

DOES PROFITABILITY, ASSET STRUCTURE, AND BUSINESS RISK CAN AFFECT CAPITAL STRUCTURE?

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ABSTRACT:

Research Purpose: This study empirically investigates the impact of Profitability, Asset Structure, and Business Risk on the Capital Structure of food and beverage companies listed on the Indonesia Stock Exchange.

Methodology: This research used population were all food and beverage companies listed on the Indonesia Stock Exchange, as many as 21 companies. The sampling method used in this study is the purposive sampling method, namely determining the sample based on specific criteria or considerations so that a sample of 10 companies is obtained during the 2013-2018 period. The data analysis method used in this study is the classical assumption test and multiple linear regression analysis. **Research Finding:** The results showed that partially Profitability and Asset Structure variables had a positive and significant effect on Capital Structure. In contrast, Business Risk negatively and significantly affects Capital Structure. Simultaneously shows that the variables Profitability, Asset Structure, and Business Risk significantly affect Capital Structure.

Keywords: Profitability, Asset Structure, Business Risk, Capital Structure

INTRODUCTION

Minister of Industry Airlangga Hartarto stated that the food and beverage industry is one of the mainstay sectors supporting manufacturing growth and the national economy in Indonesia. The food and beverage industry is exciting to observe because it is considered to have the best prospects and can survive even amid the Covid-19 pandemic. The food and beverage industry plays an essential role in fulfilling one of the basic needs of consumers, which is marked by the demand for food and beverage products that are never empty. In addition, this industry supports manufacturing growth in Indonesia, providing the highest contribution to the economic sector. It was noted that its contribution to the Gross Domestic Product (GDP) of the non-oil and gas industry reached 34.95% in the third quarter of 2017, or an increase of 4% compared to the same period in 2016. Meanwhile, its contribution to the national GDP was 6.21% in the third quarter of 2017 or increased by 3.85% over the same period in the previous year, making this sector the most significant contributor to industrial GDP compared to other subsectors (<http://www.kemenperin.go.id>).

The growth conditions of manufacturing companies in the food and beverage sub-sector, which continually increase yearly, have resulted in increasingly fierce competition in the business world. This increases the need for funds, so companies must carry out activities effectively and efficiently to compete with other companies (Widyasta and Suhermin, 2017). Pecking-Order Theory assumes that the Company's goal is to maximize shareholder wealth. This theory was first introduced by Donaldson

in 1996, while the naming of the Pecking Order Theory was carried out by Myers (1984). Gordon Donaldson (1961) observed the behavior of the capital structure of US companies, and his observations showed that companies with high profits tend to use low debt. Pecking order theory explains why companies have a preference order in choosing funding sources. This theory states that companies prefer internal financing, namely funding from the Company's operating results in the form of retained earnings, followed by the second order, namely debt (debt) and equity (equity).

Table I-1: Average Value of Capital Structure, Profitability of Asset Structure and Business Risk of Food and Beverage Companies

| Variable | Tahun | | | | |
|-------------------------|-------|------|------|------|------|
| | 2013 | 2014 | 2015 | 2016 | 2017 |
| Capital Structure (DER) | 1,00 | 1,21 | 1,12 | 0,98 | 0,79 |
| Profitability (ROE) | 0,25 | 0,27 | 0,21 | 0,27 | 0,23 |
| Assey Structure | 0,36 | 0,38 | 0,39 | 0,39 | 0,36 |
| Business Risk | 0,17 | 0,14 | 0,13 | 0,17 | 0,16 |

Source: www.idx.co.id

Table I.1 shows that food and beverage companies' average debt to equity ratio (DER) in 2013-2015 was more than 1, meaning that the proportion of debt is more significant than its capital. While the average DER value for 2016-2017 is less than 1. This is not following the optimal capital structure theory, where the amount of company debt should not be greater than its capital. In addition, most investors are more interested in investing their capital in the form of investments in companies with a certain DER of less than 1. Because if the DER is more than 1, the risk that investors increases will bear.

