



Analysis of TBIG Stock Fair Value Using the Free Cash Flow to Equity and Relative Valuation Methods

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Abstract

This study aims to estimate the fair value of PT Tower Bersama Group Tbk shares using the Free Cash Flow to Equity and Relative Valuation methods. It compares both methods to determine which is more accurate and assesses the risk or accuracy of the current TBIG share purchase price that investors may pay. This study uses a quantitative descriptive methodology with a case study approach. Based on this methodology, it describes in detail the characteristics and phenomena present in PT Tower Bersama Infrastructure Tbk, specifically regarding the analysis of fair stock prices using the Free Cash Flow to Equity and Relative Valuation (PER and PBV) methods. Based on the calculation, a comparison is made between the intrinsic value of TBIG shares and the stock price on the stock exchange from 2018 to 2023. It can be concluded that during this period, the fair value of TBIG shares was below the stock price on the exchange, indicating that the shares were overvalued. As of July 2024, the current stock price is IDR 1,950. Based on the 2023 FCFE calculation, the intrinsic value is IDR 16,859 billion with 22 billion shares outstanding, resulting in an intrinsic value of IDR 766 per share. Since the intrinsic value (IDR 766) is less than the stock price (IDR 1,950), it is categorized as overvalued. Meanwhile, based on the calculation above, the Price-to-Earnings Ratio (PER) of TBIG is 30x. This implies that it would take 30 times the company's earnings to recoup the investment, which is relatively high.

Introduction

The capital market is an important sector in a country's economy, functioning as a platform for public offerings and trading of securities, and involving public companies and related institutions in accordance with Law Number 8 of 1995. The capital market allows companies to obtain funds from the public through the issuance of securities and provides investors with the opportunity to invest in various financial instruments (Fabozzi, 2025; Didier et al., 2021; Novak et al., 2022; Vidiati et al., 2022). Its vital role makes the capital market the main means for business funding and investment. In recent years, the Indonesian capital market has shown significant growth, which can be seen from the increase in the number of individual investors. In 2021, the number of Single Investor Identification (SID) experienced a striking increase of 92.99% compared to the previous year. In 2022, the growth in the number of individual investors continued with an increase of 37.68%, and until February 2023, there was an increase of 3.03% from the end of 2022. This data shows the increasing interest of the public to invest in the capital market (Financial Services Authority, 2021).

The demographics of individual investors in Indonesia show that the majority are men under the age of 30, indicating a trend of young investment in the capital market (Rudianto et al., 2025; Sutyanto et al., 2022; Syarkani & Alghifari, 2022). Most individual investors have a high school education background and work as civil servants, private employees, or teachers. This trend can be observed through a survey conducted by KSEI, which describes the demographic

characteristics of individual investors in the capital market (Khaerunnisa et al., 2024; Rozi et al., 2022). However, with growing investment opportunities, there are also risks that investors must be aware of. For example, the Investment Alert Task Force (SWI) has stopped 11 entities suspected of carrying out business activities without official permits from the competent authorities. Several of these entities are known to have duplicated or used the names of licensed entities, which has the potential to harm the public (Financial Services Authority, 2021). Therefore, it is important for investors to be careful and selective in choosing stock issuers listed on the stock exchange in order to avoid investment risks (Zumente & Lāce, 2021).

One of the issuers listed on the Indonesian stock exchange is PT Tower Bersama Infrastructure Tbk (TBIG). This company is engaged in providing telecommunications infrastructure services, especially telecommunications towers (Bhadani, 2023; Emami et al., 2022). TBIG has become a major player in the telecommunications infrastructure market, with more than 29,000 towers spread throughout Indonesia. In 2010, TBIG conducted an initial public offering (IPO), with a stock offering price of IDR 2,025 and raised funds of IDR 1,115 billion. TBIG's IPO data shows that at that time, the total shares registered were 4,556 million shares, with a percentage of 12.09% (Market Bisnis, 2019). The composition of TBIG shareholders in 2023 shows significant changes compared to 2010. Currently, the dominant shareholders are Bersama Digital Infrastructure Asia Pte Ltd with 75.33% ownership and PT Wahana Anugerah Sejahtera with 9.26% ownership.

