Determinants Of Capital Structure: Study On Food And Beverage Sector Listed On IDX

Septiana Arianti[1*], Fadilla Cahyaningtyas[2]

[1,2] Malang Asian Institute of Technology and Business, Indonesia
[*] Corresponding author:
Email : fadillacahyaningtyas@asia.ac.id

***Abstract**.*
In the sub-sector of food and beverage, capital structure is the most important thing in its operational activities. So it is such a great deal for the company to develop a good capital structure so that its operational activities run smoothly. This research was done on purpose to help explaining what factors gives a major influence on the structure of capital of the food and beverage companies. The method used is a quantitative method in the form of an associative where the sample applied is 10 companies within a period of 3 years, from 2018 to 2020. The technique of data collection is applying the technique of documentation. To test the hypothesis through analysis of multiple linear regression that previously tested in the help of the test of classical assumption.

Keywords: *Profitabilitas;Struktur Aset;Risiko Bisnis;Struktur Modal*

I. INTRODUCTION

At this time of the COVID-19 pandemic, it had an impact in all fields, both positive and negative impacts. For example, in the economic sector, business competition is getting tougher and stronger between companies and entrepreneurs. So that the company is required to always follow the flow of technological progress and also developments from year to year to avoid bankruptcy. This can cause the need for funding for a company for its operational costs to be increasingly swollen.The food and beverage company is one of the industrial sectors registered on the Indonesia Stock Exchange which has the advantage of being able to survive the COVID-19 pandemic that is currently engulfing almost the entire world. The food and beverage industry sector is predicted to continue to improve in the midst of the economic crisis that hit because the people's economy is becoming more stable with new habits. The food and beverage company is one of the companies that is still eyed by investors when other sectors are experiencing problems until bankruptcy occurs. The reason investors are still looking to invest in this sector is because food and beverages are basic needs of the community which will always be needed.Basically the capital structure is known as the significant components of the company in running its business operational with the aim of obtaining an optimal structure of capital. According to the opinion of Riyanto in [8] the term capital structure is claimed to a comparison of the number of long-term debt with the capital that has been kept by themselves or individuals. While the opinion of Widyaningrum in [8] the optimal structure capital is also defined as the capital estimate of structure that has been previously planned so that it can produce a minimum average capital that is useful for maximizing firm value. One of the financial ratios are able to be applied in orser to help measuring a company's structure of capital is using DER (Debt To Equity Ratio) or it can be called the debt to equity ratio.

How to calculate DER by comparing the number of debt with total equity owned. Because the amount of equity and also the amount of debt by the company to run the business that must always be proportional.Broadly speaking, there are found many factors which can influence the structure of capital from a company, including company size, taxes, company growth, sales growth, profitability, liquidity, and so on. According to research results [6] the factors which are able to influence the structure of capital including the profitability, the liquidity, size, institutional ownership, and tangibility. In this study, the research factors that will be studied are focused on only 3 factors, namely profitability, asset structure, and business risk.Profitability can be defined to be the ability of company in order to help generating profits in some period of time. Companies in high level of profitability get considered to have succeeded in carrying out their operational activities. High profitability will also reduce the possibility of the company incurring debt for its operational activities. Based on the results of research [5,6] explains that profitability gives negative effect on the company's capital structure. However, a different opinion is expressed by the results of research [2,4] that profitability gives a positive and also significant impact on the company's structure of capital.Asset structure is the amount of allocation for the components of each fixed asset and also non-fixed assets. According to the theory of pecking order, the companies usually use assets as guarantor of debt for creditors at the time the external funding is needed.

