

# The Effect of Profitability, Liquidity and Leverage toward Company Value

( The study on Medical and Pharmacy Sub Sector Company Listed in Indonesia Stocks Exchange 2013-2018)

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**Abstract:** This study aims to find the empirical evidence of the impact of profitability, liquidity and leverage toward the company value which consistently merged on Medical and Pharmacy Sub Sector Company 2013-2018. The population of this study was all companies which merged on Medical and Pharmacy Sub Sector Company during the study period. The data used was secondary data in the form of closing price, equity, total debt, total assets, return on equity, current ratio and debt to assets ratio. The statistic test used to test the hypothesis was data panel regression with comment effect as the approach. The first hypothesis test showed that the profitability affected significantly positive toward the company value. Even though, the liquidity and leverage partially affected positively but it was insignificant toward the company value.

**Keywords:** profitability, liquidity, leverage, company value.

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## I. Introduction

The company's purpose based on financial management perspective is basically to maximize the prosperity of stockholder[1]. The stockholder's prosperity can be seen from the level of the company value itself. The higher of company value is, the bigger prosperity will be received by the stockholder.

Company value is an important thing for the manager or investor[2]. For the manager company value is as the benchmark for the achievement that they got. If the manager is able to improve the company value, so the manager has shown good performance for the company. Beside that, the manager has been able to improve the stockholder prosperity as the company goal. However, for the investor the improvement of company value is as a good perception for the company, if the investor has a good opinion toward the company, so the investor will be interested in investing then it makes the stock cost of company raised.

There are many factors influenced the company value included profitability, liquidity, leverage. The result of this study showed as described in Table 1 below

**Table 1. Research Gap**

Research Gap	Result	Researcher
There is positive profitability effect toward the company value	Significantly positive	Surmadewi (2019)
	Insignificantly positive	Anzlina (2013)
There is positive liquidity effect toward the company value	Significantly positive	Jayaningrat (2017)
	Insignificantly negative	Putri (2016)
There is positive leverage effect toward the company value	Significantly positive	Sutama (2018)
	Insignificantly positive	Putri (2016)

Resource : Abstracted from Various Studies

The first table above showed that there were some factors which affected the company value. Those factors are profitability, liquidity, and leverage. However, the result of that study gave different result.

The second problem of this study was the phenomena gap that showed inconsistency relationship between the study variable. The last data showed the relationship between the study variable that has been tested as follow in the second Table :

**Table 2. The Average of Company Value, Profitability, Liquidity, and Leverage Medical and Pharmacy Sub Sector Company Listed in Indonesia Stocks Exchange 2013-2018**

Variable	Year					
	2013	2014	2015	2016	2017	2018
Company Value	3,03	6,84	2,41	4,05	4,00	3,81
Profitability	0,14	0,14	0,13	0,13	0,12	0,11

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Liquidity	3,07	3,97	3,48	3,41	3,34	2,61
Leverage	0,33	0,31	0,32	0,32	0,34	0,62

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Resource : IDX 2013-2018 has been processed.

Therefore, based on those two different opinions above, in this study the researchers are interested in researching again “The Impact of Profitability, Liquidity and Leverage toward Company Value (The study on Medical and Pharmacy Sub Sector Company Listed in Indonesia Stocks Exchange 2013-2018)”.

## II. Theory Study

### Capital Structure

Capital structure is the proportion between the use of debt and own capital in a company's financial structure [1]. The optimal capital structure will be found by balancing the benefits of debt use, bankruptcy costs and agency costs, this is called Trade off theory [3].

Myers[4], explained that the company will owe to a certain level of debt, where the tax shield from additional debt equals the cost of financial distress. The cost of financial distress is the cost of bankruptcy or reorganization and agency costs that increase due to decreased credibility of a company. Brigham and Houston[5], state that companies exchange tax benefits from debt financing with problems caused by potential bankruptcy.

### Company Value

Company value is the investor's perception toward the company where it is often associated with the stock price of that company. [2], explained that the company value is the investor's perception toward the company success rates which is often associated with stock price. [3], stated that the company value is the price which is willing to be paid by buyer candidate if the company will be sold.

Company value seen as something that is very important because with the high company value, it will be followed with the prosperity level of stockholder. The rate of company value can increase the prosperity of stockholders, so they will invest their capital to that company. The higher of stock price the higher also the company value is.

