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# **Contribution of Capital Structure, Liquidity and Firm Size to Financial Performance**

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**ABSTRACT:** This research aims to determine the effect of capital structure (DAR), liquidity (CR) and firm size (LnTA) on financial performance (ROA) in the pharmaceutical industry listed on the Indonesia Stock Exchange for the 2016 - 2021 period. The sampling method used in this research is the purposive sampling method. Based on predetermined sampling criteria, 7 companies in the pharmaceutical industry listed on the Indonesia Stock Exchange for the period 2016 - 2021 were obtained. This research used multiple linear regression analysis techniques for panel data, namely the E-views 10 analysis tool Based on the results of data analysis, it is concluded that capital structure (DAR) has a negative and significant effect on financial performance (ROA), with a probability value of 0.475. Liquidity (CR) has a positive and significant effect on financial performance (ROA), with a probability value of 0.225. Firm size (LnTA) has a positive and significant effect on financial performance (ROA), with a probability value of 0.0001.

KEYWORDS: Capital Structure, Liquidity, Firm Size, Financial Performance

# 1. INTRODUCTION

# 1.1. Background of the Problem

A company needs a strategy on how to carry out its operations to meet company goals. Return on Assets (ROA) is an indicator that can be used to measure a company's financial performance. The higher the Return on Assets (ROA), the better the company is at generating profits from its assets. This can be used by managers as a basis for decision making, both in making investments, maximizing operations, and distributing a number of profits to shareholders (Lely & Diana, 2020). According to Munawir (2010) performance measurement is a data analysis and control tool for companies. According to Francis Hutabarat (2020:2) financial performance is an analysis carried out to see the extent to which a company has implemented using financial implementation rules properly and correctly. . Companies need financial performance to know and assess the level of organizational success based on the financial operations that have been carried out. In the midst of Indonesia's economic conditions which generally experienced a decline in the second quarter of 2020, the pharmaceutical business was one of the economic sectors that was able to record positive growth. (Katadata.co.id, 11 August 2020). The pharmaceutical industry is one of the strategic sectors in a country's economy. The growth and development of the pharmaceutical industry has an important role in meeting the need for quality medicines for public health. In this context, it is important to analyze the financial performance of companies in the pharmaceutical industry in order to identify the factors that influence their financial performance. The impact of Covid-19 certainly has an influence on various sectors, both political, social and economic. However, there is one sector that is actually experiencing growth, namely the pharmaceutical sector. Financial performance in the pharmaceutical industry involves complex aspects. Industri ini memiliki siklus penelitian dan pengembangan obat yang panjang, tantangan regulasi yang ketat, dan persaingan yang kuat. Oleh karena itu, menganalisis kinerja keuangan industri farmasi dapat memberikan wawasan tentang keefektifan dan keberlanjutan operasional perusahaan di sektor ini.Pandemi virus corona (COVID-19), menurut Badan Pusat Statistik (BPS), telah mengubah pola konsumsi rumah tangga di Indonesia, terutama dalam hal kebutuhan masyarakat yang beragam. Sanitizers, vitamins and other medical supplies are now more in demand. As many as 73.28% of respondents admitted that their current daily needs, including medical devices, had changed their spending patterns. (Republika.co.id, 1 May 2020). Every business needs capital and the obstacle in fulfilling it comes from the capital provider, namely internal or external. The capital structure consists of funds collected from various sources which form the capital structure. Struktur modal adalah perimbangan antara penggunaan modal pinjaman yang terdiri dari utang jangka pendek yang bersifat permanen serta utang jangka panjang dengan modal sendiri yang terdiri dari saham preferen dan saham biasa (Sjahrial, 2009).Struktur modal perusahaan sangat penting karena struktur modal yang baik dan buruk akan berdampak langsung pada posisi keuangan perusahaan (Linda, 2022). Struktur modal (capital structure) perusahaan farmasi memainkan peran yang signifikan dalam

menentukan kinerja keuangan. Optimal capital structure can influence a company's cost of capital, level of financial risk, and company value. The liquidity ratio shows the company's capacity to pay off short-term debt. A company's ability to meet its shortterm obligations indirectly shows how liquid/smooth the company is. The liquidity of a company is expressed in the size of its current assets, namely assets that are easily converted into cash, including cash, securities, receivables and inventories (Sartono, 2010). Likuiditas yang cukup, memungkinkan perusahaan farmasi untuk memenuhi kewajiban finansialnya secara tepat waktu, menjaga kelancaran operasional, dan memanfaatkan peluang investasi. Tingkat likuiditas yang rendah dapat menghadirkan tantangan dalam menghadapi biaya pinjaman yang lebih tinggi dan mengurangi fleksibilitas keuangan. Firm Size merupakan faktor penting dalam menentukan kinerja keuangan perusahaan. Profitabilitas bisnis mempunyai pengaruh besar terhadap ukuran perusahaan. This happens because larger companies have several competitive advantages, such as market power where large companies can set high prices for their products, the existence of economies of scale which have an impact on reducing costs and ultimately increasing business profitability. (Fate, 2019). Large pharmaceutical companies allow them to take advantage of economies of scale, access to greater resources, and better bargaining power. On the other hand, smaller pharmaceutical companies may have an advantage in operational flexibility and the ability to adapt quickly to market changes. Based on the description above, the author is interested in conducting research to study and follow up on financial ratios, namely liquidity, company size, capital structure by measuring the company's financial performance, for this reason the author chose and decided on research with the title "Contribution Capital Structure, Liquidity, and Firm Size (Study of the pharmaceutical industry listed on the Indonesian Stock Exchange).

