in value, the currency is often called the soft currency.

Hard currency comes from developed countries like United States Dollar, Yen-Japanese, Euro, British Pound, Dollar-Canada, Swiss-Franc Dollar-Australia, and others. While soft currency generally comes from developing countries such as Rupiah-Indonesia, Bath-Thailand, Peso-Filipino, Rupee-India, and so forth.

### 3. METHODOLOGY

The research approach uses data analysis with the form of quantitative and qualitative descriptive analysis techniques. This quantitative approach prioritizes numbers and statistics to answer specific research questions or hypotheses, and to predict that a variable affects other variables. While descriptive qualitative method used to give description. In this research in doing data processing used Data Panel Regression method.

Sampling is done by using technique of Purposive Sampling (Sugiyono, 2012. p. 120), that is sampling technique based on a certain criterion with certain consideration.

The requirements of determining the sample on purposive sampling. Arikunto (2010. p. 120).

- Determination of population characteristics was done carefully in the preliminary study.
- Sampling should be based on certain characteristics, traits or characteristics, which are the main characteristics of the population.
- The subjects taken as samples are really the most characteristic subjects in the population.

The sample criteria in this study are real estate AND property companies that have issued financial statements to the public, within the period covering the entire study period in full. The study period established was between 2007 and 2014.

From the criteria of the period, the number of samples that meet the data completeness requirements and the largest number of assets amounted to 23 companies.

### 4. RESULT AND DISCUSSION

This study estimates and analyzes the factors affecting profitability performance and its implications for stock returns of real estate sector companies, and property listed on IDX during 2007-2014 period. Factors affecting financial performance consist of internal factors of the company: Liquidity, solvency, TATO, and external factors of the firm consisting of interest rate, and exchange rate/currency value.

While the implications for stock return are measured by using ROA, interest rate, liquidity, solvency, TATO, exchange rate/currency value. The population used in this study is the real estate industry, and the properties listed on the IDX during the period 2007-2014. Part of a population is a sample. Sampling method used in this research is by using non probability sampling method with sampling technique chosen is purposive sampling. The purposive sampling technique is a predetermined sampling technique based on the intent and purpose of the study, and selected based on certain criteria. Company criteria included in the sampling of this research are:

- The sample of this study is a real estate company, and property that has been listed on the IDX during the period 2007-2014.
- The sample has a full yearly report during the period from 1 January to 31 December for the 2007-2014 time period. It is used for data uniformity and partial distortion of time.

The largest standard deviation value experienced by the solvency variable is 206.9565 which means that the solvency variable has a higher risk level compared with other variables. While interest rate variable has the lowest risk level, that is equal to 0.010022.

We then test each regression coefficient of fixed effect model that affect the profitability performance of real estate and property company using t-test. The t-test is performed for determine whether each of the independent variables used in this study can partially affect the profitability performance of the real estate firm, and the property as a dependent variable significantly with a confidence level of 95% or alpha equal to 5% ( $\alpha = 0.05$ ). For the influence of interest rate, liquidity, solvency, TATO, and partial exchange rate on significant profitability performance will be interpreted each and compared with the research hypothesis.

#### 4.1. Effect of Interest Rate on Profitability Performance

Based on t-test shows that interest rate variable influence profitability performance is negative and significant where t-statistic probability value (0.0345) is smaller than  $\alpha = 0.05$  meaning  $H_0$  is rejected.

#### 4.2. The Effect of Liquidity on Profitability Performance

Based on t-test, the liquidity variable has positive and insignificant effect on profitability performance with 95% confidence level, where the t-statistic probability value (0.8951) is greater than  $\alpha = 0.05$  which means  $H_0$  is accepted.

#### 4.3. Effect of Solvency on Profitability Performance

Based on t-test show that solvability variable have positive and significant effect to profitability performance with 95% confidence level, where t-statistic probability value (0.0012) is smaller than  $\alpha = 0.05$  which means  $H_0$  is rejected.

