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## STOCK VALUATION AND BUSINESS PERFORMANCE OF PT INDOFOOD CBP SUKSES MAKMUR TBK AMIDST WHEAT PRICE VOLATILITY DURING THE RUSSIA-UKRAINE CRISIS

**Dimas Arbrianto, Raden Aswin Rahadi**

School of Business and Management, Institut Teknologi Bandung, Indonesia

Email: [dimas\\_arbrianto@sbm-itb.ac.id](mailto:dimas_arbrianto@sbm-itb.ac.id), [aswin.rahadi@sbm-itb.ac.id](mailto:aswin.rahadi@sbm-itb.ac.id)

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### ABSTRACT

#### KEYWORDS

Business Performance;  
Commodity Prices;  
PT Indofood CBP Sukses  
Makmur Tbk;  
Russia-Ukraine Crisis;  
Valuation

The Russia-Ukraine Crisis in 2022 adversely affected the business performance of PT Indofood CBP Sukses Makmur Tbk (ICBP), the largest noodle manufacturer in Indonesia, due to volatile wheat prices. During Q2, ICBP witnessed a 16% growth in net revenue but a substantial 40.1% decline in profit, primarily attributed to escalating commodity prices. This negative trend persisted in Q3, resulting in a significant 33.4% decrease in net profit despite increased sales. Consequently, ICBP's stock price experienced a decline. In this context, conducting a comprehensive fundamental analysis that integrates various macroeconomic factors is crucial to evaluate the company's valuation. This study aims to determine the valuation of the ICBP amidst wheat price volatility during the Russia-Ukraine crisis. This study employs multiple analysis approaches, including financial ratio analysis, intrinsic valuation using free cash flow to firm (FCFF), and relative valuation analysis employing price-earnings ratio (P/E) and enterprise value to EBITDA (EV/EBITDA) ratios. The intrinsic valuation of ICBP suggests a fair stock value of 13,806 Rupiah per share, while the current share price is 10,000 Rupiah per share, indicating an undervaluation of approximately 27.6%. Similarly, the relative valuation analysis reveals that ICBP is undervalued compared to industry peers based on P/E and EV/EBITDA ratios. These findings indicate that ICBP is presently undervalued, presenting an opportunity for future appreciation of its share price.

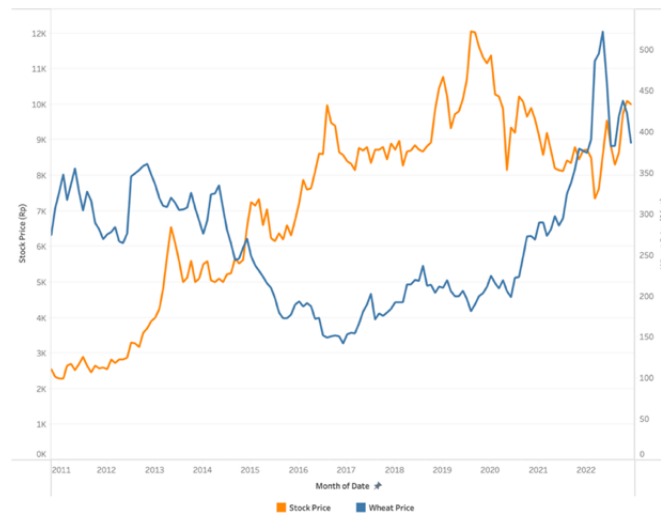
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#### INTRODUCTION

Fundamental analysis is crucial for determining a stock's intrinsic value based on dividends and profits. It involves assessing various factors that influence a stock's worth. The success of a company directly affects its ability to provide dividends and influences its market price. Considering the economic conditions in which a company operates is important, as macroeconomic and industry factors can have a significant impact on profits. Therefore, investors need a broader understanding of the economic landscape. Analyzing a company's prospects involves evaluating the economic environment, considering the industry's influence, and assessing the company's position within the industry (Bodie, Kane, & Marcus, 2021). One of the macroeconomic factors studied in this research is the impact of the supply shock event on the wheat commodity market during the Russia-Ukraine crisis in February 2022. The conflict between Russia and Ukraine, two major wheat providers to Indonesia, has influenced the global price of wheat and impacted Indonesia, causing price volatility that also affects the business performance of companies in the country that use wheat as its production material (Gafarova, Perekhozhuk, & Glauben, 2015).

PT Indofood CBP Sukses Makmur Tbk (ICBP) is one of the companies that have been impacted by this event as their products typically use flour, which is made from wheat. The raw materials used by ICBP make up a large portion, estimated at between 75-80%, of their total manufacturing costs (Felita, 2022). The impact of the Russia-Ukraine Crisis on ICBP can

be seen from the company's Q2 financial statement which reports a 16% increase in net revenue in the second quarter, compared to the previous year, but a 40.1% decrease in profit, amounting to a loss of 1.29 trillion Rupiah (PT Indofood CBP Sukses Makmur Tbk, 2022). According to the CEO of ICBP, Anthoni Salim, one of the reasons for the company's decreased profit is caused by the rise in commodity prices (PT Indofood CBP Sukses Makmur Tbk, 2022). The cost of goods sold in this quarter was 22.19 trillion Rupiah, which was a 25% increase from the same quarter last year. This resulted in a decrease of 0.3% in the company's gross profit, which was 10.4 trillion Rupiah (Pahlevi, 2022). This decrease in ICBP's financial performance caused a decline in the stock price, which fell by 6.88% to 8.125 Rupiah per unit, when the Q2 financial statement was made public (PT Indofood CBP Sukses Makmur Tbk, 2022). Additionally, the negative impact of the Russia-Ukraine conflict on PT Indofood CBP Sukses Makmur Tbk (ICBP) can also be seen in the third quarter's financial report, which showed a decline in the company's net profit of 33.4% to 3.30 trillion Rupiah, compared to the previous year's net profit of 4.96 trillion Rupiah, despite a 15% increase in net sales to 48.91 trillion Rupiah compared to the same quarter of the previous year (PT Indofood CBP Sukses Makmur Tbk, 2022).