The asset structure is considered to have a unidirectional relationship with the company's capital structure because when the assets are getting large, it will convince creditors to lend more capital to companies compared to companies with fewer assets. However, some companies prefer to sell some of their assets to avoid using external funds in the form of greater debt. This is supported by research [9,10] which explains that the asset structure gives a positive affect on the capital structure of company. Meanwhile, according to research [8] argues that structure of asset has a negative influence on the company's structure of capital. Business risk is the uncertainty inherent in the projected future rate of return on assets. The possibility of business risk increases because the company makes loans in large amounts and the possibility of not being able to repay these loans can increase the chances of the company going bankrupt. The study results [5,8] explain that business risk gives such a negative affect on the company's structure of capital. However, the results of the research above are inversely proportional to the results of research [18,19] which explains that business risk has a positive and also significant affect on structure of capital.Theoretically, the results are to add insight and broader knowledge so that it can be used as the basis for further research. While practically this research can be used as consideration and also a reference for the company before determining the capital structure that will be used in its operational activities so that it can be useful in financial management and can be used as a reference for creditors before providing capital loans to the company.

Pecking Order Theory dan Trade Of Theory

The theory was first proposed by Myers in 1984 which can be interpreted as a theory that focuses on the benefits of internal funds of company compared to the use of external funds through the issuance of shares and bonds. Pecking Order Theory is usually applied by companies that do not want to bear the burden of debt because they think that the most affective funding is internal funding, the Dividend Payout Ratio target is carried out based on investment opportunities on the grounds that the profits to be obtained cannot be predicted beforehand and the company will only seek external funding source if it is in the most urgent condition by choosing the safest external funding source and minimal risk of loss.Trade Of Theory is a theory that is usually also used in determining the company's capital structure. Trade Of Theory is based on the trade-off between gains and losses in doing debt. Where in this theory focuses more on the balance between the use of debt with the costs of financial distress (having difficulties) and agency costs (agency costs). This theory is usually used by companies that prefer to carry out external funding compared to the use of internal funds.

Capital Structure

Capital structure is defined to be consideration between debt of long-term and aso own capital to carry out permanent company spending. The structure of capital becomes important thing for entrepreneurs in business improvement activities which are often faced with various problems, especially the problem of providing capital to support operational activities so that the company does not suffer losses.Profitability

Profitability is known as the ability owned by company in order to help generate maximum profit from sales, assets owned, and also company capital. To obtain a high profit, the company must have an affective and efficient management measured based on the profit earned. This led the company to fund their operational activities using internal capital sources without requiring external funding. Profitability ratios can be used as a company in describing the final results of policies and decisions that will be determined.

Assets Structure

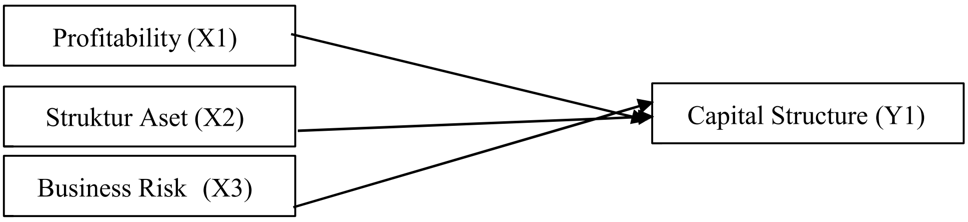
Asset structure is claimed as general description of the amount of assets or become collateral to gain the debt. Asset structure is measured using a balance between the number of fixed assets and the total assets of the company. A company generally has two types of assets, namely current assets and fixed assets. A larger proportion of assets will encourage lenders or investors to provide loans in the form of debt because they are considered capable of paying off their loans in the future.

Business Risk

Business risk is a possibility of various problems that the company will face in running the business operation and can affect their viabilities. Companies that have relatively high risk are going to realize that the use of large amounts of debt will lead to various other risks. The increasing level of business risk will also be offset by increasing the amount of bankruptcy risk that will be experienced by the company, so the company prefers to help reducing the external funds use in its structure of capital.

Hypothesis Framework

The following is a conceptual framework of the research on the determinants of the study capital structure in the food and beverage sector registered on the IDX. There is found any correlation of the variable X and variable Y which can have a direct effect.



