PENANOMICS
International Journal of Economics
ISSN: 2829-601X

THE INFLUENCE OF CAPITAL STRUCTURE, ASSET GROWTH AND PROFITABILITY ON STOCK PRICES IN THE TRANSPORTATION SECTOR OF AIRLINES REGISTERED ON THE IDX, 2018-2022

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Abstract

This research was conducted with the aim of finding out and analyzing the influence of Capital Structure, Asset Growth and Profitability on Share Prices in the Airline Transportation Sector listed on the IDX in 2018-2022. This research is quantitative research that is associative in nature. The population in this study are companies operating in airline transportation in 2018-2022. Sampling was carried out using techniques of non probability sampling or a saturated sample, namely using all sample airline companies. The data technique used in this research is Multiple Linear Regression Panel Data using Eviews 10 software. The results of this research show that partially Capital Structure (DAR) has no effect and is not significant on stock prices, Asset Growth has no effect and is not significant on stock prices, and Profitability (ROA) has a positive and significant effect on stock prices.

Keywords: Capital Structure (DAR), Asset Growth, Profitability (ROA). The value of the company

1. INTRODUCTION

Economic growth and development mark the increasingly rapid pace of globalization. The phenomenon of the country's economic growth continuing to rise and the government's support for the investment climate provides some hope for the development of the real sector and the financial sector. The large number of companies in the industry, coupled with difficult economic conditions, creates competition between transportation companies, thus making each company develop more advanced internal and external performance so that what is expected can be realized.

The Indonesian economy is currently experiencing very good economic growth after experiencing a decline in the level of economic growth due to Covid-19. Supported by private consumption, investment and positive export performance, BI projects that Indonesia's growth will experience increased growth. When Covid certainly had a lot of impact, especially on the economic growth of each country, Indonesia was also affected so that interest rates fell, economic growth fell, and the transportation sector also had an impact where all transportation was temporarily closed. The transportation sector certainly has a good effect on the Indonesian economy because transportation can increase mobility, specialization, trade, productivity and income for a country. Share prices are of course an important part of economic growth, where if a share price rises, many investors or people will want to invest, so this has a positive impact on economic growth. Transportation is an important need for mobilization in carrying out economic activities. Every company in the transportation sector must be able to survive and compete so as not to be eliminated by increasingly fierce competition on the stock exchange. (Nasution, I. & Manurung, T. 2015). One sector that is quite good to pay attention to is the transportation sector in the

aviation sector which also receives support from the government in the form of a government work program for the development of the country's infrastructure. According to Fahmi (2015, p. 270), the definition of share price is proof of ownership of capital or funds in a company. According to Darmadji & Fakhrudin (2012, p. 102) is the price that occurs on the stock exchange at a certain time. Share prices can change up or down in a matter of time very quickly. This is possible because it depends on demand and supply between share buyers and share sellers. Company share prices reflect the value of a company (Wahyudi and Pawestri, 2006). For a company, it is very important to maintain the stability of the company. A company's financial performance can be measured using profitability ratios. Profitability ratios are used as a means of measuring a company's ability to generate profits. In this analysis, a comparative measure is needed to determine the company's profitability. In this case, the company's profitability can be measured using the ratio: *Gross Profit Margin, Net Profit Margin, Return On Assets atau Return On Investment dan Return On Equity* (Sartono, 2008). Profitability ratios are a group of ratios that show the combination of the influence of liquidity, asset management, and debt on operating results (Brigham & Houston, 2018, p. 146).

This research tries to find out what factors influence share prices in aviation transportation companies listed on the Indonesia Stock Exchange (BEI). The number of transportation companies in the aviation sector listed on the Indonesian Stock Exchange (BEI) until 2022 is 3 companies, namely AirAsia Indonesia Tbk, Garuda Indonesia (Persero) Tbk, and Jaya Trishindo Tbk. Apart from these variables, there are other variables that influence share prices. Jelie D. Wehantouw, Parengkuan Tommy, Jeffry L.A Tampenawas (2017) researched company size, in this journal company size has a significant effect on share prices so that this variable can be used by future researchers. The influence of capital structure, company size and profitability on share prices in industrial companies in the food and beverage sector listed on the Indonesian Stock Exchange for the 2012-2015 period. Juwita, Dikdik Harjadi, Dendi Purma (2021) researched Total Assets, in this journal it has a positive effect so that this variable can be used by researchers other than the dependent variable. Total assets, business risk, asset growth and profitability on share prices. Julianto Fernando, Felisia, Cindy Yulistia, Mohd. Nawi Purba (2021) researched about *Return on Investmen*, in this journal it does not have a significant effect on stock prices. Influence *Return on Investment, Net Profit Margin, Dividen Per Share* and Asset Growth in Manufacturing Company Share Prices. Belah Arista, Hening Widi Oetomo (2017) researched working capital turnover, which had an insignificant negative effect on share prices. The influence of working capital turnover, company size, asset growth, and profitability on stock prices. Nisfatul Lailia and Suhermin (2017) researched dividend policy, which has a positive and significant effect on share prices. The influence of capital structure, profitability and dividend policy on company share prices

