

Valuation of Sharia Stocks Using the Discounted Cash Flow Method with the Free Cash Flow to Firm and Relative Valuation Approaches (Case Study on the IDXHIDIV20 Index for the Period 2019–2023)

Adi Aji Kurniawan¹, Irni Yunita²

Telkom University, Indonesia^{1,2}

Email: adiaji6904@gmail.com¹, irniyunita@telkomuniversity.ac.id²

Abstract

The growing interest in Sharia-compliant investments has intensified the need for in-depth analysis of Islamic stocks, particularly those offering consistently high dividends. Despite the challenges posed by the COVID-19 pandemic, geopolitical conflicts, and political instability, several listed companies have demonstrated solid financial performance. This study aims to assess the intrinsic value prominent Sharia-compliant stocks listed in the IDXHIDIV20 index using the Discounted Cash Flow (DCF) method with a Free Cash Flow to Firm (FCFF) approach. To validate the findings, the Relative Valuation method is employed, utilizing the Price to Earnings Ratio (PER) and Price to Book Value (PBV). The valuation is conducted under three scenarios pessimistic, moderate, and optimistic based on financial reports from 2019 to 2023, projecting FCFF for the 2024 period. The valuation outcomes are then compared to the actual stock prices as of December 2023. The findings indicate that INDF stock is consistently undervalued across all scenarios and valuation approaches, making it a strong investment recommendation. Conversely, ICBP stock tends to be overvalued under the optimistic scenario, reflecting greater sensitivity to market expectations. This study contributes theoretically to the development of valuation methodologies in Islamic finance and offers practical insights for investors seeking value based, Sharia-compliant investment decisions.

Keywords: Sharia Investment, IDXHIDIV20, Discounted Cash Flow, Free Cash Flow to Firm, Relative Valuation, COVID-19 Pandemic.

INTRODUCTION

Investor interest in Sharia-compliant stocks in the global market, particularly in Indonesia, continues to increase, especially among investors who prioritize Sharia principles in managing their investments (Abadi & Wicaksono, 2024; Abiola-Adams et al., 2023; Ryandono et al., 2025). Alongside this growing interest in Sharia-based investments, the need for analysis and valuation of Sharia stocks is also becoming more critical, especially for stocks that offer high dividends (Saputro & Qadri, 2024).

Stocks that provide high dividends are often considered more stable and profitable for investors seeking recurring income (Kania, 2005). The IDXHIDIV20 is a performance index of twenty companies that consistently distribute dividends at relatively high rates (Indonesia Stock Exchange, n.d.). Although the IDXHIDIV20 index is not entirely Sharia-compliant, several large-cap Sharia stocks with consistent dividend histories are included in this index, making it attractive to investors focused on Sharia principles.

The outbreak of the coronavirus, known as COVID-19, had a significant impact on the national stock market and the financial sector as a whole (Chowdhury et al., 2022; Wójcik & Ioannou, 2020). As shown in Figure 1, in 2020, the Indonesian Stock Market reached its lowest point in a decade. This situation negatively affected the capital market in Indonesia, especially in terms of capital market activities (Muhammad & Sunitiyoso, 2024).

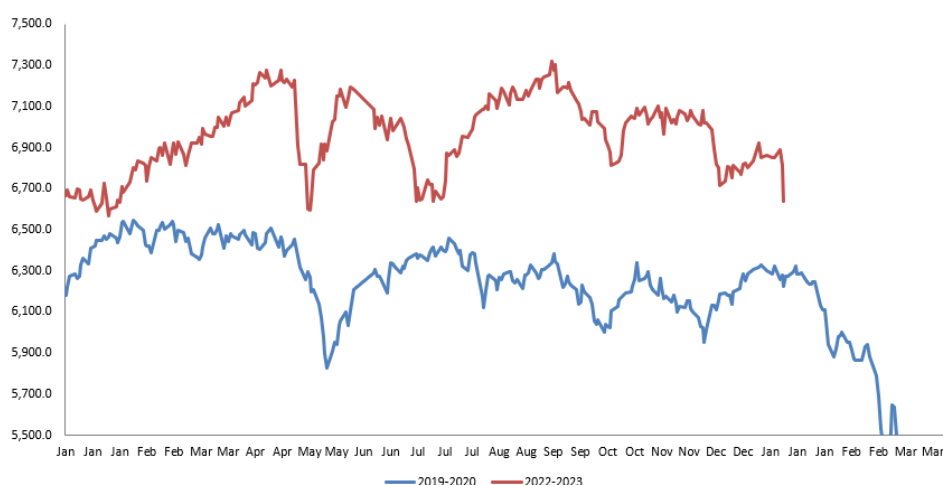


Figure 1. IHSG Price from January 2019 to January 2024
 Source: Bloomberg. Algo Research (data accessed in January 2025)

A survey by the Ministry of Manpower reported that around 88 percent of businesses affected by the pandemic experienced losses. According to the survey, 9 out of 10 businesses in Indonesia were impacted by COVID-19. The online survey data was collected via telephone and email from 1,105 companies with a 95 percent confidence level and a margin of error of 3.1 percent across 32 provinces in Indonesia (Kemnaker, 2020).

Amid the COVID-19 pandemic, several companies remained consistent in generating positive operating income (EBIT). Figure 2 shows a continuous upward trend in ICBP's operating income, with growth of 21.88% in 2020, 27.77% in 2021, 7.50% in 2022, and 17.12% in 2023. Meanwhile, PT Indofood Sukses Makmur Tbk. recorded growth of 27.85% in 2020, 35.71% in 2021, 7.19% in 2022, and 6.80% in 2023.

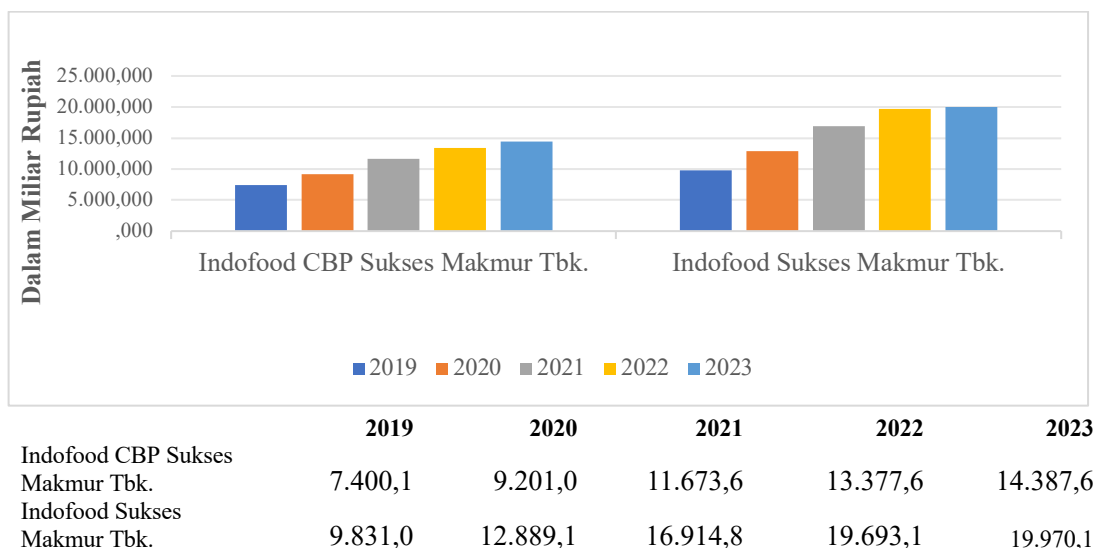


Figure 2. Operating Income (EBIT) of ICBP and INDF
 Source: Company Financial Reports (processed by the author, 2024)

Consistent increases in operating income among certain companies indicate potential profits for investors holding those stocks. However, such conditions may also be accompanied by risks of loss due to stock price fluctuations. Therefore, valuing high-dividend Sharia stocks requires in-depth analysis so that investors can determine the fair value of these stocks before making purchase decisions.

Stock price fluctuations are influenced by several factors. According to Zulfikar (2016), variables that affect stock prices include production reports, contact information, price changes, new product introductions, and product safety. In addition, funding announcements related to debt and equity, changes in management or business structure, diversification reports such as mergers and equity investments, and research developments also influence stock prices.

External factors include various aspects such as government announcements related to interest rates, inflation, economic regulations, and legal announcements, including lawsuits involving the company. Other external influences include dynamics within the securities industry, such as annual meeting announcements, insider trading activities, trading volume, trading restrictions, and stock market conditions affected by political uncertainty, exchange rate fluctuations, and various domestic or international issues.