# 1.2. Main Problem

Based on the background of the problem described above, the incorrect formulation in the research can be formulated as follows: 1.2.1. Does capital structure have a significant effect on performance?

Finance in the pharmaceutical industry listed on the IDX?

1.2.2. Does liquidity have a significant effect on financial performance in the pharmaceutical industry? Registered on BEI?

1.2.3. Does company size have a significant effect on financial performance in the industry pharmacy registered on the IDX?

1.2.4. Research Objectives

# 1.3. Research Objectives

In accordance with the problem formulation above, the objectives are to be achieved Researchers in this study are as follows:

1.3.1. To examine the influence of capital structure on the financial performance of the pharmaceutical industry listed on the IDX for the 2016 - 2021 period.

1.3.2. To examine the effect of liquidity on the financial performance of the pharmaceutical industry listed on the IDX for the 2016 - 2021 period.

1.3.3. To test the influence of firm size on the financial performance of the pharmaceutical industry listed on the IDX for the 2016 - 2021 period

# 1.4. Benefits of Research

1.4.1. For Investors

It is hoped that this research can be used as consideration for investors before investing by paying close attention and studying the variables used in this research.

1.4.2. For Practitioners

For the pharmaceutical industry, it is hoped that this research can be used as material for decision making, consideration and a source of information to improve financial performance.

ROA = Net Profit/Total Assets

# 2.2. Capital Structure

Horne and Wachowicz (2011) explain that capital structure is the ratio of a company's longterm, permanent financial resources represented by debt, preferred shares and common shares. According to Sudana (2011), capital structure refers to the company's long-term burden which is measured by comparing long-term debt with own capital (DER) or the comparison of total debt with total capital/assets (DAR). Capital structure in this study is measured by Debt to Asset Ratio (DAR).

DAR = Total Debt/Total Assets

# 2.3. Liquidity

According to Riyanto (2001), company liquidity is a problem that affects the company's ability to immediately fulfill its financial obligations. According to Munawir (2004) explains that a company can be said to be liquid if it can fulfill its financial obligations on time and if it has liquidity and current assets greater than its current liabilities (short term). Liquidity ratio according to Wild, Subramanyam, and Halsey (2005), is a ratio that shows ability company to meet short-term financial obligations in a timely manner. Liquidity is calculated by comparing current assets with the company's current liabilities. Current assets usually include securities, trade receivables, and inventory, while current liabilities include trade payables, short-term bank debt (<1 year), taxes, employee

salaries, and other costs that must be paid immediately by the company. In this research , the current ratio is used to calculate the current ratio by:

CR = Current Assets/Current Liabilities

## 2.4. Firm Size

Firm size is a measure of the number of assets the company owns. The more assets a company has, the larger its size. Yuyun Isbanah (2015) states that there are only three types of company sizes, namely large companies, medium firms and small firms. Company size is a scale that is measured based on the company's total assets at the end of the year. In this research, company size is measured by Log. Ttotal assets, namely:

Firm Size = Log.Total Assets

## 2.5. The influence of capital structure on financial performance

According to Sudana (2011), capital structure refers to the company's long-term burden which is measured by comparing long-term debt with its own capital. The optimal capital structure is a capital structure that minimizes costs while minimizing risks and maximizing share prices. The good and bad of a company's performance can be reflected in its capital structure, because the capital structure determines the sources of financing and expenditure on company operations. Capital structure is a policy decision determined by management in order to obtain sources of funds that can be used to carry out company operations. Based on the previous description, the following hypothesis is determined:

Ha1: Capital structure has a significant negative effect on the financial performance of the pharmaceutical industry listed on the IDX.

#### 2.6. The effect of liquidity on financial performance

According to Wild, Subramanyam, and Halsey (2005), the liquidity ratio is a ratio that shows the company's ability to meet shortterm financial obligations in a timely manner. Liquidity is calculated by comparing current assets with the company's current liabilities. Current assets usually include securities, trade receivables, and inventory, while current liabilities include trade payables, short-term bank debt (<1 year), taxes, employee salaries, dan biaya-biaya lain yang harus segera dibayarkan oleh perusahaan.Likuiditas perusahaan adalah kemampuan perusahaan untuk memenuhi kewajiban jangka pendeknya. Likuiditas penting bagi bisnis karena melibatkan pengubahan aset menjadi uang tunai. Manajemen perusahaan sering kali ingin mempertahankan tingkat likuiditas tertentu untuk memberikan perlindungan finansial dan fleksibilitas dalam menghadapi ketidakpastian. Untuk mencapai tujuan ini, company management may refuse to pay large dividends.

In this research, the current ratio is used to calculate the current ratio by comparing total assets owned with current liabilities. Based on the previous description, the following hypothesis is determined:

Ha2: Liquidity has a significant positive effect on the financial performance of the pharmaceutical industry listed on the IDX.