### Profitability

Brigham and Houston[5] said that profitability is the last result of some policies and decisions of company management. Company profitability is the company ability to produce net income from the activity done on the accounting period. [6], stated that profitability is the company's profit which is related to the certain sales level, assets or investment from the owner.

However, Deitiana[7] explained that profitability is the company ability in order to produce the income. If the condition of the company is profitable or guarantying the profit in the future, so there will be more investors who will invest their funds to buy the company stock and it encourages the stock price increased and getting higher.

### Liquidity

Liquidity ratio is the ratio that shows the ability of a company to fulfill the liabilities toward currency liabilities debt. The company which is able to fulfill their financial liabilities on time means that the company is on the liquidity condition and has currency asset bigger than currency debt. The scale of liquidity variable is ratio scales.

[8], said that liquidity is the company ability to fulfill currency liabilities. The higher ratio level of that company, the higher as well the liquidity position of that company. Liquidity ratio is the ratio that shows the ability of a company to fulfill their currency liabilities debt. It is the same as [9] opinion, liquidity is the company ability to pay the financial currency liabilities on time. The company which is able to fulfill that, it can be said that the company is in liquidity condition and has currency asset bigger than currency debt.

### Leverage

Leverage is often mentioned solvency, it can be interpreted as the use of assets and source of fund by the company which has permanent expense in order to increase the stockholder's profit potential[9]. The company ability to stay in competition with other companies requires the company to increase their profitability. Solvency ratio is the ratio used to measure the proportion from the total assets funded by company creditor [6].

[8], defined solvency or ratio leverage is the ratio to measure how far the company activities funded by the debt. While according to [10], solvency is the ratio that shows how the company is able to manage the debt in order to get the profit and also able to pay off the debt. The other opinion about solvency is showing the ability of the company to fulfill their financial liabilities if that company has been liquidity, in financial currency liabilities or long term liabilities [11].

**The effects of profitability toward company value**

According to [5], profitability is the company ability to get the profit related to sales, total assets or own capital. [10], explained that profitability is the ratio which described the company ability in order to produce the income. The better profitability ratio of the company will describe the company ability in getting the company income.

The study about profitability toward company value has been done by [12]. The result of the study found that the profitability influenced significantly toward the company value. Based on that result the evaluation performance of a company can be seen from that company ability to produce the income. [12] result study supported by [13], [14]and [15] who stated partially that profitability influenced positively significant toward the company value. Based on that explanation, the hypothesis of this study can be formulated as follow :  
H1 : There is positive significant profitability effect toward company value.

**The effects of liquidity toward company value**

Liquidity is the ability of a company in meeting the currency liabilities on time. It is important to be considered because the failure in paying the liabilities can cause the company bankrupt [10].

The study about liquidity effects toward company value has been done by [15] and [16]. In their study found that liquidity influenced company value positively significant which represented in stock price.

H2 : There is positive significant liquidity effect toward company value.

**The effects of leverage toward company value**

The best capital structure is capital structure that optimize the balance between the risk and return, so the stock price is maximum[5]. Leverage is the ratio which shows how the company is able to manage the debt in order to get the profit and also able to pay off the debt.

[3], stated that by having the debt, it can be used to control the free cash flow which is too much by management, therefore it avoids useless investment and it can raise the company value. Modigliani and Miller as cited in [1], concluded that leverage will increase company value because the interest receivable cost is the expense that reduce tax payment.

The study about the effects of leverage toward the company value has been studied by [14] and the result showed that there is positive significant effect toward the capital value. It shows that when there is debt raised, so it will increase the company value significantly. This study supported by [15].

H3 : There is positive significant leverage effect toward company value.