There are three main approaches to stock valuation, according to Damodaran (2012): Discounted Cash Flow (DCF), Relative Valuation, and Contingent Claim Valuation. To identify future growth potential, this study will employ the Discounted Cash Flow method using the Free Cash Flow to Firm (FCFF) approach.

The basic principle of the Discounted Cash Flow (DCF) method, according to Wira (2014), is that the fair value (present value) of a stock reflects its future cash flows that have been discounted. This method incorporates the time value of money concept. The DCF calculation focuses on income generated from business operations. The concept of free cash flow is based on the assumption that business revenue, minus other costs, yields free cash flow, which belongs to the company's capital providers—both creditors and shareholders.

DCF is used to value a business through several steps. First, a projection of free cash flows (FCF) for the next five to ten years is created. To discount all future FCFs and obtain the present value, an appropriate discount rate is selected, such as using the WACC under the enterprise value approach. The terminal value (TV) represents the present value of all projected cash flows beyond a specific period. The TV and current cash flow values are then added together in the final step (Steiger, 2008). The FCFF method has advantages in calculating the overall value of a company, encompassing both equity and debt elements, and is unaffected by the company's capital structure. Moreover, this method is applicable to various types of companies, including those that do not distribute dividends, as it focuses primarily on operational cash flow.

Due to its ability to accommodate future growth projections and its resilience against accounting manipulation, the FCFF method is considered more objective and appropriate than other approaches, such as the Dividend Discount Model (Haryanto & Kristanti, 2020).

FCFF often needs to be supplemented with the relative valuation approach to provide a more comprehensive overview and ensure that the valuation results align with market conditions (Damodaran, 2012). Relative valuation enables company evaluations against competitors in the same industry, providing additional validation for the reasonableness of FCFF outcomes. Additionally, relative valuation helps identify potential biases in FCFF assumptions, resulting in more proportional valuations that incorporate both fundamental values and market dynamics. Combining these two methods results in a more comprehensive analysis that supports strategic decision-making, such as mergers, acquisitions, or investments.

Hartono (2013) explains that stock value can be analyzed by comparing market value with intrinsic value. If the market value is lower than the intrinsic value, the stock is considered undervalued, as investors are paying less than the actual worth. Conversely, if the market value exceeds the intrinsic value, the stock is considered overvalued. If both values are equal, the stock is considered fairly valued.

In the buy, hold, and sell strategy, investors only buy stocks if the market price is lower than their intrinsic value (undervalued), determined through thorough analysis of the company's fundamentals. After

purchasing undervalued stocks, investors should hold them long-term unless there are fundamental changes in the company's condition. Selling is recommended only when the stock reaches its fair or overvalued level—not based on market fluctuations or temporary sentiment. This approach aims to avoid speculation and prioritize rational investment decisions (Graham et al., 2013).

Fitriyana et al. (2020) emphasize that predicting stock prices is crucial for investment gains. Their study highlights profitability ratios like ROA, ROE, and EPS as key factors influencing stock prices in the consumer goods sector. This supports using financial valuation methods such as the Discounted Cash Flow (DCF) approach, particularly the Free Cash Flow to Firm (FCFF) model, which relies on fundamental performance.

Additionally, stock portfolios play a vital role in risk management. According to Kristanti et al. (2022), portfolios built on financial ratios like Economic Value Added (EVA) and Market Value Added (MVA) show a strong link between returns and risk in the Indonesian stock market. During crises like COVID-19, active portfolio strategies outperformed passive ones, highlighting the importance of selecting stocks based on company performance. This study combines the DCF-FCFF method to estimate intrinsic value from future cash flows with relative valuation techniques using Price to Book Value (PBV) and Price to Earnings Ratio (PER) as market benchmarks. This hybrid approach offers a thorough analysis of Sharia stock investments within the IDXHIIDIV20 index.

Fitriani and Rikumahu (2019) predicted intrinsic values and provided investment recommendations for cement industry stocks. The economic impact of COVID-19 caused higher volatility compared to the IHSG. Their study covered data from 2014–2020 using the FCFF and Relative Valuation methods through optimistic, moderate, and pessimistic scenarios.

Their findings showed that PT Indocement Tungal Prakarsa Tbk (INTP) was overvalued in all 2019 scenarios, PT Solusi Bangun Indonesia Tbk (SMCB) was undervalued in all scenarios, and Semen Indonesia Tbk (SMGR) was overvalued in the pessimistic scenario. In 2021, INTP remained overvalued, SMGR and SMCB were overvalued in pessimistic scenarios, and others were undervalued. Across all scenarios, SMGR's PER was considered low, while its PBV was too high. In 2021, PER of SMGR and SMCB was overvalued in pessimistic and other scenarios, while INTP was overvalued in all scenarios.

The investment recommendation was to buy SMCB and SMGR shares and sell INTP.

Soelistyo and Hendrawan (2020) conducted an additional valuation study using the same method in the automotive and component subsector for 2021 projections. Their findings showed that using the Discounted Cash Flow method, PT Astra International Tbk (ASII) and PT Indospring Tbk (INDS) were overvalued in every scenario, while PT Gajah Tungal Tbk (GJTL) was undervalued in eight scenarios. For pessimistic and moderate scenarios, PT Selamat Sempurna Tbk (SMSM) was overvalued, but in the optimistic scenario, it was undervalued. The Free Cash Flow to Firm method was deemed to better reflect the company's actual condition, as statistical analysis showed a linear correlation between the market stock price and the intrinsic value calculated using this method.

There are three scenarios used in previous research: optimistic, moderate, and pessimistic. These scenarios aim to determine the stock's market value condition—whether it is overvalued, undervalued, or fairly valued. Therefore, the researcher is conducting a study titled:

"Valuation of Sharia Stocks using the Discounted Cash Flow Method With Free Cash Flow to Firm and Relative Valuation Approach (Case Study on Idxhidiv20 Index for the Years 2019–2023)".

Stock price fluctuations pose a risk for investors, making it essential to conduct fundamental analysis using company financial data or stock valuation to determine intrinsic value. The IDXHIIDIV20 index offers added advantages to investors as the companies listed consistently pay annual cash dividends. Based on this background, several research questions are raised: What is the projected fair value of INDF and ICBP stocks using the Discounted Cash Flow method with the Free Cash Flow to Firm approach under optimistic, moderate, and pessimistic scenarios for 2024? What is the estimated fair value of these stocks using the Relative Valuation method with Price to Earnings Ratio and Price to Book Value under the same scenarios? Lastly, should the stocks be held, sold, or bought?

This study aims to analyze the fair value projections of INDF and ICBP stocks by applying the Discounted Cash Flow method and Free Cash Flow to Firm approach under optimistic, moderate, and pessimistic scenarios for 2024. Additionally, the research evaluates stock valuation using Relative Valuation with the Price to Earnings Ratio and Price to Book Value approaches under similar scenarios. The final objective is to provide investment recommendations on whether to hold, sell, or buy INDF and ICBP stocks based on the valuation results.

The study is expected to offer both theoretical and practical benefits. Theoretically, it contributes to the development of capital market studies, offering insights and serving as a useful reference for future research, especially in applying valuation theories through intrinsic value analysis. Practically, it serves as a decision-making tool for investors in determining whether to hold, sell, or buy their stock holdings. Additionally, the research benefits the analyzed companies by helping them understand their intrinsic stock values, thus enhancing their appeal to potential investors.

RESEARCH METHOD

Research is a systematic activity aimed at finding solutions to specific problems through in-depth analysis, including understanding the conditions or situations that occur during the research period (2016). This study will employ a descriptive method, which is grounded in the philosophy of positivism. Descriptive research is conducted to understand and explain the characteristics of variables within a particular context. This method provides researchers with an overview of various aspects relevant to the observed phenomenon, such as individuals, organizations, industry dynamics, or other perspectives (Sekaran & Bougie, 2016).

Based on the research context, this study falls under a non-contrived setting. A non-contrived setting refers to research conducted in a natural environment or under normal conditions as they exist. In terms of the researcher's involvement, this study is classified as a non-intervention study, where the researcher does not manipulate or alter the data used, as only secondary data is utilized. From the perspective of the unit of analysis, this study is categorized as a group-level research since it focuses solely on one group of data, namely the IDXHIDIV20 index stocks listed on the Indonesia Stock Exchange in 2024. Based on the duration of data collection, this study is considered longitudinal.

Purposive sampling will be used to determine the sample. Purposive sampling is a technique of selecting samples based on specific criteria so that the results can provide relevant solutions to the research problem (Sekaran & Bougie, 2016). The sample criteria include companies Indofood CBP Sukses Makmur Tbk. and Indofood Sukses Makmur Tbk., which are listed on the Indonesia Stock Exchange and have audited financial statements for at least the past five years.

