

ANALYSIS OF THE EFFECT OF RETURN ON ASSET, DEBT TO EQUITY RATIO, AND TOTAL ASSET TURNOVER ON SHARE RETURN
(Case Study of Property and Real Estate Subsector Companies Listed on the IDX for the 2014-2018 Period)

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Abstract - This study aims to determine how much influence the return on assets, debt to equity ratio, and total asset turnover against the return of property and real estate stocks listed on the Indonesia Stock Exchange from 2014 – 2018.

This research uses associative research, quantitative approach, and counted by the method of multiple linear regression using panel data with the reviews 10 software program. The population in this study were 54 companies which company property and real estate sectors listed in Indonesia Stock Exchange from 2014 to 2018. The sample is determined by purposive sampling, with a total sampel of 32 property and real estate companies, so that the total observation in this study is 160. The research data used in this study are secondary data.

The result of this study indicate than simultaneous return on assets, debt to equity ratio, and total asset turnover have a significant effect on property and real estate stock return from 2014- 2018. Partially total asset turnover have a significant effect on stock return, return on assets and debt to equity ratio have no significant effect on stock return

Keywords: *Return On Asset, Debt to Equity Ratio, Total Asset Turn Over, Stock Return*

Abstrak– Penelitian ini bertujuan untuk mengetahui seberapa besar pengaruh *return on asset, debt to equity ratio, dan total asset turnover* terhadap *return saham* pada Perusahaan Properti dan *Real Estate* yang terdaftar di Bursa Efek Indonesia dari tahun 2014 – 2018.

Penelitian ini menggunakan jenis penelitian asosiatif, pendekatan kuantitatif, dan dihitung dengan metode regresi linier berganda yang menggunakan data panel dengan program Eviews 10. Populasi dalam penelitian ini 54 perusahaan sektor properti dan *real estate* yang terdaftar di Bursa Efek Indonesiadari tahun 2014 – 2018. Sampel ditentukan dengan purposive sampling, dengan jumlah sampel sebanyak 32 perusahaan properti dan *real estate*, sehingga total observasidalam penelitian ini berjumlah 160. Data penelitian yang digunakan dalam penelitian ini adalah data sekunder.

Hasil penelitian ini menunjukkan bahwa secara simultan *return on asset, debt to equity ratio, dan total asset turnover* berpengaruh signifikan terhadap *return saham* properti dan *real estate* dari tahun 2014 – 2018. Secara parsial *total asset turnover* berpengaruh signifikan terhadap *return saham, return on asset* dan *debt to equity ratio* tidak berpengaruh signifikan terhadap *return saham*.

Kata kunci : *Return On Asset, Debt to Equity Ratio, Total Asset Turn Over, Return Saham*

I. PRELIMINARY

The capital market (capital market) is a market for a variety of long-term financial instruments that can be traded, both debt securities (bonds), equities (stocks), mutual funds, derivative instruments and other instruments. The Capital Market has an important role for the economy of a country, namely as a means for business funding or as a means for companies to obtain funds from the public (investors) which are for business development, expansion, additional working capital, etc. to invest in financial instruments, the public can place their funds in accordance with the characteristics of the advantages and risks of each instrument. The presence of the capital market in Indonesia is marked by the number of investors who have begun investing in various industries, one of them is the real estate and property industry which is used as a sample in this study. Seeing an increase in population, many people buy property to meet their housing needs. In addition, many people are entering retirement age and preparing their financial planning ahead by preferring to invest. One of them is the property sector which is used as an alternative for investing

Fundamental analysis is an analysis related to the condition of the company, which aims to analyze or project the value of a stock, which later results from the analysis are used to assess the company's performance and the company's potential future growth. In fundamental analysis, there are several financial ratios that can be used to see the performance or financial condition of a company. The ratios used in this study include return on assets (ROA), debt to equity ratio (DER), and total asset turnover (TATO).

Based on these considerations, the authors are interested in making property and real estate companies in the Indonesia Stock Exchange as the object of research. The research that will be carried out is entitled "Analysis of the Effect of Return on Assets, Debt to Equity Ratio, and Total Asset Turnover on Stock Returns in Property and Real Estate Companies listed on the Indonesia Stock Exchange for the 2014 - 2018 Period".

1.1. Formulation of the problem

Based on the description above, the following problems can be formulated:

1. Does return on assets (ROA) affect stock returns in Property and Real Estate companies on the IDX for the 2014-2018 period?
2. Does the debt to equity ratio (DER) affect stock returns in property and real estate companies on the IDX for the 2014-2018 period?
3. Does total asset turnover (TATO) affect stock returns in Property and Real Estate companies on the IDX for the 2014-2018 period?

1.2. Research purposes

Based on the above problems, the objectives of this study are as follows:

1. To test the effect of return on assets (ROA) on stock returns in property and real estate companies on the IDX for the 2014-2018 period.
2. To test the effect of the debt to equity ratio (DER) on stock returns in property and real estate companies on the IDX for the 2014-2018 period.
3. To test the effect of total asset turnover (TATO) on stock returns in Property and Real Estate companies on the IDX for the 2014-2018 period.

II. LITERATURE REVIEW

2.1. Capital market

According to Tandelilin (2010: 26) the capital market is a meeting between parties who have excess funds and parties who need funds by trading securities. Thus, the capital

market can also be interpreted as a market for trading securities that generally have a lifespan of more than one year, such as stocks and bonds.

