# Valuation of the Fair Market Value of the Shares of PT Link Net Tbk in Connection with the Acquisition of Shares by PT XL Axiata Tbk in 2022 Using the Discounted Cash Flow (DCF) and Abnormal Income Method

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**Abstract**

Corporate takeover actions (acquisitions) carried out by companies are always in the spotlight of the capital market public, because corporate acquisition actions are classified as material transactions that require very large financing, and it is not uncommon for there to be conflicts of interest in their implementation. However, sometimes there can be cases where a company acquires another company in the hope of gaining synergies but instead incurs losses, which may be due to an unreasonable acquisition price that can harm many parties including the public and shareholders. This can of course be prevented by assessing the performance of the company to be acquired previously and assessing the company's fair market (valuation). This research was conducted to analyze the fair market value of 20% of the shares of PT Link Net Tbk in connection with the planned acquisition by PT XL Axiata Tbk using the Discounted Cash Flow and Abnormal Income methods and to analyze the price offered by PT XL Axiata Tbk to acquire 20% of the shares of PT Link Net Tbk is classified as fair or not. The research results show that in the valuation using the Discounted Cash Flow (DCF) method, based on the results of calculating the fair market value of 20% of PT Link Net Tbk amounting to IDR 2,795,896 million or IDR 4,882 per share, while in the valuation using the Abnormal Income method, it is based on the results of calculating the value fair market 20% PT Link Net Tbk amounting to IDR 2,602,704 million or IDR 4,545 per share. If we compare the transaction value of the purchase of PT Link Net Tbk shares by PT XL Axiata Tbk which is IDR 4,800 per share, the transaction value is considered fair in both methods, both the Discounted Cash Flow (DCF) and Abnormal Income methods.

***Keywords**: Valuation, Discounted Cash Flow, Abnormal Income.*

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## A. INTRODUCTION

Various corporate actions that can be carried out by companies include stock splits, dividend distribution, divestment, share purchase offers, mergers, acquisitions, private placement, bonus share distribution, rights issue, etc. other. The corporate action that is the focus of this research is the acquisition action carried out by the company. In many cases, acquisitions carried out by companies often become the public spotlight, especially the capital markets. This is because corporate acquisition actions are classified as material transactions where very large financing is required, and it is not uncommon for there to be conflicts of interest in their implementation.

On June 22 2022, Axiata Group Berhad (“Axiata”) and PT XL Axiata Tbk (“EXCL”) completed the acquisition of 66.03% of the shares of PT Link Net Tbk

("LINK") with a transaction value of RM 2 .63 billion. With the acquisition, it is hoped that LINK and EXCL can take advantage of synergies in running businesses in the fields of wireless communications, network and transmission services, as well as connecting customers from both companies spread throughout Indonesia. The combination with EXCL which operates in the field of cellular connection services can make LINK able to take advantage of consumers in the corporate segment. However, the hopes of both LINK and EXCL in utilizing existing synergies to increase profits are not reflected in their financial performance as of 2022. At the close of trading activities on March 14 2023, LINK's share price closed at IDR 2,150 or experienced a decrease of 6. 93%. Meanwhile, as of September 27 2023, the share price closed at IDR. 1,700 per share.

Reflecting on the phenomena that occur above, sometimes cases can occur where a company acquires another company in the hope of gaining synergies but instead suffers losses which are likely due to an unreasonable acquisition price that can harm many parties including the public and shareholders. This can of course be prevented by assessing the performance of the company to be acquired previously and assessing the company's fair market (valuation).

Based on the background explained above, this research formulates the problem as follows:

1. What is the fair market value of 20% of PT Link Net Tbk shares in connection with the planned acquisition by PT XL Axiata Tbk using the Discounted Cash Flow (DCF) method.
2. What is the fair market value of 20% of PT Link Net Tbk shares in connection with the planned acquisition by PT XL Axiata Tbk using the Abnormal Income method.
3. Is the price offered by PT Link Net Tbk reasonable to acquire 20% of the shares in PT XL Axiata Tbk.

## B. LITERATURE REVIEW

Acquisition is a takeover of a company that is the target of acquisition by purchasing company shares or assets owned under the condition that the target company continues to carry out operational activities. This research also adopts signaling theory, which aims to observe the reactions of investors and potential investors to corporate actions in the form of company acquisitions or company sales by selling most of their shares. Signal theory describes a situation where the source of information sends signs or signals to the intended parties which contain conditions experienced by the company which are useful as references for the recipient of the information.