RESULT AND DISCUSSION

Cost Structure and Profitability Analysis

The cost structure and profitability analysis presented in Table 4.6 reveals fundamental differences between ICBP and INDF in terms of operational efficiency and profit-generating capacity. ICBP has an average EBITDA margin of 19.75% and an EBIT margin of 17.53%, which are significantly higher than INDF's margins of 16.02% and 12.63%, respectively. These higher margins reflect better cost efficiency and operational management effectiveness, which are crucial elements in the Free Cash Flow to Firm (FCFF) valuation approach.

The cost of goods sold (COGS) at ICBP averaged 64.54%, which is lower than INDF's 68.40%. This difference indicates that ICBP is more efficient in managing its production cost structure. Additionally, selling, general, and administrative (SG&A) expenses for ICBP were also lower at 14.31% compared to INDF's 15.22%. This cost efficiency supports stable operating income and improves the reliability of future cash flow projections, which ultimately enhances the intrinsic value of the company's stock under the FCFF valuation approach.

Furthermore, INDF recorded higher depreciation expenses (3.39%) compared to ICBP (2.22%). While higher non-cash charges at INDF reduce operating profit, they do not directly affect cash flows. On

the other hand, the lower depreciation at ICBP contributes to higher net operating cash flows, which is a key component in calculating free cash flow. As a result, ICBP's projected FCFF tends to be larger and more stable, thus increasing the valuation of its shares.

In the relative valuation approach, using metrics such as the Price-to-Earnings (P/E) ratio and Enterprise Value to EBITDA (EV/EBITDA), ICBP also demonstrates higher valuation potential. Its superior profit margins and better cost efficiency justify a premium valuation by investors. Companies with solid operational performance are generally assumed to carry lower business risk, leading to a lower discount rate (WACC) and higher valuation.

Overall, ICBP's stronger operational performance compared to INDF positively influences its stock valuation. Cost efficiency, high profit margins, and strong cash flows enhance valuation results using both the FCFF and relative valuation approaches. Therefore, differences in cost structure and profitability are key factors in determining the fair value of each company's stock.

4.1.2 Analysis of Capital Expenditure (CAPEX) Performance Relative to Revenue

Capital Expenditure (CAPEX) refers to a company's investment in the form of spending for the purchase, enhancement, or maintenance of fixed assets necessary to support the continuity and growth of its business operations. To understand the long-term direction and pattern of company investment, this study analyzes the percentage of CAPEX relative to revenue over the past five years.

This ratio is calculated annually to identify the company's tendencies in allocating funds to fixed assets and to evaluate the implications for overall financial performance. The results of this analysis provide insight into the consistency of the company's investment strategy and the potential contribution of CAPEX to future revenue growth.

Table 1 CAPEX to Revenue Ratio – ICBP and INDF

	<i>Historical ICBP</i>				
	2019	2020	2021	2022	2023
<i>(IDR in millions)</i>					
Revenue	42.296.703	46.641.048	56.803.733	64.797.516	67.909.901
CAPEX	2.033.838	1.919.170	2.249.751	1.788.876	1.823.830
Percentage of CAPEX to Revenue	4,8%	4,1%	4,0%	2,8%	2,7%
	<i>Historical INDF</i>				
	2019	2020	2021	2022	2023
<i>(IDR in millions)</i>					
Revenue	76.592.955	81.731.469	99.345.618	110.830.272	111.703.611
CAPEX	4.657.775	4.592.304	4.784.668	3.979.013	3.967.864
Percentage of CAPEX to Revenue	6,1%	5,6%	4,8%	3,6%	3,6%
Entity	Average		MIN	MAX	
ICBP			3,68%.	2,7%	4,8%
INDF			4,74%	3,6%	6,1%

Source: Company Financial Statements (processed by author), 2025

Table 1 is based on the operational performance data of the companies over the past five years. The CAPEX figures presented are calculated from the growth of fixed assets and then compared to total revenue. This approach is used to assess the proportion of fixed asset investment relative to revenue, thereby

providing insight into the company's capital spending policies and the efficiency of resource allocation in expansion or asset maintenance activities.

During the observation period (2019–2023), the CAPEX performance of PT Indofood CBP Sukses Makmur Tbk (ICBP) and PT Indofood Sukses Makmur Tbk (INDF) showed a declining trend. ICBP posted an average CAPEX-to-revenue ratio of 3.68%, with the highest being 4.8% in 2019 and the lowest at 2.7% in 2023. Meanwhile, INDF recorded an average ratio of 4.74%, peaking at 6.1% in 2019 and declining to 3.6% in 2022 and 2023. The downward trend has been more pronounced since 2021, with ICBP experiencing a more significant decline than INDF. This indicates growing pressure on the performance of both companies during the analysis period.

4.1.3 Analysis of Working Capital in Relation to Revenue

The analysis of working capital components as a percentage of revenue aims to evaluate the company's operational efficiency in managing its current assets to support business activities. In this context, working capital is defined as the total of trade accounts receivable and inventories minus trade accounts payable.

The purpose of this analysis is to identify the company's annual working capital requirements as part of the valuation process using the discounted cash flow (DCF) method with the Free Cash Flow to Firm (FCFF) approach. One of the key indicators examined is the working capital-to-revenue ratio, as shown in the following table.

Table 2 Working Capital to Revenue Ratio

<i>(IDR in millions)</i>		<i>Historical ICBP</i>				
		2019	2020	2021	2022	2023
Revenue		42.296.703	46.641.048	56.803.733	64.797.516	67.909.901
Working Capital	Trade accounts receivable	4.049.290	5.273.416	6.400.930	6.875.504	7.198.158
	Trade accounts payable	2.635.433	3.045.111	3.585.935	3.702.979	3.773.969
	Inventories	3.840.690	4.586.940	5.857.217	7.132.321	6.329.482
Presentase Working Capital terhadap pendapatan		12,42%	14,61%	15,27%	15,90%	14,36%
<i>(IDR in millions)</i>		<i>Historical INDF</i>				
		2019	2020	2021	2022	2023
Revenue		76.592.955	81.731.469	99.345.618	110.830.272	111.703.611
Working Capital	Trade accounts receivable	5.406.033	6.429.130	7.626.041	8.280.536	79.78.466
	Trade accounts payable	4.521.883	4.407.555	5.157.135	5.372.311	5.353.795
	Inventories	103.76.325	11.150.432	13.557.229	17.287.007	15.977.913
Presentase Working Capital terhadap pendapatan		8,77%	12,78%	13,87%	21,79%	27,03%
Entitas		Average		MIN	MAX	

ICBP	14,51%	12,42%	15,90%
INDF	16,85%	8,77%	27,03%

Source: Company Financial Reports (processed by the author), 2025

During the 2019–2023 period, ICBP’s working capital-to-revenue ratio exhibited a relatively stable trend, ranging from 12.42% to 15.90%, with an average of 14.51%. This stability reflects consistency in managing working capital and management’s ability to control current asset components. The gradual increase from 2019 to 2022 indicates operational growth accompanied by a proportionate rise in working capital needs. Meanwhile, the decline in 2023 to 14.36%, despite increased revenue, suggests internal efficiency or improvements in inventory and receivables management. From a managerial perspective, stable and proportional working capital management relative to revenue is a positive indicator of corporate liquidity and reflects the effectiveness of operational strategies in balancing growth with efficiency.

In contrast, the parent company INDF exhibited a more volatile and significantly increasing working capital-to-revenue ratio, rising from 8.77% in 2019 to 27.03% in 2023. The five-year average ratio reached 16.85%, with the most significant surges occurring in 2022 and 2023. This rise was driven by a sharp increase in inventory values, indicating an accumulation of work-in-process goods, raw materials, or finished products that had not yet been absorbed by the market.

This phenomenon may be interpreted as a response to global market dynamics, supply chain disruptions, or corporate policies aimed at stockpiling raw materials. However, excessively high ratios may indicate inefficiencies in managing current assets, especially in terms of inventory and receivables control. From a financial management standpoint, a high working capital ratio can negatively impact operational cash flow, as a large portion of company funds is tied up in illiquid assets. This becomes a strategic concern for management to ensure that the deployed working capital can be effectively converted into revenue.

The contrasting characteristics of working capital management between ICBP and INDF offer meaningful insight in the context of equity valuation using the Free Cash Flow to Firm (FCFF) method. ICBP’s stable working capital suggests the potential for more predictable and consistent free cash flows, which leads to more reliable intrinsic value estimates. On the other hand, high volatility in INDF’s working capital can introduce variability in future cash flow projections, increasing uncertainty in determining its fair stock value.

