FACTORS AFFECTING CAPITAL STRUCTURE IN FOOD AND COMPANIES BEVERAGES LISTED ON THE EXCHANGE INDONESIAN SECURITIES (IDX)

Putri Handayani Bachtiar[1],Muchriana Muchran[2],Muhammad Khaedar Sahib[3]
Muhammadiyah University of Makassar

Coresponding Author:
putrihandayanibachtiar@gmail.com[1], muchranmuchriana@gmail.com[2],
muhammadkhedarsahib@unismuh.ac.id[3]

Abstract

The aim of this research is to determine the factors that influence the capital structure of food and beverage companies listed on the Indonesia Stock Exchange (BEI). The population in this study is listed food and beverage companies listed on the Indonesia Stock Exchange (BEI), with a sample of 24 companies. This research was conducted using quantitative methods with the variables used in this research being Profitability, Liquidity, Company Size and Company Growth. The data analysis techniques used in this research are the classical assumption test, multiple linear regression analysis, hypothesis testing with partial tests (t tests), simultaneous F tests, and determination tests with the help of SPSS software. The results of this research show that Profitability has a negative and significant effect on the capital structure of food and beverage companies listed on the Indonesia Stock Exchange (BEI) for the 2020-2022 period. Liquidity has a negative and significant effect on the capital structure of food and beverage companies listed on the Stock Exchange Indonesia (BEI) for the 2020-2022 period, Company size has a negative and significant effect on the capital structure of food and beverage companies listed on the Indonesia Stock Exchange (BEI) for the 2020-2022 period, Company Growth has no effect on the capital structure of food and beverage companies listed listed on the Indonesia Stock Exchange (BEI) for the 2020-2022 period

Keywords: Profitability, Liquidity, Company Size, Company Growth Capital Structure, Indonesian Stock Exchange,

INTRODUCTION

The rapid progress and development of the world in the business sector is marked by an increase in competitive business competition.

One industry that has the opportunity to develop on the Indonesian Stock Exchange (BEI) is food and beverage companies. stable industry and is not affected by economic conditions (Dyah & Paramitha, 2020).

Decisions about funding and capital structure are among the financial decisions that financial managers must make if the company is to survive. This decision relates to the amount of preferred stock debt and common stock that the company must use.Therefore, one of the tough tasks of financial managers is to determine the optimal capital structure to maximize company value (Antoro et al., 2020).

Food and beverage companies are used in this research because their products are often used by many people and are able to survive in any policy model.

Instability in the capital structure of the food and beverage industry on the Indonesian Stock Exchange causes price fluctuations, and changes in company profits are visible in published financial reports.

Capital structure is a comparison of the amount of fixed short-term debt or current debt, long-term debt, ordinary shares and preferred shares (Sevira & Azhari, 2021).

According to Kasmir (2017:196) in (Leviani & Widjaja, n.d. 2020) The profitability ratio is a ratio to assess a company's ability to seek profits both in the form of company profits and the economic value of sales, the company's net assets and its own capital. Research conducted

According to research (Oktaviana et al., 2020) liquidity has a negative effect on capital structure. If a company has a good liquidity rating, it can be said that its current assets are greater than its debt obligations.

Company size can be expressed in total assets, sales and market capitalization. The greater the total assets, sales and market capitalization, the greater the size of the company. According to research conducted by (Purba DKK, 2020) states that company size has a positive effect on capital structure. The amount of assets a company owns will influence creditors' willingness to provide credit.

According to research by Khariry and Yusniar (2016) in (S Rumapea, 2021) states that company growth has a significant effect on capital structure, this is different from the results of research conducted by Susanto (2016) in (Fania Fajrianingrum, 2021) that company growth has no effect significant impact on capital structure.

Based on the description above and the existence of phenomena and differences in the results of previous research (research gaps) regarding factors that influence capital structure which show differences in research results, the author is interested in conducting research with the title "Factors that Influence Capital Structure in Food and Drinks Listed on the Indonesian Stock Exchange (BEI)"

RESEARCH METHODS

Type of research

This research uses a quantitative approach to determine the factors that influence the capital structure of food and beverage companies listed on the Indonesia Stock Exchange (BEI). Quantitative research is a process of searching for knowledge that uses numerical data to analyze data (Moh Kasiram, 2009 in Marinu Maruwu, 2023). This research will be conducted on companies listed on the Indonesia Stock Exchange for the 2020-2022 period. The research time is estimated to be approximately 2 months and will start from March-April 2024.

