The Influence of Indonesian Interest Rates, Inflation, Debt to Asset Ratio and Return on Asset against the Property and Real Estate Sector Stock Prices on the Indonesia Stock Exchange in 2014-2018

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Abstract

The aim of this study is to see the effect of Indonesia's interest rates, inflation, DAR and ROA on stock prices. This type of research is quantitative research, uses a deductive approach and is descriptive in nature. The population of the property and real estate sector has 52 companies, within 5 years, so the data totaled 155. The results of this study show that simultaneously SBI, inflation, DAR and ROA have a significant effect on stock prices. Partially, only ROA has a positive / significant effect on the stock price. Other variables, namely SBI, inflation and DAR do not affect the stock price. The amount of stock price variation that can be explained by the independent variable used is 18.3%, the remaining 81.7% is influenced by other variables.

Keywords
SBI, inflation, DAR, ROA, stock prices

I. Introduction

Stock or stock exchanges are related to the sale and purchase of securities on the IDX or other names IDXX. One form of trading on the IDX is the sale of shares. Stock prices often change according to the size of supply and demand. The demand for shares is influenced by a variety of information known to investors regarding the issuer, including information on the company's financial statements. Financial reports are a form of company management accountability to internal or external parties related to company performance in one period of time. What is in the financial statements, as an assessment of the company's shares for investors?

Among the various aspects that affect stock prices, namely Indonesian interest rates, inflation, DAR and Return on Asset. Below is an overview of property and real estate companies that shows a phenomenon in the research data.
Table 1. Phenomenon of the Property and Real Estate Sector

| Code issuer | Tribal Year | Flower (%) | Inflation (%) | Debt | Net profit | Price Stock |
|-------------|-------------|------------|---------------|------|------------|-------------|
| ASRI        | 2014        | 7.75       | 8.36          | 10,553,173,020,000 | 1,176,955,123,000 | 560         |
|             | 2015        | 7.50       | 3.35          | 12,107,460,464,000 | 684,287,753,000 | 343         |
|             | 2016        | 4.75       | 3.02          | 12,998,285,601,000 | 510,243,279,000  | 352         |
|             | 2017        | 4.25       | 3.61          | 12,155,738,907,000 | 1,385,189,177,000 | 356         |
|             | 2018        | 6.00       | 3.13          | 11,339,568,456,000 | 970,586,600,000  | 312         |
| APLN        | 2014        | 7.75       | 8.36          | 14,223,273,846,000 | 983,875,368,000  | 335         |
|             | 2015        | 7.50       | 3.35          | 15,486,506,060,000 | 1,116,763,447,000 | 334         |
|             | 2016        | 4.75       | 3.02          | 15,741,190,673,000 | 939,737,108,000  | 210         |
|             | 2017        | 4.25       | 3.61          | 17,293,138,465,000 | 1,882,581,400,000 | 210         |
|             | 2018        | 6.00       | 3.13          | 17,376,276,425,000 | 193,730,292,000  | 152         |
| FATHER      | 2014        | 7.75       | 8.36          | 76,625,843,194    | 7,046,505,797    | 50          |
|             | 2015        | 7.50       | 3.35          | 74,812,450,750    | 1,204,642,974    | 50          |
|             | 2016        | 4.75       | 3.02          | 72,040,603,450    | 1,818,062,130    | 50          |
|             | 2017        | 4.25       | 3.61          | 58,885,428,727    | 13,212,381,915   | 88          |
|             | 2018        | 6.00       | 3.13          | 44,423,132,493    | 4,950,263,483    | 109         |

Source: www.bi.go.id, financial reports of ASRI, APLN, BAPA

The explanation for this phenomenon is at PT. Alam Sutera Realty, Tbk Indonesia’s interest rate in 2015 fell but stock prices fell, inflation in 2015 and 2018 fell, stock prices also fell, inflation in 2017 rose share prices also rose. Debt in 2016 went up, share price also went up, debt in 2018 went down, and share price also went down. 2016 net income decreased share price increased.

