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# Determine the Optimal Capital Structure of PT Indofood CBP Makmur Tbk (PT. ICBP)

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**ABSTRACT:** The food and beverage industry is a very large industry both nationally and globally. In Indonesia, the government's investment realization in the food and beverage industry reached IDR 19.17 trillion. One of the giant food and beverage companies in Indonesia, namely PT ICBP, is one of the largest contributors to Indonesia's GDP in the food and beverage sector. But the problem occurred in 2020 when the COVID-19 pandemic hit. Apart from the pandemic, in 2022 there was a war between Russia and Ukraine which disrupted the global supply chain. The company's decision to acquire PCL needs to be questioned because looking at the company's financial condition, the capital structure of the firm is not in an optimal position. Therefore, this research was conducted with the aim of obtaining optimal capital structure and providing recommendations for strategic steps for PT ICBP. The results obtained are that in 2022 the debt level of the company is not on the optimal capital structure. Therefore, the authors carry out a scenario analysis of the company's capital structure based on the base scenario where the future financial position will develop, such as the author's estimation, the best scenario and the worst scenario. The optimal capital structure is obtained if the debt is at the level of 85% for the base scenario, 45% for the best scenario, and 40% for the worst case. With this capital structure, company achieve its maximum firm value. Companies must reduce debt levels according to the framework that Damodaran recommends, namely investing using new equity or retained earnings.

KEYWORDS: COVID-19, Firm Value, Food and Beverage Industry, Optimal Capital Structure, Russia-Ukraine War.

### INTRODUCTION

In 2020, there were several major events that rocked the world's industry, one of which was the COVID-19 pandemic. Besides that, there was a war between Russia-Ukraine which caused other problems for world trade. PT ICBP is a company that has been affected by these two things with a decrease in company profitability, which is the return on equity (ROE) and return on assets (ROA) that significantly and the increasing debt to equity ratio (DER) from 2019 to 2020. Judging from these three indicators, the authors conclude that PT ICBP's financial condition is not doing well and it is necessary to look at the composition of the company's debt and equity to see its optimal capital structure. Capital structure is a complex study that looks at how companies finance their operations using debt or equity. By looking at the capital structure, we can find out the cost of capital of the company and furthermore we can calculate the value of the firm based on the debt and equity ratio.

The purpose of this study is to determine the optimal capital structure that provides maximum corporate value from PT ICBP. The author uses secondary data from PT ICBP obtained from annual financial reports for 2018 to 2022. After determining the optimal capital structure of the company, this research provides strategic options for PT ICBP to achieve the expected capital structure conditions. This research uses company valuation calculations using the weighted average cost of capital (WACC) approach. WACC is used to determine the best proportion between the company's debt and equity.

#### BACKGROUND

Indonesia has experienced significant changes in its food needs over the last decade. As stated by data from the United Nations Food and Agriculture Organization (FAO), the country's population has increased by about 25 million people from 2010 to 2020, reaching a total of over 270 million people. If we look at food and beverage sales activities in Indonesia, the trend tends to increase every year with a contribution of IDR 1,121 trillion from a total of IDR 16,971 trillion in 2021. Majority of Indonesian people consume rice and besides rice, noodles are also a food that is dominated in Indonesia. Companies that produce the main staples in Indonesia have benefited greatly, including PT ICBP. With its flagship product which is Indone, PT ICBP has become one of the leaders in the

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instant noodle market in Indonesia, even abroad. For 37 years, the company has developed its business lines in the field of consumer branded products such as snacks, dairy products, beverages, also seasonings and made PT. Indofood CBP Sukses Makmur, Tbk. become a giant in the field of food and beverage in Indonesia.

