



# The Effect of Working Capital Management Efficiency on Profitability of Pharmaceutical Companies on the Indonesia Stock Exchange

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## ABSTRACT

This study aims to identify and analyze the influence of working capital management efficiency (Inventory Conversion Period, Receivable Collection Period, Payables Defferal Period, Cash Conversion period, Firm Size, and Company status) together and partially to Profitability On Pharmaceutical Companies Listed In Indonesia Stock Exchange. The data analysis technique used is multiple linear analysis with pooled least square method. The population in this study were 8 Pharmaceutical Companies year 2010-2014 there are Companies BUMN and BUMS. samples were taken based on certain criteria. based on these criteria the number of samples of this study of eight Pharmaceutical Companies. the results of this study indicate that together working capital management efficiency that consist of Inventory Conversion Period, Receivable Collection Period, Payables Defferal Period, Cash Conversion period, Firm Size, and Company status significantly influence to Profitability. However, partial, Inventory Conversion Period, dan Receivable Collection Period not significant positive effect on Gross Profit Margin. Payables Defferal Period, dan Cash Conversion period not significant negative effect on Gross Profit Margin, Firm Size, significant negative effect on Gross Profit Margin, and company status significant positive effect on Gross Profit Margin.

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## 1. INTRODUCTION

The existence of economic globalization in realizing free world trade gave birth to an era of competition in various industrial fields. This economic globalization will soon create a new environment and new business opportunities in various industrial fields. One of the fastest growing industrial companies in Indonesia is the pharmaceutical industry and Indonesia is the largest pharmaceutical in the ASEAN region (Dorocki, 2014). The pharmaceutical industry became an important industry for the development of the nation's economy (Scherer, 1993). Based on the Regulation of the Minister of Health no. 1799 / Menkes / Per / XII / 2010 on the Pharmaceutical Industry is a business entity that has permission from the Minister of Health to carry out drug manufacturing activities or drug ingredients. The pharmaceutical industry must make the drug in such a way as to be in accordance with the purpose of its use, meet the requirements stated in the registration permit document and do not pose a risk that

endangers its users because it is unsafe, low quality or ineffective. Pharmaceutical Companies can be divided into two categories, namely state-owned enterprises and BUMS (Nolan & Xiaoqiang, 1999) (O'Donnell, 2002). According to Sharabati et al. (2010) the pharmaceutical industry is an industry that intensively conducts research, an innovative industry and balanced in the use of human resources and technology. Product renewal and innovation are essential to the survival of pharmaceutical companies (Roberts, 1999). The main purpose of the establishment of a company in general is to generate the profitability or profit of the company (Gambardella & McGahan, 2010). The company's ability to obtain this profit is very important to note the company in order to continue to survive and grow and develop in carrying out its business. The profit achieved can be maximized through increasing sales of the company's products and minimizing the operating costs of pharmaceutical companies as one part of the manufacturing industry is certainly very concerned about the profitability of its business. The company wants to always be efficient in managing its business so that the profitability of the company can be maximized (Uremadu et al., 2012). According to data from the Ministry of Finance in 2013, national drug sales have always experienced a growth of 12%-13% every year where currently the pharmaceutical market in Indonesia is worth about USD 6.24 billion and as much as 75% of the market share is controlled by national companies (www.ipmg-online.com). Until now, the measurement of profitability in companies still many use Gross Profit Margin. This ratio is used to measure the ability of a company's management to earn overall profits. Werner (2013) stated that gross profit margin (GPM) derived from the company's operating gross profit is divided by sales (Bošković & Dimitrijević, 2015). The use of Gross Profit Margin is based on the consideration that this ratio reflects the profit of the company's operating activities without being affected by funding activities (Martani & Khairurizka, 2009). This is a measure of the efficiency of the company's operations and also an indication of product pricing (Srairi, 2010).

