



# The Role of Product Development Costs in Moderate Managerial Ownership Seen From The Indicators of Return on Asset, Cash Ratio, and Total Asset Turnover

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**Abstract.** This research aims to determine the effect of Return on Assets, Cash Ratio, Total Assets Turnover to Managerial Ownership with Product Development Costs as a Moderating Variable. This research uses the Pharmaceutical subsector company objects on the Indonesia and Malaysia Stock Exchanges for the 2013-2021 period. The data collected is secondary data with a documentation method in the form of the company's annual report. The analytical tool used to test the hypothesis is IBM SPSS V21. The sampling method used in this research used a purposive sampling technique to obtain 10 companies that presented complete financial reports, resulting in 90 samples. The analysis technique used is descriptive statistical analysis, classical assumption test, moderated regression analysis (MRA), multiple linear regression, t test, and f test. The research results partially concluded that Return on Assets and Cash Ratio influences managerial ownership while Total Assets Turnover has no effect on Managerial Ownership. The results of the research simultaneously show a calculated f value of 3.099 and an f table of 2.71, meaning calculated  $f > f$  table or a significance value of  $0.031 < 0.05$ . So Return on Assets, Cash Ratio, and Total Assets Turnover has a simultaneous effect on Managerial Ownership. Research results Moderated Regression Analysis (MRA) shows that Product Development Costs can moderate the Return relationship on Assets to Managerial Ownership and Product Development Costs can moderate the Cash relationship Ratio to Managerial Ownership. Meanwhile, Product Development Costs cannot moderate the Total Asset relationship Turnover on Managerial Ownership. For further research, it is hoped that it will examine other sub-sectors and add other variables.

**Keywords:** Managerial Ownership, Product Development Costs, ROA, CR, TATO.

## 1. INTRODUCTION

Exchange Effect Indonesia And Malaysia in a way direct manage development marketcapital and act as a trade facilitator in the facilitating capital market public company securities trading. The listed companies come from the same industry different, one of which is the pharmaceutical sector. The pharmaceutical sector is a company that operates in the pharmaceutical industry to the health equipment needed by parties House Sick big, clinic, public health center, drugstore, And etc For public Which currently need maintenance.

According to the Central Statistics Agency (BPS), Gross Domestic Product (GDP) is abovebase price constant (ADHK) industry chemistry, pharmacy, And drug traditional as big as Rp. 235.48trillion on 2022. Mark the go on thin 0.69% compared to on year previously Whichas big as Rp. 233.87 trillion. Although industry pharmacy still grow on year 2022,

But performance was much slower than the previous two years. In 2020 and 2021, industry pharmacy is capable grow up to 8.48% and 9.61%. (Sadya, 2023)

Every company tries to achieve company goals, namely by increase prosperity owner through decision or policy Which appropriate Which will reflected in price share in market capital. The more tall price share means prosperity owners are increasing. Company survival can be improved by improving performance company. Good company performance can be seen from the company's financial performance, Apart from that, it can also be seen from the appropriate policies implemented by management company. Policy in in company is reflection step managerial Fortake the right decision.

Wrong One factor Which influence A company is structure ownership share. Structure ownership share consists from structure ownership managerial And structure ownership institutional. (Effendi, 2016, p. 16) opinion that "Ownership Managerial is amount share Which owned by party company management Which in a way active follow in taking decision on something company"

The transformation from personal ownership to impersonal ownership is more appropriate by increasing the number of public shares, because in public shares, share ownership becomes a small number of shares so that share ownership will be spread. Whereas when compared to share ownership by institutions, share ownership is in large numbers so that this will cause a concentration of share ownership. Share ownership can influence the course of the company which ultimately affects the company's performance in achieving the company's goals, namely maximizing the company's value. This is because of the control held by the shareholders. The structure of share ownership in a company generally includes institutional ownership, managerial ownership, and share ownership by individuals or the public. The higher the institutional ownership, the less opportunistic behavior of managers will be able to reduce agency costs which are expected to increase the company's value (Wahyudi and Pawestri, 2006). According to Shleifer and Vishny (in Tendi Haruman, 2008), the number of large shareholders has an important meaning in monitoring the behavior of managers in the company. With the concentration of ownership, large shareholders such as institutional ownership will be able to supervise the management team. With high institutional ownership, the greater the supervision given to management. High supervision will minimize the level of misappropriation that occurs on the part of management that can possibly reduce the value of the company. In addition to institutionalization, positive things are also done to increase the value of the company. According to Permanasari (2010:30), the greater the ownership by financial institutions, the

