

ANALYSIS OF THE COMPOSITION OF CAPITAL STRUCTURE BY USING *ECONOMIC VALUE ADDED (EVA)* APPROACH IN TFD A COMPANY

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ABSTRACT

This research uses case study and aims to evaluate the capital structure of TFD A Company which is a company in the agribusiness industry sector and within the scope of a medium-sized company. During Covid-19 pandemic in 2020-2021, TFD A Company experienced billing difficulties to the manufacturer (buyer). The results of this study show that the EVA value of TFD A Company recorded an increase in negative value but the company still achieved an increase in its net profit. Based on the research of the two comparative companies, it is concluded that the composition of capital structure has its own risks. The implication of this research is that the TFD A Company should consider publicly listing its company, assessed by the composition of the capital structure, the company's obligations to its shareholders, and the ability to record net income.

Keywords: *EVA, capital structure, EAT, comparison, debt, equity*

1. INTRODUCTION

Overview

Covid-19 pandemic had significant effects in almost every aspect of every industry sector in Indonesia, including agribusiness or agriculture sector. Among the various aspects discussed, the agriculture sector is one of the strongest candidates because it is a crucial food security support sector in times of economic crisis and it is a window of an opportunity in the revitalization stage of the agriculture sector in terms of approving Indonesia's agricultural production system in international trade (complete autarky).

A company should base strategic decision making at the growth and sustainability of the company, in order to increase company value. This is the reason why strategic decision making will be reflected in the results and analysis of the company's financial statements. According to Aviny (2022), a company's financial statements can provide information about the rate of return on investment and the implementation of the company's strategy and in its analysis requires a benchmark or comparison to assess the company's financial performance (Gitman, 2000 in Aviny, 2022). In the form of decision making on capital and corporate funding, there are two main sources which are internal sources and external sources (Hashemi Tilehnoei & Shivaraj, 2014). Capital structure is a combination of debt and equity (Miglo, A., 2016). If the debt is excessive, it can result in higher loan interest payments, financial distress, and bankruptcy for a company. Meanwhile, if the proportion of capital is more, it will not have impact on a company's bankruptcy but will affect the limited movement of the company's strategic decision making and the company's strategic decisions will fully depend on the decisions of shareholders. According to Pandey (2004) in Samuel et al. (2012), the decision on a company's capital structure has to be assessed from its impact on the value of a company, then the company has to be able to maximize the company's value. The Economic Value Added

(EVA) approach which is a measure of economic performance to help evaluate a company's operational performance. According to Brigham & Ehrhardt (2007) in Aviny (2022), the focus of EVA is on managerial effectiveness in certain years which helps evaluate the remaining income after all capital costs are taken into account, including its equity capital, so that it can show an estimate of the real economic profit in that year, with its ultimate goal being maximizing the company value. Salaga, Bartosova & Kicova in Malichova et al. (2017) and Ross (2021) stated that EVA is a sophisticated instrument in measuring business performance compared to the rest of the evaluation criteria. EVA will help this research because it uses calculation and evaluation of income, capital cost, debt and equity, and assess the increase / decrease of the company's value during its operational period.

Based on the previous research, there are research suggestions to complement further research, namely:

1. Junior (Borges Junior, 2022) in *“Corporate governance and capital structure in Latin America: Empirical evidence”* said that future research should pay attention to the capital structure that focuses on the proportion of equity capital or the effect of the cost of capital on the composition of the capital structure and the role of governance in the company.
2. Czerwonka, Leszek (2021) in *“Capital structure determinants of small and medium-sized enterprises: Evidence from Central and Eastern Europe”* said that research should use alternative methodologies (other than regression-based methodologies) to resolve the confusion over capital structure and in the formulation of solutions, evenly distributed from the scale of the firm's capital.
3. Aviny (2022) in *“The financial performance of cocoa companies during the covid-19 pandemic: An Economic Value Added (EVA) approach”* says that research with the EVA approach should add a time span of analysis to ensure there are differences in financial performance between before and during the pandemic.