A. RESEARCH PROBLEM FORMULATION

Based on these problems, the problem formulation for this researcher is as follows
Is there an influence of capital structure on share prices in sector companies?

1. Airline Transportation in 2018-2022?
2. Is there an influence of asset growth on share prices in companies in the Airline Transportation sector in 2018-2022?
3. Does profitability affect share prices in companies in the Airline Transport sector in 2018-2022?

C. RESEARCH PURPOSES

The purpose of writing this research is

4. To find out and analyze the influence of capital structure on share prices.
5. To find out and analyze the effect of asset growth on share prices.
6. To find out and analyze the effect of profitability on share prices.

D. LITERATURE REVIEW

1. Signal Theory (*Signaling Theory*)

According to Brigham & Houston (2019) a signal is an action taken by company management that provides clues to investors about how management views the company's prospects. This Signal Theory explains that all actions contain information, and this is due to information asymmetry. Information asymmetry is a condition where one party has more information than the other party. This theory is based on the assumption that managers and shareholders do not have access to the same company information, so there is asymmetric information between managers and shareholders.

2. Capital Structure

Another definition, capital structure is the balance or comparison between own capital and foreign capital. In this sense, own capital is retained and owned by the company, while foreign capital is in the form of short-term debt or long-term debt.

3. Asset Growth

The company is expressed as total asset growth where past asset growth will describe future profitability and future growth. *Growth* is the change (decrease or increase) in total assets owned by the company. Based on the definition above, it can be concluded *Growth* is the change in total assets in the form of increases or decreases experienced by a company during one period. Asset growth describes the growth of company assets which will affect the company's profitability which believes that the percentage of total assets is a better indicator in measuring *Growth* company (Putrakrisnanda, 2009).

4. Profitability

Profitability ratios are ratios that assess a company's ability to make a profit. The purpose of using profitability ratios is for companies that are capable of

external parties, namely: being able to measure or calculate the profit earned by the company in a certain period, assessing the company's profit position in the previous year and the current year, assessing the company's profit, assessing the amount of profit after tax with capital. itself, measures the productivity of all company funds used, both borrowed capital and own capital, measures the productivity of all company funds used, both own capital (Kasmir, 2017, p. 196).

5. Stock Price

Tjiptono and Hendi (2016, p. 6) define share price as a sign of a person's participation or ownership in a limited company or agency. According to Jogiyanto (2008, p. 167) the share price is the price of a share that occurs on the stock market at a certain time determined by the market manager and determined by the demand and supply of the shares concerned in the capital market. Meanwhile, according to the opinion of Suad Husnan and Enny Pudjiastuti (2004) the share price is the current value of the company (*present value*) from the income that will be received by investors in the future. The share price used in carrying out transactions in the capital market is a price formed from market mechanisms, namely market demand and supply. The price of a share can change up and down very quickly

E. Hypothesis

a. Capital structure influences share prices in companies in the Airline Transportation sector.
b. Asset growth affects share prices in companies in the Airline Transportation sector.
c. Profitability influences share prices in companies in the Airline Transportation sector.

2. IMPLEMENTATION METHOD

1. Research location
   This research was carried out by processing data from sources www.idx.co.id, www.yahoofinance.co by taking report data from 2018-2022 as research material.
2. Research time
   This research was conducted over a period of time from September 2023 to February 2024.

E. POPULATION and SAMPLE

a. Population

Population is a group or object that will be used as a generalization of research results (Priyatno, 2010). The population of this research is airline transportation

PENANOMICS
International Journal of Economics
ISSN: 2829-601X

sector companies listed on the IDX. The total population of airline companies is 3 companies.