**Figure 1. Comparison of Wheat Commodity Price and ICBP Stock Price (Source: The World Bank, 2023; Investing.com, 2023)**

Since macroeconomics can influence the share price of a company, a thorough fundamental analysis is required to determine the company's valuation. The aim of fundamental analysis is to find stocks whose value has been inaccurately assessed compared to the intrinsic value that can be derived from financial information that is visible (Bodie, Kane, & Marcus, 2021). Fundamental analysis focuses on determining a company's value. Its importance in portfolio management varies depending on the investor's approach. Passive investors may not prioritize valuation, while active investors may consider it more. Within the active investor group, the significance of valuation can differ based on specific investment strategies. Market timers may prioritize market valuation over individual firms, unlike long-term stock pickers. Fundamental analysts use asset valuation to manage portfolios, while technical analysts may rely on it less (Damodaran, 2012). Therefore, in order to better understand the relationship between ICBP's stock price and its financial performance, a further examination of the relationship between the firm's profit and the price of wheat is needed. An assessment of the relationship between the wheat commodity price and ICBP's stock valuation will give insights into the risk and potential benefits of investing in ICBP's shares. Thus, the

study aims to determine the valuation of the ICBP amidst wheat price volatility during the Russia-Ukraine crisis.

## RESEARCH METHOD

This research employs mixed methods research to determine the valuation of the ICBP amidst wheat price volatility during the Russia-Ukraine crisis. Mixed methods research entails collecting both quantitative and qualitative data, merging the two forms of data, and applying various designs that may contain philosophical assumptions and theoretical frameworks (Creswell, 2015). The research will use an explanatory sequential mixed methods design, with quantitative data acquired using a quantitative research methodology explained using qualitative research methods. The Explanatory Sequential Mixed Method is a two-phase research design that employs a mixed methods technique. In the first phase, quantitative data is acquired, followed by the analysis of the findings. The findings are then utilized to prepare for or integrate into the second phase, which has a qualitative nature (Creswell, 2015). Hence, the initial quantitative stage will be followed by the qualitative stage. With this research method, a robust argument and justification regarding the stock valuation of PT Indofood CBP Sukses Makmur Tbk amidst wheat price volatility during the Russia-Ukraine crisis will be more robust.

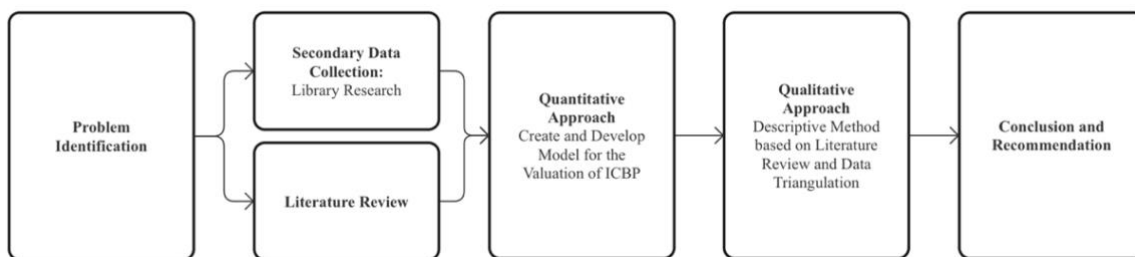


Figure 2. Research Design

In this research, the first stage of data collection and analysis will be conducted using a quantitative approach. Quantitative approach is utilized to examine the relationship among variables that will result in determining the valuation of ICBP. The quantitative approach is concerned with the quantity, frequency, or magnitude of an event; it serves as the foundation for a statistical investigation (Schindler, 2022). To collect the essential information for estimating the company's valuation, a detailed examination of secondary data drawn from academic journals and publications, company reports, government databases, industry reports and market research, published reports and studies, research databases, literature or textbooks, and trusted online sources will be undertaken. Then, the data will be analyzed using PESTLE, Porter's Five Forces, financial ratio analysis, intrinsic valuation using DCF method, and relative valuation using P/E Ratio and EV/EBITDA ratio. Furthermore, the result of the calculation of quantitative approach will be analyzed with a qualitative approach in order to sharpen the argument and make the justification of the correlation analysis more robust. The qualitative approach is a methodology that uses interpretive tools to explain, determine, interpret, and understand the importance of a certain phenomenon (Schindler, 2022). Qualitative approach will help to further understand the result of valuation measurement in the quantitative approach stage. The qualitative approach will be conducted by using a descriptive method based on literature review to describe the factors that affects valuation of ICBP.

## RESULTS AND DISCUSSION

In this section, a comprehensive discussion will be presented regarding the results obtained from the collected data. The analysis will begin by examining the business environment of the company, followed by an evaluation of the intrinsic and relative valuation of the company.

### External Business Environment Analysis – PESTLE

#### *Political*

In March 2022, the price of wheat reached a record high of \$522.3 per metric ton, driven by factors including the Russia-Ukraine war (The World Bank, 2023). This conflict resulted in significant human and infrastructure losses, leading Western countries to implement sanctions. The consequences extended beyond the economy, creating a humanitarian crisis in Ukraine (Hassen & Bilali, 2022). As a consistent market for Russian and Ukrainian wheat exports, Indonesia will undoubtedly be affected (Gafarova, Perekhozhuk, & Glauben, 2015). Being the world's second-largest wheat importer, the disruption caused by the war will have notable implications for Indonesia's wheat market, including changes in supply chains, availability, and prices (Foreign Agricultural Service United States Department of Agriculture - Production, Supply, and Distribution, 2023). This will impact stakeholders within the industry and the broader economy.