#### 4.4. Effect of TATO on Profitability Performance

Based on t-test show that TATO variable have positive and significant effect to profitability performance where t-statistic probability value (0.0000) is smaller than  $\alpha = 0.05$  which means  $H_0$  is rejected.

#### 4.5. Effect of Exchange Rate on Profitability Performance

Based on t-test shows that the exchange rate has a positive and significant effect on profitability performance with a confidence level of 95%, where the t-statistic probability value (0.0216) is smaller than  $\alpha = 0.05$  which means  $H_0$  is rejected.

Based on the estimation result of the panel data regression method using the fixed effect model, of the five independent variables that are internal factors, and external real estate companies, and property that affect the profitability performance proxied by ROA, there are four variables have significant influence, i.e., variable interest rate, solvency, TATO, and exchange rate. Of the variables that influence significantly, variable solvency is the most dominant variable effect on the profitability performance of real estate companies, and property with a coefficient of 6.45

with a positive direction sign. While the TATO variable is the least influence variable with the coefficient of 0.000464 with positive direction sign.

From 23 companies in regression panel equations fixed effect data model for each company can be concluded as follows:

1. Companies with the greatest sensitivity of ROA in the period 2007-2014 are PT Agung Podomoro Land (APLN) Tbk with a total value of constant of  $[C_i + (-0.5242)] = 2.9503 + (-0.5242) = 2.42613$ .
2. Companies with the smallest sensitivity of ROA change over the period 2007-2014 are PT. MNC Land Tbk. (KPIG) Tbk with total value of constant equal to  $[C_i + (-0.5242)] = -0.1971 + (-0.5242) = -0.7213$ .

Then test each regression panel data coefficient that affects stock return of real estate company, and property using t-test. The t-test is performed to determine whether each independent variable used in this study can partially affect the firm's stock return as a dependent variable significantly with a confidence level of 95% or alpha equal to 5% ( $\alpha = 0.05$ ). For the influence of ROA variable, liquidity, solvability, TATO, and partial exchange rate have a significant effect on stock return of real estate company, and significant property will be interpreted each and compared with research hypothesis.

#### 4.6. Influence ROA against Return of Company Share

Based on t-test shows that ROA variable influences stock return of real estate company, and property positively and significantly where t-statistic probability value (0.0320) is smaller than  $\alpha = 0.05$  meaning  $H_0$  is rejected. Partial coefficient value ROA variable of 0.190713 can be interpreted that every 10% ROA increase, assuming other variables are constant then it will cause the increase of stock return of 1.90%. The results of this study are in line with the research hypothesis which states that ROA variable partially positively affect the stock return of real estate companies, and property listed on the IDX during the period 2007-2014.

#### 4.7. Effect of Interest Rate on Return of Company Share

Based on the t-test, the interest rate variable has a negative effect on the stock return of the real estate company, and the property is not significant with the confidence level of 95%, where the t-statistic probability value (0.1026) is greater than  $\alpha = 0.05$  which means  $H_0$  be accepted.

#### 4.8. The Influence of Liquidity on Return of Company Share

Based on t-test shows that the liquidity variable has a negative effect on stock return of real estate company, and property and significant where the t-statistic probability value (0.000) is smaller than  $\alpha = 0.05$  meaning  $H_0$  is rejected. Partial coefficient value of liquidity variable equal to  $-0.001135$  can be interpreted that every 10% increase of variable liquidity, assuming other variables constant then it will cause decrease of stock return of company equal to 0,01%. The results of this study are in line with the research hypothesis which states that the liquidity variable partially positively affects the stock return of real estate companies, and property listed on the IDX during the period 2007-2014.

#### 4.9. Effect of Solvency on Return of Company Share

Based on t-test shows that the solvency variable has a positive and significant effect on stock return of property company, and real estate, where the t-statistic probability value (0.0012) is smaller than  $\alpha = 0.05$  which means  $H_0$  is rejected. The value of partial coefficient of solvency variable of 0.000600 can be interpreted that any increase of 10% solvency ratio, assuming other variables are constant then it will cause the increase of company stock return by 0,006%. The results of this study are in line with the research hypothesis which states that the solvency variable partially positive effect on stock returns of real estate companies, and property listed on the IDX during the period 2007-2014.