This indicates a consolidation of power in the hands of several large shareholders, while shares circulating in the public reached 15.41% (TBIG Annual Report, 2023). This change in composition was partly due to corporate actions such as the 1:5 stock split carried out on November 14, 2019, which aimed to increase stock liquidity and improve the attractiveness of shares in the market (Market Bisnis, 2019).

TBIG's stock price movement shows significant fluctuations. In 2021 to 2022, TBIG shares experienced a sharp increase, while at the end of 2022 to February 2023, the stock price decreased. TBIG's stock price on September 4, 2023 was recorded at IDR2,070, after previously experiencing a decline from a price above IDR3,000 in 2021-2022. This decline was partly due to the stock split carried out in 2019, which changed the nominal value of the shares without affecting the overall investment value (Market Bisnis, 2019). In stock investment analysis, assessing the fair price or intrinsic value of shares is very important to determine whether the shares are worth buying or selling (Baum et al., 2021; Damodaran, 2024; Nukala & Prasada Rao, 2021).

Common methods used in this assessment include Free Cash Flow to Equity (FCFE) and Relative Valuation. The FCFE method considers the cash flow generated by the company after meeting financial obligations and necessary investments. Meanwhile, Relative Valuation compares the company's book value with similar companies in a certain period. Previous research has shown that the FCFE method is often considered more accurate in predicting future stock performance. For example, research by Rachmawati et al. (2022) shows that using the FCFE method provides a better picture of the intrinsic value of stocks compared to other methods such as Price Earning Ratio (PER) and Economic Value Added (EVA). Another study by Yulianti et al. (2023) also found that Price to Book Value (PBV) has a significant effect on stock returns, while PER does not have a significant effect.

Research by Ibrahim & Ulpah (2022) shows that the FCFE method assesses Bank Jago Tbk (ARTO) shares as overvalued in the market compared to their intrinsic value, while the Relative Valuation method assesses the shares as undervalued. In addition, research by Colin & Kacaribu (2021) on PT Bank Rakyat Syariah Indonesia Tbk (BRIS) found that the company's

shares were included in the undervalued category using fundamental analysis such as FCFE and Relative Valuation. Research by Jamaluddin et al. (2021) shows that Total Asset Turnover, PER, and PBV do not have a significant effect on stock returns in manufacturing companies on the Indonesia Stock Exchange, while research by Colline & Anwar (2021) found that the Price to Cash Flow (PCF) ratio provides the highest accuracy results in determining overvalued stocks.

The FCFE and Relative Valuation methods provide important perspectives in analyzing the fair value of stocks. FCFE assesses the cash flow available to shareholders after meeting the company's financial obligations and investments, while Relative Valuation compares the value of stocks with the value of similar companies (Hamonangan & Batubara, 2024; Khanafi et al., 2024; Jumran & Hendrawan, 2021). By using this method, investors can make more informed decisions about the potential benefits of investing in TBIG stocks and other issuers. Overall, the Indonesian capital market continues to grow with an increasing number of investors and a variety of investment instruments. However, caution is still needed in choosing stocks for investment, given the risks associated with unlicensed entities. TBIG, as one of the major issuers in the telecommunications infrastructure sector, shows significant stock price dynamics and can be an interesting research object for analyzing the fair value of stocks using the FCFE and Relative Valuation methods.

Methods

This study employs a quantitative descriptive methodology combined with a case study approach to analyze the fair value of stock for PT Tower Bersama Infrastructure Tbk (TBIG). The quantitative descriptive method is used to systematically collect, process, and interpret numerical data, enabling the researcher to describe financial characteristics and valuation indicators in a structured and objective manner. The use of this method ensures that the analysis is based on measurable data, providing a solid foundation for drawing conclusions about the stock's valuation.