The phenomenon at PT. Agung Podomoro Land, Tbk Indonesia’s interest rates in 2015 and 2016 fell, stock prices also fell, inflation in 2015, 2016 and 2018 fell, stock prices also fell, 2015 net income rose but stock prices fell. Income is the amount received usually within a certain period of time is usually one year, community income is thus all receipts received in a particular year either from industry, trade and other sectors. The economic condition of the population is a condition that describes human life that has economic score. Economic conditions are assessed through three variables: livelihoods, income, and ownership of valuables. (Shah et al., 2020).

Economic growth is still an important goal in a country’s economy, especially for developing countries like Indonesia. Economic growth must also be followed by positive changes in the context of improving the welfare and prosperity of the people who are mandated by the 1945 Constitution. Therefore, economic development is still the focus of development in Indonesia and is an indication of the success of development. Economic growth is a process of increasing the production capacity of an economy that is realized in the form of an increase in national and regional income. (Magdalena and Suhatman 2020). While the phenomenon at PT. Bekasi Asri Pemula, Tbk inflation in 2018 increases, stock prices also go up, Indonesia’s interest rates in 2017 increase, share prices also go up, 2018 net profit goes down, stock prices go up.

Based on the description and related phenomena, it is intended to conduct research with the title: "The Influence of Indonesian Interest Rates, Inflation, Debt to Asset Ratio and
Return on Asset Against the Property and Real Estate Sector Stock Prices on the Indonesia Stock Exchange in 2014-2018.

1.1 Formulation of the Problem

The formulation of the problem in this study are:
1. How does the SBI interest rate affect the property and real estate sector share prices on the IDX for the 2014-2018 period?
2. How does inflation affect the property and real estate sector share prices on the IDX for the 2014-2018 period?
3. How does DAR affect the property and real estate sector share prices on the IDX for the 2014-2018 period?
4. How is the effect of ROA on the share price of the property and real estate sector on the IDX for the 2014-2018 period?
5. How do the SBI interest rates, inflation, DAR and ROA affect the property and real estate sector share prices on the IDX for the 2014-2018 period?

II. Review of Literature

2.1 The Effect of SBI on Stock Prices

According to Susanto (2015) if Bank Indonesia raises deposit rates, investors will take action by selling shares and switching to deposits which they feel are safer, so that if Indonesia's interest rates increase, investors will move their investments so that the stock price will decline.

According to Tandelilin (2010: 103) if the SBI increases, the stock price will decrease or vice versa. If the SBI increases, the return on investment related to interest rates, for example on deposits, will also increase. This situation can attract investors' interest, initially investing in stocks to transfer their capital in the form of deposits. So if more people release / sell their shares, the share price will decrease.

2.2 Effect of Inflation on Stock Prices

According to Susanto (2015), the impact of increasing inflation is that stock prices will decline due to an increase in the price of goods so that the purchasing power of investors will decrease.

According to Wira (2014: 17), a very high inflation rate will discourage investors because if BI suppresses inflation through raising interest rates, it will have an impact on falling stock prices.

2.3 Cloudy Debt to Asset Ratio to Share Price

According to Amrah and Elwisam (2018) a large debt ratio shows that if the company gets a large interest expense, the percentage of profits that its shareholders can receive is getting smaller. So investors are less interested in buying shares from the related company, which results in a decrease in demand and the company's share price.

According to Sitanggang (2015: 73), using a large amount of debt will increase the risk faced by shareholders and possibly the share price will decrease.
2.4 Cloudy Return on Asset to Share Price

Amrah and Elwisam's opinion (2018) that the higher the ROA of a company, raises the confidence of investors to invest their capital, and increases investors' high expectations of dividend distribution which will then increase the demand for shares of related companies in the capital market.

According to Halim (2015: 23), stock price fluctuations are determined by the company's capacity to earn profits. If the profit tends to be large, it is very possible that the dividends paid tend to be large, then it will have a positive effect on the stock price on the stock exchange and investors will be interested in buying the shares. Thus the demand for shares will increase and the share price will increase.