Therefore, working capital management is a critical factor that not only reflects operational efficiency but also significantly influences valuation outcomes and investor decision-making.

Valuation Calculation

The company valuation process in this study is conducted using 2023 as the primary projection year, based on simulations derived from historical data over the last five years (2019–2023). The use of historical data aims to produce a more representative valuation estimate by taking into account the trends in financial performance and operational dynamics of the company throughout that period.

1. Estimating the Cost of Equity

The cost of equity is calculated using the Capital Asset Pricing Model (CAPM), which includes three main components: the risk-free rate, the market risk premium, and the company’s beta. The risk-free rate is taken from the average benchmark interest rate set by Bank Indonesia (BI Rate). The market risk premium is calculated as the difference between the market return—measured by the movement of the Jakarta Composite Index (IHSG) from January 1 to December 31, 2023—and the risk-free rate. The beta value is obtained from PEFINDO, a rating agency established by the cooperation of Bapepam-LK and Bank Indonesia to measure a company’s systematic risk.

2. Estimating the Cost of Debt

The cost of debt reflects the expense borne by the company when borrowing funds to finance its assets. This cost represents the obligation to pay interest to creditors and is typically calculated based on the average interest rate across all existing loans.

To determine the cost of debt, the study uses the average base lending rate for corporations as published by the Financial Services Authority (OJK). This data is gathered from four of Indonesia's largest banks by total assets: Bank Rakyat Indonesia (BRI), Bank Mandiri, Bank Central Asia (BCA), and Bank Negara Indonesia (BNI).

Table 3 Corporate Base Lending Rates and Tax Rates (ICBP, INDF)

Bank	SBDK Korporasi (%)	Periode Data
Bank Central Asia (BCA)	7,82	31 Januari 2025
Bank Negara Indonesia (BNI)	8,41	7 Maret 2025
Bank Mandiri	8,50	28 Februari 2025
Bank Rakyat Indonesia (BRI)	8,00	Oktober 2023
Average	8,18	

<i>Historical tax rate</i>	2019	2020	2021	2022	2023	AVG
ICBP	27,93%	25,51%	20,48%	23,96%	26,03%	25,51%
INDF	27,93%	25,51%	20,48%	23,96%	26,03%	25,51%

$$\text{Cost of Debt} = \text{Interest Rate} \times (1 - \text{Tax Rate}) \quad (2.15)$$

$$\text{Cost of Debt ICBP} = 0,0818 \times (1 - 0,2552) = 0,0818 \times 0,7448 = \mathbf{0,0609}$$

$$\text{Cost of Debt INDF} = 0,0818 \times (1 - 0,2552) = 0,0818 \times 0,7448 = \mathbf{0,0609}$$

Weighted Average Cost of Capital (WACC)

The results of the equity and debt cost calculations are then used in the Weighted Average Cost of Capital (WACC) formula, considering the proportion of equity and liabilities in each company's capital structure. The resulting WACC serves as the discount rate in estimating the company's value.

$$WACC = \frac{\text{Equity}}{\text{Debt} + \text{Equity}} \times \text{Cost of Equity} + \frac{\text{Debt}}{\text{Debt} + \text{Equity}} \times \text{Cost of Debt} \quad (2.15)$$

Table 4 WACC Components and Results

WACC Component	ICBP	INDF
Long-term bond rate	6,85%	6,85%
Equity market risk premium	8,4%	8,4%
Adjusted beta	0,6	0,83
Additional risk adjustments	0,25%	0,25
Cost of equity	12,15%	14,1%
Tax rate	25,51%	25,51%
Debt/Equity ratio	0,35	1,03
Cost of debt	6,09%	6,09%
WACC	10,18%	9,33%

Source: Author's calculation (2025)

Based on Table 4, the WACC for PT Indofood CBP Sukses Makmur Tbk (ICBP) is recorded at 10.18%, higher than PT Indofood Sukses Makmur Tbk (INDF) which is at 9.33%. This difference reflects the variations in funding structure and risk levels between the two entities.

ICBP has a debt-to-equity ratio (DER) of 0.35, indicating that the company relies more on equity financing. This reliance raises the overall cost of capital, as equity is generally more expensive than debt. Conversely, INDF has a DER of 1.03, showing a heavier dependence on debt financing, which is relatively cheaper after considering tax benefits.

In terms of equity cost (Cost of Equity), ICBP posts 12.15%, which is lower than INDF's 14.1%. This difference is due to ICBP's lower beta value (0.6 vs. 0.83), reflecting lower systematic market risk. Meanwhile, the cost of debt is the same for both companies at 6.09%, though there are minor differences in their tax treatments.

Overall, ICBP's greater reliance on equity increases its overall capital cost. On the other hand, INDF's more aggressive use of leverage improves capital cost efficiency but also increases financial risk.

4.2.2 Projected Revenue and EBIT Growth

Financial projections are conducted through simulations over the next five years, based on historical data from 2019 to 2023. These projections are divided into three scenarios: optimistic, moderate, and pessimistic. The following approach is applied to support the analysis:

- a. The company's average historical revenue growth
- b. The industry's average historical growth
- c. The spread, defined as the absolute difference between the company's average growth and the industry's average growth

The simulation follows the projection model of Fitriani & Rikumahu (2019), which suggests two conditions when comparing historical growth:

- a. If the company's average historical growth is higher than the industry's:
 - Optimistic: Company average + spread
 - Moderate: Company average
 - Pessimistic: Industry average
- b. If the industry's average historical growth is higher than the company's:
 - Optimistic: Industry average + spread
 - Moderate: Industry average
 - Pessimistic: Company average

Based on this method and historical data, the projected revenue growth for ICBP and INDF in 2024, used for valuation, is as follows:

Table 5 Projected Company Growth for 2024

<i>Income Statement (IDR in millions)</i>	<i>Historical ICBP</i>				
	2019	2020	2021	2022	2023
<i>Revenue</i>	42.296.703	46.641.048	56.803.733	64.797.516	67.909.901
<i>Cost of goods sold</i>	(27.892.690)	(29.416.673)	(36.516.449)	(43.005.230)	(42.783.641)
<i>Gross profits</i>	14.404.013	17.224.375	20.287.284	21.792.286	25.126.260
<i>Selling, G&A expenses</i>	(6.566.668)	(7.309.168)	(7.804.155)	(8.336.913)	(9.344.089)
<i>Net other income/(expense)</i>	(355.349)	(876.034)	(765.371)	(856.222)	(1.080.392)
<i>Depreciation & amortisation</i>	1.026.760	1.112.392	1.271.005	1.329.299	1.376.517
<i>EBITDA</i>	8.508.756	10.151.565	12.988.763	13.928.450	16.078.296
<i>Net financial income/(expense)</i>	(45.024)	919.474	(1.767.588)	(5.073.766)	(3.257.086)
<i>Profit before tax</i>	7.436.972	9.958.647	9.950.170	7.525.385	11.444.693
<i>Corporate income tax</i>	(2.076.943)	(2.540.073)	(2.038.227)	(1.803.191)	(2.979.570)
<i>Net profit after tax</i>	5.360.029	7.418.574	7.911.943	5.722.194	8.465.123

Adi Aji Kurniawan, Irni Yunita

<i>Revenue & Expenses Forecast ICBP (IDR in millions)</i>		<i>Projections (Pesimis)</i>	<i>Projections (Moderate)</i>	<i>Projections (Optimis)</i>
	2023	20232024	20232024	20232024
Revenue	67.909.901	71.169.576	76.534.458	82.170.980
% Growth	12,7%	4,43%	12,73%	21,03%
Cost of goods sold	(42.783.641)	(44.836.833)	(48.216.7	(51.767.718)
% of Revenue	63%	63%	63%	63%
Selling, G&A expenses	(9.344.089)	(9.792.605)	(10.530.7	(11.306.348)
% of Revenue	14%	14%	14%	14%
Net interest incomes/expenses	(3.257.086)	(3.413.426)	(3.670.736)	(3.941.074)
% of Revenue	-4,8%	-4,8%	-4,8%	-4,8%
Other incomes/expenses	(1.080.392)	(1.132.251)	(1.217.602)	(1.307.274)
% of Revenue	-1,6%	-1,6%	-1,6%	-1,6%
Tax expense	(2.979.570)	(3.059.787)	(3.290.4	(3.532.769)
Tax rate	26%	26%	26%	26%
Net profit	8.465.123	8.934.674	9.608.185	10.315.797
% Margin	12,7%	4,8%	12,7%	12,7%

