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FINANCE | RESEARCH ARTICLE

The Influence of Liquidity and Sales Growth on Capital Structure in Manufacturing Companies on The Indonesian Stock Exchange

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Abstract: This study aimed to determine the effect of liquidity and sales growth on capital structure. The research population is food and beverage manufacturing companies listed on the Indonesia Stock Exchange for 2017 - 2021. The research sample was six companies. Data was analyzed using linear regression and processed using the IBM SPSS 25 program. The results showed that the partial Current Ratio negatively and significantly affects the Equity Ratio. Meanwhile, sales growth has no significant impact on Debt-to-equity Ratios in food and beverage companies.

Keywords: Current Ratio, Sales Growth, Debt to Equity Ratio.**JEL Classification Code:** H83, H70, M48, R53

1. INTRODUCTION

Companies running a business in services or production expect good results and strive to achieve company goals. Especially now that competition in the business world is getting more challenging daily, both from small and large companies. Many companies continue to innovate so that the company is superior in terms of competition for products and services offered by other companies. Companies making innovations need capital to meet these needs; capital needs can be obtained from various sources. The capital is divided into two sources: internal and external, where internal capital is funds from the company itself. In contrast, external funds come from outside sources such as debt. In response to this phenomenon, the role of financial managers in making decisions must carefully consider which costs will be chosen as a source of funds because each source of funds has different consequences. Determining the amount of capital or debt used as a source of corporate funds is related to the capital structure. Capital structure can also be considered between private and foreign capital (debt). The factors that most influence the capital structure are liquidity and sales growth rate, management control and attitude, the attitude of lenders and rating agencies, market conditions, internal conditions of the company, and the company's flexibility. The capital structure of several food and beverage companies was reviewed through the Equity Ratio, as follows:

Table 1. Capital Structure (Debt to Equity Ratio) Period 2018 - 2020

Code	Capital Structure		
	2018	2019	2020
BUDI	1.77	1.33	1.24
CEKA	0.20	0.23	0.24
DLTA	0.19	0.18	0.20
ICBP	0.51	0.45	1.06
INDF	0.93	0.77	1.06
MYOR	1.06	0.92	0.75
Mean	0.78	0.65	0.76



Based on the table 1, the capital structure of several food and beverage companies was reviewed using the debt-to-equity ratio formula. It is concluded that there were fluctuations in the capital structure during the 2018-2020 period. In 2018, the debt-to-equity ratio was 0.78 or 78%, while in 2019, it decreased to 0.65 or 65%. Meanwhile, in 2020, it increased again, amounting to 0.76 or 76% of the previous year.

According to (Masnoon and Anwar, 2012), the capital structure can optimize the combination of the amount of debt and equity that is set in such a way as to minimize the company's cost of capital. The purpose of the capital structure is to maximize the company's value and minimize the overall cost of capital. Judging from the company's scale, the scope of small businesses is more financed by their capital (Chadha & Sharma, 2015). On the other hand, using sizeable long-term debt can pose a risk of default on the interest charged. The level of capital structure can be measured by the long-term debt to equity (LTDER) ratio, which is the amount of long-term debt compared to the total amount of own capital. The long-term debt-to-equity ratio is used because this Ratio measures the amount of capital owned as a guarantor for fulfilling long-term debt.

The first factor affecting capital structure is liquidity, defined as the company's ability to fulfill its financial obligations, according to Riyanto (2010). Liquidity indicates the readiness of the company to settle short-term obligations on time when due, which is reflected in the amount of current assets owned by the company. When the company has a more significant amount of cash, the company tends to make payments on debt or buy securities (Sartono, 2012). (Sartono, 2012). Companies with high liquidity risk tend to reduce or even not use debt because they have a large amount of internal funds, so they prefer to maximize the use of these funds. Pecking order theory can be understood as a situation where companies are more likely to use internal funding as an alternative to funding new investments (Sheikh & Wang, 2011). This study uses the current Ratio to measure the company's liquidity level. The current Ratio is the amount of current assets compared to the current debt. An increase in this Ratio will illustrate the availability of excess cash due to the acquisition of profit income or expansion in the form of investment that the company lessensifies. The second factor that affects the capital structure is sales growth. Sales growth is a change in the increase or decrease in sales from year to year, which can be seen in the company's profit and loss statement (Maryanti, 2016). Company growth can also be seen in sales growth. Companies with stable sales growth gain the trust of outsiders and find it easier to get loans or debt than companies with unstable sales growth. Companies with high sales growth will also require larger funds, so they use more external sources. From the description above, this study aims to obtain empirical evidence that capital structure is influenced by liquidity and sales growth for manufacturing companies listed on the Indonesia Stock Exchange (IDX). This problem attracts researchers to research by taking the title "The Effect of Liquidity and Sales Growth on Capital Structure in Manufacturing Companies on the Indonesia Stock Exchange."