2.5 Previous Research

Several previous studies that have examined the same are referred to by researchers namely:
1. Susanto (2015) entitled The Effect of Inflation, Interest and Exchange Rates on Stock Prices. The results show that partially inflation does not affect stock prices, interest rates and exchange rates have a significant effect on stock prices. Simultaneously, inflation, interest rates and exchange rates affect the stock price.
2. Valianti (2016), entitled The Effect of DAR, DER, ROA and NPM on Stock Prices in LQ-45 Index Companies on the IDX. The results showed that DAR had a negative and significant effect on the stock price, ROA and NPM had a positive and significant impact on the stock price and DER did not affect the stock price. Simultaneously DAR, DER, ROA and NPM affect the share price.
3. Rosana, et al (2017) entitled The Effect of Exchange Rates, Inflation, and Interest Rates on Stock Prices in Yang Companies Go Public on the IDX 2014-2016. The results showed that individually the exchange rate and inflation had a positive and significant impact on stock prices while interest rates had a negative and significant impact on stock prices. Simultaneously the exchange rate, inflation and interest rates affect the share price.

2.6 Conceptual Framework

Below is a conceptual framework prepared, namely:

![Conceptual framework](image)

Figure 1. Conceptual framework
2.7 Research Hypothesis
The hypothesis formulated by the researcher includes:
H1: Indonesian interest rates partially affect the property and real estate sector stock prices on the IDX for the 2014-2018 period.
H2: Inflation affects partially the share prices of the property and real estate sectors on the IDX for the 2014-2018 period.
H3: DAR has an individual effect on the Property and Real Estate Sector Stock Prices on the IDX for the 2014-2018 period.
H4: ROA has an individual effect on the Property and Real Estate Sector Stock Prices on the IDX for the 2014-2018 Period.
H5: SBI interest rates, inflation, DAR and ROA affect the Property Sector Stock Prices and Real Estate on the IDX for the 2014-2018 period.

III. Research Methods

3.1 Time and Place of Research
The research will be carried out in property companies and Real Estate listed on the IDX and through the internet network, namely the official IDX website addressing the website www.idx.co.id, and lasts from March to December 2019.

3.2 Research Methods
This study applies a deductive approach, namely a general to specific presentation with quantitative data and descriptive explanations.

3.3 Population and Sample Research
Based on the 2018 Fact Book, the population was 52 companies. The research sample considerations are property companies and Real Estate listed on the IDX, issued a complete and sequential financial report during the 2014-2018 period and got the biggest profit in the 2014-2018 period.

Table 2. Sample Selection

| No. | Information | Total |
|-----|-------------|-------|
| 1.  | Company *Property and Real Estate* listed on the IDX | 52    |
| 2.  | not published complete financial reports sequentially in the 2014-2018 period | (10)  |
| 3.  | did not get a net profit in the 2014-2018 period the number of samples | (11)  |
|     | Number of samples | 31    |
|     | Number of periods | 5     |
|     | Number of Observations = 31 x 5 | 155   |

3.4 Data Collection Technique
Before testing the data, first collect company financial report data downloaded on the IDX website and search for SBI and inflation data on the BI website.

3.5 Types and Sources of Data
The quantitative type of data sourced from other parties is also referred to as secondary data.
3.6 Identification and Definition of Operational Variables

Operationalization makes it easier for researchers to provide an overview of what variables are used, namely.

| Variable       | Definition                                                                                                                                                                                                 | Indicator                                      | Scale       |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-------------|
| Interest rate SBI (X1) | Bank Indonesia Certificate is one of the securities issued by Bank Indonesia in recognition of short-term debt with a discount / interest system Source: Firdaus & Ariyanti 2011: 101 | SBI interest rates per December 2014-December 2018 | Percent     |
|                |                                                                                                                                                                                                            | Source: Bank Indonesia                         |             |
| Inflation (X2) | Inflation is defined as an increase in commodity prices caused by the unsynchronized program of the commodity procurement system with the level of income owned by the people in a certain country. Source: Putong (2013: 276) | Inflation per December 2014-December 2018 | Ratio       |
|                |                                                                                                                                                                                                            | Source: Bank Indonesia                         |             |
| Debt to Asset Ratio (X3) | DAR describes how much debt the company has financed Source: Valianti (2016)                                                                                                                                                   | DAR = \frac{Total Debt}{total asset} Source: Valianti (2016) | Ratio       |
| Return on Asset (X4) | It is the ratio of profit after tax to total assets Source: Ramdhani (2013)                                                                                                                                                  | ROA = \frac{net income after tax}{total assets} Source: Ramdhani (2013) | Ratio       |
| Price Stock (Y) | A reflection of the value of shares of companies listed on the Indonesia Stock Exchange Source: Valianti (2016)                                                                                                                  | End of year share price per December 2014-2018 | Ratio       |
|                |                                                                                                                                                                                                            | Source: Darmadji and Fakhruddin (2015: 157)   |             |

3.7 Classic Assumption Test

The test is carried out before testing multiple regression. The prerequisite test to be tested is the normality test, multicollinearity, autocorrelation and heteroscedasticity.