2.2. Stock

According to Irham Fahmi (2015: 81), stocks are one of the capital market instruments that are most in demand by investors, because they are able to provide an attractive rate of return. Shares are paper with a clear nominal value, company name, followed by rights and obligations that have been explained to each holder.

2.3. Investation

Investment can be defined as an attempt to spend some money or save money on something in the hope that one day it will get financial benefits. Jogiyanto (2010: 5) suggests that investment is a delay in current consumption to be used in efficient production for a certain period of time. Meanwhile, according to Tandelin (2010: 1) investment is a commitment to a number of funds or other resources that are carried out at this time, with the aim of obtaining a number of benefits in the future. Generally, investments are categorized into two types, namely real assets such as buildings, vehicles and land, and financial assets

2.4. Return Stock

According to Brigham and Houston (2014: 215), the return or rate of return is the difference between the amount received and the amount invested divided by the amount invested.

2.5. Relationship between Research Variables

2.5.1. Effect of Return On Asset (ROA) on Stock Return

According to Fahmi (2012: 98) Return on assets is often referred to as return on investment, because this ROA looks at the extent to which the investment that has been invested is able to provide returns as expected and the investment is actually the same as the invested or placed company assets.

That is, the rate of return on investment uses the ratio of measuring the return received from the invested capital. This measurement ratio is used to evaluate company performance. The rate of return on investment is a type of rate of return on capital, this ratio measures the company's ability to provide profits for those who provide long-term funds and attract long-term providers in the future.

With the increase in ROA, the dividends received by shareholders are expected to increase. This shows that the company's ability to manage its assets to generate profits has attractiveness and is able to influence investors to buy company shares which results in the company's stock price increasing and the resulting return also increases. So that with an increase in ROA, it means that the company's performance is getting better and as a result, the stock price of the company in question also increases. Thus, return on assets (ROA) has a positive effect on stock returns. Research conducted by Anwaar (2016) shows that *Return On Asset* (ROA) has a significant positive impact on stock returns in companies listed on the FTSE-100 Index London, UK.

2.5.2. Effect of Debt to Equity Ratio (DER) on Stock Returns

According to Darsono and Ashari (2010: 54-55) debt to equity ratio (DER) is one of the leverage or solvency ratios. The solvency ratio is the ratio to determine the company's ability to pay its obligations if the company is liquidated. This ratio is also known as the leverage ratio, which assesses the company's limits on borrowing money. Debt to equity ratio (DER) is a ratio that measures how far the company is financed by debt and the company's ability to fulfill its obligations with the equity it owns.

The greater the debt to equity ratio (DER), it means that the business capital structure uses more debt relative to equity. A larger dividend payment increases the opportunity to increase capital from external sources. One of the sources of external capital is debt. Companies that pay dividends in large amounts are required to finance their investments through leverage, so that the relationship between dividend policy and leverage is unidirectional. The company's internal cash is used to pay dividends so that additional external funds through debt are required. However, the greater the debt to equity ratio (DER), the greater the risk of default faced by the company, and the company also has to pay high interest costs.

Research conducted by Sudarso and Sudiyatno (2016) shows that the debt to equity ratio (DER) has a positive and insignificant effect on stock returns in property and real estate companies listed on the Indonesia Stock Exchange.

2.5.3. The Effect of Total Asset Turnover (TATO) on Stock Return

According to Syamsuddin (2011: 62), total asset turnover is the level of efficiency in the use of all company assets in producing a certain sales volume. It can be said that total asset turnover (TATO) is part of the ratio of activities that measures the level of efficiency and effectiveness of all assets used by the company in increasing sales earned from each rupiah of assets by comparing sales to total assets. An increase in the value of total asset turnover (TATO) will lead to an increase in net sales (net sales) achieved by the company so that it is expected to have an impact on increasing profits.

Research conducted by Salim and Simatupang (2016) show that total assets turnover (TATO) has a significant effect on stock returnsproperty and real estate listed on the Indonesia Stock Exchange. The results of the study are similar to research conducted by Ananto (2014) which shows that *total asset turnover* (TATO) has a significant effect on stock returns.

2.6. Research Hypothesis

Based on the relationship between the variables above, the researcher tries to test the effect of return on assets (ROA), debt to equity ratio (DER), and total asset turnover (TATO) on stock returns in property and real estate companies listed on the Indonesia Stock Exchange (IDX). , then the research hypothesis is formulated as follows:

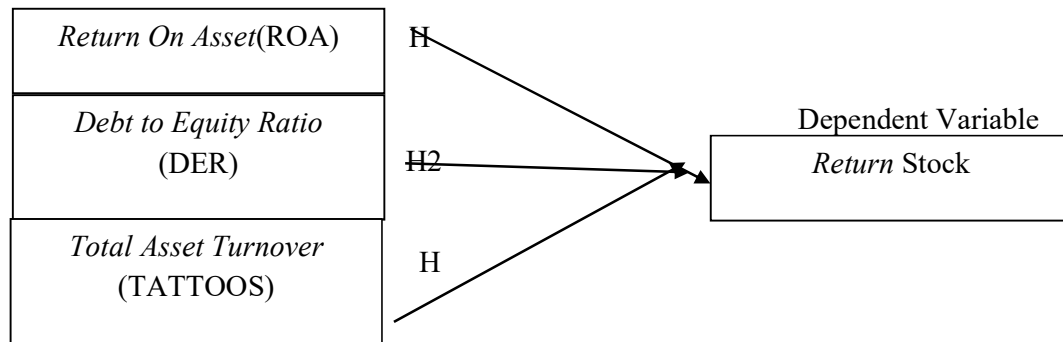
1. It is suspected that return on assets (ROA) has a significant effect on stock returns in property and real estate companies listed on the Indonesia Stock Exchange (BEI).
2. It is suspected that the debt to equity ratio (DER) has a significant effect on stock returns in property and real estate companies listed on the Indonesia Stock Exchange (IDX).
3. It is suspected that total asset turnover (TATO) has a significant effect on stock returns in property and real estate companies listed on the Indonesia Stock Exchange (IDX).

