Return on Assets as an Intervening Variable: Analysis of Factors Affecting Firm Value?

Ade Gunawan(✉) and M. Firza Alpi(✉)

Universitas Muhammadiyah Sumatera Utara, Medan, Indonesia
{adegunawan,m.firzaalpi}@umsu.ac.id

Abstract. The samples used in this study were all pharmaceutical companies listed on the Indonesia Stock Exchange (IDX) for the 2016–2020 period using the purposive sampling method. There are 8 pharmaceutical companies selected as samples. The data analysis method used is Path Analysis, where Path Analysis is the development of multiple linear regression. Based on the results of data analysis, it was found that TATO had an insignificant negative effect on Firm Value, CR had a significant positive effect and a negative direction on Firm Value, ROA had an insignificant negative effect on Firm Value, TATO had an insignificant negative effect on ROA, CR had an insignificant negative effect on ROA.

Keywords: total asset turnover · current ratio · return on assets · firm value

1 Introduction

The government's efforts to roll out a green economy in various sectors aim to encourage Indonesia to be free from the middle-income trap, according to Indonesia's Vision 2045. This is the right strategic policy because Indonesia must immediately recover from the Covid-19 pandemic which has eroded economic strength for two and a half years. Final. The geopolitical situation as a result of the Ukraine-Russia war also contributed to the slowdown in world economic growth. Economic transformation through the green economy strategy allows for a shift in the economic structure from less productive to more productive sectors (industrialization) in line with efforts to maintain the carrying capacity and capacity of the environment. A green economy strategy that promotes low-carbon and climate-resilient development policies is a crucial foundation for its implementation. And this also affects the Indonesian stock exchange in the pharmaceutical sector. With the current economic conditions and the emergence of more and more new companies in the industrial sector, intense competition has resulted in encouraging companies to improve their performance in order to achieve company goals. The pharmaceutical sub-sector companies are no exception. Intense competition in the pharmaceutical industry requires every company to be wise and careful in managing its resources so that the company's operational activities can run effectively and efficiently so that the company's desired goals can be achieved. According to Dominick [1] states that: "the main purpose of the company according to the theory of the firm is to maximize the wealth or value of the firm (value of the firm)". Meanwhile, according to the financial management point

Table 1. Average Total Asset Turnover, Average Current Ratio, Average Return On Assets, and Average Price to Book Value of Pharmaceutical Companies Listed on the Indonesia Stock Exchange 2016–2020

Year	Average TATO	Average CR	Average ROA	Average PBV
2016	1.20	3.41	0.10	7.46
2017	1.14	3.34	0.09	8.05
2018	1.00	2.61	0.19	8.20
2019	0.99	2.89	0.19	2.43
2020	0.94	2.62	0.09	7.20

Source:Research data processed

of view, the company's goal is to maximize shareholder wealth. Increased shareholder wealth can be achieved through increasing company value [2]. According to Gendro and Hadri [3], firm value is the investor's perception of the company's level of success which is often associated with stock prices. The higher the stock price of the company, the better the value of the company. This will invite investors to invest in the company [4]. In other words, the higher the stock price, the higher the value of the company.

According to Brigham and Houston [5], firm value is influenced by several factors, one of which is the liquidity ratio. The liquidity ratio describes the company's ability to pay its financial obligations that must be met immediately, which consists of the Current Ratio and Quick Ratio [6]. The liquidity ratio used in this study is the Current Ratio (CR). Current Ratio (CR) is used because it can find out how much the company's ability to meet its short-term obligations, especially short-term obligations that will soon be due. The lower the percentage of the current ratio in a company, it will be considered that the company is experiencing problems in liquidation. Which means the company is considered unable to meet its short-term obligations to creditors. Conversely, if the current ratio is high, the greater the confidence investors have to invest their capital. So it can be concluded that the Current Ratio has a significant influence on firm value. This is supported by previous research conducted by Irnawati [7]. However, contrary to the results of research conducted by Misran and Chabachib [8] which states that the current ratio does not have a significant influence on the value of the company. This can be because the percentage of the current ratio is also too high which will indicate an excess of cash or other current assets compared to what is needed now. The stock price will decrease if investors think the company is too liquid, which means that there are productive assets that are not utilized by the company, and as a result it will increase the burden or costs for the company such as maintenance costs and storage costs (Table 1).