#### 2.7. The influence of company size on financial performance

According to Luh Putu Varamitha Anandamaya (2021), large companies tend to have large total assets and by utilizing these large assets, the company is expected to generate high income. In contrast, small companies will have smaller total assets and will also generate less income. Larger companies tend to receive more attention from the government and society. Large companies will also face greater risks because they disclose more financial information than small companies. Company size can be denoted by SIZE. Company size is a scale measured based on the company's total assets at the end of the year. If the company has large assets, management will have more freedom in managing these financial resources to support the company's operational activities. According to Nadila Sari & Peng Wi (2022), the natural log of total assets is used as an indicator of company size to reduce the impact of data fluctuations. Based on the previous description, the following hypothesis is determined:

Ha3: Firm Size has a significant positive effect on the Financial Performance of the pharmaceutical industry listed on the IDX.

#### 2. LITERATURE REVIEW

# **2.1. Financial Performance**

Financial performance is an analysis carried out to see how well a company has implemented financial performance rules (Fahmi, 2018: 142). Financial performance is a complex issue because it concerns the efficiency of capital utilization and the efficiency of company operations. On the other hand, shareholders invest their capital in the company with the main aim of increasing welfare. Therefore, measuring the financial performance of a company must be able to provide indicators of the evolution of the level of shareholder welfare after investing over a certain period of time (Ika, 2018). Financial performance in this research is measured by Return on Assets (ROA).

#### **3. RESEARCH METHOD**

The sampling method used in this research is the purposive sampling method. Based on predetermined sampling criteria, 7 pharmaceutical industry companies listed on the Indonesia Stock Exchange for the 2016 - 2021 period were obtained. **Result** 

The results section presents a description of the research data. Writing source literature uses body notes in the format of the American Psychological Association (APA) Style.

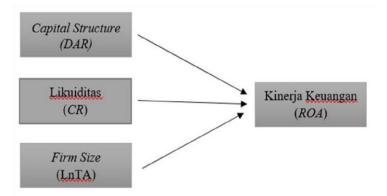


Figure 3.1 Concept

# 3.1. Classic Assumption Test

#### 3.1.1. Data Normality Test

The normality test aims to determine whether the residual values from the regression model are normally distributed or not. The statistical test that can be used to test residual normality is the Jarque-Bera statistical test. The Jarque-Bera test is based on the fact that the skewness and kurtosis values of a normal distribution are equal to zero. Therefore, the absolute value of this parameter can be a measure of deviation from the normality of the distribution.

This test compares the Jarque Bera value with the chi-square value in a table with two degrees of freedom. The hypothesis is:

*H*0 : Residual data is normally distributed

Ha: Residual data is not normally distributed

If the Jarque Bera probability value is smaller than the set significance value ( $\alpha = 0.05$ ) then Ho is rejected or the data is not normally distributed, but if the Jarque Bera probability value is greater than the set significance value ( $\alpha = 0.05$ ) then Ho is accepted or the data normally distributed.

3.1.2. Multicollinearity Test

The purpose of the multicollinearity test, according to Ghozali (2012), is to find out whether the regression model found any correlation between the independent variables. A good regression model should have no correlation between independent variables. To determine whether there is multicollinearity in the regression model, look at the tolerance value > 0.10 and vice versa, the Variance Inflation Factor (VIF) value < 10 means the data does not have a multicollinearity problem.

## 3.1.3. Autocorrelation Test

Autocorrelation can be defined as the relationship between members of a series of observations ordered by time (for times series data) or by space (cross-section data).

The autocorrelation test will show the nature of the regression residuals which are not independent from one observation to another. The autocorrelation test aims to test whether in the regression model there is a correlation between usage errors in period t and usage errors in the previous period (t-1).

Autocorrelation occurs because there are observations that are correlated with each other over time. A good regression model is one that is free from autocorrelation.

According to Ghozali (2011), to test whether there is autocorrelation in a regression model, it is best to first use the Durbin-Watson (DW) test. The rejection rule is:

#### Table 3. Durbin Watson Test

Syarat	Hipotesis Nol	Keputusan
0 < d < dI	Tidak ada autokorelasi positif	Menolak H <sub>0</sub>
dI < d < du	Tidak ada autokorelasi positif	Tidak ada keputusan
4 - dI < d < 4	Tidak ada autokorelasi negatif	Menolak H <sub>0</sub>
$4\text{-}du \le d \le 4\text{-}dI$	Tidak ada autokorelasi negatif	Tidak ada keputusan
du < d < 4- $du$	Tidak ada autokorelasi positif dan negatif	Tidak menolak

## 3.1.4. Heteroscedasticity Test

The purpose of the heteroscedasticity test, according to Ghozali (2011) is to find out whether in the regression model there is inequality of residual variance from one observation to another. Residuals are called heteroscedasticity if the variance of the residuals is different for each observation. In contrast, if the residual is constant from one observation to another, it is called homoscedasticity. The heteroscedasticity test carried out in this study uses the Glejser test, 3.1.4. Heteroscedasticity Test

The purpose of the heteroscedasticity test, according to Ghozali (2011) is to find out whether in the regression model there is inequality of residual variance from one observation to another. Residuals are called heteroscedasticity if the variance of the residuals is different for each observation. In contrast, if the residual is constant from one observation to another, it is called homoscedasticity. The heteroscedasticity test carried out in this study uses the Glejser test.

## **3.2.** Test the panel data regression model

3.2.1. Test Chow

The Chow test is used to choose between using a fixed effect model or a common effect model. Chow's test hypothesis is as follows: H0: Common Effect Model

#### Ha: Fixed Effect Model

According to Gujarati & Poter (2012), if the results of this specification test show the Chisquare probability is smaller than 0.05 then the better model is Fixed Effect, and if the Chisquare probability is greater than 0.05 then the better model is Common effects. When the selected model is fixed effect, it is necessary to carry out another test, namely the Hausman test to find out whether it is better to use a fixed effect model (FEM) or a random effect model (REM).