Tabel 1. Gross Profit

No	Company Name	Gross profit		
		BUMN		
		2012	2013	2014
1	PT. Indofarma Tbk.	367.895.645	337.567.310	312.426.176
2	PT. Kimia Farma (Persero) Tbk.	1.175.166.970	1.292.152.041	1.385.482.060
<b>BUMS</b>				
3	PT. Darya-Varia Laboratoria Tbk.	651.109.890	660.656.077	585.219.682
4	PT. Kalbe Farma Tbk.	6.533.433.806	7.679.113.456	8.475.795.157
5	PT. Merck Tbk.	424.442.298	447.462.017	458.455.147

Source: Financial Report (Data Processed)

Based on the table presented, it shows that the gross profit of pharmaceutical companies every year for three years for two state-owned companies and three state-owned enterprises has fluctuated development (Cheng & Lei, 2015) (Warmerdam & van Dijk, 2013). Working capital is the amount of funds invested in the current assets of each company to finance its daily operations. Brigham and Houston (2009: 489) state that working capital is a company's investment in short-term assets, such as cash, marketable securities, accounts receivable and inventories (Donkor, 2014). Table 2 presents the current assets of five pharmaceutical companies from 2012 to 2014 as follows:

Tabel 2. Current Assets from Five Pharmaceutical Companies from 2012 to 2014

No	Company Name	Current Assets		
		BUMN		
		2012	2013	2014
1	PT. Indofarma Tbk.	777.629.145	848.840.281	782.887.635
2	PT. Kimia Farma (Persero) Tbk.	1.506.614.456	1.810.614.614	2.040.430.857



**Tabel 4.** Business Receivables to Pharmaceutical Companies From 2012 to 2014

No	Company Name	Business Receivables		
		BUMN		
		2012	2013	2014
1	PT. Indofarma Tbk.	247.767.441	304.641.011	196.478.417
2	PT. Kimia Farma (Persero) Tbk	458.728.515	546.576.423	514.930.239
		BUMS		
3	. PT. Darya-Varia Laboratoria Tbk.	390.002.690	377.104.867	351.272.822
4	PT. Kalbe Farma Tbk.	1.805.234.960	2.145.218.904	2.346.943.652
5	PT. Merck Tbk.	67.305.122	136.435.794	143.402.727

Source: Financial Statements (Processed Data)

From the data presented it is seen that from five pharmaceutical companies in Table 4 experienced an increase in business receivables every year, except PT. Indofarma Tbk experienced a decline in 2014. Table 1.5 presents the business debt of pharmaceutical companies from 2012 to 2014 as follows:

**Tabel 5.** Pharmaceutical Company Business Debt 2012 to 2014

No	Nama Perusahaan	Business Debt		
		BUMN		
		2012	2013	2014
1	PT. Indofarma Tbk.	247.767.441	304.641.011	334.684.118
2	PT. Kimia Farma (Persero) Tbk.	341.133.037	477.891.750	505.218.537
		BUMS		
3	PT. Darya-Varia Laboratoria Tbk.	34.553.333	52.196.861	37.154.607
4	PT. Kalbe Farma Tbk.	808.864.740	1.151.654.579	1.133.092.818
5	PT. Merck Tbk.	62.401.118	73.930.946	64.086.809

From the data presented it is seen that the business debt of five pharmaceutical companies in Table 5 increases every year, except in BUMS companies for PT. Darya-Varia Laboratoria Tbk, PT. Merck Tbk, which suffered a decline in 2014. Table 6 presents the total assets of pharmaceutical companies from 2012 to 2014.

**Tabel 6.** Total Assets of Pharmaceutical Companies From 2012 to 2014

No	Company Name	Business Debt		
		BUMN		
		2012	2013	2014
1	PT. Indofarma Tbk.	1.188.618.790	1.294.510.669	1.248.343.275
2	PT. Kimia Farma (Persero) Tbk.	2.076.347.580	2.471.939.548	2.968.184.626
		BUM S		
3	PT. Darya-Varia Laboratoria Tbk.	1.074.691.476	1.190.054.288	1.236.247.525
4	PT. Kalbe Farma Tbk.	9.417.957.180	11.315.061.275	12.425.032.367
5	PT. Merck Tbk.	569.430.951	696.946.318	716.599.526

From the data presented it is seen that the total assets of the five pharmaceutical companies in Table 6 have increased every year, in state-owned enterprises and BUMS companies.

