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EFFECT OF LEVERAGE AND LIQUIDITY ON FINANCIAL PERFORMANCE OF COMPANIES IN THE PROPERTY AND REAL ESTATE SUB SECTOR IN INDONESIA

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ABSTRACT:

This research aims to determine the effect of leverage and liquidity on financial performance of companies in property and real estate sub sectors company listed on the Indonesia Stock Exchange in the 2014-2018 period. The independent variables used in this study are leverage and liquidity. The dependent variable used in this study is financial performance of companies. The research population is the property and sub-sector companies' real estate listed on the Indonesia Stock Exchange in the 2014-2018 period consisting of 41 companies. The sample selection technique used in this research is technique non-probability sampling with purposive sampling method, with sampling of 6 companies. While the analytical method used in this research is multiple linear regression analysis at a significant level of 5%. The program used in analyzing data using Eviews9. The results of the research showed that simultaneously leverage and liquidity together had no effect on financial performance of company. While partially influential leverage on company financial performance and liquidity financial performance of companies.

INTRODUCTION

Indonesia with a large population is a place to invest in property because the amount of demand is very large. The rapid growth of the property business is in line with the increasing domestic economy, the addition of foreign investor

capital in the Indonesian property sector, namely purchases in the form of property products and securities from national property companies.

The Indonesian property market is very good for targeting property assets. Ranging from solid investments, promising long-term investments, prices continue to rise, to passive income that can be obtained from rental results. In developed and developing countries, property development and business are growing rapidly. Meanwhile, in countries experiencing economic decline or developing countries such as Indonesia, Property development is increasing rapidly accelerating the economy towards a better future (Angelina, 2020).

Based on statistical data, there is a housing shortage of approximately 15 million units. Demand for occupancy per year reaches 700-800 thousand units, while developers are only able to provide around 400 noisy units. This imbalance in the number of requests is evidence of the prospect of property that still holds enormous potential. The price competition among property entrepreneurs became common. A company does not escape the expectations of the owner which is the company will continue to exist for a long time but it will not always happen, at one point the company could go bankrupt. Bankruptcy of a company is seen from the performance of a company. When the financial performance of a company is in a condition can't lead to potential bankruptcy in a company, if it happens, it will give concern to external and internal parties of the company such as: managers, employees, investors and creditors (Amalia, 2020). The investor will lose the shares invested in the company while the creditor will incur losses for providing a capital loan and the company cannot repay the loan funds. (Kembar.pro, Ferry Rinaldi, 2015).

Indonesia's economic condition in the last 3 years is unstable and even inhibits the decline, this is caused by stunted growth in the property industry. These conditions should be considered by property businesses. This condition is not resolved properly; it is estimated that the growth of the property industry will experience a deeper decline from 2014 to 2016 reaching 25%. This is also conveyed by Executive Director of Indonesia Property Watch (IPW) Ali Traghandha said that property businesses continue to be careful because it is predicted that the decline in property growth will reach its lowest point in 2019.

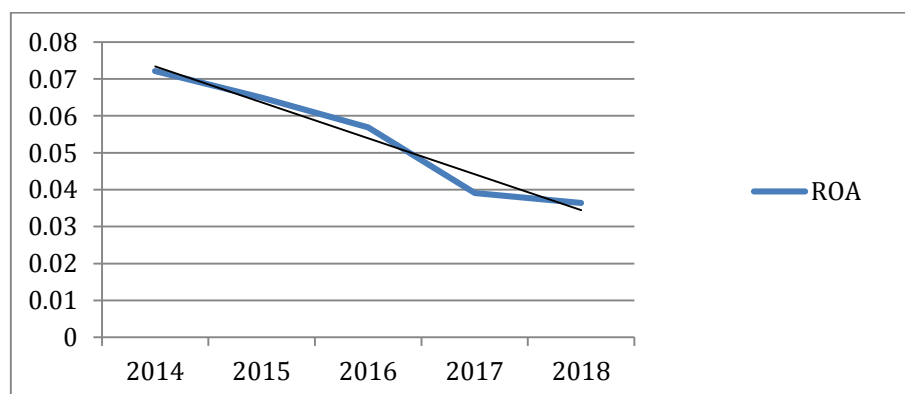


Figure 1. Return on Asset Graph

Source: Financial Statements (idx.co.id), Data Processed by the Author, 2019.
From Figure 1, it can be concluded that Return on Assets (ROA) over a 5 year period has decreased.