Profitable companies generally use small amounts of debt. Pecking Order Theory also states that companies like internal financing (funding from the company's operating results in retained earnings). Table I-1 shows that profitability in 2013-2014 showed a gap phenomenon, with an increasing trend from 0.25 to 0.27, but DER also increased from 1.00 to 1.21. Meanwhile, in 2015-2016 profitability showed an increasing trend from 0.21 to 0.27, and DER decreased from 1.12 to 0.98.

Companies that have a composition of fixed assets in large numbers will undoubtedly have the opportunity to obtain additional capital with debt than companies that have small amounts of fixed assets because fixed assets such as land and buildings can be used as collateral to obtain debt. Table I-1 shows that the asset structure in 2014-2015 showed an increasing trend from 0.38 to 0.39, but DER decreased from 1.21 to 1.12. Meanwhile, in 2013-2014 the asset structure showed an increasing trend from 0.36 to 0.38, and DER also increased from 1.00 to 1.21.

Companies with high business risks tend to use less debt to avoid possible bankruptcy. Table I-1 shows that business risk in 2014-2015 showed a downward trend from 0.14 to 0.13, but DER also decreased from 1.21 to 0.12. Meanwhile, in 2015-2016 business risk showed an increasing trend from 0.13 to 0.17, and DER decreased from 1.12 to 0.98.

Several previous studies state that the pecking order theory tends to be used in developing countries, including Indonesia. Sudana (2011) states that most companies in Indonesia support the pecking order theory in determining the determinants of capital structure because most companies in Indonesia prefer internal funding and rarely distribute dividends. Pecking order theory also states that a high level of sales growth is a significant internal funds source. Therefore companies use internal funding more. Sayuthi and Raithari (2013) also state that the higher sales growth, the company prioritizes internal sources of funds so that it will reduce debt; on the contrary, the use of debt is carried out if the company's sales growth is low.

LITERATURE REVIEW

Pecking Order Theory

There are some capital structure theories highlighted in the literature. Mostafa & Boregowda (2014) mentioned that the traditional Trade-Off theory and Pecking Order theory are the most accepted theories of capital structure. Pecking Order Theory says that companies will issue securities in order of most profitable. Pecking Order Theory is based on the assumption that company managers have complete knowledge of the actual financial condition of the company; the second assumption is that managers will act according to the best possible actions for the benefit of their investors. Pecking Order Theory also illustrates that companies will prefer to use their internal funding first compared to external funding so that companies that use internal funding have a higher level of profit than companies that use external funding (Myers and Majluf, 1984). External funding selection is based on the lowest level of risk that will be selected first. The external funding that will be selected first is retained earnings, debt, risk debt, convertible securities, preferred stock, and common stock.

Profitability Relationship To Capital Structure

Profitability is one of the factors that need to be considered because it has an influence on the size of the company's capital structure. A company with a high level of profitability means that it has large amounts of internal funds, so it can make the company reduce the amount of its capital structure in the form of debt, because most of the company's funding needs have been met from its internal sources. It is the same with pecking order theory (Myers, 1984) which states that companies will choose to use internal funding sources first compared to external funding sources. Bevan and Danbolt (2002) state that the higher the profit of a company, the greater its internal funds so that the use of debt should be reduced, this is consistent with the pecking order theory which finds a negative relationship in developed countries. This is in line with the research results of Habibah and Andayani (2015), which state that profitability has a significant effect on capital structure.

Based on this explanation, the hypotheses developed are:

H1: Profitability has an effect on Capital Structure

Relationship Of Assets Structure To Capital Structure

Asset structure compares fixed and total assets (Ahmad et al., 2017). The asset structure will support the formation of the Company's capital structure, so the Company must design it as efficiently as possible in using the available funds. Companies that have a composition of fixed assets in large numbers will undoubtedly have the opportunity to obtain additional capital with debt because these assets can be used as collateral in obtaining debt. Sofat & Singh (2017), who researched manufacturing companies in India, stated that there was a positive and significant influence between the asset structure and the Company's capital structure. With a more significant number of fixed assets owned by the Company, it can be used to apply for loans to automatically increase creditor confidence to provide loans to the Company. These results are also supported by research conducted by M'eng et al. (2017), Nnadi (2016), Berkman et al. (2016), and Gwatidzo et al. (2016), which also shows positive and significant results between the asset structure and the Company's capital structure.