#### 3.2.2. Hausman test

The purpose of this test is to determine whether to use the correct fixed effect model (FEM) or random effect model (REM). In FEM, the intercept for each object is different, but the intercept for each object does not change over time. This is called time invariance. In SEM, the (common) intercept represents the average value of all intercepts (cross-section), and the  $\varepsilon$ 1 component represents the (random) deviation of individual intercepts from this average value (Gujarati, 2012). The hypothesis of the Hausman test is as follows.

#### H0:Random Effect Model

#### Ha: Fixed Effect Model

If the Hausman test produces a cross-sectional random probability of less than 0.05, the better model is the fixed effect model, and if the cross-sectional random probability is greater than 0.05, the better model is the random effect model.

3.2.3. Lagrange Multiplier Test

The Lagrange Multiplier test is used to determine whether it is better to use a random effect model or a better common effect model used. This test is carried out when the model selected by the Hausman test is a random effect model. The hypothesis used is: H0: Common Effect Model

#### Ha:Random Effect Model

This test is based on the Chi Square distribution with the same degrees of freedom as the number of independent variables. If the statistical Lagrange Multiplier value is greater than the critical value of the Chi Square statistic, then Ho is rejected, and the Random Effect Model becomes the best model. On the other hand, if the value of the Lagrange Multiplier statistic is smaller than the critical value of the Chi Square statistic, then Ho is accepted, and the best model is the Common Effect Model.

# **3.3. Panel Data Regression Analysis**

According to Ghozali (2011), the regression equation is an equation that states the nature of the relationship between the independent variable (X) and the dependent variable (Y).

The following is the Econometric equation:

 $Y = \alpha + \beta 1X1i + \beta 2X2i + \beta 3X3i + e$  Where:

Y= Financial Performance (ROA)  $\alpha$  = Constant  $\beta 1\beta 2\beta 3$  = Regression Coefficient X1 = Capital structure (DAR)

X2 = Liquidity (CR)

X3 = Size (LnTA)

I = 1, 2, 3, ...., n (number of observations) e = Component error (random error)

Panel data regression analysis can be carried out using three estimation methods:

3.3.1. Common Effect Model

The common effect model assumes that there is no difference in the intercept and slope values in the regression results either on the basis of differences between individuals and over time. The method for estimating parameters in the common effect model uses the Ordinary Least Square (OLS) method.

3.3.2. Fixed Effect Model

The Least Square Dummy Variables (LSDV) technique is used in the panel data regression estimation method for the fixed effect model. By providing a unique intercept value for each entity, the Least Square Dummy Variable (LSDV) model can capture subject heterogeneity (Gujarati, 2012).

3.3.3. Random Effect Model

If in a fixed effect the difference between individuals and time is reflected in the intercept, whereas in a random effect it is accommodated through error (Gujarati, 2012). The panel data regression estimation method on the random effect model uses the Generalized Least Square (GLS) method.

## 3.4. Hypothesis Testing

3.4.1. T-test

Carrying out a statistical t test (beta coefficient test)

The t statistical test in this research was carried out by testing the significance level of the independent variable and dependent variable in the regression results. This test uses a significance level of 5% ( $\alpha = 0.05$ ).

Determine decision making criteria based on t-statistical test results:

H0: If the probability value is greater than alpha (>0.05) then H0 is accepted and Ha is rejected

Ha: If the probability value is smaller than alpha (<0.05) then H0 is rejected and Ha is accepted, which means the independent variable has a significant influence on financial performance.

3.4.2. F statistical test (Goodness Fit Test)

The F statistical test is a useful method for testing the feasibility of a regression model.

The basis for making the F test decision is if the tolerance figure used is 5% ( $\alpha = 0.05$ ).

The hypothesis is rejected if the Sig value. > 0.05 means that the regression model equation is not feasible,

The hypothesis is accepted if the Sig value. < 0.05 means that the regression model is suitable for use.

3.4.3. Coefficient of Determination (Adjusted R2)

According to Kuncoro (2001), the coefficient of determination shows how much ability the independent variable has in explaining the dependent variable. R2 is a measure of model suitability.

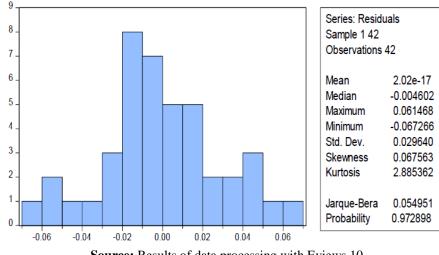
The higher the R2 value, the better the independent variable is at explaining the dependent variable. A coefficient value that is close to 0 indicates that the ability of the independent variables to explain the dependent variable is very limited. The coefficient of determination value ranges from 0-1. Meanwhile, a coefficient of determination value that is close to 1 indicates that all the information needed to predict the dependent variable is provided by the independent variables.

