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Dalam rangka pelaksanaan Tridarma Perguruan Tinggi, maka dengan ini Ketua Program Studi Akuntansi Fakultas Ekonomi Dan Bisnis memberikan tugas kepada:

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Does the Debt Ratio Mediate the Effect of Liquidity Ratio and Profitability Ratio on Stock Returns?: Empirical Evidence on Wholesale and Retail Trade Sub-Sector Companies on the Indonesia Stock Exchange

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Abstract

This study aims to analyze the mediating effect of the debt ratio on the effect of liquidity and profitability on stock returns. Stock prices and returns are one unit, so that to estimate stock prices and returns can be seen from the company's financial performance, through financial ratios such as liquidity ratios, profitability ratios, and debt or leverage ratios. Companies with good financial performance are expected to have good stock performance. This study used a sample of 31 public companies in the wholesale and retail trade sub-sector which were listed on the Indonesia Stock Exchange in the 2016-2020 period. Sampling of this research was based on purposive sampling technique. The data analysis technique used is tiered linear regression, path analysis, and the Sobel test. The results of this study indicate that the significant liquidity ratio has a negative effect on the debt ratio and the liquidity ratio does not have a significant negative effect on stock returns. The profitability ratio has a significant positive effect on the debt ratio which confirms the trade-off theory. The profitability ratio has a significant positive effect on stock returns, while the debt ratio has a significant negative effect on stock returns. The debt ratio is not significant to mediate the positive negative effect of the liquidity ratio on stock returns. Likewise, the debt ratio is not significant mediating the negative positive effect of profitability ratios on stock returns. The results of this study suggest that investors who expect high stock returns do not need to pay attention to the company's debt ratio, but rather pay attention to the company's liquidity and profitability.

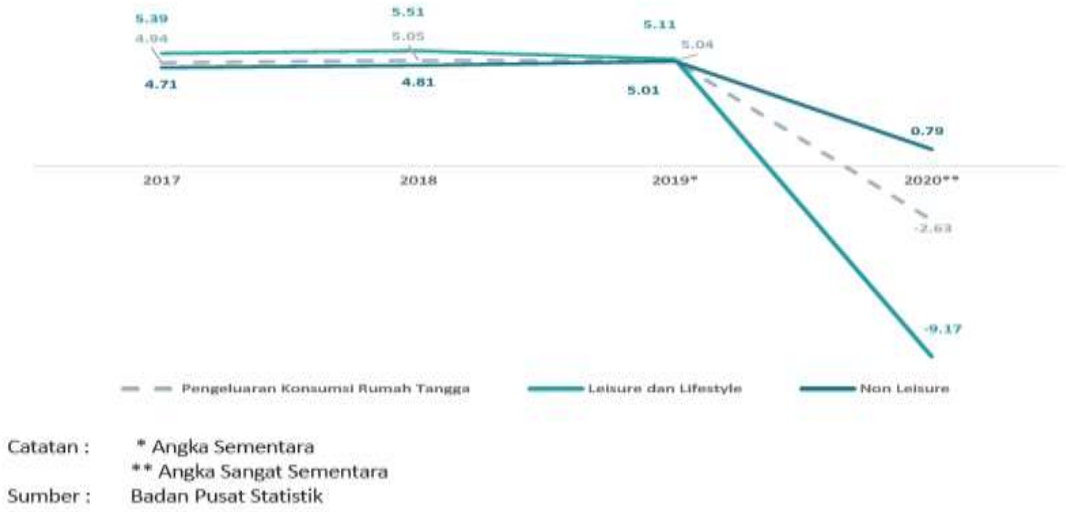
Keywords: *Stock Return, Liquidity, Profitability, Leverage, Trade-off Theory.*

A. INTRODUCTION

Currently, Indonesia is experiencing rapid progress because investment through the capital market has become a trend among the younger generation. According to data from the Indonesian Central Securities Depository as of September 2021, the capital market SID (Single Investor Identification) in Indonesia has reached more than 6,200,000 SIDs. Shares are one of the most widely marketed securities on the Indonesia Stock Exchange with varying share prices for each public company. In buying a stock, there are many things that investors need to consider. Every investor expects profit in investing. One of the goals of investors in investing in the capital market is to get a return, with the hope of a high rate of return on stocks. Stock return is a result obtained from investment activities in the capital market. An increase in stock prices will further increase the rate of return that an investor will get. The price

and rate of return on shares is a unit, so to estimate the price and rate of return on shares can be seen from the company's financial performance.

During the Covid-19 pandemic, the wholesale and retail trade sub-sector companies were quite affected due to a decrease in household consumption expenditure which experienced the biggest contraction with a negative growth rate of -2.63 percent in 2020. This contraction was caused by limited resources buy people affected by the Covid-19 pandemic as shown in the graph below:



Catatan : * Angka Sementara
** Angka Sangat Sementara
Sumber : Badan Pusat Statistik

Figure 1. Household Consumption Growth (Percent), 2017-2020

When making a decision, investors need a tool to measure the company's performance to find out whether it is worth investing in the company. By analyzing financial ratios, a company can evaluate their financial condition within a certain period of time. The company's financial performance can be measured using financial ratio analysis based on data in the company's financial statements (Ross et.al., 2015). There are several types of financial ratio analysis including liquidity ratios, debt ratios, and profitability. The liquidity ratio is used to measure a company's ability to pay off its obligations immediately at maturity. Companies with good liquidity can get loans with low interest rates. Profitability ratios are used to evaluate a company's profit with all the assets available in it, or the investment of the owners. Profits obtained by the company as a source of internal funding when the company cannot attract outside funding.

Brigham & Houston (2014) explains that the debt ratio is used to measure how much external party funds or creditors are used to generate profits. Adair & Adeskou (2015) argue that negligence in managing large debt capital can lead to an increasingly risky company fixed burden. This will result in an increase in the company's financial risk, thus potentially reducing the value of the company (Dewi & Sudiartha, 2017). Thus, the company will benefit from a good capital structure, which can be seen from the increasing financial position and company value. Thus, companies with good financial performance can be expected to have good stock performance, vice-versa.

