

THE INFLUENCE OF NET PROFIT MARGIN AND DEBT TO ASSET RATIO ON STOCK PRICES AT PT BLUE BIRD FOR THE 2011-2023 PERIOD

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Abstract: This study aims to determine the influence of Net Profit Margin and Debt to Asset Ratio on the stock price of PT Blue Bird Tbk from 2011 to 2023. A quantitative method was used to analyze these variables both partially and simultaneously, as well as to identify which variable has the most significant impact on the stock price. Based on the data analysis, the results indicate that the Debt to Asset Ratio does not have a significant partial effect on the company's stock price. Simultaneously, this variable also shows no meaningful impact. The contribution of both variables, Net Profit Margin and Debt to Asset Ratio, to the stock price is 27.7%, while the remaining percentage is influenced by other factors not discussed in this study.

Keywords: Net Profit Margin, Debt to Asset Ratio, Stock Price

INTRODUCTION

The year 2022 marked a significant recovery for Indonesia's economy. After experiencing a contraction due to the COVID-19 pandemic, Indonesia's economic growth in 2022 reached 5.31%. This figure represents the highest growth rate since 2014 and exceeded the target set by the government.

Despite positive growth, Indonesia's economy still faces several challenges, such as inflation. Rising global commodity prices have contributed to higher inflation domestically. Additionally, global uncertainties, such as geopolitical conflicts and climate change, may negatively impact Indonesia's economy. Furthermore, the slowdown in the global economy could reduce demand for Indonesia's export products. Nevertheless, Indonesia's economic outlook remains promising. The government continues to promote economic growth through various policies, such as infrastructure development, SME sector expansion, and digital transformation.

Although national macroeconomic conditions improved throughout 2022, the outlook for the property industry in the country remains challenging. Changes in market dynamics have introduced new issues that directly affect business progress. To remain competitive and secure alternative funding quickly, companies must enhance their business management. The capital and money markets are primary sources of external funding for both the government and businesses. Corporate finances need greater attention due to increasing economic demands and intense business competition. In finance, these reports are considered essential tools for decision-making processes. Financial reports are published annually, semi-annually, quarterly, monthly, weekly, or even daily, serving the needs of entrepreneurs, investors, banks, management, government, and capital market participants.

A company does not need to borrow funds from a bank to obtain financing; instead, it can issue and sell shares in the capital market without paying fixed interest. The development of the capital market is strongly influenced by growing public awareness of investment and participation as investors. When investing, investors expect returns, and companies rely on investor assessments of their stocks, as these evaluations serve as performance indicators. Thus, companies strive to maintain and improve their performance, which affects stock prices. Investors are particularly drawn to a company's profits and cash flow. Performance

measurement is crucial to ensure the company meets investors' expectations for returns, such as dividends and capital gains.

Siahaan et al. (2016) explain that the Debt to Asset Ratio (DAR) measures the proportion of a company's total debt to its total assets. A lower debt ratio indicates that the company relies less on debt financing, while a higher debt ratio signifies greater dependence on debt (Husna and Satria, 2019). The Debt to Asset Ratio reflects the extent to which a company's assets are financed by debt and how that debt impacts asset management.

Table 1. PT. Blue Bird Tbk Variable Data for the 2011-2023 Period

Year	NPM (%)	DAR (%)	Stock Price
2011	15,70	33,26	255
2012	15,88	35,14	355
2013	21,83	45,58	315
2014	23,68	50,39	650
2015	19,04	53,63	489
2016	13,06	57,29	500
2017	12,33	51,82	350
2018	7,60	54,17	308
2019	15,96	51,04	260
2020	2,39	61,47	220
2021	-1,14	63,36	156
2022	6,09	61,99	171
2023	19,40	55,22	198

Data Source: Processed data, 2024

According to the table and data above, the Net Profit Margin, Debt to Asset Ratio, and Stock Price have fluctuated over time. This can be observed from the financial reports of PT Blue Bird from 2011 to 2023. The highest stock price was recorded in 2014, at IDR 650, while the lowest was in 2022, at IDR 156. Various factors influence these stock price changes, making it essential to understand them.

RESEARCH METHOD

This research employs a quantitative approach to analyze the influence of Net Profit Margin and Debt to Asset Ratio on the stock price of PT Blue Bird Tbk over the period 2011-2023. Data analysis is conducted using multiple linear regression to understand the relationship and impact of the independent variables (Net Profit Margin and Debt to Asset Ratio) on the dependent variable (stock price). The model aims to identify the extent to which changes in these financial variables affect the company's stock price.