## 2. RESEARCH METHOD

The type of research conducted is causal associative research. Causal associative research according to (Kraak & Story, 2015) is "research that aims to analyze the relationship between one variable to another or how one variable affects another variable" (Riggle et al., 2009). In other words, causal design is useful for measuring relationships between research variables or useful for analyzing how one variable is another. The study was conducted at pharmaceutical companies listed on the Indonesia Stock Exchange, through internet media with data taken from [www.sahamok.com](http://www.sahamok.com) and [www.idx.co.id](http://www.idx.co.id) websites and the time the study was conducted in August 2016. The operational limitations in this study are as follows:

The variables used consist of two parts, namely: Independent variables, which consist of Inventory conversion period ( $X_1$ ), Receivables collection period ( $X_2$ ), Payables deferral period ( $X_3$ ), and Cash Conversion Cycle ( $X_4$ ), Firm Size ( $X_5$ ) and Company Status ( $X_6$ ).

The data used in this study was obtained from: Financial Statements of Pharmaceutical Companies on the Indonesia Stock Exchange (IDX) in 2010-2014. IDX data obtained from [www.idx.co.id](http://www.idx.co.id).

Inventory conversion period is the average period of time required to convert raw materials into finished goods and sell them. So the inventory conversion period can be measured by dividing inventory with sales then multiplied by 365.

$$\text{Inventory Conversion Period} = \frac{\text{Inventory}}{\text{Sales}/365}$$

Receivables collection period is the average period of time required to convert a company's receivables into cash, in other words the period from sale to realization of collection. So the collection period of receivables can be measured by dividing business receivables by sales then multiplied by 365.

$$\text{Receivables Collection Period} = \frac{\text{Receivables}}{\text{Sales}/365}$$

Payables deferral period is the average period of time from the purchase of raw materials and the use of workers until the payment of these materials and workers. So the debt repayment period can be measured by dividing current debt by the cost of goods sold multiplied by 365.

$$\text{Payables Deferral Period} = \frac{\text{Payables}}{\text{cost of goods sold}/365}$$

Cash Conversion Cycle is the length of time between the expenditure of cash for production resources (materials and workers) to the receipt of cash from the sale of products, in other words the length of time between the payment for employee wages and the purchase of materials with the collection of business receivables.

$$\text{Cash Conversion Cycle} = \text{Inventory Reivables Payables conversion} + \text{collection} - \text{deferral period period period}$$

Firm Size measures the size of the company as measured by the company's total assets. The size of the company in the natural logarithm to equate with other variables.  $\text{Size} = \ln(\text{total asset})$ .

The Company's status is to use dummy variables consisting of two categories of pharmaceutical companies used in the study.

Gross profit margin measures the percentage of gross profit that can be generated from each sale.

$$\text{Gross Profit Margin} = \frac{\text{Gross Profits}}{\text{sales}} \times 100\%$$

Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics set by researchers to be studied and then concluded (Pandey & Pandey, 2015).

According to (Levy & Lemeshow, 2013), "a sample is the part of the population used to estimate population characteristics". Sampling methods are done by purposive sampling technique. According

to (Daniel, 2011), purposive sampling is a sampling technique based on a criterion set against the target element tailored to the purpose and problem of the research. The criteria in sampling in this study are as follows: pharmaceutical companies listed on the Indonesia Stock Exchange in 2010-2014, financial statements for the period 2010-2014 on these companies have been audited by independent auditors.

### 2.1. Data analysis technique

Based on the criteria stated above, all pharmaceutical companies listed on the Indonesia Stock Exchange meet all three research criteria.