The estimated relationship between these financial ratios and stock prices can be seen in the phenomena of the 5 wholesale and retail trade sub-sector companies as shown in graphs 2 to 5 below:

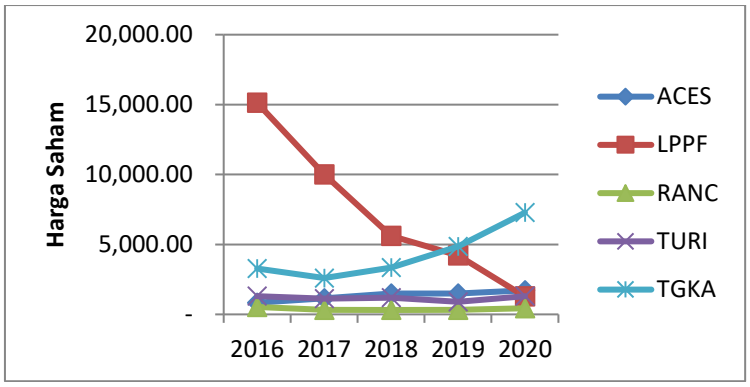


Figure 2. Share prices of 5 companies in the wholesale and retail trade sub-sector 2016-2020

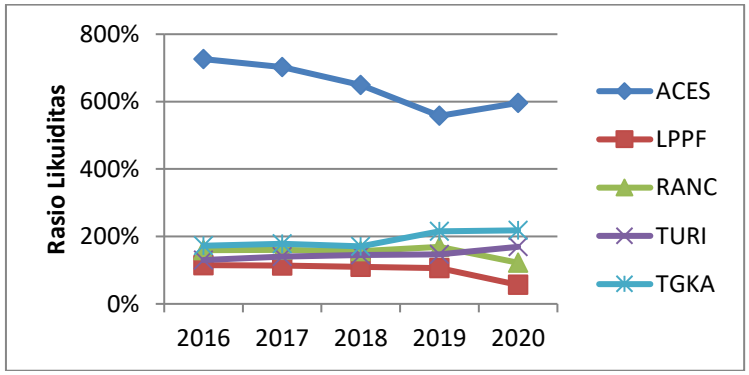


Figure 3. Liquidity ratio of 5 companies in the wholesale and retail trade sub-sector 2016-2020

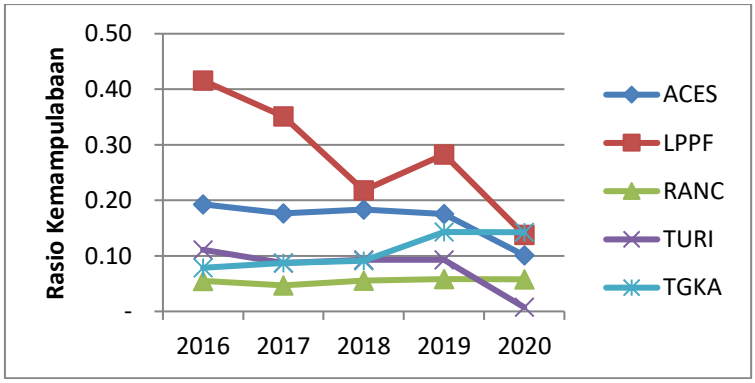


Figure 4. Profitability ratio of 5 companies in the wholesale and retail trade sub-sector 2016-2020

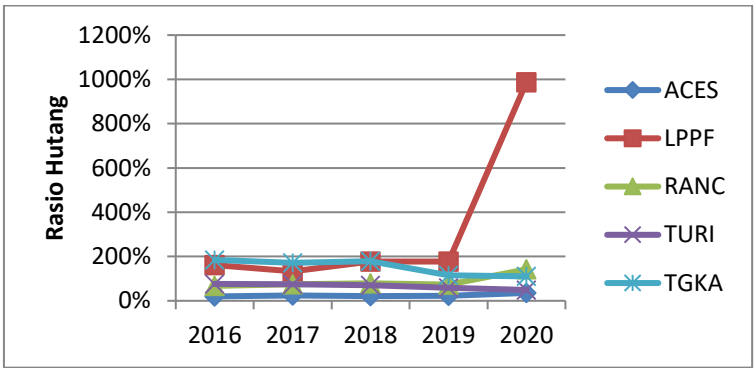


Figure 5. Debt ratio of 5 companies in the wholesale and retail trade sub-sector 2016-2020

From the phenomenon above, it can be seen that the liquidity ratio and profitability ratios of the five companies show a unidirectional pattern of relationship with stock price movements. However, the debt ratio shows the opposite pattern to stock prices. This phenomenon indicates that when a company's debt ratio increases, an increase in the company's liquidity ratio and profitability ratio will reduce its stock price, which has implications for reducing stock returns, vice-versa. From the description above it can be seen that several factors such as profitability, liquidity, and leverage can affect investors' decisions in buying shares.

Based on the background and the phenomenon of stock price movements and financial ratios in wholesale and retail trade sub-sector companies during the 2016-2020 period above, the formulation of this research problem poses the following research questions: Does the Debt Ratio mediate the effect of the Liquidity Ratio and Profitability Ratio on Return of Shares of Whole Sale and Retail Trade Sub-Sector Companies Listed on the Indonesia Stock Exchange for the 2016-2020 Period?

B. LITERATURE REVIEW

1. Stock Returns

Jogiyanto (2017), and Purba (2019) state that stock return is a return obtained by investors from an investment activity in the capital market in a certain period. Furthermore, Purba (2019) describes that stock returns consist of dividends distributed by the company, and capital gains or losses which are called capital gains/losses. The better the company's performance, the more profitable the company, and the more profitable investors, so that the higher the stock price which has implications for increasing stock returns (Modigliani & Miller, 1958).

2. Liquidity Ratio

Dewi & Sudiartha (2019), and Lestari & Cahyono (2020) state that liquidity shows a company's ability to use its current assets to pay off its current liabilities. The liquidity ratio is used to measure how liquid a company is. Companies that have a high liquidity ratio will basically reduce or not use debt at all, because companies have a lot of cash, so companies can prefer to maximize the use of their funds (Dewiningrat

& Mustanda, 2018). Liquidity can be measured in three ways, namely: current ratio, quick ratio, and cash ratio (Ibnu, 2020).

