

The Effect of Asset Structure, Profitability and Liquidity on the Capital Structure of the Manufacturing Industry Sector

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Abstract

The motivation behind this research is to find out the variables that affect capital structure, and this examination is a quantitative report using optional information handled through various methods of multiple linear regression investigation using SPSS26. Asset structure (X1), profitability (X2), and liquidity (X3) are independent research variables, while capital structure (Y) is the research dependent variable. Comparison of Asset Structure, Return On Assets (ROA), Current Ratio (CR), and Debt To Equity Ratio (DER) as measuring tools. The participants in this study were food and beverage companies listed on the Indonesia Stock Exchange in 2019 – 2021, while the sample this study consisted of 15 food and beverage companies listed on the Indonesia Stock Exchange in 2019 - 2021. Purposive sampling was used to take samples, this study found that partially asset structure and profitability have a negative impact on capital structure, while liquidity has a positive impact on capital structure. Then if simultaneously asset structure, profitability, and liquidity have a positive effect on capital structure.

Keywords

Asset structure; profitability; liquidity



I. Introduction

Capital makes a significant contribution to the company's performance and sustainability. Where capital refers to the funds a company has to manage its operations and grow its assets. The capital structure includes two types of funding: profit-based internal funding and external funding that comes from outside the business, such as from investors.

In the industrial sector, building a business and developing it requires relatively large capital. In the current era, one of the industrial sectors of the food and beverage company continues to increase, so that the capital needed by the company also increases. This incident was caused by an increase in Indonesia's population growth as well as the large number of consumer demands for food and beverage needs.

The Central Statistics Agency (BPS) recorded that the gross domestic product (GDP) based on constant prices (ADHK) for the food and beverage industry in 2019 was 744.17 trillion, and in 2020 it increased by 755.91 trillion, then in 2021 it experienced an increase of 775.1 trillion. Meanwhile, the percentage value for growth in 2019 was 7.78%, then in 2020 it was 1.58%, while in 2021 it was 2.54% which in 2021 looks to have been a year of improvement.

According to Martono and Harjito, what is meant by "capital structure" is the ratio or balance of the industry's long-term funding shown through a comparison of its own capital to its long-term debt. Even though the capital structure itself aims to strategically plan the company's long-term debt capital, it can also help maximize capital port. Table 1 shows how the capital structure of the food and beverage industry has changed over time:

Table 1. Development of Capital Structure in Food and Beverage Companies Listed on the IDX for the 2019-2021 Period

No	Company name	DER (%)		
		2019	2020	2021
1	PT. Akasha Wira International Tbk	45	37	34
2	PT. Delta Djakarta Tbk	18	20	30
3	PT. Indofood CBP Sukses Makmur Tbk	45	105	115
4	PT. Indofood Sukses Mkmur Tbk	77	106	107
5	PT. Mayora Indah Tbk	92	75	75
6	PT. Multi Bintang Indonesia Tbk	152	102	171
7	PT. Nippon Indosari Carporindo Tbk	5	37	47
8	PT. Prashida Aneka Niaga Tbk	33	53	135
9	PT. Sekar Bumi Tbk	75	83	98
10	PT. Sekar Laut TBK	107	93	64
11	PT. Tiga Pilar Sejahtera Food Tbk	(165)	142	115
12	PT. Tri Banyan Tirta Tbk	189	196	199
13	PT. Siantar Top Tbk	34	29	18
14	PT. Ultrajaya Milk and Trading Company Tbk	16	83	44
15	PT. Wilmar Cahaya Indonesia Tbk	23	24	22

Data Source: idx.co.id, 2022

The Debt to Equity Ratio (DER) fluctuated throughout the development of the capital structure in the food and beverage industry in 2019-2021, rising and falling every year, as observed in table 1.1. PT Delta Djakarta and PT. Indofood CBP Sukses Makmur Tbk as a food and beverage industry, the average DER has increased from 2019 to 2021. In contrast, PT. Akasha International Tbk, and PT. Sekar Laut Tbk is a food and beverage industry that has experienced a decrease in DER from 2019 to 2021. Human Resources (HR) is the most important component in a company or organization to run the business it does. Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). Development is a change towards improvement. Changes towards improvement require the mobilization of all human resources and reason to realize what is aspired (Shah et al, 2020). The development of human resources is a process of changing the human resources who belong to an organization, from one situation to another, which is better to prepare a future responsibility in achieving organizational goals (Werdhiastutie et al, 2020). Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). The success of leadership is partly determined by the ability of leaders to develop their organizational culture. (Arif, 2019).

One of the risks of a company can be reviewed through the capital structure of the company itself. Where if the amount of debt increases then the risk of the company will be greater, and if the amount of debt is low then the risk of the company will be smaller. There are several types of capital structure, each of which has its own unique characteristics, and there are also a number of factors that contribute to the success of the manufacturing structure and the sustainable success of the manufacturing industry. The main topic of this article is "how to influence the influence of assets, profitability and liquidity on the capital structure" in order to recognize the structure of assets, profitability and liquidity of the capital structure. The findings of this article can be used as a source of information and advice for investors as well as for the companies themselves.