Table 1
Airline Transportation Company Population 2018-2022

No	Company name
1	PT. Garuda Indonesia (Persero) Tbk
2	PT. Jaya Trishindo Tbk
3	PT. Air Asia Indonesia Tbk

b. Sample

The sample is part of the population that will be studied in more depth (Priyatno, 2010). In this research, the sampling technique is a saturated sample, by conducting research on all registered companies without predetermined criteria.

3. RESULTS AND DISCUSSION

According to Basuki and Prawoto (2017), the advantages of using panel data have several advantages, including:

a. Panel data can be used to explicitly account for individual heterogeneity by allowing for individual-specific variables.
b. Panel data can be used to test, build, and learn complex behavioral models.
c. Panel data is based on observations of a nature *cross section* which is repetitive *(time series)*, so it is suitable for use as *study of dynamic adjustment.*
d. Panel data has implications for data that is more normative, more varied and can reduce collinearity between variables, degrees of freedom *(degree of freedom/df)* higher so that the estimation results obtained are more efficient.
e. Panel data can be used to minimize bias that may be introduced by aggregating individual data.

The multiple linear regression model in this research is:

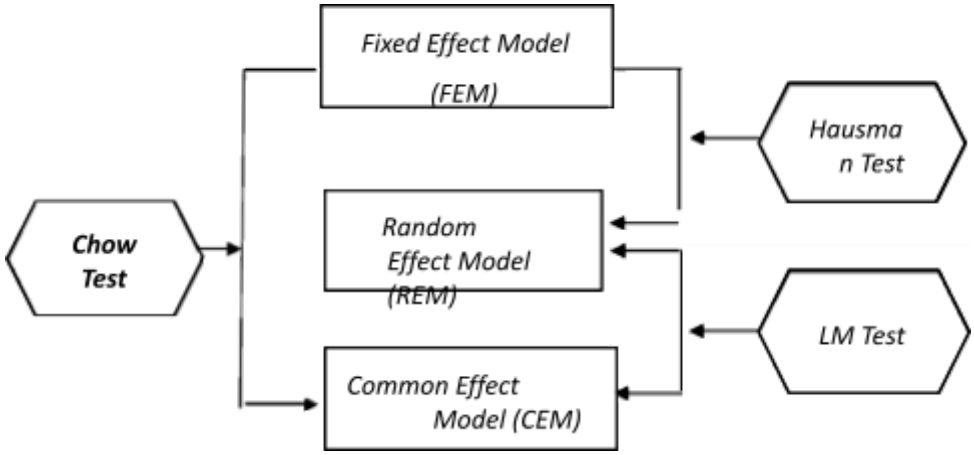
$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Y : Share Price
A: constant
β 1- β 2 : Coefficient X
X1: Capital Structure
X2: Asset Growth
X3: Profitability
e. : error

1. Stages of Multiple Linear Regression Analysis

a. Determination of Estimated Capital

Figure 3. 1 Estimated capital



In panel regression testing, there are 3 (three) methods that will be used in this research, namely method *Fixed Effect Model, Random Effect Model,* and *Common Effect Model.* To be able to use one of these three methods requires the right method in selecting the testing method. Widarjono (2018, p. 372), states that there are three tests in determining the most appropriate technique for estimating panel data regression. The three tests are (a) to choose between methods *Common Effect* or *Fixed Effect* a Chow test is required, (b) to choose between *Common Effect* or *Random Effect* testing is required *Lagrange Multiplier (LM),* (c) to choose between *Fixed Effct* or *Random Effect* test is required *Hausman*.

1) Test *Chow (Common Effect vs Fixed Effect*)

According to Widarjono (2018, p. 372), test *Chow* can be used to determine techniques with approach models *Pooled Least Square (PLS)* or *Fixed Effect (FE)*. To determine which method is suitable, a test will be used *cross section F* with the following decisions:

a) The suitable method to use is fixed effect if the value is significant *cross-section* F > 0,05.
b) The suitable method to use is *common effect* if the value is significant *cross-section* F < 0,05.

2) Test *Lagrange Multiplier (Common Effect vs Random Effect*)

This test is carried out to select the model that will be used between the models *pooled least square* or *model random effect.* The Breusch Pagan test is used to determine a suitable method, with the following decisions made:

a) The suitable method to use is *random effect* if the Breusch Pagan significance value is <0.05.
b) The suitable method to use is *common effect* if the Breusch Pagan significance value is > 0.05.

