

*Research Article*

# Evaluating Optimal Capital Structure of PT. Matahari Putra Prima Tbk

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**Abstract:** *The objective of this paper is to investigate evaluating the optimal capital structure of PT Matahari Putra Prima Tbk. By employing a comprehensive analysis that integrates both external and internal factors affecting the company, this study aims to evaluate the financial stability and overall capital strategy of MPPA. The research utilizes a combination of PESTLE analysis, Porter's Five Forces, financial ratio analysis, and Altman Z-score to assess the company's current standing and future projections. Various scenarios are projected, including best, base, and worst-case outcomes, to determine the optimal capital structure under different conditions. Additionally, sensitivity analysis is conducted to understand the robustness of the capital structure against market volatility. The findings suggest strategic recommendations for MPPA to enhance its capital efficiency and investor attractiveness, highlighting the importance of rights issues in maintaining financial health and supporting long-term growth. This study contributes to the broader understanding of capital structure optimization in the context of Indonesian retail companies and provides actionable insights for corporate finance practitioners and policymakers.*

**Keywords:** *Optimal capital structure, Cost of Capital, Pecking Order Theory.*

## I. INTRODUCTION

According to "Retail Foods in Indonesia" by the United States Department of Agriculture Foreign Agricultural Services (USDA FAS), In 2023, Indonesia's economy grew by 5.3%. This means that the country's overall financial situation got better. Good trading terms helped the growth. This is how well the country is doing in its business with other nations. The growth is a good sign for the country's economy. It shows that the country is getting stronger financially. The growth in the economy also affected how people in Indonesia spend their money. Many people in Indonesia are now spending more on things that are good for their bodies, like exercise and healthy food. They are also thinking more about their future and taking care of their minds. This shows that people's spending habits are changing. They are focusing more on things that are good for them. The growth in the economy and the changes in people's spending habits are important for businesses in Indonesia. For example, grocery stores are trying to adjust to these changes. They are trying to offer products that are a good value for the money. This means they are trying to sell things that are good quality but not too expensive. This is because people are paying more attention to the prices of food. This is how the growth in the economy is affecting the way businesses sell their products. Current trends in Indonesia's retail food industry include:

- Online Shopping: More and more people in Indonesia are buying their food online. This means they can order food from their computers or phones and have it delivered to their homes. Many different kinds of food are available to buy online, including food from other countries.
- Specialty Stores: In big cities like Jakarta, Bandung, and Surabaya, stores that sell special kinds of food are becoming more popular. These stores sell high-quality food from other countries, like fruits, meat, and seafood. They are often located near where people live.
- Small Stores: Big stores that sell a lot of food are making smaller stores. They are doing this to compete with smaller stores that are closer to where people live. This makes it easier for people to buy food.
- Refrigerated Food: More and more stores are making more space to keep food cold. This is because people are buying more frozen and fresh food.
- On-the-Go Food: Stores that are easy to get to are selling more food that is easy to eat. This makes it easier for people to buy food when they are not at home.
- Healthy Food: People in cities are trying to eat food that is better for them. This means they are buying more food that is good for their bodies. Some stores are only selling food that is good for people.



**Table. 1 Grocery Retail Outlets by Channel in Indonesia (2022)**

Category	2019	2020		2021		2022		
	Sales Value (US\$ million)	Outlets	Sales Value (US\$ million)	Outlets	Sales Value (US\$ million)	Outlets	Sales Value (US\$ million)	Outlets
Convenience Retailers	12,710.0	35,120	13,259.3	36,930	14,372.9	39,714	16,606.6	41,453
Supermarkets	6,158.2	1,427	4,734.1	1,452	4,380.2	1,468	4,929.5	1,544
Hypermarkets	2,449.4	336	1,632.1	313	1,250.3	294	1,311.5	298
Small Local/ Traditional Grocers	98,792.9	4,506,710	68,464.8	4,056,111	70,518.8	3,974,988	77,553.2	3,935,238
Food/Drink/Tobacco Specialists	1,254.3	6,181	868.5	5,583	850.6	5,334	975.6	5,455
Total Grocery Retailers	120,743	4,543,593	89,339	4,094,806	92,485.2	4,016,464	100,400	3,981,428
Food E-commerce	633.1	-	1,249.3	-	1,963.0	-	2,894.8	-

The increasing sales value and number of outlets for convenience retailers and food e-commerce, along with a decrease in the number of outlets for traditional grocers, reflect the changing landscape of the grocery retail sector in Indonesia, with a growing convenience and online shopping. Convenience retailers grow a significant increase in sales value and the number of outlets from 2019 to 2022, indicating a growing preference for convenience stores among Indonesian consumers. The sales value for food e-commerce also increased steadily from 2019 to 2022, showcasing the rising popularity of online shopping for food and groceries in Indonesia. The sales value and number of outlets for small local/traditional grocers decreased from 2019 to 2021 but increased in 2022. The total sales value for grocery retailers increased from 2019 to 2021 but decreased in 2022, while the number of outlets decreased over the years.