# 4. RESULTS

#### 4.1. Classic Assumption Test

4.1.1. Normality Test

**Figure V. 1 Normality Test Results** 



Source: Results of data processing with Eviews 10

Based on the Jarque fallow test results in Figure V.1, it can be seen that the probability value is 0.972898 > 0.05, where this value is greater than 0.05, so it can be concluded that the data in this study is normally distributed. 4.4.2. Heteroscedasticity Test

Variable	Coefficient Std. Error	t-Statistic	Prob.
C DAR CR LNTA	0.009984 0.116142 -0.102304 0.118207 0.002573 0.009143 0.001953 0.004689	-0.865460	0.3922 0.7799

# Table V. 2 Glejser Test Results

Source: Results of data processing with Eviews 10

Based on the Glejser test results in Table V.2, it can be seen that the probability values for all variables are greater than the significance level (0.05) used, so it can be concluded that this research data does not have heteroscedasticity problems. 4.1.3. Multicollinearity Test

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
С	0.002042	90.48821	NA
DAR	0.002116	9.009922	2.451032
CR	1.27E-05	13.85716	3.385855
LNTA	3.33E-06	100.1001	1.803727

Source: Results of data processing with Eviews 10

Based on the results of the multicollinearity test in Table V.3, the calculation results of DAR 2,451 (<10), CR 3,385 (<10), and LnTA 1,803 (<10) indicate that there are no independent variables that have a VIF value  $\geq$  10. So, it can be concluded that there is no multicollinearity in the regression model of this research and the model is suitable for use. 4.1.4. Autocorrelation Test

# Table V. 4 Durbin-Watson Test Results

R-squared	0.895866	Mean dependent var	0.116190
Adjusted R-squared	0.866578	S.D. dependent var	0.069386
S.E. of regression	0.025345	Akaike info criterion -	4.308251
Sum squared resid	0.020555	Schwarz criterion	-3.894520
Log likelihood	100.4733	Hannan-Quinn criter	4.156602
F-statistic	30.58850	Durbin-Watson stat	1.745168
Prob(F-statistic)	0.000000		

**Source:** Results of data processing with Eviews 10

Based on the Durbin-Watson test results in Table V.4, it can be seen that the DW value is 1.745168. This value will be compared with the value in the Durbin-Watson d Statistics table: Significance Point For dl and du AT 0.5 Level of Significance uses a significance value of 5%, the number of samples (n) is 42 and the number of variables is 3 (k=3), then from the DurbinWatson table the lower limit value (dl) will be obtained, namely 1.3573 and the upper limit value (du) is 1.745168. The DW value is in the criteria du < d < 4-du so it can be concluded that there is an autocorrelation problem in this research model.

# 4.2. Fixed Effect Model Panel Data Regression Analysis

Based on the model specification tests that have been carried out, it can be concluded that the model chosen in this research is the Fixed Effect Model. Below is a table of panel data estimation results using the Fixed Effect Model (FEM) which has passed the classical assumption test.

Table V. 7 Fixed Effect Model Estimation Results Dependent Variable: ROA Method: Panel Least Squares Date: 08/30/23 Time: 11:11 Sample: 2016 2021 Periods included: 6 Cross-sections included: 7

Total panel (balanced) observations: 42

Variable	Coefficient Std. Error		t-Statistic	Prob.
С	-0.164487 0.061565		-2.671778	0.0118
DAR	-0.145697 0.070694		-2.060941	0.0475
CR	0.010282 0.004289		2.397029	0.0225
LNTA	0.010643 0.002388		4.457109	0.0001
Effects Specification				
Cross-section fixed ( dummy variables)				
R-squared	0.895866	Mean dependent var		0.116190
Adjusted R-squared	0.866578	S.D. dependent var		0.069386
S.E. of regression	0.025345	Akaike info criterion -		4.308251
Sum squared resid	0.020555	Schwarz criterion		-3.894520
Log likelihood	100.4733	Hannan-Quinn criter		4.156602
F-statistic	30.58850	Durbin-Watson stat		1.745168
Prob(F-statistic)	0.000000	Mean dependent var		0.116190

Source: Results of data processing with Eviews 10

Based on Table V.7, the multiple regression equation model is obtained as follows:

ROA = -0.164487 - 0.145697 DAR + 0.010282 CR + 0.010643 LnTA

Based on the analysis of the regression equation above, it can be interpreted as follows:

1. The constant value is -0.164487, which means that if the independent variables DAR, CR and LnTA are considered constant, then the financial performance value (ROA) is -0.164487.

2. Test - t

The results of the t test in table V.7 in this study can be explained as follows:

3. Capital Structure (DAR)

Based on the test results in Table V.7, it can be seen that DAR has a coefficient value of 0.145697 and has a significance level that is smaller than the 5% alpha level that has been set, namely 0.0475 < 0.05. This shows that DAR has a significant negative effect on ROA in pharmaceutical industry companies listed on the Indonesia Stock Exchange for the 2016-2021 period, so the hypothesis is accepted.

# 4. Liquidity (CR)

Based on the test results in Table V.7, it can be seen that CR has a coefficient value of 0.010282 and has a significance level smaller than The 5% alpha level that has been set is 0.0225 < 0.05. This shows that CR has a significant positive effect on ROA in pharmaceutical industry companies listed on the Indonesia Stock Exchange for the 2016-2021 period, so the hypothesis is accepted. 5. Firm Size (LnTA)

Based on the test results in Table V.7, it can be seen that LnTA has a coefficient value of 0.010643 and has a significance level that is smaller than the 5% alpha level that has been set, namely 0.0001 < 0.05. This shows that LnTA has a significant positive effect on ROA in pharmaceutical industry companies listed on the Indonesia Stock Exchange for the 2016-2021 period, so the hypothesis is accepted.