3) Hausman test (*Fixed Effect vs Random Effect*)

This test is carried out to select the method that will be used between *Model Random Effect* with *Model Fixed Effect*. To find out which method is suitable, the Hausman test will be used by looking at the values *cross-section* random with the following decision making:

a) *Fixed effect* suitable is selected if the random cross-section significance value is <0.05.
b) *Random effect* suitable is selected if the random cross-section significance value is > 0.05.

2. Test the Assumptions of the Multiple Linear Regression Model

The panel regression model assumption test was carried out to obtain a good regression line. According to Gujrati and Porter (2012, pp. 471-472), method *Generalized Least Square* (GLS) is carried out only to obtain equations that can satisfy classical assumptions. On software *EViews* 10, the use of the GLS method in the estimation only *Random Effect*, while usage *Ordinary Least Square* (OLS) in the estimation model, namely the estimation model *Fixed Effect* or *Common Effect*. Therefore, in this research, whether or not it is necessary to test the classical assumption depends on the results of the best estimation method chosen.

If the best estimation method chosen for the regression equation is *Random Effect*, then there is no need to test classical assumptions. On the other hand, if the best estimation method chosen is *Common Effect* or *Fixed Effect* (OLS), it is necessary to test the classical assumptions.

In estimating panel regression with the model *Common Effect* or *Fixed Effect* (OLS) multicollinearity and heteroscedasticity tests can be used. The following is a description of the two tests, namely:

a. Multicollinearity test

The purpose of carrying out a multicollinearity test is to detect correlation between independent variables. A regression model can be said to be good if it has no correlation between independent variables. According to Ghozali and Ratmono (2017, p. 83), high multicollinearity between independent variables can result in the following things:

1) If the OLS estimation results obtained are high variance and covariance values and the OLS regression is still BLUE, then it is difficult to get a correct estimate.
2) With point (1), the null hypothesis is not easy to reject if the confidence interval value tends to get wider.
3) As a result of point (2), the coefficient of the independent variable tends to be statistically insignificant, because the t value is one or more.
4) Even though the t value of one or more independent variables is still not significant, the R value^2 which measures *oveall goodnessof fit* very high.
Small changes in the data can cause sensitivity to the value of the OLS estimator and its standard error.

b. Heteroscedasticity Assumption Test

Ghozali (2018, p. 135) states, the purpose of the heteroscedasticity test is to test the

regression model whether there is inequality *variance* from the residual of one observation to another observation, when it turns out *variance* from the residual of one observation to another observation is different, it can be called heteroscedasticity. The regression equation must be free from heteroscedasticity problems.

The EViews program can be used to detect whether this problem exists or not. According to Ghozali and Ratmono (2017), there are several causes of the residual variance not being constant but varying, namely as follows:

1) There is outlier data (extreme data) which allows heteroscedasticity to occur.
2) Errors in specifications can give rise to heteroscedasticity.
3) *Error-learning* model related to the variance value is expected to decrease.
4) The variance increases when there is an increasing relationship between the independent and dependent variables.
5) Data collection techniques have been improved. So it could be the cause of the decrease in variance.

The cause of the estimator (independent variable coefficient) being biased is not heteroscedasticity but rather the component of the calculation that is not residual. An estimator that becomes inefficient can cause the calculated t statistical and f values to become biased and the BLUE and standard error of the regression model to become biased. So this has the impact of making statistics taken for hypothesis testing invalid. This research uses - *section heteroscedasticity* which is carried out to correct parameter values obtained through OLS, so that they can be used as output in hypothesis testing (Ghozali and Ratmono, 2017).

c. Coefficient of Determination (R^2)

Coefficient of determination (R^2) is used to measure how far the model's ability to explain variations in the dependent variable. Ghozali (2018, p. 97) the determinant coefficient value is between zero and one. The ability of the independent variable to explain variations in the dependent variable is very limited if the R value^2 obtained is of little value.

The use of this coefficient of determination has a fundamental weakness, namely bias towards the number of independent variables included in the model. Each addition in one independent variable, the R value^2 is guaranteed to increase no matter whether the variable has a significant effect on the dependent variable.

d. Hypothesis testing

The hypothesis test used in this research is a partial test or can also be called a significance test. This test shows how much influence an independent variable individually has in explaining variations in the dependent variable. The parisal test can be carried out using a significance level of 0.05 or 5%. According to Ghozali (2013, p. 98) the t statistical test basically shows how far the influence of an explanatory variable or independent variable individually is in explaining variations in the dependent variable. The null hypothesis (Ho) to be tested is whether a parameter (bi) is equal to zero or Ho: bi = 0, meaning whether an independent variable is not a significant explanation of the dependent variable. The alternative hypothesis (Ha) is that the parameter of a variable is a significant

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International Journal of Economics
ISSN: 2829-601X

explanation of the dependent variable. To find out the statistical t value of the table, a significance level of 5% (0.05) is determined with degrees of freedom df = (n-k-1), where n= number of observations and k= number of variables.