The average value of Return On Assets (ROA) of pharmaceutical sector companies from 2016–2020 tends to decrease with a very small value below 1. This means that the invested capital as a whole has not been able to generate profits or profits for the company, which indicates that the overall financial performance of pharmaceutical sector companies is relatively low so that later it will affect the value of the company in the eyes of investors. Because basically shareholders expect the maximum profit from the

investment they have made. Meanwhile, the average Price to Book Value of pharmaceutical sector companies from 2016–2020 tends to increase every year. The average PBV value is above 1, meaning that the share price owned by the company is greater than the price at book value.

2 Another Section of Your Paper

2.1 Total Asset Turnover (TATO)

Total Asset Turnover by Rina [9] used to measure the turnover of all assets owned by the company and measure the amount of sales obtained from each rupiah of assets. The higher the total asset turnover value, this indicates the effectiveness of the use of company assets. Slow asset turnover indicates that the assets owned are too large compared to the ability to do business [10]. The formula for calculating total asset turnover according to Rambe, et al. [11]:

$$\text{Total Asset Turnover (TATO)} = \frac{Penjualan}{Total\ Aktiva}$$

2.2 Current Ratio (CR)

According to Ammy and Alpi [12] The current ratio is the most commonly used measure to determine the ability to meet short-term obligations, because this ratio shows how far the demands of short-term creditors are met by assets that are estimated to be cash in the same period as the debt maturity. According to Wirajaya [13] The current ratio is a liquidity ratio that shows the company's ability to pay off all current liabilities of the company. In other words, this ratio is useful for measuring the smoothness of the company's current assets in order to pay off the company's debts that must be paid off immediately. According to Akuba and Hasmirati [14] The purpose and benefits of the Current Ratio is to measure how much the company's ability to meet or pay short-term obligations or debts that will soon be due when they will be billed as a whole. The formula that can be used to calculate the current ratio according to Dewi [15]:

$$\text{Current Ratio} = \frac{Aktiva\ Lancar}{Hutang\ Lancar} x 100\%$$

2.3 The Value of the Company

According to Rahayu and Sari [16] company value is a condition that has been achieved by a company which is reflected by the stock price, where the share price is formed due to the demand and supply in the capital market that considers the public's assessment of the company's performance. According to Sintyana and Artini [17] The higher the value of the company, the greater the investor's confidence in the performance of management in leading the company. The increase in the value of the company is an achievement for both the company and the management of the company because with the increase in the

value of the company, it means that the goals to be achieved by the company are also increasingly wide open. According to Sianipar [18] argues that a high company value is the desire of the company owners, because a high value indicates the prosperity of shareholders is also high. According to Hayati [19] that the normative purpose of the company is to increase the value of the company. The higher the value of the company, the greater the prosperity that will be received by the owner of the company. In this study, the indicator used to measure firm value is to use price to book value (PBV). PBV explains the relationship between stock market price and book value per share which can be used as an alternative approach to determine the value of a stock [20]. Price to book value (PBV) is a financial ratio that compares the stock price with the book value per share.This ratio was chosen because it can provide an overview of the potential price movements of a stock so that from this description, indirectly this PBV ratio also has an influence on stock prices so that it can be used as a benchmark in seeing the value of the company [21]. The formula that can be used to calculate Price to Book Value according to Rahayu and Sari [16] that is:

$$\text{PBV} = \frac{Harga\ pasar\ per\ lembar\ saham}{Nilai\ buku\ per\ lembar\ saham}$$

