Almana : Jurnal Manajemen dan Bisnis
Volume 5, No. 2/ August 2021, p. 156-164
ISSN 2579-4892 print/ ISSN 2655-8327 online
DOI: 10.36555/almana.v5i2.1546

ANALYSIS OF FACTORS AFFECTING CAPITAL STRUCTURE ON LISTED COMPANIES IN INDONESIA STOCK EXCHANGE 2017-2019 PERIOD

Della Ayu Sevira*[1], Muhammad Azhari[2]
Universitas Telkom, Indonesia*[12]
dellaasevira@student.telkomuniversity.ac.id*[1], muhazhari@telkomuniversity.ac.id[2]

Abstract: Achieve the objectives of companies requires financial decisions that include capital structure. Capital structures in food and beverage companies are relatively low, so it doesn't necessarily make capital structures optimal. This research is conducted to examine factors that influence the capital structure of food and beverage companies listed on the Indonesia Stock Exchange in the 2017-2019 periods. The purpose of this research is to test both simultaneously and partially the influence of profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activity, and liquidity on the capital structure. 14 of 26 companies have been selected as research samples from food and beverage companies listed in Indonesia Stock Exchange in 2017-2019, so 42 observations have been obtained. The method of analysis that using in this research is the multiple regressions analysis technique. This research shows that simultaneously profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activity, and liquidity have a significant influence on the capital structure. The result of partial research shows that firm size and liquidity significantly influence the capital structure. Meanwhile, profitability, tangibility, sales growth, asset growth, business risk, and firm activity have no significant influence on the capital structure.
Keywords: Asset Growth; Business Risk; Capital Structure; Firm Activity; Firm Size; Liquidity; Profitability; Sales Growth; Tangibility

INTRODUCTION

Economic competition is increasing from year to year, which makes company managers improve their company performance to meet company goals. To fulfill company objectives, it is necessary to make appropriate decisions by the company. One of the crucial decisions for the company is the funding decision, which includes the capital structure. Capital structure is the most critical thing in financial decisions because funding is always used in operating activities in a company to consider the capital structure. Capital structure is also important because the capital structure can affect the company's financial condition and can predict the company's survival. The capital structure also relates to many parties such as shareholders, creditors, and the management itself. According to some experts, the definition of the capital structure is the comparison of the amount of short-term debt or current debt that is fixed, long-term debt, common stock, and preferred stock. If the company increases the amount of debt, then the company will increase its financial risk. Therefore, managers should not fund the company with their capital but accompanied by borrowing debt from external parties because there will be more benefits in savings. With that, the right capital structure will provide services in the form of the smallest capital cost.

According to some experts, the measuring instrument used to measure the capital structure is the Debt to Equity Ratio (DER). DER is a measurement ratio that balances total debt and the company's equity or capital. In the IDX statistical data, the value of the capital structure in the food and beverage sub-sector during the 2017-2019 period as measured by DER tends to decrease relatively.

Submitted: January 29, 2021; Revised: July 06, 2021; Accepted: July 08, 2021;
Published: August 16, 2021; Website: http://journalfeb.unla.ac.id/index.php/almana

Almana : Jurnal Manajemen dan Bisnis
Volume 5, No. 2/ August 2021, p. 156-164
ISSN 2579-4892 print/ ISSN 2655-8327 online
DOI: 10.36555/almana.v5i2.1546

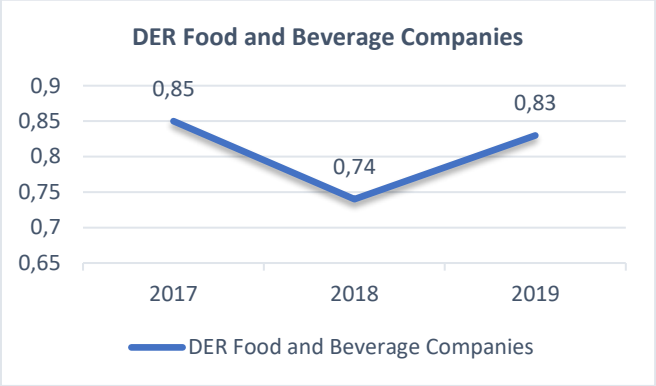

Figure 1. DER Value on Food and Beverage Companies
Source: Processed data from idx.co.id (2020)