**Table. 2 Top Indonesia Food Retailers (2022)**

Brand Name	2022	
	Sales Value (US\$ million)	Number of Outlet
Alfamart (Sumber Alfaria Trijaya Tbk PT)	7,622	17,394
Indomaret (Salim Group)	7,605	19,996
Alfa Midi (Sumber Alfaria Trijaya Tbk PT)	1,100	2,273
Hypermart (Matahari Putra Prima Tbk PT)	445	103
Super Indo (Koninklijke Ahold Delhaize NV)	383	189
Transmart Carrefour (Trans Retail Indonesia PT)	318	63
Carrefour (Trans Retail Indonesia PT)	263	70
Lotte Mart (Lotte Group)	256	49
Circle K (Alimentation Couche-Tard Inc)	181	634
Farmer's Market (Supra Boga Lestari Tbk PT)	109	38
Ramayana (Ramayana Lestari Sentosa Tbk PT)	77	76
Others	83,018	3,943,103
Total	101,376	3,983,988

Based on Top Indonesia Food Retailers, Indonesia's grocery retail market saw significant growth in 2022, driven by the easing of pandemic-related measures. The market is dominated by traditional markets, which account for 77% of the market share, although modern retail stores and e-commerce are gaining ground. Hypermarkets in Indonesia, particularly those operated by Transmart Carrefour, have been experiencing a decline in sales. In 2022, Transmart Carrefour closed 12 of its outlets due to increased competition among retailers and shifting consumer behavior towards smaller-format retail outlets, such as convenience stores and supermarkets, which are preferred for their closer proximity to residential areas.

Matahari Putra Prima (MPPA), a major Indonesian retail company founded in 1986, operates various stores like Hypermart and Foodmart. Despite a strong presence and growth efforts, MPPA faces financial challenges. They reported losses in the first half of 2023 and throughout 2022, though these losses have decreased year-over-year since 2017. While their stock price increased in 2023, overall profitability remains an issue due to rising costs. To achieve future success, MPPA will need to improve efficiency and cost management.

## II. LITERATURE REVIEW

### A) Capital Structure

Capital structure theory by Ross, Westerfield, Jaffe and Jordan (2018) is the specific mix of debt and equity a company uses to fund its operations and growth. Equity capital comes from ownership shares in the company and entitles holders to future cash flows and profits. Debt includes bond issues or loans, while equity can take the form of common stock, preferred stock, or

retained earnings. Short-term debt is also included in the capital structure. Both debt and equity are reflected on the balance sheet, which also lists a company's assets acquired through these financing methods. Capital structure includes a mix of long-term debt, short-term debt, common stock, and preferred stock. The balance between short-term and long-term debt is a key factor in evaluating a company's capital structure.

Debt is one of the primary ways for a company to raise funds in the capital markets. It offers tax benefits, as interest payments on borrowed funds are often tax-deductible, and allows the company to maintain ownership, unlike equity. Debt is particularly accessible and attractive when interest rates are low. Equity involves external investors gaining partial ownership of the company. While more expensive than debt, especially in low-interest environments, equity does not require repayment, which is advantageous if the company faces declining earnings. However, equity gives investors a claim on the company's future earnings.

### ***B) Modigliani and Miller's Theory of Capital Structure***

Based on Ross, Westerfield, Jaffe and Jordan (2018), The Modigliani and Miller (MM) propositions are a set of theoretical ideas about how a firm's capital structure (debt and equity) affects its value. There are two main propositions, each with different assumptions:

#### **a. MM Proposition I (without taxes)**

This proposition states that the total value of a firm (market value of all outstanding debt and equity) is independent of its capital structure. In other words, how a company finances itself (debt and equity) shouldn't affect its overall value if the company operates efficiently and earns the same return on its assets regardless of financing. This is a controversial proposition because it seems counterintuitive that might expect a company with a lot of debt (high financial risk) to be worth less than a company with no debt. However, MM Proposition 1 argues that the benefit of debt's lower cost (tax shield) is offset by the increased risk for equity investors, resulting in the same overall value.

#### **b. MM Proposition II (without taxes)**

This proposition states that as a company increases its use of debt such as leverage, the cost of equity capital that required return by shareholders will also increase. This is because shareholders demand a higher return to compensate for the added risk of a company with more debt. The cost of equity increases to reflect the increased risk of default for the shareholders if the company cannot meet its debt obligations. This higher cost of equity offsets the benefit of the lower cost of debt from Proposition 1, resulting in the same overall firm value, as argued in Proposition 1.

#### **c. MM with Taxes**

This proposition states that a firm can increase its value by using debt because of the tax shield benefit. The tax savings from deductible interest payments partially offset the increased risk associated with debt for equity investors. MM's theory with taxes suggests that debt can be a valuable tool for increasing a firm's value by reducing its tax burden.