2. RESEARCH METHOD AND MATERIALS

The quantitative research method, specifically correlational, was employed in this study to examine the relationship between two or more variables using numerical data for statistical analysis. Conducted at Consumer Goods Industry Companies listed on the Indonesia Stock Exchange (IDX), the research spanned three months from October to December 2022. Secondary quantitative data were sourced from financial and sustainability reports available at the IDX representative office in Makassar and online. Data collection involved documentation and literature research. The population comprised 26 food and beverage companies listed on the IDX from 2017-2021, with a purposive sampling technique narrowing it to six companies that consistently published financial reports and did not incur losses for three consecutive years. Descriptive statistical analysis, classical assumption tests (normality, heteroscedasticity, multicollinearity), and multiple linear regression analysis were performed using SPSS version 20.0 to determine the influence of liquidity and sales growth on capital structure.

3. RESULTS AND DISCUSSION

3.1. Descriptive Variable

The Current Ratio reflects a company's ability to pay its short-term liabilities using its current assets. The following is the average Current Ratio of food and beverage companies listed on the Indonesia Stock Exchange from 2017 to 2021.

Table 2. Descriptive Variable Current Ratio

No.	Code	Current Ratio					Average
		2017	2018	2019	2020	2021	
1	DMND	223.20	227.17	176.88	435.78	358.36	284.28
2	GOOD	99.37	118.14	153.38	176.65	147.54	139.02
3	MYOR	238.60	265.46	342.86	369.43	232.82	289.83
4	ROTI	225.86	357.12	169.33	383.03	265.32	280.13
5	SALT	125.94	122.68	129.01	153.67	179.33	142.13
6	ULTJ	419.21	439.78	444.41	240.34	311.26	371.00
Mean		222.03	255.06	235.98	293.15	249.11	251.06

By looking at the Current Ratio level from Table 2, it can be seen that the company's liquidity condition, as viewed through the current Ratio, fluctuates. The highest average current ratio value is in 2020, namely 293.15%, and the lowest is in 2017, at. Overall, the current Ratio of food and beverage companies in 2017 - 2021 is good. This indicates that the higher the Current Ratio value, the more the availability of current assets to pay current debt is also increasing.

Sales Growth is a company's sales increase from year to year. When a company experiences increasing sales growth, this tends to encourage it to increase its assets. The following is the average Sales Growth of food and beverage companies listed on the Indonesia Stock Exchange in 2017 - 2021.

Table 3. Descriptive Variable Sales Growth

No.	Code	Sales Growth					Average
		2017	2018	2019	2020	2021	
1	DMND	10.49	17.17	10.96	-11.62	14.13	8.22
2	GOOD	13.31	7.60	4.84	-8.62	14.11	6.25
3	MYOR	13.44	15.58	4.01	-2.20	14.00	8.97
4	ROTI	-1.22	11.06	20.62	-3.75	2.35	5.81
5	SKLT	9.63	14.31	22.59	-2.14	8.23	10.53
6	ULTJ	4.13	12.16	14.04	-4.39	10.88	7.36
Mean		8.30	12.98	12.84	-5.45	10.62	7.86

Looking at the sales growth rate in Table 3, it is known that sales growth conditions fluctuate every year. The highest sales growth was in 2018, at 12.98%. Meanwhile, the lowest sales growth was in 2020 at -5.45%. The higher the sales growth, the better for the company. When the profit from sales is more significant, the company can avoid financial distress. The debt-to-equity ratio reflects the ability of the company's capital to fulfill all its obligations. The following is the average Debt-to-Equity Ratio of food and beverage companies listed on the Indonesia Stock Exchange from 2017 to 2021.