We can see that the debt to equity ratio (DER) value in the food and beverage sub-sector has decreased relatively. In 2017, the DER value in the food and beverage sub-sector was 0.85 times. In 2018, the DER value in the food and beverage sub-sector decreased by 0.11 to 0.74 times. Meanwhile, in 2019, the DER value in the food and beverage sub-sector experienced a slight increase to 0.83 times. The decreasing DER value indicates that the food and beverage sub-sector companies are starting to use their capital compared to debit or foreign capital.

A capital structure that uses more of its capital will not necessarily make the capital structure optimal. Companies that use more of their capital will decrease the company's value because capital from debt tends to be more profitable than using their capital, which results in more limited funds.

As for the factors that influence the capital structure that is considered to achieve an optimal capital structure, according to Brigham & Joel F (2011), the factors considered for making capital structure decisions are internal company conditions such as sales stability, tangibility, company growth rate, profitability, taxes, control, operating leverage, management attitudes, and lender attitudes. And rating agencies and financial flexibility. Meanwhile, according to Ria & Lestari (2015), capital structure is influenced by various factors both in the company's external environment and in the company's internal environment. The company's external factors include interest rates, capital market conditions, and political stability. Meanwhile, the company's internal factors include company size, profitability, and dividend stability.

Based on several factors that affect the capital structure, this study uses 8 (eight) elements in the food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX). The eight factors include profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activity, and liquidity. The choice of these factors comes from the internal aspects of the company because the internal conditions of the company will determine the capital structure of the company itself, as well as the inconsistencies of previous researchers so that this study aims to re-examine the variables of profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activity, and liquidity as variables that affect capital structure.

Profitability describes the company's ability to earn profits. Investors will see a company's profit growth from year to year. Measurement of profitability, according to Brigham & Joel F (2011), is to use Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). Research conducted by Kyissima et al. (2019) found a significant favorable influence between profitability and capital structure. But other results were found by Sansoethan & Suryono (2016), namely that profitability does not affect capital structure.

Submitted: January 29, 2021; Revised: July 06, 2021; Accepted: July 08, 2021;
Published: August 16, 2021; Website: http://journalfeb.unla.ac.id/index.php/almana

Almana : Jurnal Manajemen dan Bisnis
Volume 5, No. 2/ August 2021, p. 156-164
ISSN 2579-4892 print/ ISSN 2655-8327 online
DOI: 10.36555/almana.v5i2.1546

Tangibility is the ratio between fixed assets and total assets. Tangibility describes how many assets or assets a company can guarantee when making loans to creditors. The higher the tangibility, the higher the use of its capital because the company has sufficient support. The use of loan capital is less and causes a low capital structure. Research conducted by Pramukti (2019) found a significant positive effect between tangibility and capital structure. However, those who found differences in the study Putri (2018) stated that the tangibility did not affect the capital structure.

Firm size is a size, scale, or variable that describes its size based on several conditions, such as its total assets. What can use company size to describe the financial characteristics of the company? A larger company will have an excess in the sources of funds obtained to finance its investment in earning a profit. Research conducted by Pramukti (2019) and Guna & Sampurno (2018) found that firm size does not affect capital structure. In contrast, to study conducted by Chandra (2018) found that company size positively affects capital structure.

Sales growth is a company condition that describes the increase or decrease that can be seen from sales. The sales growth measurement is from the total sales the company has from the previous year to the current year. Research conducted by Pramukti (2019) found that sales growth positively affects capital structure. But there are differences in the study results Guna & Sampurno (2018), which found that sales growth did not affect capital structure.

Asset growth is the percentage increase or decrease in total assets ed by a company. Asset growth can be calculated as the percentage change in total assets in the current year against the previous year (Brigham & Joel F, 2011). Research conducted by Ariani & Wiagustini (2017) states that asset growth has a significant effect on capital structure. Meanwhile, we found different study results Sansoethan & Suryono (2016), which found that asset growth did not affect capital structure.

