Farida_Artikel 1

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Submission date: 21-Jul-2021 01:21PM (UTC+0700)
Submission ID: 1622259308
File name: 2020_Irin.pdf (459.49K)
Word count: 8654
Character count: 45506

A Fundamental Analysis to Plantation Industry Valuation in Indonesia

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DOI: 10.29322/IJSRP.10.04.2020.p10096
http://dx.doi.org/10.29322/IJSRP.10.04.2020.p10096

Abstract - The purpose of this study was to determine the effect of macroeconomic fundamental factors and corporate fundamental factors on the value of the company in the plantation subsector which was listed on the Indonesia Stock Exchange (IDX) in 2014-2018. The number of samples in this study was 10 companies for 5 years and produced with purposive sampling method. This study used panel data regression regression with random effect model. Companies values variable was represented by Price Book Value (PBV). The macroeconomic fundamental factors were consist of inflation rate, exchange rate, and interest rate. While the company fundamental factors consisting of profitability and leverage. The results of this study showed that exchange rate, inflation rate, profitability and leverage had at significant effects on the value of the company, but the interest rate did not significantly effect on value.

Index Terms – Firm value, Random effect model, Price book value, Fundamental analysis

I. Introduction

In Indonesia, there are many areas that have the potential for the development of the plantation sector. This is caused by ecological factors that are good for cultivating plantations. Generally plantation crops are very suitable to be planted in tropical and subtropical regions. Therefore, several types of plantation commodities are developing in Indonesia, including oil palm, tea, rubber, cocoa, sugar cane, quinine, and so forth. Plantation industry is the strength and support of the national economy. In 2016, the plantation industry contributed IDR 429 trillion to the national Gross Domestic Product (GDP). Revenue from the plantation sector has exceeded the oil and gas (oil and gas) sector, whose value is only Rp 365 trillion. Of 127 plantation commodities, only 15 commodities produce foreign exchange. Of the 15 commodities, the largest contribution came from oil palm, which reached Rp. 260 trillion.

From 2012 to 2014, plantation sub-sector companies experienced a decrease in net profit, which was one of the reasons, namely general expenses, sales expenses, funding costs and other expenses, which were followed by falling sales prices in each yield from the estate sub-sector. This decline in net profit occurred in almost all listed companies on the Indonesia Stock Exchange (IDX). For example, PT Sampoerna Agro Tbk (SGRO), whose profit fell by 64.20% from Rp336.29 billion in 2012 to Rp120.38 billion in 2013. The same thing happened to PT Tunas Baru Lampung Tbk (TBLA), a decrease Profits occurred by 64.85%, from Rp244.24 billion in 2012, plummeting to Rp85.84 billion in 2013. Likewise what happened to PT BW Plantation Tbk (BWPT) whose net profit fell 30.66% from Rp262.18 billion in 2012 to Rp181.78 billion in 2013.

At the end of April and the beginning of May 2017, many stocks are consolidating prices. Either the stocks that went up high then went down, or conversely the stocks that went down then went up. One of the causes is the financial statements for the first quarter of 2017 which indeed occur at the end of April and early May each year. In 2017 the plantation sector was the worst performing sector on the Indonesia Stock Exchange. This sector still recorded a decrease of 6.34% since the beginning of the year. Compare with the Composite Stock Price Index (CSPI) which rose 12.28% in the same period. However, the plantation sector was still challenging due to crude palm oil (CPO) prices that have the potential to rise and Indonesia still the main exporter of CPO.

Until 2018, there were 16 companies engaged in the plantation sub-sector and their derivative products listed on the Indonesia Stock Exchange (IDX). Stock market performance is a reflection of general economic and industrial conditions. Likewise, the performance of plantation-based companies in the plantation sub-sector should also be reflected in the share prices of plantation-based companies listed on the Indonesia Stock Exchange (IDX).

The capital market is an alternative funding for developing plantation land in Indonesia, because through the capital market, funds can be obtained in large amounts compared to banks. For investors themselves, the capital market aside from IDXng a vehicle for investment is also diversification. Each investor can choose a variety of existing investments, where each type of investment has its own characteristics in terms of return and risk. The capital market has also brought positive benefits to the development of the national economy in which the government sector and the private sector are the spearhead of the formation of the national economy, to increase the rate of growth in all fields and encourage companies to further develop in accordance with their respective businesses.

Besides the capital market developments described above, investment in the public sector has a high enough risk, therefore investments made must be based on rational considerations after previously obtaining various information that is very necessary

for decision making, investors can only determine what level of profit (expected return) desired and how far the possibility of actual results will deviate from the expected results.