According to the findings of previous research conducted by I Made Pande Dwiana Putra and Gede Bagus Dwiputra Gunadhi (2019), asset structure has a positive effect on capital structure, profitability has a negative effect on capital structure, and liquidity has a negative effect on capital structure. Meanwhile, Akhmad Darmawan et al. (2021) stated that liquidity has a negative effect on capital structure, while profitability has a positive effect on capital structure. Then the asset structure has a negative effect on the capital structure, according to Yona Putri Nabayu et al. (2020). Therefore, researchers will update the data in this study using vulnerabilities over three periods, 2019–2021, to study how asset structure, profitability.

II. Review of Literature

2.1 Capital Structure

The term "capital" refers to the main group of funds that will be used to manage the business, and "structure" means to regulate each part in order to more clearly form a capital structure. The capital structure means managing the company's main funds from various sources in the long term.

2.2 Asset Structure

Assessment of the company's asset structure is used to compare the size of the company's fixed assets and the total assets. Which can be obtained through sources of information related to total assets and fixed assets in each period. According to the findings of previous research conducted by I Made Pande Dwiana Putra and Gede Bagus Dwiputra Gunadhi (2019), asset structure has a positive effect on capital structure. Meanwhile, research by Yona Putri Nabayu et al. (2020) found that asset structure has a negative effect on capital structure. So the research hypothesis is:

H1 = there is an effect of asset structure on the capital structure of food and beverage companies listed on the IDX for the 2019-2021 period.

2.3 Profitability

Evaluation of the industry's ability to generate the desired profit in accordance with its objectives is known as profitability. Which can be obtained through sources of information from total assets and total sales in each period. According to the findings of previous research conducted by I Made Pande Dwiana Putra and Gede Bagus Dwiputra Gunadhi (2019), profitability has a negative effect on capital structure. Meanwhile, research by Akhmad Darmawan et al. (2021) found that profitability has a positive effect on capital structure. So the research hypothesis is:

H2 = there is a profitability effect on the capital structure of food and beverage companies listed on the IDX for the 2019-2021 period.

2.4 Liquidity

A measure of the industry's ability to meet its obligations is liquidity that can be obtained through sources of information related to current assets and liabilities each period. According to the findings of previous research conducted by I Made Pande Dwiana Putra and Gede Bagus Dwiputra Gunadhi (2019), liquidity has a negative effect on capital structure. While research by Akhmad Darmawan et al. (2021) indicates that liquidity has a negative effect on capital structure. So the research hypothesis is:

H3 = there is an effect of liquidity on the capital structure of food and beverage companies listed on the IDX for the 2019-2021 period.

III. Research Method

This quantitative study uses secondary data and SPSS26 to process the method of analyzing multiple linear regression. Asset structure (X1), profitability (X2), and liquidity (X3) are the independent research variables, while capital structure (Y) is the research dependent variable. The capital structure comparison variables, Return On Assets (ROA), Current Ratio (CR), and Debt To Equity Ratio (DER) are the measuring tools used. The following research population is the food and beverage industry which will be registered on the IDX. Exchange in 2019 and 2021. Meanwhile, the sample for the following research includes 15 food and beverage industries that will be registered on the IDX in 2019 and 2021. Taking samples using purposive sampling Current Ratio (CR), as well as Debt To Equity Ratio (DER).

IV. Result and Discussion

- To recognize whether the related variable (Y) is influenced by the independent variable (X).
- Test the t value to identify whether there is a partial effect of the independent variable (X) on the related variable (Y).
- F test to identify whether there is an influence of the independent variable (X) on the related variable (Y) simultaneously.
- The function of the coefficient of determination to calculate the proportion of the influence of the independent variable (X) in a simultaneous manner on the related variable (Y).

4.1 t test

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	std. Error	Betas	t	Sig.
1	(Constant)	.964	.134		7,198	.000
	Asset Structure	.244	.306	.095	.797	.431
	Profitability	.719	.448	.189	1,603	.118
	Liquidity	-.165	.028	-.696	-5,958	.000

a. Dependent Variable: Capital Structure

T table = t (a/2 : nk-1)

a = 5% = t (0.005/2 : 15-3-1) = 2.201

The effect of X1 on Y

Identified a sig value of 0.431 > 0.05 and a calculated t value of 0.792 < t table 2.201, so it can be assumed that H1 or hypothesis one has a rejection. The following indicates that the asset structure (X) does not have a significant positive effect on the capital structure (Y)

Effect of X2 on Y

Identified the sig value of 0.118 > 0.05 and the calculated t value 1,603 < t table 2.201, it can be assumed that H2 or hypothesis two is rejected. This indicates that profitability (X2) has no significant positive effect on capital structure (Y).