3. Leverage

Dewi & Sudiartha (2019) stated that the debt ratio shows the company's ability to use assets or funds at a fixed cost to increase the company's income level. Meanwhile, Lestari & Cahyono (2020) explained that the debt ratio is the ratio used to calculate how much of a company's assets are financed by its debt. The debt ratio is important for shareholders to observe how strong the company's ability to pay off its debts. Companies with high leverage ratios indicate that these companies have a high level of dependence on creditors. According to Gitman & Zutter (2015), there are several debt-to-asset ratios and debt-to-equity ratios.

4. Profit Ratio

The profitability ratio is a financial ratio that serves as a tool to measure a company's ability to generate profits (Choirurodin, 2018). This financial ratio measure can assist companies in determining their profit position in a given year. The profitability ratio shows the company's ability to obtain profit or a measure of the effectiveness of company management (Dewi, 2016; Purba 2019). Agree with Ross et al (2015) which explains that profitability ratios are used to measure management effectiveness in managing a company. Meanwhile, Lestari & Cahyono (2020) mentions profitability as a measure of a company's ability to increase its profits through all available resources within the company. There are several measuring tools for profitability ratios, including: the ratio of return on assets, and the ratio of return on equity (Gitman & Zutter, 2015).

5. Capital Structure Theory

Brigham & Houston (2014) which explains that capital structure is the basis for increasing company capital through a combination of own capital, issuance of shares, and debt. The most common capital structure theories include: (1) Agency Theory was built to prevent conflicts between interest groups. The concept of free cash flow is a source of contention between managers and shareholders. Managers usually prefer to save the resources they have so that they can eventually control them. Accounts payable can be seen as a means of reducing agency free cash flow conflicts. If the company uses debt, managers will be asked to take money from the company's cash to pay interest; (2) Trade Off Theory put forward by Myers (2001), namely companies will be in debt to a certain extent. The trade-off theory shows that managers in determining their capital structure will consider the trade-off between the benefits of tax savings and the costs of sacrificing the use of debt (Cotei & Farhat, 2011; Glover & Hambusch, 2014; Africa & Sunani, 2017).

Companies with high levels of profitability will most likely try to reduce their tax burden by increasing their debt ratios, so that the additional debt will reduce taxes.

Lumbantobing & Salim (2021) mentions the implication of this trade-off theory is that companies have leverage targets, and adjust the company's leverage from time to time to these leverage targets. (3) Pecking Order Theory, expressed by Myers (1984), Africa & Sanani (2017), and Sumail & Akob (2022) that companies tend to rely on internal funding sources compared to using funding sources derived from riskier debt. High company profits are used to reduce its debt ratio. There is a hierarchy of scenarios that companies need to consider in determining the use of their funds, namely choosing low-risk funding sources first, then debt and issuing equity as the last resort funding option. Optimal capital structure targets are not used in pecking order theory (Modigliani & Miller, 1958).

6. Framework for Thinking and Developing Research Hypotheses the Relationship between Liquidity Ratios and Debt Ratios

Studies by Prastika & Candradewi (2019), Purnama & Purnama (2020), Lumbantobing & Salim (2021) reveal findings that significant liquidity ratios have a negative effect on debt ratios. The more liquid a company is, the more cash available, so that cash can be used to pay off debts or even not use debt at all. Based on their findings, it can be postulated that there is a relationship between liquidity and debt ratio as stated in the following H1 research hypothesis:
H1: The liquidity ratio has a negative effect on the debt ratio.

7. The Relationship between Profitability Ratios and Debt Ratios

The findings of Dewi & Sudiartha (2017), Dewi (2019), and Lumbantobing & Salim (2021) reveal empirical evidence of the validity of the trade-off theory where the higher the profitability ratio of a company, the debt ratio will increase (Myers, 1984; Glover & Hambusch, 2014). High profits are used as collateral to increase the company's credibility in an effort to increase its loans from creditors. Based on their findings, it can be explained the relationship between the profitability ratio and the debt ratio as stated in the research hypothesis postulation H2 below:
H2: The profitability ratio has a positive effect on the debt ratio

8. The Relationship between Liquidity Ratios and Stock Returns

Studies by Dewi & Sudiartha (2017), Fuad & Mughni (2018), and Lestari & Cahyono (2020) reveal findings that significant liquidity ratios have a positive effect on stock returns. Their findings indicate that the more liquid a company is, the higher its stock return tends to be, vice-versa. Thus, based on the results of their study, it can be postulated the research hypothesis H3 in this study as follows:
H3: The liquidity ratio has a positive effect on stock returns

9. The Relationship between Profitability Ratios and Stock Returns

Based on the findings of Erzad & Erzad (2017), Fuad & Mughni (2018), and Purba (2019), which revealed that the profitability ratio has a significant positive effect

on stock returns, which shows that the higher a company's profits, the more it increases its stock returns, vice-versa . Then the research hypothesis H4 in this study is as follows:
H4: The profitability ratio has a positive effect on stock returns

10. The Relationship between Debt Ratios and Stock Returns

Based on the findings of Dewi & Sudiartha (2017), Erzad & Erzad (2017), Nurmasari (2018) which shows the results that the debt ratio has a significant negative effect on stock returns, it can be postulated the relationship between debt ratio and stock returns as stated in the research hypothesis H5 this study as follows:
H5: The debt ratio has a negative effect on stock returns

11. The Debt Ratio Mediates the Effect of the Liquidity Ratio on Stock Returns

Based on the development of the research hypothesis H1 which postulates that the liquidity ratio has a negative effect on the debt ratio, and the research hypothesis H5 which postulates that the debt ratio has a negative effect on stock returns, then based on the transitivity nature of the research hypotheses H1 and H5, a relationship can be constructed that the more liquid a company, the lower the debt ratio, then the low debt ratio will further increase stock returns.