The case study approach is applied to focus the analysis on a single entity—TBIG—allowing for an in-depth examination of its financial performance and valuation within its specific business environment. This approach is particularly suitable for understanding complex financial phenomena in a real-world setting, as it facilitates a detailed exploration of internal and external factors that may influence the company's stock value.

Two valuation techniques are used in this study: the Free Cash Flow to Equity (FCFE) model and Relative Valuation methods, specifically the Price to Earnings Ratio (PER) and Price to Book Value (PBV). The FCFE model is an intrinsic valuation method that calculates the cash available to the company's equity shareholders after accounting for all expenses, reinvestment needs, and debt repayments. This method is chosen because it provides a comprehensive measure of the firm's value based on its ability to generate returns for shareholders over time.

In parallel, the relative valuation method is employed to provide a market-based perspective. By comparing TBIG's financial ratios—PER and PBV—with those of comparable companies in the industry, this method offers insights into how the market values TBIG relative to its peers. The use of both intrinsic and relative valuation techniques ensures a balanced and robust assessment, capturing both the internal financial strength of the company and its positioning in the broader market.

Through this combined methodological framework, the study aims to produce a well-rounded valuation analysis that is not only grounded in empirical financial data but also relevant for investors and stakeholders seeking to assess the fairness of TBIG's stock price.

Results and Discussion

Free Cash Flow to Equity (FCFE) Method: In this method, the assessment is carried out by discounting free cash flow to equity, which is the remaining cash flow that can be received by shareholders after the company meets all obligations such as taxes, loan interest, capital expenditures, and changes in working capital. The first step in this analysis is to determine the company's growth rate by projecting the financial statements, including the Financial Position Statement and Comprehensive Income Statement. This projection aims to estimate the profit and equity value of PT. Tower Bersama Infrastructure (TBIG) in the future, following the guidelines of Bapepam and LK No: Kep-196/BL/2012 which recommends a minimum projection period of five years, or according to the remaining life of the main production facilities. Therefore, this analysis uses the 2018-2023 financial statements and projections from 2023-2028 to maintain the accuracy of the results. To calculate the growth rate, the Arithmetic Average and Geometric Average Damodaran (2002) methods are used. This approach helps in determining more accurate growth estimates for future projections. The following are the results of the calculation of TBIG's average net income growth.

Table 1. TBIG Revenue Growth Table (In Billion Rupiah)

No	Year	Net income	Growth
1	2018	4,318.1	
2	2019	4,698.7	380.6
3	2020	5,327.7	629
4	2021	6,179.6	851.9
5	2022	6,524.4	344.8
6	2023	6,640.6	116.2
Total Growth			49.6%
Average Growth			9.9%/year
Compound Annual Growth Rate (CAGR)			8.9%

Source: TBIG 2018-2023 financial report data processed by the author

Based on the data above, the CAGR set by TBIG in its financial report is 8.9%. Compound Annual Growth Rate (CAGR) is the average annual growth rate required to invest an initial value into an ending value over a given period. This is a useful metric for measuring investment performance or business growth over several years. So the author made a calculation of TBIG's revenue growth for the next 5 years using the CAGR value set by TBIG. As a comparison, the author also looked for data on the growth and inflation of the Indonesian economy. Based on data from the Central Statistics Agency (BPS), Indonesia's economic growth in 2023 reached 5.05%. This figure shows that the Indonesian economy continues to grow positively amidst quite complex global economic challenges. And the inflation rate was 2.61% in December 2023 (Central Statistics Agency, 2023). From the data above, it can be seen that TBIG's revenue growth is greater than national inflation, thus it can be said that TBIG is experiencing healthy growth.