Table 4. Descriptive Variable Debt to Equity Ratio

No.	Code	Debt to Equity Ratio					Average
		2017	2018	2019	2020	2021	
1	DMND	45.17	44.03	69.65	22.33	25.55	41.35
2	GOOD	205.33	73.81	88.30	143.06	157.42	133.58
3	MYOR	102.82	105.93	92.30	77.25	79.14	91.49
4	ROTI	61.68	50.63	51.40	37.94	47.10	49.75
5	SKLT	106.82	120.35	107.89	89.89	63.92	97.78
6	ULTJ	23.30	16.35	16.86	83.85	46.75	37.42

No.	Code	Debt to Equity Ratio					Average
		2017	2018	2019	2020	2021	
	Mean	90.85	68.52	71.07	75.72	69.98	75.23

Based on table 4, the debt-to-equity ratio fluctuates, with the highest debt-to-equity ratio in 2017 being 90.85%, while the lowest debt-to-equity ratio level was in 2018. Generally, the average value of debt to equity ratio in food and beverage companies is 75.23%, which is classified as low. This means that the lower the debt-equity Ratio, the better the fundamental conditions of food and beverage companies.

3.2. Classical Assumption Test

In this study, normality testing uses three tests: the Kolmogrov-Smirnov normality test, histogram, and p-plot. The normality test aims to ensure that the data is normally distributed. The main requirement for the regression method is that the data be normally distributed with a significant level above 5%. If the considerable level is below 5%, the data is said to be not normally distributed.

Table 5. Kolmogrov - Smirnov Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		30
Normal Parameters,b	Mean	.0000000
	Std. Deviation	30.76345973
Most Extreme Differences	Absolute	.152
	Positive	.152
	Negative	-.087
Test Statistic		.152
Asymp. Sig. (2-tailed)		.074c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

The normality test table 5 shows that the data has a normal distribution because of the significant level of Asymp Sig. (2-tailed) above 5%, namely $0.074 > 0.05$.

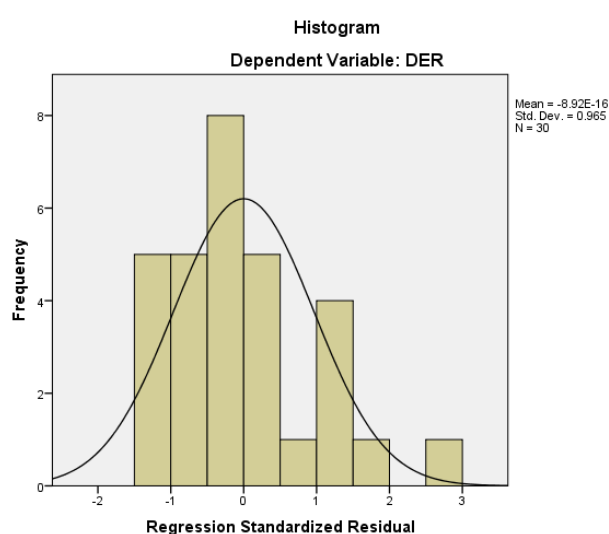


Figure 1. Histogram Normality Test

The histogram figure 1 illustrates a distribution pattern not skewed to the right and left but right in the middle, like a bell shape; these results indicate that the data is usually distributed.

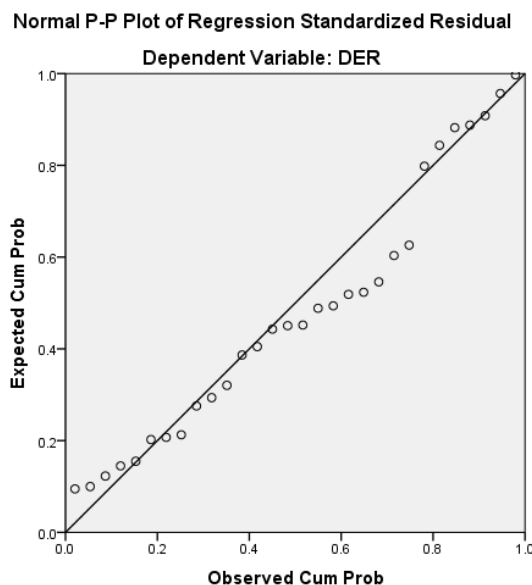


Figure 2. P-Plot Normality Test

Based on the p-plot normality test image, it is known that the data is usually distributed because the data spreads around the diagonal line and follows the direction of the diagonal line. The following are the results of the multicollinearity test of the current ratio (CR) and sales growth (SG) variables on the debt-to-equity ratio (DER).