**Tabel 7.** Research Criteria

No	Characteristics of the Company	Sum Company Pharmacy	Era Report	Sum Sample (n)
1	Pharmaceutical Companies that have financial statements on the Indonesia Stock Exchange	8	5	40
2	Pharmaceutical Companies that do not have financial statements on the Indonesia Stock Exchange	-	-	-
	Sum	8	5	40

Information:

n = number of insurance financial statements for the period 2010 – 2014, so n = 40

The data used in this study is quantitative secondary data. The data source used is one that has been published by another party. The data source used is the financial statements of pharmaceutical companies listed on the Indonesia Stock Exchange.

In this study, data collection was done through documentation studies by collecting supporting data from journals, literature, and reference books to get an overview of the problems studied and collect secondary data in the form of financial statements of pharmaceutical industry companies published and listed on the Indonesia Stock Exchange in accordance with the observation period.

The data analysis technique used in this study is to use eviews using descriptive tools, statistical tools and home linear regression consisting of dependent variables (Y) and four independent variables ( $X_1, X_2, X_3, X_4, X_5, X_6$ ).

Data panel is a data set consisting of a number of cross-sectional data from a certain time span (time series). To estimate model parameters with panel data, there are several approaches offered, namely: Common Effect Model, This method is done by combining/combining time series and cross section data with OLS methods. Fixed Effect Model or Pooled Least Square This approach assumes that the presence of variables that are not all included in the model equation allows for non-constant interception. Random Effect Model If on the fixed effect model the difference between individuals or waktu is reflected through interception, then in this model the difference is accommodated through error.

The steps for the selection of panel data models are as follows:

- a. Estimate with Fixed Effect Model.
- b. Uji Chow (Pooled Least Square atau Fixed Effect Model)

With the testing criteria:

Ho = Pooled Least Square

H1 = Fixed Effect Model

Reject Ho if the p-value < the significance value (0.05); H1 is accepted.

- c. Estimates with Random Effect Model
- d. Hausman Test (Random Effect Model or Fixed Effect model)

With testing criteria:

Ho = Random Effect Model

H<sub>1</sub> = Fixed Effect Model

Reject Ho if the p-value < the significance value (0.05); H<sub>1</sub> received (Maria, 2015)

The Multiple Linear Regression Method is used to determine the causative factors of changes in bound variables that have more than one free variable. The benefits of this multiple linear regression analysis include: (1) to find out the magnitude of the influence of each free variable covered in the equation to the bound variable. (2) to predict the value of variables bound in the future. In this regression model with dummy variables the number of dummy variables used is as much as a category minus one.

### 3. RESULTS AND DISCUSSIONS

Descriptive statistical analysis is used to determine the description of a data viewed from the maximum value, minimum value, mean value, and standard deviation value. In this study, the variable used in descriptive statistical calculations is GPM (Gross Profit Margin) is the percentage of gross profit that can be generated from sales. ICP (inventory conversion period) is the average period of time required to convert raw materials into finished goods and sell them. RCP (Receivables Collection Period) is the average period of time required to convert a company's receivables into cash, in other words the period from sale to realization of collection. PDP (Payables Defferal Period) is the average period of time from the purchase of raw materials and the use of workers until the payment of these materials and workers. CCC (Cash Conversion Cycle) is the length of time between payment for employee wages and purchase of materials with collection of business receivables. And FIRM SIZE is the level of identification of the size or small of a company. Based on descriptive statistical analysis obtained the following sample picture:

**Table 8.** Descriptive Statistics GPM, ICP, RCP, PDP, CCC, FIRM SIZE for state-owned enterprises

	GPM %	ICP Day	RCP Day	PDP Day	CCC Day	FM
Mean	29.30600	54.00800	50.41000	84.26500	20.14900	21.15000
Median	30.10500	54.63500	44.58500	85.00500	32.53000	21.10500
Maximum	32.92000	64.52000	75.46000	131.0600	48.03000	21.81000
Minimum	22.62000	44.33000	40.27000	42.46000	-25.92000	20.41000