H2: Asset Structure Affects Capital Structure

Relationship Of Business Risk To Capital Structure

Business risk is the risk posed by the company's operational activities due to the uncertainty of operating income and profit before interest and taxes. A company faces business risk if it generates profits that fluctuate from one period to another (Munandar et al., 2019). It will also increase the probability of bankruptcy. This opinion follows the trade-off theory, which explains that excessive use of debt can undoubtedly increase the risk that will be borne by the company, resulting in the possibility of bankruptcy.

H3: Business Risk Affects Capital Structure

RESEARCH METHODOLOGY

The scope of this research is carried out on food and beverage companies listed on the Indonesia Stock Exchange (IDX) for 2013-2018. The variable used is the influence of the independent variable on the dependent variable, where the independent consists of profitability, asset structure, and business risk. In contrast, the dependent variable is capital structure.

The data source in this study is secondary data. This data has been collected by other parties, published to the public using data, and is ready to be analyzed. The secondary data in this study is in the form of financial data that has been audited by the company concerned and downloaded through the official website of the Indonesia Stock Exchange, www.IDX.co.id. The type of data used is quantitative data, measured on a numerical scale or numbers (Kuncoro, 2009:145). The quantitative data in this study are in the form of audited financial statements of food and beverage companies from 2013-2018.

The population in this study were all food and beverage companies listed on the Indonesia Stock Exchange during the 2013-2018 period, totaling 21 companies.

The sample is a subset or part of the population of several members (Ferdinand, 2014:171). Sampling in this study was conducted based on the purposive sampling technique, namely the technique of determining the sample with specific criteria or considerations (Sugiyono, 2009:60). The criteria used to select the sample are as follows:

1. Food and beverage companies listed on the Indonesia Stock Exchange during 2013-2018.
2. Companies that have complete annual financial statement data related to the variables used in this study.
3. Companies that have not suffered losses for six consecutive years from 2013-2018.

Based on the criteria above, the sample in this study was ten companies, so the total observations of this study were 60 observations.

Table 3-1: List of Population and sample

| No. | Kode Saham | Nama Perusahaan |
|-----|------------|---|
| 1 | ADES | PT.Akasha Wira International.Tbk |
| 2 | CEKA | PT.Wilmar Cahaya Indonesia Tbk |
| 3 | ICBP | PT.Indofood CBP Sukses Makmur Tbk |
| 4 | INDF | PT.Indofood Sukses Makmur Tbk |
| 5 | MLBI | PT.Multi Bintang Indonesia Tbk |
| 6 | MYOR | PT.Mayora Indah, Tbk |
| 7 | ROTI | PT.Nippon Indosari Corpindo Tbk |
| 8 | SKBM | PT.Sekar Bumi. Tbk |
| 9 | SKLT | PT.Sekar Laut. Tbk |
| 10 | ULTJ | PT.Ultrajaya Milk Industry and Trading Company. Tbk |

Source: www.IDX.co.id

In this study, data analysis was carried out using quantitative analysis with the help of the Statistical Package Social Sciences (SPSS) software. Indonesia Stock Exchange (Sugiono, 2009). The method of data analysis in this study is multiple linear regression analysis which is used to determine whether there is an influence of the independent variable (X) on the dependent variable (Y), namely the influence of profitability, asset structure, and business risk on the capital structure of food and beverage companies listed in Indonesia. The regression model used in this study is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Description:

Y = Capital Structure

a = Constant

b₁, b₂, b₃ = Regresion of Coefisien X₁, X₂, X₃

X₁ = Profitabilty

- X₂ = Asset Structure
- X₃ = Business Risk
- e = Error Term

Results and Discussion

The results of multiple linear regression conducted in this study can be seen in the table below:

Table 4.1: Multiple Linear Regression Analysis Results Coefficients^a

| Model | | Unstandardized Coefficients | | T | Sig. |
|-------|-----------------|-----------------------------|------------|--------|------|
| | | B | Std. Error | | |
| 1 | (Constant) | .820 | .101 | 8.098 | .000 |
| | Profitability | 3.582 | .341 | 10.517 | .000 |
| | Asset Structure | .530 | .250 | 2.122 | .038 |
| | Business Risk | -5.949 | .658 | -9.039 | .000 |

Based on table 4-1, the multiple linear regression equation is obtained as follows:

$$Y = 0,820 + 3,582X_1 + 0,530X_2 - 5,949X_3$$

From the multiple linear regression equation, it can be interpreted that:

1. The constant has a positive value of 0.820, meaning that if the variable value of profitability, asset structure, and business risk is considered constant and has a value of 0, then the capital structure has a positive value.
2. The profitability regression coefficient (X₁) has a positive value of 3.582, meaning that each additional 1 unit of profitability variable will increase the capital structure by 3.582 with the assumption that other variables are fixed.
3. The asset structure regression coefficient (X₂) is positive at 0.530, meaning that each additional 1 unit of profitability variable will increase the capital structure by 0.530 assuming other variables remain.

The business risk regression coefficient (X₃) has a negative value of -5.949, meaning that each additional 1 unit of profitability variable will reduce the capital structure by -5.949 assuming other variables remain.

Simultaneous Test Results (F Test)

Table IV-2: Simultaneous Test Results (F Test)

| Model | F | Sig. | Adjusted R Square |
|------------|--------|-------|-------------------|
| Regression | 53.297 | 0.000 | 0.727 |

a. Dependent Variable: Capital Structure

b. Predictors: (Constant), Business Risk, Assets Structure, profitability

Based on the table above, it can be seen that this research model has a calculated F value of 53.297 with a Sig. F value of 0.000. Because of the value of Sig. $F < (0.05)$, it can be stated that the independent variables, which include profitability (X_1), asset structure (X_2), and business risk (X_3), have a significant simultaneous effect on capital structure.

The coefficient of determination (R^2) is used to determine how big the percentage of the influence of the independent variable on changes in the dependent variable.

Table IV-2 above shows that the coefficient of determination shown from the Adjusted R Square value is 0.727. This value means that all independent variables (independent), namely profitability, asset structure, and business risk, affect the capital structure variable by 0.727 or 72.7%, and the remaining 27.3% is explained by other variables not used in this study.

Effect of Profitability on Capital Structure

The results partially test the hypothesis that the profitability variable has a t-count value of 10.517 with a sig. t value of 0.000 so that it can be stated that profitability has a positive and significant effect on the capital structure of food and beverage companies. This is not under the Pecking Order Theory, which states that companies prefer internal funding in the form of profits obtained by the company rather than external funding in the form of debt. However, this study shows that the higher the level of company profitability, the more positive the capital structure will be, increasing the company's capital structure. This happens because a company with a high level of profitability (ROE) means that it can manage financing sources effectively to generate net income to increase the attractiveness and level of trust of external parties (investors and creditors) to invest their capital into the company. In other words, the company has an excellent opportunity to make large loans.

ROE ratio shows the rate of return on equity, this ratio describes how well the company can return what the investor has invested. Of course, when an investor invests, he expects a return on what he has invested. Therefore, the higher the ROE, the more attractive investors will be, leading to an increase in stock prices (Azhar and Meutia, 2022). This study's results align with previous research conducted by Habibah and Andayani (2015), which stated that profitability had a positive and significant effect on capital structure.

Effect of Asset Structure on Capital Structure

The results of the partial hypothesis testing of the asset structure variable have a t-count value of 2.122 with a sig.t value of 0.038, so it can be stated that the asset structure has a positive and significant effect on the capital structure of food and beverage companies. This shows that the higher the company's asset structure, the more positive the capital structure will be, which will increase the company's capital structure. This study is under the theory stated by Sitanggang (2015: 75) that the asset structure will support the formation of the company's capital structure; the company must design as efficiently as possible using the available funds. Companies that have a composition of fixed assets in large numbers will have an excellent opportunity to obtain additional capital with debt because these assets can be used as collateral in obtaining debt. The results of this study are in line with previous research conducted by Habibah and Andayani (2015), Zahroh and Fitria (2016), which state that asset structure has a positive and significant effect on capital structure.