2.7. Research Conceptual Framework

In this study, there are 3 variables to be tested. The variables used are return on assets (ROA), debt to equity ratio (DER), total asset turnover (TATO), and stock returns. Based on the above hypothesis, the conceptual framework of research can be described as follows:

Figure 2.1
conceptual framework

Independent Variable



Source: Self-processed (2020)

III. RESEARCH METHOD

3.1. Research Strategy

This research is an associative research. According to Sugiyono (2013: 11) associative research is research that aims to determine the relationship between two or more variables. Using case studies, which is an approach that takes research objects to be analyzed intensively and thoroughly in order to obtain a complete picture of the problems related to these objects. This study has two variables, namely the independent and dependent variables. The independent variable is the variable that affects and the dependent variable is the variable that is affected

3.2. Population and Sample Research

The population in this study were all property and real estate sub-sector companies listed on the Indonesia Stock Exchange (IDX) which are listed on the Indonesia Stock Exchange (IDX) for the 2014-2018 period as many as 54 companies, as shown in the table as follows:

Table 3.1
List of Population in Property and Real Estate Subsector Companies
2014-2018 period

No.	Stock code	Issuer Name
1	APLN	Agung Podomoro Land, Tbk
2	ASRI	Alam Sutera Reality, Tbk
3	ARMY	Armidian Karyatama, Tbk
4	ELTY	Bakrieland Development, Tbk
5	FATHER	Bekasi Asri Pemula, Tbk
6	BEST	Bekasi Fajar Industrial Estate, Tbk
7	BIPP	Bhuwanatala Indah Permai, Tbk
8	BIKA	Binakarya Jaya Abadi, Tbk
9	BKDP	Bukit Darmo Property, Tbk
10	BCIP	Bumi Citra Permai, Tbk
11	BSDE	Bumi Serpong Damai, Tbk
12	CTRA	Ciputra Development, Tbk
13	NIRO	City Retail Developments, Tbk
14	COWL	Cowell Development, Tbk
15	SCBD	Dadanayasa Arthatama, Tbk

16	DART	Duta Anggada Realty, Tbk
17	DUTI	Duta Pertiwi, Tbk
18	LCGP	Eurika Prima Jakarta, Tbk
19	FMII	Fortune Mate Indonesia, Tbk

Table 3.1
List of Population in Property and Real Estate Subsector Companies
2014-2018 period

No.	Stock code	Issuer Name
20	FORZ	Forza Land Indonesia, Tbk
21	GAMA	Gading Development, Tbk
22	GWSA	Greenwood Sejahtera, Tbk
23	GMTD	Goa Makassar Tourism Development, Tbk
24	MORE	Indonesia Prima Property, Tbk
25	DILD	Intiland Development, Tbk
26	JRPT	Jaya Real Property, Tbk
27	RISE	Jaya Sukses Makmur Sentosa, Tbk
28	KIJA	Jababeka Industrial Estate, Tbk
29	ONE	Kota Satu Properti, Tbk
30	LPCK	Lippo Cikarang, Tbk
31	LPKR	Lippo Karawaci, Tbk
32	MMLP	Mega Manunggal Property, Tbk
33	EMDE	Megapolitan Development, Tbk
34	MKPI	Metropolitan Kentjana, Tbk
35	MTLA	Metropolitan Land, Tbk
36	MDLN	Modernland Realty, Tbk
37	CITY	Natura City Developments, Tbk
38	PWON	Pakuwon Jati, Tbk
39	GPRA	Perdana Gapura Prima, Tbk
40	WHEELS	Pikko Land Development, Tbk
41	PLIN	Plaza Indonesia Realty, Tbk
42	POLL	Pollux Properti Indonesia, Tbk

Table 3.1
List of Population in Property and Real Estate Subsector Companies
2014-2018 period

No.	Stock code	Issuer Name
43	PPRO	PP Properti, Tbk
44	MPRO	Propertindo Mulia Investama, Tbk
45	PUDP	Pudjiati Prestige, Tbk
46	DMAS	Puradelta Lestari, Tbk
47	RBMS	Rista Bintang Mahkota Sejati, Tbk
48	RDTX	Roda Vivatex, Tbk
49	BKSL	Sentul City, Tbk

50	TARA	Sitara Propertindo, Tbk
51	SMRA	Summarecon Agung, Tbk
52	SMDM	Suryamas Dutamakmur, Tbk
53	LAND	Trimitra Propertindo, Tbk
54	URBN	Urban Jakarta Prpertindo, Tbk

Source: www.idx.co.id and processed (2020)

According to Sugiyono (2013: 264) the sample is part of the number and characteristics possessed by the population. The sample was selected according to the method used, namely the purposive sampling method, namely the sampling technique with certain considerations and criteria tailored to the research objectives. The criteria in this study are as follows:

