



Unraveling PT Cita Mineral Investindo: Growth Potential through Organic & Inorganic Strategies under Bauxite Export Ban

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ABSTRACT: Downstreaming has brought significant impact for Indonesia's economy, with higher price on goods that were processed to gain a higher value, from IDR 17 trillion (USD 1,1 billion) at the end of 2014 to IDR 326 trillion (USD 20,9 billion) in 2021, Indonesia was able to boost the value of its nickel exports by up to 19 times. However, concerns arise as there may be a lack of clarity and confidence among investors on investment potential in Indonesia's bauxite mining business, potentially leading to the failure on increasing added value due to the inadequate numbers of bauxite smelters to support the downstreaming process. Bauxite export ban as part of Indonesia's effort to downstream more minerals could lead PT Cita Mineral Investindo's growth to plateau due to their main business is in bauxite mining with products of Metallurgical Grade Bauxite. It may affect its revenue stream negatively, and limit their potential to grow even further. Bauxite industry currently aligned with Indonesia's plan to be a big player in EV production in the future, which could contribute to the production of aluminium material and key component to EV batteries. The study will examine the valuation of PT Cita Mineral Investindo with the scenarios of organic growth and inorganic growth in an effort to market and increase their domestic sales in order to quantify the opportunities that PT Cita Mineral Investindo may have in complying with the new regulations. The study will involve Financial Ratio Analysis to assess its business condition and DCF valuation will assess the enterprise value for both growth strategy. Sensitivity analysis is performed to identify the most factor influencing the enterprise value of the company.

The enterprise value of PT Cita Mineral Investindo in the organic growth scenario is valued at IDR 9.505.697.469.283 and in the inorganic growth scenario is valued at IDR 12.018.885.689.175. Tornado chart sensitivity analysis shows that the most influencing factors are WACC and terminal growth rate. PT Cita Mineral Investindo is valued higher when it uses an inorganic growth scenario. To achieve this, PT Cita Mineral Investindo must utilize inorganic growth through a set of joint-venture and strategic partnerships.

KEYWORDS: Discounted Cash Flow, Export Ban, Strategy, Bauxite, Valuation, Growth.

INTRODUCTION

According to Asian Development Bank in Asian Development Outlook 2023, Indonesia ranked 4th in Southeast Asia in terms of GDP growth rate with 4,8% [1]. Indonesia's y-on-y GDP growth bump significantly after COVID-19 started to settle down and continue to grow within 5%. However, due to the enormous amount portion of Indonesia's economy accounted by private consumption, as soon as consumer spending normalizes, this should put a floor on growth. For investment, businesses will remain modest and watch the ongoing condition in the country [1]. Indonesia's GDP growth by business sector is the highest GDP growth is the transportation and warehousing with 15,93%, followed by mining and excavation with 4,92%. This shows that the mining sector in Indonesia is still growing constantly [2].

According to Indonesian President Joko Widodo, bauxite exports would be prohibited starting in June 2019 in order to promote domestic processing of the primary mineral source of aluminum. The resource-rich country has surprised investors with its rules on commodity exports. These regulations have included brief but contentious prohibitions on shipments of palm oil and coal, of which Indonesia is the world's top exporter, earlier this year. With China as its main customer, it is also one of the top bauxite suppliers in the world. However, Indonesia's ban is timed in accordance with its current mining law [3].

Indonesian government had previously prohibited the export of nickel ore on January 1, 2020. With the help of this policy, Indonesia was able to increase the value of its nickel exports by up to 19 times, from IDR 17 trillion (USD 1,1 billion) at the end of 2014 to IDR 326 trillion (USD 20,9 billion) in 2021 [4]. According to President Joko Widodo in 2022, the government went after this strategy in order to achieve natural resource sovereignty and increase added value in the country, particularly in order to create as many job opportunities as possible, increase foreign exchange, and achieve more evenly distributed economic growth. The administration hopes



to achieve the same result with this policy as it did with the nickel export restriction. State revenues are expected to increase from IDR 21 trillion (USD 1,4 billion) to around IDR 62 trillion (USD 4,1 billion) after bauxite is industrialized in the country [4].

The situation creates a lot of attention from people all over the world, as for Jahen in 2023 pointed out that the government need to be cautious with this down streaming because each commodity has distinctive characteristics, and it will be more difficult to be competitive for Indonesia if Indonesia is not a major player on the downstreamed commodities [5]. In the other hand, according to Wen Xianjun, a former director of the China Nonferrous Metals Industry Association's aluminium division, claims that China increased its attempts to develop aluminium resources in Africa instead, as a result of Indonesia's 2014 ban [3]. This event was already reflected on China's reliance on Indonesia's bauxite from importing 68% of Indonesia's bauxite and ranked number one as the highest percentage in 2013 and shrank into only 15% in 2022 [6].