According to Herlianto (2013: 23) the main purpose of investment for investors is to maximize returns, without forgetting the risk factors that must be faced. Return is one of the factors that motivates investors to invest and is also a reward for the courage of investors in taking risks on these investments

The analysis technique commonly used by investors is ratio analysis technique. Ratio analysis is done by comparing certain items in the balance sheet or individual income statement or a combination of both reports. From the analysis of the ratio will produce several financial ratios of companies that are useful in making investment decisions. Financial ratios are broadly grouped into five namely liquidity ratios, activity ratios, profitability ratios, solvency ratios (leverage) and market ratios (Robert, 1997: 18).

The value of a company shows the value of inclusion in the company and reflects the value of the company in the eyes of the community. if the stocks price of a company is high then the value of the company is also high and vice versa. High and low stock prices of a company is influenced by many factors such as the company's financial performance, demand and supply, interest rates, risk levels, inflation rates, government policies, macroeconomics, politics and security of a country.

Several factors of analysis that can affect the value of the company include fundamental analysis, both social-economic and political. Although there are many other analyzes that psychologically affect market power, fundamental analysis is the main factor for the market to determine the company's market price. Because fundamental analysis provides a clear picture that is an analysis of the achievements of company management in managing the company that is its responsibility.

Thus, the need for complete information that can be analyzed how the actual condition of the business analysis used can be various kinds of analysis including financial ratios. This ratio is very important to do an analysis of the company's financial condition. One of the financial ratios that can be used is the profitability ratio with the Return on Asset (ROA) approach and the Leverage ratio with the Debt to Equity Ratio approach.

An investor in conducting stock trading activities in a country must pay attention to the monetary situation and movement of macroeconomic variables such as interest rates, exchange rates and inflation. Economic conditions and the ups and downs of macro variables in a country can affect stock prices, including in the plantation sector. Bank Indonesia as the central bank is obliged to implement monetary policy, namely by controlling economic stability so as not to experience inflation or deflation. The exchange rate is the price in the exchange between two different types of currencies. There will be a comparison of the value or price between the two currencies.

There are several theories and also previous research that can be used to predict the effect of Profitability, Leverage, Inflation, Rupiah Exchange Rates and Interest Rates. According to the results of research (Hamidah, Hartini, and Mardiyati 2015) and (Marlina 2013) that Leverage proxied by Debt to Equity Ratio (DER) has a positive and significant effect on Company Value, While different results obtained by (Agustina and Ardiansari 2015) that Debt to Equity Ratio (DER) has a negative and significant effect on firm value. Another study conducted by (Suryantini and Arsawan 2014) produced inflation and the exchange rate had a positive and significant effect on firm value, while different results were obtained by (Sugiarto and Santosa 2017) resulted in the exchange rate of the rupiah having a negative and significant effect on firm value. Other research conducted by (Fuad and Wandari 2018) produced external factors consisting of interest rates, inflation and exchange rates that did not have a significant effect on firm value. Research conducted by (Sugiarto and Santosa 2017) and (Abidin 2017) produces interest rates that have a positive and significant effect on firm value while different results are obtained by (Idamiharti 2017) and (Noerirawan and Muid 2019) that interest rates have a negative and significant effect on The value of the company.

Based on the phenomena and some of the results of previous studies described above, researchers are interested in conducting research to analyze the influence of fundamental factors to plantation firms value, listed on the Indonesia Stock Exchange at 2014 - 2018. This study aims to determine the effect of each of the variables above.

II. Literature Review

1. Signaling Theory

Signaling theory was developed by (Ross 1977) which states that information about high and stable profitability published by the company as an announcement will give a signal to investors in making investment decisions. Basically every investor who invests in the capital market wants to get a rate of return. If the higher the profit obtained by the company, it will indirectly cause the return obtained by investors is also high. Signaling Theory explains why companies have the urge to provide financial statement information to external parties. Company encouragement to provide information because there is information asymmetry between the company and outsiders because the company knows more about the company's profile and prospects to come than outside parties (investors and creditors) (Widyawati 2016).

2. Trade-Off Theory

In a study conducted by (Ogolmagai 2013), the trade-off theory explained that an increase in the debt ratio in the capital structure would increase the value of the company. Likewise with the opinion (Kusumajaya 2011) which states that the trade-off theory can predict a positive relationship between capital structure and firm value with the assumption that tax profits are still greater than the cost of financial pressures and agency costs. If the position of the capital structure is below the optimal point, each additional debt will increase the value of the company, but after passing the optimal point, increasing the use of debt can reduce the value of the company. The optimal point can be obtained by a balance between the benefits of the tax shield with financial distress and agency costs, due to the use of leverage, or a trade-off between benefits and costs (Myers 1977).

3. Agency Theory

Agency theory is the formulation of the problem that explains the conflict between the company owner (principal) and the company manager/agent (Sisharini 2013). Jensen and Meckling (1976) state that there are conflicts of interest that occur because of differences in agency relationships of each party. The manager of the company certainly has an interest in maximizing his own welfare. On the other hand, managers also have an obligation in carrying out their duties to maximize the welfare of the owners of the company (principal) both in the short and long term. The difference in objectives and the separation between ownership and management of the company causes managers to act according to their own desires without regard to the interests of the principal.

