



THE EFFECT OF CAPITAL STRUCTURE ON PROFITABILITY FOOD AND BEVERAGE SUB SECTOR MANUFACTURING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE, 2018-2021

Ulfa Yanti¹, Anita Munir²

¹Tanri Abeng University, ulfa.yanti@student.tau.ac.id

²Tanri Abeng University, munir.anita@tau.ac.id

ABSTRACT

This study aims to determine whether there is a relationship or influence of capital structure on profitability. A total of 14 manufacturing companies in the food and beverage sub-sector were sampled in this study using a purposive sampling technique. SPSS version 25 program becomes a tool for data analysis using multiple linear regression models. Capital structure is the independent variable in this study as measured by the Debt to Equity Ratio, Debt to Asset Ratio and Long Term Debt to Equity Ratio. Meanwhile, profitability in this study is the dependent variable as measured by Return on Equity. The standard level of significance in this study is 5%, so the results in this study, simultaneously capital structure has a significant effect on profitability while partially DER has a significant positive effect on ROE, DAR and LDER have a significant negative effect on ROE.

Keywords: capital structure, profitability, Indonesia Stock Exchange

1. Introduction

The development of industry, especially manufacturing in the current era of globalization, is increasing every year. Minister of Industry Airlangga Hartarto said that manufacturing industry players in Indonesia continue to be optimistic in expanding or increasing their investment, with the confidence of manufacturing players getting higher it can be assumed that manufacturing performance in Indonesia is growing rapidly. Of course, this will make competition between businesses even tighter and every industry will compete in creating better company performance to achieve company goals. according to Romadhoni & Sunaryo (2017), business competition is not limited to competition between national companies, but has become a competition for international companies so that every company must develop careful planning in all aspects of business, including the company's financial policy. Because trusting creditors or investors depends on how the company can manage its liquidity and profitability.

In the capital structure, long-term debt and equity are the company's fixed financing. The great influence of the capital structure can have an impact on the company's financial condition. Therefore, capital structure management is needed, the existence of such management can allow a company to use its funds for activities that are appropriate and useful for the survival of the company. (Margaretha, 2004)

According to Munawir in Jannati (2014), the measurement of profit and money is obtained from the source of capital used for operating activities or knowing the company's ability to earn profits can be seen from the profitability ratio. according to Irfan (2020) one indicator of profitability ratios that is often the concern of potential investors is Return on Equity, where this ratio can describe how the company can provide benefits for its owners.

The Ministry of Industry noted that during the 2015-2019 period, food and beverage sub-manufacturing companies grew by 8.16% on average. However, during the Covid-19 pandemic in the fourth quarter, the non-oil and gas industry experienced a growth contraction of 2.52%, but by 1.58%, food and beverage companies were still able to grow positively. In the second quarter of 2021, the Central Statistics Agency (BPS) noted that the growth of the food and beverage sub-sector manufacturing industry on a quarterly basis grew by around 2.37 percent. The food and beverage manufacturing sector also gets development priority in industry 4.0, the sector is encouraged to use industrial 4.0 technology which in this digital transformation will have an impact on the national economy. In addition, with the increase in the number of Indonesian people, some of the food and beverage products are still needed. So as many as 14 manufacturing companies in the food and beverage sub-sector in 2018-2021 were the samples in this study. Capital structure with indicators (DER, DAR and LDER) will be tested for its effect on profitability with indicators (ROE).

In this study, researchers took several references regarding the basics of ratios as well as their understanding and analysis, these references were sourced from Kasmir (2009), Darmawan (2020) books, journals published by Google Scholar. In this study, the required sample data collection for food and beverage companies was taken through the idx.co.id website from 2018-2021 on a quarterly basis.

Capital Structure

The capital structure is a combination of debt and equity, an optimal and good capital structure will be the company's reference in the use of funds from available capital sources. according to Romadhoni & Sunaryo (2017), capital structure is defined as the composition of the company's capital originating from debt sources or own capital. leverage, debt to equity and collateralizable assets are three indicators of measuring capital structure. So from this theory the measurement of capital structure indicators in this study is the ratio of leverage or leverage. according to Darmawan (2020), leverage ratio there is a relationship between funding decisions in the company where the company prefers debt financing rather than own capital. The size of the risk of loss faced by the company depends on the value of the leverage ratio produced by the company. Munir (2018) in his research states that there is a relationship between the time of debt repayment with return on stakeholders, high or low debt repayment given by the company will affect the company's financial problems.

