

# ANALYSIS MODEL OF THE EFFECT OF ASSETS, EQUITY AND DEBT ON PROFITS IN PHARMACEUTICAL SUB-SECTOR COMPANIES AT THE INDONESIA STOCK EXCHANGE FOR THE PERIOD 2014 – 2021.

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## ABSTRACT

This study aims to determine and analyze the effect of variable assets, equity and debt on the profits of pharmaceutical sub-sector companies on the Indonesia Stock Exchange for the period 2014 – 2021. The independent variables of the study are assets, equity and debt as independent variables with profit as the dependent variable. Data and facts obtained from the financial statements of issuer companies have the value of assets, equity, debt and profits in the pharmaceutical sub-sector during the study period has a considerable and significant difference in value and fluctuates. This study used the Smart Partial Least Square (PLS) 3.0 software program. The results showed 1) Asset variables have no effect on profit variables in pharmaceutical sub-sector companies on the Indonesia Stock Exchange for the period 2014 - 2021. 2) The equity variable has no effect on the profit variable. 3) Variable debt has no effect on variable profit.

Keyword: assets, equity, debt, profit.

## 1. Research Background

This research model aims to determine and analyze the effect of assets, equity and debt on profits in pharmaceutical sub-sector companies on the Indonesia Stock Exchange for the period 2014 – 2021. This study uses assets as the first independent variable with indicators of current assets, fixed assets and total assets. Assets are a form of wealth owned by the company and are resources for the company to do business. (Suroño, 2022). Assets are assets owned by a company as a whole. The facts and data obtained show that the assets of each issuer company in the pharmaceutical sub-sector have a significant amount of difference between one issuer and another, of course, will affect the performance of each company and the performance of the pharmaceutical sub-sector as a whole on the Indonesia Stock Exchange.

This study also uses equity as the second independent variable, with an indicator of the amount of own capital. Financial Accounting Standards (PSAK No.

21) states that equity is part of the owner's rights in the company, namely the difference between existing assets and liabilities. Based on data and facts of the financial statements of each issuer, it can be seen that the equity value of each issuer company in the pharmaceutical sub-sector during the research period has a significant magnitude and difference. In addition, the debt variable is also used as the third independent variable with indicators including current debt, long-term debt and total debt. Debt is all the company's financial obligations to other parties that have not been fulfilled, where this debt is a source of funds or company capital derived from creditors. (Suroño, 2022). Based on the financial statements of each issuer, it is known that the debt value of each issuer has a variety of magnitudes, which has an impact on the performance of each issuer and the performance of the pharmaceutical sub-sector as a whole.

This study uses profit as a dependent variable, using indicators of gross profit,

profit before tax and net profit. Profit is an increase in equity value from transactions that are incidental and not the main activity of the entity and from transactions or other activities that affect the entity during a certain period, except those derived from proceeds or investments from owners (prive). (Harahap, 2015). Pharmaceutical sub-sector issuer companies have diverse performance with significant differences in the pharmaceutical sub-sector, which will affect the amount of profit obtained by the company.

Based on data and facts obtained from the financial statements of each issuer, it can be seen that the value of assets, equity, debt and profits of pharmaceutical sub-sector issuers during the study period had considerable and significant differences and fluctuated during the research period. This study aims to: 1) knowing and analyzing the effect of asset variables on profits in pharmaceutical sub-sector companies on the Indonesia Stock Exchange for the period 2014 – 2021. 2) Know and analyze the effect of equity variables on profits. 3) Know and analyze the effect of variable debt on profits. Based on this, this study looks at the relationship model and the relationship between variable assets, equity and debt to profit with the title “**Analysis Model of the Effect of Assets, Equity and Debt on Profits in Pharmaceutical Sub-Sector Companies on the Indonesia Stock Exchange for the period 2014 - 2021**”.

## Method

The independent variables in this study are assets, equity and debt and profit as dependent variables. This study used Partial Least Square (PLS), using Smart PLS 3.0 software. This method has the advantage that it does not require assumptions and can be estimated with a relatively small number of samples. (Haryono, 2017). Smart PLS was used in this study for several reasons, namely (Yunan Surono, 2022):

a. This study examines the influence between variables, but the relationship between

these variables in this study is still weak or not known with certainty, in smart PLS can be used for research that has a strong or weak theoretical foundation, even research that is theoretical confirmation (theoretical testing) and recommends relationships that have no theoretical basis (exploratory).

b. This research variable is distribution free (does not assume certain distributed data, can be nominal, ordinal, interval and ratio categories).