greater the power of voice and encouragement that optimizes the value of the company. With the ownership of shares by institutional investors, the monitoring process will run more effectively so that it can reduce managerial actions in terms of profit management that can harm the interests of other parties (stockholders), according to Satmoko and Sudarman (2011), the company's funding policy is determined by analyzing the composition between debt and equity owned by the company. The source of operational financing for the company in carrying out its activities is divided into two, namely creating profits and providing welfare for shareholders, so that when shareholders are more prosperous, the value of the company will also increase.

The pharmaceutical industry is considered to have contributed significantly to Indonesia's economic growth. The reason is, throughout 2017, almost all pharmaceutical business lines experienced positive growth. According to records from the Indonesian Pharmaceutical Entrepreneurs Association (GP), in 2017, the pharmaceutical, chemical and traditional medicine industry grew by 6.85%, investment in this industry jumped by 35.65% or IDR 8.5 trillion compared to the previous year. Meanwhile, most of Indonesia's pharmaceutical raw materials are imported from China using US dollars. The strengthening yuan against the US dollar has recently skyrocketed the price of raw materials. "While 95% of the need for raw materials for drugs is currently still imported," said Vincent. (KONTAN.CO.ID-JAKARTA). The phenomenon that generally occurs in Indonesia regarding profitability to the company's value at PT. Kalbe Farma Tbk (KLBF) continues to strengthen itself as a company that has increased by 17.38% throughout 2013. This year, KLBF is recorded as generating revenue of IDR 16 trillion, which was previously IDR 13.63 trillion. The ROE indicator that continues to increase throughout 2013 and is currently at 22.5% shows that KLBF's performance is getting better or more efficient. While the technical condition, KLBF shares have decreased and are in a period of overbought. (Vibiznews.com). Based on the problems above, we can see that shares of pharmaceutical companies tend to be less liquid because shares of pharmaceutical issuers only move actively at certain times. Therefore, the author wishes to conduct further research entitled "The Role of Product Development Costs in Moderate Managerial Ownership Seen from The Indicators of Return on Asset, Cash Ratio, And Total Asset Turnover"

## **2. LITERATURE REVIEW**

### ***Managerial ownership***

According to (Effendi, 2016, p. 16), "Managerial ownership is the number of shares owned by company management who actively participate in decision making in a company." Factors that influence managerial ownership according to (Imanta, 2011) include Debt Policy, Dividend Policy, Business Risk, Institutional Ownership, Company Size, Income Volatility, Profitability, and Company Value. According to (Effendi, 2016, p. 16) Managerial Ownership is calculated using the following formula:

$$\text{Managerial Ownership} = \text{Number of Shares Owned by Commissioners, Directors, Managers} / \text{Number of Shares in Circulation} \times 100\%$$

### ***Return on Assets (ROA)***

According to (Kasmir, 2019, p. 201) ROA is "The return on investment or better known as Return on Asset is a ratio that shows the result (Return) on the number of assets used in the company." The benefits of ROA according to (Kasmir, 2018, p. 197) are knowing the level of profit obtained by the company in one period, knowing the company's profit position in the previous year and the current year, knowing the development of profits over time, knowing the amount of net profit after tax with capital own, and knowing the productivity of all company funds used, both borrowed capital and own capital. According to (Sujarweni, 2021, p. 114) ROA is calculated using the formula:

$$\text{Return on Assets (ROA)} = (\text{Net Profit After Tax} / \text{Total Assets}) \times 100\%$$