Profitability

According to Kasmir (2009), measurement of the company's ability to earn a profit can be measured by the ratio of profitability. Return on Equity is one indicator of profitability used in this study, the measurement is by comparing profit after tax with own capital. In research conducted by Munir (2018) stated that return on stakeholders is a method that is widely used by researchers because return on stakeholders can provide evidence that this ratio is a good measure of profitability.

The effect of Debt to Equity Ratio on Return on Equity

Debt to Equity Ratio is a ratio to determine the value of debt to capital. How much each rupiah can be used as collateral for debt, knowing the amount of funds provided by the borrower (creditor) with the owner of the company is the use of the Debt to Equity Ratio (Kasmir, 2009). Debt to Equity Ratio has an effect on Return on Equity. The higher this ratio will be affect the level of net income available to shareholders (Jannati, 2014).

The effect of Debt to Asset Ratio on Return on Equity

Debt to Asset Ratio according to Kasmir (2009) is a debt ratio used to measure how much the company's assets are financed by debt or how much the company's debt affect asset management. Debt to Assets Ratio has an effect on Return on Equity. The higher the Debt to Asset Ratio, the greater risk his finance. This due to greater the company's responsibility to outside parties because the company is doing too much funding through debt (Sheila Tobianto, Elvasco Unedo Hutabarat, 2021)

The Effect of Long Term Debt to Equity Ratio on Return on Equity

Long Term Debt to Equity to according to Kasmir (2009) is a ratio that explains long term debt with own capital with the aim of measuring how much of each rupiah of own capital is used as collateral for long term debt by looking at the comparison between long term debt and own capital provided by the company. Long Term Debt to Equity Ratio has effect on Return on Equity, the greater the Long Term Debt to Equity Ratio indicates an increase in the company’s own capital ability to guarantee long term debt. The increase that occurs in Long Term Debt to Equity Ratio will increase Return on Equity because the company’s condition is able to meet long term obligations taken by the company to increase profits (Liando, 2021).

2. Method

In this study, the research approach used is quantitative with verification descriptive analysis research methods. The data used in this study are secondary data obtained from the Indonesia Stock Exchange on a quarterly basis for food and beverage companies in 2018-2021. The purpose of verification descriptive analysis is to find out and explain the truth of the facts that have been described so that the verification method can be explained about the relationship between the variables studied by collecting data, processing data, analyzing and providing explanations or data interpretations in the form of statistical hypothesis testing. To regress the model that has been formulated, the researchers used the SPSS 25 program as data analysis. The data analysis method used multiple linear regression.

- H1: The joint capital structure has effect on the company's profitability
- H2: Debt to Equity Ratio has effect on company profitability with Return on Equity variable.
- H3: Debt to Asset Ratio has effect on company profitability with Return on Equity variable.
- H4: Long Term Debt to Equity Ratio has effect on the company with the Return on Equity variable.

3. Results and Discussion

In this study, the F test and T test can answer the formulation of the hypothesis that has been formulated. To determine whether or not the influence of independent variables simultaneously on the dependent variable can be carried out the F test, while to see the effect or relationship of each independent variable on the dependent variable, the T test can be performed.

Significant Simultaneous Test (F Test)

Simultaneous significant test aims to compare the significance value of Ftable and Fcount with a significance of <5% or less than 0.05. If Fcount < Ftable then Ho is accepted and Ha is rejected and vice versa if Fcount > Ftable then Ha is accepted and Ho is rejected.

Where:

Ho: The capital structure measured by DER, DAR, LDER together has no effect on profitability as measured by ROE

Ha: The capital structure as measured by DER, DAR, LDER together has an effect on profitability as measured by ROE

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23821.070	3	7940.357	51.303	.000 ^b
	Residual	29716.366	192	154.773		
	Total	53537.436	195			

a. Dependent Variable: ROE

b. Predictors: (Constant), LDER, DER, DAR

Source: SPSS Version 25

Figure 1. Significant Simultaneous Test Results (F Test)

The results of the significant simultaneous test or F test show that the Fcount value is 51.303 while the Ftable is 2.65, it can be concluded that $F_{count} > F_{table}$ with a significance level of $0.000 < 0.05$. So the researcher can conclude that H_a is accepted and H_o is rejected. This means that all independent variables or capital structure variables as measured by DER, DAR and LDER together have a significant positive effect on the profitability variable as measured by ROE. This means that if there is an increase in the capital structure variable, the company's profitability as measured by ROE will also increase.