Table 8 shows that descriptive statistical output of research variables from 2010 to 2014 using the Eviews program. From the table can be explained descriptive statistics of dependent and independent variables for state-owned enterprises as follows: (a). GPM variable (Gross Profit Margin) has a maximum value of 32.92 owned by PT. Indofarma Tbk. in 2011. Minimum value of 22.62 owned by PT. Indofarma Tbk. in 2014, and the average of GPM was 29.31 with 10 observations. (b) The variable ICP (inventory Conversion Period) has a maximum value of 4.52 owned by pt. Indofarma Tbk. in 2013. Minimum value of 44.33 owned by PT. Kimia Farma (Persero) Tbk. 2010, and the average value of ICP is 54.01 with the number of observations as many as 10. With an average score of 54.01, this shows that most of the pharmaceutical companies that sampled this study had positive ICP. (c) Rcp variable (Receivables Collection Period) has a maximum value of 75.46 owned by pt. Indofarma Tbk. in 2012. Minimum value of 40.27 owned by PT. Kimia Farma (Persero) Tbk. in 2011, and the average value of RCP amounted to 50.41 with the number of observations as many as 10. With an average score of 50.41, this shows that most of the pharmaceutical companies that sampled this study had positive RCPs. (d) The PDP variable (Payables Defferal Period) has a maximum value of 131.06 owned by pt. Indofarma Tbk. in 2011. Minimum value of 42.46 owned by PT. Kimia Farma (Persero) Tbk. in 2011, and the average value of PDP amounted to 84.27 with the amount. Observations of 10. With an average score of 84.27, this shows that most of the pharmaceutical companies that sampled this study had a positive PDP. (e). Variable CCC (Cash Conversion Cycle) has a maximum value of 48.03 owned by pt. Kimia Farma (Persero) Tbk. 2012. Minimum value of -25.92 owned by PT Indofarma Tbk 2011, and average value of

CCC of 20.15 with the number of observations as many as 10. With an average score of 20.15, this shows that most of the pharmaceutical companies that sampled this study had a positive CCC. (f). The Firm Size variable has a maximum value of 21.81 owned by pt. Kimia Farma (Persero) Tbk. in 2014. Minimum value of 20.41 owned by PT Indofarma Tbk. 2010, and average value of Firm Size of 21.15 with the number of observations as many as 10. With an average score of 21.15, this shows that most of the pharmaceutical companies that sampled this study had a positive Firm Size.

**Tabel 9.** Descriptive Statistics GPM, ICP, RCP, PDP, CCC, FIRM SIZE for BUMS companies

	GPM %	ICP Hari	RCP Hari	PDP Hari	CCC Hari	FM
Mean	54.16867	55.37100	66.30100	44.25833	77.41300	20.78600
Median	55.54000	53.12000	57.75500	44.87500	71.34000	20.47500
Maximum	67.74000	112.9400	130.9100	86.75000	165.0800	23.24000
Minimum	36.90000	27.46000	26.42000	0.710000	25.16000	18.43000

Source: Eviews Processed Results, 2012

Table 9 shows that descriptive statistical output of research variables from 2010 to 2014 using the Eviews program. From the table can be explained descriptive statistics of dependent and independent variables for BUMS companies as follows: (a). GPM variable (Gross Profit Margin) has a maximum value of 67.74 owned by PT. Pyridam Farma Tbk. in 2013. Minimum value of 36.90 owned by PT. Tempo Scan Pacific Tbk. in 2010, and the average of GPM is 54.17 with an average of 30 observations. With an average score of 54.17 this shows that most pharmaceutical companies that sampled this study have a positive GPM. (b) Variable ICP (inventory Conversion Period) has a maximum value of 112.94 owned by pt. Merck Tbk. in 2013. Minimum value of 27.46 owned by PT. Taisho Pharmaceutical Indonesia Tbk. 2010, and the average value of ICP is 55.37 with 30 observations. With an average score of 55.37, this shows that most of the pharmaceutical companies that sampled this study had positive ICP.