Effect of X3 on Y

Identified the sig value of 0.000 <0.05 and the calculated t value -5,958 > t table 2.201, it can be assumed that H3 or hypothesis three is accepted. The following indicates that liquidity (X3) has a significant positive effect on capital structure (Y).

4.2 F test

Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	3,690	3	1230	14,045	.000b
	residual	2,978	34	088		
	Total	6,668	37			

a. Dependent Variable: Capital Structure

b. Predictors: (Constant), Liquidity, Profitability, Asset Structure

Sig value, < 0.05 calculated f value > f table

Value of f table = 3.98

Because the calculated F value is 14.045 > t table 3.98 and the sig value is known to be 0.000 <0.05, this shows that H1, H2, and H3 are accepted. Then asset structure (X1), profitability (X2), and liquidity have a significant positive effect on capital structure (Y).

4.3 Coefficient of Determination

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.744a	.553	.514	.29595

a. Predictors: (Constant), Liquidity, Profitability, Asset Structure

Judging from the previous table. The R Square value is known to be .553 or 55.3%. This indicates that the capital structure (Y) is influenced by asset structure (X1), profitability (X2), and liquidity (X3). The remaining 44.7% is influenced by variables outside the model. Because the R Square value is greater than 50%, it can be said that asset structure, profitability, and liquidity have a positive influence on capital structure.

V. Conclusion

1. The results of sig 0.431 > 0.05 and the t value of 0.792 < t table 2.201 indicate that asset structure has a negative and significant effect on capital structure. This shows that the asset structure has no influence on the capital structure of food and beverage companies listed on the IDX in the 2019 - 2021 period.
2. The results of sig 0.000 <0.05 and t-count -5.958 > t-table 2.201 indicate that liquidity has a positive and significant effect on capital structure. This shows that liquidity affects the capital structure of food and beverage companies listed on the IDX in the 2019-2021 period.
3. Asset structure (X1), profitability (X2), and liquidity (X3) affect the capital structure (Y) simultaneously. This is evident from the results of the calculated F value of 14.045 which is greater than the t table of 3.98 and the sig value of 0.000 is less than 0.05.

References

- A. D., & Sandra, R. N. (2021). Pengaruh Profitabilitas, Likuiditas, Dan Ukuran Perusahaan Terhadap Struktur Modal. *Jurnal Akuntansi*, 93-106.
- Arif, S. (2019). Influence of Leadership, Organizational Culture, Work Motivation, and Job Satisfaction of Performance Principles of Senior High School in Medan City. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*. P. 239-254
- Gunadhi, G. B., & Putra, I. P. (2019). Pengaruh Profitabilitas, Struktur Aset, Likuiditas, Dan Pertumbuhan Penjualan Terhadap Struktur Modal Perusahaan Makanan Dan Minuman. *E-Jurnal Akuntansi*, 641-668.
- Kurniawan , A. T., & Widiyanto, T. (2020). Faktor-Faktor Yang Mempengaruhi Struktur Modal Pada Perusahaan Food And Beverage. *Jurnal Of Accounting*, 26-10.
- Milansari, R., & Masitoh, E. (2020). Faktor-Faktor Yang Mempengaruhi Struktur Modal Pada Perusahaan Makanan Dan Minuman Di BEI. *Akuntansi Dan Keuangan Indonesia*, 31-46.
- Nabuyu, Y. P., & N. M. (2020). Pengaruh Profitabilitas, Struktur Aktiva, Dan Likuiditas Terhadap Struktur Modal Pada Perusahaan Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia Pada Tahun 2014-2017. *Paradigma Ekonomika*, 147-162.
- Niati, D. R., Siregar, Z. M. E., & Prayoga, Y. (2021). The Effect of Training on Work Performance and Career Development: The Role of Motivation as Intervening Variable. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(2), 2385–2393. <https://doi.org/10.33258/birci.v4i2.1940>
- Niati, D. R., Siregar, Z. M. E., & Prayoga, Y. (2021). The Effect of Training on Work Performance and Career Development: The Role of Motivation as Intervening Variable. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(2), 2385–2393. <https://doi.org/10.33258/birci.v4i2.1940>
- Shah, M. M., et al. (2020). The Development Impact of PT. Medco E & P Malaka on Economic Aspects in East Aceh Regency. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Volume 3, No 1, Page: 276-286.*
- W. F., & Lestari, E. W. (2021). Faktor Yang Mempengaruhi Struktur Modal Pada Perusahaan Manufaktur Sub Sektor Makanan Dan Minuman Periode 2018-2020. *Proceeding Seminar Nasional & Call For Papers*, 791-803.
- Werdhiastutie, A. et al. (2020). Achievement Motivation as Antecedents of Quality Improvement of Organizational Human Resources. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Volume 3, No 2, Page: 747-752.*