### ***Cash Ratio (CR)***

According to (Sujarweni, 2021, p. 111) Cash Ratio is "a ratio used to measure a company's ability to pay short-term obligations with available cash stored in the bank." According to (Syamsuddin, 2016, p. 29) There are several factors that can influence cash ratio, namely: Company Size, Industry, Growth Opportunities, Risk, and Working Capital Turnover Cash Formula Ratio according to (Sujarweni, 2021, p. 111) as follows:

$$\text{Cash Ratio} = (\text{Cash} + \text{securities}) / \text{Current Liabilities}$$

### ***Total Assets Turnover (TATO)***

According to (Sujarweni, 2021) the meaning of TATO is "the ability of funds embedded in all rotating assets in a certain period or the ability of invested capital to generate revenue). Factors that influence Total Assets Turnover according to (Kasmir, 2018, p. 186) is a sales component and a component of total assets. If a company wants to maximize its assets, it must

increase sales or reduce less productive assets. According to (Sujarweni, 2021, p. 111) the Total Asset formula Turnover as follows:

$$\text{Total Asset Turnover} = \text{Net Sales} / \text{Total Assets}$$

### **Product Development Costs**

According to (Sukmadinata, 2016, p. 164) stated that "Research and development is a powerful research method for improving practice. "This research is a procedure for creating products or developing existing products to make them better." The duties and responsibilities of R&D are: Increasing Company Credibility, Improving Company Finances, and Minimizing Company Expenditures. In this research, the ratio is used as a research measure and Development are as follows:

$$\text{IRND} = \text{Total R\&D Expenditure} / \text{Total Assets}$$

### **Hypothesis**

According to (Sugiyono, 2015, p. 64) Hypothesis is a temporary answer to the research problem formulation, where the research problem formulation has been stated in the form of a question sentence. It is said to be temporary, because the answer given is only based on relevant theory, not yet based on empirical facts obtained through data collection. The results of research conducted by (Peng et al., 2021) states that ROA has a positive effect on Managerial Ownership. Similar to the results of research conducted by (Alkurdi et al., 2021), and (Ben Aissa & Goaid, 2015) show that Return on Assets (ROA) have a positive and significant effect on managerial ownership. Based on the results of this research, the hypothesis in this research is as follows:

*H1 = Return on Assets has a positive effect on Managerial Ownership.*

The results of research conducted by (Abassi et al., 2021), (Vijayakumaran, 2020) and (Ardana Putra et al., 2019; Chadha & Sharma, 2015) stated that Cash Ratio has a positive effect on Managerial Ownership.

*H2 = Cash Ratio has a positive effect on Managerial Ownership.*

The results of research conducted by (Chadha & Sharma, 2015) state that TATO has a positive effect on Managerial Ownership. Similar to the results of research conducted by (Kurniawan, 2021), and (Ahmad et al., 2023; Kurniawan, 2021) states that TATO has a positive effect on Managerial Ownership.

*H3 = Total Assets Turnover has a positive effect on Managerial Ownership.*

The results of research conducted by Intan Candradewi, & Ida Bagus Panji Sedana show that Return on Assets (ROA) have a positive and significant effect on managerial

ownership, the results of research conducted by Chairani Lubis, the results of research conducted by (Peng et al., 2021), (Alkurdi et al., 2021), and (Ben Aissa & Goaid, 2015) state that ROA has a positive effect on Managerial Ownership. According to (Abassi et al., 2021), (Vijayakumaran, 2020) and (Ardana Putra et al., 2019; Chadha & Sharma, 2015) stated that Cash Ratio has a positive effect on Managerial Ownership. According to (Chadha & Sharma, 2015), TATO has a positive effect on Managerial Ownership. Similar to the results of research conducted by (Kurniawan, 2021), and (Ahmad et al., 2023; Kurniawan, 2021) states that TATO has a positive effect on Managerial Ownership. If we look at several research sources, it can be concluded that Return on Assets, Cash Ratio, Total Assets Turnover as an independent variable can influence managerial ownership.