LITERATURE REVIEWS***Leverage***

The leverage ratio is the ratio used to measure the extent of the company's assets are financed by debt (Adhi, 2019; Nugraha, 2020). In other words, the leverage ratio used to measure how much debt burden must be borne by the company in order to fulfill assets. In a broad sense, the leverage ratio used to measure a company's ability to meet all of its obligations, both short-term and long-term obligations. Leverage can be measured using a Debt To Asset Ratio (DAR) is the ratio used to measure the ratio between total debt to total assets (Brigham, E. F., & Houston, 2011). In other words, this ratio is used to measure how much the company's assets are financed by debt or how much the company's debt affects the financing of assets. DAR can be obtained with the following formula:

$$DAR = \frac{\text{Total Debt}}{\text{Total Asset}}$$

Liquidity

Liquidity is the company's ability to pay obligations that must be fulfilled immediately. Short-term debt is an obligation that must be fulfilled immediately, therefore this ratio can be used to measure the level of security of short-term creditors, and measure whether the company's operations will not be disrupted if these short-term obligations are immediately billed (Sutrisno, 2013). A company which is able to fulfill its financial obligations on time means that the company is in a "liquid" state and is said to be able to fulfill its financial obligations on time either on short-term or short-term debt (Darsono, 2011). The ratio used to measure liquidity in this study is the Current Ratio (CR). CR can be obtained with the following formula:

$$CR = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Financial Performance of Companies

Financial performance of companies is a description of the financial condition of a company within a certain period, both in terms of aspects of fundraising and fund distribution. Financial performance can be measured using profitability ratios. According to Gitman (2012), profitability is the relationship between revenues and cost generated by using the firm's asset - both current and fixed - in productive activities. A company is an organization that operates with the aim of making a profit by selling products and/or services to its customers (Husnan, S., & Pudjiastuti, 2012). The operational goal of most companies is to maximize profits both short-term and long-term profits. This research used Return On Assets (ROA) as an indicator in

measuring company performance. Kasmir (2014) ROA can be obtained with the following formula:

$$ROA = \frac{EAT}{Total\ Asset}$$

The leverage ratio describes how a company can cover all its debts with available assets, the bigger this ratio the better, because the more confident investors will invest. A high leverage ratio has a good impact on the company, this is in line with the trade-off theory which states that the greater the company's debt, the better the company's performance in reducing its tax costs, by reducing tax costs, the greater the return of investors. In addition, the increase in corporate debt has a good impact on the company because the company does not need to pay any more fees for supervision (agency costs), the higher the level of debt, the higher the level of investor supervision of the company. The profitability ratio is widely used by investors as the ratio that most easily describes a company, through these ratio investors can find out how the company can generate returns, both returns on its assets and on the company's capital itself. Return On Asset measures the company's ability to generate operating profit with all assets owned by the company. Return On Asset illustrates the extent to which the company's assets can generate profits. The liquidity ratio is used by investors because investors can see how liquid a company is. The more liquid the company's assets, the more effective the company is in covering its short-term debt. Liquidity ratios can have a good or bad effect on a company's funding. Some companies are good at managing their current assets so that they can pay off their current debts, but in some cases the more liquid the company is, the worse it is because they have risks.

Hypothesis

H1: Debt to Asset Ratio and Current have a simultaneous effect on Return On Assets at Property and Real Estate Companies listed on the Indonesia Stock Exchange for the 2014-2018 Period.

H2: Debt to Asset Ratio has an effect on Return On Asset in Property and Real Estate Companies listed on the Indonesia Stock Exchange for the 2014-2018 Period.

H3: Current Ratio affects the Return on Assets of Property and Real Estate Companies listed on the Indonesia Stock Exchange for the 2014-2018 period.