<i>Income Statement (IDR in millions)</i>	<i>Historical INDF</i>				
	2019	2020	2021	2022	2023
Revenue	76592955	81731469	99345618	110830272	111703611
Cost of goods sold	-53876594	-54979425	-66871514	-76858593	-75653142
Gross profits	22.716.361	26.752.044	32.474.104	33.971.679	36.050.469
Selling, G&A expenses	-12781881	-13535154	-15027632	-14965651	-15899426
Net other income/(expense)	74.939	-527323	(431.850)	(533.857)	(281.543)
Depreciation & amortisation	3.014.292	3.075.001	3.249.512	3.269.799	3.383.984
EBITDA	13.023.711	15.764.568	20.264.134	21.741.970	23.253.484
Net financial income/(expense)	(1.260.022)	(263.233)	-2525969	(6.153.406)	(4.254.116)
Profit before tax	8.749.397	12.426.334	14.488.653	12.318.765	15.615.384
Corporate income tax	(2.846.668)	(3.674.268)	(3.258.958)	(3.674.268)	(4.121.651)
Net profit after tax	5.902.729	8.752.066	11.229.695	8.644.497	11.493.733

<i>Revenue & Expenses Forecast INDF (IDR in millions)</i>	<i>Projections</i>			
	2023	20232024	20232024	20232024
		<i>Projections (Pesimis)</i>	<i>Projections (Moderate)</i>	<i>Projections (Optimis)</i>
<i>Revenue</i>	111.703.611	116.652.081	120.751.603	124.851.126
% Growth	8,10%	4%	8,10%	11,77%
<i>Cost of goods sold</i>	(75.653.142)	(79.323.415)	(82.111.090)	(84.898.766)
% of Revenue	68%	68%	68%	68%
<i>Selling, G&A expenses</i>	(15.899.426)	(16.603.771)	(17.187.280)	(17.770.788)
% of Revenue	14%	14%	14%	14%
<i>Net interest incomes/expenses</i>	(4.254.116)	(4.442.573)	(4.598.699)	(4.754.825)
% of Revenue	-3,8%	-3,8%	-3,8%	-3,8%
<i>Other incomes/expenses</i>	(281.543)	(294.015)	(304.348)	(314.681)
% of Revenue	-0,3%	-0,3%	-0,3%	-0,3%
<i>Tax expense</i>	(4.121.651)	(4.078.617)	(4.221.953)	(4.365.288)
Tax rate	26%	26%	26%	26%
<i>Net profit</i>	11.493.733	11.909.690	12.328.234	12.746.778
% Margin	10%	10%	10%	10%

<i>Description</i>	ICBP	INDF
<i>Historical average growth</i>	12,73%	8,10%
<i>Industry average growth spread</i>	4,43%	4,43%
	8,30%	3,68%
<i>Forecasting Scenario</i>		
<i>Optimistic</i>	21,76%	11,49%
<i>Moderate</i>	12,73%	8,10%
<i>Pesimistic</i>	4,80%	5,19%

Table 5, which presents the projected financial performance for 2024, indicates that PT Indofood CBP Sukses Makmur Tbk (ICBP) has the potential to record more aggressive revenue growth compared to its parent company, PT Indofood Sukses Makmur Tbk (INDF). Under the optimistic scenario, ICBP is expected to achieve revenue of IDR 82 trillion, while INDF is projected to reach IDR 124.8 trillion. ICBP's highest annual growth rate is predicted to reach 21.76%, driven by both domestic and international market expansion as well as stable raw material prices. In contrast, INDF is projected to grow by 11.49%, primarily supported by its agribusiness and branded consumer products segments.

In the moderate scenario, ICBP's revenue is forecasted to increase by 12.73% and INDF's by 8.10%, which still exceeds the national average growth projection for the food and beverage industry, estimated at around 4.43%. Meanwhile, in the pessimistic scenario, both ICBP and INDF are expected to grow modestly

at 4.43%, reflecting external challenges such as weakening consumer purchasing power and rising operational costs due to inflation and raw material price volatility. From an investment perspective, ICBP is considered to have more dynamic growth potential, albeit with relatively higher risks.

On the other hand, INDF exhibits more stable characteristics, attributed to its diversified business portfolio. Therefore, investment analysis for both companies should be conducted comprehensively, taking into account macroeconomic factors, commodity price volatility, and government policies that may affect long-term financial performance.

To estimate Earnings Before Interest and Tax (EBIT) as an indicator of operational performance, calculations were based on the difference between projected revenue and estimated operating expenses, including depreciation and amortization. The operating expense estimate was determined using the company's historical average cost-to-revenue ratio, derived from data for the 2019 to 2023 period. This ratio was applied to all three projection scenarios (optimistic, moderate, and pessimistic) for the year 2024.

Table 6 Projected Costs and EBIT for 2024

<i>Description</i>	ICBP	INDF
	2024	2024
Historical Average Revenue Growth (%)	12,73%	8,10%
Cost of Goods Sold (COGS)	67,30%	71,27%
Marketing Expenses	4,96%	4,66%
General and Administrative Expenses	7,18%	6,81%
EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization)	21,29%	17,51%
Depreciation	2,69%	2,54%
EBIT (Earnings Before Interest and Taxes)	18,58%	14,97%

In 2024, ICBP is projected to earn IDR 76.55 trillion in revenue, while INDF is expected to earn IDR 112.97 trillion. Operational efficiency is reflected in ICBP's EBITDA margin of 21.29%, outperforming INDF's 17.51%. ICBP's cost of goods sold (67.30%) is also lower than INDF's (71.27%), contributing to higher gross margins.

ICBP's EBIT is forecasted to reach IDR 14.23 trillion, while INDF's is IDR 16.90 trillion. Although INDF has a higher nominal EBIT, ICBP has a better EBIT margin (18.58% vs. 14.97%), indicating greater efficiency in converting revenue into profit, and enhancing long-term profitability.

Free Cash Flow to the Firm (FCFF) and Firm Valuation. FCFF projections estimate the future cash flow the company can generate. It is calculated using the following formula based on Damodaran (2012):

$$\text{Free Cash Flow to Firm} = (\text{EBIT} (1 - \text{Tax})) + \text{Depreciation} - \text{Capital Expenditure} - \text{Perubahan Modal Kerja (Working Capital)} \quad (2.2)$$

Following FCFF calculation, a Terminal Value is estimated to represent the perpetuity value of future cash flows assuming constant growth.

$$\text{Terminal value} = \sum_{t=1}^{t=n} \frac{CF_t}{(1+K_c)^t} + \frac{\text{Terminal value}_n}{(1+K_c)^n} \quad (2.12)$$

Table 7 FCFF and Terminal Value for ICBP and INDF (in million IDR)

<i>(IDR in millions)</i>	Projections				
	ICBP (Pesimis)				
	FY24	FY25	FY26	FY27	FY28
					Terminal

American Journal of Economic and Management Business
Vol. 4 No. 5, May 2025

<i>Profit before tax</i>	11.994.461	12.570.195	13.173.564	13.805.896	14.468.579	13.816.013
<i>(-) Net interest income/expense</i>	(3.413.426)	(3.577.271)	(3.748.980)	(3.928.931)	(4.117.519)	(3.931.810)
<i>(+) Depreciation & Armortization</i>	2.092.868	2.284.486	2.449.510	2.755.923	3.102.129	2.769.187
EBITDA	17.500.755	18.431.952	19.372.054	20.490.749	21.688.227	20.517.010
<i>(-) Tax</i>	3.059.787	3.206.657	3.360.576	3.521.884	3.690.934	3.524.465
<i>(-): Capex</i>	2.609.107	2.734.345	2.865.593	3.003.142	3.147.292	3.005.342
<i>(-): Change in NWC</i>	965.460	483.283	377.473	679.226	560.893	539.197
FCFF	10.866.400	12.007.668	12.768.411	13.286.498	14.289.107	13.448.005
261.811.720						
Terminal value						
Projections						
ICBP (Moderate)						
<i>(IDR in millions)</i>						
	FY24	FY25	FY26	FY27	FY28	Terminal
<i>Profit before tax</i>	12.898.624	14.536.749	16.382.916	18.463.546	20.808.417	18.551.626
<i>(-) Net interest income/expense</i>	(3.670.736)	(4.136.919)	(4.662.308)	(5.254.421)	(5.921.733)	(5.279.487)
<i>(+) Depreciation & Armortization</i>	2.092.868	2.284.486	2.449.510	2.755.923	3.102.129	2.769.187
EBITDA	18.662.228	20.958.154	23.494.734	26.473.891	29.832.278	26.600.301
<i>(-) Tax</i>	3.290.439	3.708.325	4.179.282	4.710.051	5.308.227	4.732.520
<i>(-): Capex</i>	2.805.786	3.162.121	3.563.711	4.016.302	4.526.372	4.035.461
<i>(-): Change in NWC</i>	1.773.486	1.427.827	1.446.002	1.993.945	2.042.542	1.827.496
FCFF	10.792.516	12.659.882	14.305.739	15.753.593	17.955.137	16.004.823
311.588.982						
Terminal value						
Projections						
ICBP (Optimis)						
<i>(IDR in millions)</i>						
	FY24	FY25	FY26	FY27	FY28	Terminal
<i>Profit before tax</i>	13.848.567	16.756.766	20.275.686	24.533.581	29.685.632	24.831.633
<i>(-) Net interest income/expense</i>	(3.941.074)	(4.768.700)	(5.770.127)	(6.981.853)	(8.448.042)	(7.066.674)
<i>(+) Depreciation & Armortization</i>	2.092.868	2.284.486	2.449.510	2.755.923	3.102.129	2.769.187
EBITDA	19.882.509	23.809.951	28.495.323	34.271.357	41.235.804	34.667.494
<i>(-) Tax</i>	3.532.769	4.274.651	5.172.328	6.258.516	7.572.805	6.334.550