BUSINESS ISSUE

Despite the successful implementation of the prior ban on nickel export, there may be an inadequate degree of assurance and trust among businesses on potential investments in Indonesia's bauxite mining business. Changes in regulatory procedures, environmental restrictions, and community engagement requirements, for example, could have generated uncertainties. Compliance with the amended law may cause disruptions in CITA's operations, revenue streams, and its financial health as a whole.

This bauxite export ban may result in a lack of clarity and confidence, which may impede investment decisions and the growth and development of bauxite mining companies in the country, despite the fact that PT Well Harvest Winning currently owns one of the only four operating smelters in Indonesia through a joint venture in which CITA owns 30% of WHW's shares, while China Hongqiao Group Limited owns 56%, Winning Investment (HK) Company owns 9% PT WHW owned the first and largest smelting Grade Alumina refinery in Southeast Asia, with a capacity of 2 million tonnes alumina per year, despite the fact that the planned 19 million tonnes of raw bauxite could not be absorbed due to a lack of smelter facilities.

Based on previous years' production volumes and the bauxite export ban, CITA's Metallurgical Grade Bauxite (MGB) sales volume is anticipated to plateau and not grow substantially in the next 1 to 2 years due to an inadequate number of smelter facilities in Indonesia, but it will nevertheless be able to sell around 6-8 million dry metric tonnes based on the current capacity of the associated entities, PT Well Harvest Winning. Future conditions may favor CITA to grow even further, given Indonesia's intentions to downstream mineral industry, as well as establish an electric vehicle ecosystem in Indonesia, starting with batteries, which require around 18,9% aluminum and 15,7% nickel components to build a single regular 60 kW electric vehicle battery.

Considering the precedent of nickel export restrictions, the share prices of many businesses increased. With a favorable response in terms of revenue for Indonesia and businesses to the nickel restriction, the same response is predicted when the following round of mineral export bans is enforced in Indonesia, which will be in the bauxite industry. CITA will face a challenge in their revenue streams due to the bauxite export ban from Law No. 3 of 2020 concerning Amendments to Law No. 4 of 2009 concerning Mineral and Coal Mining, because they will no longer be able to sell their bauxite raw materials or any unprocessed mineral ore as exported commodities, and with the limited capacity of smelters in Indonesia, CITA must have other strategies for the future to boost their sales domestically through some set of strategic actions. To be able to quantify the opportunities that PT Cita Mineral Investindo might have in following the new regulations, the study will assess the valuation of PT Cita Mineral Investindo with the scenarios of organic growth and inorganic growth through strategic partnerships, joint-venture, or alliances in an effort to distributing and increasing their domestic sales.

LITERATURE REVIEW

A. *Financial Ratio Analysis*

Financial performance used as a tool for internal analysis and can be divided into five general categories of ratios, liquidity, activity, debt, profitability, and market ratios. Risk is primarily measured by liquidity, activity, and debt ratios, while return is measured by profitability ratios, and market ratios which measured both of risk and return [7]. The usage of many different financial measurements will provide a more precise quick overview and thorough understanding of a firm's financial state [8].



B. Organic Vs. Inorganic Growth

Organic and inorganic growth are strategies used by businesses to achieve long-term sustainability. Organic growth refers to growing or expanding a business through the use of its internal activities and resources, which might involve product development, market development, and market penetration without relying on the help of other companies, by performing actions such as improved processes, allocation of resources, and diversification. On the other hand, inorganic growth acquired its growth through a set of actions such as M&A, strategic partnerships, or joint-venture as the company's growth booster. The process of inorganic growth could include merging with other companies or even establishing a new joint-venture which enables the company to access each of the participating company's market share or assets [9].

C. Valuation

Valuation is a step in determining the fair market value of an asset, or in some instances, of a firm or a company. The key to successful investing in assets or a company is knowing the value itself. Valuation can be utilized to achieve an array of objectives. However, its role varies depending on the circumstance. The primary focus of fundamental analysis is valuation. Some analysts use discounted cash flow models to assess a firm, while others use multiples such as price to earnings and price to book value ratios [10].

In general, there are three types of approaches to valuation. The first is discounted cash flow valuation, which compares the value of an asset to the present value of the asset's anticipated future cash flows. The second type of valuation is relative valuation, which assesses the worth of an asset by comparing it to similar assets or, in a sense, comparing a firm to other enterprises in the same industry on a variable such as earnings, cash flows, book value, or sales. The third method is contingent claim valuation, which use pricing models to determine the value of assets that share option characteristics [11] [12].

D. Discounted Cash Flow Valuation

This method is based on the present value rule, which implies that the value of any asset is the present value of its predicted future cash flows [10]. In certain ways, the value of any asset is defined by the cash flows generated by that asset, its term, the expected growth in cash flows, and the riskiness of these cash flows [13].

$$Value\ of\ Asset = \sum_{t=1}^N \frac{E(Cash\ flow_t)}{(1+r)^t}$$

In terms of cash flows, there are three options: dividends or free cash flow to equity (FCFE) for equity valuation models, and free cash flow to firm (FCFF) for firm valuation models; the distinction between FCFE and FCFF is basically a differentiation between equity and firm valuation [13]. The use of a valued company's cost of capital or cost of equity varies by whether the Free Cash Flow to Firm (FCFF) or Free Cash Flow to Equity (FCFE) calculation is applied in DCF valuation [14]. FCFE method in valuing a firm is done by dividing the FCFE by the sum of the required rate of return for the equity subtracted by the growth rate of the firm's earnings [15].