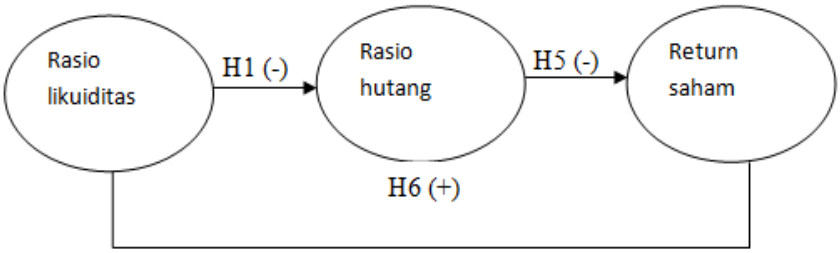


Figure 6. The debt ratio mediates the effect of the liquidity ratio on stock returns

This relationship indicates a conjecture that the debt ratio mediates the positive effect of the liquidity ratio on stock returns. In other words, the positive effect of liquidity on stock returns will be more positive when the debt ratio decreases (Lumbantobing & Salim, 2021). Thus, it can be postulated the research hypothesis H6 in this study is as follows:
H6: The debt ratio mediates the positive effect of the liquidity ratio on stock returns.

12. The Debt Ratio Mediates the Effect of the Profitability Ratio on Stock Returns

Based on the development of the research hypothesis H2 which postulates that the profitability ratio has a positive effect on the debt ratio, and the research hypothesis H5 which postulates that the debt ratio has a negative effect on stock returns, then based on the research hypotheses H2 and H5, a transitivity relationship can be constructed that the higher the the profitability of a company will be the higher the debt ratio, then the higher the debt ratio will further reduce its stock return.

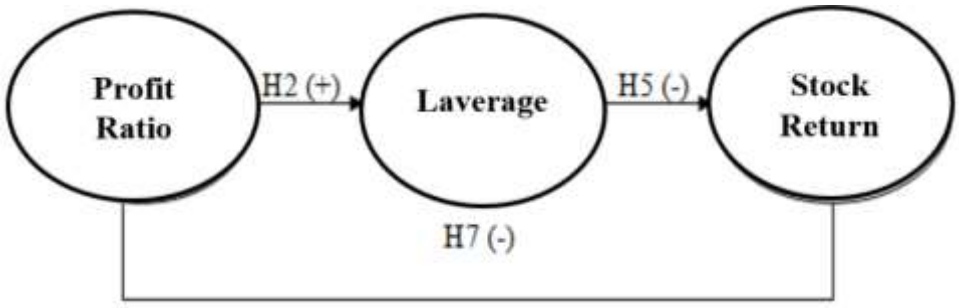


Figure 7. The debt ratio mediates the effect of the profitability ratio on stock returns

Thus, from the nature of the transitivity of the relationship above, it can be assumed that the debt ratio mediates the negative effect of the profitability ratio on stock returns. The positive effect of the company's profitability ratio on stock returns will decrease when the company's debt ratio increases (Lumbantobing & Salim, 2021). As stated in the postulation of the following research hypothesis H7:

H7: The debt ratio mediates the negative effect of the profitability ratio on stock returns.

The empirical research model in this study is presented in the following figure:

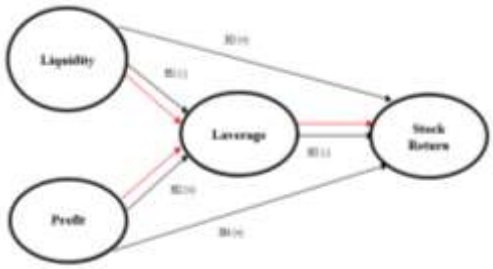


Figure 8. Research Model Pictographs

The pictograph of the research model above illustrates the postulation of the relationship that the debt ratio variable mediates the direct effect of the independent variables on the liquidity ratio and profitability ratio on stock returns. The positive effect of the liquidity ratio on stock returns will be more positive when the debt ratio increases. However, the positive effect of the profitability ratio on stock returns will be more negative when the company's debt ratio increases. This study will test whether the debt ratio mediates the direct effect of the liquidity ratio and profitability ratio on stock returns?

C. METHOD

1. Object of Research

This study uses secondary data which are documents in the form of financial statements of companies in the wholesale and retail trade sub-sector for the 2016-2020 period, starting from income statements, balance sheets, and cash flow reports obtained through the Indonesian Stock Exchange (IDX) website. The research was conducted by analyzing data in the financial reports of wholesale and retail trade sub-sector companies listed on the Indonesia Stock Exchange for the period 2016-2020.

2. Data Collection Technique

The sampling technique used in this research is purposive sampling based on the following provisions: Wholesale & retail trade companies listed on the Indonesia Stock Exchange for the period 2016-2020, and present complete financial statement information in units of Rupiah currency. The number of samples that meet the requirements of this study are 31 companies.

3. Research Variables and Operational Definitions

Research Variables and Operational Definitions in this study are presented in the following table:

Tabel 1. Operationalization of Research Variables

Variable	Definition	Proxy	Scale
Liquidity Ratio	A measure of a company's ability to meet obligations when they fall due (Gitman & Zutter, 2015).	CR = $\frac{Current\ Assets}{Current\ Liabilities}$	Ratio
Profit Ratio	The company's ability to earn profits by using all existing assets (Gitman & Zutter, 2015).	ROA = $\frac{Net\ Profit\ Income}{Total\ Assets}$	Ratio
Debt Ratio	The debt position of a company shows how much other party's funds are used to generate profits (Gitman & Zutter, 2015).	DER = $\frac{Total\ Liabilities}{Total\ Equity}$	Ratio
Stock Returns	The amount of profit investors get when investing in stocks (Jogiyanto, 2017).	RS = $\frac{Pt-P0+Divt}{P0}$	Ratio

4. Data Analysis

The data analysis technique used in this study is a tiered linear regression analysis technique, and path analysis as in the following structural equation model:

Structural equation models 1: $DER = \alpha_1.CR + \alpha_2.ROA + \varepsilon_1$

Structural equation models 2: $SR = \beta_1.CR + \beta_2.ROA + \beta_3.DER + \varepsilon_2$

Information:

SR : Stock Returns

α_{1-2} : Standard regression coefficient structural equation 1

β_{1-3} : The standard regression coefficient of the structural equation 2

CR : Current Ratio

ROA : Profit to Asset Ratio

DER : Debt to Equity Ratio

ε_{1-2} : Error/remaining

5. Path Analysis

Testing the direct and indirect effects with path analysis where the debt ratio is the intervening variable, as shown in the following table:

Table 2. Path Analysis

EFFECT	CR⟶ DER ⟶ RS	ROA⟶DER⟶ RS
Direct	β_1	β_2
Indirect	$\alpha_1.\beta_3$	$\alpha_2.\beta_3$
TOTAL	$\beta_1 + \alpha_1.\beta_3$	$\beta_2 + \alpha_2.\beta_3$

If the total effect is greater than the direct effect, the debt ratio can strengthen the effect of the liquidity ratio and profitability ratio on stock returns, vice-versa. To test the significance of the debt ratio to mediate the effect of the liquidity ratio, or the ratio of profitability on stock prices, it is carried out using the Sobel test in order to provide a clearer picture of the mediation of the debt ratio in the independent variable (liquidity & profitability ratio) to the dependent variable (stock return).