Effect of Business Risk on Capital Structure

The results of the partial hypothesis testing of the business risk variable have a t value of -9.039 with a sig.t value of 0.000, so it can be stated that business risk has a negative and significant effect on the capital structure of food and beverage companies. This shows that the higher the company's business risk, the more negative the capital structure will be, which will reduce the company's capital structure. This research is under the Trade-Off Theory, which states that when a company uses high debt to meet its funding needs, it can increase business risk because the company must be able to meet its obligations. The interest expense borne by the company is getting more prominent as well. So companies with high business risk should use relatively low debt to avoid bankruptcy. This study's results align with research by Mahardhika (2017) and Pakpahan (2018), which stated that business risk had a negative and significant effect on capital structure.

CONCLUSION

Based on the results of data analysis and discussion of the effect of Profitability, Asset Structure, and Business Risk on the Capital Structure of food and beverage companies listed on the Indonesia Stock Exchange, several conclusions can be drawn as follows:

1. Profitability positively and significantly affects the capital structure of food and beverage companies listed on the Indonesia Stock Exchange.
2. Asset structure has a positive and significant effect on the capital structure of food and beverage companies listed on the Indonesia Stock Exchange.
3. Business risk has a negative and significant effect on food and beverage companies' capital structure on the Indonesia Stock Exchange.
4. Profitability, asset structure, and business risk simultaneously significantly affect the capital structure of food and beverage companies listed on the Indonesia Stock Exchange.

RECOMMENDATIONS

Based on the tested hypothesis and research results, the researcher recommends the following:

1. For the Company is expected to be able to maintain and increase profitability to improve its capital structure. This is because the higher the level of profitability means the company can manage its funding sources effectively to generate profits to increase the attractiveness and level of investor confidence to invest their capital into the company.
2. The company is expected to pay more attention to the asset structure to increase its capital structure when the asset structure is quite large. Companies with large amounts of fixed assets will have an excellent opportunity to obtain additional capital with debt because these assets can be used as collateral or collateral.
3. The company is expected to pay more attention to its business risks. This is because when a company uses high debt to meet its funding, it can increase its business risk. The business risk that is too high will lead to a risk in the form of the company's inability to repay its debts.

REFERENCE

- [1] Ahmad, G. N., Lestari, R., & Dalimunthe, S. (2017). Analysis of Effect of Profitability, Assets Structure, Size of Companies, and Liquidity to Capital Structure in Mining Companies Listed in Indonesia Stock Exchange Period 2012-2015. **Jurnal Riset Manajemen Sains Indonesia**, 8(2), 339–354. <https://doi.org/https://doi.org/10.21009/JRMSI.008.2.09>
- [2] Azhar, Iqlima, & Meutia, Tuti. (2022). The Effect of Return Equity (ROE), Net Profit Margin (NPM), and Earning Per Share (EPS) on Stock Price of Manufacturing Companies on the Indonesia Stock Exchange. **Proceeding International Seminar on Islamic Studies**. 23-24 February 2022. Medan. Indonesia. Hal. 479-488.
- [3] Berkman, A. N., İskenderoğlu, O., Karadeniz, E., & Ayyıldız, N. (2016). Determinants of Capital Structure: The Evidence from European Energy Companies. **International Journal of Business Administration**, 7(6), 96–106. <https://doi.org/http://dx.doi.org/10.5430/ijba.v7n6p96>.
- [4] Bevan, A., dan Danbolt, J., 2002. Capital structure and its determinants in the UK- a decompositional analysis, *Applied Financial Economics*, 12, 159-170.
- [5] Chasanah, Nur Wahyu Shofiatin dan Budi Satrio. 2017. Pengaruh Profitabilitas, Likuiditas dan Ukuran Perusahaan Terhadap Struktur Modal Pada Perusahaan Transportasi. **Jurnal Ilmu dan Riset Manajemen**, Volume 6 Nomor 7.
- [6] Donaldson, Gordon. 1961. "Corporate det capacity". Boston: Division of Research, Harvard Business School.
- [7] Ferdinand, A. 2014. **Metode Penelitian Manajemen** (5th ed.). Semarang: Undip Press.
- Gwatidzo, T., Ntuli, M., & Milo, M. (2016). Capital Structure Determinants in South Africa: A Quantile Regression Approach. **Journal of Economic and Financial Sciences**, 9(1), 275–290.
- [8] Habibah, Maulia dan Andayani. 2015. Analisis Pengaruh Profitabilitas, Struktur Aset, Likuiditas dan Pertumbuhan Penjualan Terhadap Struktur Modal. **Jurnal Ilmu dan Riset Akuntansi**, Vol. 4 No. 7).
- [9] <http://www.idx.co.id>. Diakses pada tanggal 06 Februari 2019.
- [10] <http://www.kemenperin.go.id>. Diakses pada tanggal 15 Januari 2019.