The next step is to determine the amount of net sales during the projection period, namely the projection period for the next 5 (years) from 2023 to 2028. Growth is assumed to be constant to simplify the calculations and the results are not too large. The following is a projection of net income from 2023 to 2028. From the following table, it can be seen that TBIG for the last 5 years based on financial reports, TBIG's income exceeds the projection and growth targets.

Table 2. Net Income Projection Table 2018-2023 (In Billion Rupiah)

Description	Year	Net Income Projection	Net Income (Fact)	Difference
TBIG	2018	4,304.7	4,318.1	13.3
	2019	4,606.1	4,698.7	92.6
	2020	4,928.4	5,327.7	399.2
	2021	5,273.4	6,179.6	906.1
	2022	5,642.6	6,524.4	881.7
	2023	6,050.3	6,640.6	590.2
	2024	6,711.6	-	-
	2025	7,449.1	-	-
	2026	8,268.4	-	-
	2027	9,176.1	-	-
	2028	10,179.6	-	-

Source: Data processed from TBIG Financial Report (2018-2023)

Calculation FCFE with CFO formula – (Capex + Net Borrowing).

The following is the FCFE calculation starting in 2018-2023.

Table 3. TBIG FCFE Period 2018-2023 (In Billion Rupiah)

Year	Cash Flow From Operation (a)	Capital Expenditure (b)	Net Borrowing (c)	FCFE (a - b + c)	Outstanding Shares	Intrinsic Value (IN)	End of Year Stock Prices	Category
2018	3.239	2.204	18.315	19.350	4	4.838	5.700	Overvalue
2019	3.691	2.039	15.025	16.677	22	758	6.200	Overvalue
2020	3.786	2.051	14.242	12.507	22	569	1.000	Overvalue
2021	4.465	7.176	1.032	3.743	22	170	3.400	Overvalue
2022	4.809	3.903	14.348	13.442	22	611	2.530	Overvalue
2023	4.381	2.745	18.495	16.859	22	766	2.100	Overvalue

Based on the calculation from the table above, a comparison of the intrinsic value of TBIG shares with the share price on the stock exchange from 2018 to 2023 can be concluded that from 2018 the fair price of TBIG shares can be categorized as Overvalued. Likewise, the current share price (July 2024) is IDR 1,950 with a comparison of the 2023 FCFE calculation of IDR 16,859, so it can be said that $NI < \text{share price}$, thus categorized Overvalue. However, the movement of TBIG stock prices on the stock exchange market continues to increase. Although in 2020 it seems to have decreased from 2019 due to the corporate action in the form of a 1:5 stock split at the end of 2019. However, on average it still increases. This indicates that investors or market players provide a positive perspective or assessment and believe in TBIG's growth in the future.

Relative valuations the most frequently used company valuation. The advantages of this valuation method are that it is easy to use, does not take up much time, and does not require many assumptions compared to the Discounted cash flow (FCFE) valuation method. The fact that relative valuation is very easy to use has made it a powerful method. In this method, of course, there are steps that will be taken, namely:

Price Earnings Ratio (PER) is a comparison between the stock market price and the company's earnings. Investors will calculate how many times (multiplier) the earnings value is reflected in the price of a stock, (Wibowo et al., 2019). PER indicates the amount of rupiah that

investors must pay to obtain one rupiah of earnings from the company. The formula for calculating the Price Earning Ratio according to (Mudzakar & Wardanny, 2021) is as follows:

$$\begin{aligned} \text{PER} &= \text{Price Per Share as of 2023} / \text{Earning Per Share} \\ &= 2,100/69 \\ &= 30x \end{aligned}$$

Based on the calculation above, the PER TBIG against the stock price of 30x can be said to be relatively high so that it requires 30x profit to be able to return the investment.

Price Earning Multiple (PE) is the most widely used because of its simplicity, although its relationship to the company's financial fundamentals is often overlooked, allowing for errors in its use. PE is a financial matrix used to assess the relative valuation of a company's shares. PE is used to compare the current share price with Earnings per Share (Eps).