Table 6. Multicollinearity Test

Coefficients			
Model		Collinearity Statistics	
		Tolerance	VIF
1	CR	.928	1.078
	SG	.928	1.078

a. Dependent Variable: DER

Table 6. The multicollinearity test above can show the variance inflation factor (VIF) value for all variables, namely current Ratio (CR) and sales growth (SG), has a value smaller than ten and a tolerance value greater than 0.10, so there are no symptoms of multicollinearity between independent variables. The following are the results of the heteroscedasticity test of the current ratio (CR) and sales growth (SG) variables on the debt to equity ratio (DER) using scatterplot:

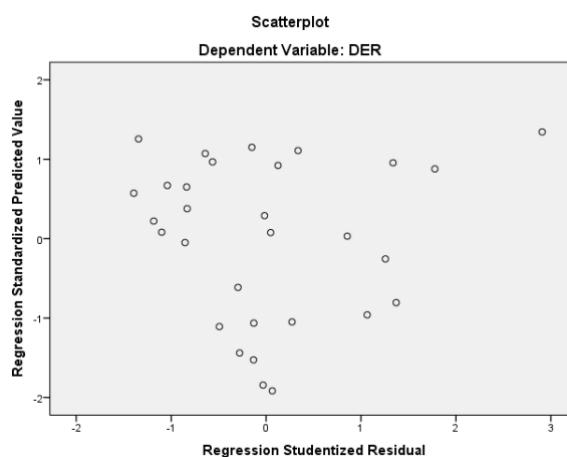


Figure 3. Heteroskadasticity Test

The figure shows no heteroscedasticity because the data points are spread above, below, or around the number; the data points are not collected only above and below.

3.3. Hypothesis Test

3.3.1 Multiple Linear Regression Analysis

Multiple linear regression aims to determine whether variable X has a positive or negative effect on variable Y. The following are the results of multiple linear regression of current ratio (CR) and sales growth (SG) variables on debt to equity ratio (DER)

Table 7. Multiple Linear Regression Analysis

Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	153.362	17.569		8.729	.000	
CR	-.296	.056	-.734	-5.253	.000	
SG	-.486	.717	-.095	-.677	.504	

a. Dependent Variable: DER

Source: data processed (2023)

Table 7 shows the regression equation as follows:

$$Y = 153.362 - 0.296 \text{ CR} - 0.486 \text{ SG}$$

The multiple linear regression equation above can be explained in detail as follows:

- 1) Constant
The constant (a) of 153.362 means that if the current Ratio (CR) and sales growth (SG) together do not change or are equal to zero (0), the debt-to-equity Ratio (DER) is 153.362.
- 2) Current Ratio (X1)
The regression coefficient value for the current ratio variable (X1) is—0.296. This study shows that the current Ratio (X1) hurts the debt-to-equity Ratio. This indicates that when the current Ratio (X1) increases by one unit (1%), the debt-to-equity Ratio (Y) decreases by—0.296.
- 3) Sales Growth (X2)
The sales growth variable (X2) regression coefficient value is—0.486. This study shows that sales growth (X2) hurts the debt-to-equity Ratio. When sales growth (X2) increases by one unit (1%), the debt-to-equity Ratio (Y) decreases by—0.486.

3.3.2 Hypothesis Test

The t-test or partial test determines whether variable X significantly affects variable Y with a significant level of 0.05. The following are the results of the t-test of the current ratio (CR) and sales growth (SG) variables on the debt-to-equity ratio (DER)

Table 8. Hypothesis Test t-count

Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	153.362	17.569		8.729	.000	
CR	-.296	.056	-.734	-5.253	.000	
SG	-.486	.717	-.095	-.677	.504	

Hypothesis 1

Based on the partial test results, it is known that the current ratio (X1) t-count is -5.253 with a significance level of current Ratio (X1) of $0.000 < 0.05$, so the first hypothesis in this study is accepted.