Paper Structure

This research is a case study and aims to evaluate the capital structure of TFD A Company which is a company in the agribusiness industry sector and within the scope of a medium-sized company. During the Covid-19 pandemic in 2020-2021, TFD A Company experienced billing difficulties to the factory (buyer).

Our Contribution

The benefits expected from this research are that it can be an input for the company to find out whether all the funding decisions have increased the company's value, the company can obtain the basis for strategic decision making on the capital structure for the future operations of TFD A Company, and become the reference for the future researchers who will conduct a research with similar methods both on companies in the agribusiness / agriculture industry sector and in other industrial sectors.

2. THEORY

Capital Structure

Capital structure refers to the company's source of funding (Subramanyam, K. R., 2014, p. 161). In the form of decision making on the capital and corporate funding, there are two main sources that are internal sources and external sources. Internal funding can be in the form of

the funding related to the company's retained earnings. External funding can be a form of funding from other parties outside the company (Hashemi Tilehnouei & Shivaraj, 2014 and Hillier et al., 2012). Capital structure is a combination of debt and equity (Miglo, A., 2016).

Debt

According to Hillier et al. (2012, p. 29) and Hawawini & Viallet (2011, p. 249), debt is mentioned as fixed-income investments, and is a contract containing an agreement to pay a certain amount of funds by the borrower in the future to the investor who owns the contract. (Subramanyam, K. R., 2014: 162).

Equity

According to Kieso et al. (2020), Hillier et al., (2012, p. 59), and Hawawini & Viallet (2011, p. 308), equity is the residual value of assets less liabilities, with its category components being share capital, share premium, held profit, comprehensive income accumulation, treasury shares, and non-controlling interest. Equity capital is usually permanent and the increase of equity will be favored by creditors as protection against financial distress (Subramanyam, K. R., 2014, p. 163).

Economic Value Added (EVA)

Value-based management systems are used as the basis for companies to formulate company plans, make company decisions, evaluate the actual performance of the company, and design the effectiveness of company management, in order to create value for the company. Economic Value Added (EVA) is the deviation of the difference between the net profit after the tax and capital cost which is spent to generate profit (Brigham & Houston, 2020). Hawawini & Viallet (2011, p. 545), Brigham & Houston (2020, pp. 98-99), and Aviny (2022) defined Economic Value Added (EVA) approach into these formulas:

- 1) The calculation of Net Operating Profit After Tax (NOPAT) which is net operating profit after the tax.

$$\text{NOPAT} = \text{EBIT} (1 - \text{tax rate})$$

- 2) The calculation of Invested Capital

$$\text{IC} = \text{Equity} + \text{Short-term debt} + \text{Long-term debt}$$

- 3) The calculation of Cost of Capital (CoC)

$$\text{Cost of Capital} = \text{IC} \times \text{WACC}$$

- 4) The calculation of Weighted Average Cost of Capital (WACC) which is the overall capital cost of a company.

$$\text{WACC} = [\text{Wd} \times \text{Rd} (1 - t)] + \text{Wp} \times \text{Rp} + \text{We} \times \text{Re}$$

- 5) The calculation of Economic Value Added (EVA)

$$\text{EVA} = \text{NOPAT} - \text{cost of capital}$$

$$\text{EVA} = \text{NOPAT} - (\text{WACC} \times \text{Invested Capital})$$

$$\text{EVA} = \left(\frac{\text{NOPAT}}{\text{Invested Capital}} - \text{WACC} \right) \times \text{Invested Capital}$$

3. METHODS

The research method used by the researchers is descriptive method, which uses elements, characteristics, properties of an event or phenomenon. This method is initiated from the

researchers who gathered data, analyzed the data which was related to the used theories, and then interpreted them. In conducting this research, the researchers would use case study method on the data of financial statements of TFD A Company in 2017-2018 and in 2020-2021. The researchers would also use the data of financial statements of Indo Pureco Pratama (IPPE) Company and Indo Oil Perkasa (OILS) Company in 2020-2021 as a benchmark for evaluating the composition of TFD A Company's capital structure in the same period.