Damodaran's theory supports the use of DCF analysis as a fundamental analysis in valuing a corporation, as does Steiger's claim that DCF is an excellent instrument for evaluating a company's values. Findings from these methods are affected by several factors, which proven by Kramná that in her research the input from perpetual growth and weighted average cost of capital would produce a huge effect on the findings only by tweaking those factors by a bit [16]. Analysts can use this model to acquire a long-term perspective on both real stock value and company value, which is a useful foundation for making investment decisions and selecting businesses that promise greater payouts of dividends in the future [17].

METHODOLOGY

Research methodology used in this study is quantitative methods that concentrates to articulate phenomena using numbers, which in this research is valuation to gain the enterprise value of a bauxite mining company (CITA), these factors can then be measured and the resulting numerical information can be examined analytically [18]. Analysis conducted in this research begins with identifying business issues to formulate research problems. Based on the business concerns, the author then develops research questions and objectives. The author then acquires secondary data from various sources for purposes of the analysis. External and internal analysis is then carried out to acquire an overview of the industry and macroeconomic conditions. Financial ratios are then examined as part



of the internal analysis to acquire a better understanding of the company's financial situation. The author then conducted valuation using the DCF valuation method, using both the organic and inorganic growth approaches. The author studied the valuation analysis results to develop and formulate conclusions and recommendations.

RESULT AND DISCUSSION

A. Financial Performance

Assessing financial performances of PT Cita Mineral Investindo are important to provide thorough business solution. The ratio analysis and time-series analysis are tools used to evaluate PT Cita Mineral Investindo's financial performance. The practice of calculating and evaluating financial ratios in order to examine and evaluate a company's performance is known as ratio analysis. The major inputs for ratio analysis are the company's income statement and balance sheet [7]. Analyzing financial ratios in time-series analysis provides the evaluation of the company's performance over time which enable analysts to assess the company's progress and trends [7]. The following table shows the time-series analysis on financial ratios of PT Cita Mineral Investindo.

Table 1. Financial Performances Analysis

<i>Financial Performances</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>
Liquidity Ratio					
Current Ratio	0,46	0,68	2,10	2,21	1,81
Quick Ratio	0,16	0,41	0,84	1,24	0,93
Activity Ratio					
Inventory Turnover	2,67	5,00	2,89	4,80	4,74
Total Assets Turnover	0,61	1,01	1,05	1,06	1,09
Debt Ratio					
Debt Ratio	0,54	0,48	0,16	0,15	0,18
Debt to Equity Ratio	1,18	0,92	0,20	0,17	0,22
Profitability Ratio					
Gross Profit Margin	0,46	0,50	0,50	0,44	0,37
Operating Profit Margin	0,36	0,22	0,19	0,15	0,15
Net Profit Margin	0,33	0,17	0,15	0,12	0,13
Earnings Per Share	Rp 196	Rp 195	Rp 168	Rp 144	Rp 188
ROA	0,20	0,17	0,16	0,13	0,14
ROE	0,44	0,33	0,19	0,15	0,17

B. Discounted Cash Flow Valuation

In providing a business solution, author conducts a DCF analysis process to evaluate the company's valuation using two growth projections where first scenario, the author assumes that the company does nothing in regards to the situation and conditions following the enactment of the new mining law No. 3/2020, and the second scenario assumes that the company is pursuing an inorganic growth strategy in the form of share acquisition or purchase and establishes cooperation with/in alumina smelter companies that can provide direct extra revenue to the company as well as added advantages as shareholders.

1) Growth Rate

DCF analysis is conducted for 5 years projections with projected sales/revenue as the base for the calculation. To determine the projected sales of raw bauxite, Author uses assumption of bauxite market will increase from 273,97 million tons in 2023 to 330,29 million tons by 2028, at a CAGR of 3,81% over the forecast period of 2023 to 2028 [19].

Mordor Intelligence forecasted Indonesia as a high-growth region, located in the highly anticipated and rapidly evolving Asia-Pacific region, poised to lead the market as the world's biggest and fastest growing market, particularly due to rapid industrialization boosting the use of bauxite derivative products such as aluminum.

However, the actual condition happening currently in Indonesia have led to the author's reasoning behind using the 3,81% CAGR of bauxite market globally. This is primarily due to the enactment of the new mining regulation No. 3/2020, which forbids the export of unprocessed bauxite. As a result of this, bauxite mining businesses are unable to export the goods they produce overseas



and have to keep their sales to the domestic market. The domestic market for raw bauxite is also limited in its absorptive capacity due to inadequate number of alumina smelter in Indonesia.