Model evaluation in PLS is carried out with a two-step approach, where evaluating the measurement model to obtain adequacy requirements and continued with structural model evaluation to model quality evaluation. (Yamin, 2022).

a. Yamin (2022) suggests that Loading Factor (LF) or outer loading describes how well items reflect/describe variable measurements. Hair et al (2021), Henseler et al (2009) using  $LF \geq 0.70$  is acceptable, Another opinion according to Chin (1998), LF values  $\geq 0.60$  are acceptable.

b. Internal consistency reliability indicated by Composite Reliability (CR) is a measure to show how far the reliability of the variable. According to Hair et al (2011), Henseler (2009), the minimum value of Composite Reliability is 0.70, but in Hair et al (2011) for exploratory studies the value of Composite Reliability between 0.60 – 0.70 is acceptable.

c. Average Variance Extracted (AVE) is the average variation of each measurement item contained by variables. How far the overall variable is can explain the variation of measurement items. This measure also describes how well the variable Convergent Validity is. According to Hair et al (2021), the value  $(AVE) \geq 0.50$ .

d. According to Yamin (2022), the test results seen from the value of t-values for two-tailed testing are 1.65 (significant level = 10%), 1.96 (significant level = 5%), and 2.58 (significant level = 1%).

e. Discriminant validity describes how far the variable or construct is built differently from other variables / constructs and is

statistically tested. Discriminant validity testing is performed at the level of variables and indicators. At the indicator level a measure of cross loadings is used and at the variable level is the Fornell-Lacker Criterion i.e. comparing the roots of AVE with the correlation between variables.

- f. According to Hair et al (2019), R square values of 0.75, 0.50 and 0.25 mean substantive (high), moderate and weak influences. Opinion Henseler et al (2009) R square value 0.67 (high), 0.33 (moderate), 0.19 (weak);

The steps for testing the Partial Least Square-based research model, (Yunan Surono, 2021), are:

1. Design a structural model (inner model), by formulating a model of the relationship between constructs..

2. Design the outer model, by specifying the relationship between the latent construct and its construct (reflective).
3. Create path coefficients constructions, by visualizing the relationship between latent constructs and constructs.
4. Estimating models using weighting selection schemes in the model estimation process.
5. Evaluate the model by looking at the evaluation of the measurement model and the evaluation of the structural model.
6. Hypothesis testing and interpretation.

The results of the initial model construction of research by researchers using Smart PLS can be seen in the following figure:

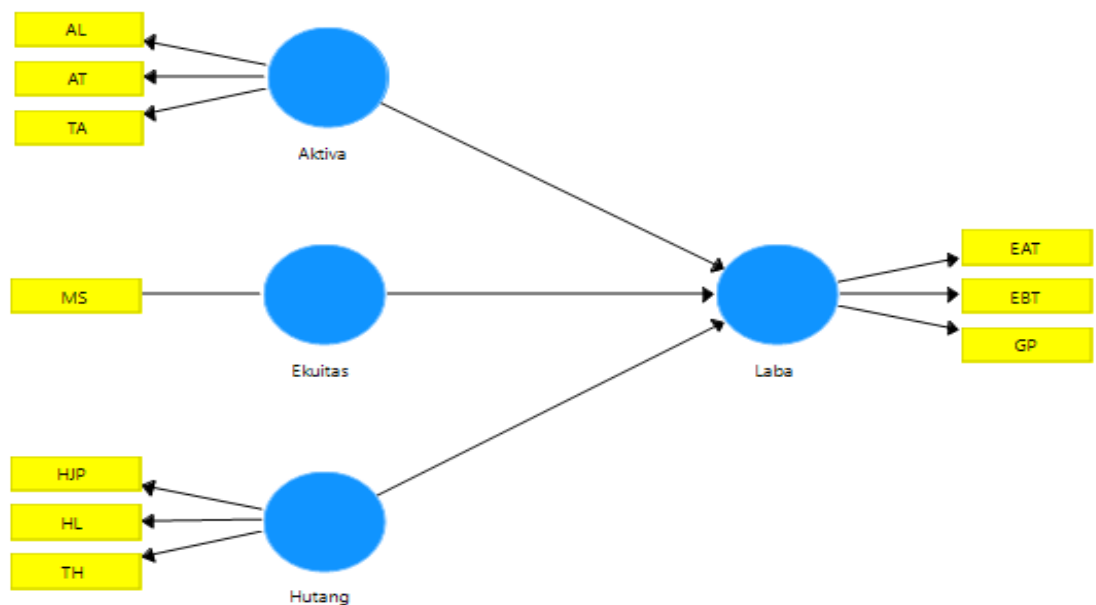


Figure 1, preliminary construction of the study

## Result

The results of the study, showed that the estimation of the relationship between latent variables and their constructs obtained the following results;