(Sisharini 2013) explained that the objectives of company managers often conflict with increasing shareholder prosperity through increasing company value. This creates a conflict of interest between managers and shareholders. To minimize these conflicts of interest, companies can implement a supervisory mechanism that can align related interests.

4. Fisher Effect Theory

(Sugiarto and Santosa 2017) explains the Fisher effect. Based on the principle of monetary neutrality, an increase in the rate of money growth will increase the rate of inflation but does not have an impact on the real variable. An important application of this principle focuses on the effect of money on the interest rate. The interest rate is an important variable for macroeconomic economists to understand because it connects the current economy and the future economy through its effects on savings and investment.

(Cecchetti and Schoenholtz 2015) in his book entitled "Money Banking and Financial Market said the central bank uses monetary policy to stabilize economic growth and inflation. An expansionary or accommodative policy is through a decrease in the interest rate that increases economic growth and inflation, on the contrary a strict or restrictive policy is to raise the short-term interest rate which will reduce economic growth and inflation.

5. The value of the company

The goal to be achieved by a company is not just to maximize the profits that can be obtained, but the main thing is how to maximize the value of the company. Company value is the main indicator considered by investors in the investment decision-making process in a company (Fuad and Wandari 2018). The value of a company for a company listed on the capital market is reflected by its share price, where the higher the share price, the higher the value of the company concerned. Besides based on the nominal share price per share, the company's value can also be measured using a number of valuation ratios. One of the valuation ratios of the company's value is the Price to Book Value (PBV), which is the ratio between the market price per share and book value per share. PBV illustrates how much the market appreciates the book value of company shares, with the criterion that the greater the PBV value shows the higher market confidence in the company concerned (Suryantini and Arsawan 2014). Thus, the greater the PBV value states the higher level of market confidence in the growth prospects of the company, thereby further strengthening the confidence of investors to invest their money in the company which pushes up the company's stock price, and ultimately increases the value of the company concerned.

6. Profitability

Return on Assets shows the effectiveness of the company to utilize its assets as well as possible so as to create profitability for the company. Profitability can show how the performance of the company. Referring to the signal theory, an increase in company profitability can be a positive signal used by investors to see the prospects of the company. With increased profitability and good prospects in the future, this can have an impact on increasing the value of the company in the eyes of investors.

In this study the ratio used is return on assets (ROA). This ratio Shows the company's ability to use all assets owned to generate profits after tax. A high ROA value will provide a positive signal for investors that the company can produce in favorable conditions. This is an attraction for investors to own company shares and will increase share prices so that the value of the company will also increase. Then, there will be a positive relationship between profitability and stock prices where the high share price will affect the value of the company. There are several previous studies that can be used to predict the effect of profitability on firm value, according to the results of the study (Widyawati 2016) profitability has a positive and significant effect on firm value.

7. Leverage

Leverage is a ratio that calculates how far the funds provided by creditors, as well as a ratio that compares the total debt to the overall assets of the company, therefore if investors see a company with high assets but also the risk of leverage is high, it will think twice about invest in the company. Because it is feared that these high assets can be obtained from debt which will increase investment risk if the company cannot pay off its obligations in a timely manner (Widyawati 2016).

Leverage is often symbolized by the debt to equity ratio (DER) which reflects the ratio between total debt and its own capital. This ratio illustrates the proportion of funds sourced from debt and shows the safe debt limit for the company. The greater leverage shows the greater investment risk. Therefore the company management strives to maintain and manage leverage always in a stable position, to reduce the risks that may be experienced by both investors and company management, so that in the eyes of investors the company's value will also increase. There are several previous studies that can be used to predict the effect of Leverage on Company Value, according to research results (Hamidah, Hartini, and Mardiyati 2015) and (Marlina 2013) that Leverage has a positive and significant effect on Company Value.

8. Inflation

Inflation is a condition of rising prices of goods in general and continuously, which is caused by disruption of the balance between the flow of goods and the flow of money. When there is high inflation, it can push up the price of raw materials or

operational costs incurred, which in turn erodes the value of the profits obtained by the company (Suryantini & Arsawan, 2014). The decline in the value of earnings due to the impact of inflation can lead to a negative assessment by the market that the company in question does not have good financial performance, subsequently reduces investor interest in investing, and ultimately results in a decline in the value of the company (Fuad and Wandari 2018).

In this study, the inflation rate uses the Consumer Price Index (CPI) data from the year-end inflation report published by Bank Indonesia. The CPI is a measure of the average price of goods and services by households, and is an indicator used by the government to measure inflation in Indonesia. Research conducted by (Suryantini and Arsawan 2014) produces inflation and the exchange rate has a positive and significant effect on company value.