Business risk is the risk of a company's assets if the company does not use debt. The measurement of business risk is by using a comparison between earnings before interest and taxes (EBIT) with total assets. Research conducted by Chandra (2018) found that business risk has a positive effect on capital structure. Different research results Sholikhadi (2016) found that business risk has no significant impact on capital structure.

Firm activities describe how effectively the company uses its assets to carry out activities in its company. Measurement of company activity can be done using sales compared to total assets or using asset turnover. According to research conducted by Gunawan (2011), firm actions positively affected capital structure. In contrast to the study ran Ismaida & Saputra (2016), firm activities did not affect capital structure.

Liquidity is the company's ability to repay obligations or short-term debt that will mature or invest in cash when it needs funds. Liquidity can be measured using a ratio that includes the current rate, the quick ratio, and the cash ratio. Research conducted by Sansoethan & Suryono (2016) found that liquidity significantly affects capital structure. However, it is different from a study conducted by Chandra (2018) which found that liquidity did not considerably affect capital structure.

This research is conducted to examine factors that influence the capital structure of food and beverage companies listed on the Indonesia Stock Exchange in the 2017-2019 periods. The purpose of this research is to test both simultaneously and partially the influence of profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activity, and liquidity on the capital structure.

Submitted: January 29, 2021; Revised: July 06, 2021; Accepted: July 08, 2021;
Published: August 16, 2021; Website: http://journalfeb.unla.ac.id/index.php/almana

Almana : Jurnal Manajemen dan Bisnis
Volume 5, No. 2/ August 2021, p. 156-164
ISSN 2579-4892 print/ ISSN 2655-8327 online
DOI: 10.36555/almana.v5i2.1546

METHODS

This research uses quantitative methods and the positivism paradigm. The type of this research is descriptive. Based on the investigation, this study uses causal, which analyzes the relationship between one variable and another or how a variable affects other variables. This study uses a unit of analysis in the form of a group, namely the food and beverage sub-sector companies listed on the Indonesia Stock Exchange. Based on time, this study uses a cross-section because data collection is only at one time. The data collected in this study is secondary data, which comes from the literature study and the IDX website. The sampling technique in this study is non-probability sampling with a purposive sampling type.

This research using multiple regression linear analysis. Before using multiple linear regression analysis, this study used the classic assumption test first. It then used the hypothesis test to find out that each independent variable affects the dependent variable.

RESULTS AND DISCUSSION

Normality Test

The normality test is carried out to test whether the regression model, the independent variable, and the dependent variable or both of them have a standard or abnormal distribution. This study used the One-Sample Kolmogorov Smirnov normality test.

Table 1. Normality Test Result

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		42
Normal Parameters[a,b]	*Mean*	.0000000
	Std. Deviation	.40155896
Most Extreme Differences	*Absolute*	.131
	Positive	.131
	Negative	-.093
Test Statistic		.131
Asymp. Sig. (2-tailed)		.068[c]

Source: Data processed using SPSS (2021)

Based on Table 1, the residual analysis results have a significant value from the regression function of the profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activity, and liquidity of 0.068. The value of 0.068 is more significant than 0.05, so we can conclude that the data is usually distributed.

Multicollinearity Test

This study's multicollinearity test was carried out by looking at the Tolerance and Variance Inflation Factor (VIF) values. The multicollinearity test is used to determine whether the regression model finds a correlation between independent variables.