Table 4. Comparison Companies

Company name	Company Code
PT Sarana Menara Nusantara Tbk	TOWR
PT Dayamitra Telecommunications Tbk	MTEL
PT Centratama Telecommunications Indonesia Tbk	CENT
PT Inti Bangun Sejahtera Tbk	IBST
PT Tower Bersama Infrastructure Group Tbk	TBIG

Source: IDX, 2023

From the companies in the table above, the author determines the Price-Earnings Ratio (PER) of the three companies as a benchmark for companies to obtain profits, namely:

Table 5. PER of Comparative Companies Period 2023

Company name	Company Code	PER(x)
PT Sarana Menara Nusantara Tbk	TOWR	16
PT Dayamitra Telecommunications Tbk	MTEL	29
PT Centratama Telecommunications Indonesia Tbk	CENT	75
PT Inti Bangun Sejahtera Tbk	IBST	76
PT Tower Bersama Infrastructure Group Tbk	TBIG	30
Average		45

Source: IBST, TOWR, CENT, TBIG Financial Report (2023)

Judging from the PER of these companies, it is known that the PER value of TBIG is 30 times to produce the stock market price. With the PER value of TBIG at the end of 2023 of 30 compared to the average PER value of the four comparative companies in the same industry of 45. So the TBIG stock price category on the stock exchange market can be said to be undervalued compared to the industry average.

Price-to-Book Value (PBV) In investment analysis, many book values are useful because this method is relatively stable in measuring value to compare with market value. In addition, this price book value (PBV) ratio can be compared with the same company, regardless of whether the company is undervalued or overvalued and has negative profits. PBV has several disadvantages. The first is that this method is affected by accounting decisions such as depreciation and other variables. The second is that book value does not affect many service and technology companies that do not have tangible assets. Finally, if the company experiences negative financial reports repeatedly, PBV may be negative.

When compared to the intrinsic value, PBV on December 31, 2023 is:

Intrinsic Value = Total equity / number of shares outstanding

Intrinsic Value = 13,400,000,000,000/ 22,656,999,445.

Intrinsic Value = Rp.591

PBV ratio = Current stock price / book value (intrinsic value)

=1,950/ 591

= 3.5x

Based on TBIG's 2023 financial report PBV of Rp.591 compared to the initial share price in July 2024 of 1,950. So it can be said that TBIG's stock market price is overvalued.

PV Multiple (Price to Valuation Multiple) is an industry valuation comparison metric that is applied to compare the value of a company with the value of its assets with the following formula;

PV Multiple = Stock Market Price / Asset Value

Table 6. PBV of Comparative Companies Period 2023

Company name	Company Code	PBV	Stock Value	PBV Ratio
PT Daya Mitra Telekomunikasi	MTEL	1.073	665	0.6
PT Inti Bangun Sejahtera Tbk	IBST	4.360	6.000	1.4
PT Sarana Menara Nusantara Tbk	TOWR	951	1.286	1.6
PT Centratama Telekomunikasi Indonesia Tbk	CENT	50	80	1.6
PT Tower Bersama Infrastructure Tbk	TBIG	591	2.100	3.5
Average		1.986		1.7

Source: MTEL, IBST, TOWR, CENT, TBIG Financial Report (2023)

Judging from the PBV of these companies, it is known that the PBV Ratio value of TBIG is greater than the average PBV Ratio value of the four comparative companies. So it can be concluded that the fair price of shares in 2023 is Overvalued.