9. Exchange Rates

The exchange rate (exchange rate) is the price of one currency against another, or is the price of one unit of foreign currency in the domestic currency or the price of one unit of the domestic currency in foreign currency (Levi, 2009; Hady, 2016). The degree of stability of a country's currency exchange rate is considered to show the economic situation of the country concerned, and can affect the confidence of investors, especially those from abroad to invest their capital in the country. The strengthening of the Rupiah (or IDR) exchange rate against foreign currencies will provide a positive signal for the development of the Indonesian economy; or vice versa, a weakening IDR value could signal a deteriorating national economy (Tandelilin, 2010; Mishkin, 2008). Research conducted by (Suryantini and Arsawan 2014) produced inflation and the exchange rate had a positive and significant effect on firm value, while different results obtained by (Sugiarto and Santosa 2017) resulted in the rupiah exchange rate having a negative and significant effect on firm value. The exchange rate did not influence the stock price (Pandelake and Farida, 2017).

10. Interest rate

The interest rate is the cost of the loan or the price to be paid on the loan, or is the price of the resources used by the recipient of the loan (debtor) to the lender (creditor). (Noerirawan&Muid, 2012). Specifically, the transaction process that occurs within the banking sector cannot be separated from this element of interest rates, both related to savings products and loans that generate interest-based income for banks (Mishkin, 2008). In this study, interest rates are represented using the BI Rate or interest rates from year-end reports published by Bank Indonesia. BI Rate is the interest rate determined by Bank Indonesia on a quarterly basis as a signaling for other interest rates (Mishkin, 2008). In a sense, all monetary and banking quantities refer to this BI Rate including the general banking interest rate. The BI Rate is the benchmark interest rate or basis for banks in Indonesia in setting the interest rates for savings products and loans that they will offer to their prospective customers.

The condition of interest rates is also an external condition that can affect the company. Rising interest rates will encourage people to save, and lazy to invest in the real sector. An increase in the interest rate will also be borne by investors, in the form of an increase in interest costs for the company. The public does not want to risk investing in high costs, as a result the investment becomes undeveloped. Many companies have difficulty maintaining their lives, and this causes the company's performance to decline. The decline in company performance can result in a decrease in stock prices, which means the value of the company will also decline. Companies that use credit or debt in their funding will have an impact on changes in interest rates that occur and of course this will also affect the value of the company. In accordance with research conducted by Noerirawan 2012) that interest rates have a negative and significant effect on firm value.

III. Research Method

This type of research is a causal conclusive research that aims to obtain evidence of a causal relationship between Profitability, Leverage, Inflation, Rupiah Exchange Rates, and Interest Rates on Company Value in plantation sub-sector companies listed on the Indonesia Stock Exchange during 2014-2018. The study uses quantitative research data with data on financial statements of plantation sub-sector companies and it was obtained from Indonesia Stock Exchange, Bank of Indonesia and the Central Bureau of Statistics.

The population is plantation sector companies listed on the Indonesia Stock Exchange (IDX) for 5 years during 2014 to 2018. The sample selection was carried out using the purposive sampling method and selected for 6 companies. Model analysis used multiple linier regression with panel data. The model is $Y_{it} = \beta_0 + \beta_t X_{it} + ...+ \beta_t X_{it} + \mu_{it}$, where Y_{it} is dependend variable representing companies values. This study used price book value for firm value (Farida et al, 2019). Independend variables are represented for profitability, leverage, the inflation rate, the exchange rate and the interest rate.

IV. Result and Discussion

1. Model Selection or Suitability Test

There are 3 kinds of approaches in panel data regression analysis. Therefore, we need to choose which approach is the best that we will use to predict the regression model from the research conducted. And here are some tests conducted to get the best approach in panel data regression analysis:

a. The F statistical test used to choose between the Common Effect Model or Fixed Effect Model is called the Chow Test (Chow - Test).
b. The F statistical test used to choose between the Fixed Effect Model and the Random Effect Model is called the Haussman Test.

c. The statistical test F used to choose between the Common Effect Model and the Random Effect Model is called the Lagrange - Muptiplier Test (Lagrange - Multiplier Test).

The result of model selection is in table 1as folows;