Table 3.3
List of Samples in Property and Real Estate Subsector Companies
2014-2018 period

No.	Stock code	Issuer Name
1	APLN	Agung Podomoro Land, Tbk
2	ASRI	Alam Sutera Reality, Tbk
3	FATHER	Bekasi Asri Pemula, Tbk
4	BEST	Bekasi Fajar Industrial Estate, Tbk
5	BCIP	Bumi Citra Permai, Tbk

Table 3.3
List of Samples in Property and Real Estate Subsector Companies
2014-2018 period

No.	Stock code	Issuer Name
6	BSDE	Bumi Serpong Damai, Tbk
7	CTRA	Ciputra Development, Tbk
8	SCBD	Dadanayasa Arthatama, Tbk
9	DART	Duta Anggada Realty, Tbk
10	DUTI	Duta Pertiwi, Tbk
11	FMII	Fortune Mate Indonesia, Tbk
12	GAMA	Gading Development, Tbk
13	GWSA	Grenwood Sejahtera, Tbk
14	GMTD	Goa Makassar Tourism Development, Tbk
15	DILD	Intiland Development, Tbk
16	JRPT	Jaya Real Property, Tbk
17	KIJA	Jababeka Industrial Estate, Tbk
18	LPCK	Lippo Cikarang, Tbk
19	LPKR	Lippo Karawaci, Tbk
20	EMDE	Megapolitan Development, Tbk
21	MKPI	Metropolitan Kentjana, Tbk
22	MTLA	Metropolitan Land, Tbk
23	MDLN	Modernland Realty, Tbk
24	PWON	Pakuwon Jati, Tbk
25	GPRA	Perdana Gapura Prima, Tbk

26	WHEELS	Pikko Land Development, Tbk
27	PLIN	Plaza Indonesia Realty, Tbk
28	PUDP	Pudjiati Prestige, Tbk

Table 3.3
List of Samples in Property and Real Estate Subsector Companies
2014-2018 period

No.	Stock code	Issuer Name
29	RDTX	Roda Vivatex, Tbk
30	BKSL	Sentul City, Tbk
31	SMRA	Summarecon Agung, Tbk
32	SMDM	Suryamas Dutamakmur, Tbk

Source: www.idx.co.id and processed

3.3. Data Analysis Methods

3.3.1. Data Processing and Data Presentation

The data used in this research is secondary data. Secondary data is data obtained from second sources or secondary sources (Bungin, 2013: 128). Secondary data in this study were obtained from the publications of various related agencies which were taken from the agency's website and also from other websites related to this research. The related agencies and websites are the Indonesia Stock Exchange (www.idx.go.id), and Yahoo Finance (www.yahoofinance.com). Data is taken based on the classification of the period in this study, namely January 2014 to December 2018.

3.3.2. Descriptive Statistical Analysis

The method used by the writer in analyzing the data in this research is descriptive statistical analysis. According to Sugiyono (2014: 206) descriptive analysis is a statistic used to analyze data by describing or describing the collected data as it is without intending to make generalized conclusions or generalizations. Descriptive analysis is a research conducted to determine the value of the independent variable and the dependent variable. This analysis measures the strength of the relationship between two variables consisting of:

- a. The maximum value is the highest value for each tested variable.
- b. The minimum value is the lowest value for each tested variable.
- c. The average value (mean) is a technique used to measure the average.
- d. Standard deviation (Variance) is used to assess the average or sample.

3.3.3. Panel Data Estimation Method

In the regression model estimation method using panel data, it can be done through two approaches, namely:

1. Fixed Effect Model

This model assumes that the differences between individuals can be accommodated from differences in the intercept. To estimate panel data, the Fixed Effect model uses dummy variable techniques to capture intercept differences between companies. However, the slope is the same between companies. This estimation model is often called the Least Squares Dummy Variable (LDSV) technique.

2. Random Effect Model

This model will estimate panel data where the disturbance variables may be interrelated over time and between individuals. In the random effect model, the differences in intercept are accommodated by the error terms of each company. The advantage of using this model is that it eliminates heteroscedasticity. This

model is also called the Error Component Model (ECM) or the Generalized Least Square (GLS) technique.

3.3.4. Panel Data Regression Model Selection

The panel data method has two approaches, namely the Fixed Effect Model (FEM) and the Random Effect Model (REM). Both are differentiated based on the presence or absence of a correlation between the error component and the independent variable. The difference between FEM and REM lies in the presence or absence of a correlation between λ_i and μ_t with X_{it} . The test used in determining these two methods is the Hausman test.

1. Hausman Test

It is a statistical test to choose whether a Fixed Effect or Random Effect model is most appropriate. If the Hausman statistical value is greater than the critical value of Chi-Squares, it means that the correct model for panel data regression is the Fixed Effect model. The hypothesis formed in the Hausman test is as follows:

H0: Random Effect Model

H1: Fixed Effect Model

3.3.5. Panel Data Linear Regression Equation Method

According to Gujarati and Porter (2009: 240) panel data regression is expressed in mathematical equations as follows:

$$Ret_{it} + \beta_0 + \beta_1 ROA_{it} + \beta_2 DER_{it} + \beta_3 TATO_{it} + \varepsilon_{it} \quad (3.5)$$

Information

Ret_{it}	: Stock returns
ROA_{it}	: Return On Asset
DER_{it}	: Debt To Equity Ratio
$TATO_{it}$: Total Asset Turnover
$\beta_{1,2,3}$: The Coefficient of Each Independent Variable
i	: Company
t	: Year

3.3.6. Classic assumption test

3.3.6.1. Multicollinearity Test

The multicollinearity test aims to test the regression model which is found to be correlated between independent variables (Ghozali, 2016: 103). A good regression model is a model that is free of multicollinearity in which there is no correlation between one independent variable and another. If in the test there is a correlation, then there is a multicollinearity problem. Multicollinearity test can be tested using a correlation matrix between independent variables with a standard value of 0.8. If the test results show a value greater than 0.8, the independent variable has a collinearity problem.