Affect of Profitability on Capital Structure

Profitability is claimed to be important thing in determining the company's capital because companies with high profits are reluctant to do external funding because based on the pecking order theory the use of internal funds is preferred by the company compared to external funding, because profitable companies are considered to have high profitability and generate additional retained earnings. When the company's retained earnings are higher, it will minimize the possibility of using external funds to meet the company's capital needs. According to the research [2,4] explains that profitability gives such as positive and significant affect on structure of capital. This is due to the higher the profit earned, the lower the possibility of using external funds. Therefore, the following hypothesis can be proposed: H1: Profitability gives positive affect on structure of capital.

Affect of Asset Structure on Capital Structure

The asset structure is considered to have a unidirectional relationship with the company's structure of capital due to the reason if the assets of a large entity of business will convince creditors to lend capital to the company. This is the same as research [10] it is said that structure of asset gives positive influence on structure of capital. Where the greater the structure of assets owned by the company, the greater the possibility of the company using debt. Therefore, the following hypothesis can be proposed: H2: Asset structure gives a positive affect on structure of capital.

Affect of Business Risk on Capital Structure

The structure of capital will increase when the company has a large amount of debt with the worst possibility, namely the occurrence of bankruptcy or commonly referred to as going out of business. According to research [5] explains that business risk gives such a negative influence on the company's structure of capital. This is because if the business risk is high, it must reduce the use of external funds, high use of debt will make it difficult for companies to repay their debts. Therefore, the following hypothesis can be proposed: H3 : Business Risk gives negative affect on Capital Structure

II. METHODS

Types of Data, Population, and Research Sample

This study uses the types as quantitative research in the form of associative where the data applied in formed as secondary data in the form of company financial statements which can be seen on the official website page of the IDX (https://www.idx.co.id/). The research sample was obtained from 10 companies from a total of 30 food and beverage companies registered on the IDX with a period of 3 years, from 2018 to 2020 which resulted in a final sample of 30 samples.Sampling using purposive sampling method that is adjusted to the following criteria:

1. Companies registered on the IDX during the period of the study,
2. Companies that consistently present financial statements during the research period,
3. Companies that consistently generate profits during the research year.

Research Bound Variables (Dependent Variable)

The dependent variable is known as a variable which the existence is impacted or becomes a result of the independent variable. The dependent variable used is the Capital Structure. The formula for calculating the capital structure proxied to DER is as follows (DER = Total Debt : Total Equity x 100%).

Independent Variable (Independent Variable)

This variable is a type of variable that can influence or be the cause of changes in other variables. The independent variables included in the research are Profitability, Asset Structure, and Business Risk.
The ratio used to calculate profitability is ROA (Return On Assets) with the following formula (ROA = Net Profit Before Tax: Total Assets x 100%).The independent variable secondly is the structure of asset. To calculate it, you is is used the following formula (**Asset Structure : Total Fixed Assets : Total Assets**).
The third independent variable used in the study is business risk, the ratio that will be used to measure business risk is DOL (Degree of Operating Leverage) where the formula for calculating DOL is (**DOL : Profit before tax and interest : change in sales x 100%**).

Data Analysis Techniques and Hypothesis Testing

Classic assumption test

The test of classical assumption aims to obtain a regression model that is suitable for research and is able to provide accurate results. By doing 4 ways, namely: Normality test using the graphical method by looking at the spread of data around the normal diagonal line and also using One-Sample Kolmogorov Smirnov, Multicollinearity Test by looking at the VIF (Variance Inflation Factor) value to determine the possibility of multicollinearity symptoms in the regression model that used, the autocorrelation test can be seen based on the Durbin Waston (D-W) value in the regression model, the heteroscedasticity test can use the Spearman's rho correlation method.

Coefficient of Determination Test (R2)

The coefficient of determination function is to help determine the close relationship of the independent variables and the dependent variable.

Multiple Linear Regression Analysis

Bahri's opinion in [1] multiple linear regression analysis is an analysis by connecting two or more of independent variables towards the dependent variable, the purpose is to know the relationship intensity of two or more variables.