Table 1
Model Selection Test Results

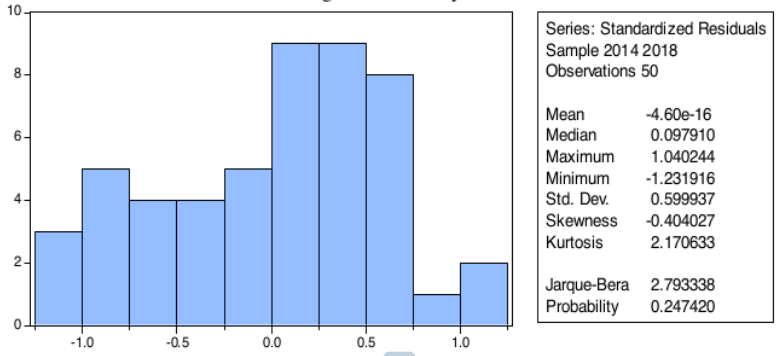
Model Selection Test	Test results	Selected Model
Chow Test H0 : Common Effect Model Ha : Fixed Effect Model	Cross-section probability F is smaller than alpha (0.0000 <0.05), then H0 is rejected and Ha is accepted	Fixed Effect Model
Haussman Test H0 : Random Effect Model Ha : Fixed Effect Model	χ2calculate = 0.000000 with p-value (Prob value) greater than alpha (1.0000> 0.05) then Ha is rejected and H0 is accepted	Random Effect Model
Lagrange Multiplier Test H0 : Common Effect Model Ha : Random Effect Model	Pagan Breusch cross section 27.71810 with p-value (Prob value) smaller than alpha (0.0000 <0.05) then Ha is accepted	Random Effect Model

Based on the results of the three test estimation models above, the Random Effect Model was selected on two tests, it can be determined that the best panel data regression model is the Random Effect Model (REM) to determine the effect of Profitability, Leverage, Inflation Rate, Rupiah Exchange Rates and Interest Rates on Firm Value of the Plantation Sub Sector listed on the Indonesia Stock Exchange for the 2014-2018 Period.

2. Classic assumption test

In the multiple linear regression model must meet several tests of classical assumptions, namely data normality test, data multicollinearity test, data autocorrelation test and data heterocedasticity test. If the assumptions are fulfilled, the regression equation will be accurate and good (Sofiamira and Haryono, 2017). The normality test aims to test whether in the regression model, the disruptive variable or residual has a normal distribution or not. Normality Test is carried out with the Jarque-fallow test. Decisions are normally distributed whether or not residuals are simply by comparing the JB Probability (Jarque-Bera) count with an alpha level of 0.05 (5%). If the Probability of JB counts> 0.05, it can be concluded that the residuals are normally distributed, which means that the classical assumptions about normality have been fulfilled in table 2.

Table 2
Histogram Normality Test



In this study the Jarque-Bera probability value is 0.247420> 0.05. Then it can be concluded that the data is normally distributed which means the classic assumptions about normalcy have been fulfilled.

Multicollinearity testing is carried out to test whether there is a correlation between independent variables. A good model is if there is no strong correlation between the independent variables. Multicollinearity Test with Eviews can be done by looking at the

correlation matrix table, if the correlation matrix table does not have a value of more than (>) 0.90, it can be concluded that there is no multicollinearity in the model. So that the linear regression model is free from the presence of multicollinearity.

Table 3
Variable Independent Correlation Matrix

	ROA	DER	INFLASI	KURS	SB
ROA	1.000000	-0.222111	0.268975	0.014618	0.140120
DER	-0.222111	1.000000	-0.094725	0.082385	-0.079745
INFLASI	0.268975	-0.094725	1.000000	-0.148203	0.549978
KURS	0.014618	0.082385	-0.148203	1.000000	0.329278
SB	0.140120	-0.079745	0.549978	0.329278	1.000000

In the correlation matrix table between the independent variables (Independent) in this study there was no value> 0.90. So it can be concluded that there is no multicollinearity in the model. So the classic assumptions about the absence of multicollinearity have been fulfilled. The next assumption is for heteroscedasticity test is a test to see whether there is an inequality of the variance from one residual to the other observations. Regression models that meet the requirements are there are similarities from the residuals of one observation to another that is fixed or called homoscedasticity. A good regression model is homoscedasticity or heteroscedasticity does not occur. The decision whether or not heteroscedasticity occurs in the linear regression model with Eviews is to look at the value of Obs*R-square probability. If the probability of Obs*R-square is smaller than (<) alpha 0.05 (5%), H0 is rejected, which means heteroscedasticity occurs. Meanwhile, if the Obs * R-square probability value is greater than (>) alpha 0.05 (5%), H0 is accepted, which means that there is no heteroscedasticity. So it can be concluded that the linear regression model is free from the presence of heteroscedasticity.

Table 4
Heteroscedasticity Test
Heteroskedasticity Test: White

F-statistic	1.182104	Prob. F(5,44)	0.3333
Obs*R-squared	5.921117	Prob. Chi-Square(5)	0.3140
Scaled explained SS	4.412890	Prob. Chi-Square(5)	0.4916

In table 4, the probability of Obs*Rsquared is 0.3140. This shows that the Obs *Rsquared probability value is greater than 0.05, it can be concluded that there is no heteroscedasticity in the research data. So the classic assumption test about the absence of heteroscedasticity in the linear regression model has been fulfilled.