*H4 = Return on Assets, Cash Ratio, Total Assets Turnover has a positive effect on Managerial Ownership*

According to research conducted by (Dimitropoulos, 2020) states that R&D had a negative impact on company profitability before the crisis but during the crisis the company managed to increase profitability with the level of R&D investment and according to research by (Erdogan & Yamaltdinova, 2019) states that there is a relationship between expenditure R&D and financial performance. However, the influence of R&D is found to be higher on ROE and ROA. Thus, it can be concluded that R&D intensity has an acceptable effect on the company's financial performance.

*H5 = Total Assets Turnover has a positive effect on Managerial Ownership.*

The results of research conducted by (Lee & Choi, 2015) revealed that there was a positive influence of indicators on research costs and Development (R&D) with liquidity. The influence of the financial structure of the pharmaceutical business on research costs and Development (R&D) to generate sources of profit in the next generation or develop cost-effective medicines to increase company value. In contrast to research conducted by (Du et al., 2016) revealed that R&D and liquidity are not significant. On the one hand, this may be due to the R&D accounting treatment of capitalization or expense.

*H6 = Product Development Costs have a positive effect on Cash Ownership Ratio.*

The results of research conducted by Jun- Hwan Park, Bangrae Lee, Yeong -Ho Moon, GyuSeok Kim, & Lee-Nam Kwon revealed that turnover was influenced by R&D investment and research conducted by Hyoung Ju Song, Jihwan Yeon, Seok Lee (2020) Thus, we can say that changes in Research & Development (R&D) costs affect Assets Turnovers.

*H7 = Total Assets Turnover has a positive effect on Product Development Costs.*

### 3. METHODS

Research methods according to (Sugiyono, 2019, p. 2) are a scientific way to obtain valid data with the aim of finding, developing and proving certain knowledge so that it can in turn be used to understand, solve and anticipate problems. The population in this study was 18 pharmaceutical subsector companies registered in Indonesia and Malaysia, namely 11 companies in Indonesia and 7 companies in Malaysia. So the total population is 18 companies. Meanwhile, the number of samples included in the criteria is 10 pharmaceutical companies. The type of data used in this research is in the form of numbers and data analysis is carried out using statistical procedures using secondary data in the form of annual data report and test hypotheses or answer questions related to the subjects being tested, there are 18 types in this research, and this research uses data of more than 1 year. Where in the empirical study research was on pharmaceutical subsector companies listed on the Indonesia and Malaysia Stock Exchanges in 2013-2021. In processing the data, researchers used descriptive statistical testing, then classical assumption testing (normality test, autocorrelation test, heteroscedasticity test, multicollinearity test), followed by regression analysis testing (multiple regression analysis, moderated regression analysis) and also hypothesis testing (coefficient test). determination, individual parameter significant test, simultaneous significant test).

### 4. RESULTS

#### *Data analysis*

#### *Hypothesis testing*

**Table 1.** Results of Determination Coefficient Analysis

Model Summary <sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.334 <sup>a</sup>	.112	.081	3.55409

a. Predictors: (Constant), X3\_CR, X2\_TATO, X1\_ROA

b. Dependent Variable: Managerial Ownership

*Source: IBM SPSS V21 data processing results*

Based on the results of data processing above, the Adjusted R Square value is 8.1%. This value shows that 91.9% of the variation in income value can be explained by the Return On Asset (ROA), Cash value Ratio (CR) and Total Assets Turnover (TATO) while the remaining 87.9% is explained by other variables not included in the regression model such as Product Development Costs (BPP), company growth, sales growth, and others.