3.8 Research Data Analysis Model Multiple

Linear Regression Analysis

The multiple regression formula used is:

\[ Y = a - b_1 X_1 - b_2 X_2 - b_3 X_3 + b_4 X_4 + e \]

With:

- \( Y \) = Share Price
- \( a \) = Constant
- \( b_1, b_2, b_3, b_4 \) = Regression coefficient
- \( X_1 \) = Indonesian Interest Rate
- \( X_2 \) = Inflation
- \( X_3 \) = DAR
- \( X_4 \) = ROA
- \( e \) = Standard error (error rate)
3.9 Coefficient of Determination

This test is often assumed by how much the ability of all variables to explain the variants of the dependent variable. The coefficient of determination is shown in value Adjusted R Square because the independent variable used 3 variables. (Ghozali, 2016: 95)

a. F Test

It aims to determine whether all the independent variables simultaneously affect the dependent variable. The t test can be carried out by comparing the value of F Count with the F table. If F count > from F table, (Ho is rejected, Ha is accepted) and the opposite is if the value of F counts <F table (Ho is accepted, Ha is rejected). (Ghozali, 2016: 96)

b. T Test

Aimed at testing how the influence of each independent variable partially on the dependent variable. This test can be carried out by comparing the t count with the t table or by looking at the section of the significance column in each t count column. The following criteria are used as a guideline for the t test:

H 0 accepted when t count < t table and significant > 0.05 H a accepted when t count > t table and significant <0.05 (Ghozali, 2016: 97)

IV. Results and Discussion

4.1 Descriptive Statistics

Companies that match the criteria to be the sample in this study amounted to 31, so the total data amounted to 155 data. The following is an illustration of the minimum, maximum, mean and standard deviation of each variable:

| Table 4. Descriptive statistics |
|--------------------------------|
| N  | Minimum | Maximum | Mean | Std. Deviation |
|----|---------|---------|------|---------------|
| Interest rate | 155 | 4.25 | 7.75 | 6.0500 | 1.41347 |
| Inflation | 155 | 3.02 | 8.36 | 4.2940 | 2.04963 |
| DAR | 155 | 0.062 | 1.77 | 0.38779 | 0.160081 |
| ROA | 155 | 0.000 | 3.59 | 0.06295 | 0.056817 |
| Stock price | 155 | 50 | 36500 | 2169.63 | 4757,502 |
| Valid N (listwise) | 155 | | | |

The minimum value of the interest rate variable is 4.25 in 2016 while the maximum interest rate is 7.75 in 2014. The mean value of interest rates for the period 2014-2018 is 6.0500 and a standard deviation of 1.41347.

The minimum value of the inflation variable is 3.02 in 2016, while the maximum value of inflation is 8.36 in 2014. The average value of inflation for 2014-2018 is 4.2940 and the standard deviation is 2.04963.

The minimum value for the variable DAR value of 0.062 obtained by PT. Sitara Propertindo, Tbk in 2018 while the maximum value DAR 0.787 obtained by PT. Plaza Indonesia Realty in 2017. The average DAR value for 2014 - 2018 is 0.38779 and the standard deviation is 0.160081.

Minimum value on the variable Return on Asset worth 0,00 obtained by PT. Gading Development in 2017 and PT. Pikko Land Development in 2018 while the maximum value of DAR was 0.359 obtained by PT Fortune Mate Indonesia in 2016. The value is mean DAR 2014 - 2018 0.06295 and the standard deviation is 0.056817.
The minimum value of the Share Price variable is Rp. 50 which is obtained by PT. Bekasi Asri Pemula, period 2014 - 2016 and PT. Gading Development, Tbk in 2016, while the maximum value of the Share Price is Rp. 36,500, - obtained by PT. Metropolitan Kentjana, Tbk in 2017. The value of the average share price in 2014 - 2018 is IDR 2,169.63 and a standard deviation of 4757,502.