2.4 Return on Assets

According to Alpi [22] The company's profitability is one way to accurately assess the extent of the rate of return that will be obtained from its investment activities. ROA is a profitability ratio that shows the company's ability to generate profits. Return on Assets has goals and benefits not only for the owner of the company or management, but also for parties outside the company, especially parties who have a relationship or interest with the company [23]. According to Ikhwal [24] said that Return on Assets (ROA) is a form of profitability ratio to measure the company's ability to generate profits by using the total existing assets and after the costs of capital (costs used to fund assets) are excluded from the analysis.The formula that can be used to calculate Return On Assets according to Rambe, et al. [11] that is:

$$Return\ on\ Assets = \frac{Laba\ Bersih\ Setelah\ Pajak}{Total\ Aktiva}$$

2.5 Research Methods

The sample in this study amounted to 8 pharmaceutical companies listed on the Indonesia Stock Exchange while the criteria that must be met by the sample of this study are a) pharmaceutical sector companies listed on the Indonesia Stock Exchange (IDX) for the 2016–2020 period, b) companies that issue or publish the company's Annual Report during the 2016–2020 observation period which can be accessed through the IDX's official website, namely www.idx.co.id, and c) the company must have complete data according to the needs of the researcher.In this study, the type of data used is quantitative data and in

Table 2. Normality Test Results

Kolmogorov-Smirnov Z	0.114	Information
asymp. Sig. (2-tailed)	0.200 > 0.05	Normal

Source:Research data processed

this study, the data used is secondary data where the data is obtained from company internal information in the form of the 2016–2020 pharmaceutical sector company annual financial statements published by the company through the official website. Indonesia Stock Exchange, namely www.idx.co.id and a list of share prices of pharmaceutical sector companies published through the website www.finance, yahoo.com, and the data collection instrument used in this research is to use a documentation study. This study uses path analysis to determine the relationship between total asset turnover and current ratio to firm value with return on assets as an intervening variable. The data analysis tool uses the Statistical Package for Social Sciences (SPSS) program and uses the classical assumption test consisting of normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test, hypothesis testing, namely t test (partial) and coefficient of determination test (R2).

3   Results and Discussion

This study used the Kolmogorov-Smirnov (KS) non-parametric statistical test to see the normality of the residuals. If the significant value is >0.05 then the variable is normally distributed. The results of the Kolmogorov-Smirnov test can be seen in Table 2. Based on the results of the normality test with the Kolmogorov-Smirnov test in Table 2 it can be explained that the value of the Kolmogorov-Smirnov is 0.114 and significant at 0.200. This means that the variables of total asset turnover, current ratio, firm value, and return on assets are normally distributed because the significance value is > 0.05 so that the variables are feasible for path analysis.

3.1   Multicollinearity Test

According to Iskandar et al., [25], multilinearity testing was used to test whether the regression model found a strong correlation between the independent variables. This study uses multicollinearity testing. This test can be done by looking at the value of VIF (Variance Inflation Factor) and Tolerance where the tolerance value serves to measure the selected independent variable that is not explained by other independent variables. If the VIF value < 10 and the Tolerance value > 0.10 it can be concluded that the research data can be tolerated or it can be said that our research data is free from multicollinearity symptoms and if the VIF value > 10 and the Tolerance value < 0.10, it can be concluded that the data research has multicollinearity. The results of the multicollinearity test in this study can be seen in Table 3.

Based on Table 3 the results of the multicollinearity test by looking at the Tolerance and VIF values indicate that there is no multicollinearity symptom in the Total Asset

Table 3. Muticollinearity Test Results

Test of Multicollinearity	Tolerance	Standard	VIF	Standard	Information
LnTATO	0.990	>0.10	1.010	<10	There is no multicollinearity
LnCR	0.979	>0.10	1.021	<10	There is no multicollinearity
LnROA	0.984	>0.10	1.016	<10	There is no multicollinearity

Source:Research data processed

Table 4. Heteroscedasticity Test Results

Variable	Sig.	Information
LnTATO	0.106 > 0.05	There is no heteroscedasticity
LnCR	0.095 > 0.05	There is no heteroscedasticity
LnROA	0.057 > 0.05	There is no heteroscedasticity

Source:Research data processed

Turnover, Current Ratio, and Return On Asset variables. This is because the Tolerance value of the three variables is greater than 0.10 which is 0.990, 0.979 and 0.984 while the VIF value of the three variables is less than 10, namely 1.010, 1.021 and 1.016. So that the variable is declared free of multicollinearity and is feasible for path analysis.