The Sobel test was carried out to test the indirect effect of the independent variable X on the dependent variable Y through the intervening variable M. The basis for drawing conclusions from the Sobel test shows Ho's rejection if the statistical value of the z test is calculated = $\frac{ab}{Sab}$ bigger than z table. Where is the standard standard error $S_{ab} = \sqrt{b^2Sa^2 + a^2Sb^2 + Sa^2Sb^2}$.

D. RESULT AND DISCUSSION

To guarantee the assumption of normality of the data and the similarity of the residual variance, all data on each research variable is transformed into a z-score.

1. Variable Descriptive Statistics

By using descriptive statistical analysis, researchers can better understand the characteristics of the data that has been collected. In this case, this analysis helps the researcher to identify data patterns and anomalies, as well as gain a better understanding of the variability of the data.

Table 3. Descriptive Statistical Test Results

	ZRS	ZCR	ZDER	ZROA
Mean	0.0539	-0.0932	-0.0310	0.1583
Maximum	2.71	0.51	2.75	0.66
Minimum	-2.95	-0.29	-1.37	-1.38
Std. Deviation	0.83159	0.14667	0.56561	0.22314
N	155	155	155	155

2. Normality Test

Data normality is tested using P-Plot and histogram graph as below:

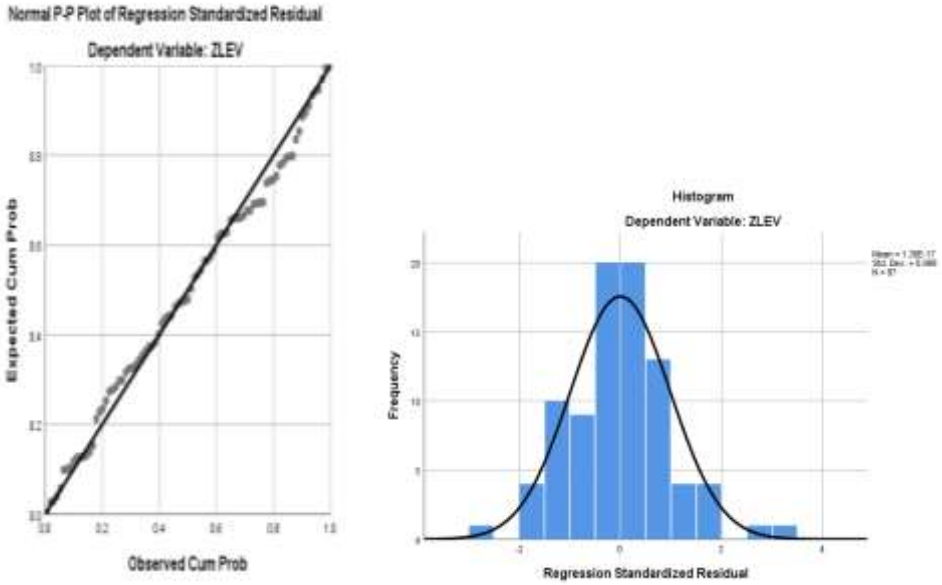


Figure 9. P-Plot Model 1 and Histogram Model 1

Figure 9 shows the structural equation model 1 for normally distributed data. The P-Plot and histogram show that the points are not far from the diagonal line with a symmetrical histogram. The same thing is also shown in Figure 10 of the P-Plot and histogram for the structural equation model 2.

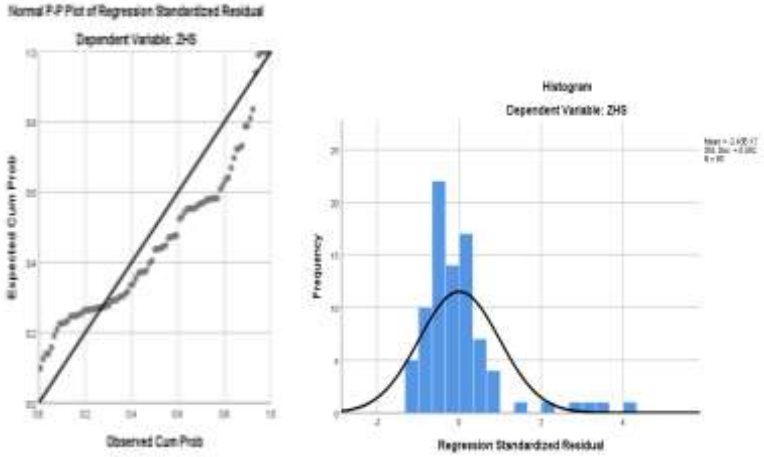


Figure 10. P-Plot Model 2 and Histogram Model 2

Table 4. Multicollinearity Test Results of the Structural Equation Model 1

Coefficients								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-0.189	0.065		-2.929	0.004		
	ZCR	-0.656	0.308	-0.170	-2.129	0.035	0.957	1.045
	ZROA	0.614	0.203	0.242	3.030	0.003	0.957	1.045

Dependent variable: ZDER

Table 5. Multicollinearity Test Results of the Structural Equation Model 2

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-0.147	0.097		-1.513	0.132		
	ZCR	-0.402	0.458	-0.071	-0.877	0.382	0.930	1.076
	ZROA	0.972	0.305	0.261	3.183	0.002	0.930	1.076
	ZDER	-0.317	0.119	-0.215	-2.667	0.008	0.930	1.076

Dependent variable: ZRS

Table 4 and Table 5 show the VIF values for all independent variables of the structural equation model 1 of 1.045 < 10, and the structural equation model 2 of 1.076 < 10, so that the structural equation models 1 and 2 can be concluded to be free from multicollinearity problems.