4.2 Classic Assumption Test
a. Normality

In testing the normality using 2 methods, namely graphical and statistical tests. The following are the results of the tests that have been carried out:

Figure 2. Histogram Normality Test Before Transformation

According to Figure 2 it can be seen that the research data is not normally distributed because the data is not symmetrical.

Figure 3. PP Plot Normality Test before Transformation

From Figure 3 it can be seen that the research data were not normally distributed because some of the data moved away from the diagonal line.
The table shows that the research data is not normally distributed because the significance value is $> 0.05$, while the significant value in the Kolmogorov Smirnov test shows a significance of $0.000 < 0.05$.

Good research data must meet the normality assumption so that the data in this study need to be transformed. The transformation technique used is LN. The test results after the data transformation were carried out, namely

**Table 5. Kolmogorov Smirnov before Transformation**

|                          | Unstandardized Residual |
|--------------------------|-------------------------|
| N                        | 155                     |
| Normal Parameters a, b   | Mean: 0.000000          |
|                          | Std. Deviation: 4351.05862678 |
|                          | Absolute: 2.20          |
| Most Extreme Differences | Positive: 2.20          |
|                          | Negative: 1.171         |
| Kolmogorov-Smirnov Z     | 2.739                   |
| Asymp. Sig. (2-tailed)   | 0.000                   |

a. Test distribution is Normal.
b. Calculated from data.

From Figure 4 it can be concluded that the data has been normally distributed because the research data tends to be symmetrical, but to find out whether the data is actually normally distributed it will be known from the P-Plot figure:

**Figure 4. Histogram after Transformation**

**Figure 5. PP Plot after Transformation**
The image shows if the data is around the diagonal line so it can be concluded if the data is normally distributed.

**Table 6. Kolmogorov Smirnov after Transformation**

| One-Sample Kolmogorov-Smirnov Test | Unstandardized Residual |
|-----------------------------------|-------------------------|
| N                                 | 153                     |
| Normal Parameters a, b             | Mean                    | 0.000000                |
|                                   | Std. Deviation          | 1.35549842              |
|                                   | Absolute                | 1.108                   |
| Most Extreme Differences          | Positive                | 1.108                   |
|                                   | Negative                | 1.081                   |
| Kolmogorov-Smirnov Z              |                         | 1.334                   |
| Asymp. Sig. (2-tailed)            |                         | 0.057                   |

a. Test distribution is Normal.
b. Calculated from data.

The table shows that if the significant value after the data is transformed into 0.057, where this value is > 0.05, a conclusion can be given if the data is normally distributed

**b. Multicollinearity**

This test is a test of the second requirement after normality. To see whether there is no correlation between the independent variables, the tolerance and VIF values can be found.

**Table 7. Multicollinearity before Transformation**

| Coefficients a | Model       | Collinearity Statistics | Tolerance | VIF |
|----------------|-------------|-------------------------|-----------|-----|
|                | Interest rate | .647                     | 1.546     |     |
|                | Inflation    | .650                     | 1.539     |     |
|                | DAR          | .971                     | 1.029     |     |
|                | ROA          | .957                     | 1.044     |     |

a. Dependent Variable: Share_Price

**Table 8. Multicollinearity after Transformation**

| Coefficients a | Model       | Collinearity Statistics | Tolerance | VIF |
|----------------|-------------|-------------------------|-----------|-----|
|                | LN_Suku_Bunga | .699                     | 1.432     |     |
|                | LN_Inflation  | .691                     | 1.447     |     |
|                | LN_DAR        | .983                     | 1.018     |     |
|                | LN_ROA        | .971                     | 1.030     |     |

a. Dependent Variable: LN_Harga_Saham

The results of multicollinearity testing both before and after the transformation showed that the research data experienced meaningful multicollinearity in the absence.