#### *Economic*

Indonesia's GDP has shown strong growth over the past five years, increasing from 10,426 trillion to 11,710 trillion in 2022. This growth can be attributed to favorable government policies and initiatives that have stimulated economic activities and attracted investments. The average annual growth rate of 3.43% indicates a sustained expansion of the Indonesian economy, making it an attractive destination for investment (Ministry of Trade of Republic of Indonesia, 2022). However, inflation rates in Indonesia have experienced fluctuations during the same period. Starting at 2.27% in 2018, the inflation rate rose to 4.10% in 2022. While moderate overall, significant fluctuations can impact businesses and consumers alike (Ministry of Trade of Republic of Indonesia, 2022). Exchange rate dynamics between the US Dollar and Indonesian Rupiah have also exhibited fluctuations. The exchange rate has shown an overall growth trend, with the Indonesian Rupiah depreciating against the US Dollar. These fluctuations have implications for importers, exporters, and investors, affecting the cost of imports, export competitiveness, and investment attractiveness (Bank of Indonesia, 2023). Indonesia's growing population, which surpassed 275 million in 2021, has led to increased demand for food, particularly wheat (Indonesian Statistics Agency, 2022; Shofa, 2022). Despite efforts to enhance domestic production, Indonesia relies on imports to meet its wheat needs due to growing demand and limitations in local production capabilities (Lubis & Panjaitan, 2012).

#### *Sociocultural*

Instant noodles have become a staple in Indonesia's food culture, with the country ranking second globally in consumption, trailing only China (World Instant Noodles Association, 2022; Wreksono, 2018). This immense demand has led to a thriving market and the emergence of various local instant noodle brands. One prominent player is PT Indofood CBP Sukses Makmur Tbk, the owner of the popular Indomie brand, which holds a remarkable 72.9% share of the Top Brand Index in 2022 (Top Brand Award, 2022). Indomie's success can be attributed to its wide range of flavors, commitment to quality and affordability, and strong

distribution network. The brand's extensive marketing efforts have solidified its position as the top choice for Indonesian consumers.

### ***Technological***

ICBP utilizes advanced technology to enhance manufacturing processes, resulting in improved productivity and efficiency. High-speed machines and automation have increased output, optimized manpower allocation, and reduced packaging inventory. The company prioritizes employee development through tailored training programs and knowledge-sharing initiatives. In warehouse operations, ICBP has implemented automation programs, including a robotic auto-loader for transportation. To address sustainability goals, ICBP pilots lighter packaging materials and invests in new machinery for flexible and corrugated packaging. State-of-the-art machines have increased production capacity by 15%, while environmentally friendly packaging alternatives, like monolayer packaging, have been explored. These technological advancements enable ICBP to meet customer demands and address sustainability concerns effectively (PT Indofood CBP Sukses Makmur Tbk, 2022).

### ***Legal***

The Indonesian government has implemented Import Regulation Number 23/M-DAG/PER/4/2014 to address trade security concerns related to wheat flour imports. This regulation establishes quotas and levies, with a specific import quota of 441,141 tons for the Security Measures, including 22,057 tons allocated for imports from Ukraine. This highlights the importance of Ukraine as a source for meeting Indonesia's demand for wheat flour (Ministry of Trade of Republic of Indonesia, 2014). Additionally, the government has imposed corporate income tax on all companies in Indonesia. The tax rate is set at 22% as per Law No.7 of 2021 (Ministry of Finance of Republic of Indonesia, 2021). This tax rate ensures compliance with the current legal framework and provides accurate analysis of the financial implications and tax liabilities, aligning with prevailing taxation legislation.

### ***Environmental***

ICBP prioritizes innovation to meet evolving consumer needs and has implemented a Responsible Supplier Guideline to ensure sustainable raw material sourcing. They collaborate with local farmers to improve supply chain and economic well-being. Environmental protection is a fundamental commitment for ICBP. They adhere to Indonesian environmental standards and have policies addressing GHG emissions, energy and water usage, manufacturing waste, and packaging waste. They aim to reduce GHG emissions, energy consumption, and water use compared to the 2018 baseline. The Noodles Division utilizes renewable energy sources and has received recognition for their efforts at the Indonesia B20 Sustainability Award. ICBP has made progress in implementing circular economy principles for waste management, complying with regulations and participating in Waste Bank schemes. They launched the Green Warmino program to promote proper waste management and partnered with IPRO to enhance waste collection and recycling rates. These initiatives demonstrate their commitment to sustainability and the United Nations' SDGs (PT Indofood CBP Sukses Makmur Tbk, 2022).



## External Business Environment Analysis – Porter’s Five Forces

### *Threat of New Entrants*

The threat of new entrants in the instant noodle industry in Indonesia is low due to complex regulatory requirements and competition from established brands like Indomie. Regulatory standards outlined in Kemenperin No.148 of 2019 ensure quality and food safety. Competing against well-known brands requires new entrants to build brand recognition, earn consumer trust, and differentiate their products (Nurhayati-Wolff, 2022; Ministry of Industry of Republic of Indonesia, 2019; Wreksono, 2018; Widyanti, Sunaryo, & Kumalasari, 2014).

### *Bargaining Power of Suppliers*

The bargaining power of suppliers in the wheat import industry is high in Indonesia. As the country relies completely on imported wheat for its wheat flour-based products, suppliers have control over pricing and availability. Fluctuations in global wheat prices directly impact ICBP's operations and financial performance. The cost of flour production, which heavily depends on wheat prices, significantly affects the production cost and profitability of instant noodle companies like ICBP (Foreign Agricultural Service United States Department of Agriculture - Production, Supply, and Distribution, 2023; Arief, 2022; Meylinah, 2022; Apriande & Daryanto, 2012).