### ***C) Cost of Capital***

The cost of capital, according to Ross, Westerfield, Jaffe and Jordan (2018), is the minimum return required to justify a capital budgeting project; it assesses whether a proposed decision is justifiable based on its costs. Many companies finance business expansion through a mix of debt and equity. For these companies, the overall cost of capital is calculated from the weighted average cost of all their capital sources, known as the weighted average cost of capital (WACC). The component of WACC is equity, debt, cost of debt, and cost of equity.

#### **a. Cost of Debt**

The cost of debt is the total interest expense owed on a debt. This cost represents the interest obligation on liabilities such as bonds and loans, expressed as either the effective interest rate or the total interest expense. The components of the cost of debt are directly correlated with the borrower's creditworthiness; borrowers perceived as riskier by lenders will incur a higher cost of debt. The elements of the cost of debt consist of interest expense, debt, and marginal tax rate. There are two types of cost of debt: pre-tax cost of debt and after-tax cost of debt.

##### **1. Pre-tax Cost of Debt**

This is the most basic measure and reflects the actual interest rate a borrower pays on their debt before accounting for any tax benefits. It's essentially the interest expense as a percentage of the outstanding loan amount.

##### **2. After-tax Cost of Debt**

This considers the tax shield advantage of debt. Since interest payments are tax-deductible, they reduce the company's taxable income, leading to tax savings. The after-tax cost of debt reflects the effective interest rate the borrower pays after considering this tax benefit.

## **b. Cost of Equity**

The cost of equity represents the expected return that investors demand for holding a company's equity, reflecting the compensation required for bearing the risk of ownership. This metric is crucial for firms as it helps in assessing the feasibility of new projects and investments.

### **1. Capital Asset Pricing Model (CAPM)**

The Capital Asset Pricing Model (CAPM) is a widely used method to estimate the cost of equity, incorporating three key components: the risk-free rate, the market risk premium, and the stock's beta. The element of cost of equity consists of the beta of the company, risk-free rate of returns and market rate of return.

### **2. Dividend Discount Model (DDM)**

According to Damodaran (2015) Dividend Discount Model is more applicable to companies that pay regular dividends to shareholders. It estimates the cost of equity based on the current dividend that the annual dividend per share paid out by the company. The market price per share is the current stock price of the company. And expected dividend growth rate that the estimated rate at which the company's dividends are expected to grow in the future.

## **D) Optimal Capital Structure**

Several theories explain capital structure in the modern era; capital structure theory by Modigliani and Miller (1958), Capital structure refers to the methods a company uses to fund its operations and growth, typically through a mix of debt and equity. This mix represents the relative proportions of these funding sources in a company's overall financial makeup. They asserted that, under certain conditions, a firm's capital structure does not affect its value. Building on this idea, two major theories emerged: the trade-off theory by Modigliani and Miller (1962) and the pecking order theory by Myers and Majluf (1984). The trade-off theory suggests that companies determine their capital structure by balancing the benefits and costs to maximize their overall value. The pecking order theory acknowledges the practical considerations and information asymmetries in the real world that influence a company's financing decisions. Consequently, companies prefer internal financings, such as retained earnings, over external options, such as debt and equity, by choosing their funding sources based on availability and cost, with debt being less favored than equity.

Also, according to Damodaran (2015), optimal capital structure refers to the ideal mix of debt (loans, bonds) and equity (stock) financing that a company should use to maximize its overall value. It's essentially finding the balance spot between the benefits and drawbacks of debt. Investments are made in projects that promise the highest returns with acceptable risks. These projects can be financed through two sources: owners' funds (equity) or borrowed money (debt), referred to as the financial mix. The goal of the financial mix is to achieve the lowest possible risk appropriate for the funded assets. Excessive use of debt increases the company's risk, while insufficient debt leads to reduced business investment, resulting in lower dividends for shareholders.

## **E) Supermarket Retail Business**

The evolution of supermarket business models is a complex interplay between physical stores and e-grocery services, each operating with distinct strategies (Callegari, 2022). Data mining techniques, like association rules, are utilized to analyze customer purchasing patterns and improve services in supermarkets, emphasizing product relationships and proximity for effective customer service (Saptadi, 2023). Queueing theory simulations demonstrate the benefits of using predicted service times in supermarket models, highlighting the advantages of incorporating even weak predictions for queue management and service ordering (Michael Mitzenmacher and Dell'Amico, Matteo, 2022). Comparisons between different supermarket business models reveal the importance of adapting to online-offline integration and continuously refining e-commerce strategies (Liu, 2022). Furthermore, effective working capital management plays a crucial role in enhancing the profitability of retail supermarkets, emphasizing the significance of optimizing working capital cycles for improved financial performance and profit margins (Ngari, 2022).

## **F) PESTLE**

PESTLE analysis (Bouزيد, 2020) is an acronym for a model formed from the initials of macroeconomic variables, including:

### **a. Political**

Political factors include applicable laws, government policies, and formal or informal regulations within the company (For example, taxation policies and local regulations).

### **b. Economic**

Economic factors include all factors that affect the purchasing power of customers and influence the business climate of a company (Examples: exchange rate standards, interest rates, and economic growth).