3. Residual Variance Homogeneity Test

Homogeneity test is a statistical test procedure that aims to show that two or more groups of data samples are taken from populations that have the same variance.

Table 6. Glejser Test Results of the Structural Equation Model 1

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.352	0.047		7.432	0.000
	ZCR	-0.428	0.226	-0.154	-1.898	0.060
	ZROA	-0.195	0.148	-0.107	-1.314	0.191

Dependent variable: AbsRes1

Table 7. Glejser Test Results of Structural Equation Model 2

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.582	0.062		9.417	0.000
	ZCR	-0.154	0.291	-0.044	-0.529	0.597
	ZROA	0.086	0.194	0.037	0.441	0.660
	ZDER	0.142	0.075	0.157	1.885	0.061

Dependent variable: AbsRes2

Table 6 and Table 7 show the results of the Glejser test with significance values for all independent variables for absolute residual variables > 0.05, so that the structural equation model 1 and structure 2 have a homogeneous residual variance (homoscedasticity).

4. Regression Model Fit Test (F-Test)

The F-test is any statistical test in which the test statistic has an F-distribution under the null hypothesis. It is used most often when comparing statistical models that have been fitted to data sets, to identify the model that best fits the population from which the data is sampled.

Table 8. F Test Results of the Structural Equation Model 1

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.476	2	1.738	5.769	0.004[b]
	Residual	45.791	152	0.301		
	Total	49.267	154			

Dependent Variable: ZDER Predictors: ZROA, ZCR $R^2 = 0.07055$

Table 9. F Test Results of the Structural Equation Model 2

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.036	3	3.012	4.666	0.004[b]
	Residual	97.461	151	0.645		
	Total	106.497	154			

Dependent variable: ZRS Predictors: ZDER, ZCR, ZROA $R^2 = 0.08485$

Table 8 and Table 9 show the results of the F test (ANOVA) which has a significance value of 0.004 < 0.05, so that the structural equation models 1 and 2 are feasible to use to predict the dependent variable based on variations in the independent variables of the regression model.

5. Test of Significance of Each Independent Variable

Significance test is one of the most important stages in a research, especially research with a quantitative methodology. This test will determine the conclusions of the research results. The significance test determines whether the hypothesis made at the beginning of the research will be accepted or rejected.

Table 10. Results of the t-test of the Structural Equation Model 1

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-0.189	0.065		-2.929	0.004
	ZCR	-0.656	0.308	-0.170	-2.129	0.035
	ZROA	0.614	0.203	0.242	3.030	0.003

Dependent Variable: ZDER

Structural Equation Model Estimation 1: ZDER = -0.170 ZCR + 0.242 ZROA

Table 10 reveals the results of the statistical hypothesis test t for the structural equation model 1 as follows:

a. Standardized coefficients β of ZCR is -0.170 with a significance value of 0.035 < 0.05, so Ho is rejected. These results show evidence that the ZCR current ratio has a significant negative effect on the ZDER debt ratio variable. Thus the research hypothesis H1 is accepted; the higher the liquidity ratio, the lower the debt ratio, vice-versa. The findings of this study support the results of the studies by Prastika & Candradewi (2019), Purnama & Purnama (2020), Lumbantobing & Salim (2021) which reveal that the liquidity ratio has a significant negative effect on the debt ratio. The more liquid a company is, the more cash available, so that cash can be used to pay off debts or even not use debt at all.

b. The independent variable ZROA has standardized coefficients β worth 0.242 with a significance value of 0.003 <0.05, so Ho is rejected. These results show evidence that the return on assets ZROA ratio has a significant positive effect on the ZDER debt ratio variable. Thus the research hypothesis H2 is accepted. The higher the profit ratio, the higher the debt ratio, vice-versa. The results of this study show evidence of the trade-off theory. The findings of this study are in line with the findings of Glover & Hambusch (2014), Dewi & Sudiartha (2017), Dewi (2019), and Lumbantobing & Salim (2021) which reveal empirical evidence of the validity of the trade-off theory from Myers (1984 & 2021), where the higher the profitability ratio of a company, the debt ratio will increase. High profits are used as collateral to increase the company's credibility in an effort to increase its loans from creditors.

Table 11. Results of the t-test of the Structural Equation Model 2

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-0.147	0.097		-1.513	0.132
	ZCR	-0.402	0.458	-0.071	-0.877	0.382
	ZROA	0.972	0.305	0.261	3.183	0.002
	ZDER	-0.317	0.119	-0.215	-2.667	0.008

Dependent Variable: ZRS

Structural Equation Model Estimation 2: **ZRS = -0.071 ZCR + 0.261 ZROA -0.215 ZDER**

Table 11 shows the results of the statistical hypothesis test t for the structural equation model 2, as follows:

c. Standardized coefficients β of ZCR is -0.071 with a significance value of 0.382 > 0.05, so Ho is not rejected. These results show evidence that the current ratio of ZCR has no significant negative effect on ZRS stock returns. Thus the research hypothesis H3 is rejected. The results of this study do not support the results of the studies by Dewi & Sudiartha (2017), Fuad & Mughni (2018), and Lestari & Cahyono (2020) which revealed findings that significant liquidity ratios have a positive effect on stock returns. These findings indicate an increase in the liquidity of the research sample companies, so that their stock returns will not necessarily increase either.

d. Standardized coefficients β of ZROA is 0.261 with a significance value of 0.002 <0.05, so Ho is rejected. These results show evidence that the ratio of return on assets of ZROA has a significant positive effect on ZRS Stock Returns. Thus the research hypothesis H4 is accepted. The higher the profit ratio, the higher the stock return, vice-versa. The findings of this study support the results of studies by Erzad & Erzad (2017), Fuad & Mughni (2018), and Purba (2019), which reveal that the profit ratio has a significant positive effect on stock returns. The higher the profitability of the sample companies in this study, the higher their stock returns, vice-versa.

e. The debt ratio independent variable ZDER has a standardized coefficient β of -0.215 with a significance value of 0.008 <0.05, so Ho is rejected. The results of

this test show evidence that the debt ratio has a significant negative effect on ZRS Stock Returns. Thus, the research hypothesis H5 is accepted. The higher the debt ratio, the lower the stock return, vice-versa. This finding confirms the findings of Dewi & Sudiartha (2017), Erzad & Erzad (2017), and Nurmasari (2018) which show that the debt ratio has a significant negative effect on stock returns. The results of this study are also consistent with research conducted by Lumbantobing & Salim (2021) which states that the debt ratio has a significant effect on stock returns.

f. Path Analysis

Path analysis is used to determine the direct or indirect effect of the debt ratio variable (DER) as a mediator on the effect of financial ratios on stock returns.