Hypothesis testing

According to Bahri in [1] the t value is obtained in the output section of the regression coefficient. Testing the hypothesis to see the independent variables partially affect on the dependent variable using t statistical test. The test uses a significance level or 95% confidence or (α) = 0.05. Test criteria with comparison as follows:

I. Significance value > 0.05 then H_1 is rejected, meaning that the independent variable does not influence the dependent variable.

II. Significance value < 0.05 then H_1 is accepted, meaning that the independent variable influence the dependent variable.

III. RESULT AND DISCUSSION

Classical assumption test analysis is intended to help determining the feasibility of the model of regression used. The test includes 4 aspects including:

Normality test

According to the results shown of the one sample test of Kolmogorov-Smirnov table, the

Kolmogorov-Sminov value in the statistical test column is 0.125 with a significant level of 0.200. So it can be concluded based on the table that 0.200 > 0.005 and the data is declared to be normally distributed.

Multicollinearity Test

The data processing results indicates that the value of VIF in the profitability table is 1.017, the asset structure table is 1.015 and the business risk table value is 1.003. then according to the multicollinearity test results, we can stated that there has no multicollinearity in the variables and the regression mode is considered good.

Autocorrelation Test

Model Summary

a) Predictors: (Constant), Business Risk (X3), Asset Structure (X2), Profitability (X1)

b) Dependent Variable: Modal Structure (Y)

According to the autocorrelation test results that were conducted, the results obtained that the value of D- W $-2 \leq 1,845 \leq 2$, it is indicated that the data used is free or has no autocorrelation symptoms.

Heteroscedasticity Test

According to the hesterocedasticity test results using Spearman's rho correlation, it was found that the correlation between the variables with the Unstandardized Residual (Sig 2 tailed) value of 1,000 > 0.005 which means that there is no heteroscedasticity in the research data.

Coefficient of Determination Test (R2)

Model Summary

a. Predictors: (Constant), Business Risk (X3), Asset Structure (X2), Profitability (X1)

b. Dependent Variable: Modal Structure (Y)

According to the of the test of determination coefficient results obtained R2 of 0.077. Based on these results, it is known that the variables of the profitability, the structure of asset, and also the risk of business can explain the structure of capital of 7.7% and the 92.3% can be described by other factors outside the focus of the the research.

Discussion

These followings are the data processing of Multiple Linear Regression results contained in this table 1:

Table 1. Multiple Linear Regression Analysis Test Result

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,432	,195		2,220	,035
	Profitabilitas (X1)	,812	,560	,275	1,450	,159
	Struktur Aset(X2)	,003	,429	,001	,007	,995
	Risiko Bisnis (X3)	,000	,002	,021	,113	,911

Source : *Processed Data, 2021*

Analysis of the Affect of Profitability on Capital Structure

Regarding the research results, it is taken a conclutision that the significant value is 0.159 <0.05, which means H1 is accepted, where profitability has a positive influence on structure of capital. It is based on the theory of pecking order, when the profitability of a company increases, it will reduce the possibility of the company to make loans or use external funds which will cause long-term problems, for example the company's difficulty in paying off its debts. According to the study results, it is linier to several previous research [4] said that profitability gives such a positive and also significant impact on the company's structure of capital. However, this opinion contradicts the results of research [6] with the results of profitability having a negative influence on the structure of capital.

Analysis of the Affect of Asset Structure on Capital Structure

According to the results shown at table 1, the structure of asset gives such a significant value of 0.995 > 0.05, or it is shown that H2 is rejected or the asset structure does not influence the capital structure.

In accordance with the Pecking Order Theory, companies that have fixed assets or larger current assets or with smaller total assets will equally allocate their assets for the company's operational activities rather than having to use external funding. If the company does not sell or pledge its assets when experiencing capital problems, the asset structure does not change and has no influence on the structure of capital. This statement is supported by the research [8] which argues that asset structure does not influence the company's structure of capital. Meanwhile, research [10] which explains that the asset structure has a positive influence on the company's structure of capital.