3.2 Heteroscedasticity Test

Heteroscedasticity testing in this study used the Park Test. This test is carried out by raising the residuals and then in the natural logarithm (Ln), then regression of the independent variables is carried out. And if the test results significance value > 0.05 means there is no heteroscedasticity and vice versa if the significance value < 0.05 means heteroscedasticity occurs. The results of the heteroscedasticity test in this study can be seen in Table 4.

Based on Table 4 the results of the heteroscedasticity test with the Park test obtained a significance value of LnTATO = 0.106, LnCR = 0.095, and LnROA = 0.057, so that the three variables passed the heteroscedasticity test because the significance value was > 0.05 and was feasible for path analysis.

3.3 T-Test (t-Test)

According to Sugiono [26], the t-statistical test was conducted to test whether the independent variable (X) individually had a significant relationship or not to the dependent variable (Y) or in other words the t-test was conducted to determine the level of significance of the partial influence of the independent variables, namely Total Asset Turnover,

Current Ratio and Return On Assets to Firm Value. If the probability or significant value < 0.05 or tcount > ttable, the independent variable has an individual effect on the dependent variable. And vice versa if the value of t > 0.05 or tcount < ttable then the independent variable has no effect on the dependent variable. The results of the t-test (t-Test) in this study can be seen in Table 5.

3.4 Path Analysis

In this research, the data analysis used is path analysis. The author chooses to use path analysis techniques because to determine the causal relationship of each variable. With the aim of explaining whether or not there is a direct or indirect effect between exogenous variables and endogenous variables. In this study, the authors want to analyze and ascertain whether there is an effect of total asset turnover and current ratio on firm value with return on assets as an intervening variable. According to Sarwoko [27], path analysis is the development of Multiple Regression, so that it can be estimated the magnitude of the causal relationship between a number of variables and the hierarchy of positions of each variable.

Figure 1 shows that TATO has a direct effect on firm value of 0.097 and an indirect effect on firm value of −0.012 (0.019 x −0.641). The total effect of TATO on Firm Value = 0.097 + (−0.012) = 0.085. The magnitude of the coefficient of direct influence compared to indirect influence, it can be concluded that ROA is not able to mediate the effect of TATO on Firm Value.

Figure 2 shows that CR has a direct effect on firm value of −0.386 and an indirect effect on firm value of 0.231 (−0.361 x −0.641). The total effect of CR on Firm Value

Table 5. ROA. t test results

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	,296	,165		1,800	0.080
	TATTOO	,126	,115	,173	1.093	,282
	CR	−,041	,031	−,210	−1,328	,192

[a] Dependent Variable: ROA
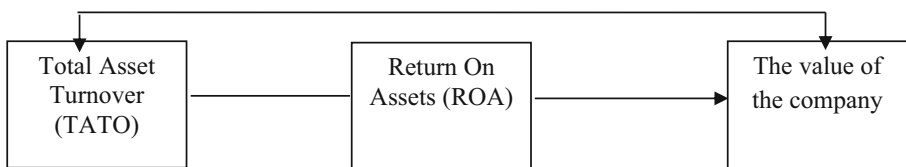*Source: Research Data Processed*

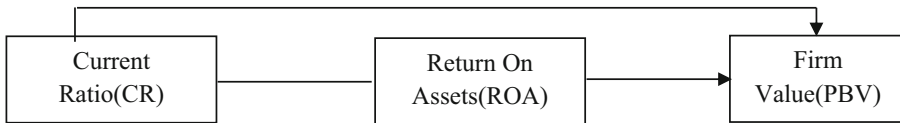**Fig. 1.** TATO Path Analysis Model on Firm Value

Fig. 2. CR Path Analysis Model on Firm Value

$= -0.386 + 0.231 = -0.155$ The magnitude of the coefficient of indirect influence compared to direct influence, it can be concluded that ROA is able to mediate the effect of CR on Firm Value.