3.3.6.2. Heteroscedasticity Test

According to Hsiao and Pesar (2014), the Heteroscedasticity test aims to determine whether there is an error variance across identical individuals, which is caused not only by time (t) but also by the company (i). A good regression model is a heteroscedasticity regression model or heteroscedasticity does not occur because this data collects power that represents various measures. According to Hsiao (2014) the Heteroscedasticity Test is divided into two, namely:

1. *Period Panel* heteroscedasticity, namely to test the symptoms of heteroscedasticity caused by the period factor (years)
2. *Panel cross section* heteroscedasticity, which is to test the heteroscedasticity symptoms caused by the cross section factor.

3.3.6.3. Correlation Test

According to Hsio and Pesar (2014), the correlation test aims to measure the error between companies and measure the error between times whether they influence each other or not. Correlation tests can be divided into two, namely:

1. Cross correlation is used to test whether errors between companies are correlated.
2. Autocorrelation is used to test time series data using the Durbin-Watson method. If there is a correlation, it is called an autocorrelation problem. The Durbin-Watson test is only used for level one autocorrelation (first order autocorrelation) and requires the existence of an intercept (constant) in the regression model and there are no more variables between the independent variables.

The Durbin-Watson test mechanism is as follows, assuming that the assumptions underlying the test are met

1. Run OLS regression and get the residue.
2. Calculate from the equation (Most computer programs now do this on a routine basis).
3. For a given sample size and the number of explanatory variables given, find out the critical dU and dU values.

3.3.7. Statistical test t

The t statistical test basically shows how far the influence of one explanatory (independent) variable individually in explaining the variation in the dependent variable. The t test has a significance value of $\alpha = 5\%$. The criteria for testing the hypothesis using the t statistical test is if the significance value of t (p-value) < 0.05 , then the alternative hypothesis is accepted, which states that an independent variable individually and significantly affects the dependent variable (Ghozali, 2016: 99).

3.3.8. Determination Coefficient Test (R²)

The coefficient of determination test is used to show how much the independent variable can explain the dependent variable (Ghozali, 2013: 146). The coefficient of determination can be seen in the value of Adjusted R Square which shows how much the independent variables (DER, ROA and TATO) can explain the dependent variable (Stock Return). The amount of determination coefficient is 0 to one. The higher the Adjusted R Square value, the better the regression model used because it indicates that the ability of the independent variables to explain the dependent variable is also greater, as well as in the reverse area.

3.3.9. F test

The purpose of the f test is to test whether all coefficients are equal to 0. Or in the language of statistics, what will be tested is the null hypothesis, namely:

$$H_0: \beta_1 = \beta_2 = \beta_3 = \dots = \beta_k = 0$$

Ha: Not all regression coefficients are 0

If the results of the f test are significant, it does not mean that all independent variables simultaneously affect the dependent variable. The significant f test results mean that not all coefficient values of the independent variables are zero (0). This means that one or more independent variables may have a value that is different from zero (partially significant), while the rest have a coefficient value that is not different from zero (not partially significant).

The f test is essentially the best regression model test, which is to test the following two models:

- a. Model 1: $Y_i = \alpha$ (regression model without independent variables)
- b. Model 2: $Y_i = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_k X_{ki}$

If the f test result is significant, it means that model 2 is better than model 1. If the f test result is not significant, it means that Model 1 = Model 2, because all the coefficients of the independent variables = 0.

IV. RESULTS AND DISCUSSION

4.1. Description of Research Object

The real estate and property industries in general are two different things. Real estate is land and all permanent improvements on it including buildings, such as buildings, road construction, open land, and all other forms of development that are permanently attached. According to laws and regulations in Indonesia, the definition of the real estate industry is stated in PDMN No.5 of 1974 which regulates the real estate industry. In this regulation, the definition of the real estate industry is a property company that is engaged in the provision, procurement and preparation of land for industrial purposes, including the tourism industry. While the definition of property according to the Decree of the Minister of Public Housing no.05 / KPTS / BKP4N / 1995, Art. 1.a: 4 Property is a land title and / or a permanent building which becomes the object of owner and development. In other words, property is the real estate industry coupled with laws such as rent and ownership

4.2. Data analysis

4.2.1. Descriptive statistics

Descriptive statistical analysis on firm value variables using the Eviews version 10 application can be seen in the following table:



Table 4.1.
Descriptive statistics

Date: 08/31/20 Time: 11:33 AM Sample: 2014 2018				
	RETURN	ROA	DER	TATTOOS
Mean	0.071830	0.062848	0.761281	0.216617
Median	-0.001122	0.046666	0.634943	0.214227
Maximum	1.341176	0.358901	3.700960	0.858513
Minimum	-0.875294	2.56E-05	0.045088	0.000259
Std. Dev.	0.386827	0.055411	0.529745	0.111990
Skewness	0.810912	1.889232	1.822910	1.484300
Kurtosis	3.529363	8.489334	9.525903	10.16531
Jarque-Bera	19.40358	296.0639	372.5294	401.0285
Probability	0.000061	0.000000	0.000000	0.000000
Sum	11.49273	10.05574	121,8050	34.65878
Sum Sq. Dev.	23.79193	0.488188	44,62013	1.994133
Observations	160	160	160	160