**Table 2.** Multiple Linear Regression Test Results

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3,042	1,238		2,458	.016
X1_ROA	.133	,065	,230	2,047	,044
X2_CR	-2.125	1,052	-.207	-2,019	,047
X3_TATTOO	-.609	0.379	-.180	-1,606	,112

a. Predictors: (Constant), X3\_CR, X2\_TATO, X1\_ROA

b. Dependent Variable: Managerial Ownership

Source: IBM SPSS V21 data processing results

Based on the table above, the regression equation can be prepared:  $Y = \alpha + \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$

$$Y = 3.042 + (0.133) ROA - (2.125) CR - (0.609) TATO + e$$

From the regression equation that has been prepared above, it can be interpreted as follows: The value of  $\beta_0$  or a constant of 3.042 indicates that if the independent variable has a value of zero (0) or is omitted, then Managerial Ownership is 3.042. The Return On Asset (ROA) coefficient of 0.158 shows that for every additional Return On Asset (ROA) of one unit, it will be followed by an increase in Managerial Ownership of 0.158. Cash Coefficient Ratio (CR) of -2.125 indicates that each additional Cash Ratio (CR) of one unit, will be followed by a decrease in the value of Managerial Ownership -2,125. Total Asset Coefficient Turn Over (TATO) of -0.609 indicates that each addition to Total Assets Turn Over (TATO) of one unit will be followed by a decrease in the value of Managerial Ownership of -0.609.

**Table 3.** Individual Parameter Significance Test (t Statistical Test)

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3,042	1,238		2,458	.016
X1_ROA	.133	,065	,230	2,047	,044
X2_CR	-2.125	1,052	-.207	-2,019	,047
X3_TATTOO	-.609	0.379	-.180	-1,606	,112

a. Predictors: (Constant), X3\_CR, X2\_TATO, X1\_ROA

b. Dependent Variable: Managerial Ownership

Source: IBM SPSS V2 data processing results



The t test results show that the calculated t value is smaller than the t table in hypotheses 2 & 3 the calculated t is smaller than the t table ( $-2.019$  &  $-1.606 > 1.98793$ ) while in hypothesis 1 the calculated t is greater than the t table ( $2.047 > 1.98793$ ) and the significance value is greater than 0.05 ( $0.112 > 0.05$ ) This means that hypothesis 3 is not accepted/not supported, while for hypotheses 1&2 the significant value is smaller than 0.05 ( $0.044$  &  $0.047 < 0.05$ ). This means that hypotheses 1&2 are accepted/supported.

**Table 4.** Simultaneous Significant Test (F Test)

Coefficients<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	119,304	3	39,768	3,099	.031 <sup>b</sup>
	Residual	1103.770	86	12,835		
	Total	1223.074	89			

a. Dependent Variable: Ownership\_Managerial

b. Predictors: (Constant), TATO, CR, ROA

Source: IBM SPSS V21 data processing results

Based on table 4 of the SPSS version 21 test results above, the F test results show that the calculated F value is greater than the F table value, namely  $3.099 > 2.71$  and the significance value is smaller than 0.05 ( $0.031 < 0.05$ ). meaning all variables Return On Assets (ROA), Cash Ratio (CR) and Total Assets Turn Over (TATO) simultaneously influences the Managerial Ownership variable.

### Moderated Test Regression Analysis (MRA)

Model 1 (Return on Assets (ROA) on Managerial Ownership with Product Development Costs (BPP) as a Moderating variable)

**Table 5.** Model 1 Regression Results

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	,642	,617		1,041	,301
X1_ROA	,130	0.66	,224	1,974	,052
Z_Product_Development_Costs	-16,549	11,665	-.161	-1,419	,160

a. Dependent Variable: Ownership\_Managerial

Source: IBM SPSS V21 data processing results

**Table 6.** Moderated Results Regression Analysis (MRA) 1

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.15	,651		,022	,982
X1_ROA	0.72	,068	.124	1,060	,292
Z_Product_Development_Costs	-14,981	11,351	-.146	-1,320	,190
X1Z	272,242	109,638	,270	2,483	,015

a. Dependent Variable: Ownership\_Manarial

*Source: IBM SPSS V21 data processing results*

Based on tables 5 and 6 above, the results obtained are the Effect of Product Development Costs (BPP) (Z) on Managerial Ownership (Y) in the first output (Not Significant) because the sig value.  $0.160 > 0.05$  and the interaction effect of MRA 1 (ROA\*Product Development Costs) on the second output is significant because the sig value.  $0.015 < 0.05$  then it can be stated that in model 1 Product Development Costs (BPP) (Z) is the Moderator variable.