The relationship between the selected independent variables is because the overall variable tolerance value is > 0.10 and the VIF value of all variables is <10.
c. Autocorrelation

In time series research, an autocorrelation test is mandatory. The following are the results of the autocorrelation test both before and after data transformation:

**Table 9. Autocorrelation before Transformation**

| Model | Durbin-Watson |
|-------|---------------|
| 1     | 2.277 a       |

a. Predictors: (Constant), ROA, Inflation, DAR, Interest_Rate  
b. Dependent Variable: Share_Price  

By looking at the DW table guidelines; k = 4 and n = 155 then the value is:  
Dl = 1.6848 - dl = 2.3152  
Du = 1.7906 - du = 2.2094  

So it can be concluded if the research data does not experience autocorrelation because the value of du < Dw <4 - du or 1.7906 <2.277 <2.2094

**Table 10. Autocorrelation after Transformation**

| Test Runs | Unstandardized Residual |
|-----------|-------------------------|
| Test Value | \( \text{, 29014} \) |
| Cases < Test Value | 76 |
| Cases > Test Value | 77 |
| Cases Total | 153 |
| Number of Runs | 86 |
| Z | 1.380 |
| Asymp. Sig. (2-tailed) | 0.168 |

a. Median  

From table 10 the autocorrelation test after transformation using the run test shows that the data does not experience autocorrelation because the significant value of the test results is 0.168 > 0.05.

d. Heteroscedasticity Test

![Figure 6. Scatterplot before Transformation](image)
From the results of the scatterplot graph test before the transformation, it can be seen that some of the data are clustered so that a conclusion can be made if the heteroscedasticity test results in this study a heteros problem.

![Scatterplot](image)

**Figure 7. Scatterplot after Transformation**

From the results of the scatterplot graph test, after the data transformation, it shows that the plot has been scattered randomly, but after the transformation of the scatterplot graph data it shows that the data is more randomly spread so that the data meets the prerequisite test requirements because it does not experience heteroscedasticity.

| Table 11. Spearma's rho Heteroscedasticity Test before Transformation Correlations |
|-----------------------------------------------|-----|-----|-----|-----|-------------------|
|                           | Interest_Inflation | Rate | DAR | ROA | Unstandardized Residual |
| Correlation               | 1,000          | 0.400 ** | 0.70 | 0.165 * | 0.121 |
| Interest rate             |                |      |     |     |                  |
| Coefficient               |                |      |     |     |                  |
| Sig. (2-tailed)           | 155            | 0.00 | 0.387 | 0.040 | 0.135 |
| N                         |                | 155  | 155 | 155 | 155 |
| Correlation               | 0.400 **       | 1.000 | 0.053 | 0.134 | 0.021 |
| Coefficient               |                |      |     |     |                  |
| Inflation                 |                |      |     |     |                  |
| Sig. (2-tailed)           | 0.070          |      | 0.515 | 0.098 | 0.792 |
| N                         | 155            | 155  | 155 | 155 | 155 |
| Correlation               | 0.070          | 0.53 | 1.000 | 0.001 | 0.107 |
| Spearman's rho             |                |      |     |     |                  |
| DAR                       |                |      |     |     |                  |
| Sig. (2-tailed)           | 0.387          |      | 0.515 | 0.993 | 0.185 |
| N                         | 155            | 155  | 155 | 155 | 155 |
| Correlation               | 0.165 *        | 0.134 | 0.001 | 1.000 | 0.266 ** |
| ROA                       |                |      |     |     |                  |
| Sig. (2-tailed)           | 0.040          |      | 0.098 | 0.993 | 0.001 |
| N                         | 155            | 155  | 155 | 155 | 155 |
| Correlation               | 0.121          | 0.021 | 0.107 | 0.266 ** | 1.000 |
| Unstandardized Residual   |                |      |     |     |                  |
| Coefficient               |                |      |     |     |                  |
| Sig. (2-tailed)           | 0.135          |      | 0.792 | 0.185 | 0.001 |
| N                         | 155            | 155  | 155 | 155 | 155 |

**. Correlation is significant at the 0.01 level (2-tailed).**

* Correlation is significant at the 0.05 level (2-tailed).
The results of the Spearman’s rho test before data transformation showed that the ROA variable had a significant value <0.05, so the results of this test experienced heteroscedasticity.