Adi Aji Kurniawan, Irni Yunita

<i>(-): Capex</i>	3.012.424	3.645.033	4.410.489	5.336.692	6.457.398	5.401.526
<i>(-): Change in NWC</i>	2.622.425	2.557.342	2.889.390	3.962.065	4.518.314	3.789.923
FCFF	10.714.890	13.332.926	16.023.116	18.714.083	22.687.288	19.141.496
372.655.111						
Terminal value						

<i>(IDR in millions)</i>	Projections INDF Pesimis					
	FY24	FY25	FY26	FY27	FY28	Terminal
<i>Profit before tax</i>	15.988.307	16.696.589	17.436.248	18.208.673	19.015.317	18.220.079
<i>(-) Net interest income/expense</i>	(4.442.573)	(4.639.379)	(4.844.904)	(5.059.533)	(5.283.670)	(5.062.702)
<i>(+) Depreciation & Armortization</i>	4.558.847	2.546.310	5.035.746	5.489.789	5.989.185	5.504.907
EBITDA	24.989.727	23.882.278	27.316.898	28.757.995	30.288.173	28.787.689
<i>(-) Tax</i>	4.078.617	4.259.300	4.447.987	4.645.033	4.850.807	4.647.942
<i>(-): Capex</i>	5.470.381	5.756.818	6.004.655	6.249.226	6.464.847	6.239.576
<i>(-): Change in NWC</i>	1.198.260	1.184.225	596.132	1.076.616	1.041.038	904.595
FCFF	14.242.469	12.681.936	16.268.124	16.787.120	17.931.481	16.995.575
393.291.340						
Terminal value						

<i>(IDR in millions)</i>	Projections INDF Moderate					
	FY24	FY25	FY26	FY27	FY28	Terminal
<i>Profit before tax</i>	16.550.186	17.890.751	19.339.902	20.906.434	22.599.855	20.948.731
<i>(-) Net interest income/expense</i>	(4.598.699)	(4.971.194)	(5.373.861)	(5.809.143)	(6.279.684)	(5.820.896)
<i>(+) Depreciation & Armortization</i>	4.558.847	2.546.310	5.035.746	5.489.789	5.989.185	5.504.907
EBITDA	25.707.733	25.408.255	29.749.509	32.205.367	34.868.725	32.274.534
<i>(-) Tax</i>	4.221.953	4.563.931	4.933.609	5.333.231	5.765.223	5.344.021
<i>(-): Capex</i>	5.470.381	5.756.818	6.004.655	6.249.226	6.464.847	6.239.576
<i>(-): Change in NWC</i>	1.894.124	1.989.241	1.451.444	2.077.361	2.151.522	1.893.442
FCFF	14.121.275	13.098.266	17.359.801	18.545.548	20.487.133	18.797.494
434.989.199						
Terminal value						

American Journal of Economic and Management Business
Vol. 4 No. 5, May 2025

<i>(IDR in millions)</i>	<i>Projections INDF Optimis</i>					
	FY24	FY25	FY26	FY27	FY28	Terminal
<i>Profit before tax</i>	17.112.066	19.126.156	21.377.305	23.893.413	26.705.668	23.992.129
<i>(-) Net interest income/expense</i>	(4.754.825)	(5.314.468)	(5.939.981)	(6.639.117)	(7.420.541)	(6.666.547)
<i>(+) Depreciation & Armortization</i>	4.558.847	2.546.310	5.035.746	5.489.789	5.989.185	5.504.907
EBITDA	26.425.738	26.986.934	32.353.032	36.022.319	40.115.395	36.163.582
<i>(-) Tax</i>	4.365.288	4.879.082	5.453.350	6.095.210	6.812.616	6.120.392
<i>(-): Capex</i>	5.470.381	5.756.818	6.004.655	6.249.226	6.464.847	6.239.576
<i>(-): Change in NWC</i>	2.589.988	2.846.092	2.420.463	3.272.450	3.551.787	3.081.567
FCFF	14.000.081	13.504.942	18.474.564	20.405.433	23.286.145	20.722.047
			479.524.920			
Terminal value						

The Value of the Firm is derived from the present value (PV) of all future FCFF, discounted using the Weighted Average Cost of Capital (WACC). The results are presented in three scenarios—pessimistic, moderate, and optimistic—to provide a comprehensive outlook under varying assumptions.

Table 8 Valuation Summary (in million IDR)

Description	ICBP			INDF		
	Pessimistic	Moderate	Optimistic	Pessimistic	Moderate	Optimistic
<i>Total PV FCFF (Million IDR)</i>	109.384.364	130.181.195	155.694.490	176.239.517	194.924.928	214.882.027
<i>PV of Terminal Value (Million IDR)</i>	261.811.720	311.588.982	372.655.111	393.291.340	434.989.199	479.524.920
Enterprise Value (Million IDR)	144.440.431	169.180.284	199.447.713	221.512.603	243.065.575	266.063.251
<i>Liability (Million IDR)</i>	65.759.150	65.759.150	65.759.150	86.123.100	86.123.100	86.123.100
Equity Value (Million IDR)	78.681.281	103.421.134	133.688.563	135.389.503	156.942.475	179.940.151
<i>Outstanding Shares</i>	11.662	11.662	11.662	8.780	8.780	8.780
Value per shares	6.746,81	8.868,22	11.463,61	15.420,22	17.875,00	20.494,32
Market Value		11.375			7.700	

Based on the FCFF approach, the intrinsic value of ICBP shares in the optimistic scenario is IDR 11,237.63, which is slightly below the market price of IDR 11,375. In moderate and pessimistic scenarios, the intrinsic value falls below the market price, indicating that the stock is near its fair value, especially under optimistic assumptions.

In contrast, INDF's stock appears undervalued in all scenarios. Its intrinsic value ranges from IDR 6,396.24 to IDR 12,612.74, consistently exceeding its market price of IDR 7,700. This suggests potential for price appreciation if the market adjusts to reflect the company's fundamentals.

Under the optimistic scenario, ICBP's Enterprise Value reaches IDR 196.81 trillion, while INDF's is IDR 222.14 trillion. After deducting liabilities, the resulting equity values are IDR 131.05 trillion for ICBP and IDR 110.74 trillion for INDF.

These findings suggest that INDF's stock has room for future price growth, whereas ICBP stock is already trading near its intrinsic value.

Discussion

This study is closely related to several previous studies that implemented stock valuation approaches based on Free Cash Flow to Firm (FCFF) and Relative Valuation. Most of the prior research focused on specific sectors such as banking, construction, mining, real estate, food and beverage, as well as energy and oil & gas. These sectoral focuses reflect efforts to identify unique valuation characteristics within each industry.

For instance, Fitriani and Rikumahu (2019) and Hendrawan et al. (2020) demonstrated that the FCFF approach is capable of revealing intrinsic stock values that are either undervalued or overvalued in the cement sector, taking into account various economic scenarios. These findings suggest that the FCFF method has analytical flexibility to capture industry dynamics and is responsive to macroeconomic fluctuations, including those triggered by global crises such as the COVID-19 pandemic.