3.5   Effect of Total Asset Turnover on Return on Assets

The test results for the first hypothesis in this study are to determine whether Total Asset Turnover has an effect on Return On Assets. Based on the results of statistical tests, the regression coefficient is 0.126, the tcount value of 1.093 is smaller than the ttable value of 2.024 with a significance value of 0.282, which means it is greater than 0.05. Based on these results, it can be concluded that Total Asset Turnover has a negative and insignificant effect on Return On Assets. So the first hypothesis is rejected. Based on testing the first hypothesis which states that Total Asset Turnover has a negative and insignificant effect on Return On Assets, it can be concluded thatwith an increase in the value of Total Asset Turnover can reduce the value of the Company's Return On Assets. As mentioned by Radiman [28], the high level of Total Asset Turnover does not guarantee a high rate of Return On Assets, this can be due to the possibility that the high total or total assets contained in the company do not come from own capital but from debt, causing high interest costs to be paid by the company. If the company is not able to manage its assets, there will be no increase in sales. And this will have an impact on the company's profit which ultimately causes the return on assets to decrease.

3.6   Effect of Current Ratio on Return on Assets

The test results for the second hypothesis in this study are to determine whether the Current Ratio has an effect on Return On Assets. Based on the results of statistical tests, the regression coefficient is -0.041, the tcount value of -1.328 is smaller than the ttable value of 2.024 and with a significance value of 0.192, which means it is greater than 0.05. Based on these results, it can be concluded that the Current Ratio has a negative and insignificant effect on Return On Assets. So the second hypothesis is rejected. Based on the second hypothesis testing which states that the Current Ratio has a negative and insignificant effect on Return On Assets, it can be concluded that an increase in the Current Ratio value can reduce the Company's Return On Assets value. As mentioned by Harjito and Martono [29], a high current ratio will provide an indication of good guarantees for short-term creditors in the sense that each company has the ability to pay off its short-term financial obligations, but a high current ratio will negatively affect the ability to earn profits because some of the working capital does not rotate or experience unemployment. Based on the theory stated above, the relationship between the current ratio level and the company's Return On Assets is inversely proportional. That is, if the

level of the Current Ratio increases, the rate of Return On Assets decreases and vice versa.

3.7 Effect of Total Asset Turnover on Firm Value

The test results for the third hypothesis in this study are to determine whetherTotal Asset Turnover has an effect on Firm Value. Based on the results of statistical tests, the regression coefficient is 6.182, the tcount is 1.989, which is smaller than ttable, which is 2.024 and with a significance value of 0.054, which means it is greater than 0.05. Based on these results, it can be concluded that Total Asset Turnover has a negative and insignificant effect on Firm Value. So the third hypothesis is rejected. Based on the third hypothesis testing which states that Total Asset Turnover has a negative and insignificant effect on Firm Value, it can be concluded that an increase in Total Asset Turnover can reduce Firm Value. As mentioned by Sawir [30], if the total asset turnover is slow, this indicates that the assets owned by the company are too large compared to the company's ability to increase sales. This will result in investors paying less attention and considering the total assets turnover ratio in investing so that it will not affect the value of the company.

3.8 Effect of Current Ratio on Firm Value

The test results for the fourth hypothesis in this study are to determine whetherCurrent Ratio has an effect on firm value. Based on the results of statistical tests, the regression coefficient is −2.056, the Tcount value is −2.461, which is greater than ttable, which is 2.024 with a significance value of 0.019, which means it is smaller than 0.05. Based on these results, it can be concluded that the Current Ratio has a significant and negative effect on firm value. So that the fourth hypothesis is accepted. The negative direction here means that if the Current Ratio increases, then the value of the company decreases and vice versa if the current ratio decreases, the value of the company will increase. Based on the fourth hypothesis testing which states that the Current Ratio has a significant and negative effect on firm value, it can be concluded that an increase in the Current Ratio can reduce firm value. As mentioned by Irnawati [7], a high current ratio may indicate an excess of cash compared to the level of need or an element of current assets that is low in liquidity (such as inventory) in excess. The high current ratio is indeed good from the point of view of creditors, but from the point of view of shareholders it is not profitable because current assets are not utilized effectively. On the other hand, a low current ratio is relatively riskier, but indicates that management has operated current assets effectively. The cash balance is kept to a minimum according to the needs and the level of turnover. Based on the theory stated above that the relationship that occurs between the level of the Current ratio with Company Value is inversely proportional to true.