RESULTS AND DISCUSSION

Table 1. Profitability in Food and Beverage Companies
2020-2022

EMITEN	Years		
	2020	2021	2022
ADES	0,19	0,27	0,10
BISI	0,11	0,14	0,17
BWPT	-0,13	-0,68	0,00
CEKA	0,14	0,13	0,14
CLEO	0,14	0,18	0,16
CAMP	0,04	0,09	0,12
DLTA	0,12	0,18	0,23
DSFI	-0,03	0,06	0,09
DSNG	0,07	0,10	0,14
FISH	0,14	0,18	0,19
GOOD	0,08	0,14	0,12

ICBP	0,13	0,11	0,07
INDF	0,08	0,08	0,06
LSIP	0,70	0,09	0,09
MLBI	0,19	0,60	0,86
PSGO	0,02	0,15	0,15
PANI	0,00	0,06	0,01
ROTI	0,06	0,09	0,16
SGRO	-0,05	0,17	0,20
SIMP	0,01	0,04	0,05
SKBM	0,01	0,02	0,08
SMAR	0,12	0,19	0,28
SSMS	0,11	0,24	0,28
TBLA	0,11	0,12	0,11
average	0,10	0,11	0,16

**Table 2. Liquidity in Food and Beverage Companies
2020-2022**

EMITEN	Years		
	2020	**2021**	**2022**
ADES	2,11	2,01	2,62
BISI	4,92	6,10	6,65
BWPT	0,40	0,17	0,18
CEKA	4,13	4,38	8,22
CLEO	0,61	0,80	0,74
CAMP	6,00	6,88	5,79
DLTA	5,36	3,93	3,80
DSFI	1,18	1,29	1,50
DSNG	0,32	0,34	0,44
FISH	1,03	1,07	1,15
GOOD	0,62	0,69	0,80
ICBP	0,38	0,53	0,53
INDF	0,45	0,58	0,63
LSIP	1,78	2,56	3,44
MLBI	0,80	0,65	0,71
PSGO	0,25	0,41	0,53
PANI	1,24	1,14	1,12
ROTI	1,26	0,95	0,88
SGRO	0,23	0,27	0,35
SIMP	0,04	0,58	0,69
SKBM	1,18	1,18	1,30
SMAR	0,82	0,86	1,01
SSMS	0,43	0,45	0,38
TBLA	0,59	0,63	0,67
Average	1,51	1,60	1,84

Table 3. Company Size in Food and Beverage Companies in 2020-2022

EMITEN	Years		
	2020	**2021**	**2022**
ADES	13,77	14,08	14,31
BISI	14,88	14,95	15,04
BWPT	16,52	16,30	16,31
CEKA	28,07	28,16	28,17
CLEO	27,90	27,92	28,15
CAMP	27,71	27,76	27,70
DLTA	20,92	20,99	20,99
DSFI	26,64	26,69	26,69
DSNG	16,46	16,43	16,54
FISH	19,90	20,05	19,94
GOOD	29,51	29,54	29,62
ICBP	18,45	18,58	18,56
INDF	18,91	19,00	19,01
LSIP	16,20	16,28	16,33
MLBI	14,88	14,88	15,03
PSGO	28,85	28,94	29,05
PANI	25,31	18,91	23,49
ROTI	29,12	29,06	29,04
SGRO	16,09	16,09	16,14
SIMP	17,38	17,39	17,40
SKBM	28,20	28,30	28,34
SMAR	17,37	17,51	17,56
SSMS	23,27	23,35	23,36
TBLA	16,78	16,86	16,97
Average	21,38	21,17	21,41

Table 4. Company Growth in Food and Beverage Companies in 2020-2022

EMITEN	Years		
	2020	**2021**	**2022**
ADES	0,16	0,36	0,26
BISI	-0,00	0,07	0,08
BWPT	-0,04	-0,20	0,01
CEKA	0,12	0,08	0,01
CLEO	0,05	0,02	0,25
CAMP	0,02	0,05	-0,06
DLTA	-0,14	0,06	-0,00
DSFI	-0,04	0,04	-0,00
DSNG	0,21	-0,03	0,11
FISH	0,03	0,15	-0,14
GOOD	0,29	0,01	0,08
ICBP	1,67	0,13	-0,02
INDF	0,69	0,09	0,00