### 3.1. Panel Data Model Selection

To estimate model parameters using panel data, several techniques are offered, namely: Common Effect Model or Pooled Least Square (PLS), Fixed Effect Method, and Random Effect Method. The following is an application of model selection. (a). Determination of the Estimated Model between the Common Effect Model (CEM) and the Fixed Effect Model (FE M) with the Chow Test. (b). To determine whether the estimation model is CEM or FEM in forming a regression model, the Chow test is used. The following hypotheses were tested.

$H_0$ : CEM model is better than FEM model

$H_1$ : FEM model is better than CEM model

The rules of decision-making against hypotheses are as follows. If the probability value of cross section  $F < 0.05$ , then  $H_0$  is rejected and  $H_1$  is accepted. If the probability value of cross section  $F$  is 0.05, it is accepted and rejected. Here are the results based on the Chow test using Eviews 7.

Based on the results of the Chow Test on Table 8, the known probability value is 0.0000. Since the probability value  $< 0.05$ , the estimation model used is FEM.

**Tabel 9.** Results from the Chow Test

Redundant Fixed Effects Tests			
Pool: JUMA			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	55.239659	(7,27)	0.0000
Cross-section Chi-square	109.170004	7	0.0000

Based on the results of the Chow Test on Table 9, the known probability value is 0.0000. Since the probability value  $< 0.05$ , the estimation model used is FEM.

To determine whether the FEMatau REMd in estimation model forms a regression model, the Hausman test is used. Rem model is better than FEM model. The FEM model is better than the REM model. If the random cross section probability value  $< 0.05$ , it will be rejected and accepted. If the random cross section probability value is  $0.05$ , it is accepted and rejected. Here are the results based on the Hausman Test using Eviews 7:

**Tabel 10.** Results from the Hausman Test.

Correlated Random Effects - Hausman Test			
Pool: JUMA			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.107132	5	<b>0.5341</b>

Based on the results of the hausman test in table 10, the known probability value is  $0.5341$ . Since the probability value  $< 0.05$ , the estimation model used is the REM model.

Multiple regression analysis of panel data models is used to determine the influence between independent variables and dependent variables, through the influence of Inventory Conversion Period, Receivables Collection Period, Payables Defferal Period, and Cash Conversion Cycle, on Profitability (ROA and GPM) on pharmaceutical companies on the Indonesia Stock Exchange. Multiple regression tests of panel data models were conducted to look for relationships between independent variables and dependent variables, through the influence of Inventory Conversion Period ( $X_1$ ), Receivables Collection Period ( $X_2$ ), Payables Defferal Period ( $X_3$ ), and Cash Conversion Cycle ( $X_4$ ) products, on Profitability ( $Y$ ) on pharmaceutical companies on the Indonesia Stock Exchange.

**Tabel 11.** Multiple Regression Testing Panel data model

Dependent Variable: GPM?  
Method: Pooled EGLS (Cross-section random effects)  
Date: 10/13/16 Time: 14:30  
Sample: 2010 2014  
Included observations: 5  
Cross-sections included: 8  
Total pool (balanced) observations: 40  
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ICP?	17.36647	68.30717	0.254241	0.8009
RCP?	17.56068	68.32055	0.257034	0.7987
PDP?	-17.35509	68.31381	-0.254050	0.8010
CCC?	-17.46030	68.31606	-0.255581	0.7999
SIZE?	-4.661723	1.461116	-3.190522	0.0031
SP?	25.96587	5.599564	4.637123	0.0001
C	118.9738	30.29057	3.927752	0.0004
Random Effects (Cross)				
_1--C	-6.131048			
_2--C	6.131048			
_3--C	0.798439			
_4--C	7.084510			
_5--C	-0.043356			
_6--C	5.291539			
_7--C	-4.709891			
_8--C	-8.421242			