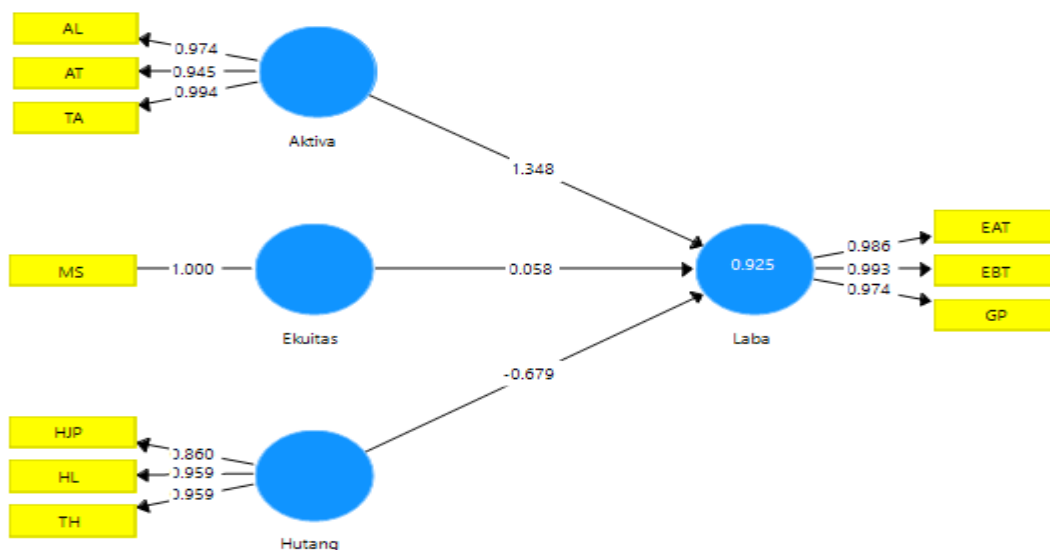


Figure 2, research construction results.

The results of the study, showed that the value of Construct Reliability and Validity is as follows;

Table 1. Construct Reliability and Validity value PLS algorithm.

	<i>Cronbach's Alpha</i>	<i>rho A</i>	<i>Composite Reliability</i>	<i>Average variance Extracted</i>
Aktiva	0.970	0.985	0.980	0.944
Ekuitas	1.000	1.000	1.000	1.000
Hutang	0.917	0.925	0.948	0.860
Laba	0.984	0.984	0.989	0.969

Source : PLS result data, 2023.

Based on table 1, it can be seen that Cronbach's Alpha value has a value above 0.7 in the reliable category, it illustrates that the reliability test has met the requirements or is in the reliable category and the Average Variance Extracted value has a value above 0.5., which means the data is valid. In addition to using AVE, validity tests can also use Validity Discriminant (discriminant validity) cross loading values on Fornell-Larcker Criterion are all more than 0.7. Jogiyanto (2011)., as in the following table;

Table 2. Cross loading value Validity Discriminant

	Aktiva	Ekuitas	Hutang	Laba
Aktiva	0.971			
Ekuitas	0.956	1.000		
Hutang	0.795	0.663	0.927	
Laba	0.864	0.897	0.432	0.984

Source : PLS result data, 2023.

The outer loading value of the PLS algorithm as shown in figure 2 in detail can be seen in table 3 below:

Table 3. PLS algorithm outer loading values.

	Aktiva	Ekuitas	Hutang	Laba
AL	0.974			
AT	0.945			
EAT				0.986
EBT				0.993
GP				0.974
HJP			0.860	
HL			0.959	

MS		<b>1.000</b>		
TA	<b>0.994</b>			
TH			<b>0.959</b>	

Source : PLS result data, 2023.

Figure 2 and table 3 show that asset variables with AL, AT and TA indicators have loading factor values above 0.7. The equity variable with the MS indicator has a loading factor value above 0.7. Variable debt with indicators HJP, HL and TH has a loading factor value above 0.7. Profit variables with EAT, EBT and GP indicators also have a loading factor value above 0.7 which means it is ideal (the indicator validly measures the variable construct it forms).