4. DISCUSSIONS

Financial Performance of TFD A Company in 2017-2018 Period

The gross profit and net profit of TFD A Company in 2018 significantly increased because TFD A Company started to enter the export market to market its products. In 2017, TFD A Company used capital from internal sources only.

Table 1. Financial Performance of TFD A Company in 2017-2018 (in IDR)

Year	Gross Profit	Net Profit
2017	139,697,517.19	29,286,759.36
2018	531,597,161.50	264,402,396.27
Year	Debt	
2017	-	
2018	300,000,000.00	

Source: Income Statement and Balance Sheet of TFD A Company

Financial Performance of TFD A Company in the Period of 2020-2021

TFD A Company recorded a net profit of Rp 210,248,581.88 in 2020 and Rp 292,973,122.84 in 2021. The net profit in 2020 was considered to have decreased when compared to the data of the financial performance of TFD A Company before the Covid-19 pandemic. Next, the net profit in 2021 did not increase significantly when compared to its profit data because TFD A Company pursued capital turnover quickly and sold products with margins which tend to be thin.

Table 2 Financial Performance of TFD A Company in 2020-2021 (in rupiah)

Year	Gross Profit	Net Profit
2020	778,169,850.00	210,248,581.88
2021	654,947,512.00	292,973,122.84
Year	Debt	
2020	1,000,000,000.00	
2021	2,000,000,000.00	

Source: Income Statement and Balance Sheet of TFD A Company

The Approach of Economic Value Added (EVA) on TFD A Company on the Period Before and During Covid-19 Pandemic

The steps in analyzing TFD A Company with EVA approach are influenced by several indicators. The first indicator is the calculation of *Net Operating Profit After Tax* (NOPAT), as shown below:

Table 3 NOPAT of TFD A Company in 2017, 2018, 2020, 2021 (in rupiah)

YEAR	PT TFD A
2017	24,042,150.27
2018	217,580,647.70
2020	178,720,133.92
2021	240,658,894.38

Source: The Statement of Profit and Loss and Balance of TFD A Company
(Data Processed)

The result of the calculation of NOPAT from TFD A Company showed the fluctuating results, which tend to increase in 2018 and increase again in 2021. The TFD A Company's ability to cover its operational cost decreased in 2020. However, it can be concluded that during the period before and during Covid-19 pandemic, the company was still able to generate net income which was greater than the taxes paid by the company with a positive NOPAT (Table 3).

Table 4 below will show the amount of *Invested Capital* (IC) from TFD A Company, as the supporting indicator of the EVA approach analysis of TFD A Company.

Table 4 IC of TFD A Company in 2017, 2018, 2020, 2021 (in rupiah)

YEAR	PT TFD A
2017	1.079.286.759,36
2018	1.643.689.155,63
2020	2.578.937.737,51
2021	4.362.707.960,35

Source: The Statement of Profit and Loss and Balance of TFD A Company
(Data Processed)

The invested capital in TFD A Company has increased before and during Covid-19 pandemic, with an average growth of 37.16 percent. The next step is the calculation of Weighted Average Cost of Capital / WACC.

Table 5 Wd and Rd of TFD A Company in 2017, 2018, 2020, 2021

YEAR	PT TFD A	
	Wd	Rd
2017	0.00%	0%
2018	18.25%	5.51%
2020	38.78%	5.51%
2021	45.84%	6.36%

The percentage of equity cost was considered higher (Table 6) than the percentage of debt cost (Table 5), so it would be more profitable for the company to use debt rather than equity in the implementation of TFD A's operational strategy.