LSIP	0,06	0,08	0,04
MLBI	0,00	0,53	0,15
PSGO	0,04	0,09	0,10
PANI	-0,17	0,66	0,19
ROTI	-0,04	-0,05	-0,01
SGRO	0,02	0,00	0,05
SIMP	0,01	0,01	0,00
SKBM	-0,02	0,11	0,03
SMAR	0,26	0,15	0,05
SSMS	0,07	0,08	0,00
TBLA	0,11	0,08	0,12
Average	0,14	0,11	0,05

Table 5. Capital Structure in Food and Beverage Companies 2020-2022

EMITEN	Years		
	2020	**2021**	**2022**
ADES	0,36	0,34	0,23
BISI	0,19	0,14	0,11
BWPT	3,31	4,85	4,96
CEKA	0,24	0,22	0,10
CLEO	0,46	0,34	0,42
CAMP	0,13	0,12	0,14
DLTA	0,20	0,29	0,30
DSFI	0,93	0,85	0,65
DSNG	1,27	0,95	0,88
FISH	2,31	2,33	1,75
GOOD	1,27	1,23	1,18
ICBP	1,05	1,15	1,00
INDF	1,06	1,07	0,92
LSIP	0,17	0,16	0,13
MLBI	1,02	1,71	2,14
PSGO	1,81	1,61	1,45
PANI	1,45	2,90	1,16
ROTI	0,37	0,47	0,54
SGRO	1,56	1,12	0,95
SIMP	0,91	0,81	0,70
SKBM	0,83	0,98	0,90
SMAR	1,79	1,79	1,21
SSMS	1,62	1,26	1,16
TBLA	2,29	2,24	2,46
Average	1,11	1,21	1,06

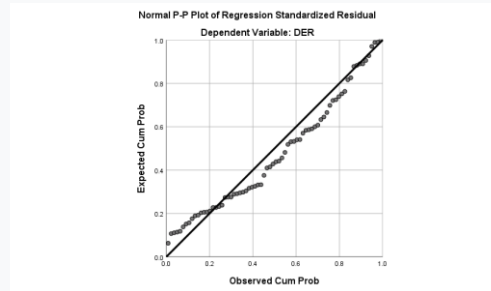## Classic Assumption Test

Normality test

Figure 1. Normality test

Based on the Normal P –P Plot of Regression Standardized Residual data above, it can be seen that the plotting data (dots) are not far apart and not spread out but follow a diagonal line so it can be concluded that the residual values are normally distributed.

Multicollinearity Test

Table 7. Multicollinearity Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.566	0.395		6.495	0.000		
	ROE	-1.698	0.574	-0.289	-2.960	0.004	0.943	1.060
	CR	-0.248	0.049	-0.487	-5.036	0.000	0.962	1.040
	SIZE	-0.038	0.017	-0.215	-2.226	0.029	0.960	1.041
	GROWTH	-0.085	0.398	-0.021	-0.213	0.832	0.913	1.095

Based on the output results of the Coefficients table above, it is known that the tolerance values for the variables Return on Equity (0.943), Current Ratio (0.962), Size (0.960), and Growth (0.913) are greater than 0.10. Meanwhile, the VIF value of the variables Return on Equity (1.060), Current Ratio (1.040), Size (1.041), and Growth (1.095) is smaller than 10.00. Referring to the basis of decision making for the multicollinearity test, it can be concluded that there are no symptoms of multicollinearity.
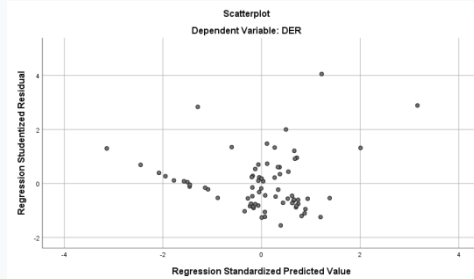
Heteroscedasticity Test

Figure 2. Heteroscedasticity Test

Based on the Scatterplot output above, it can be seen that the data points are spread below and above or around the number 0, not gathered only above or below, the distribution of the points does not form a wavy pattern, widening, then narrowing. Based on these results, heteroscedasticity does not occur.