On the other hand, in the global industrial order there is geopolitical tensions followed by the implementation of protectionist policies in a number of countries are considered capable of triggering global financial market uncertainty due to supply chain disruptions, resulting in deepening inflationary pressures. This condition will also cause commodity prices to soar which could lead to a global energy and food crisis, including for Indonesia. The main trigger for this problem is the impact of the wars between Ukraine and Russia and the unfinished COVID-19 pandemic. The increase in commodity prices has also made PT ICBP become one of the numerous companies affected. Due to the number of occurrences, the study of the company's financial position must be held and the company's capital structure was observed not to be in an optimal position.

#### LITERATURE REVIEW

Capital structure refers to the way a company finances its operations and growth by utilizing different sources of funding, such as debt and equity. It represents the proportionate mix of these financing sources in a company's overall capitalization. There are several theories which explain capital structure in modern era, starting from capital structure irrelevance theory by Modigliani and Miller (1958). Modigliani and Miller said that under certain assumptions, the capital structure of a firm has no impact on its value. Following the presumption of this irrelevance capital structure model, two major theories have arisen which are trade of theory by Modigliani and Miller (1962) and pecking order theory by Myers and Majluf (1984). Trade off theory posits that companies determine their capital structure by weighing these benefits and costs to maximize the overall value of the firm. In pecking order theory, Myers and Mjluf recognize the practical considerations and information asymmetry that exist in the real world that influencing companies financing (debt and equity). Firms choose financing sources based on their availability and cost, with debt being less preferred than equity.

As Gitman & Zutter (2015) said in their book, determining the optimal capital structure is a challenging aspect of financial decisionmaking due to its interconnectedness with other variables. Making unfavorable choices in capital structure can lead to increased capital costs, which in turn can decrease the net present values (NPVs) of projects and render them less viable. Conversely, making sound capital structure decisions can reduce capital costs, resulting in higher NPVs and more viable projects

According to Mullins (1982), the cost of capital is an important concept in financial decision-making, as it helps determine the feasibility of investment projects, assess the company's capital structure, and evaluate the attractiveness of different financing options. It serves as a benchmark or hurdle rate against which the company evaluates the expected returns from potential investments. If the expected return on an investment is lower than the cost of capital, it may not be considered economically viable. The cost of capital is influenced by various factors, including the company's risk profile, market conditions, industry norms, and the company's overall financial health. It is often calculated using models such as the Capital Asset Pricing Model (CAPM) for equity and the weighted average cost of capital (WACC) for the overall cost of capital.

### METHODOLOGY

This research aims to find the optimal capital structure of PT ICBP and proposes strategies to achieve optimal capital structure. The step of doing this research is to define the business issues first. After the business issues are obtained, an external and internal analysis is carried out. External analysis uses PESTLE analysis and Porter's Five analysis. Internal analysis uses financial ratio analysis. The author uses secondary data from the annual report of PT ICBP in 2017 to 2022. According to Perez (2017) cited from Pradityo (2023), secondary data is information that has been collected for several reasons. The advantages of using secondary data are time savings, accessibility, cost reduction, breadth of research, and providing new perspectives from previous studies. After conducting external and internal analysis, the authors use the weighted average cost of capital (WACC) approach to find the right composition of debt and equity in determining the maximum value of the term.

In calculating WACC, secondary data such as risk-free rate, risk premium, beta coefficient and marginal tax are needed. In addition, the authors calculated the cost of debt using the credit rating spread of the company, whose data was obtained from the study of Prof.

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Aswath Damodaran. The author evaluates the company's financial data for five historical years to make financial projections for the next year. Financial projections are needed to create three scenarios that will occur in the future. The first scenario is the condition of the company that will occur if the company develops according to the trend over the last five years. The best scenario is by looking at the company's best performance during historical years, as well as the worst scenario where the company's growth estimates are adjusted to the company's performance during historical years. To determine the optimal capital structure, it is necessary to iterate calculations by modifying debt and equity to produce the highest value of the firm. After obtaining the optimal composition of the capital structure, the authors use the framework proposed by Damodaran (2004) to determine what steps are needed if the debt level is under or over levered.