The testing steps in the t test (partially) are as follows:

Ho: No influence *Debt to Asset Ratio* to Share Prices.
Ha: There is an influence *Debt to Asset Ratio* to Share Prices

HoThere is no influence of Delta Asset on Stock Prices
Ha: There is an influence *Delta Asset* to Share Prices

Ho: No influence *Return On Asset* to Share Prices.
Ha: There is an influence *Return On Asset* to Share Prices

a. The significant level uses 5% (a = 0.05)
With a confidence level of 95% or 0.95% while significance (a = 0.05), because this can represent the relationship between variables and is a significance level commonly used in research.

b. Decision making
The t test decision making in this research is as follows:
If t count > t table eyes (HO rejected and accepted Ha)
If t count < t table eyes (HO accepted and rejected Ha)
If the significance level is smaller than 5% (0.05) then the proposed hypothesis is accepted or said to be significant (Ha is accepted and Ho is rejected), meaning that the independent variable partially has a significant effect on the dependent variable = the hypothesis is accepted.

If the significance level is greater than 5% (0.05) then the proposed hypothesis is rejected or said to be insignificant (Ha is rejected and Ho is accepted), meaning that partially the independent variable has no significant effect on the dependent variable = the hypothesis is rejected.

1. Statistical Test Results

1. Determining Estimates

a. Uji Chow

Table 2

Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.529806	(2,9)	0.2680

Cross-section Chi-square	4.389561	2	0.2180

Prob value 0.2180> 0.05 then the CEM model is selected.

b. Hausman test

Table 3

Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.185080	3	0.2030

The prob value is 0.2030 > 0.05, so the REM model is chosen

c. Uji Lagrange Multiplier

Table 4

Lagrange Multiplier Results

Null (no rand. effect) Alternative	Cross-section One-sided	Period One-sided	Both
Breusch-Pagan	0.010881 (0.8746)	0.315018 (0.5746)	0.325899 (0.5681)
Honda	0.104312 (0.4585)	-0.561265 (0.7127)	-0.323114 (0.6267)
King-Wu	0.104312 (0.4585)	-0.561265 (0.7127)	-0.238876 (0.5944)
GHM	-- --	-- --	0.010881 (0.7071)

The value (0.8746)> 0,05, then the selected one is the CEM model.

2. Panel Regression Model Assumption Test

Classical Assumption Test, because in this study the best estimation method was CEM, a classical assumption test is needed.

a. Multicollinearity Test

Table 5

Multicollinearity Test Results

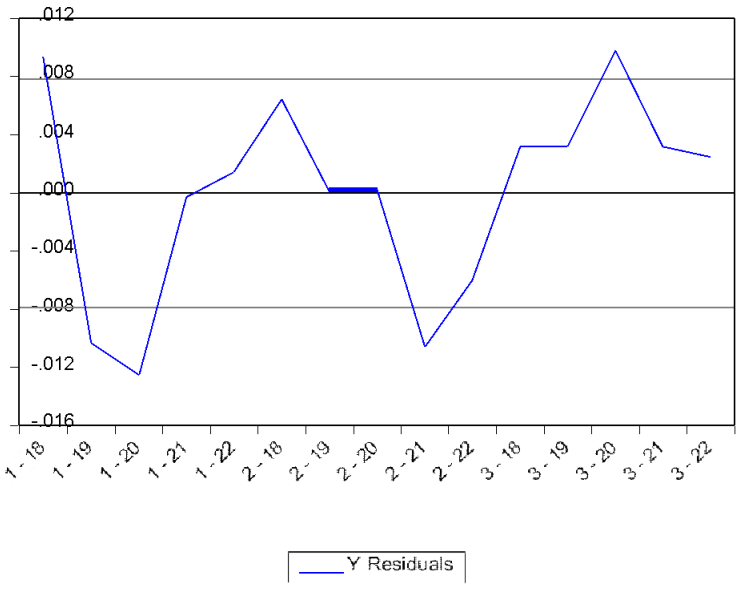
	BUT	Δaset	LONG
BUT	1.000000	-0.112160	-0.107255
Assets Growth	-0.112160	1.000000	-0.152413
LONG	-0.107255	-0.152413	1.000000

The correlation coefficient X1 and X2 is 0.112160 < 0.85, the correlation coefficient X1 and multicollinearity test.

b. Heteroscedasticity Test

Figure 3

Heteroscedasticity Test Results



Based on the residual graph (blue), it can be seen that it does not exceed the limit or is still within 0 or -0, meaning the residual variance is the same. Therefore, there are no symptoms of heteroscedasticity or passing the heteroscedasticity test.