### *Bargaining Power of Buyers*

Buyers in the instant noodle market have medium-low bargaining power. While there are many instant noodle companies offering various flavors and products, a few key players, including Indofood with its brand Indomie, dominate the market. Indofood's significant market share and strong brand recognition limit the power of buyers to influence pricing or terms. Consumers often prioritize well-known brands like Indomie, indicating a preference for familiarity and trust over price considerations. This suggests that buyers have limited power to significantly impact the market. The market share held by Indofood reflects consumers' willingness to pay a premium for the brand. Overall, the competitive landscape and brand loyalty reduce the bargaining power of buyers in the instant noodle market (Top Brand Award, 2022; Wreksono, 2018)

### *Threat of Substitute Products*

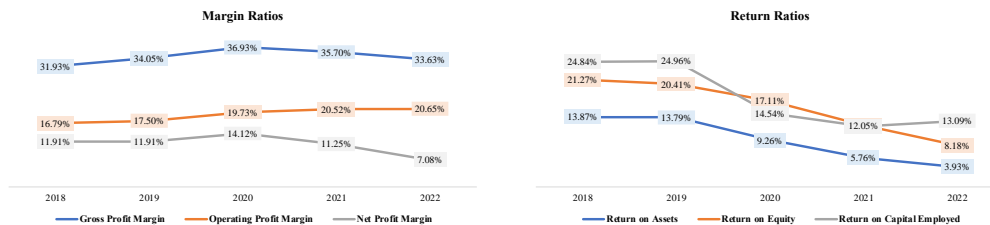
The threat of substitute products in the Indonesian instant noodle market is high, mainly due to the country's significant consumption of rice as a staple food. Indonesia has consistently shown high levels of rice consumption compared to other countries. While instant noodles have gained popularity, consumers have the potential to revert back to rice if the price of instant noodles increases and becomes less cost-effective. Even a slight price increase can impact consumer behavior, leading to a reduction in instant noodle consumption. Rice holds a prominent position in the Indonesian diet due to its cultural and dietary significance, affordability, and availability. As a result, rice serves as a compelling substitute for instant noodles (Jibiki, 2022; Widyanti, Sunaryo, & Kumalasari, 2014).

### *Rivalry Among Competing Firms*

The rivalry among firms in the Indonesian instant noodle market is medium. The market offers opportunities for various instant noodle brands from Indonesian companies. PT Indofood CBP Sukses Makmur Tbk, with its successful Indomie brand, holds a dominant market position and enjoys strong consumer preference. Indomie achieved recognition as the top instant noodle brand in Indonesia, capturing a significant market share. The brand's success, effective marketing strategies, high-quality products, and strong brand recognition contribute to its dominance and customer loyalty. Indomie's market position creates barriers to entry for new players and poses challenges for existing competitors, reducing the intensity of rivalry. The brand's ability to cater to local flavors and meet diverse consumer preferences further solidifies

its market leadership (Prastyawan, Qadri, & Asqolani, 2022; Top Brand Award, 2022; Wreksono, 2018).

### Internal Business Environment Analysis – Financial Ratio Analysis Profitability Ratios

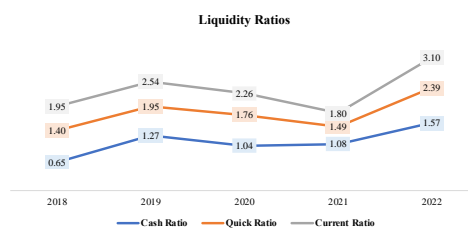


**Figure 3. Profitability Ratios of ICBP**

ICBP's Gross Profit Margin has shown an increasing trend from 31.93% in 2018 to 36.93% in 2020, but it declined to 33.63% in 2022 due to increased competition, rising production costs, and higher interest expenses. The operating profit margin, on the other hand, consistently increased from 16.79% in 2018 to 20.65% in 2022, indicating effective management of operating expenses. However, the net profit margin declined from 14.12% in 2020 to 7.08% in 2022 due to increased financial costs, including losses on foreign exchange differences and interest expenses, related to the acquisition of Pinehill Company Limited (PCL) and fluctuating exchange rates.

The return on assets (ROA) declined from 13.87% in 2018 to 3.93% in 2022, while the return on equity (ROE) decreased from 21.27% in 2018 to 8.18% in 2022. The decline in both ROA and ROE can be attributed to the acquisition of PCL in 2020, which increased total assets and equity, impacting profitability. The rise in financial costs further contributed to the reduction in net profits and the subsequent decline in ROA and ROE. The return on capital employed (ROCE) declined from 24.84% in 2018 to 13.09% in 2022, primarily due to financing the acquisition through bank loans and the subsequent increase in non-current liabilities. However, the ROCE slightly improved to 13.09% in 2022, driven by increased operating profit and other operating income from foreign exchange differences.

### Liquidity Ratios



**Figure 4 .Liquidity Ratios of ICBP**

The company's cash ratio increased from 0.65 in 2018 to 1.27 in 2019, but dropped to 1.04 in 2020 due to the acquisition of PCL, which reduced cash reserves and increased current liabilities. However, in 2021, the cash ratio improved to 1.08 with the issuance of a Global Bond to repay the bank loan related to the acquisition. In 2022, the cash ratio further improved to 1.57 as the company paid its other short-term liability, reducing short-term liabilities. Meanwhile, both the quick ratio and current ratio increased from 2018 to 2022, indicating improved liquidity. The quick ratio rose from 1.40 in 2018 to 2.39 in 2022, while the current

ratio increased from 1.95 to 3.10. There was a slight drop in both ratios in 2021 due to the acquisition, but in 2022, both ratios experienced significant increases as the company reduced short-term liabilities.