### c. Social

Social factors include all factors that can influence customer needs and affect the size of the existing market share (Examples: level of public education, population growth rate, social conditions and work environment).

### d. Technology

Technological factors include everything that can help in facing business challenges and support the efficiency of the company's business processes. Examples: new inventions and developments, cost and use of technology, changes in science, and the impact of technological change).

### e. Legal

Legal factors include legal influences such as changes to existing or future laws (Examples: health and safety, employment direction, human rights, corporate governance, and environmental responsibility).

### f. Environment

To analyze the state of a country. Environmental factors can be used when doing strategic planning or trying to influence buyer decisions such as geographic location factors.

### G) Porter's Five Forces

Porter's Five Forces is a tool businesses can use to understand the competition in their industry. It helps them identify their strengths and weaknesses compared to rivals and ultimately develop a better business plan (Ardi, Kho., Jacob, Donald, Tan, 2023). This framework, created by Michael Porter in 1979, analyzes five key factors that influence competition such as rivalry among existing businesses, the threat of new competitors entering the market, the bargaining power of suppliers, the bargaining power of customers, and the availability of substitutes for the company's products

## III. METHODOLOGY

The study employs a multi-pronged approach to evaluate the optimum capital structure of MPPA. Historical financial data from 2018 to 2022 is used to assess the company's financial health and identify trends in its capital structure. Financial ratio analysis is conducted to evaluate the company's liquidity, profitability, and solvency. The PESTLE and Porter's Five Forces frameworks are used to analyze the external environment and identify potential threats and opportunities. Financial projections are constructed under various economic scenarios to assess the impact of different debt-to-equity ratios on the company's financial performance. The Weighted Average Cost of Capital (WACC) is calculated for each scenario to determine the optimal capital structure.

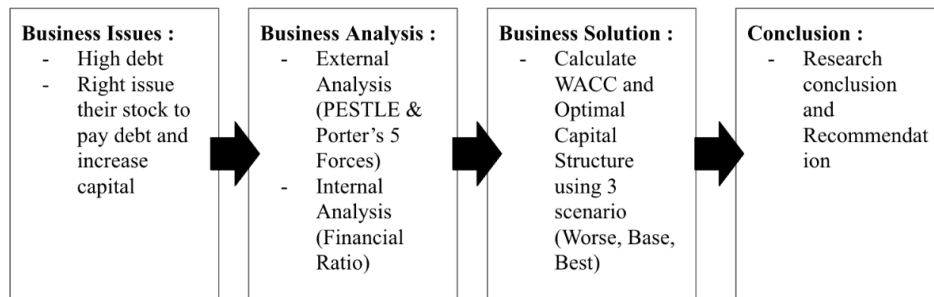


Figure 1. Conceptual Framework (Source: Author 2024)

### A) Data Collection Method

To collect the data, this research investigates the optimal capital structure for PT. Matahari Putra Prima Tbk (MPPA), a prominent Indonesian retail company, by analyzing its financial statements from 2018 to 2022 listed on the Indonesia Stock Exchange (IDX). Additionally, this research will incorporate insights from the company's annual reports from 2018 until 2023 and relevant academic literature on optimal capital structure to formulate a comprehensive understanding of MPPA's financial health and suggest strategies for achieving a balanced debt-to-equity ratio.

### B) Data Analysis Method

To analyze data for PT. Matahari Putra Prima. Tbk, the author needs to determine the optimal capital structure for PT. Matahari Putra Prima Tbk (MPPA), this research will employ a multi-pronged approach. First, historical financial data from 2018 to 2022, listed on the Indonesia Stock Exchange (IDX), will be the foundation for future projections. Next, internal financial health will be assessed through financial ratio analysis. To understand the broader context, external factors will be analyzed using PESTLE (Political, Economic, Social, Technological, Legal, and Environmental) and Porter's Five Forces frameworks. This will be followed by constructing financial projections under various economic scenarios (best, base, and worst case) to assess the

impact of different debt-to-equity ratios. Finally, the Weighted Average Cost of Capital (WACC) will be calculated for each scenario. By comparing WACC with the projected financial performance, the optimal capital structure for MPPA will be identified.

#### IV. ANALYSIS OF RESULTS

##### A) *PESTLE Analysis*

###### a. **Political**

According to the Ministry of Trade Republic of Indonesia, The Indonesian government actively shapes the retail landscape through various policies and initiatives. These aim to achieve multiple goals, such as fostering economic growth, attracting foreign investment, and supporting small and traditional businesses. This support can be seen as a factor that contributes to the growth of MPPA, as it allows the company to operate more freely and serve its customers better.

###### b. **Economic**

Indonesia's GDP growth in 2023 can be characterized as moderate, 5.05 percent, meaning sectors such as transportation and household consumption were the best-performing sectors. Growth this year is also projected to be slightly lower compared to the previous year, 2022, but the provincial disaggregated figures show stronger growth rates outside Java. This underlines the importance of policies that would correct these trends and bring a more balanced pace of economic growth in the country. Indonesia's economic recovery in 2022, marked by a 5.31% GDP growth rate, is a significant factor that can benefit MPPA. The resumption of business activities and booming exports can lead to increased consumer spending and a stronger retail sector, which can positively impact MPPA's sales and profitability.