Submitted: January 29, 2021; Revised: July 06, 2021; Accepted: July 08, 2021;
Published: August 16, 2021; Website: http://journalfeb.unla.ac.id/index.php/almana

Almana : Jurnal Manajemen dan Bisnis
Volume 5, No. 2/ August 2021, p. 156-164
ISSN 2579-4892 print/ ISSN 2655-8327 online
DOI: 10.36555/almana.v5i2.1546

Table 2. Multicollinearity Test Result

Model		Collinearity Statistics	
		Tolerance	VIF
1	*(Constant)*		
	ROA	.223	4.477
	SA	.153	6.551
	SIZE	.331	3.023
	SG	.608	1.644
	AG	.834	1.199
	BRISK	.610	1.640
	TATO	.361	2.767
	CR	.121	8.242

Source: Data processed using SPSS (2021)

Based on Table 2, we can see that the calculation of tolerance and VIF values do not have independent variables with a tolerance value ≤ of 0.10 and a VIF value ≥ of 10 so that we can conclude that there is no multicollinearity and the regression model is feasible to use.

Heteroscedasticity Test

The heteroscedasticity test is used to test the regression model whether there is an inequality of variance from the residuals in one observation to another. The heteroscedasticity test in this study was carried out using the Glejser test and seeing the significance value of the regression results.

Table 3. Heteroscedasticity Test Result

Model		*Coefficients*				
		Unstandardized Coefficients		Standardized Coefficients	t	*Sig.*
		B	Std. Error	Beta		
1	*(Constant)*	3.467	1.717		2.019	.052
	ROA	.173	1.082	.051	.160	.874
	SA	-.228	.550	-.160	-.414	.681
	SIZE	-.097	.048	-.528	-2.014	.052
	SG	-.413	.425	-.188	-.970	.339
	AG	-.036	.297	-.020	-.121	.904
	BRISK	-3.469	2.419	-.277	-1.434	.161
	TATO	.028	.104	.067	.268	.790
	CR	-.069	.063	-.477	-1.101	.279

Source: Data processed using SPSS (2021)

Based on Table 3, we can see that all the results have a significance value of more than 0.05. So from the results of the Glejser test, it can be concluded that the regression model does not occur heteroscedasticity.

Submitted: January 29, 2021; Revised: July 06, 2021; Accepted: July 08, 2021;
Published: August 16, 2021; Website: http://journalfeb.unla.ac.id/index.php/almana

Almana : Jurnal Manajemen dan Bisnis
Volume 5, No. 2/ August 2021, p. 156-164
ISSN 2579-4892 print/ ISSN 2655-8327 online
DOI: 10.36555/almana.v5i2.1546

Autocorrelation Test

The autocorrelation test in this study uses the Durbin Watson (DW) value. The criteria in this test are -2 <DW <2.

Table 4. Autocorrelation Test Result

Model Summary					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. The error of the Estimate**	**Durbin-Watson**
1	.788[a]	.621	.529	.4475940	1.724

Source: Data processed using SPSS (2021)

Based on Table 4, we can see that the Durbin Watson (DW) value is 1.724, which means -2 <1.724 <2, so it can be concluded that there is no autocorrelation between the independent variables so that the regression model is feasible to use.

Multiple Linear Regression Analysis

We conducted multiple linear regression analyses to examine the effect of profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activity, and liquidity on capital structure.

Table 5. Multiple Linear Regression Analysis Test Result

Coefficients					
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	***Sig.***
	B	**Std. Error**	**Beta**		
1 *(Constant)*	8.517	2.851		2.988	.005
ROA	-.971	1.795	-.123	-.541	.592
SA	-.734	.913	-.220	-.804	.427
SIZE	-.204	.080	-.476	-2.557	.015
SG	-1.269	.706	-.247	-1.798	.081
AG	-.671	.493	-.160	-1.362	.182
BRISK	-6.142	4.016	-.210	-1.530	.136
TATO	-.204	.172	-.212	-1.188	.244
CR	-.272	.104	-.805	-2.618	.013

Source: Data processed using SPSS (2021)

Based on Table 5, the regression equation can be drawn up as follows:
DER = 8,517 - 0,971ROA - 0,734SA - 0,204SIZE - 1,269SG - 0,671AG - 6,142BRISK - 0,204TATO - 0,272CR + e

The results of the multiple linear regression equation above can be concluded that the constant is 8,517, which states that the variables of profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activities, and liquidity is equal to zero, so the capital structure is 8.517.