### Model Feasibility Testing (Goodness of Fit)

The results of the goodness of fit model test are seen at the R-square value, from the results of the running calculate model and obtained a figure of 0.925 or 92.5%. The figure shows that the structural model that can be explained is 92.5%, the remaining 7.5% is explained by other variables that are not yet contained in the model and include errors. These results explain that this research model is a feasible model because it has relevant predictive value (good) according to Chin (1998), in Ghozali on PLS assessment criteria.

Table 4. R<sup>2</sup> Value

	<b>R Square</b>	<b>R Square Adjusted</b>
Laba	0.925	0.921

Source : PLS result data, 2023.

The next step we will do the calculation (calculate) by bootstrapping.

### Bootstrapping Results.

The calculation results (calculate) by bootstrapping on Smart PLS 3.0, obtained path coefficients consisting of original sample (O), sample means (M), standard deviation (STDEV), T statistics ([O / STDEV]) and P values as in table 5 below;

Table 5, Bootstrapping result (path coefficients).

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ([O/STDEV])	P Values
Aktiva -> Laba	<b>1.348</b>	<b>0.907</b>	<b>1.507</b>	<b>0.895</b>	<b>0.371</b>
Ekuitas -> Laba	<b>0.058</b>	<b>0.390</b>	<b>1.130</b>	<b>0.051</b>	<b>0.959</b>
Hutang -> Laba	<b>-0.679</b>	<b>-0.521</b>	<b>0.563</b>	<b>1.205</b>	<b>0.229</b>

Source : PLS result data, 2023.

In order to find out whether or not the effect between variables can be known from the magnitude of P values, if the value of P values is smaller (less) than 0.05 or 5% then the relationship between variables is said to have an effect, and if the value of P values is greater (above) 0.05 then the relationship between variables is said to have no effect. In addition, to see the level of significance can be known from the column T statistics. According to Ghozali (2006), t-stat values above 1.96 indicate a significant influence of each hypothesis. To find out the magnitude of influence between variables, it can be known from the original sample column.

The results of calculating path efficiency based on table 5 show that;

1. The asset variable has no effect on the profit variable because the P values value of 0.371 or greater than 0.05 then the relationship between these variables is said to have no effect.
2. The equity variable has no effect on the profit variable because the P value of 0.959 or greater than 0.05 then the relationship between these variables is said to have no effect.
3. The debt variable has no effect on the profit variable because the P value of 0.229 or greater than 0.05 then the relationship between these variables is said to have no effect.

Bootstrapping results also produce a table of results for outer loadings, which illustrates the ability to reflect and the significance of indicators to variables, as shown in the outer loading values in table 6 below;

Table 6 Outer loading value of Bootstrapping results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ([O/STDEV])	P Values
AL <- Aktiva	0.974	0.976	0.007	132.483	0.000
AT <- Aktiva	0.945	0.950	0.015	61.232	0.000
EAT <- Laba	0.986	0.985	0.010	100.879	0.000
EBT <- Laba	0.993	0.992	0.004	262.283	0.000
GP <- Laba	0.974	0.972	0.013	77.082	0.000
HJP <- Hutang	0.860	0.864	0.063	13.564	0.000
HL <- Hutang	0.959	0.963	0.022	43.508	0.000
MS <- Ekuitas	1.000	1.000	0.000		
TA <- Aktiva	0.994	0.995	0.004	231.495	0.000
TH <- Hutang	0.959	0.961	0.028	34.685	0.006

Source : PLS result data, 2023.

Based on table 6, it can be seen that the outer loading value of the bootstrapping results, shows that each indicator has a significant influence on its variables where the P value of each indicator is smaller than 0.05., so that each indicator is able to reflect the variables it forms. Figure 3 below is the result of Bootstrapping which displays the outer loading value as shown below;