###### c. **Social**

Indonesia's young demographic, with 56% of the population under the age of 30, presents a significant market for consumer goods, particularly convenience items and snack foods. This demographic trend can be leveraged by MPPA to target its marketing efforts and product offerings towards this age group, potentially increasing sales and market share.

###### d. **Technology**

MPPA has a chance to thrive in Indonesia's booming e-commerce market. By creating a user-friendly online store, partnering with established platforms, and offering exclusive deals, they can reach new customers through one of their businesses, Hypermart. Efficient logistics and delivery are also crucial, with options like same-day delivery or click-and-collect. However, competition is fierce, and profitability requires careful planning. Embracing technology is essential for MPPA to stay relevant and meet the demands of today's digital shoppers.

###### e. **Legal**

According to InCorp Indonesia, The regulations created by MPPA have an impactful duty and responsibility towards creating policies for the acts and conduct of e-commerce. These regulations can impact Hypermart's online operations with these regulations can impact Hypermart's online operations in such as E-commerce regulations that MPPA will then be in a position to set measures on the conduct of business on the internet, protection of the consumers and their privacy. Foreign investment also needs to be cleared because there are numerous policies and laws implemented by MPPA capable of impacting e-commerce. Lastly, Taxation, The application of tax policies concerning e-commerce companies is sanctioned by MPPA. Hypermart should keep track of any alterations in taxation in relation to e-commerce to avoid inaccuracy or noncompliance in financial records.

###### f. **Environmental**

Indonesia's growing environmental awareness presents both challenges and opportunities for MPPA. The emergence of a zero-waste market offers a promising niche for the company to embrace sustainability and cater to environmentally conscious customers. According to Statista, Indonesians have an awareness of a zero-waste lifestyle. This can make MPPA encourage the zero-waste movement.

##### B) *Porter's Five Forces*

###### a. **Threat of New Entrants**

The Indonesian retail sector is characterized by significant barriers to entry, including the need for substantial infrastructure, logistics, and inventory management capital. This makes it challenging for new entrants to establish themselves in the market. Additionally, regulatory obstacles such as import permits and certifications further complicate the process of market access for new entrants. This high barrier to entry can be seen as a factor that contributes to the stability of the market and the competitive advantage of established players like MPPA.

### b. Bargaining Power of Suppliers

In Indonesia's retail sector, suppliers hold varying degrees of power. Imported goods, such as dairy and animal feed, are subject to high bargaining power due to strong demand and limited options. Local producers of fresh produce and meat, especially in rural areas, also enjoy some leverage due to similar factors. This variation in supplier power can impact MPPA's procurement strategies and pricing decisions.

### c. Bargaining Power of Buyers

Indonesian consumers' power is particularly high due to their growing middle classes, urbanization, and better employment opportunities. This means that consumers require better potency of goods, which retailers like MPPA must respond to by offering a wide variety of products and competitive pricing. The intense competition in the cities, particularly among supermarkets, further exerts pressure on consumer power by driving prices down and expanding product offerings.

### d. Threat of New Substitutes

The growth of the e-commerce sector in Indonesia presents a threat of new substitutes for traditional retail. Retailers like MPPA are now obliged to adapt their online presence, pricing, and services to be competitive with e-commerce platforms. This shift towards online shopping can potentially erode the market share of traditional retailers if they fail to adapt.

### e. Rivalry Among Competitors

Indonesia's supermarket competition is diverse and complex, with traditional supermarkets facing challenges from well-established convenience stores like Indomaret and Alfamart. These convenience stores are widespread and offer a broader range of products, making them a significant competitor to MPPA. Additionally, the growth of the e-commerce sector is forcing retailers to adapt their strategies to remain competitive, which can lead to increased rivalry among competitors.

### f. Projected Income Statement

Based on the table below, a summary of the account in projected income statements following five years. These accounts will calculate how three financial scenarios (Worse, Base, Best) were used to create the company's future income statement prediction from 2024 until 2028. The weighted average cost of capital for the company will be calculated based on this future prediction.

**Table. 3 Summary of Input Projection**

		Worse	Base	Best
Projection	Base	2024 F-2028F	2024 F-2028F	2024 F-2028F
Revenue	Median	-13.32%	-1.41%	10.50%
Cost of Revenue	% Sales	82.42%	81.73%	81.04%
GA Expense	% Sales	17.18%	17.18%	17.18%
Selling Expense	% Sales	3.92%	3.92%	3.92%
Rent Income	% Sales	1.08%	1.08%	1.08%
Other Expense	% Sales	0.25%	0.25%	0.25%
Depreciation	% Sales	31.12%	31.12%	31.12%
Other Income	% Sales	0.09%	0.09%	0.09%
Interest Expense	% Sales	2.87%	2.87%	2.87%
Tax Expense	EBT	22%	22%	22%

(Source: Author, 2024)