The last classic assumption test is autocorrelation. The autocorrelation test aims to test whether in a linear regression model there is a correlation between interruption errors in the previous period. If there is a correlation, there is an autocorrelation problem. In detecting the presence or absence of autocorrelation can be done with the Breusch-Godfrey Serial Correlation LM Test on Eviews program, by looking at the probability value of Obs*R-square. If the probability of Obs*R-square is smaller than (<) alpha 0.05 (5%) then H0 is rejected, which means that Autocorrelation occurs. Meanwhile, if the Obs*R-square probability value is greater than (>) alpha 0.05 (5%), H0 is accepted, which means that there is no autocorrelation. So it can be concluded that the linear regression model is free from the existence of autocorrelation.

Table 5
Autocorrelation Test
Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.869465	Prob. F(2,41)	0.1671
Obs*R-squared	4.095036	Prob. Chi-Square(2)	0.1291

In table 5, the probability of Obs * Rsquared is 0.1291. This shows that the Obs*Rsquared probability value is greater than 0.05, it can be concluded that there is no Autocorrelation in the research data. So the classic assumption test about the absence of autocorrelation in the linear regression model has been fulfilled.

3. Multiple Linier Regression Analysis

After going through the classical assumption test, the regression model is worthy used as a measurement tool to detect the relationship between proposed variables, namely the independent variable Profitability, Leverage, Inflation Rate, Rupiah Exchange Rates, Interest Rates and the Company's dependent variable. The following is a random effect model that has been tested classic assumptions.

Table 6
Random Effect Model

Dependent Variable: PBV?
Method: Pooled EGLS (Cross-section random effects)
Date: 02/04/20 Time: 03:15
Sample: 2014 2018
Included observations: 5
Cross-sections included: 10
Total pool (balanced) observations: 50
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.029498	0.263654	-3.904734	0.0003
ROA?	1.582217	0.651022	2.430357	0.0192
DER?	0.237448	0.079831	2.974378	0.0048
INFLASI?	9.417736	2.453347	3.838730	0.0004
KURS?	-2.008725	0.906667	-2.215505	0.0319
SB?	6.019672	4.107222	1.465631	0.1499
Random Effects (Cross)				
_AALI—C	0.662522			
_BWPT—C	0.203371			
_GZCO—C	-0.965440			
_JAWA—C	-0.482803			
_LSIP—C	0.431089			
_PALM—C	0.455394			
_SGRO—C	0.132203			
_SIMP—C	-0.679432			
_SMAR—C	0.215630			
_TBLA—C	0.027465			

Effects Specification	S.D.	Rho
Cross-section random	0.378065	0.6868
Idiosyncratic random	0.255312	0.3132

Weighted Statistics			
R-squared	0.550202	Mean dependent var	0.001521
Adjusted R-squared	0.499088	S.D. dependent var	0.406462
S.E. of regression	0.287674	Sum squared resid	3.641274
F-statistic	10.76433	Durbin-Watson stat	1.536325
Prob(F-statistic)	0.000001		

Unweighted Statistics			
R-squared	0.269514	Mean dependent var	0.005261
Sum squared resid	17.63629	Durbin-Watson stat	0.317197

Then the regression equation model can be written as follows

PBV = -1.029498 + 1.582217*ROA + 0.237448*DER + 9.417736*INFLASI - 2.008725*KURS + 6.019672*SB

Estimation results can be interpreted as follows:

a. From the regression equation above it can be explained that the constant or intercept is equal to -1.029498 meaning that when the independent variables are zero, then the Company Value (PBV) is equal to -1.029498
b. The value of the Profitability regression coefficient (ROA) is 1.582217, which means there is a positive influence on the Profitability variable (ROA) on the Company Value variable (PBV) where each increase in Profitability (ROA) by 1% will increase the Company's Value (PBV) by 1.582217%. Assuming the other independent variables are fixed (citeris paribus).
c. Leverage regression coefficient value (DER) is 0.237448, which means there is a positive influence on the Leverage variable (DER) on the Company Value variable (PBV) where every Leverage increase (DER) by 1% will increase the Company's Value (PBV) by 0.237448%. Assuming the other independent variables are fixed (citeris paribus).

d. The value of the inflation rate regression coefficient (INFLATION) is 9,417736 which means that there is a positive influence on the Inflation Rate variable (INFLATION) to the Company Value variable (PBV) where each increase in the Inflation Rate (INFLATION) by 1% will increase the Company's Value (PBV) by 9.417736 %. Assuming the other independent variables are fixed (citeris paribus).
e. The regression coefficient value of the Rupiah Exchange Rate (KURS) is - 2.008725, which means there is a negative influence of the Rupiah Exchange Rate variable (KURS) on the Company Value variable (PBV) where each increase in the Rupiah Exchange Rate (KURS) by 1% will reduce the Company's Value (1%) PBV) of -2.008725%. Assuming the other independent variables are fixed (citeris paribus).
f. The interest rate regression coefficient (SB) value is 6,019672, which means that there is a positive influence on the Interest Rate variable (SB) on the Company Value variable (PBV) where every 1% increase in Interest Rate (SB) will increase the Company's Value (PBV)) amounting to 6,019672%. Assuming the other independent variables are fixed (citeris paribus).