Autocorrelation Test

Table 8. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.631	0.398	0.362	0.77817	1.763

The table above shows that the Durbin-Watson (d) value is 1.763. Next, we will compare this value with the Watson Durbin table value at a significance of 5%. The number of variables "k" = 4 while the number of samples "N" = 72, then (k; N) = (4; 68). We then look at this number in the Durbin Watson distribution table. So we get a "dU" value of 1.735. So the Durbin-Watson value is greater than "dU" and smaller than (4-dU) or dU=1.735<d=1.748<(4-dU)=2.265. As is the basis for taking the Durbin Watson test, it can be concluded that there is no autocorrelation.

Hypothesis testing

Table 9. Hypothesis Testing

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.566	0.395		6.495	0.000		
	ROE	-1.698	0.574	-0.289	-2.960	0.004	0.943	1.060
	CR	-0.248	0.049	-0.487	-5.036	0.000	0.962	1.040
	SIZE	-0.038	0.017	-0.215	-2.226	0.029	0.960	1.041
	GROWTH	-0.085	0.398	-0.021	-0.213	0.832	0.913	1.095

Multiple Linear Regression Analysis

Y= a+b1x1+b2x2+b3x3+b4x4

Y= 2,566 - 1,698X1 - 0,248X2 - 0,038x3 - 0,085x4

Based on the multiple linear regression equation above we can conclude as follows:

The Return on Equity (ROE) regression coefficient is -1.698, which means that if Return on Equity (ROE) increases by 1 and other variables are assumed to be constant, the Debt to Equity Ratio (DER) will decrease by -1.698. A negative coefficient means there is a negative relationship between Return on Equity (ROE) and Debt to Equity Ratio (DER). If Return on Equity (ROE) increases, the Debt to Equity Ratio (DER) decreases.

The Current Ratio (CR) regression coefficient is -0.248, which means that if the Current Ratio (CR) increases by 1 and other variables are assumed to be constant, the Debt to Equity Ratio (DER) will decrease by -0.248. A negative coefficient means that there is a negative relationship between the Current Ratio (CR) and the Debt to Equity Ratio (DER). If the Current Ratio (CR) increases, the Debt to Equity Ratio (DER) decreases.

The SIZE regression coefficient is -0.038, which means that if SIZE increases by 1 and other variables are assumed to be constant, the Debt to Equity Ratio (DER) will decrease by -0.038. The coefficient is negative, meaning there is a negative relationship between SIZE and Debt to Equity Ratio (DER). If SIZE IN increases, the Debt to Equity Ratio (DER) decreases.

The GROWTH regression coefficient is -0.085, which means that if GROWTH increases by 1 and other variables are assumed to be constant, the Debt to Equity Ratio (DER) will decrease by -0.085. A negative coefficient means that there is a negative relationship between GROWTH and Debt to Equity Ratio (DER). If GROWTH increases, the Debt to Equity Ratio (DER) decreases.

Simultaneous F Test

Table 10. Simultaneous F Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.781	4	6.695	11.056	0.000
	Residual	40.571	67	0.606		
	Total	67.352	71			

Based on the table above, it is known that the Sig. of 0.000 is smaller than 0.05 and the Fcount value of 11,056 is greater than Ftable, which is 2.53. Based on this, it can be concluded that simultaneously Return on Equity (ROE), Current Ratio (CR), Size and Growth influence the Debt to Equity Ratio (DER).

Coefficient of Determination (R Square)

Table 11. Coefficient of Determination (R Square)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.631	0.398	0.362	0.77817	1.763

Based on the "Model Summary" table above, it is known that the R Square value is 0.398, which means that the simultaneous influence of Return on Equity (ROE), Current Ratio (CR), Size and Growth on the Debt to Equity Ratio (DER) is 39.8 %. Meanwhile, the remainder (100%-39.8%=60.2%) was influenced by other variables not examined in this research.