# 4.3. Regression Model Feasibility Test (Goodness of Fit Test)/Test - F

The F statistical test was carried out to test whether the multiple regression equation produced in this research was feasible, so that it could be used to predict the effect of the independent variable on the dependent variable. Based on Table V.7 of the F-test results, it is known that during this research period the probability value was 0.000000, which is smaller than the alpha level of 5% or smaller than 0.05 (0.000000 < 0.05), so it can be concluded that the multiple regression equation model in the research This is declared good (goodness of fit), so that the independent variables Capital Structure, Liquidity and Firm Size can be used to predict their effect on the dependent variable Financial Performance.

# 4.4. Coefficient of Determination (Adjusted R2)

The coefficient of determination (Adjusted R2) is used to measure how much the independent variable is able to explain its effect on the dependent variable.

Based on table V.7, the Adjusted R2 value is 0.866578. This shows that the independent variables DAR, CR, LnTA can explain variations in the dependent variable, namely financial performance, of 86.65%, while the remaining 13.35% is explained by other variables in outside the research variables.

# 5. DISCUSSION

# 5.1. The Influence of Capital Structure (DAR) on Financial Performance

The results of statistical analysis for the capital structure variable proxied by DAR show that the regression coefficient is negative at -0.145697. The results of the t test for the capital structure variable showed that the significance value was smaller than the predetermined alpha level, namely 0.0475 < 0.05, so it can be concluded that DAR has a significant negative effect on ROA in pharmaceutical industry companies listed on the Indonesia Stock Exchange for the 2016-2021 period.

The results of this research are in line with the results of research conducted by Ika Puspita Kristianti (2018), An Suci Azzahra & Nasib (2019) which stated that DAR has a significant negative relationship with ROA. A company with value The DAR is high and the company's capital structure is already in optimum condition, so if the company adds debt it will increase the burden borne by the company, while the additional performance is lower than the burden borne, thereby causing the ROA value to fall. These results indicate that increasing the proportion of debt to total assets will reduce the level of effectiveness of assets in generating profits. The increase in the proportion of debt to total assets creates additional burden in the form of interest expenses that must be borne by the company, which is a component reducing profits. An increase in expenses due to interest expenses will reduce profits, thereby affecting the ROA value. Thus, an increase in the proportion of debt to assets will result in a decrease in ROA.

# 5.2. Effect of Liquidity (CR) on Financial Performance

The results of statistical analysis for the liquidity variable proxied by CR show that the regression coefficient is positive at 0.010282. The results of the t test for the liquidity variable showed that the significance value was smaller than the predetermined alpha level, namely 0.0225 < 0.05, so it can be concluded that CR has a significant positive effect on ROA in pharmaceutical industry companies listed on the Indonesia Stock Exchange for the 2016-2021 period.

The results of this research are in line with the results of research conducted by Wikan Budi Utami & Sri Laksmi Pardanawati (2016), Bayu Wulandari et al (2020) which stated that CR has a significant positive relationship with ROA. The Current Ratio increases because the company is able to optimize working capital to carry out its operational activities which will have an impact on increasing profits. This means that every increase in the Current Ratio will be followed by an increase in Return on Assets, and vice versa, if the Current Ratio decreases it will be followed by a decrease in the Return on Assets value.

# 5.3. The influence of Firm Size (LnTA) on Financial Performance

The results of statistical analysis for the firm size variable proxied by LnTA show that the regression coefficient is positive at 0.010643. The results of the t test for the firm size variable showed that the significance value was smaller than the predetermined alpha level, namely 0.0001 < 0.05, so it can be concluded that LnTA has a significant positive effect on ROA in pharmaceutical industry companies listed on the Indonesia Stock Exchange for the 2016-2021 period. The results of this research are in line with the results of research conducted by Angela Maryadi & Elizabeth Sugiarto Dermawan (2019), Rizky Tri Rahayuningtyas & Suwardi Bambang Hermanto (2022) which stated that LnTA has a significant positive relationship with

ROA. This supports the theory which states that the company size factor is proxied by Total Assets which shows the size of the company is an important factor in generating profits. A large company that is considered to have reached the maturity stage is an illustration that the company is relatively more stable and more capable of generating profits than small companies. The greater the assets, the more capital invested, the greater the turnover of money and the greater the market capitalization, the greater the company's financial performance.

# 6. CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

Based on the results of the analysis, the following conclusions and suggestions are obtained:

**6.1.** The Capital Structure (DAR) variable has a significant negative effect on the company's performance (ROA) as evidenced by the results of the t test for the capital structure variable with a significance value smaller than the alpha level that has been determined. Determined, namely 0.0475 < 0.05 in the pharmaceutical industry listed on the Indonesia Stock Exchange for the 2016-2021 period.

**6.2.** The Liquidity Variable (CR) has a significant positive effect as evidenced by the results of the t test for the liquidity variable with a significance value smaller than the predetermined alpha level, namely 0.0225 < 0.05, in the pharmaceutical industry listed on the Indonesia Stock Exchange for the 2016-2021 period.

**6.3.** The Firm Size (LnTA) variable has a significant positive effect as evidenced by the results of the t test for the firm size variable with a significance value smaller than the predetermined alpha level, namely 0.0001 < 0.05, in pharmaceutical industry companies listed on the Indonesia Stock Exchange for the 2016 period. -2021.