3. Multiple Linear Regression Panel Data Equation

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Y = 0.994334 - 0.0018034*X1 + 0.016952*X2 + 0.018750*X3

Table 5

Multiple Linear Regression Panel Data Equation

Variable	Coefficient	Say/Prob
C	0,994334	0,0000
BUT	-0,001803	0,9244
Growth. Assets	0,006952	0,3473
LONG	0,018750	0,0203

The coefficients of the multiple linear regression equation can be interpreted as follows:

a) The constant value 0.994334 means that if the value of .

b) β 1 = -0.0018034, this shows that the coefficient of the capital structure variable has a negative direction and the sig value is 0.9244 with a negative meaning that is not significant, where for every 1% increase in capital structure, Y (Share Price) will decrease by -0.0008034 points. It can be concluded that as the capital structure decreases, share prices decrease, and vice versa.

c) β 2 = 0.016952, this shows that the coefficient of the asset growth variable has a positive direction with a sig value of 0.3474 with a positive meaning that is not significant, where for every 1% increase in asset growth, Y (Share Price) will increase by 0.016952 points. It can be concluded that the higher the asset growth, the higher the share price, and vice versa.

d) β 3 = 0.018750, this shows that the coefficient of the profitability variable has a positive direction with a sig value of 0.0203 with a significant positive meaning, where for every 1% increase in profitability, Y (Share Price) will increase by 0.018750 points. It can be concluded that the higher the profitability, the higher the share price, and vice

versa.

4. Hypothesis testing

a. Uji t

Table 6
t Test Results

Variable	t count	t table	α	Prob
BUT	-0.097047	2.160	0.05	0.9244
Asset growth	0.981673	2.160	0.05	0.3474
LONG	2.710617	2.160	0.05	0.0203

Based on the output results of Eviews 10 in table 4.14, it can be concluded that: t table (df: 13, α:0,05) = 2,160

1) The Effect of Capital Structure (DAR) on Share Prices.
Based on table 4.14, the capital structure variable has a calculated t value of -0.97047, which is smaller than the t table value, namely 2.160 and the sig value. 0.9244 is greater than 0.05, then Ho is accepted and Ha is rejected, meaning that the capital structure variable has no effect and is not significant on Airline Transportation Share Prices.

2) The Effect of Asset Growth on Stock Prices.

Based on table 4.14, the Asset Growth variable has a calculated t value of 0.981673, which is smaller than the t table value, namely 2.160 and the sig value. 0.3474 is greater than 0.05, then Ho is accepted and Ha is rejected, meaning that the asset growth variable has no effect and is not significant on Airline Transportation Stock Prices.

3) The Effect of Profitability (ROA) on Share Prices.

Based on table 4.14, the Profitability variable has a calculated t value of 2.710617 which is greater than the t table value, namely 2.160 and the sig value. 0.0203 is smaller than 0.05, then Ho is rejected and Ha is accepted, meaning that the profitability variable has a significant and influential effect on Airline Transportation Share Prices.

b. Coefficient of Determination Test (R^2)

Table 4. 16

Coefficient of Determination Test Results

R-squared	0.859037
Adjusted R-squared	0.740356
S.E. of regression	0.007841
Sum squared resid	0.000676
Log likelihood	53.76763
F-statistic	2.631441
Prob(F-statistic)	0.102309

Based on table 4.15, it can be seen that the R square value produces a figure of 0.859037. These results mean that the share price variable is influenced by capital structure variables, asset growth and profitability by 0.859039 or 85.90% while the remaining 14.10% is influenced by other variables such as company size, company value, liquidity, total assets, ROI, capital turnover and policy. dividend.

4. CONCLUSION

1. *Debt To Asset Ratio* produces regression results that are negative and insignificant to stock prices.
2. Asset growth produces regression results that are positive and insignificant on stock prices,
3. *Return On Asset* produces regression results that are significantly positive on stock prices,

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