DISCUSSION

a. Effect of Profitability on Capital Structure

The results of the first hypothesis data analysis show that the calculated t value is negative, namely -2.960. The statistical results of the t test for Profitability show a significance value of 0.004 and smaller than 0.05, so it can be concluded that Profitability has a negative and significant effect on capital structure so that hypothesis 1 is accepted.

A high level of profitability means a high level of debt repayment and retained earnings. Companies that have a high level of profitability tend to use retained earnings to reduce debt.

The results of this research support previous research conducted by Firnanti (2011) which shows that profitability has a negative and significant effect on capital structure. This means that the higher the profitability, the lower the capital structure.

b. Effect of Liquidity on Capital Structure

The results of the second hypothesis data analysis show that the calculated t value is negative, namely -5.036. The statistical results of the t test for Liquidity show a significance value of 0.000 and less than 0.05, so it can be concluded that Liquidity has a negative and significant effect on capital structure so that hypothesis 2 is accepted.

Greater liquidity will cause the company's capital structure to become smaller, because companies with high liquidity have the ability to pay short-term debt, which tends to reduce debt, so the capital structure becomes smaller.

These results are in line with previous research conducted by Widayanti, Triaryati, and Abundanti (2016) showing that liquidity has a negative and significant influence on capital structure.

c. Effect of Company Size on Capital Structure

The results of the third hypothesis data analysis show that the calculated t value is negative, namely -2.226. The statistical results of the t test for Company Size show a significance value of 0.029 and is smaller than 0.05, so it can be concluded that Company Size has a negative and significant effect on capital structure so that hypothesis 3 is accepted.

This means that the higher the company size, the lower the capital structure will be. Total assets, total sales, and average sales level can be used to determine how large or small a company is. Companies that are larger and whose shares are widely spread will be more willing to issue new shares to finance sales growth than smaller companies.

The results of this research are in line with research by Firnanti (2011) which states that company size has a negative and significant effect on capital structure.

d. Effect of Company Growth on Capital Structure

The results of the third hypothesis data analysis show that the calculated t value is negative, namely -0.213. The statistical results of the t test for Company Growth show a significance value of 0.832 and greater than 0.05, so it can be concluded that Company Growth has no effect on capital structure so that hypothesis 4 is rejected.

This condition shows that an increase or decrease in sales does not affect the value of the company's capital structure. This is because not all companies that experience growth rates will increase the amount of debt. This may be because the company uses the profits earned from sales for operations rather than increasing debt.

The results of this research are in line with research conducted by Sri Hermaningsih (2013) which states that company growth variables do not have a negative and significant effect on capital structure.

CONCLUSION

Based on the results of data analysis and the discussion that has been presented, the following conclusions can be drawn:

Has a negative and significant effect on the capital structure of food and beverage companies listed on the Indonesia Stock Exchange (BEI) in 2020-2022. Hypothesis 1 is accepted, and profitability can be used to predict the capital structure of food and beverage companies listed on the Indonesia Stock Exchange in 2020-2022. This is indicated by a significance value of 0.007 which is smaller than 0.05. Liquidity has a negative and significant effect on the capital structure of food and beverage companies listed on the Indonesia Stock Exchange (BEI) in 2020-2022. This is proven by the significance value of 0.000 which is smaller than 0.05 so that hypothesis 2 is accepted. Company size has a negative and significant effect on the capital structure of food and beverage companies listed on the Indonesia Stock Exchange (BEI) in 2020-2022. This is proven by the significance value of 0.029 which is smaller than 0.05 so that hypothesis 3 is accepted. Company growth has an insignificant negative effect on the capital structure of food and beverage companies listed on the Indonesia Stock Exchange (BEI) in 2020-2022. This is proven by the significance value of 0.832 which is greater than 0.05 so that hypothesis 4 is rejected.