**Model 2 (Cash Ratio (CR) to Managerial Ownership with Product Development Costs (BPP) as a moderating variable)**

**Table 7.** Model 2 Regression Results

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	5,271	1,172		4,496	,000
X2_CR	-3,580	1,054	-.349	-3,395	,001
Z_Product_Development_Costs	-14,977	10,547	-.146	-1,420	,159

a. Dependent Variable: Ownership\_Manarial

*Source: IBM SPSS V21 data processing results*

**Table 8.** Moderated Results Regression Analysis (MRA) 2Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6,201	1,221		5,077	,000
X1_CR	-3,784	1,035	-.368	-3,654	,000
Z_Product_Development_Costs	-1,795	,959	-.066	-.620	,537
X2Z	-3,009	1,630	-.234	-2,216	,029

a. Dependent Variable: Ownership\_Manerial

*Source: IBM SPSS V21 data processing results*

Based on tables 7 and 8 above, the results show the influence of Product Development Costs (BPP) (Z) on Managerial Ownership (Y) in the first output (not significant) because the sig value.  $0.159 > 0.05$  and the interaction effect of MRA2 (CR\* Product Development Costs) on the second output (significant) because the sig value.  $0.029 < 0.05$  then it can be stated that in model 2 Product Development Costs (BPP) (Z) is the Moderator variable.

**Model 3 (Total Assets Turn Over (TATO) on Managerial Ownership with Product Development Costs (BPP) as a moderating variable)**

**Table 9.** Model 3 Regression ResultsCoefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1,669	,507		3,290	,001
X3_TATTOO	-.242	,485	-.072	-.499	,619
Z_Product_Development_Costs	-2,678	14,736	-.026	-1.82	,856

a. Dependent Variable: Ownership\_Manerial

*Source: IBM SPSS V21 data processing results*

**Table 10.** Moderated Results Regression Analysis (MRA) 3

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1,643	,521		3,154	,002
X3_TATTOO	-.240	,487	-.071	-.493	,624
Z_Product_Development_Costs	-2,887	14,839	-.028	-.195	,846
X3Z	9,350	37,232	-.027	,251	,802

a. Dependent Variable: Ownership\_Manageerial

*Source: IBM SPSS V21 data processing results*

Based on tables 9 and 10 above, the results obtained were the influence of Product Development Costs (BPP) (Z) on Managerial Ownership (Y) in the first output (not significant) because the sig value.  $0.856 > 0.05$  and the interaction effect of MRA3 (TATO\*BPP) on the second output (not significant) because the sig value.  $0.802 > 0.05$  then it can be stated that in model 3 Product Development Costs (BPP) (Z) is not a Moderator variable.

## 5. DISCUSSION

**Table 11.** Hypothesis Testing Results

No	Hypothesis	Results	Accepted/ Rejected
H <sub>1</sub>	<i>Return On Assets</i> influential to Ownership Managerial.	The t value = 2.047 with as big as sig. 0.044 < 0.05	Accepted
H <sub>2</sub>	<i>Cash Ratio</i> influential to Ownership Managerial.	The t value = -2.019 with as big as sig. 0.047 < 0.05	Accepted
H <sub>3</sub>	<i>Total Assets Turn Over</i> No influential to Ownership Managerial.	The value of t = -1.606 with as big as sig. 0.112 > 0.05	Rejected
H <sub>4</sub>	<i>Return On Assets, Cash Ratio</i> and <i>Total Asset Turn Over</i> together - The same (simultaneous) influential to Ownership Managerial.	F value = 3.099 with as big as sig. 0.031 < 0.05	Accepted
H <sub>5</sub>	<i>Return On Assets</i> can moderate connection between influence Cost Development Product to Ownership Managerial.	Output 1 = (Not significant) with as big as sig. 0.160 > 0.05 Output 2 = (significant) with equal to 0.015 < 0.05	Accepted
H <sub>6</sub>	<i>Cash Ratio</i> can moderate connection between influence Cost Development Product to Ownership Managerial.	Output 1 = (Not Significant) with as big as sig. 0.159 > 0.05 Output 2 = (Significant) with as big as sig. 0.029 < 0.05	Accepted
H <sub>7</sub>	<i>Total Asset Turn Over</i> is not can moderate connection between influence Cost Development Product to Ownership Managerial.	Output 1 = (Not Significant) with as big as sig. 0.856 < 0.05 Output 2 = (Not Significant) with as big as 0.802 > 0.05	Rejected