2) *Terminal Growth Rate*

Terminal growth rate represents the expected growth rate at which the company is assumed to grow at steady rate indefinitely into perpetuity. Assumptions of the value of the rate of the business growing at sustainable rate in the future after the period of forecast. Terminal growth rates are typically derived from a company's historical growth or from the long-term GDP growth rate. However, due to the current state of the bauxite industry in Indonesia with the implementation of the new mining law No. 3/2020, terminal growth is projected to follow the global bauxite market growth rate of 3,81%.

3) *Projected Sales and Revenue*

PT Cita Mineral Investindo experienced constant increase in their sales from 2019 to 2022, but is expected to experience a halt in growth or increase in their sales due to the new mining law No. 3/2020. As the firm getting closer towards that halt, there is currently no expected moves from the firm. In this analysis, the sales are projected using a 3.81% growth rate. The currency rate and the amount of domestic sales are two major factors influencing forecast sales. PT Cita Mineral Investindo's projected sales are separated into two types, organic growth and inorganic growth. Organic growth in the present climate is projected to increase its sales by 3,81%, while inorganic growth is projected to increase sales by 3,81% and additional revenues from the inorganic activities such as joint venture or strategic partnership for a smelter company which in this analysis is estimated to increase its sales by 25%.

Revenue forecasts of PT Cita Mineral Investindo is divided into two projections, representing organic growth and inorganic growth. Organic growth revenue projections estimate the revenue on the current condition, which accounts on the halted domestic sales. Inorganic growth revenue projections estimate the revenue on the condition that the company invested and establish partnership with a smelter company which would generate new revenue streams from the associated entities and boosted raw bauxite sales from the partnership.

4) *Cost of Goods Sold*

Direct costs associated with the activities which produce or purchase goods from the company is important to assess the profit margin and to analyze the efficiency of its production. PT Cita Mineral Investindo record an average of 54,46% COGS as percentage of sales, respectively 53,88%; 49,73%; 49,89%; 56,24%; and 62,57% from 2018 to 2022. Author assumes that the margin of COGS to Sales will stay the same for the 5-year period of projections at 54,46% for both organic projection and inorganic projection.

5) *Operating Expense*

PT Cita Mineral Investindo planned to pursue efficiency in their operations, including reducing their operating expenses as the new mining law No. 3/2020 forbid them to sell their goods internationally. All expenses under operation are projected on the assumption of the expense to sales percentage, except for Equity in Net Profit of associate. Based on the assumption, operating expense projections are divided into organic growth projection and inorganic growth projection as in the income statement projections.

6) *Exchange Rate*

Projected sales in this analysis relies on the exchange rate projections of USD to IDR. The exchange rate growth used in the calculation refers to the last year's 2% growth rate, with variation of 1%, 0%, -1%, and -2% as the rate for sensitivity analysis.

Table II. Exchange Rate Projections in Rupiah

<i>Exchange Rate</i>	<i>2023F</i>	<i>2024F</i>	<i>2025F</i>	<i>2026F</i>	<i>2027F</i>
2%	Rp14.845	Rp15.142	Rp15.445	Rp15.754	Rp16.069

7) *Depreciation*

Every asset or thing such as machinery, buildings, or vehicles have a lifetime that have a decreasing value over time. In this analysis, for the organic growth valuation, the author utilizes the median percentage of prior depreciation to sales, as well as the



median percentage of previous depreciation to sales for both the organic growth depreciation projection and the inorganic growth depreciation projection.

Table III. Organic Growth Depreciation Projections

<i>ORGANIC</i>	<i>Depreciation</i>
2022	110.525.121.496
2023F	83.744.306.188
2024F	81.034.307.596
2025F	89.073.287.087
2026F	97.909.770.662
2027F	107.622.874.429

Table IV Organic Growth Depreciation Projections

<i>INORGANIC</i>	<i>Depreciation</i>
2022	110.525.121.496
2023F	83.744.306.188
2024F	90.899.064.362
2025F	99.916.673.518
2026F	109.828.871.364
2027F	135.602.485.251

8) *Capital Expenditure*

A firm's capital expenditure comprises funds invested in purchasing, upgrading, or sustaining long-term assets such as property, plant, and equipment, or even technology, with the anticipation of future benefits. The author forecasts its future capital expenditure based on the median percentage of prior capital expenditure to sales and the median percentage of previous capital expenditure to sales. Assumption for capital expenditure of PT Cita Mineral Investindo is that they do not spend any major flux in term of capital expenditure in the 5-year period of projections.