Analysis of the Affect of Business Risk on Capital Structure

According to the research results contained in the table before, it states business risk that has a value of significant 0.911 > 0.05, which indicates H3 is rejected. Business risk will only occur if the company is not careful in doing external funding, the greater the amount of debt, the possibility of the company not being able to pay off its debts will increase. But if the company can manage its finances well, the problem of paying off previous debts will not affect the capital structure. Research [8] explains that business risk does not influence the capital structure and is inversely proportional to the results of research [19] said that business risk gives a positive and also significant affect on capital structure.

IV. CONCLUSION

According to the data processing results done previously, it is taken conclusion that profitability has a positive influence on capital structure. Meanwhile, asset structure and also business risk have no affect on the company's capital structure. The limitation in this study is that the sample used is only the companies in the food and beverage sub-sector registered on the IDX during the study period of time and only using 3 variables, so that the results are claimed to be more accurate, sampling can also be obtained from researching other sectors and by longer timeframes also use more diverse variables. Suggestions for further researchers are to examine various factors other than profitability, asset structure, and business risk variables as well as increase the research sample and not only come from food and beverage sector companies but include all sectors of companies listed on the IDX.

V. ACKNOWLEDGMENTS

I would like to thank the people who have helped and participated in completing the making of this article, guiding and providing motivation, Parents, Mrs. Asian Business.

REFERENCES

[1] Bahri, Syaiful. 2018. Metodologi Penelitian Bisnis. Yogyakarta: Penerbit Andi

[2] Dewi, dkk. 2017. Pengaruh Profitabilitas, Ukuran Perusahaan, Dan Pertumbuhan Aset Terhadap Struktur Modal Perusahaan. ***E-Jurnal Manajemen Unud**, Vol. 6, No. 4, 2017: 2222-2252.*

[3] Sari, dkk. 2016. Pengaruh Profitabilitas, Likuiditas, Pertumbuhan Aset dan Ukuran Perusahaan Terhadap Struktur Modal. ***Jurnal Ilmu dan Riset Manajemen :**Volume 5, Nomor 4, April 2016*

[4] Widayanti, dkk. 2016.Pengaruh Profitabilitas, Tingkat Pertumbuhan Perusahaan, Likuiditas, dan Pajak Terhadap Struktur Modal pada Sektor Pariwisata. ***E-Jurnal Manajemen Unud**, Vol. 5, No. 6, 2016: 3761-3793*

[5] Juliantika, dkk. 2016.Pengaruh Profitabilitas, Ukuran Perusahaan, Likuiditas, Dan Risiko Bisnis Terhadap Struktur Bisnis Pada Perusahaan Property dan Realestate.***E-Jurnal Manajemen Unud**, Vol. 5, No.7, 2016: 4161 – 4192*

[6] Cahyani,Nilam Indah Nur Handayani.2017.Pengaruh Profitabilitas, Likuiditas, Size, Kepemilikan Institusional, dan Tangibility terhadap Struktur Modal. ***Jurnal Ilmu dan Riset Akuntansi** Volume 6, Nomor 2, Februari 2017*

[7] Dewiningrat,Ayu Indira dan I Ketut Mustanda.2018. Pengaruh Likuiditas, Profitabilitas, Pertumbuhan Penjualan, dan Struktur Aset terhadap Struktur Modal.***E-Jurnal Manajemen Unud**, Vol. 7, No. 7, 2018: 3471-3501*

[8] Septiani, dkk. 2018. Pengaruh Profitabilitas, Ukuran Perusahaan, Struktur Aset, Risiko Bisnis dan Likuiditas pada Struktur Modal. ***E-Jurnal Akuntansi UniversitasUdayana** Vol.22.3. Maret (2018): 1682-1710*

[9] Gunadhi,Gede Bagus Dwiputra dan I Made Pande Dwiana Putra.2019. Pengaruh Profitabilitas, Struktur Aset, Likuiditas, Dan Pertumbuhan Penjualan Terhadap Struktur Modal Perusahaan Makanan Dan Minuman. ***E-Jurnal Akuntansi** Vol.28.1.Juli (2019): 641-668*