Source: IBM SPSS V21 data processing results

### ***Effect of Return on Assets on Managerial Ownership (H1)***

The first hypothesis is to find out whether there is an influence of Return On Assets (ROA) on Managerial Ownership. From table 3, the tcount is 2.047 and the ttable value is 1.98793. The significance value is 0.044, which means that Return On Assets (ROA) partially has a significant effect on Managerial Ownership. Return On Assets (ROA) is used to evaluate whether management has received adequate compensation (readable). return) from the assets

he controls. This ratio is a useful measure if one wants to evaluate how well a company has used its funds. Therefore, Return On Assets (ROA) is often used by top management to evaluate business units within a multinational company. This is the same as research conducted by, namely research from (Peng et al., 2021), (Alkurdi et al., 2021), and which states that Return on Assets (ROA) has a positive effect on Managerial Ownership.

### ***Cash Influence Ratio to Managerial Ownership (H2)***

The second hypothesis is to find out whether there is an influence of Cash Ratio to Managerial Ownership. From table 3, the tcount is (-2.019) and the ttable value is 1.98793. The significant value is 0.047 which means that Cash Ratio partially has a significant effect on Managerial Ownership. Cash The ratio is a tool used to measure how much cash is available to pay debts. The availability of cash can be shown from the availability of cash funds or cash equivalent to cash such as a checking or savings account at a bank that can be withdrawn at any time. This is the same as research conducted by, namely research from (Abassi et al., 2021), (Vijayakumaran, 2020) and (Ardana Putra et al., 2019; Chadha & Sharma, 2015) which states that Cash Ratio has a positive effect on Managerial Ownership.

### ***Effect of Total Assets Turn Over on Managerial Ownership (H3)***

The third hypothesis is to find out whether there is an influence of Cash Ratio to Managerial Ownership. From table 3, the tcount is -1.606 and the ttable value is 1.98793. The significant value is 0.112 which means that Total Assets Partial Turn Over (TATO) has no significant effect on Managerial Ownership. Total Assets Turn Over (TATO) is a comparison between sales and total assets of a company where this ratio describes the speed of turnover of total assets in a certain period. Total Assets Turn Over (TATO) is a ratio that shows the level of efficiency in using the company's overall assets in generating a certain sales volume. This is inversely proportional to research conducted by, namely research from (Chadha & Sharma, 2015), (Kurniawan, 2021), and (Ahmad et al. al., 2023) which states that Total Assets Turn Over (TATO) has a positive effect on Managerial Ownership.

### ***Effect of Return on Assets, Cash Ratio, and Total Assets Turn Over to Managerial Ownership (H4)***

The fourth hypothesis is to find out whether there is a significant simultaneous influence of Return on Assets, Cash Ratio and Total Assets Turn Over to Managerial Ownership. From table 4, the Fcount is 3,099 and the Ftable value is 2.71. The significant value is 0.031 which

means that Return on Assets, Cash Ratio Total Assets Turn Over simultaneously has a significant effect on Managerial Ownership. An increase or decrease in Managerial Ownership can be influenced by the value of Return on Assets, Cash Ratio, Total Assets Turn Over is an important part of the company's sustainability in increasing Managerial Ownership. This is the same as research carried out by, namely research from According to (Peng et al., 2021), (Abassi et al., 2021), and (Chadha & Sharma, 2015) stated that Return on Assets, Cash Ratio, Total Assets Turn Over simultaneously has a significant effect on Managerial Ownership.