Following the Research Paradigm:

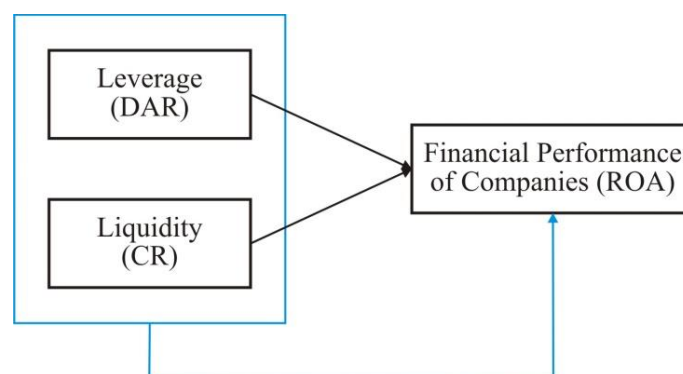


Figure 2. *Research Paradigm*

METHODS

The research conducted is quantitative research. This quantitative research is a research method that tests data in the form of numbers and uses statistics (Sugiyono, 2015). The variables in this study are leverage, liquidity level and financial performance of the company. This research was conducted to determine the effect of variable leverage and the level of corporate liquidity on the financial performance of companies in the property and real estate sub-sector companies listed on the Indonesia Stock Exchange Period 2014-2018.

The population in this research were all property and real estate sub-sector companies listed on the Indonesia Stock Exchange in the 2014-2018 period as many as 41 companies. And those who meet the research criteria using *purposive sampling* (desired criteria) there are only 6 companies which are sampled in this research. The Data collection and collection techniques are carried out using internet research methods and literature studies to obtain secondary data issued by the company in the form of corporate financial statements (Octavia, 2020).

Classical Assumption Test

Classical assumption test is performed to determine the feasibility of the multiple regression model used (Nariswari, 2020; Widajatun, 2019). In the classic assumption test there are four types of tests conducted: Normality Test which aims to see whether the data is normally distributed or not, Multicollinearity Test which aims to determine the linear relationship between independent variables, Heteroscedasticity Test which aims to determine the occurrence of the test model at the time of residuals and the predictive value has a correlation or pattern of relationships and finally the Autocorrelation Test aims to find out whether in a regression model there is a correlation between error in the t period (analysis period) and $t-1$ (previous period) (Husna, 2016; Nugraha, 2019).

Model Test

Panel Data Regression used to conduct analysis in this research, where panel data is a combination of cross section data and time series (Nuryaman, 2015). To manage the panel data, the most appropriate model is chosen by conducting the Chow Test, the Hausman Test and the Langrange Multiplier Test (Nugraha, 2019).

Coefficient Determination Test

Test coefficient of determination (R^2) was conducted to measure the extent to which the independent variables have the ability to be able to explain the dependent variable (Widajatun, 2020).

Hypothesis Test

The level of significance of the influence of independent variables on the dependent variable can be determined by conducting a hypothesis test. To find out the effect simultaneously performed the F test, and for the partial the T test was performed (Susanti, 2020).

RESULTS AND DISCUSSION

Normality Test Results

The method used to test normality in this research is the Jarque-Bera method (JB Test). The data is normally distributed if the probability value > 0.05 , but conversely the data is not normally distributed if the probability value < 0.05 (Wijaya, 2020).