Table V Organic Growth Capital Expenditure Projections

<i>ORGANIC</i>	<i>CapEx</i>
2022	82.423.631.920
2023F	79.229.779.202
2024F	76.665.872.473
2025F	84.271.482.921
2026F	92.631.605.232
2027F	101.821.090.485

Table VI Inorganic Growth Capital Expenditure Projections

<i>INORGANIC</i>	<i>CapEx</i>
2022	82.423.631.920
2023F	79.229.779.202
2024F	85.998.835.345
2025F	94.530.319.035
2026F	103.908.165.512
2027F	114.216.337.894



9) Growth Rate

The change in net working capital represents the difference between the net working capital from the beginning of a period with the net working capital from the end of a period. Net working capital represents the difference on current assets and current liabilities.

$$NWC = \text{Current Assets} - \text{Current Liabilities}$$

Formula calculating the change in net working capital compares the net working capital from a different period.

$$\Delta NWC = NWC_{end} - NWC_{beginning}$$

Table VII Organic Growth Change in Net Working Capital

ORGANIC	NWC	Δ NWC
22	691.335.891.835	19.638.372.230
23F	247.767.085.337	-443.568.806.498
24F	239.749.245.283	-8.017.840.054
25F	263.533.483.379	23.784.238.096
26F	289.677.228.305	26.143.744.926
27F	318.414.554.093	28.737.325.787

Table VIII Inorganic Growth Change in Net Working Capital

INORGANIC	NWC	Δ NWC
22	691.335.891.835	19.638.372.230
23F	247.767.085.337	-443.568.806.498
24F	268.935.253.772	21.168.168.435
25F	295.614.879.398	26.679.625.625
26F	324.941.247.737	29.326.368.340
27F	357.176.927.955	32.235.680.218

10) FCFF Projection

Following the assumptions, FCFF of PT Cita Mineral Investindo starts with the base year of 2022 from the company’s financial report. This calculation provides information on the free cash flow to the firm in the next five years which represents the cash flows available to the company after deducting all operational and non-operating expenses. The forecasted Free Cash Flow to the Firm (FCFF) for PT Cita Mineral Investindo is divided into two growth scheme and outlined as follows.

Year	22	23F	24F	25F	26F	27F
	0	1	2	3	4	5
Revenue	5.694.017.210.214	3.237.081.925.183	3.132.328.684.518	3.443.070.230.919	3.784.638.781.247	4.160.092.517.397
COGS	-3.562.813.989.784	-1.763.008.989.815	-1.705.957.327.462	-1.875.196.213.741	-2.061.224.383.180	-2.265.707.410.607
Gross Profit	2.131.203.220.430	1.474.072.935.369	1.426.371.357.057	1.567.874.017.178	1.723.414.398.067	1.894.385.106.790
OpEx	-1.296.210.338.633	-690.358.757.329	-636.589.276.701	-721.388.270.864	-815.617.098.890	-920.259.060.934
EBIT	834.992.881.797	783.714.178.040	789.782.080.356	846.485.746.314	907.797.299.177	974.126.045.855
Tax	-90.171.951.011	-103.018.599.952	-99.684.877.654	-109.574.080.274	-120.444.337.702	-132.392.975.129
NOPAT	744.820.930.786	680.695.578.088	690.097.202.702	736.911.666.040	787.352.961.474	841.733.070.726
Depreciation	110.525.121.496	83.744.306.188	81.034.307.596	89.073.287.087	97.909.770.662	107.622.874.429
OCF	855.346.052.282	764.439.884.277	771.131.510.298	825.984.953.127	885.262.732.136	949.355.945.155
CapEx	82.423.631.920	79.229.779.202	76.665.872.473	84.271.482.921	92.631.605.232	101.821.090.485
Change in NWC	19.638.372.230	-443.568.806.498	-8.017.840.054	23.784.238.096	26.143.744.926	28.737.325.787
FCFF	753.284.048.132	1.128.778.911.573	702.483.477.879	717.929.232.110	766.487.381.978	818.797.528.882
TV						10.177.214.627.565

Figure 1. Organic Growth FCFF Projection



Year	22	23F	24F	25F	26F	27F
	0	1	2	3	4	5
Revenue	5.694.017.210.214	3.237.081.925.183	3.513.644.469.145	3.862.214.311.525	4.245.363.900.399	4.666.523.707.147
COGS	-3.562.813.989.784	-1.763.008.989.815	-1.913.632.997.028	-2.103.474.273.801	-2.312.148.686.510	-2.541.524.569.668
Gross Profit	2.131.203.220.430	1.474.072.935.369	1.600.011.472.117	1.758.740.037.724	1.933.215.213.889	2.124.999.137.479
OpEx	-1.296.210.338.633	-525.345.709.382	-591.793.182.289	-681.167.522.075	-780.849.499.579	-891.929.420.863
EBIT	834.992.881.797	948.727.225.987	1.008.218.289.828	1.077.572.515.649	1.152.365.714.311	1.233.069.716.616
Tax	-90.171.951.011	-103.018.599.952	-111.820.071.999	-122.913.142.232	-135.106.696.529	-148.509.908.017
NOPAT	744.820.930.786	845.708.626.035	896.398.217.829	954.659.373.417	1.017.259.017.782	1.084.559.808.599
Depreciation	110.525.121.496	83.744.306.188	90.899.064.362	99.916.673.518	109.828.871.364	135.602.485.251
OCF	855.346.052.282	929.452.932.223	987.297.282.191	1.054.576.046.935	1.127.087.889.146	1.220.162.293.851
CapEx	82.423.631.920	79.229.779.202	85.998.835.345	94.530.319.035	103.908.165.512	114.216.337.894
Change in NWC	19.638.372.230	-443.568.806.498	21.168.168.435	26.679.625.625	29.326.368.340	32.235.680.218
FCFF	753.284.048.132	1.293.791.959.520	880.130.278.410	933.366.102.274	993.853.355.294	1.073.710.275.739
TV						13.345.643.505.954