3.9 The Effect of Return on Assets on Firm Value

The test results for the fifth hypothesis in this study are to determine whetherReturn on Assets has an effect on firm value. Based on the results of statistical tests, the regression

coefficient is −7.674, the tcount value is −1.754 which is smaller than the ttable value of 2.024 and with a significance value of 0.088, which means it is greater than 0.05. Based on these results, it can be concluded that Return on Assets has a negative and insignificant effect on Firm Value. So that the fifth hypothesis is accepted. Based on testing the fifth hypothesis which states that Return On Assets has a negative and insignificant effect on Firm Value, it can be concluded that an increase in Return On Assets can reduce Firm Value. As mentioned by Febriani [31], low Return On Assets can be caused by the existence of funds spent on company operations that are not in accordance with the profits earned. If the company uses the entire fund for operations to the maximum or in accordance with the company's needs, the profit obtained will be maximized. Based on the theory stated above that the relationship that occurs between the level of Return on Assets to Firm Value is inversely proportional. That is, if the level of Return On Assets increases, the level of Company Value decreases and vice versa. This may occur because the company's management encourages focus on short-term goals rather than long-term, so it tends to take short-term decisions that are more profitable but have negative consequences in the long run.

3.10   The Effect of Total Asset Turnover on Firm Value with Return on Assets as an Intervening Variable

The results of this test indicate that Total Asset Turnover has a direct effect on Firm Valueof 0.097 and an indirect effect on the Company Value of −0.012 (0.019 x − 0.641). The total effect of TATO on Firm Value = 0.097 + (−0.012) = 0.085. The magnitude of the coefficient of direct influence compared to indirect influence, it can be concluded that ROA is not able to mediate the effect of TATO on Firm Value. So the sixth hypothesis is rejected.

3.11   The Effect of Current Ratio on Firm Value with Return on Assets as an Intervening Variable

The results of this test indicate that the Current Ratio has a direct effect on firm value of −0.386 and an indirect effect on firm value of 0.231 (−0.361 x −0.641). The total effect of CR on Firm Value = −0.386 + 0.231 = −0.155 The magnitude of the coefficient of indirect influence compared to direct influence, it can be concluded that ROA is able to mediate the effect of CR on Firm Value. so that the seventh hypothesis can be accepted.

4   Conclusion

Based on the results of the data analysis and discussion described above, it can be concluded that the Return On Asset (ROA) variable can be explained by the Total Asset Turnover (TATO) and Current Ratio (CR) variables, which are 7.3%, while the remaining 92. 7% is explained by other variables outside the model. While the Firm Value variable can be explained by the Total Asset Turnover (TATO) variable, Current Ratio (CR) and Return On Asset (ROA) of 22.4%, while the remaining 77.6% is explained by other variables outside the model. Based on the results of the tests that have been carried

out, it can be seen that TATO has an insignificant negative effect on ROA, CR has an insignificant negative effect on ROA. TATO variable has no significant negative effect on firm value. The CR variable has a significant and negative effect on firm value. Based on the path analysis, it can be concluded that ROA cannot mediate the effect of TATO on Firm Value. However, ROA can mediate the effect of CR on Firm Value. This study has limitations, namely the sample used is 40 pharmaceutical companies that meet the sample criteria from 12 publicly listed pharmaceutical companies listed on the Indonesia Stock Exchange. The variables used are only limited to TATO and CR with ROA as an intervening variable. Next is the observation year which is only limited between 2016–2020. As a suggestion for the company, it is expected to pay attention to the TATO variable for its effect on ROA. Because the large number of assets embedded in the company shows the amount of idle funds in the company. if these funds are not used properly it will not generate sales or high profits. And if these funds or assets cannot be managed properly then it will affect the level of effectiveness and efficiency of the company in utilizing existing resources within the company. For investors or company shareholders ROA variable is a variable that affects the value of the company. The increase in profitability shows the company's prospects are getting better and can provide prosperity for shareholders.