In this study the first hypothesis is accepted, the capital structure affects the profitability of the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange in 2018-2021 indicating that the decision to choose sources of funds from outside parties or creditors is an important thing for companies to consider. because together if the company adds too many sources of funds it will affect its profitability. So, if the capital structure increases then profitability will also increase. This research agrees with Liando (2021), that together the capital structure has a significant effect on the company's financial performance

Coefficient Multiple Determination Test (R²)

The results of the coefficient of determination test (R²) are used to see how far the independent variables used in this study affect the dependent variable or how big the percentage of the effect of changes in capital structure variables on changes in profitability variables.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.667 ^a	.445	.436	12.44077	1.130

a. Predictors: (Constant), LDER, DER, DAR
b. Dependent Variable: ROE

Source: SPSS Version 25

Figure 2. Coefficient Multiple Determination Test Results (R²)

The results of the analysis of the coefficient of determination (R²) prove that the R Square of 0.445 or 44.5% of the company's profitability as measured by ROE can be explained by the capital structure variable as measured by DER, DAR and LDER while as much as 0.555 or 55.5% is influenced by the variable others that were not tested in this study.

Significant Partial Test (T Test)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.930	3.033		3.934	.000
	DER	29.547	3.802	1.054	7.772	.000
	DAR	-42.365	16.360	-.415	-2.590	.010
	LDER	-.274	.065	-.333	-4.225	.000

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	DER	.157	6.364
	DAR	.113	8.883
	LDER	.466	2.147

a. Dependent Variable: ROE

Source: SPSS Version 25

Figure 3. Significant Partial Test Results (T Test)

The second hypothesis proves that there is a positive effect between the capital structure variables as measured by DER on profitability as measured by ROE. Seen from the table above, the DER variable has a Tcount of 7.772 with a significance of 0.000, it is known that the Ttable is 1.97233. So, it can be concluded that Tcount > Ttable means Ho is rejected and Ha is accepted. This shows that the more use of debt in the capital structure of the entire sample of companies, the higher the company's profitability (ROE). This research is in line with research conducted by Talitha Wiery Ramadhani & Suwitho (2019) Debt to Equity Ratio has a significant effect on Return on Equity. The higher the value of the DER ratio indicates that the total short-term debt and long-term debt, the greater the costs borne by the company to outsiders. The increase in costs shows that the source of funds for food and beverage companies depends on outside parties. However, disagree with the research conducted by Irfan (2020) shows that there is no significant effect between the variables Debt to Equity Ratio on Return on Equity.

The third hypothesis proves that there is a negative effect between capital structure variables as measured by DAR on profitability as measured by ROE. Seen from the table above, the DAR variable has a Tcount of -2.590 with a significance of 0.010, it is known that Ttable is 1.97233. So it can be concluded that Tcount > Ttable means Ho is rejected and Ha is accepted. The greater the DAR value, the more it proves that a lot of company funds are paid for by debt (Jannati, 2014). From the results of this study, it can be concluded that an increase of one rupiah in the value of DAR will reduce the company's ability to earn a profit of 2,590. Base on the results of the data analysis of the DAR variable every time there is an increase it will reduce ROE, where when the company's assets are funded more by debt, it will increase the burden or responsibility of the company to outsider, thereby reducing the profit level. This research is in line with research conducted by Jannati (2014) that there is a significant effect between DAR on ROE but does not agree with the research conducted by Sheila, Elvasco and Mariska (2021) that there is a positive effect between the DAR variables on ROE.