The fair price of PT. Tower Bersama Group Tbk (TBIG) shares based on the Free Cash Flow To Equity method is classified as overvalued, or the market price is above the fair price. Therefore, the purchase price of PT. Tower Bersama Infrastructure Tbk (TBIG) shares by investors at the close of December 31, 2023 can be said to be less than ideal because investors get a market price slightly above the fair price of the shares. This is because the intrinsic value of FCFE of IDR 766 is smaller than the market value of IDR 2,100. From this comparison, it is known that the value of the shares falls into the overvalued category. With the following calculation:

Intrinsic Value of FCFE

Intrinsic Value of FCFE = Value of FCFE / Number of Shares Outstanding)

Intrinsic Value of FCFE = Rp.16,850 (in billion) / 22 (in billion) Intrinsic Value of FCFE = Rp.766

Meanwhile, the calculation of the fair value of TBIG share prices using the Relative Valuation method with PER and PBV is as follows

PER value as of December 31, 2023

PER value = Stock price / PE

PER value = Rp.2,100 / Rp.69

PER value = 30x

From the PER, it can be said that TBIG's stock ability to generate profits in 2023 is 30.5x the stock price, where the PE of IDR 69 per share compared to the stock price at the beginning of 2024 of IDR 2,100 can be classified as high, but lower than the industry average of 45x can be categorized *undervalued*.

Meanwhile, the fair price of PT. Tower Bersama Group Tbk (TBIG) shares based on the Relative Valuation method is classified as overvalued, or the market price is above the fair value either with the Earning Price Ratio (PER) Multiple or the Price Book Value (PBV) Multiple. Likewise, the fair analysis of stock prices using the FCFE method can be categorized as Overvalued.

Therefore, the purchase price of PT. Tower Bersama Infrastructure Tbk (TBIG) shares by investors at the beginning of the year until June 2024, which is priced around Rp. 2,100, can be said to be risky and needs to be careful and it is better to wait for a more appropriate momentum and time.

Conclusion

Based on the research results in the previous chapters, the conclusions drawn in this study are as follows: The fair price of PT. Tower Bersama Group Tbk (TBIG) shares, based on the Free Cash Flow To Equity (FCFE) method, is categorized as overvalued. Meanwhile, using the Relative Valuation method by calculating the Price-to-Earnings Ratio (PER), the shares are categorized as undervalued, while the Price-to-Book Value (PBV) calculation also categorizes the shares as overvalued. The method that approaches market prices is the FCFE method with a value of Rp. 766, compared to the Relative Valuation method with the PER calculation, which gives a value of Rp. 69, or 30x of the stock price on the market. However, TBIG's PER is lower than the industry's average PER of 45x, which can categorize the stock as undervalued. When the stock value is calculated with PBV, it yields Rp. 591 per share, which is lower when compared to the market price, categorizing the stock as overvalued. Therefore, the purchase of shares by investors or market players in 2024 should be done carefully by weighing the associated risks and potential profits.

Furthermore, several external factors need to be considered as they will influence the company's operations and future growth, thereby impacting the PER, PBV, and FCFE: 1) Interest Rates: The prevailing interest rates can significantly affect TBIG's financing costs, which in turn influence the company's cash flow and valuation. Higher interest rates may reduce profitability and growth prospects, leading to lower FCFE and potentially altering stock valuations based on these cash flows; 2) Telecommunications Industry Competition: The competitive landscape in the telecommunications sector could affect TBIG's market share and profitability. Increased competition may pressure prices, reduce margins, and influence future growth projections, which would impact the company's financial metrics, including PER, PBV, and FCFE; 3) Exchange Rate Fluctuations (Rupiah to US Dollar): As TBIG operates in an industry that involves significant foreign transactions, fluctuations in the exchange rate between the Rupiah and the US Dollar can affect its costs, revenues, and cash flows. A weaker Rupiah could increase costs related to debt re-payments or imported materials, potentially impacting profitability and stock valuation; 4) Government Policies: Changes in government regulations or policies, such as taxes, infrastructure de-velopment incentives, or regulatory changes in the telecommunications industry, could have a significant impact on TBIG's

operational efficiency and profitability. Any policy changes could either support or hinder the company's growth, which in turn would be reflected in the financial metrics like FCFE, PER, and PBV.

Given these factors, careful analysis is required to assess how such variables might influence TBIG's future performance and the broader market conditions for investors looking to make informed decisions in 2024.

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