REFERENCES

Antoro, W., Sanusi, A., & Asih, P. (2020). *The Effect of Profitability, Company Size, Company Growth on Firm Value Through Capital Structure in Food and Beverage Companies on the Indonesia Stock Exchange 2014-2018 Period. International Journal of Advances in Scientific Research and Engineering, 06(09),* 36–43. *https://doi.org/10.31695/ijasre.2020.33876*

Aslah, T. (2020). *Pengaruh Profitabilitas, Likuiditas, Struktur Aset dan Ukuran Perusahaan Terhadap Struktur Modal. 2(1).*

Arsal, M., & Muchran, M. (2020). *Pengaruh Profitabilitas, Likuiditas, Pertumbuhan Perusahaan Dan Struktur Modal Terhadap Nilai Perusahaan pada Perbankan yang Listing di BEI Periode 2016-2020 Hasriwana. In Prosiding Seminar Nasional (p. 112).*

Kenny, S., & Nariman, A. (2021). *Analisis Faktor-Faktor Yang Mempengaruhi Struktur Modal Perusahaan Makanan dan Minuman. Jurnal Ekonomi, November 2021,* 581–597.

Kharimah, T. N., & Sutandi, S. (2019). *Analisis Rasio Likuiditas, Solvabilitas, Profitabilitas Untuk Menilai Tingkat Kesehatan PerusahaanPada Pt. Harapan Jaya Lestarindo Tangerang. Primanomics : Jurnal Ekonomi & Bisnis, 17(2),* 91. *https://doi.org/10.31253/pe.v17i2.176*

Leviani, M., & Widjaja, I. (2020). *ANALISIS FAKTOR YANG MEMPENGARUHI STRUKTUR MODAL PADA PERUSAHAAN MAKANAN DAN MINUMAN YANG TERDAFTAR DI BURSA EFEK INDONESIA PERIODE 2013-2017. www.idx.co.id.*

Marlina, M., Pinem, D., & Hidayat, N. F. (2020). *Effect of Liquidity, Profitability, and Sales Growth on Capital Structure (in Manufacturing Companies). International Humanities and Applied Science Journal, 3(2). https://doi.org/10.22441/ihasj.2020.v3i2.01*

Milansari, R., & Masitoh, E. (2020). *FAKTOR-FAKTOR YANG MEMPENGARUHI STRUKTUR MODAL PADA PERUSAHAAN MAKANAN DAN MINUMAN DI BEI. In Maret (Vol. 2020, Issue 1).*

Mujiatun, S., & Ferina, D. (2021). *EFFECT OF PROFITABILITY AND ASSET STRUCTURE ON CAPITAL STRUCTURE (IN SHARIA BASED MANUFACTURING COMPANIES IN INDONESIA STOCK EXCHANGE IN 2016-2019 PERIOD). Proceeding International Seminar on Islamic Studies Medan.*

Mulyani, N., & Agustinus, E. (2021). *Analisa Pengaruh Ukuran Perusahaan, Struktur Aset, Dan Struktur Modal Terhadap Profitabilitas. Jurnal Arastirma, 2(1), 19–26.*

Putu, N., Karismawati, A., Agung, A., & Suarjaya, G. (2020). *e-ISSN t: t2378-703X t Volume-XX, tIssue-XX, tpp-XX-XX The Effect Of Dividend Policy, Sales Growth, And Liquidity Of The Company's Capital Structure. www.ajhssr.com*

Purwanti, D. (2021). *Determinasi Kinerja Keuangan Perusahaan : Analisis Likuiditas, Leverage Dan Ukuran Perusahaan (Literature Review Manajemen Keuangan). Jurnal Ilmu Manajemen Terapan, 2(5), 692–698. https://doi.org/10.31933/jimt.v2i5.593*

Setiadi, I., & Teknologi dan Bisnis Ahmad Dahlan Jakarta, I. (2020). *FAKTOR-FAKTOR YANG MEMPENGARUHI STRUKTUR MODAL. In Maret 2020: Vol. XVIII (Issue 1). http://jurnalnasional.ump.ac.id/index.php/kompartemen/*

Sevira, D. A., & Azhari, M. (2021). *Analysis of Factors Affecting Capital Structure on Listed Companies in Indonesia Stock Exchange 2017-2019 Period. Almana : Jurnal Manajemen Dan Bisnis, 5(2), 156–164. https://doi.org/10.36555/almana.v5i2.1546*

Sahib, M. K., Rustam, A., & Fitrah, F. (2023). *Analysis of Financial Performance Based on Activity Ratio and Profitability Ratio in Food and Beverage Industry Companies Listed on The Indonesia Stock Exchange (IDX) Period 2016–2020. INVOICE: JURNAL ILMU AKUNTANSI, 5(1), 34-57.*