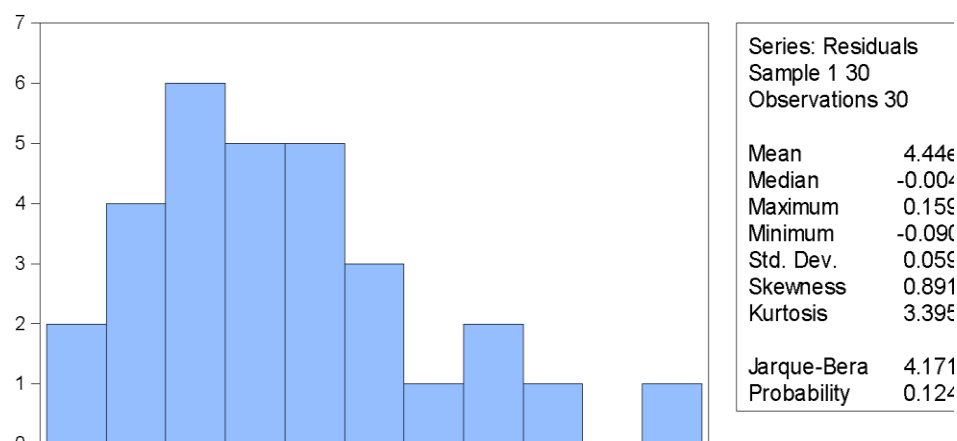


Figure 3. Normality Test

Source: Results of Data Processing with Eviews 9

Normality Test Results show that the statistical value of the Jarque-Bera of 4.171862 significance at the 0.05 significance level with a probability value of 0.124191. JB probability value (0.124191) > 0.05 it means that the data is normally distributed.

Multicollinearity Test Results

This test is conducted to determine whether there is a linear relationship between independent variables, in this case the relationship between DAR and CR. If the value contained in the correlation matrix is below 0.8, then among the independent variables there is no multicollinearity (Nugraha, 2020).

Table 1. Multicollinearity Test

| | | |
|-----|-----------|-----------|
| | DAR | CR |
| DAR | 1.000000 | -0.700681 |
| CR | -0.700681 | 1.000000 |

Source: Results of Data Processing with Eviews9

The conclusion from the results of the Multicollinearity Test output is that between the Current Ratio and Debt to Asset Ratio variables there is no multicollinearity problem.

Heterokedastisitas Test Results

Heterokedastisitas test intended to find out the test model at the time of residuals and predicted values have a correlation or relationship patterns.

Table 2. Heterokedastisitas Test

| | | | |
|--------------------------------|----------|---------------------|--------|
| Heteroskedasticity Test: White | | | |
| F-statistic | 2.828531 | Prob. F(5,24) | 0.0381 |
| Obs*R-squared | 11.12350 | Prob. Chi-Square(5) | 0.0490 |
| Scaled explained SS | 10.79131 | Prob. Chi-Square(5) | 0.0557 |

Source: Results of Data Processing with Eviews9

Heteroscedasticity Test Results concluded that the regression model is free from heteroscedasticity problems. These results are indicated by the Obs * R-square probability value of 11,12350 which is greater than 0.05, so the assumption of heteroscedasticity for regression testing has been fulfilled.

Autocorrelation Test Results

This test uses the Durbin-Watson test. If $D_u < d < 4-D_u$, the data is free from autocorrelation.

Table 3. Autocorrelation Test

| | | | |
|---|-----------|---------------------------|-----------------|
| Breusch-Godfrey Serial Correlation LM Test: | | | |
| F-statistic | 1.641899 | Prob. F(2,25) | 0.2138 |
| Obs*R-squared | 3.483052 | Prob. Chi-Square(2) | 0.1753 |
| R-squared | 0.116102 | Mean dependent var | 4.44E-17 |
| Adjusted R-squared | -0.025322 | S.D. dependent var | 0.059579 |
| S.E. of regression | 0.060329 | Akaike info criterion | -2.626996 |
| Sum squared resid | 0.090990 | Schwarz criterion | -2.393463 |
| Log likelihood | 44.40493 | Hannan-Quinn criter. | -2.552286 |
| F-statistic | 0.820950 | Durbin-Watson stat | 1.979822 |
| Prob(F-statistic) | 0.524107 | | |

Source: Results of Data Processing with Eviews9

Table 3 shows the Durbin-Watson stat value of 1.988490 indicates that there are no symptoms of autocorrelation, where the value of D_U (1.6715) is smaller than 1.979822 and 1.979822 smaller than the $4-d_U$ value (2.3285) at the 5% significance level.

Chow Test Results

Chow Test was conducted to find out which model is best to use between fixed effects and common effects for this study.