### g. Projected Balance Sheet

To determine the company's projection balance sheet, the author uses the capital intensity ratio to project total assets in the future. After finding the total asset projection, to calculate the projected equity, the author calculates the total equity for each year by adding the net income from the previous year to the total equity from the previous year. In order to make the projection balance sheet, the company's total equity and total liabilities for five years will be sought. By adding the equity from the prior year and the net income will get the future equity. The liabilities can be determined by deducting the total equity from total assets in 2024 until 2028. The capital intensity ratio measures efficiency and shows how much assets are used to generate revenue for the company. Based on table 4.14 shows that the company's capital intensity ratio from 2019 - 2023 showed up and down, with the largest capital intensity ratio in 2021 with a value of 69.88 percent. After calculating the

capital intensity ratio, the author calculated the estimated total assets for the next five years, from 2024 up to 2028. The projection balance sheet can be determined for three financial scenarios (Worse, Base, and Best).

**Table. 4 Capital Intensity Ratio**

	2019	2020	2021	2022	2023	AVERAGE
<b>Total Asset</b>	3,820,809	4,510,511	4,650,488	3,784,871	3,641,458	4,081,627
<b>Revenue</b>	8,654,646	6,746,594	6,655,222	7,017,530	6,914,802	7,197,759
<b>Capital Intensity Ratio</b>	44.15%	66.86%	69.88%	53.93%	52.66%	57.50%

(Source: Author, 2024)

### C) Weight Average Cost of Capital

#### a. Cost of Equity

After the author obtained data to calculate the cost of equity, the following shows the calculation of the historical cost of equity based on the risk-free rate, equity risk premium and beta coefficient previously obtained. Below is the historical data on the cost of equity for PT Matahari Putra Prima Tbk.

**Table. 5 Historical Cost of Equity**

	2019	2020	2021	2022	2023
<b>Risk-Free Rate</b>	6.94%	6.40%	6.38%	6.92%	6.64%
<b>Equity Risk Premium</b>	3.38%	3.80%	6.43%	9.23%	7.59%
<b>Beta</b>	1.945	0.625	1.324	0.656	1.1375
<b>Cost of Equity</b>	<b>13.51%</b>	<b>8.78%</b>	<b>14.89%</b>	<b>12.97%</b>	<b>15.27%</b>

(Source: Author, 2024)

#### b. Cost of Debt

The cost of debt is one of the elements used to calculate the cost of capital. To find the cost of debt, the author uses Damodaran's framework to obtain a company's risk-free rate, default spread, and marginal tax rate to calculate the cost of debt. Based on the historical weight average cost of capital, the cost of debt is greater than the cost of equity. According to Damodaran, the cost of equity is supposedly greater than the cost of debt. It's because the company's interest coverage ratio is -0.69 while the company's bond ratings are D2/D, resulting in a low default spread that raises the cost of debt. According to Damodaran (2014: 399), having too much debt results in the company defaulting or, the worse thing the company will be going bankrupt.

**Table. 6 Historical Cost of Debt**

	2019	2020	2021	2022	2023
<b>Risk-Free Rate</b>	6.94%	6.40%	6.38%	6.92%	6.64%
<b>Default Spread</b>	18.15%	18.82%	17.36%	18.33%	18.07%
<b>Tax Rate</b>	25%	22%	22%	22%	22%
<b>Pretax Cost of Debt</b>	25.09%	25.22%	23.74%	25.25%	24.71%
<b>After-Tax Cost of Debt</b>	18.82%	19.67%	18.52%	19.70%	19.27%

(Source: Author, 2024)

After obtaining the cost of equity and cost of debt, the weighted average cost of capital can be determined. The firm value can be calculated after determining the historical cost of capital, Free cash flow to the firm and growth rate. Free cash flow to firms is also known as unlevered cash flow because the cash flow is unaffected by debt and tax benefits. The author obtained a growth rate based on net sales of the company from financial years 2016 until 2023.

**Table. 7 Historical Weight Average Cost of Capital**

	2019	2020	2021	2022	2023
<b>Debt Ratio</b>	86.11%	95.90%	87.43%	95.61%	92.88%
<b>Cost of Equity</b>	13.51%	8.78%	14.89%	12.97%	15.27%
<b>Cost of Debt</b>	18.82%	19.67%	18.52%	19.70%	19.27%



<b>Cost of Capital (WACC)</b>	17.83%	18.81%	17.74%	19.18%	18.79%
<b>Firm Value</b>	Rp453,706	Rp835,252	-Rp4,987,636	Rp2,511,442	-Rp1,060,184

(Source: Author, 2024)

Based on the historical weight average cost of capital, the cost of debt is greater than the cost of equity. According to Damodaran, the cost of equity is supposedly greater than the cost of debt. It's because the company's interest coverage ratio is -0.69 while the company's bond ratings are D2/D, resulting in a low default spread that raises the cost of debt. According to Damodaran (2014: 399), having too much debt results in the company defaulting or, worse thing, the company will go bankrupt.