The fourth hypothesis proves that there is a negative effect between the capital structure variables measured by LDER on profitability as measured by ROE. Seen from the table above, the LDER variable has a Tcount of -4.225 with a significance of 0.000, it is known that Ttable is 1.97233. So, it can be concluded that Tcount > Ttable means Ho is rejected and Ha is accepted. This ratio aims to see how much of the rupiah can be used as collateral for long-term debt by comparing long-term debt with own capital (Kasmir 2009). The results of this partial test indicate that any increase in long-term debt will reduce profitability as measured by Return on Equity. Acquiring long-term debt requires a large enough cost, but the acquisition of long-term debt that is large enough will affect the decline in the company's Return on Equity so that this will also have an impact on decreasing the company's performance and will later become a consideration for creditors to meet funding needs in a company. An increase in long-term debt by one rupiah will reduce profitability as measured by Return on Equity of 4.225. In the food and beverage sub sector manufacturing companies, it can be seen that long term debt has decreased and increased, the results of the study showing that there is a negative effect indicates that increase in long term debt can reduce the company profit so that the company has a responsibility to fulfill its long term obligations the length. This study does not agree with the research conducted by Liando (2021) that there is a positive and significant effect between LDER on ROE.

4. Conclusions and Implications

The results of the study simultaneously that capital structure variables have a significant effect on return on equity, meaning that if there is an increase in capital structure, it will increase profitability.

The results of the partial test on the DER variable prove that there is a positive and significant relationship to ROE in food and beverage companies for the 2018-2021 period. This means that if an increase occurs in DER then ROE will also increase. The higher the company uses external sources of funds, the more it will be seen that the profitability ratio increases. In other words, the source of capital for food and beverage companies in the 2018-2021 period depends on outside parties. Therefore, the amount of this ratio will be a burden for the company for its ability to fulfill obligations to outside parties.

The results of the partial test on the DAR variable state that there is a negative and significant relationship to ROE in food and beverage companies for the 2018-2021 period. This can mean that an increase in each DAR variable

will decrease the ROE variable. In other words, when a company increases its DAR value or its debt-to-asset ratio, it will reduce the company's ability to earn profits.

The results of the partial test on the LDER variable state that there is a negative and significant relationship to ROE in food and beverage companies for the 2018-2021 period. This means that if long-term debt increases, it will cause a decrease in company profitability.

The overall conclusion in this study is that the capital structure has an influence on the company's profitability, as seen in the coefficient of determination of the capital structure variables of 0.445 or 44.5% able to explain the profitability variable. Therefore, the company can maintain and maximize the use of external sources of funds so that there is no failure to fulfill the company's obligations so that the company's goals in obtaining profits can be achieved properly. In addition, company managers must also be able to better regulate the use of outside funds and control the accuracy of the company in fulfilling its obligations.

References

- Darmawan. (2020). *Dasar-dasar Memahami Rasio & Laporan Keuangan* (S. . Dini Maulana Lestari (ed.); Cetakan I). UNY Press.
- Irfan. (2020). Analisis Determinan Return On Equity (ROE) Pada Perusahaan Makanan Dan Minuman. *Jurnal Sosial Dan Ekonomi*.
- Jannati, I. (2014). Pengaruh Rasio Leverage Terhadap Profitabilitas (Studi Pada Perusahaan Makanan Dan Minuman Yang Terdaftar di BEI Periode Tahun 2009 – 2011). *Jurnal Administrasi Bisnis SI Universitas Brawijaya*.
- Kasmir. (2009). *Pengantar Manajemen Keuangan*. Kencana.
- Liando, J. S. (2021). *Analisis Pengaruh Struktur Modal Terhadap Kinerja Keuangan Perusahaan Manufaktur Sub Sektor Makanan Dan Minuman Yang Terdaftar Di Bei Tahun 2015-2019*.
- Margaretha, F. (2004). *Teori Dan Aplikasi Manajemen Keuangan Investasi dan Sumber Dana Jangka Pendek*. PT. Grasindo.
- Munir, A. (2018). Inflation, Time of Debt Repayment and Firms Performance: The Evidences from Food and Beverage Companies. *Journal of Management and Leadership*.
- Romadhoni, & Sunaryo, H. (2017). *Pengaruh Struktur Modal Terhadap Kinerja Keuangan Perusahaan Manufaktur Sektor Makanan dan Minuman Yang terdaftar di Bursa Efek Indonesia Tahun 2013-2016*.
- Sheila Tobianto, Elvasco Unedo Hutabarat, M. S. (2021). *Pengaruh Debt To Assets Ratio , Long Term Debt To Equity Ratio Dan Total Asset Turn Over Terhadap Return On Equity Pada Perusahaan Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia Periode 2015-2019*.
- Talitha Wiery Ramadhani, & Suwitho. (2019). Pengaruh Struktur Modal Terhadap Profitabilitas Pada Industri Food And Beverages Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Ilmu Dan Riset Manajemen*.