Based on the study theory and previous study, the study method can be seen in this picture below:

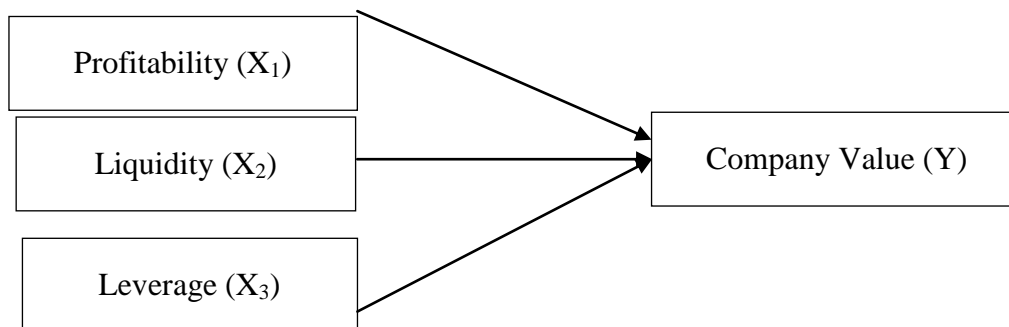


Figure 1: Theoretical Framework Model

**III. Research Method**

This study is included in census study. The population were all the companies which merged consistently in Medical and Pharmacy Sub Sector in eight times period with 48 observations, while the subject or analysis unit in this study was annual basic financial statement in the company chosen as the population.

The variables of this study were company value, profitability, liquidity, and leverage.

**Table 3: Research Variables and Indicators**

Variable	Indicator	Formula
Company value	Tobin'Q	$q = \frac{MVS + D}{TA}$
Profitability	Return on Equity	$ROE = \frac{EAT}{Equity} \times 100\%$

Liquidity	Current Ratio	$CR = \frac{\text{Current Assets}}{\text{Account Payable}} \times 100\%$
Leverage	Debt to Assets Ratio	$DAR = \frac{\text{Total Debt}}{\text{Total Assets}} \times 100\%$

This study used secondary data that has been compiled from www.IDX.co.id, in the form of the summary of company performance, basic financial statement and annual report in 2013-2018.

#### IV. Result

Before doing statistic test, the first step must be done is screening toward the data which is going to be processed. The analysis tool used to test the hypothesis is data panel regression with common effect approach assistance by SPSS program and significant level 5% ( $\alpha = 0,05$ ). The model of data panel regression used is as follows :

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

where :

Y : Company value

$\alpha$  : Constant

$\beta_1 \beta_2 \beta_3$  : Regression coefficient

X1 : Profitability

X2 : Liquidity

X3 : Leverage

$\epsilon$  : error / distraction variable

After screening toward the data by detecting the outlier data, there were 11 observations stated as outlier and taken out from the next counting. It makes the data changed until 37 observations and double logarithm natural transformation done in order to get the result estimation as follows:

$LN\_Y = 3,231 + 5,057 LN\_X_1 + 0,027 LN\_X_2 + 0,128 LN\_X_3$ . The output result of SPSS 23 version will be shown in the Table 3 below.

#### Normality Test, Classic Assumption Test and Model Test

The result of normality and classic assumption test showed that the estimation model result of data panel regression indicates there is no indication of violent assumption normality (Table 5), classic assumption (Table 6,7, and 8) and model stated fit (Table 4). It is because they are able to explain 71,80 % variable company value from the average, while the rest is 28,20 % caused by other variable which is not included in this regression model.

#### Individual Parameter Significant Test

The result of individual parameter significant test toward profitability, liquidity, and leverage variable partially or individually showed that only profitability variable stated significant and the first hypothesis accepted.

**Table 4:** The estimation result of Data Panel Regression

Dependent Variable: LN\_Y

Variable	Coefficient	Std.Error	t-Statistic	Sig
C	3,231	0,423	7,629	0,000
LN_X <sub>1</sub>	5,057	0,644	7,847	0,000
LN_X <sub>2</sub>	0,027	0,173	0,157	0,876
LN_X <sub>3</sub>	0,128	0,139	0,363	0,363
R-squared		0,718	F-statistic	28,009
Adjusted R-squared		0,692	Sig	0,000

Resource : Secondary Data has been processed, 2020

**Table 5:** The result of Normality Test with Skewness and Kurtosis

Variable	N	Z_Skewness	Z_Kurtosis	Z_Kritis	Conclusion
Unstandardized Residual	37	0,737	-1,142	±1,96	Normal

Resource : Secondary Data has been processed, 2020

**Table 6:** The test result of Multikolonieritas

Variable	Tolerance	VIF
LN_X <sub>1</sub>	0,683	1,463
LN_X <sub>2</sub>	0,565	1,770

LN_X <sub>3</sub>	0,654	1,529
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Resource : Secondary Data has been processed, 2020