Figure 2. Inorganic Growth FCFF Projection

11) DCF Valuation

DCF Discounted cash flow valuation then performed through discounting the free cash flow to firm (FCFF) and terminal value. Discount rate used in the valuation is from the previous WACC calculation which represents the firm’s riskiness, 12,16% for both organic and inorganic growth scenario. Discounting the FCFF and terminal value formulate the enterprise value of the firm analyzed.

Year	22	23F	24F	25F	26F	27F
Total FCFF	753.284.048.132	1.128.778.911.573	702.483.477.879	717.929.232.110	766.487.381.978	818.797.528.882
PV of FCFF	753.284.048.132	1.006.383.292.551	558.399.700.287	508.797.806.499	484.309.663.106	461.263.594.386
TV			10.177.214.627.565			
PV of TV			5.733.259.364.322			
Enterprise Value			9.505.697.469.283			
Net Debt 2022			78.730.370.398			
Equity Value			9.426.967.098.885			
Shares Outstanding			3.960.361.250			
Value per share			Rp2.380			

Figure 3. Organic Growth DCF Valuation

Year	22	23F	24F	25F	26F	27F
Total FCFF	753.284.048.132	1.293.791.959.520	880.130.278.410	933.366.102.274	993.853.355.294	1.073.710.275.739
PV of FCFF	753.284.048.132	1.153.503.665.552	699.610.025.223	661.478.324.406	627.972.221.065	604.866.824.394
TV			13.345.643.505.954			
PV of TV			7.518.170.580.404			
Enterprise Value			12.018.885.689.175			
Net Debt 2022			78.730.370.398			
Equity Value			11.940.155.318.777			
Shares Outstanding			3.960.361.250			
Value per share			Rp3.015			

Figure 4. Inorganic Growth DCF Valuation

C. Sensitivity Analysis

Sensitivity analysis methodology is used to demonstrate and visualize the rate of driving forces that would affect the enterprise value both for the organic scenario and inorganic scenario. This method provides the calculation with adjustments to future or related circumstances of the valuation.

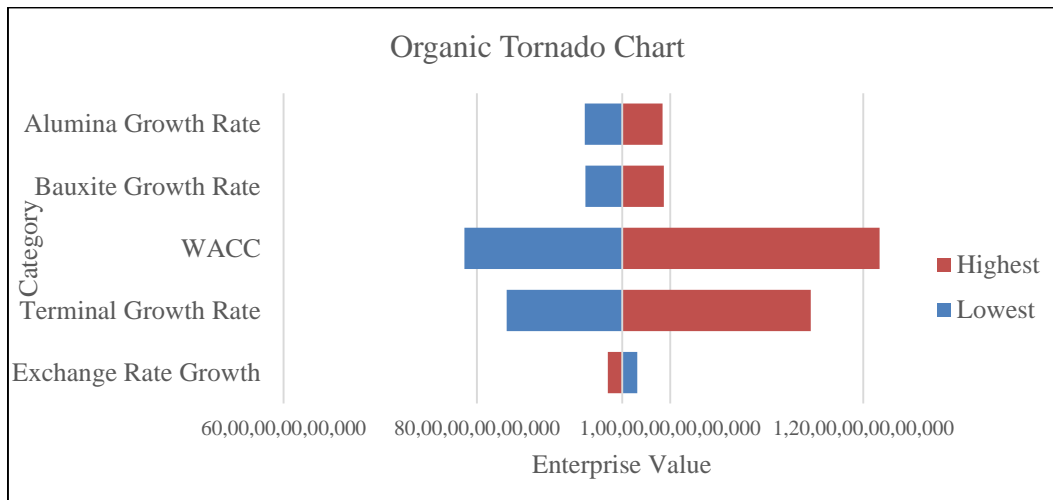


Figure 5. Organic Tornado Chart

Table 11X Organic Growth Sensitivity Analysis

<i>ORGANIC</i>	<i>Lowest</i>	<i>Base</i>	<i>Highest</i>
Exchange Rate Growth	9.661.537.095.356	9.505.697.469.283	9.356.002.442.662
Terminal Growth Rate	8.308.911.226.541	9.505.697.469.283	11.456.135.895.028
WACC	7.871.429.901.300	9.505.697.469.283	12.167.018.467.012
Bauxite Growth Rate	9.123.854.942.082	9.505.697.469.283	9.934.894.567.313
Alumina Growth Rate	9.116.873.717.917	9.505.697.469.283	9.922.972.901.919