Table 12. Path Analysis and Sobel Test

EFFECT	ZCR ➔ ZDER ➔ ZRS	ZROA ➔ ZDER ➔ ZRS
Direct	-0.071	0.261
Indirect	0.03655	-0.05203
Total	-0.03655	0.20897
Standard Error	0.07834	0.0576
Z-Sobel	0.46656	0.90330
P-Value	0.321	0.181

Source: Results of data processing with SPSS 25

g. Table 12 explains that the direct effect of the current ratio variable ZCR on the ZRS stock return variable has a path coefficient of -0.071, with a total effect of a path coefficient of -0.03655 through the mediation variable ZDER's debt ratio, whose total effect value is greater than the direct effect of ZCR on ZRS. These results indicate that the debt ratio mediates the positive and negative effect of the liquidity ratio on stock returns. However, the results of the Sobel test showed a p-value of 0.321 > 0.05, so the research hypothesis H6 was rejected. Thus empirically it can be concluded that the debt ratio is not significant mediating the positive negative effect of the liquidity ratio on stock returns. The results of this study do not support the findings of Lumbantobing & Salim (2021) which reveal that significant leverage mediates the positive effect of liquidity on stock prices.

h. Table 12 also reveals that the direct effect of the ZROA earnings ratio variable on the ZRS stock return variable has a path coefficient of 0.261, with a total effect path coefficient of 0.20897 through the mediation variable ZDER's debt ratio, whose total effect value is lower than the direct effect of ZROA on ZRS. This shows that the positive effect of the earnings ratio on stock returns will decrease when the debt ratio increases, vice-versa. However, the results of the Sobel test showed a p-value of 0.181 > 0.05, so the research hypothesis H7 was rejected. Thus empirically it can be concluded that there is not enough evidence to show that significant debt ratios mediate the negative positive effect of profitability ratios on stock returns.

The results of this study are consistent with the results of research conducted by Lumbantobing & Salim (2021) which revealed that leverage is not significant mediating the positive effect of profitability on stock prices. Thus, these findings do not provide empirical evidence that when the debt ratio of the sample companies in this study increases, the increase in profitability cannot increase their stock returns.

E. CONCLUSION

Based on testing and data analysis conducted on sample companies in the wholesale and retail trade sub-sectors listed on the Indonesia Stock Exchange for the 2016-2020 period, this study concludes the following empirical findings: (1) The liquidity ratio has a significant negative effect on the company's debt ratio . The higher the liquidity ratio, the lower the debt ratio, vice-versa; (2) The profit ratio has a significant positive effect on the debt ratio which indicates the trade-off theory applies. The higher the profitability ratio, the higher the debt ratio. High profits can be used as collateral to increase the debt ratio to a certain level so that the company's capital structure can be optimized to the target of using certain debts; (3) The liquidity ratio has no significant negative effect on stock returns. Meanwhile, the profitability ratio has a significant positive effect on stock returns. This shows that the higher the company's profitability ratio, the higher its stock return; (4) Significant debt ratio has a negative effect on stock returns. The higher the debt ratio, the lower the stock return, vice-versa; (5) The debt ratio is not significant mediating the effect of the liquidity ratio and profitability ratio on stock returns. The liquidity ratio and profitability ratio only have a direct effect on stock returns. The addition of debt made by the company has no significant effect on changes in liquidity and earnings on stock returns.

The findings from this study show empirical evidence that the debt ratio is not a mediator variable on the effect of liquidity ratios and profitability ratios on stock returns. So, this study suggests that potential investors do not need to worry about the size of the company's debt ratio when the company's liquidity and profitability increase, followed by an increase in company debt. Additional debt should be used to increase investment in companies that are productive and innovative, so that they can improve their stock performance, which has implications for increasing investor stock returns.

REFERENCES

1. Adair, P., & Adaskou, M. (2015). Trade-Off Theory vs Pecking Order Theory and The Determinants of Corporate Leverage: Evidence From a Panel Data Analysis upon French SMEs (2002-2010). Cogent Economics and Finance, 3(1), 1-12.
2. Africa, L. A., & Sunani, A. (2017). The Effect of Pecking Order, Trade-Off and Market Timing Theories on Capital Structure in Commercial Banking Companies Listed on IDX. *The Indonesian Accounting Review*, *7*(2), 129. https://doi.org/10.14414/tiar.v7i2.1398.