The research begins with descriptive statistical testing to provide a general overview of the data characteristics, including minimum, maximum, average values, and standard deviation. This test helps identify patterns and trends within the data. Subsequently, a series of classical assumption tests is performed to ensure the data meets the requirements for regression analysis. Validity testing ensures the data used is relevant and reliable. Additionally, multicollinearity testing is conducted to determine whether there is a strong correlation between the independent variables. Multicollinearity is considered present if the correlation coefficient between variables exceeds 0.9 or if the VIF value is greater than 10.

The research also includes a heteroscedasticity test to assess whether the variance of errors in the regression model remains constant. If the variance is not constant, it indicates heteroscedasticity. Furthermore, autocorrelation testing is conducted to determine whether there is a correlation between residuals in a given period and those in the previous period, which could affect the model's accuracy.

Once the data meets the necessary requirements, multiple linear regression analysis is carried out to examine both the simultaneous and partial effects of the independent variables on the dependent variable. Hypothesis testing is conducted through a t-test to evaluate the individual impact of each independent variable and an F-test to assess the overall feasibility of the model. The t-test determines whether Net Profit Margin

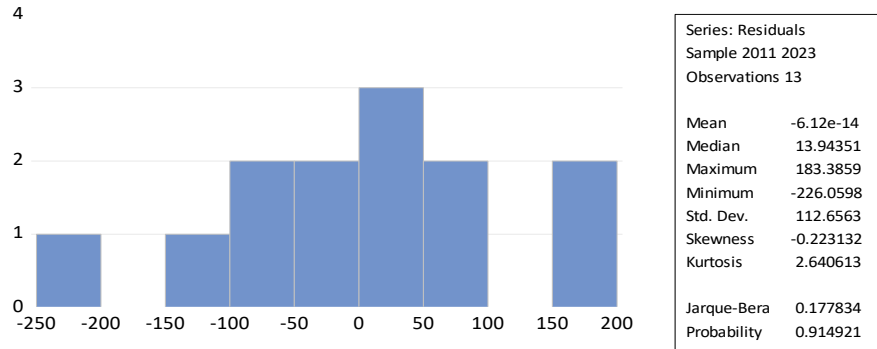
or Debt to Asset Ratio has a significant partial influence on the stock price, while the F-test assesses whether both variables simultaneously affect the stock price.

Additionally, correlation coefficient testing is used to measure the strength of the relationship between the variables, and the coefficient of determination (R^2) is applied to assess how well the independent variables explain variations in the stock price. Through this comprehensive analysis, the research aims to provide valuable insights into the influence of Net Profit Margin and Debt to Asset Ratio on the stock price of PT Blue Bird Tbk over the 2011-2023 period.

RESULTS AND DISCUSSION

Classical Assumption Test

1. Normality



Data source Processed using Eviews 12 (2024)

Figure 1. Normality Test Results

The results of the normality test shown in the table above show that Jarque-Bera (JB) is 0.177834 or <2 and the probability value is 0.914921 or more than 0.05, which indicates that the residual data from this study has a normal distribution.

2. Multicollinearity Test

Table 2. Multicollinearity Test Results

Sample: 2011 2023

Included observations: 13

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	87041.51	74.29808	NA
X1	33.37005	6.472838	1.496392
X2	21.82390	51.62439	1.496392

There are no symptoms of multicollinearity in the data of this study, as indicated by the results of the multicollinearity test using the Variable Inflation Factors method, which is shown in table 4.6 above. The correlation value between the independent variable and other variables in this study is still below 10.00.

Heteroscedasticity Test

Table 3. Heteroscedasticity Test Results

Heteroskedasticity Test: White

Null hypothesis: Homoskedasticity

F-statistic	3.890688 Prob. F(5,7)	0.0524
Obs*R-squared	9.559994 Chi-Square Prob.(5)	0.0887
Scaled explained SS	4.640311 Chi-Square Prob.(5)	0.4613

According to the results of the heteroscedasticity test, as shown in the previous data table, there is no heteroscedasticity problem; the chi square value of Obs*R-squared is 0.0887, which is greater than the significance level of 0.05. So, it can be concluded that the classical assumption of heteroscedasticity is met by the data used in this study.

3. Auto Correlation Test

Table 3. Autocorrelation Test Results

Breusch-Godfrey Serial Correlation LM Test:

Null hypothesis: No serial correlation at up to 2 lags

F-statistic	0.820725 Prob. F(2,8)	0.4740
Obs*R-squared	2.213240 Chi-Square Prob.(2)	0.3307

The results of the table above show that the autocorrelation test using Breush-Godfrey (LM TEST) has an Obs*R-Squared probability value of 0.3307 which is greater than (0.05), which indicates that the assumptions of the autocorrelation test have been met or the data has passed the test.