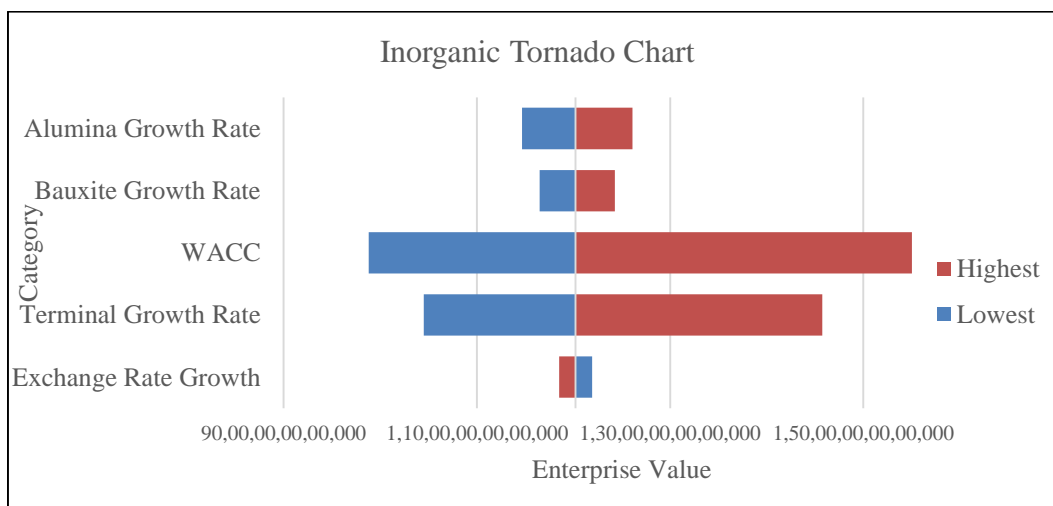


Figure 6. Inorganic Tornado Chart

Table X Inorganic Growth Sensitivity Analysis

<i>INORGANIC</i>	<i>Lowest</i>	<i>Base</i>	<i>Highest</i>
Exchange Rate Growth	12.193.123.867.733	12.018.885.689.175	11.851.534.426.298
Terminal Growth Rate	10.449.509.083.399	12.018.885.689.175	14.576.545.801.776
WACC	9.880.654.627.397	12.018.885.689.175	15.503.683.195.920



Bauxite Growth Rate	11.649.434.564.763	12.018.885.689.175	12.426.655.815.321
Alumina Growth Rate	11.468.052.041.407	12.018.885.689.175	12.610.025.885.410

From the sensitivity analysis, the most influential driving forces for PT Cita Mineral Investindo’s enterprise value are WACC and terminal growth rate, both for the organic growth scenario and inorganic growth scenario of the valuation.

D. Result Summary

From the discounted cash flow valuation method, the organic growth and inorganic growth enterprise value from PT Cita Mineral Investindo are as shown in following table.

Table XI Enterprise Value of PT Cita Mineral Investindo

<i>Enterprise Value of PT Cita Mineral Investindo</i>	
Organic Growth	IDR 9.505.697.469.283
Inorganic Growth	IDR 12.018.885.689.175

E. Implementation Plan & Justification

For PT Cita Mineral Investindo to continue growing its revenue and avoid the potential of a plateau growth period induced by the bauxite export prohibition, the analysis shows that pursuing inorganic growth equates to a higher company valuation. PT Cita Mineral Investindo will have a future in the bauxite mining business since it is aligned with Indonesia's vision to develop a sustainable ecosystem for EV manufacturing in Indonesia.

Based on the conducted analysis, by pursuing an inorganic growth approach on their future strategy will result in significant difference in the company’s enterprise value. Fostering their growth with strategic actions such as establishing a joint-venture, regardless of whether it is a new established joint-venture or a partnership to build or use a currently operational smelter to accommodate CITA's Metallurgical Grade Bauxite (bauxite ore) for the domestic market and supporting the existing joint-venture named PT Well Harvest Winning Alumina Refinery.

Establishing a joint-venture to support the company’s growth should be the plan for PT Cita Mineral Investindo to maintain resilience in the face of adversity caused by the new law. PT Cita Mineral Investindo should consider these following steps in establish a joint-venture.

1. Find the right partner, PT Cita Mineral Investindo should consider pursuing this joint venture or partnerships with local companies or through international investments that are committed to and agree with the notion of long-term relationship with PT Cita Mineral Investindo as its raw material supplier.
2. Conducting due diligence, PT Cita Mineral Investindo must conduct a legal assessment of the contracts and the national regulatory requirements whether the company chooses to partner with a local or foreign company.
3. Determine the structures for ownership and control whether it is a dominant parent, shared management, split control, independent management, or rotating management. Given that of the connected concerns between autonomy and parental conflict, which could be generated by variations in organizational culture, joint-venture management independence is frequently linked to performance [20]. Including all the other governance structure and financial terms.