Source: processed data (2020)

Based on the table in 4.1, the average value of stock returns is 0.071, the average value of return on assets (ROA) is 0.062, the average value of debt to equity ratio (DER) is 0.761 and the average value of total asset turnover (TATO)) of 0.2166. The median value of stock returns is -0.001122, the median value of return on assets (ROA) is 0.046, the average value of debt to equity ratio (DER) is 0.634 and the median value of total asset turnover (TATO) is 0.214.

Furthermore, the maximum value of stock return is 1.34. The maximum value of return on assets (ROA) is 0.35, the maximum value of debt to equity ratio (DER) is 3.70, and the maximum value of total asset turnover (TATO) is 0.85, while the minimum value of return on shares is -0.87. the minimum value of return on assets (ROA) is -0.000256, the minimum value of debt to equity ratio (DER) is 0.045, and the minimum value of total asset turnover (TATO) is 0.000259.

4.2.2. Panel Data Regression Model Selection

4.2.2.1. Hausman Test

The Hausman test aims to determine whether the random effect model is better to use than the fixed effect.

H0: Random Effect

H1: Fixed Effect

If the chi-square probability is more than 5%, then the random effect model should be used. The results of the estimation using the random specification effect are as befollowing:

Table 4.2

Hausman Test

Correlated Random Effects - Hausman Test Equation: Untitled Cross-section random effects test			
Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Random cross-section	0.903411	3	0.8246

The chi-square probability result is 0.8246. So it can be concluded that the model that should be used is the random effect.

4.2.3. Classic assumption test

4.2.3.1. Multicollinearity Test

One way to determine the multicollinearity in a model is to look at the correlation coefficient of the computer output. If there is a coefficient of variance inflation factors > 10 then there are symptoms of multicollinearity. The following is the result of the correlation coefficient output can be seen in table 4.3

Table 4.3
Multicollinearity Test

Variance Inflation Factors Date: 08/31/20 Time: 11:32 AM Sample: 1 160 Included observations: 160			
Variable	Coefficient Variance	Uncentered VIF	Centered VIF
ROA	0.514722	4.185738	1.824204
DER	0.003564	3.553231	1.154336
TATTOO	0.123315	8.506179	1.785178
S			

Source: processed data (2020)

Based on the test of the correlation coefficient above, each variable has a value of variance inflation factors < 10, it can be concluded that the model does not experience multicollinearity problems.

4.2.3.2. Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. A good model is one that does not occur homoscedasticity or heteroscedasticity.

Table 4.4
Cross Section Heteroscedasticity Test

Panel Cross-section Heteroskedasticity LR Test

Equation: UNTITLED

Specification: RETURN C ROA DER TATO

Null hypothesis: Residuals are homoskedastic

	Value	df	Probability
Likelihood ratio	40.59606	32	0.1417
LR test summary:			
Restricted logL	-66.41867	156	
Unrestricted logL	-46.12064	156	

Source: processed data (2020)

Based on the results of the heteroscedasticity test above, it shows the value of p-Likelihood Ratio (LR Ratio) 0.1417 > 0.05, so it can be concluded that in this study there is no heteroscedasticity problem or the data is homogeneous.

Table 4.5
Panel Period Heteroscedasticity Test
Source: processed data (2020)

Panel Period Heteroskedasticity LR Test			
Equation: UNTITLED			
Specification: RETURN C ROA DER TATO			
Null hypothesis: Residuals are homoskedastic			
	Value	df	Probability
Likelihood ratio	7.062058	32	1.0000
LR test summary:			
	Value	df	
Restricted LogL	-66.41867	156	
Unrestricted LogL	-62.88764	156	

Based on table 4.5, it can be seen that the heteroscedasticity test with the period test results in the likelihood ratio value of 7.062058 and has a probability of 1.0000 <0.005. Then H0 is declared not an error because homoscedasticity is accepted, so it can be interpreted that there is no heteroscedasticity in the test period.

4.2.3.3. Correlation Test

A. Autocorrelation test

Autocorrelation test aims to see whether or not there is a relationship between the residuals of one observation and the residuals of other observations. The autocorrelation test can be seen using the Durbin Watson test. Autocorrelation is a correlation between one observation disorder variable and another observation disorder variable.

The autocorrelation test uses the Durbin Watson test. The assessment is seen from the probability value. If the probability value is less than 0.05, it can be concluded that there is an autocorrelation problem in the model. The following results from the autocorrelation test can be seen in table 4.6.

Table 4.6
Autocorrelation Test with Durbin Watson

Weighted Statistics			
Root MSE	0.347440	R-squared	0.077476
Mean dependent var	0.022386	Adjusted R-squared	0.059735
SD dependent var	0.362871	SE of regression	0.351866
Sum squared resid	19.31430	F-statistic	4.367076
Durbin-Watson stat	1.944267	Prob (F-statistic)	0.005535

Source: processed data (2020)

Based on table 4.5, the Durbin Watson value is 1.94. From the Durbin Watson table with K = 3 and n = 160, the value of DL = 1.7035 is obtained. DU = 1.7798. Then the DW value is 1.94 > DU 1.77, so that the data in this study are free from autocorrelation problems.