***The influence of product development costs can moderate the relationship between Return On Assets and Managerial Ownership (H5)***

The fifth hypothesis is to find out whether there is an influence of Product Development Costs that can moderate the relationship between Return On Assets (ROA) and Managerial Ownership. From tables 5 and 6, the significant values are 0.160 and 0.015, which means that Product Development Costs moderate Return On Assets (ROA) on Managerial Ownership. Product Development Costs as a moderating variable in the relationship between the influence of Return On Assets (ROA) on Managerial Ownership, this is because Return On Assets is often used by top management to evaluate business units in a multinational company.

***The influence of Product Development Costs can moderate the relationship between Cash Ratio to Managerial Ownership (H6)***

The sixth hypothesis is to find out whether there is an influence of Product Development Costs that can moderate the relationship between Managerial Ownership. From tables 7 and 8, the significant values obtained are 0.159 and 0.029, which means that the influence of Product Development Costs moderates Cash Ratio to Managerial Ownership. Product Development Costs as a moderating variable in the influence of Cash Ratio to Managerial Ownership, Cash The ratio is a liquidity ratio that shows the company's ability to pay short-term debt with cash or cash equivalents owned by the company.

***The influence of Product Development Costs can moderate the relationship between Total Assets Turn Over to Managerial Ownership (H7)***

The seventh hypothesis is to find out whether there is an influence of Product Development Costs that can moderate the relationship between Total Assets Turn Over to Managerial Ownership. From tables 9 and 10, the significant values are 0.856 and 0.802, which means that Product Development Costs do not moderate Total Assets. Turn Over to Managerial

Ownership. Product Development Costs as a moderating variable in the influence of Total Assets Turn Over (TATO) on Managerial Ownership, Total Assets Turnover describes the turnover of assets as measured by sales volume. The higher the Total Asset ratio Turnover means the more efficient use of all assets in producing.

## **CONCLUSION**

Return On Assets (ROA) and Cash Ratio (CR) partially has a significant effect on Managerial Ownership, while Total Assets Partial Turn Over (TATO) has no significant effect on Managerial Ownership in the Pharmaceutical subsector listed on the Indonesia & Malaysia Stock Exchange for the 2013-2021 Period. Return On Assets, Cash Ratio, and Total Assets Turn Over simultaneously has a significant effect on Managerial Ownership in the Pharmaceutical subsector listed on the Indonesia & Malaysia Stock Exchange for the 2013-2021 period. Product Development Costs moderate Return On Assets (ROA) and Cash Ratio (CR) to Managerial Ownership, while Product Development Costs do not moderate Total Assets Turn Over (TATO) on Managerial Ownership in the Pharmaceutical subsector listed on the Indonesia & Malaysia Stock Exchange for the 2013-2021 period.

## **LIMITATIONS**

The author realizes that there are still imperfections in this research. The suggestions put forward by the author from the research that has been carried out are as follows: For researchers who will conduct similar research, it is hoped that they can add or replace other variables that are more likely to influence the Managerial Ownership variable and are expected to be able to research other subsectors besides the Pharmaceutical subsector companies., so that the research results obtained better reflect the situation on the Indonesia & Malaysia Stock Exchange in more detail and truth. For company management because of Total Assets Turn Over does not have a significant influence on Managerial Ownership, then Total Assets Turn Over must be increased in value so that Managerial Ownership is generated optimally and also Product Development Costs cannot strengthen or weaken the relationship between Total Assets Turn Over. For investors who wish to invest, it is hoped that the results of this research will be useful as material for consideration in making investment decisions. Investors should pay more attention to indicators that influence Managerial Ownership, such as low Return on Assets (ROA), Cash High ratio, Total Asset value Low Turn Over and low Product Development Costs are considerations in making investment decisions in the Pharmaceutical subsector in order to obtain optimal results.



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