References

1. S. Dominick, *Ekonomi Manajerial dalam Perekonomian Global*. Jakarta: Salemba Empat, 2005.
2. E. Febriana, Djumahir, and A. Djawahir, "Pengaruh Struktur Modal, Kebijakan Dividen, Ukuran Perusahaan,Kepemilikan Saham Manajerial Dan Profitabilitas Terhadap Nilai Perusahaan(Studi Pada Perusahaan Manufaktur Yang Terdaftar Di BEI Pada 2011–2013)," *Ekon. Bisnis*, vol. 21, no. 2, pp. 163–178, 2016, https://doi.org/10.17977/um042v21i2p163-178.
3. W. Gendro and K. Hadri, *Manajemen Keuangan Lanjutan Berbasis Corporate Value Creation*, Edisi 1. Yogyakarta: UPP STIM YKPN, 2017.
4. I. G. A. D. N. Yanti and N. P. A. Darmayanti, "Pengaruh Profitabilitas, Ukuran Perusahaan, Struktur Modal, dan Likuiditas Terhadap Nilai Perusahaan Makanan dan Minuman," *E-Jurnal Manaj.*, vol. 8, no. 4, 2019.
5. E. F. Brigham and J. F. Houston, *Dasar-dasar Manajemen Keuangan*, Edisi 11. Jakarta: Salemba Empat, 2012.
6. R. Amanah, D. Atmanto, and D. F. Azizah, "Pengaruh Rasio Likuiditas dan Rasio Profitabilitas Terhadap Harga Saham (Studi Pada Perusahaan Indeks LQ45 Periode 2008–2012)," *J. Adm. Bisnis*, vol. 12, no. 1, 2014.
7. J. Irnawati, "Pengaruh Return On Assets (ROA), Return On equity (ROE) dan Current ratio (CR) Terhadap Nilai Perusahaan dan Dampaknya Terhadap Kebijakan Deviden (Studi kasus pada Perusahaan Construction and Engine ering yang terdaftar di Bursa Efek Singapura)," *J. SEKURITAS (Saham, Ekon. Keuang. dan Investasi)*, vol. 2, no. 2, pp. 1–13, 2019.