### Efficiency Ratios

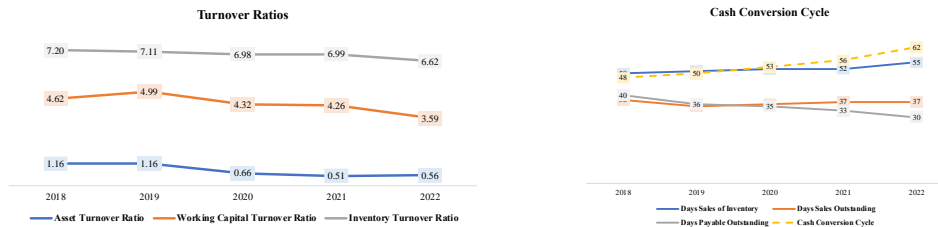


Figure 5. Efficiency Ratios of ICBP

The company's Asset Turnover Ratio declined from 1.16 in 2018 and 2019 to 0.66 in 2020 and 0.51 in 2021, indicating a decrease in asset-based revenue. The acquisition of PCL led to a significant increase in total assets, but revenue growth did not keep pace, resulting in a lower Asset Turnover Ratio. In 2022, there was a slight improvement to 0.56, but asset utilization remained below previous levels due to faster asset growth compared to revenue. The Working Capital Turnover Ratio declined from 4.62 in 2018 to 3.59 in 2022, indicating decreasing efficiency in using working capital to generate sales. The increase in working capital in 2021 and 2022 contributed to this decline. The company's Inventory Turnover Ratio dropped from 7.20 in 2018 to 6.62 in 2022, suggesting challenges in selling inventory. The increase in cost of goods sold and inventory indicated increased production but difficulties in selling the goods.

The Cash Conversion Cycle (CCC) increased from 48 days in 2018 to 62 days in 2022, indicating potential cash flow issues. This was primarily due to an increase in DSI and DSO, along with a decrease in DPO. The rise in DSI and longer inventory holding periods may lead to increased costs and cash flow challenges. DSO slightly increased over the years, indicating longer collection periods despite efforts to streamline accounts receivable. DPO decreased, reflecting faster supplier payments, but could also indicate cash flow management challenges.

### Solvency Ratios

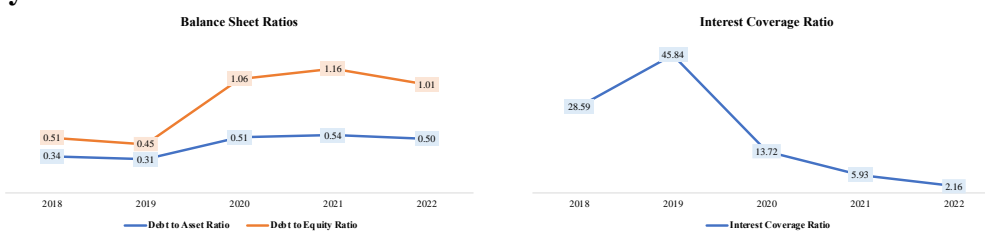


Figure 6. Solvency Ratios of ICBP

The company's debt-to-asset ratio has fluctuated over time, indicating changes in its reliance on debt financing. In 2018, debt financed 34% of the company's assets. The ratio dropped to 0.31 in 2019 but increased to 0.51 in 2020 due to the acquisition of Pinehill Company Limited. In 2021, the ratio reached 0.54, but in 2022, it dropped to 0.50 as the company paid off other short-term liabilities, reducing its debt. The debt-to-equity ratio followed a similar pattern, decreasing to 0.45 in 2019 and significantly increasing to 1.06 in 2020 due to the acquisition. The issuance of Global Bonds raised the ratio to 1.16 in 2021, but



it decreased to 1.01 in 2022 as the company reduced its debt. The interest coverage ratio has shown fluctuations over a five-year period. In 2018, the ratio was strong at 28.59, indicating that operating income comfortably covered interest expenses. The ratio increased to 45.84 in 2019, reflecting lower interest expenses and higher operating profits. However, in 2020 and 2021, the ratio declined to 13.72 and 5.93, respectively, due to increased interest expenses from a bank loan for an acquisition and the issuance of Global Bonds. In 2022, the ratio dropped to 2.16 despite an increase in operating income, primarily due to rising interest expenses caused by the dollar exchange rate.