PT Cita Mineral Investindo should consider the three things mentioned before establishing its joint-venture and beware of the timing of the execution. The export ban on bauxite has been in effect since June 10, 2023 and will have an immediate influence on the organization, hence the timeframe for this joint-venture or partnership should be met as soon as possible.

RESULT AND DISCUSSION

A. Conclusion

The conclusions of the study are based on research questions around the business issue and data analysis, and discussed as follows:

1. Based on the financial performance analysis, PT Cita Mineral Investindo has demonstrated a positive trend in terms of revenue growth in the last five years. Even though the firm experienced significant growth in revenue, it records a minor



growth on their net income due to the increase of cost of goods sold and other selling expenses. The financial health of PT Cita Mineral Investindo is evaluated based on liquidity, profitability, and solvency ratio. In terms of liquidity, PT Cita Mineral Investindo has a relatively healthy liquidity with a current ratio of 1,81 in 2022. It is higher than the average industry current ratio of 1,63. In terms of profitability, PT Cita Mineral Investindo is in a good position, with a net profit margin of 13% in 2022, which is better than the industry average of 7,29%. In 2022, PT Cita Mineral Investindo's return on assets is 2% better than the industry average of 0,14, suggesting its capacity to generate profit through asset management. In terms of solvency, PT Cita Mineral Investindo has a comparatively low debt to equity ratio of 22%, which is lower than the industry average of 39%. A low debt-to-equity ratio indicates that the company uses less debt, is more conservative, and is exposed to fewer financial risks. A low debt-to-equity ratio shows that the corporation underutilizes debt as a source of corporate growth and expansion.

2. Enterprise value of PT Cita Mineral Investindo from DCF analysis with FCFF approach on organic growth scenario shows that the enterprise value of PT Cita Mineral Investindo is IDR 9.505.697.469.283. From the inorganic growth scenario of the DCF analysis shows that the enterprise value of PT Cita Mineral Investindo is IDR 12.018.885.689.175. From the DCF analysis with FCFF approach, it can be concluded that the enterprise value of PT Cita Mineral Investindo is greater by 26,46% if the company pursue to do the inorganic scenario.
3. Based on sensitivity analysis, the most critical factors influencing PT Cita Mineral Investindo's enterprise value in organic growth scenario and inorganic growth scenario is the WACC and terminal growth rate. The range value in the WACC sensitivity analysis for organic growth scenario is IDR 7.871.429.901.300 to IDR 12.167.018.467.012. For inorganic growth scenario is IDR 9.880.654.627.391 to IDR 15.503.683.195.920. The range value in the terminal growth rate sensitivity analysis for organic growth scenario is IDR 8.308.911.226.541 to IDR 11.456.135.895.028. For inorganic growth scenario is IDR 10.449.509.083.399 to IDR 14.576.545.801.776.

B. Recommendation

Based on the findings of this study, the author makes several suggestions to PT Cita Mineral Investindo on what they should do to increase their valuation on the current condition of export ban on unprocessed mineral ore.

As a bauxite mining company in Indonesia, PT Cita Mineral Investindo still has enormous growth opportunities. With its healthy financial positions, PT Cita Mineral Investindo is capable to explore various profitable projects in the future, especially in this time after the enactment of Law No.3/2020 which prohibit raw minerals to be exported. To overcome long-term obstacles and assure future growth, PT Cita Mineral Investindo must extend its business by forming alliances with other companies, such as joint ventures, to support its expanding bauxite output.

Considering the current immediate issues related to the affected sales as a result of raw minerals (bauxite) export restrictions, the study recommends that PT Cita Mineral Investindo concentrate and go after inorganic growth approach to ensure its growth continues to expand by establishing new joint-venture with another company to build a new smelter infrastructure, allowing PT Cita Mineral Investindo to do strategic sales options with the joint-venture and generate more equity in net profit of associate. The benefit of this strategy is:

1. Ensure future growth, by pursuing an inorganic growth strategy through joint-venture, the company can grow despite export restrictions and an inadequate bauxite smelter in Indonesia, allowing the company to keep its mining operations active through partnerships agreements with the joint-venture ensuring future earnings.
2. Enhance financial performance, by considering this inorganic growth strategy, it enables the company to keep the mining activities going, reducing the possibilities of non-production mining sites, which could lead to revenue growth and optimized operations.
3. Future expansion by improved inventory turnover efficiency, the firm can constantly sell its goods through the inorganic growth approach, which may also improve its inventory turnover efficiency, which can be impacted if the company finds itself unable to sell its goods related to the bauxite export prohibition. With the improved inventory turnover efficiency, the company can pursue future expansion to explore more sites for their future projects.



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