Multiple Linear Regression Analysis

Table 4. Multiple Linear Regression Test Results

Sample: 2011 2023

Included observations: 13

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-59.98150	295.0280	-0.203308	0.8430
X1	14.20349	5.776681	2.458762	0.0337
X2	3.775690	4.671605	0.808221	0.4378

Source: Data processed using Eviews 12 (2024)

The linear regression equation is as follows: $Y = -59.98150 + 14.20349 (X1) + 3.775690 (X2)$. From the results of the multiple linear regression analysis of the normal least square method, the results of the study can be interpreted as follows:

1. The constant value (a) of -59.98150 indicates that X1 and X2 are equal to 0 so that the Stock Price is -59.98150.
2. The regression coefficient value of the Net Profit Margin variable (X1) is positive at 14.20349, which means that with every 1 unit increase in variable X1, the average dependent variable Stock Price (Y) will increase by 14.20349, provided that other variables are constant.
3. The regression coefficient value of the Debt Ratio variable

t-test (Partial Test)

Table 5. Net Profit Margin t-Test Results (Partial Test)

Sample: 2011 2023

Included observations: 13

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-59.98150	295.0280	-0.203308	0.8430
X1	14.20349	5.776681	2.458762	0.0337

Source: Data processed using Eviews (2024)

The table shows the t table value with the provisions = 0.05 and Pr = (nk-1) or (13-2-1) = 10 so that 2.228 is obtained; the calculated t value in the Net Profit Margin table (X1) is 14.20349 which is greater than 2.228, and the significance value is 0.0337 which is lower than 0.05, which indicates that Net Profit Margin partially affects stock prices.

Table 6. Debt To Asset Ratio t-Test Results (Partial Test)

Sample: 2011 2023

Included observations: 13

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-59.98150	295.0280	-0.203308	0.8430
X2	3.775690	4.671605	0.808221	0.4378

Source: Data processed using Eviews (2024)

The table shows the t table number with the provisions = 0.05 and Pr = (nk-1) or (13-2-1) = 10 so that 2.228 is obtained; the calculated t value in the Debt to Asset Ratio (X2) table is 3.775690 which is greater than 2.228, and the significance value of the X2 variable is 0.4378 which is greater than 0.05, which indicates that the Debt to Asset Ratio does not affect the Stock Price partially.

Table 7. F Test Results (Simultaneous)

R-squared	0.397537	Mean dependent variable	323.6154
Adjusted R-squared	0.277044	SD dependent var	145.1410
SE of regression	123.4088	Akaike information criterion	12.66806
Sum squared residual	152297.3	Black criterion	12.79843
Log likelihood	-79.34236	Hannan-Quinn critter.	12.64126
F-statistic	3.299264	Durbin-Watson stat	1.349274
Prob(F-statistic)	0.079369		

Source: Data processed using Eviews (2024)

With an F-statistic value of 3.299264 less than 3.71 and a probability value (F-statistic) of 0.079369 greater than 0.05, it can be concluded that Net Profit Margin and Debt to Asset Ratio do not have a simultaneous impact on Stock Prices.

Table 8. Results of the Determination Coefficient Test (R²)

R-squared	0.397537	Mean dependent variable	323.6154
Adjusted R-squared	0.277044	SD dependent var	145.1410

SE of regression	123.4088	Akaike information criterion	12.66806
Sum squared residual	152297.3	Black criterion	12.79843
Log likelihood	-79.34236	Hannan-Quinn critter.	12.64126
F-statistic	3.299264	Durbin-Watson stat	1.349274
Prob(F-statistic)	0.079369		

Source: Data processed using Eviews 12 (2024)

The table above shows the test results, which show an Adjusted R-squared value of 0.277. This shows that the independent variable has an influence of 27.7% on the dependent variable, and the external variables of the research model influence 72.3%.

CONCLUSION

Based on the research on the influence of Net Profit Margin and Debt to Asset Ratio on the stock price of PT Blue Bird Tbk for the 2011–2023 period, it is concluded that Net Profit Margin has a significant partial impact on the stock price. Meanwhile, Debt to Asset Ratio does not show a significant partial effect. Simultaneously, both variables do not have a significant influence on the stock price, with most of the impact coming from other factors beyond this study. The simultaneous test using the F-test indicates that the regression model is valid, leading to the rejection of the initial hypothesis and acceptance of the alternative hypothesis. This finding suggests that, although one independent variable influences the stock price individually, both variables combined are not sufficient to explain the overall price movements. Therefore, other factors likely play an important role in influencing the company's stock price fluctuations.

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