### Market Value Ratios

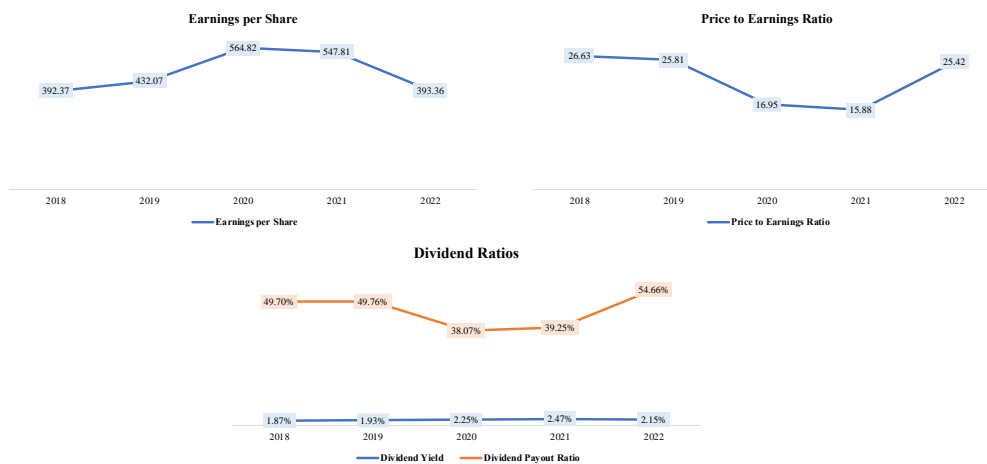


Figure 7. Market Value Ratios of ICBP

ICBP's earnings per share (EPS) generally increased, except for a drop in 2021 and a further decrease in 2022. The EPS rose from 392.37 in 2018 to 564.82 in 2020 but declined to 547.81 in 2021 due to financing-related unrealized foreign exchange differences. In 2022, the EPS decreased to 393.36 due to a significant decline in income attributable to equity holders and unrealized foreign exchange losses. The price-to-earnings (P/E) ratio fluctuated over the years. It declined from 26.63 in 2018 to 16.95 in 2020, influenced by increased EPS and a decrease in share price during the pandemic. The P/E ratio further decreased to 15.88 in 2021 but rose significantly to 25.52 in 2022 despite a decrease in EPS. The company's dividend yield increased from 1.87% in 2018 to 2.47% in 2021 but slightly decreased to 2.15% in 2022. The dividend payout ratio varied from 49.70% in 2018 to 38.07% in 2020, increased to 54.66% in 2022. The decline in net income raised concerns as a larger portion of earnings was paid out as dividends. Net income decreased from 5,039 billion in 2019 to 4,587 billion in 2022, while dividends increased from 2,274 billion in 2018 to 2,507 billion. The dividend payout ratio declined from 49.7% in 2018 to 38.07% in 2020 but increased in subsequent years. These trends of decreasing profitability and increasing dividend payout ratio may worry investors, as less cash is available for growth investments.

### Intrinsic Valuation

To determine a firm's intrinsic valuation, key components such as the WACC, FCFF, and terminal value are calculated. The data sources used for calculating WACC can be found in Table 1.

**Table 1. Data for WACC Calculation**

No	Variables	Values	Remarks	Sources
1	Government Bond Rate	6.55%	Indonesian Government Securities Yield - 10 Year Tenure	PT Penilai Harga Efek Indonesia ( <a href="https://www.phei.co.id/Data/HPW-dan-Imbal-Hasil">https://www.phei.co.id/Data/HPW-dan-Imbal-Hasil</a> )
2	Beta	0.272	Pefindo Beta Stock Report - December 29 <sup>th</sup> , 2022	PT Pemeringkat Efek Indonesia ( <a href="https://pefindo.com/fileman/file/1284">https://pefindo.com/fileman/file/1284</a> )
3	Risk Premium	9.23%	Country Default Spreads and Risk Premiums - January 5 <sup>th</sup> , 2023	Damodaran ( <a href="https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html">https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html</a> )
4	Firm's Default Spread	3.13%	Ratings, Interest Coverage Ratios and Default Spread - January, 2023	Damodaran ( <a href="https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ratings.html">https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ratings.html</a> )
5	Marginal Tax Rate	22.00%	Corporate Income Tax from UU No.7/2021 regarding "Harmonization of Tax Regulation"	ICBP Annual Report Fiscal Year 2022 and Ministry of Finance Regulation Information Network ( <a href="https://jdih.kemenkeu.go.id/download/a9faab97-aca7-4f87-9fdc-faa8123d1454/7TAHUN2021UU.pdf">https://jdih.kemenkeu.go.id/download/a9faab97-aca7-4f87-9fdc-faa8123d1454/7TAHUN2021UU.pdf</a> )

The calculation of cost of equity requires several components, including risk-free rate, beta coefficient, and risk premium. The calculation of the cost of equity is as follows:

$$\begin{aligned} E(R_i) &= R_f + \beta_i [\text{Risk Premium}] \\ &= 6.55\% + 0.272 (9.23\%) \\ &= 9.06\% \end{aligned}$$

After that, to calculate the after-tax cost of debt, several factors are taken into account, including the risk-free rate, the firm's default spread, and the marginal tax rate. The formula for determining the after-tax cost of debt is as follows:

$$\begin{aligned} \text{After Tax Cost of Debt} &= (\text{Risk Free Rate} + \text{Default Spread}) \times (1 - \text{Marginal Tax Rate}) \\ &= (6.55\% + 3.13\%) \times (1 - 22\%) \\ &= 7.55\% \end{aligned}$$

After determining the cost of equity and the after-tax cost of debt, the WACC is calculated. It is computed by assigning weights to the cost of equity and after-tax cost of debt based on their proportions in the company's capital structure.

$$\begin{aligned} \text{WACC} &= \text{Cost of Equity} \times \left( \frac{\text{Equity}}{(\text{Debt} + \text{Equity})} \right) \\ &\quad + \text{After Tax Cost of Debt} \times \left( \frac{\text{Debt}}{(\text{Debt} + \text{Equity})} \right) \\ &= 9.06\% \times \left( \frac{57,473}{(57,833 + 57,473)} \right) + 7.55\% \times \left( \frac{57,833}{(57,833 + 57,473)} \right) \\ &= 8.31\% \end{aligned}$$

Once the WACC is determined, the next step is to forecast the free cash flow to the firm. To do this, it is necessary to establish the growth rate of ICBP's revenue. The revenue growth

rate is a key factor in estimating various components of the free cash flow to the firm. By projecting the expected revenue growth rate, it becomes possible to evaluate the company's future performance and its potential to generate cash flows. This growth rate serves as a basis for forecasting other financial metrics and ultimately calculating the values of the free cash flow to the firm. This method assumes that ICBP will continue growing at a similar rate as it has in the past, based on its historical performance.