**6.4.** For investors who will invest capital in companies in the pharmaceutical industry sector, it is best to pay attention to the information in the financial reports regarding the company's performance to be used as consideration in making investment decisions.

**6.5.** Future researchers can consider adding other independent variables outside the variables in this research to see their effect on a company's financial performance.

## REFERENCES

- 1) Akenga, G. (2017). Effect of liquidity on financial performance of firms listed at the Nairobi Securities Exchange, Kenya. International journal of science and research, 6(7), 279-285.
- 2) Anandamaya, L. P. V., & Hermanto, S. B. (2021). Pengaruh Good Corporate Governance, Ukuran Perusahaan Dan Leverage Terhadap Kinerja Keuangan. Jurnal Ilmu Dan Riset Akuntansi (Jira), 10(5).
- 3) Brigham, EF., and J. Houston. (2011). Dasar-Dasar Manajemen Keuangan. Jakarta: Salemba Empat.
- 4) Demirgüneş, K. (2016). The effect of liquidity on financial performance: Evidence from Turkish retail industry. International journal of economics and finance, 8(4), 63-79.
- 5) Dewi, N. W. A. M., & Candradewi, M. R. (2018). Pengaruh employee stock ownership plan, leverage, dan ukuran perusahaan terhadap kinerja keuangan perusahaan. E-Jurnal Manajemen Unud, 7(9), 4774-4802.
- 6) Diana, L., & Osesoga, M. S. (2020). Pengaruh likuiditas, solvabilitas, manajemen Asset, dan ukuran perusahaan terhadap kinerja keuangan. Jurnal Akuntansi Kontemporer, 12(1), 20-34.
- 7) Fahmi, Irham. (2018). Analisis Kinerja Keuangan. Bandung:Alfabeta.
- 8) Fahmi, Irham. (2012). Analisis Kinerja Keuangan. Bandung:Alfabeta.
- 9) Ghozali, Imam. (2012). Aplikasi Analisis Multivarate dengan Program SPSS. Semarang:UNDIP.
- 10) Gujarati, D.N., & Poter, D.C. (2012). Dasar-dasar Ekonometrika. Jakarta:Salemba Empat.
- 11) Gitosudarmo, Indriyo & Basri. (2002). Manajemen Keuangan. BPFE: Yogyakarta.
- 12) Horne, J. C. V., & Wachowichz, J. M. (2011). Prinsip-Prinsip Manajemen Keuangan. Jakarta:Salemba Empat
- 13) Hutabarat, Francis, MBA, CIBA. (2020). Analisis Kinerja Keuangan. Cetakan Pertama. Serang:Desanta Muliavisitama
- 14) Kasozi, J. S. (2018). Capital structure and the profitability of listed retail firms. Journal of Economics and Behavioral Studies, 10(1 (J)), 171-181.
- 15) Kong, Y., Musah, M., & Agyemang, A. O. (2019). Liquidity and financial performance: A correlational Analysis of Quoted Non-financial firms in Ghana. International Journal of Trend in Scientific Research and Development (IJTSRD), 3(5), 133-143.
- 16) Kristianti, Ika Puspita. (2018). Analisis pengaruh struktur modal terhadap kinerja keuangan perusahaan. Jurnal Akuntansi Dewantara, 2(1), 56-68.
- 17) Isbanah, Yuyun. (2015). Pengaruh ESOP, leverage, and ukuran perusahaan terhadap kinerja keuangan perusahaan di bursa efek Indonesia. Jurnal Riset Ekonomi Dan Manajemen, 15(1), 28-41.
- 18) Katadata.co.id (2020). Kebal Pandemi, Laba Tiga Perusahaan Farmasi Semester 1 Naiksignifikan. https://katadata.co.id/agungjatmiko/finansial/5f325299a3b35/kebal-pandemilaba-tiga-perusahaan-farmasi-semester-i-naik-signifikan., Diakses 29 Maret 2023.
- 19) Kristianti, Ika Puspita. (2018). Analisis Pengaruh Struktur Modal Terhadap Pengaruh Kinerja Keuangan Perusahaan. Jurnal Akuntansi Dewantara, 2(1), 56-68.
- 20) Kuncoro, Mudrajad. 2001. Metode Kuantitatif Teori dan Aplikasi untuk Bisnis dan Ekonomi. Yogyakarta: AMP YKPN.
- 21) Kuncoro, Mudrajad. 2011. Metode Kuantitatif Teori dan Aplikasi untuk Bisnis dan Ekonomi. Yogyakarta: AMP YKPN.
- 22) Maryadi, A., & Dermawan, E. S. (2019). Pengaruh ukuran perusahaan, financial leverage, dan liquidity terhadap kinerja keuangan. Jurnal Paradigma Akuntansi, 1(3), 572-579.
- 23) Muhindi, K. A., & Ngaba, D. (2018). Effect of firm size on financial performance on banks: Case of commercial banks in Kenya. International Academic Journal of Economics and Finance, 3(1), 175-190.
- 24) Munawir, S. (2010). Analisa Laporan Keuangan. Yogyakarta: Liberty
- 25) Munawir, S. (2004). Analisa Laporan keuangan. Yogyakarta: Liberty
- 26) Nasib, A. S. A. D. (2019). Pengaruh firm size dan leverage ratio terhadap kinerja keuangan pada perusahaan pertambangan. JWEM STIE Mikroskil, 9, 13-20.
- 27) Olowokudejo, F. F., & AJIJOLA, L. A. (2022). An assessment of effect of liquidity management on the return on assets of insurance companies in Nigeria. Nigerian Journal of Risk and Insurance, 12(1), 161-173.