[10] Dharmadi,I Komang Yusa dan I Gusti Ayu Made Asri Dwija Putri.2018. Pengaruh Struktur Aset, Profitabilitas,

Operating Leverage, Likuiditas terhadap Struktur Modal Perusahaan Consumer Goods di BEI ***E-Jurnal Akuntansi Universitas Udayana*** *Vol.24*

[11] Primantara, dkk. 2016. Pengaruh Likuiditas, Profitabilitas, Risiko Bisnis, Ukuran Perusahaan, dan Pjak Terhadap Struktur Modal. ***E-Jurnal Manajemen Unud****, Vol. 5, No. 5, 2016: 2696-2726*

[12] Andika, dkk. 2016. Prngaruh Struktur Aktiva, Ukuran Perusahaan, Profitabilitas, dan Risiko Bisnis Terhadap Struktur Modal. ***Jurnal Ilmu dan Riset Akuntansi*** *:Volume 5, Nomor 9, September 2016*

[13] Sari, dkk. 2017. Pengaruh Struktur Aktiva, Risiko Bisnis, Pertumbuhan Penjualan, dan Profitabilitas Terhadap Struktur Modal. ***Jurnal Ilmu dan Riset Akuntansi****Volume 6, Nomor 7, Juli 2017*

[14] Jalil,Muhammad.2018.Pengaruh Risiko Bisnis dan Struktur Aktiva Terhadap Struktur Modal pada Perusahaan Makanan dan Minuman yang terdaftar di BEI. ***Jurnal Akuntansi dan Keuangan*** *– Vol. 7, N0. 2, Juli – Desember 2018*

[15] Nanda Desty Widya dan Endang Dwi Retnani.2017.Pengaruh Profitabilitas, Kepemilikan Managerial, Kepemilikan Institusional, dan Risiko Bisnis Terhadap Struktur Modal. ***Jurnal Ilmu dan Riset Akuntansi*** *Volume 6, Nomor 3, Maret 2017*

[16] Pertiwi,Ni Ketut Novianti Indah dan Ni Putu Ayu Darmayanti.2018. Pengaruh Profitabilitas, Likuiditas, Struktur Aktiva dan Kebijakan Dividen Terhadap Struktur Modal Perusahaan Manufaktur di BEI. ***E-Jurnal Manajemen Unud,*** *Vol. 7, No. 6, 2018: 3115-3143*

[17] Selfiana,Kiki Eka dan Fidiana.2016.Pengaruh *Growth Opportunity*, Profitabilitas,dan Struktur Aset Terhadap Struktur Modal. ***Jurnal Ilmu dan Riset Akuntansi*** *: Volume 5, Nomor 9, September 2016*

[18] Munandar, dkk.2019.Pengaruh Risiko Bisnis Terhadap Struktur Modal Pada Perusahaan Pabrik Kertas PT.Tjiwi Kimia Tbk. ***Jurnal Manajemen dan Keuangan*** *Vol.7 No.2 Tahun 2019 Page (53-61)*

[19] Nainggolan,Misco Valensi.2017.Pengaruh Kebijakan Deviden, Profitabitas, Ukuran Perusahaan, Risiko Bisnis, *Cash Holding*, Kontrol Kepemilikan, dan *Non Debt Tax Shield* Terhadap Struktur Modal Pada Perusahaan Manufaktur yang terdaftar di BEI (Periode 2011-2014). ***JOM Fekon*** *Vol.4 N0.1 Februari*

[20] Rosmawati,Sri dan Sinta Anggraini.2021.Pengaruh Profitabilitas, Likuiditas, dan Struktur Aktiva terhadap Struktur Modal (Studi Kasus pada Perusahaan Manufaktur Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia Periode 2018-2019).***Jurnal Citra Ekonomi*** Vol.2 No.2 Oktober 2021.