Furthermore, studies by Cahyono and Hendrawan (2020), as well as Fibrianto and Hendrawan (2020), in the mining and energy sectors strengthen the premise that the FCFF method often produces valuation estimates that differ from market ratio approaches such as Price to Earnings Ratio (PER) and Price to Book Value (PBV). This discrepancy highlights that the two methods can be complementary in constructing a more holistic view of a stock's fair value. In addition, research by Hendrawan and Permadi (2020) and Hidayat and Hendrawan (2020) emphasizes the importance of triangulating valuation methods to improve the accuracy and credibility of intrinsic value estimations.

This study seeks to expand the horizon of previous research by specifically focusing on high-dividend Sharia stocks, as reflected in the IDXHIDIV20 index. This focus sets this study apart, considering the limited number of studies explicitly analyzing Sharia stocks within a curated index that considers consistent dividend distribution and compliance with Sharia principles. The characteristics of stocks in IDXHIDIV20, which reflect dividend stability and adherence to Islamic investment principles, make them a relevant subject for further valuation analysis.

The substantive contribution of this study lies in the simultaneous use of two valuation approaches—FCFF and Relative Valuation—executed in parallel and compared to assess the consistency of intrinsic value estimation results. This approach aligns with arguments presented in studies by Nurwinda and Hendrawan (2020), as well as Hendrawan and Himawan (2020), who emphasize the urgency of integrating cash flow-based and market ratio-based methods to obtain more objective and reliable stock valuation estimates.

Thus, this study not only reinforces previous findings regarding the effectiveness of the FCFF and Relative Valuation approaches but also expands their application scope in the context of high-dividend Sharia stocks. The study is expected to fill a gap in the academic literature, which remains limited in the area of valuing Sharia stocks listed in the IDXHIDIV20 index, while also providing conceptual and practical contributions to the development of valuation methodologies relevant to the characteristics of Sharia-based investment instruments.

Valuation Analysis of INDF Stock in 2024

The valuation of PT Indofood Sukses Makmur Tbk (INDF) stock in 2024 yielded varying equity value estimates based on three assumption scenarios. Under the pessimistic scenario, equity value was estimated at IDR 56.15 trillion, increasing to IDR 79.41 trillion under the moderate scenario, and reaching IDR 110.7 trillion in the optimistic scenario. These differences reflect diverse market projections of the company's fundamentals and growth prospects.

When compared to the company's book value of IDR 66.4 trillion, the Price to Book Value (PBV) ratio shows significant variation. In the pessimistic scenario, PBV is recorded at 0.85x, indicating the stock is traded below its book value. In the moderate scenario, PBV rises to 1.20x, suggesting the market price is slightly above its accounting value. Under the optimistic scenario, PBV increases to 1.67x, reflecting greater investor confidence in the company's future prospects.

Additionally, in the same year, the company recorded a net profit of IDR 11.44 trillion. Based on this profit, the Price to Earnings Ratio (PER) was 4.91x in the pessimistic scenario, 6.94x in the moderate scenario, and 9.68x in the optimistic scenario. These PER values indicate the level of investor willingness to pay for each rupiah of earnings, while also reflecting expectations for the company's financial performance sustainability.

Comparative Analysis

This discussion also includes valuation results for two major issuers: PT Indofood CBP Sukses Makmur Tbk (ICBP) and PT Indofood Sukses Makmur Tbk (INDF) for the year 2024. Each company was analyzed based on the three assumption scenarios to provide a comprehensive overview of fair value ranges under various economic and business conditions. This is expected to provide valuable information for investors in making rational and data-driven investment decisions.

Table 9. Results of Calculation of Intrinsic Value of ICBP and INDF Shares

Issuer	Scenario	Value per shares	Market Value 30 December 2023	Analysis	Decision
ICBP	Pessimistic	6.746,81	11.375 IDR	<i>Overvalued</i>	<i>Sell</i>
	Moderate	8.868,22		<i>Overvalued</i>	<i>Sell</i>
	Optimistic	11.463,61		<i>Undervalued</i>	<i>Buy</i>
INDF	Pessimistic	15.420,22	7700 IDR	<i>Undervalued</i>	<i>Buy</i>
	Moderate	17.875,00		<i>Undervalued</i>	<i>Buy</i>
	Optimistic	20.494,32		<i>Undervalued</i>	<i>Buy</i>

Assessment of the intrinsic value of stocks is a strategic step in evaluating the feasibility of a listed company as an investment object. In this study, a scenario-based approach is employed, involving three main assumptions: pessimistic, moderate, and optimistic scenarios. This approach is designed to evaluate the sensitivity of stock values to changes in financial variables and macroeconomic factors, as well as to compare the valuation results with actual market prices as of December 30, 2023.

In the pessimistic scenario, the estimated intrinsic value per share of ICBP is IDR 4,596.93. This value is significantly lower than the market price at that time, which stood at IDR 11,375. This discrepancy indicates that ICBP shares are overvalued and therefore recommended for sale (Sell), meaning the market price reflects a value higher than its fundamental estimation.

In the moderate scenario, the intrinsic value of the stock increases to IDR 7,205.96. Although this represents an increase, the value still remains below the market price, thus the stock continues to be categorized as overvalued and is recommended for sale (Sell). Meanwhile, in the optimistic scenario, the projected intrinsic value reaches IDR 11,237.63, which is close to the actual market price. In this condition, the stock is considered undervalued and is recommended for purchase (Buy), indicating potential capital gains if the optimistic projections are realized.

For INDF stock, the estimated intrinsic value in the pessimistic scenario is IDR 6,396.24, while the market price at that time was IDR 7,700. This suggests that the stock is overvalued and is recommended for sale (Sell). However, in the moderate scenario, the estimated intrinsic value increases to IDR 9,044.69,

exceeding the market price. Based on this value, the stock is classified as undervalued, indicating potential price appreciation and thus recommended for purchase (Buy).

In the optimistic scenario, the projected intrinsic value reaches IDR 12,612.74. Although this value is much higher than the market price, it is still classified as undervalued and is recommended for purchase (Buy).

As a follow-up step, validation of the intrinsic value was carried out using market ratio approaches, namely the Price to Earnings Ratio (PER) and Price to Book Value (PBV). This validation aims to test the consistency of the valuation results with general market conditions, particularly in the context of the relevant industry. An estimated value is considered valid if the PER and PBV ratios obtained from the valuation fall within the average range of the industry for the corresponding year. Thus, if the PER and PBV values from the calculations fall within the normal range of the industry sector in 2024, it can be concluded that the intrinsic stock value reflects a fair market condition.

Table 10 Calculation Results of Price to Earnings Ratio for ICBP and INDF

Issuer	Scenario	Valuation Value	Industry Average	Result	Decision	Analysis
ICBP	Pessimistic	8,81x	Min:7,21	<i>Undervalued</i>	<i>Buy</i>	<i>valid</i>
	Moderate	10,76x	Avg: 13,01	<i>Undervalued</i>	<i>Buy</i>	<i>valid</i>
	Optimistic	12,97x	Max : 23,71	<i>Undervalued</i>	<i>Buy</i>	<i>valid</i>
INDF	Pessimistic	11,78x	Min:7,21	<i>Undervalued</i>	<i>Buy</i>	<i>valid</i>
	Moderate	13,18x	Avg: 13,01	<i>Overvalued</i>	<i>Sell</i>	<i>valid</i>
	Optimistic	14,60x	Max : 23,71	<i>Overvalued</i>	<i>Sell</i>	<i>valid</i>

Source: Processed Data by the Author (2025)

Table 11 Calculation Results of Price to Book Value for ICBP and INDF

Issuer	Scenario	Valuation Value	Industry Average	Result	Decision	Analysis
ICBP	Pessimistic	1,34x	Min:0,51	<i>Undervalued</i>	<i>Buy</i>	<i>valid</i>
	Moderate	1,51x	Avg: 2.34	<i>Undervalued</i>	<i>Buy</i>	<i>valid</i>
	Optimistic	1,70x	Max:5,34	<i>Undervalued</i>	<i>Buy</i>	<i>valid</i>
INDF	Pessimistic	1,25x	Min:0,51	<i>Undervalued</i>	<i>Buy</i>	<i>valid</i>
	Moderate	1,36x	Avg: 2.34	<i>Undervalued</i>	<i>Buy</i>	<i>valid</i>
	Optimistic	1,47x	Max:5,34	<i>Undervalued</i>	<i>Buy</i>	<i>valid</i>

Source: Processed Data by the Author (2025)

Price to Earnings Ratio (PER) Analysis

Stock valuation using the Price to Earnings Ratio (PER) approach aims to assess whether a stock is undervalued or overvalued based on the comparison between the stock price and the company's financial performance, as well as industry benchmarks.