Table 4. Chow Test

| | | | |
|----------------------------------|-----------|--------|---------------|
| Redundant Fixed Effects Tests | | | |
| Equation: Untitled | | | |
| Test cross-section fixed effects | | | |
| Effects Test | Statistic | d.f. | Prob. |
| Cross-section F | 4.996358 | (5,22) | 0.0033 |
| Cross-section Chi-square | 22.761528 | 5 | 0.0004 |

Source: Results of Data Processing with Eviews9

Table 4 shows the probability of Chi-square $0,0004 < 0.05$ means that the Chow test research better done using fixed effects than common effects. After calculating the chow test, research must be calculated and compared again with the Hausman test.

Hausman Test Results

Hausman Test is performed to choose which calculation is better to use between the Random Effect or Fixed Effect.

Table 5. Hausman Test

| | | | |
|--|-------------------|--------------|---------------|
| Correlated Random Effects - Hausman Test | | | |
| Equation: Untitled | | | |
| Test cross-section random effects | | | |
| Test Summary | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob. |
| Cross-section random | 4.426455 | 2 | 0.1093 |

Source: Results of Data Processing with Eviews9

Table 5 shows the probability of $0.1093 > 0.05$, which means that in the Hausman test the research conducted is better to use random effects than fixed effects. After calculating the Hausman test, the study must be tested and compared again with the LM test.

Multiplier Langrange Test Results

Langrange Mulplier Test calculations performed to select which one is better to use the random effect or a common effect.

Table 6. Langrange Multiplier Test

| | |
|---|-----------------|
| Lagrange Multiplier Tests for Random Effects | |
| Null hypotheses: No effects | |
| Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided | |
| (all others) alternatives | |
| | Test Hypothesis |

| | | | |
|---------------|-----------------|-----------|----------|
| | Cross-section | Time | Both |
| Breusch-Pagan | 3.888868 | 1.594722 | 5.483591 |
| | (0.0486) | (0.02067) | (0.0192) |
| | | | |

Source: Results of Data Processing with Eviews9

Table 6 shows the Breusch-Pagan probability of $0.0486 < 0.05$, which means that in this study it's better to use the random effect calculation than the common effect. Therefore, the random effect is the cross-section test that is most suitable for use in panel data selection.

Determination Coefficient Test Results

Determination coefficient test is performed to see how much the change in the dependent variable can be explained by the independent variable (Ayunitha, 2020).

Table 7. Regression Estimation Results

| | | | | |
|---|-------------|--------------------|-------------|----------|
| Dependent Variable: Y | | | | |
| Method: Panel EGLS (Cross-section random effects) | | | | |
| Date: 10/20/19 Time: 19:16 | | | | |
| Sample: 2014 2018 | | | | |
| Periods included: 5 | | | | |
| Cross-sections included: 6 | | | | |
| Total panel (balanced) observations: 30 | | | | |
| Swamy and Arora estimator of component variances | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 0.245708 | 0.075481 | 3.255249 | 0.0030 |
| DAR | -0.328870 | 0.147021 | 2.236889 | 0.0337 |
| CR | -0.018457 | 0.008803 | 2.096594 | 0.0455 |
| Weighted Statistics | | | | |
| R-squared | 0.173346 | Mean dependent var | | 0.030830 |
| Adjusted R-squared | 0.112113 | S.D. dependent var | | 0.051861 |
| S.E. of regression | 0.048867 | Sum squared resid | | 0.064476 |
| F-statistic | 2.830904 | Durbin-Watson stat | | 1.226333 |
| Prob(F-statistic) | 0.076536 | | | |

Source: Results of Data Processing with Eviews9

From Table 7, the results of R-Squared = 0.173346 which means that Debt to Asset Ratio (DAR) and Current Asset Ratio (CR) contributed 17.33% (17%) to Return on Assets (ROA) and the remaining 82.67% (83%) is the influence of other factors which in this study were not examined.

F Test Results

F test is performed to show the extent to which the independent variables simultaneously explain the dependent variable.