Partial Significance Test Parameters or Test T

The testing criteria are as follows:

- H0 is accepted: If tcount<t table or significance value (p-value)> 0.05
- Ha or H1, H2, H3, H4, H5 accepted: If t> t table or significance value (p-value) <0.05

To find the table, the researcher uses the real level α = 5%, or the level of confidence (1- α) = 95%, because the greater the level of confidence the more accurate the results obtained. Here is a table of T test results that have been processed with Eviews:

Table 7
T Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.029498	0.263654	-3.904734	0.0003
ROA?	1.582217	0.651022	2.430357	0.0192
DER?	0.237448	0.079831	2.974378	0.0048
INFLASI?	9.417736	2.453347	3.838730	0.0004
KURS?	-2.008725	0.906667	-2.215505	0.0319
SB?	6.019672	4.107222	1.465631	0.1499

a. Effect of Profitability (X1) on Company Value (Y)

The hypothesis to be tested is as follows:

- H0: There is no effect of profitability on company value.
- H1: There is an effect of profitability on company value.

From the results of data processing Eviews 9 with the REM model in table 6 the significance value of 0.0192 <0.05 is obtained so that H0 is rejected and H1 is accepted, which means that the variable X1 namely Profitability (ROA) has a significant effect on the value of plantation subsector companies listed on the Indonesia Stock Exchange in the period 2014 - 2018. From the results of the regression equation above it can be seen that the regression coefficient for the profitability variable (ROA) has a positive value of 1.582217, meaning that the profitability variable (ROA) has a positive and significant effect on firm value (PBV). This means that increasing company profitability will increase company value and vice versa. The results of this study are in accordance with the signaling theory developed by Ross (1977) which states that information about high and stable profitability published by the company as an announcement will give a signal to investors in making investment decisions. Basically every investor who invests in the capital market wants to get a rate of return. If the higher the profit obtained by the company, it will indirectly cause the return obtained by investors is also high. This condition will provide a positive signal for investors in making investment decisions to buy shares. The results of this study are in line with the results of research conducted by (Bidhari, et al 2013), (Widyawati 2016) and (Vaeza and Hapsari 2015), which states that Profitability (ROA) has a positive and significant effect on Company Value.

b. Effect of Leverage (X2) on Company Value (Y)

The hypothesis to be tested is as follows:

- H0: There is no effect of Leverage on Company Value.
- H2: There is an effect of Leverage on Company Value.

From the results of data processing Eviews 9 with the REM model in table 6 obtained a significance value of 0.0048 <0.05 so that H0 is rejected and H2 is accepted, which means that the variable X2 namely Leverage (DER) has a significant effect on the value of plantation subsector companies listed on the Indonesia Stock Exchange for the period 2014 - 2018. From the results of the regression equation above it can be seen that the regression coefficient for the Leverage variable is positive at 0.237448, meaning that the Leverage variable (DER) partially has a positive and significant effect on Company Value. This means that an increase in corporate leverage will increase the value of the company and vice versa. The results of this study support the trade-off theory (Myers 1977) which explains that increasing the ratio of debt to capital structure will increase the value of the company. Likewise with the opinion of Kusumajaya (2003) which states that the trade-off theory can predict a positive relationship between capital structure and firm value with the assumption that tax profits are still greater than the costs of financial pressures and agency costs.

If the position of the capital structure is below the optimal point, each additional debt will increase the value of the company, but after passing the optimal point, increasing the use of debt can reduce the value of the company. The results of this study are in line with the results of research conducted by (Marlina 2013) and (Vaeza and Hapsari 2015) which states that Leverage (DER) has a positive and significant effect on Company Value.

c. Effect of Inflation Rate (X3) on Firm Value (Y)

The hypothesis to be tested is as follows:

- H0: There is no effect of the Inflation Rate on Company Value.
- H3: There is an influence of Inflation Rate on Company Value.

From the results of the REM model in table 6 obtained a significance value of 0.0004 <0.05 so that H0 is rejected and H3 is accepted, which means the variable X3 namely Inflation Rate (INFLATION) has a significant effect on the value of plantation subsector companies listed on the Indonesia Stock Exchange in the period 2014 - 2018 The results of this study support the Fisher Effect Theory (Sugiarto and Santosa 2017) explaining the Fisher effect (Fisher Effect). Based on the principle of monetary neutrality, an increase in the rate of money growth will increase the rate of inflation but does not have an impact on the real variable. An important application of this principle focuses on the effect of money on the interest rate. The interest rate is an important variable for macroeconomic economists to understand because it connects the current economy and the future economy through its effects on savings and investment. From the results of the regression equation above it can be seen that the regression coefficient for the Inflation Rate variable is positive at 9.417736, meaning that the Inflation Rate variable partially has a positive and significant effect on Company Value. This means that increasing the level of inflation in a country will increase the value of the Company and vice versa. The results of this study are in line with the results of research conducted by (Suryantini and Arsawan 2014) which states that the level of inflation has a positive and significant effect on Company Value.

d. Effect of Rupiah Exchange Rate (X4) on Company Value (Y)

The hypothesis to be tested is as follows:

- H0: There is no effect of Rupiah Exchange Rate on Company Value.
- H4: There is an influence of Rupiah Exchange Rate on Company Value.