3. Brigham, Eugene F. and Joel F. Houston, (2014). Fundamentals of Financial Management, 14th Edition. Mason: South-Western Cengange Learning.
4. Bursa Efek Indonesia. http//www.idx.co.id (diakses tanggal 1 Juli 2022).
5. Cotei, C., & Farhat, J. (2011). The Trade-Off Theory and the Pecking Order Theory: Are They Mutually Exclusive? *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1404576
6. Dewi, D. A. intan Y. M., & Sudiartha, G. M. (2017). Pengaruh Profitabilitas, Ukuran Perusahaan, dan Pertumbuhan Aset terhadap Struktur Modal dan Nilai Perusahaan. *E-Jurnal Manajemen Universitas Udayana*, *6*, 2222–2252.
7. Dewi, P. E. D. M. (2016). Pengaruh Rasio Likuiditas, Profitabilitas, Solvabilitas, Aktivitas dan Penilaian Pasar terhadap Return Saham. *Jurnal Ilmiah Akuntansi*, *1*(2), 109–132. https://doi.org/10.23887/jia.v1i2.9988
8. Dewi, T. A. T. (2019). Pengaruh Rasio Profitabilitas, Rasio Likuiditas, dan Ukuran Perusahaan terhadap Struktur Modal Perusahaan Asuransi Periode 2011-2016. *Jurnal Ilmiah Mahasiswa Universitas Surabaya*, *8*(1), 1839–1850.
9. Dewiningrat, A. I., & Mustanda, I. ketut. (2018). Pengaruh Likuiditas, Profitabilitas, Pertumbuhan Penjualan, dan Struktur Aset Terhadap Stuktur Modal. *E-Jurnal Manajemen Universitas Udayana*, *7*, 3471–3501. https://doi.org/10.24843/EJMUNUD.2018.v7.i07.p2
10. Erzad, A. M., & Erzad, A. M. (2017). The Effect of Financial Ratios toward Sharia Stock Return in Jakarta Islamic Index (JII). *QIJIS (Qudus International Journal of Islamic Studies)*, *5*(1), 129. https://doi.org/10.21043/qijis.v5i1.1971
11. Fuad, M., & Mughni, N. Al. (2018). Analisis Pengaruh Rasio Keuangan terhadap Return Saham PT. Adhi Karya (Persero) Tbk. *Jurnal Samudra Ekonomi dan Bisnis*, *9*(2), 116–127. https://doi.org/10.33059/jseb.v9i2.770
12. Gitman, Lawrence. J., & Zutter, Chad. J. (2015). *Principles of Managerial Finance* (14th ed.). Global Edition. Pearson Education Limited.
13. Glover, J. K., Hambusch, G. (2014). The Trade-off Theory Revisited: On the Effect of Operating Leverage. International Journal of Managerial Finance, 10(1), 2-22. http://doi.org/10.1108/IJMF-03-2013-0034.
14. Hartono, J., (2017). *Teori Portofolio dan Analisis Investasi*. BPFE.
15. Ibnu. (2020). *Cash Ratio Adalah: Pengertian, Fungsi, dan Cara Menghitungnya*. Www.Accurate.Id. https://accurate.id/akuntansi/cash-ratio-adalah/
16. Lestari, R., & Cahyono, K. E. (2020). Pengaruh Profitabilitas, Likuiditas Dan Solvabilitas Terhadap Return Saham (Studi Pada Perusahaan Consumer Goods Di Bei). *Jurnal Ilmu dan Riset Manajemen*, *9*(3). http://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/2993
17. Lumbantobing, R. (2016). Efek Rasio Likuiditas, Rasio Profitabilitas dan Rasio Aktivitas Pada Harga Saham yang Dimediasi Oleh Rasio Solvabilitas Perusahaan Sub-Sektor Industri Perkebunan yang Tercatat di Bursa Efek Indonesia. *Ilmiah Manajemen Bisnis*, *16*(2), 81–99.

18. Lumbantobing, R., & Salim, S. (2021). Does the Leverage Ratio Mediate the Effect of Liquidity Ratios , Profitability Ratios , and Activity Ratios on Stock Prices ? (Empirical Study of Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange for the Period of 2015-2019). *Journal of Management*, *11*(2), 535–543.
19. Modigliani, F., & Miller, M. H (1958). The Cost of Capital, Corporation Finance and The Theory of Investment: American Economic Review, 48, 261-297.
20. Myers, S. C. (1984). The Capital Structure Puzzle. *The Journal of Finance*, *39*(3), 574–592. https://doi.org/10.1111/j.1540-6261.1984.tb03646.x
21. Myers, S. C. (2001). Capital Structure. *Journal of Economic Perspectives*, *15*(2), 81–102. https://doi.org/10.1257/jep.15.2.81
22. Neni, M. B. P. (2019). Pengaruh Profitabilitas, Likuiditas, dan Leverage terhadap Return Saham Perusahaan Manufaktur di BEI. *Jurnal Akuntansi Keuangan Dan Bisnis*, *12 No. 2*(2), 67–76.
23. Nurmasari, I. (2018). Pengaruh Rasio Keuangan dan Pertumbuhan Pendapatan Terhadap Return Saham Pada Perusahaan Perkebunan di Bursa Efek Indonesia 2010-2017. *Jurnal SEKURITAS (Saham, Ekonomi, Keuangan Dan Investasi)*, *2*(1). https://doi.org/10.32493/skt.v2i1.1959
24. Prastika, N. P. Y., & Candradewi, M. R. (2019). Pengaruh Profitabilitas, Struktur Aktiva, dan Likuiditas terhadap Struktur Modal Perusahaan Subsektor Konstruksi Bangunan di BEI. *E-Jurnal Manajemen Universitas Udayana*, *8*(7), 4444. https://doi.org/10.24843/ejmunud.2019.v08.i07.p16
25. Purnama, M., & Purnama, O. (2020). Pengaruh Likuiditas, Profitabilitas, dan Pertumbuhan Aset Terhadap Struktur Modal. *ECo-Buss*, *2*(3), 18–31. https://doi.org/10.32877/eb.v2i3.137.
26. Ross S, A, Westerfield. R. W, Jaffe. J, Lim. J. Tan. R. & Wong. H (2015), Corporate Finance (Asia Global Edition), New York: McGraw Hill.
27. Sumail, L O., Akob, R.A. (2022). The Testing of Pecking Order Theory For Behavior Financing in The Company's Life Stage. *Journal of Finance and Banking*, vol 26, No 3, 580-598. DOI: 10.26905/jkdp.v26i3.7607.
28. Suryani Ulan Dewi, N. L. P., & Sudiartha, I. G. M. (2019). Pengaruh Profitabilitas, Likuiditas, Leverage, dan Ukuran Perusahaan terhadap Return Saham pada Perusahaan Food and Beverage. *E-Jurnal Manajemen Universitas Udayana*, *8*(2), 932. https://doi.org/10.24843/ejmunud.2019.v08.i02.p13
29. Watung, A. K. S., Saerang, I. S., & Tasik, H. H. D. (2016). Pengaruh Rasio Likuiditas, Aktivitas, Profitabilitas, dan Struktur Aktiva terhadap Struktur Modal Industri Barang Konsumsi di Bursa Efek Indonesia. *Jurnal EMBA*, *4*(2), 726–737.
30. Zubir, Z. (2011). *Manajemen Portofolio Penerapannya dalam Investasi Saham*. Salemba Empat.