### c. Optimal Capital Structure

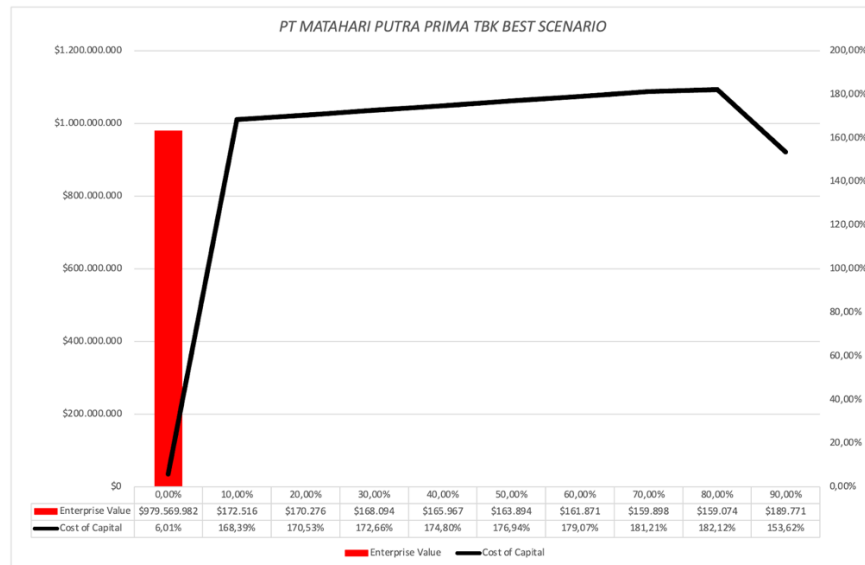
The best scenario can be implemented so that in 2024, the company is in the best condition. The best scenario can be seen from the projected income statement and balance sheet, which provide positive results of growth in the company. After calculating the company's cost of equity and cost of debt in the best conditions, the summary of the company's cost of capital and firm value can be determined. The table shows the cost of equity is 9.81 percent and the cost of debt is 18 percent in the best condition. Then, the value of the cost of capital (WACC) is 18.39 percent, with a firm value of -228,810 million rupiahs based on a debt ratio of 101.22 percent. The author will provide a summary of optimal capital structure in the best condition using the Damodaran worksheet.

**Table. 8 Actual WACC in Best Scenario**

	2024F
<b>Debt Ratio</b>	101.22%
<b>Cost of Equity</b>	9.81%
<b>Cost of Debt</b>	18%
<b>Cost of Capital (WACC)</b>	18.39%
<b>Firm Value</b>	-Rp228,810

(Source: Author, 2024)

After calculating the company's cost of equity and cost of debt in the best conditions, the summary of the company's cost of capital and firm value can be determined. The table shows the cost of equity is 9.81 percent and the cost of debt is 18 percent in the best condition. Then, the value of the cost of capital (WACC) is 18.39 percent, with a firm value of -228,810 million rupiahs based on a debt ratio of 101.22 percent.



**Figure 2. WACC, Debt and Firm Value for Best Scenario**

(Source: Author 2024)

#### d. Optimal Capital Structure Strategy

After the author calculated the company's optimal capital structure, using three different scenarios (Best, Base, Worse), it can be concluded that the company can maximize their value in the future when the company is in the best conditions, which the company can reach 979.569.982 million rupiahs with a WACC of 6.01 percent. The debt ratio required to achieve optimally is 0 percent, which can be interpreted as the company having overlevered. It is because the optimal debt ratio of the company is lower than the actual debt ratio, which is 101.2 percent. According to the optimal capital structure in the best condition, one of the reasons the company needs to reduce the debt ratio proportion is that the company is currently in a condition where they have large debt. In addition, the company can use several strategies based on the company's current conditions.