### ANALYSIS

Calculation of the optimal capital structure of the firm in 2022 shows that the highest firm value will be achieved when the level of the debt is 20%. Meanwhile, the actual capital structure of PT ICBP in 2022 is 50%. Companies only get 89% of the maximum of the value that they could generate. After making projections for the next year, the highest company value can be seen in Figure 1 using the best scenario recommended by the author.

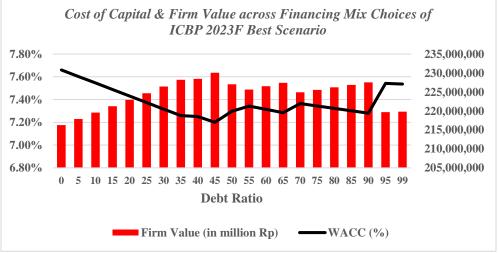


Figure 1. Cost of Capital against Firm Value of PT ICBP for Bast Scenario (Source: Author, 2023)

In the Figure 1, we can see that the highest value of the firm is on the 45% level of the debt. In the figure it can be seen that the greater the value of the firm, the smaller the required cost of capital. In accordance with the theory presented by Mullins (1982), if the expected return of the investment is lower than the cost of capital, it will not be economically viable. So, we have to find the minimum cost of capital not only to make it easier for investors to invest, but in this case also to generate the maximum value of the firm. In the best case, we got the optimal capital structure is 45% which the actual capital structure in 2022 is still higher. By using the best scenario, the authors estimate that the company's financial projections will increase according to the company's best performance. Table 1 is presented to see a comparison of the composition of the actual capital structure (2022) with projections for one year ahead using the general, best and worst scenarios.

Table 1. Optimal Capital Structure for Base Scenario (S	Source: Author, 2023)
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Scenario	Actual	Base	Best	Worst
Capital Structure	50%	85%	45%	40%
Firm Value (in million IDR)	109,214,946	135,613,957	230,067,546	74,291,698

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It can be seen in Table 1, if the company develops according to the CAGR for five historical years, the firm value will still increase by up to 24%. But the composition of the capital structure rose to 85%. This indicates that the company is increasing the amount of its debt to achieve maximum firm value. Under these conditions, the company becomes very risky because the company has to pay very large debt obligations. If the company experiences a decrease in income or financial difficulties, it is likely that there will be delays in paying debts or even failure to pay debts. In addition, the high amount of debt also makes the company have to pay a high amount of interest. This can reduce the company's profitability. Returning to Table 1, if the company is in the worst scenario, even though the company's debt level has decreased by 10%, the firm value in 2023F is lower than the actual year. Definitely, this condition is not desired by any company. Then, if you look at the best scenario, the company can increase investor confidence. The company has high bargaining power with suppliers, customers and other business partners. Likewise, with an optimal capital structure in 2023F which is smaller than the actual year, the company may find it easier to raise capital through various means, such as issuing equity or debt securities. The company's risk level decreased and the company's performance increased.

The company is over-leveraged due to the actual capital structure which is higher than the optimal capital structure in the best scenario. According to the framework proposed by Damodaran (2004), it needs to be seen if the company's financial condition has a return on equity (ROE) that is greater than the cost of equity and a return on capital that is greater than the cost of capital. By looking at the actual data for the last 5 years, both indicators have been met. So, the step that must be taken by PT ICBP is to carry out a new project using the company's equity or with retained earnings. This is expected to reduce the company's debt level in order to achieve optimal capital structure.

### CONCLUSION

In 2022, PT ICBP has a debt level of 50% on the capital structure. Meanwhile, with the projection simulation that the authors propose with the best scenario, the optimal capital structure of PT ICBP should be on 45%. With this composition, the company can increase the company's value from IDR 109 trillion to IDR 230 trillion or 211% higher. Using the framework developed by Aswath Damodaran, an implementation plan that can be carried out is the company should invest its equity or retained earnings in new projects. Either way, the company develops new products that are in demand by the market, or the company can expand by opening new factories in the country or even abroad.

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