Table 6 We and Re of TFD A Company in 2017, 2018, 2020, 2021

YEAR	PT TFD A	
	We	Re
2017	100.00%	2.71%
2018	81.75%	19.68%
2020	60.25%	13.53%
2021	42.33%	15.86%

WACC in 2017 showed the smallest value of 2.71 percent with the use of the capital from the external sources of TFD A Company. The highest weighted average cost of the capital in 2018 was 16.84 percent, because the equity cost was on the net profit after its tax and total equity increased significantly compared to other periods. The logical consequence of increasing the WACC of TFD A company was the increasing capital cost which had to be borne by the company and vice versa. The data of WACC, CoC, and EVA of TFD A Company was reflected in this table:

Table 7 WACC of TFD A Company in 2017, 2018, 2020, 2021

YEAR	PT TFD A
2017	2.71%
2018	16.84%
2020	9.76%
2021	8.90%

Table 8 CoC and EVA of TFD A Company in 2017, 2018, 2020, 2021 (in rupiah)

YEAR	PT TFD A	
	CoC	EVA
2017	29,286,759.36	(5,244,609.09)
2018	276,804,739.73	(59,224,092.03)
2020	251,589,726.75	(72,869,592.83)
2021	388,405,412.59	(147,746,518.21)

The results of the calculation of CoC (Table 8) and WACC (Table 7) above showed that the WACC value in 2018 increased supported by the increase of CoC in the same year period. The interesting thing was that there is a WACC value of 8,90 percent over the highest CoC value of Rp 388,405,412.59. After examination, the highest use of capital structure was in the 2021 period, with the composition of the debt usage of 45.84 percent (Table 5) and equity usage of 42.33 percent (Table 6). This gave a conclusion that the optimal capital structure composition which can reduce WACC is when the company management is able to balance the use of debt and equity as the company's operational working capital.

The EVA value of TFD A Company showed negative value since the period before Covid-19 pandemic and worsened when Covid-19 happened. This was in line with the findings of Devi et al. (2020), Wulandari & Patrisia (2020), Kubiczek & Derej (2021), and Tahu & Yuesti (2021) in Aviny (2022) which had proven that during Covid-19 pandemic, there was a decline in performance in several service sectors and processing industries. The EVA value of TFD A Company was recorded to increase in negative value but was still able to increase its net profit. This means that TFD A Company was able to fulfil the obligation to its owner and cover costs to the external parties, as the parties related to the composition of the company's capital structure.

The Capital Structure of Comparison Companies

In analyzing the capital structure of TFD A Company, the researchers used two comparative companies engaged in the agribusiness / agriculture sector and selling the same finished goods and semi-finished goods. The capital structure of Indo Pureco Pratama Company in 2020 to 2021, mostly came from internal sources (retained earnings, personal share capital, and share capital from other companies) and the rest from external source (selling shares to the public). In the 2020 period, there was capital of Indo Oil Perkasa Company obtained from the debt to the bank amounting to Rp 29,310,238,853 (38.01 percent). The amount of the capital obtained from the debt to the bank and this share capital increased in value for 2021. The debt percentage to the bank in terms of value increased, so it can be said that Indo Oil Perkasa Company obtained funding mostly from debt and then from common shares.

5. CONCLUSION

Based on the results of this study, the strategies carried out by TFD A Company in the 2020-2021 period was considered unable to increase EVA. The EVA value of TFD A Company was recorded to increase in its negative value but the company's net profit still increased, meaning that TFD A Company was able to fulfil its obligations to its owner and cover the cost to the company's external party. In determining capital structure, there is no specific formula because

the company has to be able to integrate the overall factors. TFD A Company may consider listing its company to publicly.

The limitation of this research is that there is no company that has the exact same strategy and operational form as TFD A Company, most of the companies that have IPO are engaged in the palm oil product subsector and its derivatives. Researchers' suggestions for future research are to use comparative data from several companies (more than two comparative companies) and to confirm more deeply the sector studied in future research.

Future implications for investors in the agribusiness industry are that investors are expected to analyze more deeply the composition of the company's capital structure before investing their money (related to the EVA and MVA approaches), because not all companies that have IPOs have the best financial performance and the composition of the capital structure is the result of the integration of all factors (not only viewed from the amount of equity /debt value alone).

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