Submitted: January 29, 2021; Revised: July 06, 2021; Accepted: July 08, 2021;
Published: August 16, 2021; Website: http://journalfeb.unla.ac.id/index.php/almana

Almana : Jurnal Manajemen dan Bisnis
Volume 5, No. 2/ August 2021, p. 156-164
ISSN 2579-4892 print/ ISSN 2655-8327 online
DOI: 10.36555/almana.v5i2.1546

Hypothesis F-Test

The F-test is performed to determine the effect of profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activity, and liquidity simultaneously on the capital structure.

Table 6. Hypothesis F-Test Result

ANOVA						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	*Regression*	10.831	8	1.354	6.758	.000[b]
	Residual	6.611	33	.200		
	Total	17.442	41			

Source: Data processed using SPSS (2021)

Based on Table 6, it is obtained f_{count} of 6.758 and a significance of 0.000. We can see that the significance value is less than 0.05. So we can conclude that H0 is rejected. This shows that profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activity, and liquidity together have a significant influence on the capital structure of food and beverage sub-sector companies listed on the Indonesia Stock Exchange during the period. 2017-2019.

Hypothesis T-Test

The T-test was conducted to determine each variable's effect on profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activities, and liquidity on capital structure. Based on Table 5, the results of the partial test or t-test can be concluded that:

ROA has a t value of -0.541 and a significance of 0.592, which means that ROA > 0.05 means that H0 is accepted. We can conclude that profitability has no significant effect on capital structure.

SA has a t value of -0.804 and a significance of 0.427, which means SA > 0.05, this means that H0 is accepted. We can conclude that tangibility has no significant effect on the capital structure.

SIZE has a t value of -2.557 and a significance of 0.015, which means SIZE < 0.05, and this means that H0 is rejected. It can be concluded that firm size has a significant effect on capital structure.

SG has a t value of -1.798 and a significance of 0.081, which means SG > 0.05 means that H0 is accepted. We can conclude that sales growth has no significant effect on capital structure.

AG has a t value of -1.362 and a significance of 0.182, which means that AG > 0.05 means that H0 is accepted. We can conclude that asset growth has no significant effect on capital structure.

BRISK has a calculated T value of -1.530 and a significance of 0.136, which means that BRISK > 0.05 means that H0 is accepted. We can conclude that business risk has no significant effect on capital structure.

TATO has a calculated T value of -1.188 and a significance of 0.244, which means that TATO > 0.05 means that H0 is accepted. We can conclude that the firm's activities have no significant effect on capital structure.

CR has a calculated T value of -2.618 and a significance of 0.013, which means CR < 0.05, which means that H0 is rejected. We can conclude that liquidity has a significant effect on capital structure.

Submitted: January 29, 2021; Revised: July 06, 2021; Accepted: July 08, 2021;
Published: August 16, 2021; Website: http://journalfeb.unla.ac.id/index.php/almana

Almana : Jurnal Manajemen dan Bisnis
Volume 5, No. 2/ August 2021, p. 156-164
ISSN 2579-4892 print/ ISSN 2655-8327 online
DOI: 10.36555/almana.v5i2.1546

Determination Coefficient Test

The coefficient of determination aims to measure how far the regression model can explain the dependent variable's variation explained by all independent variables.

Based on Table 4, the coefficient of determination's test results shows that the R Square value is 0.621. This shows that profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activity, and liquidity can explain the capital structure of 62.1%. At the same time, the remaining 37.9% is influenced by other variables outside the regression model.

CONCLUSION

Based on the test results previously described, the following conclusions were obtained that profitability, tangibility, firm size, sales growth, asset growth, business risk, firm activity, and liquidity simultaneously has significantly affected the capital structure of food and beverage sub-sector companies listed on the Indonesia Stock Exchange during the 2017-2019 period. Profitability, tangibility, sales growth, asset growth, business risk, and firm activities partially do not affect the capital structure. Firm size has a negative effect on the capital structure. The result, which shows a significant negative direction, means that the larger the firm size, the smaller the capital structure. Companies that have a large size describe the company as having high total assets so that companies tend to use their internal funds first compared to using loans from outside parties. Liquidity has a negative effect on the capital structure. The results show that a significant negative direction of the relationship means that the greater the liquidity, the smaller the capital structure. Companies that have a high level of liquidity will tend not to use debt financing.