**Table 12. Spearman’s rho Heteroscedasticity Test after Transformation**

| Correlations | LN_Suku_Flower LN_ | Inflation LN_ | DAR LN_ | ROA | Unstandardized Residual |
|--------------|--------------------|---------------|--------|-----|-----------------------|
| **Correlation** | 1.000               | 0.400 **      | 0.070  | 0.154 | 0.013                 |
| **Coefficient** |                     |               |        |      |                       |
| **Sig. (2-tailed)** |                    |               |        |      | 0.000                 |
| **N**           | 155                 | 155           | 155    | 153  | 153                   |
| **Correlation** | 0.400 **            | 1.000         | 0.053  | 0.137 | 0.025                 |
| **Coefficient** |                     |               |        |      |                       |
| **Sig. (2-tailed)** |                    |               |        |      | 0.000                 |
| **N**           | 155                 | 155           | 155    | 153  | 153                   |
| **Correlation** | 0.070               | 0.053         | 1.000  |      | 0.023                 |
| **Coefficient** |                     |               |        |      | 0.028                 |

**Spearman’s rho**

| LN_DAR | LN_ROA |
|--------|--------|
| **Coefficient** |         | 0.730 |
| **Sig. (2-tailed)** | 0.387 | 0.515 |
| **N** | 155 | 155 | 155 | 153 | 153 |
| **Correlation** | 0.154 | 0.137 | -0.023 | 1.000 | 0.106 |
| **Coefficient** |         |       |       |      | 0.191 |
| **Sig. (2-tailed)** | 0.058 | 0.092 | 0.779 |       |       |
| **N** | 153 | 153 | 153 | 153 | 153 |
| **Correlation** | 0.013 | 0.025 | 0.028 |       | 1.000 |
| **Coefficient** |         |       |       |      |       |
| **Sig. (2-tailed)** | 0.873 | 0.764 | 0.730 | 0.191 |       |
| **N** | 153 | 153 | 153 | 153 | 153 |

**Unstandardized Residual**

**. Correlation is significant at the 0.01 level (2-tailed).**

The results of Spearman’s rho praise after data transformation show that the data does not experience heteroscedasticity because the significant value of all independent variables is > 0.05.

**e. Hypothesis Test**

Multiple linear regression

**Table 13. Multiple Linear Regression Equation**

| Coefficients a |
|----------------|
| **Model** | **Unstandardized Coefficients** | **Standardized Coefficients** | **t** | **Sig.** |
| B | Std. Error | Beta | |
| (Constant) | 8.251 | 0.934 | 8.837 | 0.000 |
| LN_Suku_Bunga | 0.038 | 0.555 | 0.006 | 0.069 | 0.945 |
| LN_Inflation | 0.027 | 0.349 | 0.007 | 0.078 | 0.938 |
| LN_DAR | 0.089 | 0.208 | 0.032 | 0.427 | 0.670 |
| LN_ROA | 0.553 | 0.090 | 0.457 | 6.138 | 0.000 |

**a. Dependent Variable: LN_Harga_Saham**
From the test results in table 13, the following equation can be made:

$$\text{LN}_\text{Shares Price} = 8,251 - 0.038 \text{LN}_\text{Interest Rate} - 0.027 \text{LN}_\text{Inflation} - 0.089 \text{LN}_\text{DAR} + 0.553 \text{LN}_\text{ROA}$$

From the multiple regressions above, the following can be seen: The constant is 8.251, which reveals that if:
1. Interest Rates, Inflation, DAR, and ROA constant value 0 so the share price is 8,251 units.
2. The Interest Rate Regression Coefficient of -0.038 reveals that if there is an increase in the Interest Rate of 1, it will reduce the Stock Price by 0.038 units.
3. The inflation regression coefficient of -0.027 reveals that every 1 unit increase in inflation will reduce the Stock Price by 0.027 units.
4. The DAR coefficient of -0.089 reveals if any increases DAR 1 unit will lower the Share Price by 0.089 units.
5. Regression coefficient ROA 0.553 reveals that every 1 unit increase in ROA will increase the Stock Price by 0.553 units.
6. Regression coefficient Size 18,806 revealed if any increase occurred Size 1 unit will increase the stock price to 18,806 units.

**f. Coefficient of Determination**

Table 14. Determination Coefficient Test

| Model | R   | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-----|----------|-------------------|---------------------------|
| 1     | .453 | .205     | .183              | 1.37369                   |

Based on table 14 it can be seen the magnitude of the influence of Interest Rates, Inflation, DAR, and ROA the share price in 2014 - 2018 was 18.3% while 81.7% was due to the influence of other variables.