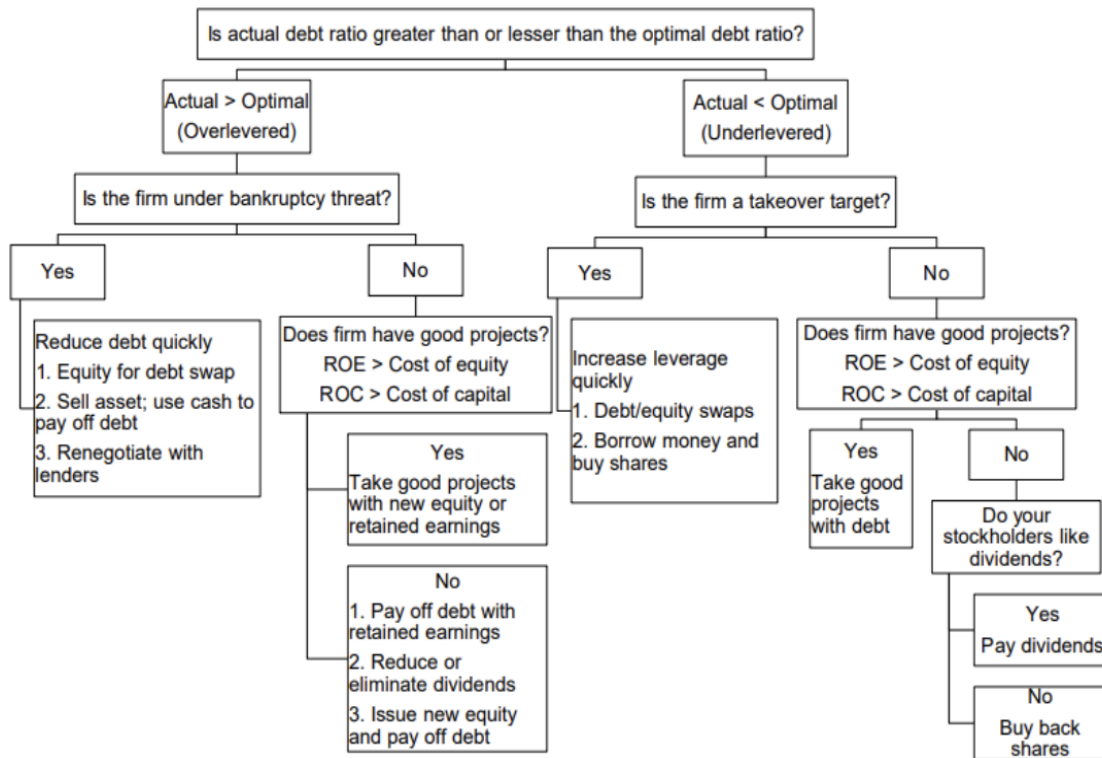


Figure 3. Optimal Capital Structure Strategy (Source: Damodaran 2015)

#### e. Altman Z-Score

Based on the Altman Z-Score calculation for PT Matahari Putra Prima Tbk in 2023 shows that the company is facing a bankruptcy threat. The total Z-score is 0.82, which means the company is threatened with bankruptcy. Companies that are threatened by bankruptcy if the z-score is below 1.81 or the "distress" zone. Back with Damodaran's Optimal Capital Structure Strategy, the company is facing bankruptcy threats, which the company should implement, such as equity for debt swap, selling assets, and renegotiating with lenders.

Table. 9 Altman Z-Score for PT. Matahari Putra Prima Tbk

x	Formula	Calculation	Z-Score
x1	1.2	-0.15	-0.18
x2	1.4	-0.73	-1.02
x3	3.3	-0.03	-0.10
x4	0.64	0.35	0.22
x5	1	1.90	1.90
Total Z Score			0.82

(Source: Author, 2024)

## V. CONCLUSION

The results of the study show that MPPA's capital structure is influenced by various factors, such as the company's financial health, economic conditions, and regulatory environment. The study finds that the company's financial health is positively correlated with its capital structure, indicating that a strong financial position can support a more optimal capital structure. The analysis also finds that the economic conditions in Indonesia, particularly the country's economic growth and inflation rates, have a significant impact on the company's capital structure. The regulatory environment, including policies and laws related to e-commerce, also plays a crucial role in shaping the company's capital structure.

PT Matahari Putra Prima Tbk's capital structure in 2023 consists of 15.27 percent of the cost of equity and 19.27 percent of the cost of debt, also the amount of debt is Rp1,875,228 and equity is Rp259,155. Based on the current condition of this company, this does not provide optimal results because the company has a large proportion of debt. The optimal debt ratio to maximize company value is 0 percent, which means the company needs to reduce their debt to maximize the value's company. The reduction of debt can be made because of the financial condition of having a lot of debt, and the company needs to reduce the debt ratio to 0 percent. The best condition company value is when the company's condition in the best scenario is 979.569.982 with a WACC of 6.01 percent.

PT. Matahari Putra Prima Tbk should reduce its debt ratio to optimize its capital structure by using analysis from the Damodaran framework with Altman Z-score. It shows that PT. Matahari Putra Prima Tbk is overlevered and has a bankruptcy threat because the Altman Z-Score is 0.82, which if the z-score is below 1.81 or a "distress" zone. As a result, the following strategy for PT. Matahari Putra Prima Tbk to maximize the company's capital structure in the future. PT. Matahari Putra Prima Tbk can implement equity for debt swap by conducting a rights issue (HMETD) in July 2023 to raise Rp 550 billion. This strategy aimed to reduce debt and increase capital. MPPA offered new shares at a price to raise capital, potentially reducing their debt ratio to a more optimal level. PT. Matahari Putra Prima Tbk can implement selling their assets; the proceeds from selling assets can be used to pay off a company's debts because if the debt is not paid off as soon as possible, the company's debt will be increased and make the company go bankrupt or default. PT. Matahari Putra Prima Tbk can renegotiate with lenders; companies that have overlevered debt ratios can negotiate with lenders by renegotiating with lenders regarding the agreement on the maturity of their debts and reducing the company's interest rate. Damodaran emphasizes that renegotiating with the lender should be a win-win solution for the company and the lender. Based on the company's current conditions, PT Matahari Putra Prima Tbk should renegotiate with the bank's lender to reduce the interest rate.

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