Based on the analysis of the issuer PT Indofood CBP Sukses Makmur Tbk (ICBP), it is found that in the pessimistic scenario, the PER value is 5.99 times, lower than the industry minimum PER of 7.21 times. This indicates that ICBP shares are undervalued and are recommended for purchase (Buy). In the moderate scenario, the PER increases to 9.39 times, which is still lower than the industry average of 13.01 times, so the stock remains undervalued and is recommended for purchase (Buy). However, in the optimistic scenario, ICBP's PER reaches 14.64 times, exceeding the industry average and approaching the industry maximum of 23.71 times, indicating an overvalued condition and is recommended for sale (Sell). This result is considered valid as it uses relevant comparisons from the related industry.

Meanwhile, the issuer PT Indofood Sukses Makmur Tbk (INDF) shows consistent results across the three scenarios, with PER values of 4.91 times (pessimistic), 6.94 times (moderate), and 9.68 times (optimistic). All of these values are below the industry PER range, whether minimum, average, or

maximum, thus it can be concluded that INDF shares are consistently undervalued and recommended for purchase (Buy). This finding strengthens the indication that INDF's stock price is considered lower compared to the performance of other companies in the same sector.

Price to Book Value (PBV) Analysis

The second valuation approach used is the Price to Book Value (PBV), which assesses the market price of a stock against the company's book value. This ratio is used to identify how much the market value reflects the company's net asset value.

For ICBP stock, in the pessimistic scenario, the PBV value is recorded at 1.16 times, higher than the industry minimum of 0.51 times, but still below the industry average of 2.34 times, so the stock is categorized as undervalued and recommended for purchase (Buy). In the moderate scenario, PBV increases to 1.82 times, which is still below the industry average, indicating the same condition. However, in the optimistic scenario, ICBP's PBV reaches 2.84 times, exceeding the industry average but still below the maximum value of 5.34 times, so in this context the stock is classified as overvalued and recommended for sale (Sell).

Conversely, INDF shares show a stable trend across all scenarios with PBV values of 0.85 times (pessimistic), 1.20 times (moderate), and 1.67 times (optimistic). All three values remain below the industry average and maximum PBV, indicating that the stock is undervalued and recommended for purchase (Buy). These results suggest that the market has not fully appreciated the company's net asset value, implying potential share price appreciation in the future.

Implication of Findings

The results of the analysis using the PER and PBV approaches show that ICBP shares have the potential to become overvalued under the optimistic scenario, especially when high growth assumptions are applied. On the other hand, INDF shares exhibit more stable and consistent characteristics as undervalued stocks across all three scenarios and both valuation approaches. Therefore, it can be concluded that INDF shares have the potential to be a more conservative and safer investment alternative under various market conditions, while ICBP shares are more sensitive to changes in future financial performance expectations.

CONCLUSION

The conclusion of this study indicates that the valuation of PT Indofood CBP Sukses Makmur Tbk (ICBP) and PT Indofood Sukses Makmur Tbk (INDF) using the Discounted Cash Flow method with a Free Cash Flow to Firm approach and relative ratios (PER and PBV) yields varying results depending on the optimistic, moderate, and pessimistic scenarios for 2024. In the optimistic scenario, both stocks show potential for appreciation, with INDF significantly undervalued and ICBP approaching its fair value. Under the moderate scenario, INDF remains undervalued, while ICBP appears overvalued. In the pessimistic scenario, both stocks are considered overvalued based on DCF analysis, yet they appear undervalued when assessed using PER and PBV ratios. Overall, INDF consistently demonstrates undervaluation across all scenarios and is recommended for purchase, whereas ICBP is only advisable to buy under the optimistic scenario and is better sold under the moderate and pessimistic scenarios.

REFERENCES

- Abadi, F., & Wicaksono, M. A. (2024). Analysis of factors affecting the satisfaction of Sharia stock investors in Bangka Belitung and Riau, Indonesia. *Journal of Islamic Economics Lariba*, 10(2).
- Abiola-Adams, O., Azubuike, C., Sule, A. K., & Okon, R. (2023). Innovative approaches to structuring Sharia-compliant financial products for global markets. *J Islamic Finance Stud*.
- Cahyono, A. D., & Hendrawan, R. (2020). Coal mining listed companies and their value: Evidence from

- Indonesia Stock Exchange. *Proceedings*, 35–44. <https://doi.org/10.5220/0008427300350044>
- Chowdhury, E. K., Khan, I. I., & Dhar, B. K. (2022). Catastrophic impact of Covid-19 on the global stock markets and economic activities. *Business and Society Review*, 127(2), 437–460.
- Damodaran, A. (2012). *Investment valuation: Tools and techniques for determining the value of any asset* (Vol. 666). John Wiley & Sons.
- Fibrianto, N. H., & Hendrawan, R. (2020). Oil and gas companies and their fair value: Evidence from Indonesia Stock Exchange. *Proceedings*, 106–116. <https://doi.org/10.5220/0008428001060116>
- Fitriani, S. R., & Rikumahu, B. (2019). *Stock valuation of cement industry in 2019 and 2021 due to COVID-19 using Free Cash Flow to Firm (FCFF) and relative valuation (RV)*. https://doi.org/10.2991/978-94-6463-292-7_18
- Fitriyana, R. F., Rikumahu, B., Widiyanesti, S., & Alamsyah, A. (2020). *Principal Component Analysis to Determine Main Factors Stock Price of Consumer Goods Industry*.
- Graham, B., Buffett, W., & Zweig, J. (2013). *The intelligent investor: A book of practical counsel*. HarperCollins.
- Hartono, J. (2013). *Teori portofolio dan analisis investasi*. IKAPI.
- Hendrawan, R., & Himawan, E. (2020). Assessing Free Cash Flow to Firm and relative valuation method in agriculture plantation companies listed in Indonesia Stock Exchange in 2018. *Proceedings*, 85–93. <https://doi.org/10.5220/0008427800850093>
- Hendrawan, R., & Permadi, F. A. (2020). Do Free Cash Flow to Firm and relative valuation method work in valuing building and construction companies? A test in IDX in 2018. *Proceedings*, 74–84. <https://doi.org/10.5220/0008427700740084>
- Hendrawan, R., Sitorus, P. M. T., & Siagian, E. L. P. (2020). Equity valuation on xchange. *Proceedings*, 65–73. <https://doi.org/10.5220/0008427600650073>
- Hendrawan, R., Susilowati, N., & Kristanti, F. T. (2020). Share valuation of Indonesian regional development bank using free cash flow to equity and relative valuation methods. *Proceedings*, 94–105. <https://doi.org/10.5220/0008427900940105>
- Hidayat, E. A., & Hendrawan, R. (2020). Should Telkom do IPO for Telkomsel? *Proceedings*, 337–347. <https://doi.org/10.5220/0008431003370347>
- Kania, S. L. (2005). *What factors motivate the corporate dividend decision?*
- Kristanti, F. T., Salim, D. F., Indrasari, A., & Aripin, Z. (2022). A stock portfolio strategy in the midst of COVID-19: Case of Indonesia. *Journal of Eastern European and Central Asian Research*, 9(3), 422–433. <https://doi.org/https://doi.org/10.15549/jeecar.v9i3.822>
- Muhammad, A. A., & Sunitiyoso, Y. (2024). Anticipating the Future of Capital Market and Investment Climate in Indonesia: A Scenario Personarrative Approach. *Journal of Futures Studies*, 28(3).
- Ryandono, M. N. H., Wijayanti, I., Wardhana, A. K., Imron, M. A., & Miraj, D. A. (2025). Stock Market Valuation in Sharia Compliance Lens: An Evaluation of the Intrinsic Value of Sharia-Compliant Stocks. *Journal of Posthumanism*, 5(2), 1248–1265.
- Saputro, D., & Qadri, R. A. (2024). Optimizing Hajj Fund Investments Through Valuation Analysis Of Sharia-Compliant Stocks. *Journal of Law, Administration, and Social Science*, 4(2), 200–220.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach* (7 ed.). Wiley.
- Steiger, F. (2008). The validity of company valuation using discounted cash flow. *Journal of Business Valuation and Economic Measurement*, 6(2), 55–70.
- Wira, D. (2014). *Analisis Fundamental Saham*. Exceed Book.
- Wójcik, D., & Ioannou, S. (2020). COVID-19 and finance: market developments so far and potential impacts on the financial sector and centres. *Tijdschrift voor economische en sociale geografie*, 111(3), 387–400.

Copyright holders:

Adi Aji Kurniawan, Irni Yunita (2025)

First publication right:

AJEMB – American Journal of Economic and Management Business