**Table 7:** The test result of Autokorelasi with Durbin-Watson

Durbin-Watson	DU	4 - DU	Information
1,869	1,654	2,346	No autokorelasi

Resource : Secondary Data has been processed, 2020

**Table 8:** The test result of Heteroskedastisitas with Glejser Test

Dependent variable : Abs\_Res

Variable	Coefficient	Std.Error	t-Statistic	Sig
C	0,134	0,221	0,608	0,547
LN_X <sub>1</sub>	-0,237	0,336	-0,705	0,486
LN_X <sub>2</sub>	-0,049	0,090	-0,539	0,593
LN_X <sub>3</sub>	-0,070	0,072	-0,970	0,339

Resource : Secondary Data has been processed, 2020

## V. Discussion

### The Effect of Profitability toward Company Value

The first hypothesis test showed that the profitability has positive and significant effect toward the company value. If the profitability is getting higher the company value is also increasing. This study result supported [10], statement the better of profitability ratio will describe the income level ability of that company. It is approved that the main purpose of a company is increasing the company value on Medical and Pharmacy Industry Sector during the study period.

The company value will guarantee the company continuously if the company is able to increase the financial performance. If the financial performance has high return on equity so the stock price will be increased. High return on equity is a good signal for the investors so the company value increased. This study result indicated that the higher profitability, the higher also the company value on Medical and Pharmacy Industry Sector during the study period 2013-2018.

The study result showed that there is positive and significant profitability effect toward company value which is almost the same as the study done by [12], [13], [14] and [15]. On the other hand, it is different result with the study done by [16], who stated that profitability influenced negatively and not significant toward the company value.

### The Effect of Liquidity toward Company Value

The second hypothesis test showed that the liquidity has positive effect toward company value. This study result indicated that the higher liquidity is, the higher also company value. However, statistically the increasing liquidity caused the company value raised and it was not significant.

This study result showed that current assets whose company has, it is enough to present that company ability to fulfill the account payable to the creditor. In fact, the bigger balance of current assets and account payable, the lower company value is. Liquidity ratio which described the financial performance of a company from liabilities side, yet not influenced the society opinion especially the investor in giving the trust to the company to invest their fund. The company has not had good ability yet to fulfill the currency liabilities by using current assets so the company has not been said liquidity, finally the investors are worried in investing their fund, if later something wrong happens.

This result study showed that liquidity variable influenced negatively insignificant toward company value on Medical and Pharmacy Industry Sector listed in Indonesia Stock Exchange 2013-2018, it is in line with the study done by [12] and [13]. On the other hand, it is different with the study done by [16] and [15] who stated that liquidity variable influenced positively significant toward company value.

### The Effect of Leverage toward Company Value

The third hypothesis test showed that leverage has positive effect toward company value. This result indicates that the higher debt to assets ratio, the higher company value is. However, statistically debt to assets ratio raised cause the company value raised which is not significant. This study result supported the study done by [12] who stated that leverage variable has insignificant effect toward company value.

This study result is not suitable with Trade off Theory in [4], stated that the manager will try to increase the level of debt until a certain point where the protection value of interest tax is really balanced with additional expense. It means the leverage will increase the company value only until an optimal point. The leverage used by the companies on Medical and Pharmacy Sub Sector is as the resource fund for the company

which has reached above the optimal point. Therefore, the leverage increasing not caused the company value raised.

This study result is totally different with Modigliani and Miller in [1], stated that leverage will increase company value because the interest expense debt is the expense which decreased the tax expense. This study result is not the same with [17] opinion, who stated that the manager must be able to take the decision of fund by considering the composition debt and own capital which will be used by the company. By having the optimal composition from leverage and own capital, it will influence the company value.

This study result is also the same as the previous study done by [16], [18], [15], [14] and [13] who stated that leverage variable has positive significant effect toward company value.

## VI. Conclusion And Suggestions

Based on the previous study that has explained, it can be concluded that firstly profitability influenced positively and significant toward company value, secondly liquidity influenced positive and insignificant toward company value and the third leverage also influenced positively and insignificant toward company value.

The suggestions for the next study, first the study used comment effect model, it is suggested to use model test so it gets the best model whether effect model or random effect. Second, this study used Tobin<sup>Q</sup> ratio, return on equity, current ratio and debt to assets ratio, it is suggested for the next study to develop other indicators for example return on assets, cash ratio and debt to equity ratio.

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