- [11] Kuncoro, Mudrajat. 2009. **Metode Riset Untuk Bisnis & Ekonomi**. Jakarta: Erlangga.
- [12] M'ng, J. C. P., Rahman, M., & Sannacy, S. (2017). The Determinants of Capital Structure: Evidence from Public Listed Companies in Malaysia, Singapore, and Thailand. **Cogent Economics&Finance**, 5(1), 1–20. <https://doi.org/https://doi.org/10.1080/23322039.2017.1418609>
- [13] Mostafa, H. T., & Boregowda, S. (2014). A Brief Review of Capital Structure Theories. *Research Journal of Recent Sciences*, 3(10), 113–118.
- [14] Munandar, A., Pratiwi, A., & Hasan, I. (2019). Pengaruh Risiko Bisnis Terhadap Struktur Modal pada Perusahaan Pabrik Kertas PT. Tjiwi Kimia, Tbk Periode 2013-2018. **Jurnal Manajemen dan Keuangan**, Volume: 7 No.2, Hal 57.
- [15] Myers, S., 1984. The capital structure Puzzle, **The Journal of Finance**, 39, 575- 592.
- [16] Nnadi, M. (2016). Accounting Factors Affecting the Capital Structure in the Asian Economic Community. **International Journal of Accounting Research**, 5(1), 1 – 9. <https://doi.org/10.4172/2472-114X.1000139>
- [17] Sayuthi dan Raithari. 2013. Pengaruh Pertumbuhan Penjualan, Operating Leverage, dan Tax Rate Terhadap Kebijakan Hutang Dengan Pendekatan Pecking Order Theory (Perusahaan Manufaktur Di Bursa Efek Indonesia Tahun 2007-2010). **Jurnal Akuntansi**, 1 (2):56-168.
- [18] Sitanggang, J.P. 2013. **Keuangan Perusahaan Lanjutan**, Edisi Pertama. Jakarta: Mitra Wacana Media.
- [19] Sudana, I. 2011. **Manajemen Keuangan Perusahaan Teori dan Praktek**. Jakarta : Erlangga.
- [20] Sugiyono. 2009. **Statistika untuk Penelitian**. Bandung: Alfabeta.
- [21]. 2014. **Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, R dan D**. Bandung: Alfabeta.
- [22] Sofat, R., & Singh, S. (2017). Determinants of Capital Structure: An Empirical Study of Manufacturing Firms in India. **International Journal of Law and Management**, 59(6), 1029 – 1045. <https://doi.org/https://doi.org/10.1108/IJLMA-05-2016-0051>
- [23] Widyasta, Atfin Tiara dan Suhermin. 2017. Pengaruh Ukuran Perusahaan, Struktur Aktiva, Profitabilitas dan Risiko Bisnis Terhadap Struktur Modal. **Jurnal Ilmu dan Riset Manajemen**, Volume 6 Nomor 6.