**g. F Test**

Table 15. F test

| Model    | Sum of Squares | df | Mean Square | F     | Sig.  |
|----------|----------------|----|-------------|-------|-------|
| Regression | 71,998          | 4  | 17,999      | 9,538 | .000  |
| Residual | 279,281         | 148| 1,887       |       |       |
| Total    | 351,279         | 152|             |       |       |

Based on table 15 it can be seen the magnitude of the influence of Interest Rates, Inflation, DAR, and ROA the share price in 2014 - 2018 was 18.3% while 81.7% was due to the influence of other variables.
h. T Test

Table 16. T test

| Model       | Unstandardized Coefficients | Standardized Coefficients | t     | Sig. |
|-------------|-----------------------------|---------------------------|-------|------|
| (Constant)  | 8,251                       | 934                       | 8,837 | 0.000|
| LN_Suku_Bunga | -0.38                   | 555                       | -0.06 | 0.945|
| LN_Inflation | -0.027                   | 349                       | -0.07 | 0.938|
| LN_DAR      | -0.089                     | 208                       | -0.32 | 0.670|
| LN_ROA      | -0.553                     | 090                       | -0.47 | 6.138|

a. Dependent Variable: LN_Harga_Saham

The amount of t table at 0.05 probability with a 2-way significance test level and df 148 is 1.97612. The following is an explanation of the t test results:
1. Interest rates have a value of -t count> - t table or -0.069> -1.97612 and a significant value of 0.945 > 0.05, it means that the interest rate has no effect on the share price.
2. Inflation has a value of -t count> - t table or -0.078> -1.97612 and a significant value of 0.938 > 0.05, it means that inflation does not affect stock prices.
3. DAR has the value -t count> - t table or -0.427> -1.97612 with a significance of 0.010 < 0.05 so that means DAR does not affect the Share Price.
4. Return on Asset has a value of t count> t table or 6.138> 1.97612 and a significant value of 0.000 <0.05, it means Return on Asset affect positively and significantly Price Stock.

4.3 Discussion

a. Effect of Interest Rates on Y

The results of the research prove that there is no effect on interest rates. The results of this study are also the same as those of Suriyani and Sudiartha (2018), namely that interest rates have no effect on stock prices.

The increase in interest rates does not affect investors' interest in moving their investment because investors are more interested in getting a higher return from their stock investment.

b. Inflation Effect on Y

The results of the research cannot show the influence of inflation on stock prices. The results of this study are also the same as the results of his research conducted by Susanto (2015), namely that inflation does not affect stock prices.

c. Influence Debt to Asset Ratio against Y

The results of the research prove that DAR has no effect on stock prices. The result of this research is also the same as that carried out by Priliyastuti and Stella (2017), namely that DAR does not affect stock prices.

d. Influence Return on Asset against Y

The results of the study showed a significant positive effect ROA at the Stock Price. The result of this research is also the same as that carried out by Damayanti and Valianti (2016), namely that ROA has a positive and significant effect on share prices.
e. The Influence of SBI, Inflation, DAR, and Return on Asset against Y

The results of this research are simultaneously interest rates, inflation, DAR, and ROA has a significant effect on stock prices. As for the magnitude of the influence of Interest Rates, Inflation, DAR, and ROA the share price is 18.3% while the other 81.7% get the influence of other variables.

V. Conclusion

The research conclusions are:
1. Partially interest rates do not affect share prices in property and real estate companies listed on the IDX in 2014 - 2018.
2. The results of the t test on the Inflation variable do not affect share prices in property and real estate companies listed on the IDX in 2014 - 2018.
3. The results of the t test on the DAR variable do not affect share prices in property and real estate companies listed on the IDX in 2014 - 2018.
4. The results of the t test on the ROA variable have a positive and significant effect on share prices in property and real estate companies listed on the IDX in 2014 - 2018.
5. Simultaneously, interest rates, inflation, DAR, and ROA significantly influence stock prices. The magnitude of the influence of the independent variables on stock prices is 18.3%, while the other variables are around 81.7%.

Suggestions that are useful for interested parties, namely:
1. For the next researcher, suggestions are given to add variables such as CR, PBV and EPR and other variables so that they can get useful results for accounting, especially regarding stock investment.
2. Property and real estate companies are advised to take their financial performance more into account so that they are always within safe and good limits in the eyes of investors because poor financial performance will react to the declining share price.

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