B. Residual Cross-Section Dependence (correlation) Test

For further testing, the correlation test is carried out with the residual cross-section dependence (correlation) test as follows:

Table 4.7

Correlation Test Results

Residual Cross-Section Dependence Test			
Null hypothesis: No cross-section dependence (correlation) in residuals			
Equation: Untitled			
Periods included: 5			
Cross-sections included: 32 Total			
panel observations: 160			
Note: non-zero cross-section means detected in data Cross-section means were removed during computation of Correlations			
Test	Statistics	df	Prob.
Breusch-Pagan LM	744.4350	496	0.0000
LM scaled magnification	7.887818		0.0000
CD zoom	5.159982		0.0000

Based on the table above, it is known that the results of the correlation test with the residual cross-section dependence test include autocorrelation problems because the probability value is <0.05 .

4.2.4 Hypothesis Testing with Panel Data Regression Analysis

4.2.4.1 Random Effect Model Test

Table 4.8
Random Effect Model Test Results

Dependent Variable: RETURN				
Method: Panel EGLS (Two-way random effects) Date: 08/31/20 Time: 11:38				
Sample: 20142018				
Periods included: 5				
Cross-sections included: 32				
Total panel (balanced) observations: 160				
Swamy and Arora estimator of component variances				
White cross-section standard errors & covariance (df corrected)				
Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	-0.071201	0.088196	-0.807305	0.4207
ROA	0.463466	0.368017	1.259360	0.2098
DER	-0.062243	0.052868	-1.177341	0.2409
TATT	0.744571	0.312147	2.385325	0.0183
OOS				
Effects Specification				Rho
SD				
Random cross-section	0.000000			0.0000
Period random	0.202704			0.2251
Idiosyncratic random	0.376087			0.7749
Weighted Statistics				
Root MSE	0.347440	R-squared		0.077476
Mean dependent var	0.022386	Adjusted R-squared		0.059735
SD dependent var	0.362871	SE of regression		0.351866
Sum squared resid	19.31430	F-statistic		4.367076
Durbin-Watson stat	1.944267	Prob (F-statistic)		0.005535
Unweighted Statistics				

R-squared	0.094919	Mean dependent var	0.071830
Sum squared resid	21.53363	Durbin-Watsonstat	1.948850

Based on table 4.8 the regression equation obtained above is:

$$\text{Stock return} = -0.071201 + 0.463466 * (\text{ROA})_{it} + (-0.062243) * (\text{DER})_{it} + 0.744571 * (\text{TATO})_{it} + e_{it}$$

Based on the regression equation above, the following interpretations are obtained:

- In the regression equation above, the constant value α is -0.0711201 which means that if the independent variable (ROA, DER, TATO) is constant (0) then the stock return is -0.0711201
- The regression coefficient on the return on assets (ROA) variable is 0.463466. The positive regression coefficient shows that each increase in return on assets of 1 part will cause an increase in stock returns of 0.463466 assuming the other independent variables from the model are random.
- The regression coefficient on the debt to equity ratio (DER) variable is -0.062243, the negative regression coefficient shows that each increase in debt to equity ratio of 1 part will cause a decrease in stock returns of -0.062243 assuming the other independent variables of the model are random.
- The regression coefficient on the total asset turnover (TATO) variable is 0.744571. The positive regression coefficient shows that each increase in total asset turnover by 1 part will cause an increase in stock returns of 0.744571 assuming the other independent variables from the model are random.

4.2.4.2 T test

Regression analysis that has been carried out aims to determine the measurable relationship of ROA, DER and TATO to stock returns. To see the size of the influence of the company's fundamental variables partially on sharia stock returns, the t test is used. This partial test or t test is used to test the effect of each independent variable on the dependent variable. If the t probability value is less than 0.05, the result is significant, it means that there is an influence from the independent variable individually on the dependent variable. Hypothesis testing partially using the t test can be seen in the following table:

Table 4.9
T test

Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	-0.071201	0.088196	-0.807305	0.4207
ROA	0.463466	0.368017	1.259360	0.2098
DER	-0.062243	0.052868	-1.177341	0.2409
TATTOO S	0.744571	0.312147	2.385325	0.0183

Source: processed data (2020)

A. Effect of Return on Assets on Stock Return

The test results of panel data regression analysis show that the t-count for the independent variable return on assets (ROA) is 1.259360, while the t-table value with $\alpha = 5\%$ and $df = (nk)$, $df = 157$ where the t-table value is amounting to 1.9751 which means that the t-count value is smaller than the t-table value ($1.259360 < 1.9751$), then if it is seen from the probability value which is equal to 0.2098 which is greater than 0.05 ($0.2098 > 0.05$) then H_0 is accepted. This means that ROA is not significant to stock returns.

b. Effect of Debt to Equity Ratio on Stock Return

The test results of panel data regression analysis show that the t-count for the independent variable debt to equity ratio (DER) is -1.177341, while the t-table value is $\alpha = 5\%$ and $df = (nk)$, $df = 157$ where the t-value table is 1.9751, which means that the t-count value is smaller than the t-table value ($-1.177341 < 1.9751$), then when viewed from the probability value, it is 0.2409 which is greater than 0.05 ($0.2409 > 0, 05$) then H_0 is accepted. This means that DER has no significant effect on stock returns.

c. The Effect of Total Asset Turnover on Stock Return

The test results of panel data regression analysis show that the t-count for the independent variable total asset turnover (TATO) is 2.385325, while the t-table value with $\alpha = 5\%$ and $df = (nk)$, $df = 157$ where the t-table value is amounting to 1.9751, which means that the t-count value is greater than the t-table value ($2.385325 > 1.9751$), then when viewed from the probability value, which is 0.0183 less than 0.05 ($0.0183 < 0.05$), then H_0 rejected. This means that TATO has a positive and significant effect on stock returns.