From the results of the REM model in table 6, it is obtained that the probability value of significance is 0.0319 <0.05 so H0 is rejected and H4 is accepted, which means that the variable X4, namely the Rupiah Exchange Rate (KURS) has a significant effect on the Value of Plantation Subsector Companies listed on the Indonesia Stock Exchange for the period of 2014 - 2018. From the research results above the regression equation shows that the regression coefficient for the variable Rupiah Exchange Rate is negative at -2.008725, meaning that the Rupiah Exchange Rate variable (KURS) partially has a negative and significant effect on Company Value. This is because companies in the plantation sector tend to export their plantation products more often abroad. The weakening of the rupiah against the US dollar would have a positive impact on the exporter due to exporters receive greater revenue. The results of this study are in line with the results of research conducted by (Sugiarto and Santosa 2017) as well as (Ogato, et al 2018) which states that exchange rates have a negative and significant effect on firm value.

e. Effect of Interest Rates (X5) on Company Value (Y)

The hypothesis to be tested is as follows:

- H0: There is no influence of the Interest Rate on the Value of the Company.
- H5: There is an interest rate effect on the value of the company.

In table 6, it is obtained the significance probability value of 0.1499> 0.05 so that H0 is accepted and H5 is rejected, which means that the variable X5, namely the Interest Rate (SB), does not affect the value of plantation subsector companies listed on the Indonesia Stock Exchange in the period of 2014 - 2018. The results of this study are in line with the results of research conducted by (Faridah 2016) and (Hamidah, et al 2015), which states that the Interest Rate has no effect on Company Value.

d. Test the Significance of Regression Parameters simultaneously or Test F

The F statistical test aims to determine the effect of the independent variables together on the dependent variable by looking at the significance value F. The criteria for the F test are as follows:

1. If the significance value of significance <0.05 then H0 is rejected and Ha is accepted, which means that the independent variable simultaneously influences the dependent variable.
2. If the significance value of> 0.05 then H0 is accepted and Ha is rejected, which means that the independent variable simultaneously has no effect on the dependent variable.

Table 8
Test F
Weighted Statistics

R-squared	0.550202	Mean dependent var	0.001521
Adjusted R-squared	0.499088	S.D. dependent var	0.406462
S.E. of regression	0.287674	Sum squared resid	3.641274

F-statistic	10.76433	Durbin-Watson stat	1.536325
Prob(F-statistic)	0.000001		

Unweighted Statistics			
R-squared	0.269514	Mean dependent var	0.005261
Sum squared resid	17.63629	Durbin-Watson stat	0.317197

To find the F table, researchers used the real level α = 5%, or the level of confidence (1- α) = 95%, because the greater the level of confidence the more accurate the results obtained. From the results of data processing for REM model in table 8 obtained a significance probability of 0.000001 <0.05 so that H0 is rejected and H6 is accepted, which means the variable Profitability, Leverage, Inflation Rate, Rupiah Exchange Rates, and Interest Rates influence simultaneously (simultaneously) on Value of Plantation Subsector Companies that are listed on the Indonesia Stock Exchange for the period 2014 – 2018.

e. Determination Coefficient Analysis (R2)

Based on the results of data processing in table 8 this study produces a coefficient of determination (R-squared) of 0.550202, this shows together the contribution of the variable Profitability (ROA), Leverage (DER), Inflation Rate (INFLATION), Rupiah Exchange Rate (KURS)), and Interest Rates (SB) that can explain the relationship with Company Value (PBV) in plantation sub-sector companies listed on the Indonesia Stock Exchange in the period 2014 - 2018 amounted to 55.0202%, while the remaining 44.9798% explained by others variables were not included in this study.

V. Conclusion

Based on the results of research and discussion above, it can be concluded that partially profitability, leverage, inflation rate has a positive and significant effect on the company value of plantation sectors listed on the Indonesia Stock Exchange (IDX) for the period 2014 – 2018. Rupiah exchange rate partially has a negative and significant effect on the company value of the plantation sector listed on the Indonesia Stock Exchange (IDX) in 2014 – 2018. Only interest rate does not effect on the company value. The company that has the greatest sensitivity to Company Value (PBV) during the period 2014 - 2018 is showed in table 6 is PT Astra Agro Lestari Tbk (AALI) and the Company which has the least sensitivity to Company Value (PBV) during the period 2014 - 2018 is PT Gozco Plantations Tbk (GZCO).

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Farida_Artikel 1

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