#### 4.10. Influence of TATO on Return of Company Share

Based on the t-test, the TATO variable has a positive and significant influence on stock returns of real estate and property, with a confidence level of 95%, where the t-statistic probability value (0.0000) is smaller than  $\alpha = 0.05$  meaning  $H_0$  rejected. TATO partial coefficient value of 0.0029 can be interpreted that every 10% increase in TATO, assuming other variables are constant, it will cause the increase of company stock return by 0,029%. The results of this study are in line with the research hypothesis which states that the TATO variable partially positively affects the stock returns of real estate companies, and property listed on the IDX during the period 2007-2014.

#### 4.11. Effect of Exchange Rate on Return of Company Share

Based on the t-test, the exchange rate variable has a positive and significant influence on stock return of real estate company, and property, with 95% confidence level, where the t-statistic probability value (0.0334) is smaller than  $\alpha = 0.05$  meaning  $H_0$  rejected. Partial exchange rate coefficient of exchange rate of 1.648585 can be interpreted that every 10% increase in exchange rate, assuming other variables are constant then it will cause the increase of stock return of company equal to 16.48%. The results of this study are in line with the research hypothesis which states that the partial exchange rate variable positively affects the stock returns of real estate companies, and property listed on the IDX during the period 2007-2014.

Based on the estimation result of panel data regression method using fixed effect model, from six independent variables which are factors influencing return of real estate company, and property there are five variables that influence significantly, that is ROA variable, liquidity, solvency, TATO, and exchange rate. Of the variables that influence significantly, the exchange rate variable is the most dominant effect on the stock return of firms with coefficient of 1.648585 with positive sign. While the ratio of solvency ratio is the least influence variable with coefficient of 0.000600 with positive direction sign.

From 23 companies in regression panel equations fixed effect data model for each company can be concluded as follows:

1. The real estate company, and the property that has the greatest sensitivity of the change of stock return of the largest company during the period 2007-2014 is PT Bakrieland Development (ELTY) Tbk dengan total value of constant equal to  $[C_i + (-8.7217)] = -1.459053 + (-8.7217) = -10.180753$ .

- The real estate company, and the property that has the sensitivity of the smallest share return change during the period of 2007-2014 is PT Metropolitan Kencana (MKPI) Tbk with total value of constant equal to  $[C_i + (-8,7217)] = -1.459053 + (-8.7217) = -6.640907$ .

## 5. CONCLUSION

- Interest rates negatively and significantly affect the profitability performance of real estate and property firms.
- Liquidity positively and insignificantly affect the profitability performance of real estate companies, and property.
- Solvency affects positively and significantly to the profitability performance of real estate and property companies.
- TATO has a positive and significant effect on the profitability performance of real estate and property companies.
- Exchange rate positively and significantly influence to profitability performance of real estate and property company.
- Factors that affect the profitability performance of real estate firms, and property that is: Interest rates, liquidity, solvency, TATO, and exchange rates together affect the return of real estate firms, and property.  $R^2 = 0.532102$ , Variable domain = 2.42613 (APLN), smallest = -0.7213 (KPIG).
- ROA positively, and significant effect on stock returns of real estate companies, and property.
- Interest rates negatively affect, and not significant to stock returns of real estate companies, and property.
- Liquidity has a negative, and significant effect on stock returns of real estate companies, and property.
- Solvency positively, and significantly affect the stock return of real estate companies, and property.
- TATO has a positive and significant effect on stock returns of real estate companies, and property.
- The exchange rate has a positive and significant effect on stock returns of real estate companies and property.
- Factors affecting stock returns of real estate firms, and property that are: ROA, interest rate, liquidity, solvency, TATO, and exchange rate together affect stock returns of real estate companies, and property.  $R^2 = 0.532102$ . Variable domain = 6.640907 (MKPI). Smallest = -10.180753 (ELTY).

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