**Table 2. Revenue CAGR Comparison**

Revenue	2018	2019	2020	2021	2022	CAGR
<b>ICBP</b>	38,413	42,297	46,641	56,804	64,798	11.02%
<b>INDF</b>	73,395	76,593	81,732	99,346	110,830	8.59%
<b>MYOR</b>	24,061	25,027	24,477	27,905	30,669	4.97%
<b>GOOD</b>	8,049	8,439	7,711	8,800	10,511	5.48%
<b>Average</b>	<b>35,979</b>	<b>38,089</b>	<b>40,140</b>	<b>48,213</b>	<b>54,202</b>	<b>7.52%</b>

To compare the revenue growth among the four companies, it is important to analyze the Compound Annual Growth Rate (CAGR) in a more detailed manner. The CAGR provides a comprehensive measure of the annual growth rate of revenue over a specific period, considering the compounding effect. Calculating the CAGR helps gain insights into the companies' revenue growth performance and their relative performance during the analyzed period. According to Table 2, ICBP has achieved a revenue CAGR of 11.02% over the given period. This indicates a strong growth rate for ICBP, surpassing the industry average CAGR of 7.52%. To forecast the remaining components of FCF, such as cost of goods sold, selling and general administrative expenses, net capital expenditure, and net working capital, a method is employed that involves calculating the average percentage of each of these historical components in relation to the company's revenue.

**Table 3. Assumptions for Forecasting FCF**

Forecasting Assumptions	2018	2019	2020	2021	2022	Average
<b>COGS / Revenue Ratio</b>	68.07%	65.95%	63.07%	64.30%	66.37%	65.55%
<b>SGA / Revenue Ratio</b>	15.14%	16.56%	17.20%	15.17%	12.99%	15.41%
<b>Net Capex / Revenue Ratio</b>	6.69%	1.94%	0.83%	1.21%	0.06%	2.14%
<b>NCWC / Revenue Ratio</b>	5.62%	4.04%	4.30%	-9.29%	8.17%	2.57%

Using the data in table 3, the forecasted FCF for ICBP is generated for the fiscal years 2023 to 2027. The forecasted FCF is calculated by multiplying the company's revenue for each fiscal year by the corresponding multiplier for each component. This data-driven approach allows for a comprehensive forecast of ICBP's FCF, considering the historical relationship between revenue and each component.

**Table 4. Forecasted FCF 2023 – 2027**

Free Cash Flow to the Firm (Forecasted)	2023F	2024F	2025F	2026F	2027F	Component
Year Number	1	2	3	4	5	
Revenue	71,941	79,871	88,676	98,451	109,303	
Cost of Goods Sold	47,158	52,356	58,128	64,536	71,650	
Gross Profit	24,783	27,514	30,547	33,915	37,654	
Selling and General Administrative Expenses	11,088	12,310	13,667	15,174	16,847	
Operating Profit	13,694	15,204	16,880	18,741	20,807	

Free Cash Flow to the Firm (Forecasted)	2023F	2024F	2025F	2026F	2027F	Component
Year Number	1	2	3	4	5	
Net Operating Profit After Tax [EBIT (1-Tax)]	10,682	11,859	13,166	14,618	16,229	a
Net Capital Expenditure	1,543	1,713	1,902	2,111	2,344	b
Non-Cash Net Working Capital	1,848	2,052	2,278	2,529	2,808	
Δ Non-Cash Net Working Capital	(3,447)	204	226	251	279	c
Free Cash Flow to the Firm	12,586	9,942	11,038	12,255	13,606	a - b - c
FCFF Terminal value					264,120	

After forecasting the relevant components of FCFF, the FCFF values for each year from 2023 to 2027 can be calculated. Additionally, to complete the intrinsic valuation process, a terminal value calculation is required, as cash flows cannot be estimated indefinitely. The terminal value assumes a sustainable growth rate beyond the terminal year.

$$\begin{aligned}
 \text{Terminal Value} &= \frac{\text{CF to Firm}_{n+1}}{(\text{WACC}_{n+1} - g_n)} \\
 &= \frac{13,606 \times (1 + 3.00\%)}{(8.31\% - 3.00\%)} \\
 &= 264,120
 \end{aligned}$$

ICBP's Terminal Value is 264,120 billion, representing the value of its future cash flows beyond the projected period. After calculating the forecasted FCFF for 2023 to 2027 and the terminal value, the next step is to discount these values to the cost of capital.

**Table 5. Present Value of Forecasted FCFF Calculation**

Present Value of Forecasted FCFF	2023F	2024F	2025F	2026F	2027F	Terminal Value
Year Number	1	2	3	4	5	
Free Cash Flow to The Firm	12,586	9,942	11,038	12,255	13,606	264,120
Present Value Factor	0.92	0.85	0.79	0.73	0.67	0.67
<b>PV of FCFF</b>	<b>11,621</b>	<b>8,476</b>	<b>8,689</b>	<b>8,907</b>	<b>9,130</b>	<b>177,230</b>
<b>Enterprise Value</b>	<b>224,052</b>					

The present value of forecasted FCFF and terminal value has been calculated, resulting in an enterprise value of 224,052 billion for ICBP. This serves as the basis for determining the fair stock value. To calculate the fair stock value, adjustments are made for factors like outstanding debt, non-controlling interest, and cash and cash equivalents. The adjusted enterprise value is divided by the number of outstanding shares to determine the fair stock value.

**Table 6. Fair Stock Value Calculation**

Fair Stock Value Calculation	
Enterprise Value	224,052
(-) Debt	57,833
(-) Non-Controlling Interests	20,954
(+) Cash and Cash Equivalents	15,741
Equity Value	161,006
Outstanding Shares	12
<b>Fair Stock Value (Rp)</b>	<b>13,806</b>

The fair stock value calculation in Table 6 resulted in a value of 13,806. This value is used to compare with the current stock price of ICBP in the market. The purpose is to determine if the stock is currently undervalued or overvalued.