Effects Specification			
		S.D.	Rho
Cross-section random		6.354443	0.8737
Idiosyncratic random		2.416256	0.1263
Weighted Statistics			
R-squared	0.574407	Mean dependent var	8.039072
Adjusted R-squared	<b>0.497027</b>	S.D. dependent var	3.465421
S.E. of regression	2.457698	Sum squared resid	199.3292
F-statistic	7.423147	Durbin-Watson stat	1.665420
Prob(F-statistic)	<b>0.000044</b>		
Unweighted Statistics			
R-squared	0.797849	Mean dependent var	47.95300
Sum squared resid	1470.608	Durbin-Watson stat	0.225734

Source: eviews, 2016

Based on the management of the data in Table 11 in the Coefficients column, the regression equation model is obtained as follows:

$$GPM = \alpha + b_1X_1 - b_2X_2 + b_3X_3 + b_4X_4 - b_5X_5 - b_6X_6 + \varepsilon$$

Thus, the multiple regression equation is as follows:

$$GPM = 118.974 + 17.3661ICP + 17.561RCP - 17.355PDP - 17.460CCC - 4.662SIZE + 25.965SP$$

Based on the multiple regression equation, the following is the interpretation of the regression equation model above:

- The constant value of 118.974 means that even though the independent variable is 0, Gross Profit Margin (GPM) remains at 118.974.
- The ICP coefficient ( $X_1$ ) is positive, amounting to 17,366, meaning that with a 95% confidence level it can be assumed that for every 1 point increase in ICP, if the variable is considered constant, it will reduce GPM by 17,366.
- The RCP coefficient ( $X_2$ ) is positive, which is 17,561, meaning that with a 95% confidence level, it can be assumed that for each additional RCP of 1 point, if other variables are held constant, the GPM will decrease by 17,561.
- The PDP coefficient ( $X_3$ ) is negative, i.e. -17,355, meaning that with a 95% confidence level, it can be assumed that each additional PDP is 1 point, if other variables are held constant, it will increase GPM by -17,355.
- The CCC coefficient ( $X_4$ ) is negative, which is -17.460, meaning that with a 95% confidence level it can be assumed that each additional CCC of 1 point, if other variables are held constant, it will increase GPM by -17.460.
- The SIZE coefficient ( $X_5$ ) is negative, which is -4.662, meaning that with a 95% confidence level it can be assumed that each additional CCC of 1 point, if other variables are held constant, it will increase GPM by -4.662.
- The coefficient of SP ( $X_6$ ) is negative, which is 25,965, meaning that with a 95% confidence level, it can be assumed that each additional SP is 1 point, if other variables are held constant, it will increase GPM by 25,965.

### 3.2. Effect of Inventory Conversion Period on Profitability.

Based on the research results, the coefficient of the Inventory Conversion Period of the Inventory Conversion Period to the Gross Profit margin is 17,36647 with a significance level of 0.8009 which is greater than 0.05. This means that the Inventory Conversion Period has no significant positive effect on the Gross Profit margin of Pharmaceutical Companies on the Indonesia Stock Exchange. This result is not in accordance with Sial & Chaudhry (2012), and Edwin (2013), who found a significant negative effect on profitability. This means that the fewer the number of days in this period, the

company's profitability will increase. This effort shows that the company is trying to reduce the costs that must be borne by the company on inventory, but by keeping it from running out of inventory which can result in customer demand cannot be fulfilled.

### **3.3. Effect of Receivables Collection Period on Profitability.**

Based on the research results, the coefficient of the Receivables Collection Period Gross Profit margin is 17.56068 with a significance level of 0.7987 which is greater than 0.05. This means that the Receivables Collection Period has no significant positive effect on the Gross Profit margin of Pharmaceutical Companies on the Indonesia Stock Exchange. The state of the high Receivables Collection Period indicates that the more efficient and effective the company is in managing receivables, this means that the company's profitability can be maintained. Accounts receivable turnover rate can describe the level of effectiveness of a company. The faster the receivables turnover rate, the more effective the working capital invested in receivables will be. The turnover period or the period of binding capital in receivables is dependent on the terms of payment. The softer or longer the terms of payment, the longer the capital is tied to receivables, which means that the turnover rate during a certain period is lower. This result is not in accordance with Edwin (2013), finding a significant negative effect on profitability.