8. M. Misran and M. Chabachib, "Analisis Pengaruh DER, CR dan TATO terhadap PBV dengan ROA sebagai Variabel Intervening," *Diponegoro J. Manag.*, vol. 6, no. 1, pp. 1–13, 2017.
9. N. M. Rina, Syamsul Bakhtiar Ass, "ANALISIS RASIO AKTIVITAS UNTUK MENI-LAI KINERJA KEUANGAN PADA PT INDOFOOD SUKSES MAKMUR Tbk YANG TERDAFTAR DI BURSA EFEK INDONESIA (BEI) Rina Syamsul Bakhtiar Ass Nurwahidah M Universitas Muslim Maros," *BRAND*, vol. 1, no. 2, 2019.
10. S. Hani, *Teknik Analisa Laporan Keuangan*. Medan: UMSU PRESS, 2015.
11. H. M. F. Rambe, A. Gunawan, Julita, R. Parlindungan, and D. K. Gultom, *Pengantar Manajemen Keuangan*, Revisi. Bandung: Citapustaka Media, 2017.
12. B. Ammy and M. F. Alpi, "Pengaruh Perputaran Piutang dan Perputaran Modal Kerja Terhadap Likuiditas Perusahaan Otomotif dan Komponen," *J. Ris. Finans. Bisnis*, vol. 2, no. 3, pp. 135–144, 2018.
13. I. G. A. Wirajaya, "Pengaruh Current Ratio, Debt To Equity Ratio dan Return On Assets pada Harga Saham," *E-Jurnal Akunt.*, vol. 21, no. 2, pp. 1317–1345, 2017, doi: https://doi.org/10.24843/EJA.2017.v21.i02.p17.
14. A. Akuba and Hasmirati, "Analisis Kinerja Keuangan Dengan Menggunakan Rasio Likuiditas Pada PT. Telkom Indonesia Tbk.," *J. Akunt. dan Manaj.*, vol. 17, no. 1, pp. 18–31, 2019.
15. M. Dewi, "Analisis Rasio Keuangan untuk Mengukur Kinerja Keuangan PT Smartfren Telecom, Tbk," *J. Penelit. Ekon. Akunt.*, vol. 1, no. 1, pp. 1–14, 2017.
16. M. Rahayu and B. Sari, "Faktor-faktor Yang Mempenngaruhi Nilai Perusahaan," *J. Ekon.*, vol. 2, no. 2, pp. 69–76, 2018.
17. I. P. H. Sintyana and L. G. S. Artini, "Pengaruh Profitabilitas, Struktur Modal, Ukuran Perusahaan Dan Kebijakan Dividen Terhadap Nilai Perusahaan," *E-Jurnal Manaj.*, vol. 8, no. 2, pp. 7717–7745, 2019, doi: https://doi.org/10.24843/ejmunud.2019.v08.i02.p07.
18. S. Sianipar, "Pengaruh Struktur Modal Dan Profitabilitas Terhadap Nilai Perusahaan Pada Sektor Makanan dan Minuman Yang Terdaftar di Bursa Efek Indonesia," *J. Ilmu Adm.*, vol. 4, no. 1, pp. 1–14, 2017.
19. N. A. Hayati, "Pengaruh Keputusan Investasi, Keputusan Pendanaan, Dan Kebijkan Dividen Terhadap Nilai Perusahaan ((Studi Pada Perusahaan Perbankan yang terdaftar di Bursa Efek Indonesia Periode 2008 – 2012)," Universitas Muhammadiyah Surakarta, 2015.
20. P. D. P. Karmawan and I. B. Badjra, "Pengaruh Economic Value Added, Debt To Equity Ratio Dan Komposisi Komisaris Independen Terhadap Nilai Perusahaan," *E-Jurnal Manaj. Univ. Udayana*, vol. 8, no. 12, p. 7033, 2019, doi: https://doi.org/10.24843/ejmunud.2019.v08.i12.p07.
21. Tryfino, *Cara Cerdas Berinvestasi Saham*, Edisi 1. Jakarta: Transmedia Pustaka, 2009.
22. M. F. Alpi, "Pengukuran Return On Asset dan Earning Per share Terhadap Harga Saham Pada Perusahaan Tekstil dan Garment Yang Terdaftar di Bursa Efek Indonesia," *J. Ilm. Maksitek*, vol. 1, no. 1, pp. 56–64, 2016.
23. M. B. Kamal, "Pengaruh Receivable Turn Over Dan Debt To Asset Ratio (DAR) Terhadap Return On Asset (ROA) Pada Perusahaan Pertanian Yang Terdaftar Di Bursa Efek Indonesia (BEI)," *J. Ilm. Manaj. dan Bisnis*, vol. 17, no. 2, pp. 68–81, 2017, https://doi.org/10.30596/jimb.v17i2.996.
24. N. Ikhwal, "Analisis Roa Dan Roe Terhadap Profitabilitas Bank Di Bursa Efek Indonesia," *Lemb. Keuang. Dan Perbank.*, vol. 1, no. 2, pp. 211–227, 2016.
25. D. Iskandar, R. Hafni, and H. A. Nasution, *Statistik Ekonomi*. Medan: Perdana Publishing, 2016.
26. Sugiono, *Metode Penelitian Kombinasi*. Bandung: Alfabeta, 2017.
27. E. Sarwoko, "Analisis jalur pengaruh karakteristik pekerjaan, motivasi, kepuasan kerja terhadap kinerja karyawan," *Modernisasi*, vol. 1, no. 1, pp. 11–26, 2005.

28. Radiman, "Pengaruh Debt to Equity Ratio dan Total Asset Turnover Terhadap Price to Book Value Dengan Return On Asset Sebagai Variabel Intervening," *J. Ris. Finans. Bisnis*, vol. 2, no. 3, pp. 99–110, 2018.
29. Harjito and Martono, *Manajemen Keuangan*, Edisi 2. Yogyakarta: Ekonisia, 2011.
30. A. Sawir, *Analisis Kinerja Keuangan*. Jakarta: Gramedia Pustaka Utama, 2001.
31. N. P. Febriani, "Pengaruh Struktur Modal, Profitabilitas dan Ukuran Perusahaan Terhadap Nilai Perusahaan Pada Perusahaan Industri sektor Dasar dan Kimia Yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2013–2015," *J. Simki-Economic*, vol. 1, no. 9, pp. 1–17, 2017.