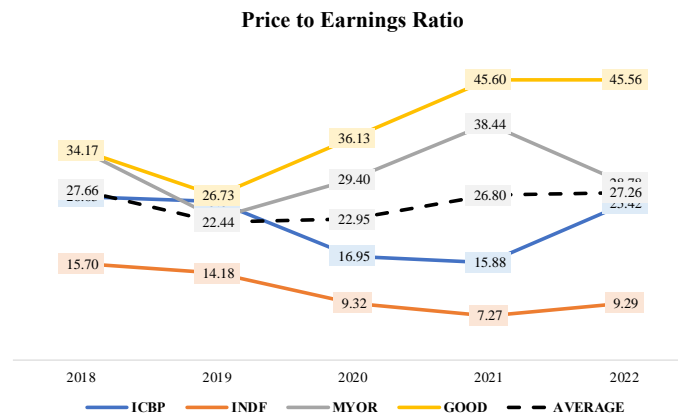
**Table 7. Stock Price Comparison**

Stock Price Comparison	
Fair Stock Value	13,806
Stock Price EOY 2022	10,000
Upside/Downside	27.6%

The fair stock value of ICBP has been compared with its stock price at the end of 2022. It has been found that the stock price at the end of 2022 is lower than the fair stock value. This creates an upside potential of 27.6%, meaning the stock price has the potential to increase by that percentage to align with its estimated fair value. This suggests that the market may have undervalued the stock, presenting an opportunity for potential price appreciation.

### Relative Valuation

#### Price to Earnings Ratio

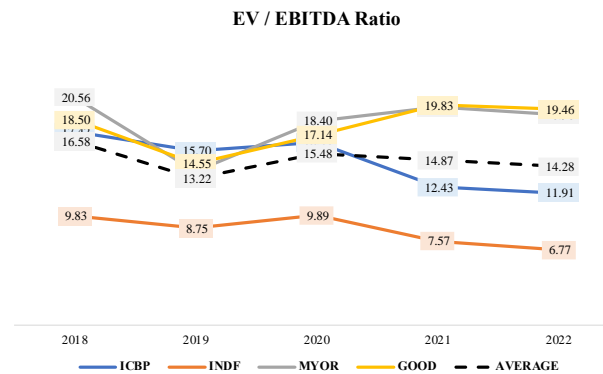


**Figure 8. P/E Ratio Comparison**

ICBP's P/E ratio has fluctuated over the years. In 2018, its P/E ratio was 26.63, indicating potential undervaluation compared to industry peers MYOR and GOOD. However, in 2019, while ICBP's P/E ratio dropped to 25.81, it exceeded the industry average of 22.44, suggesting overvaluation. In 2020 and 2021, ICBP's P/E ratio declined to 16.95 and 15.88, respectively, indicating undervaluation. This presented an investment opportunity. In 2022, ICBP's P/E ratio increased to 25.42, closer to the industry average, reflecting improved earnings performance. These fluctuations suggest potential opportunities for investors seeking companies with strong earnings potential at lower valuations. The lower P/E ratios in 2020 and 2021 indicated undervaluation, while the increase in 2022 reflected market recognition of improved earnings.



## Enterprise Value to EBITDA



**Figure 9. EV/EBITDA Ratio Comparison**

Over the five-year period, ICBP's EV/EBITDA ratio exhibited fluctuations in relation to the industry average and its peers. In 2018, the ratio exceeded the industry average, indicating a higher enterprise value compared to EBITDA. However, it was lower than MYOR and GOOD, suggesting potential undervaluation. In 2019, the ratio remained above the industry average, indicating a higher enterprise value relative to EBITDA. It surpassed MYOR and GOOD, indicating possible overvaluation. In 2020, the ratio rose above the industry average, but began falling below MYOR and GOOD, suggesting potential undervaluation. In 2021 and 2022, ICBP's ratio fell below both the industry average and its peers, indicating potential undervaluation. Overall, ICBP's EV/EBITDA ratios suggest its stock may be undervalued compared to both its peers and the industry, particularly in 2021 and 2022.

## CONCLUSION

Based on the analysis conducted on the financial condition and performance of ICBP, several key findings have emerged. Firstly, the profitability ratios indicate a decline in the company's bottom-line performance, which can be attributed to the higher cost of goods sold resulting from rising commodity prices caused by the Ukraine-Russia conflict. Secondly, the liquidity ratios show fluctuations over time, but there is an overall improvement in the company's ability to meet its short-term financial obligations. Thirdly, the efficiency ratios have experienced a decline, indicating less effective utilization of assets, working capital, and inventory within the company. Additionally, the solvency ratios suggest increasing financial leverage, with higher levels of debt and a declining interest coverage ratio. Lastly, the market value ratios reveal a decrease in the market's willingness to pay a premium for the company's shares, as evidenced by a stagnant dividend yield and an increasing dividend payout ratio.

Furthermore, the intrinsic valuation calculation conducted for ICBP reveals important insights into the company's valuation. The analysis shows that the enterprise value of ICBP amounts to 224,052 billion, while the equity value is determined to be 161,006 billion. Dividing the equity value by the total number of outstanding shares, the fair stock value is estimated to be 13,806 per share. This valuation indicates that ICBP is currently undervalued, with a significant undervaluation of 27.6% when compared to the prevailing share price of 10,000 per share. The relative valuation analysis further reinforces this conclusion, as ICBP's P/E and EV/EBITDA ratios are lower than those of its industry peers. Taking all these factors into consideration, it becomes evident that holds promising potential for future share price appreciation.

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**Devotion - Journal of Research and Community Service**



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