- 28) Opeyemi, A. (2019). The impact of Firm Size on Firms Performance in Nigeria: A comparative study of selected firms in the Building Industry in Nigeria. Asian Development Policy Review, 7(1), 1-11.
- 29) Paramita, Ratna Wijayanti Daniar, dkk. (2021). Metode Penelitian Kuantitatif. Jawa Timur: Widya Gama Press.
- 30) Primandari, Novegya Ratih, dkk. (2020). Pengaruh Good Corporate Governance dan Leverage Terhadap Kinerja Keuangan Pada PT. Kimia Farma Tbk. Pada Tahun 2013-2018. Jurnal Ekonomika, 13 (2), 2085-0352.
- 31) Rahayuningtyas, R. T., & Hermanto, S. B. (2022). Pengaruh Corporate Governance Mechanism Dan Firm Size Terhadap Kinerja Keuangan. Jurnal Ilmu dan Riset Akuntansi (JIRA), 11(9).
- 32) Republika.co.id. (2020, 1 Mei). Survei BPS: Obat dan Pulsa Meningkat di Masa Pandemi. https://republika.co.id/berita/q9n2bz457/survei-bps-obat-dan-pulsa-meningkat-di-masapandemi. Diakses 29 Maret 2023.
- 33) Ritonga, S. A., Effendi, I., & Prayudi, A. (2021). Pengaruh Struktur Modal Terhadap Kinerja Keuangan Perusahaan Consumer Goods Di Bei. Jurnal Ilmiah Manajemen Dan Bisnis (Jimbi), 2(2), 86-95.
- 34) Riyanto, Bambang. (2001). Dasar-dasar Pembelanjaan Perusahaan. Yogyakarta: BPFE.
- 35) Sasior, Linda Howay. (2022). Pengaruh Profitabilitas, Struktur Modal, Perputaran Modal Kerja Terhadap Nilai Perusahaan (Studi Kasus Perusahaan Manufaktur Sektor Makanan & Minuman Yang Terdaftar di Bursa Efek Indonesia Tahun 20017-2020. Skripsi Sarjana. Universitas Janabadra
- 36) Saifi, Muhammad. (2019). Pengaruh Corporate Governance dan Struktur Kepemilikan Terhadap Kinerja Keuangan Perusahaan. Jurnal Profit, 13(2).
- 37) Sari, Nadila., & Wi, P. (2022). Pengaruh Leverage, Ukuran Perusahaan, Struktur Modal, Dan Profitabilitas Terhadap Kinerja Keuangan Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia (Bei) Periode 2018–2021. Global Accounting, 1(3), 87-95.
- 38) Sartono, A. (2010). Manajemen Keuangan Teori dan Aplikasi. Yogyakarta: BPFE-Yogyakarta.
- 39) Singh, N. P., & Bagga, M. (2019). The effect of capital structure on profitability: An empirical panel data study. Jindal Journal of Business Research, 8(1), 65-77.
- 40) Sofyan, Mohammad. (2019). Rasio Keuangan Untuk Menilai Kinerja Keuangan. Jurnal Akademika, 17(2), 115-121.
- 41) Waryati, S. Y., Susanti, F. E., & Wahyuningrum, S. (2022). The Impact of Firm Value on Capital Structure, Profitability, and Firm Size. Asian Journal of Management, Entrepreneurship and Social Science, 2(02), 96-113.
- 42) Wulandari, B., Sianturi, N. G., Hasibuan, N. T. E., Ginting, I. T. A., & Simanullang, A. (2020). Pengaruh Likuiditas, Manajemen Aset, Perputaran Kas Dan Struktur Modal Terhadap Kinerja Keuangan pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia. Owner: Riset dan Jurnal Akuntansi, 4(1), 176-190.
- 43) Sudana, I Made. (2011). Manajemen Keuangan Perusahaan. Jakarta: Erlangga.
- 44) Sugiyono. (2009). Metode Penelitian Kuantitatif dan Kualitatif. Bandung:Alfabeta
- 45) Sugiyono. (2013). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung:Alfabeta.
- 46) Sugiyono. (2016). Metode Penelitian Manajemen. Bandung:Alfabeta.
- 47) Tambunan, J. T. A., & Prabawani, B. (2018). Pengaruh ukuran perusahaan, leverage dan struktur modal terhadap kinerja keuangan perusahaan (studi pada perusahaan manufaktur sektor aneka industri tahun 2012-2016). Jurnal Ilmu Administrasi Bisnis, 7(2), 130-140.
- 48) Utami, W. B., & Pardanawati, S. L. (2016). Pengaruh likuiditas, solvabilitas, dan manajemen aset terhadap kinerja keuangan pada perusahaan Go Publik yang terdaftar dalam Kompas 100 di Indonesia. Jurnal Akuntansi dan Pajak, 17(01).
- 49) Yuliani, E. (2021). Pengaruh Struktur Modal, Likuiditas dan Pertumbuhan Penjualan Terhadap Kinerja Keuangan. Jurnal Ilmu Manajemen, 10(2), 111-122.