### **3.4. Effect of Payables Defferal Period on Profitability.**

Based on the research results, the coefficient of Payables Defferal Period on Gross Profit margin is -17.35509 with a significance level of 0.8010 which is greater than 0.05. This means that the Payables Defferal Period has an insignificant negative effect on the Gross Profit margin of Pharmaceutical Companies on the Indonesia Stock Exchange. The results of this study indicate that the Payables Defferal Period variable has an insignificant negative effect on the company's profitability. This means that the company's debt policy does not affect the company's profitability. This is not in accordance with the theory of Brigham and Houston (2006:136) that delaying payments will not reduce cash that should be used to pay debts and the cash can be used to increase the company's business capacity which is expected to increase sales and generate higher profits. increase. This study is not in accordance with Quayyum (2012), and found a significant positive effect on profitability while Sial & Chaudhry (2012) found a significant negative effect on profitability. However, companies must pay attention to the various possibilities that arise in the use of current liabilities, this is related to the risk of using short-term debt.

### **3.5. Effect of Cash Conversion Cycle on Profitability.**

Based on the results of the study, the magnitude of the coefficient of Cash Conversion Cycle on Gross Profit margin is -17.46030 with a significance level of 0.7999 which is greater than 0.05. This means that the Cash Conversion Cycle has an insignificant negative effect on the Gross Profit margin of Pharmaceutical Companies on the Indonesia Stock Exchange. From this it can be concluded that the condition of the economic cycle is not a factor that strengthens or weakens the cash conversion cycle of the company's profit. This study is not in accordance with Tariq et al. (2013) found a significant positive effect while Samiloglu & Demirgunes (2008) did not find a significant effect. Sial & Chaudhry (2012), Edwin (2013), found a significant negative effect on profitability.

### **3.6. Effect of Size on Profitability.**

Based on the results of the study, the size coefficient on the Gross Profit margin is -4.661723 with a significance level of 0.0031 which is smaller than 0.05. This means that Size has a significant negative effect on the Gross Profit margin of Pharmaceutical Companies on the Indonesia Stock Exchange. From the data, it can be seen that the size of manufacturing companies tends to increase. This is followed by the GPM variable which also tends to increase from year to year. According to Kumar, Rajan and Zingales in Hadri Kusuma, the theory is based on critical resources, which states that the larger the assets owned by the company, the bigger the company, so the higher the profitability. The hypothesis states that size changes have a significant positive effect on GPM, accepted. The results of this study are in accordance with Hastuti (2010), finding a significant positive effect on profitability.

### 3.7. The Influence of Company Status on Profitability.

Based on the results of the study, the magnitude of the coefficient of Company Status on the Gross Profit margin was 25.96587 with a significance level of 0.0001 which is smaller than 0.05. This means that company status has a significant positive effect on the Gross Profit margin of Pharmaceutical Companies on the Indonesia Stock Exchange. So it can be concluded that the hypothesis can be accepted. This means that the status of the company affects the level of profitability obtained by the company.

## 4. CONCLUSION

From the results of the research that has been described about the influence of macroeconomic factors (BI rate, inflation, Gross Domestic Product (GDP), exchange rates) and internal factors (profit sharing and return on investment) on the growth of third party funds, it can be concluded that: (a) ). Simultaneously, Inventory Conversion Period, Receivables Collection Period, Payables Defferal Period, Cash Conversion Cycle, Size, and company status have a significant effect on Gross Profit margin. (b). Partially Inventory Conversion Period has a positive and insignificant effect on Gross Profit margin, Receivables Collection Period has a positive and insignificant effect on Gross Profit margin, Payables Defferal Period has an insignificant negative effect on Gross Profit margin, Cash Conversion Cycle has an insignificant negative effect on Gross Profit margin, While Size has a significant negative effect on Gross Profit margin, Company Status has a significant positive effect on Gross Profit margin.

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