REFERENCES

Ariani, N. K. A., & Wiagustini, N. L. P. (2017). Faktor-Faktor yang Mempengaruhi Struktur Modal pada Perusahaan Property dan Real Estate yang Terdaftar di BEI. *E-Jurnal Manajemen Unud*, *6*(6), 3168. https://doi.org/10.33087/jiubj.v20i1.821

Brigham, E. F., & Joel F, H. (2011). *Dasar-Dasar Manajemen Keuangan* (11th ed.). Erlangga.

Chandra, T. (2018). Faktor-Faktor Yang Memengaruhi Struktur Modal Pada Perusahaan Properti Dan Real Estate Di Indonesia. *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, *18*(4), 507. https://doi.org/10.24034/j25485024.y2014.v18.i4.2187

Guna, M. A., & Sampurno, R. D. (2018). Analisis Faktor-Faktor yang Mempengaruhi Struktur Modal (Studi Kasus Pada Perusahaan Makanan dan Minuman yang Terdaftar di BEI Periode 2012 – 2016). *Diponegoro Journal Of Management*, *7*(2), 236–247. http://ejournal-s1.undip.ac.id/index.php/dbr

Gunawan, A. (2011). Pengaruh Profitabilitas dan Perputaran Aktiva Terhadap Struktur Modal. *Jurnal Ilmiah Manajemen Dan Bisnis UMSU*, *11*(1).

Ismaida, P., & Saputra, M. (2016). Pengaruh Pertumbuhan Penjualan, Profitabilitas, Ukuran, Dan Aktivitas Perusahaan Terhadap Struktur Modal Pada Perusahaan Property Dan Real Estate Yang Terdaftar Di Bei Periode 2012-2014. *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA)*, *1*(1), 221–229.

Kyissima, K. H., Xue, G. Z., Yapatake Kossele, T. P., & Abeid, A. R. (2019). Analysis of capital structure stability of listed firms in China. *China Finance Review International*, *10*(2), 213–228. https://doi.org/10.1108/CFRI-05-2018-0044

Pramukti, A. (2019). Faktor -Faktor Yang Mempengaruhi Struktur Modal Perusahaan. *ATESTASI : Jurnal Ilmiah Akuntansi*, *2*(1), 58–67. https://doi.org/10.33096/atestasi.v2i1.194

Submitted: January 29, 2021; Revised: July 06, 2021; Accepted: July 08, 2021;
Published: August 16, 2021; Website: http://journalfeb.unla.ac.id/index.php/almana

Putri, R. P. (2018). Faktor-Faktor Yang Mempengaruhi Struktur Modal Perusahaan Manufaktur Di Bursa Efek Indonesia. *Jurnal Ilmu Dan Riset Akuntansi*, *2*. https://doi.org/10.22216/jbe.v1i2.1429

Ria, Y., & Lestari, P. (2015). Pengaruh Risiko Bisnis, Ukuran Perusahaan Dan Pertumbuhan Penjualan Terhadap Struktur Modal. *E-Jurnal Manajemen Universitas Udayana*, *4*(5), 241587.

Sansoethan, D. K., & Suryono, B. (2016). Faktor – Faktor Yang Mempengaruhi Struktur Modal Pada Perusahaan Makanan Dan Minuman Di Bei. *Jurnal Akuntansi : Transparansi Dan Akuntabilitas*, *5*(1), 1–10. https://doi.org/10.35508/jak.v8i1.2359

Sholikhadi, L. M. (2016). Faktor-Faktor yang Mempengaruhi Struktur Modal Perusahaan Kosmetik dan Keperluan Rumah Tangga di BEI. *Jurnal Ilmu Dan Riset Manajemen*, *5*(7), 1–17.

Submitted: January 29, 2021; Revised: July 06, 2021; Accepted: July 08, 2021;
Published: August 16, 2021; Website: http://journalfeb.unla.ac.id/index.php/almana