Table 8. Random Effect

| | | | | |
|---|-----------------|--------------------|-------------|---------------|
| Dependent Variable: Y | | | | |
| Method: Panel EGLS (Cross-section random effects) | | | | |
| Date: 10/20/19 Time: 19:16 | | | | |
| Sample: 2014 2018 | | | | |
| Periods included: 5 | | | | |
| Cross-sections included: 6 | | | | |
| Total panel (balanced) observations: 30 | | | | |
| Swamy and Arora estimator of component variances | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 0.245708 | 0.075481 | 3.255249 | 0.0030 |
| DAR | -0.328870 | 0.147021 | -2.236889 | 0.0337 |
| CR | -0.018457 | 0.008803 | -2.096594 | 0.0455 |
| Effects Specification | | | | |
| | | | S.D. | Rho |
| Cross-section random | | | 0.040065 | 0.4228 |
| Idiosyncratic random | | | 0.046809 | 0.5772 |
| Weighted Statistics | | | | |
| R-squared | 0.173346 | Mean dependent var | 0.030830 | |
| Adjusted R-squared | 0.112113 | S.D. dependent var | 0.051861 | |
| S.E. of regression | 0.048867 | Sum squared resid | 0.064476 | |
| F-statistic | 2.830904 | Durbin-Watson stat | 1.226333 | |
| Prob(F-statistic) | 0.076536 | | | |
| Unweighted Statistics | | | | |
| R-squared | 0.011571 | Mean dependent var | 0.066573 | |
| Sum squared resid | 0.114088 | Durbin-Watson stat | 0.693055 | |

Data processing: Source: Results: Data with Eviews9

In Table 8, the p-value is 0.076536, where $\alpha = 5\%$ (0.05) so in other words $0.076536 > 0.05$. Therefore, it is concluded that Return on Assets (ROA) is not influenced by the variable Debt to Asset Ratio (DAR) and Current Asset Ratio (CR) together.

T-Test Results

T-test was conducted to show the extent to which the independent variable partially explained the dependent variable. In Table 8, the Debt to Asset Ratio (DAR) variable shows a p-value of 0.0337 with $\alpha = 5\%$ (0.05) so in other words it means partially there is an influence between the Debt to Asset Ratio (DAR) variable on Return on Assets (ROA) because $0.0337 < 0.05$.

In Table 8, it can be seen that the variable Current Ratio (CR) shows a p-value of 0.0455 with $\alpha = 5\%$ (0.05) so in other words it means that partially there is an influence between the variable Current Asset Ratio (CR) on Return on Assets (ROA) because $0.0455 < 0.05$.

CONCLUSION

The conclusions of this research are as follows:

The leverage of a company that is calculated by Debt to Asset Ratio (DAR) affects financial performance of companies which is calculated by Return on Assets (ROA). Regression coefficient Debt to Asset Ratio (DAR) has a negative sign which means it shows an opposite direction relationship. This means that the more Debt to Asset Ratio (DAR), the value of Return on Assets (ROA) will decrease further. A high DAR results in a company having a high level of risk because it has long-term debt that is of high value and must be repaid at maturity. In fact, if the company can manage its long-term debt efficiency, the company will be more efficient in earning profits, because the company's debt efficiency can reduce the cost of taxes so that it generates a net profit after interest and more maximum taxes. The level of company liquidity calculated by Current Ratio (CR) has an effect on financial performance of companies is calculated by Return on Assets (ROA). Regression coefficient Current Asset Ratio (CR) has a negative sign which means it shows the opposite direction relationship. Current Asset Ratio (CR) regression coefficient has a negative sign which means it shows the opposite direction relationship. As the Current Ratio (CR) increases, the Return on Assets (ROA) decreases. The significant influence between Current Ratio (CR) on Return on Assets (ROA) shows that the CR ratio has a bad role for ROA because it can cause the ROA ratio to decrease. In this sub sector, the level of liquidity of the company causes the level of profitability to decrease, so the company is said to be inefficient in gaining profits on its assets. Leverage is calculated by Debt to Asset Ratio (DAR) and the level of company liquidity calculated by Current Ratio (CR) together do not affect the Return On Asset (ROA) which describes financial performance of companies measured by Return on Assets (ROA). So that the increase or decrease of these two ratios has an influence on the ups and downs of the performance of Return On Assets (ROA).

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