Hypothesis 2

Based on the partial test results, it is known that the sales growth (X2) t-count is - 0.677 with a significance level of sales growth (X2) of $0.504 > 0.05$, so the second hypothesis in this study is rejected.

3.3.3 Determination Coefficient Test

This analysis is used to determine the proportion of the contribution of the independent variable current Ratio (CR) and sales growth (SG) to the debt-to-equity Ratio (DER).

Table 9. Test Coefficient of Determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.715a	.511	.474	31.88249
a. Predictors: (Constant), SG, CR				
b. Dependent Variable: DER				

The coefficient of determination (*R Square*) is 0.511, or 51.1%, which indicates that the variation of the *debt-to-equity Ratio* (Y) can be explained by the *current Ratio* (CR) and *sales growth* (SG). In comparison, the remaining 48.9% is influenced by other factors not explained in this study, such as profitability, taxes, control, management attitudes, market conditions, internal company conditions, financial flexibility, etc.

3.4. Discussion*The Effect of Current Ratio on Debt to Equity Ratio*

Liquidity in this study is measured using the Current Ratio. The current Ratio reflects the ability of the company's current assets to cover current liabilities or short-term debt. The higher the current ratio value, the higher the company can pay debts because it has more short-term assets than its debt. The high current Ratio will impact the company's capital structure. Based on the research results, the first hypothesis in this study is accepted because the current Ratio has a significant adverse effect on the debt-to-equity ratio. Negative means that the higher the current Ratio in food and beverage companies, the lower the level of capital structure of the company. A significant effect is caused by the high current ratio value in food and beverage companies, which reflects that they already have sufficient internal funds to meet their short-term obligations, which will impact the company's capital structure. Emphasizing debt in these companies is helpful to avoid the risks associated with the use of debt. According to the pecking order theory, companies with high liquidity tend not to use debt financing because they have large internal funds, and some companies prefer to use internal funds first before signaling financing. The results of this study are in line with the research of Ni Putu Yulinda Prastiska and Made Reina Candradewi (2019), which suggests that there is a significant negative influence between *the current Ratio* (liquidity) and capital structure (*debt to equity ratio*).

Effect of Sales Growth on Debt to Equity Ratio

Sales growth is the increase in sales from year to year or from time to time. It is one of the important factors in determining the company's capital structure because, with the increase in the company's sales level, the profit and income that the company will obtain will also increase. Based on the research results, the second hypothesis in this study is rejected because sales growth is harmful and has no significant effect on the debt-to-equity ratio. Negative means that the higher the sales growth in food and beverage companies, the lower the level of capital structure of the company. The absence of significant influence is caused by food and beverage companies' relatively low sales growth, even though it tends to be unstable. The average annual sales growth cannot be predicted; this is indicated by the

data for the last five years, especially in 2020, which experienced negative growth. Although in 2018 it increased, the sales growth of food and beverage companies could have been more varied. This shows that the funding policy reflected in the capital structure of food and beverage companies is less influenced by sales growth. Thus, sales growth in food and beverage companies does not affect capital structure. Sales growth does not affect capital structure because when the company tries to increase the number of sales, when the company's sales increase, the profit from sales is also higher. Thus, the costs incurred can be minimized by reducing capital from long-term debt. High enough profit from sales makes the company's turnover of funds faster. This results in a decrease in capital structure when sales increase. Qurrota A'yun (2022) supports this study's results, stating that there is no significant influence between sales growth and capital structure.

4. CONCLUSION

This study, which investigates the impact of liquidity and sales growth on the capital structure of food and beverage companies listed on the Indonesia Stock Exchange (IDX) from 2017 to 2021, concludes that liquidity, as measured by the current ratio, has a significant negative effect on capital structure, indicating that a higher current ratio corresponds to a lower capital structure. Conversely, sales growth shows a negative but insignificant effect on capital structure, implying that increased sales growth does not significantly influence the capital structure of these companies.

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