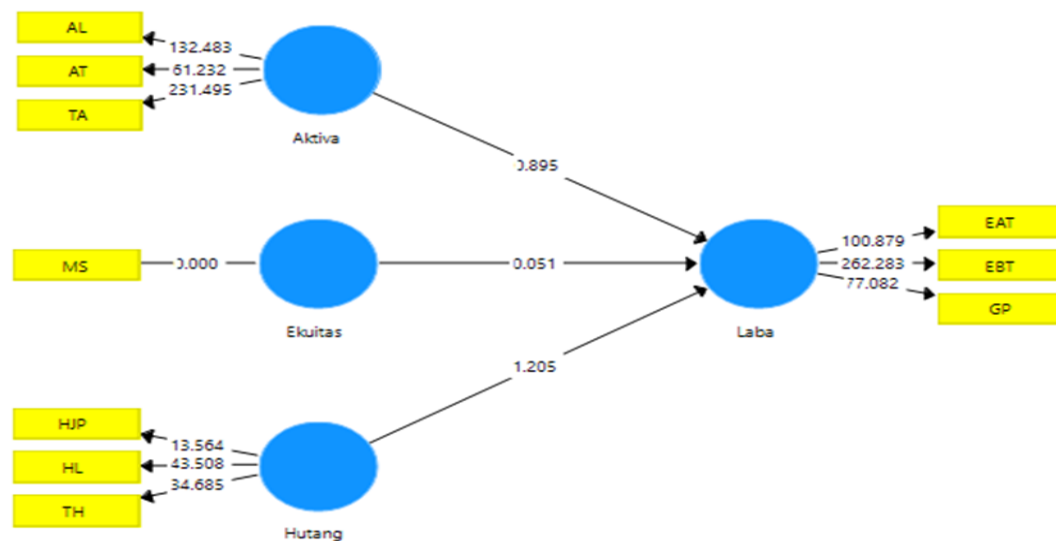


Figure 3, Bootstrapping Results.

## Discussion

Based on the results above, the results of the study can be explained among others:

1. Analyzing the effect of assets on profits in pharmaceutical sub-sector companies on the Indonesia Stock Exchange for the period 2014 - 2021, shows that the asset variable has no effect on the profit variable because the P value is 0.371 or greater than 0.05 and can also be seen in the statistical T value of 0.895 or less than

1.96., then the relationship between these variables is said to have no effect. Thus, assets have no effect on profits and have a positive direction seen in the original sample (O) value of 1.348.

The value of path coefficients (inner model) is 1.348 which means that if there is an increase of 1.348 units or 134.8% in the asset variable, there will be an increase in the variable profit by 1 unit or by 100%. The variable assets with the current asset

indicator has a loading factor (outer loading) of 0.974 which means that the current asset is able to construct a variable asset of 97.4%, the fixed asset indicator has a loading factor (outer loading) of 0.945 which means that fixed assets are able to construct variable assets of 94.5% and the total assets indicator has a loading factor (outer loading) of 0.994 which means that the total assets are able to construct variable assets of 99.4%.

The profit variable with the EAT indicator has a loading factor (outer loading) of 0.986 which means EAT is able to construct financial performance of 98.6%, the EBT indicator has a loading factor (outer loading) of 0.993 which means EBT is able to construct a profit of 99.3%, the GP indicator has a loading factor (outer loading) of 0.974 which means GP is able to construct a profit of 97.4%.

2. Analyzing the effect of equity on profits in pharmaceutical sub-sector companies on the Indonesia Stock Exchange for the period 2014 - 2021, shows that the equity variable has no effect on the profit variable because the P value is 0.959 or greater than 0.05 and can also be seen in the statistical T value of 0.051 or less than 1.96., then the relationship between these variables is said to have no effect. Thus, equity has no effect on earnings and has a positive direction seen in the original sample (O) value of 0.058.

The path coefficients value is 0.058 which means that if there is an increase of 0.058 or 5.8% units in the equity variable with its own capital indicator, there will be an increase of 1 unit or 100% in the profit variable.

3. Analyzing the effect of debt on profits in pharmaceutical sub-sector companies on the Indonesia Stock Exchange for the period 2014 - 2021, shows that the debt variable has no effect on the profit variable because the P values are 0.229 or greater than 0.05 and can also be seen in the statistical T value of 1.205 or smaller than 1.96., then the relationship between

these variables is said to have no effect. Thus, assets have no effect on profits and have a negative direction seen in the original sample (O) value of -0.679.

The value of path coefficients (inner model) is -0.679 which means that if there is a decrease of -0.679 units or -67.9% in the debt variable, there will be an increase in the variable profit by 1 unit or by 100%. Variable debt with long-term debt indicator has a loading factor (outer loading) of 0.864 which means long-term debt is able to construct variable debt of 86.4%, current debt indicator has a loading factor (outer loading) of 0.959 which means current debt is able to construct variable assets of 95.9% and the total debt indicator has a loading factor (outer loading) of 0.959 which means total debt is able to construct variable debt by 95.9%.

## 9. Conclusion

The conclusions that can be drawn from this study are as follows;

1. Asset variables do not affect profit variables in pharmaceutical sub-sector companies on the Indonesia Stock Exchange for the period 2014 - 2021.
2. The equity variable has no effect on the profit variable in pharmaceutical sub-sector companies on the Indonesia Stock Exchange for the period 2014 - 2021.
3. Variable debt does not affect variable profit in pharmaceutical sub-sector companies on the Indonesia Stock Exchange for the period 2014 - 2021.

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