4.2.4.3 Panel Data Regression F Test

The F test is used to determine whether all independent variables have a coefficient value equal to zero.

If the value of F count $>$ F table, then H_0 is rejected and it can be concluded that at least 1 independent variable has a coefficient value of $\neq 0$. If the value of F count $<$ F table, then H_0 is accepted and it can be concluded that all independent variables have a coefficient value of $= 0$. The results of the F test are shown in the following table:

Table 4.10
F test

Root MSE	0.347440	R-squared	0.077476
Mean dependent var	0.022386	Adjusted R-squared	0.059735
SD dependent var	0.362871	SE of regression	0.351866
Sum squared resid	19.31430	F-statistic	4.367076
Durbin-Watson stat	1.944267	Prob (F-statistic)	0.005535

Source: processed data (2020)

Based on the results of the eviews output, the calculated F value is 4.367076 while the F table with a level of $\alpha = 5\%$ is 2.6621. Thus F count $>$ F table ($4.367076 > 2.6621$), then also seen from the probability value which is equal to 0.005535 which is smaller than the significance level of 0.05 so that H_0 is rejected. This shows that not all ROE, DER, and TATO variables have a coefficient equal to zero.

4.2.4.4 Test of the Coefficient of Determination (Adjusted R-Square)

The coefficient of determination (Adjusted R-Square) is basically to measure how far the model's ability to explain the variation in the dependent variable. An adjusted R-square value that is close to one means the ability of the independent variables to provide almost all the information needed to predict the dependent variation. The coefficient of determination can be seen in table 4:11:

Table 4.11
Coefficient of Determination

Root MSE	0.347440	R-squared	0.077476
Mean dependent var	0.022386	Adjusted R-squared	0.059735
SD dependent var	0.362871	SE of regression	0.351866
Sum squared resid	19.31430	F-statistic	4.367076
Durbin-Watson stat	1.944267	Prob (F-statistic)	0.005535

Source: processed data (2020)

Based on table 4.11, the Adjusted R-Square (R²) number is 0.077476. This shows that the percentage of the contribution of the influence of the independent variable on the dependent variable is 7.74%, or it can be interpreted that the independent variable used in the model is able to explain 7.74% of the dependent variable, the remaining 92.26% is influenced by other factors. outside the regression model.

4.3 Research Findings

4.3.1. Effect of Return on Assets on Stock Return

The results of partial hypothesis testing in this study, researchers found that partially return on assets has no significant effect on stock returns. The results of this study are in line with research conducted by Sudarsono and Sudiyatno (2016), Mende and Rate (2017) and Asmi (2014) which concluded that partially there is no significant effect on the return on assets variable on stock returns. This shows that stock returns in the property and real estate sub-sector companies listed on the IDX are not influenced by return on assets.

4.3.2. Effect of Debt to Equity Ratio on Stock Return

The partial results of hypothesis testing in this study, researchers found that the partial debt to equity ratio has no significant effect on returns stock. The results of this study are in line with research conducted by Sudarsono and Sudiyatno (2016), Mende and Rate (2017) and Asmi (2014) who concluded that partially debt to equity ratio does not have a significant effect on stock returns. This shows that stock returns in property and real estate sub-sector companies listed on the IDX are not affected by the debt to equity ratio.

4.3.3. The Effect of Total Asset Turnover on Stock Return

The partial results of hypothesis testing in this study, researchers found that partially total asset turnover has a positive and significant effect on total asset turnover on stock returns. The results of this study are in line with research conducted by Salim and Simatupang (2016) and Ananto (2014) who concluded that partially there is a significant effect on the total asset turnover variable on stock returns. This shows that stock returns in property and real estate sub-sector companies listed on the IDX are influenced by the total asset turnover variable.

V. CONCLUSIONS AND SUGGESTIONS

5.1. Conclusion

Based on the results of research data on return on assets (ROA), debt to equity ratio (DER) and total asset turnover (TATO) on stock returns in property and real estate sub-sector companies listed on the IDX for the 2014-2018 period, this study can the following conclusions were drawn. Based on the results of the model estimation, it can be seen:

1. *Return on assets* partially there is no significant effect on stock returns. This shows that the return on shares in the property and real estate sub-sector companies listed on the IDX is not influenced by return on assets.

2. *Debt to equity ratio* partially there is no significant effect on stock returns, this shows that the stock returns of property and real estate sub-sector companies listed on the IDX are not affected by the debt to equity ratio.
3. *Total asset turnover* partially positive and significant effect on Stock Return. This means that TATO has a significant effect on stock returns.

5.2. Suggestion

The following are some suggestions that researchers can provide:

1. Prospective investors who wish to invest in shares in the property and real estate subsector should consider the TATO factor because this factor has a partially significant effect on stock returns.
2. This research can be developed using other fundamental factors and macroeconomic factors such as inflation, exchange rate (exchange rate), interest rates, money supply and so on as predictors of stock returns.

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