Valuation is an estimate of the value of an asset based either on variables that are considered to be related to future investment returns or comparisons with similar assets. In previous research conducted by Poddar (2019), the period studied revealed that all M&A deals appeared to have added less value than expected for the acquiring company. This can occur due to many factors including the macroeconomic

environment (timing of the deal) and the drivers of the merger from the acquiring company's perspective. Meanwhile, research conducted by Sutjipto Setiawan and Ghozali (2020) states that DDM is more accurate than DCF because the Mean Absolute Pricing Error (MAPE) calculation shows the DDM value is smaller, namely only 46% and with DCF the value is 206%. Meanwhile, research by Anesten, Moller, Skogsvik, Skogsvik (2019) states that the accuracy of the abnormal earnings model tends to be less than high, but can be improved by increasing the accuracy of the assumptions.

## C. METHODS

This type of research is a type of applied research based on pre-existing theories. The types of cases taken are real cases that have occurred before which are studied using existing techniques and theories. This research assesses the financial reports of acquired companies operating in the internet sector, namely PT Link Net Tbk (LINK) using Discounted Cash Flow (DCF) and Abnormal Income in the projection period from 2017-2021. After that, the author processes the data to assess the fair market value of company shares using the Discounted Cash Flow and Abnormal Income methods. For this calculation, the variables Weighted Average Cost of Capital (WACC) and Beta are needed.

In the LINK assessment, the net cash flow that will be used to be discounted to indicate the value of the business is the net cash flow to the company (Free Cash Flow to the Firm). Net cash flow is cash available after cash needs for operational activities are met, is cash flow available to capital providers (debt and equity), and is free from obligations to maintain operations and to anticipate company growth. The formulation of Free Cash Flow to the Firm is as follows:

Earnings before interest and taxes (EBIT)
- Income tax on EBIT
+ Depreciation and amortization
- *Capital expenditure*
+ (Increase)/Decrease in net working capital
= *Free Cash Flow to the Firm*

After that, in calculating the discount rate (discount factor) for net cash flow, the author uses a discount rate based on the Weighted Average Cost of Capital (WACC) with the following formula:

WACC = [ ke x We ] + [kd (1 – t)x Wd ]

Where :

| | | |
|---|---|---|
| ke | = | cost of capital for equity |
| kd | = | cost of capital for debt |
| We | = | equity weight in the capital structure |
| Wd | = | debt weight in the capital structure |
| t | = | tax rate |

After getting the Free Cash Flow to the Firm (FCFF) value, you can calculate the value of the company (Enterprise Value) using the following formula:

$$Enterprise\ Value = \frac{\text{FCFFt}}{(1 + \text{WACC})^{t}} + \frac{\text{Terminal Value}}{(1 + \text{WACC})^{n}}$$

In the Abnormal Income method, there is a direct relationship between dividends and income. If all equity (other than transaction capital) goes through the company's profit and loss report, then the final book value of equity for shareholders is the initial acquisition value (initial book value) plus net profit then minus dividends. Income-based formulations have intuitive appeal. If a company can only generate the required rate of return on its book value, then investors should be willing to pay no more than the stock's book value. Investors must pay more or less than book value if earnings are above or below these normal levels. Thus, the deviation of a company's market value from its book value depends on its ability to generate "abnormal earnings."

According to Fernandes (2014), the final result of the DCF is a component in the NPV calculation. In determining this, the following steps will be used:

1. Determine the value of FCFF
2. Determine the WACC amount
3. Determining the NPV value:

$$NPV = -Investment_0 + \sum_{t=1}^{T} \frac{FCFF_t}{(1+WACC)^t}$$

Or if simplified it could be:
NPV = -Investment + DCF

To compare the performance and quality of acquisitions, this can be done by comparing the relative valuation ratios between LINK before the acquisition and LINK one period after being acquired. For the calculation data used are LINK's audited financial reports as of 31 December 2021 for the period before the acquisition and 31 December 2022 after the acquisition. The ratios used are:

1. *Price to earnings ratio* with the following formula:
$$P/E = \frac{Stock\ Price}{\text{Net income per share}}$$
2. *Price to book value ratio* with the following formula:
$$P/BV = \frac{\text{Stock Price}}{\text{Equity per share}}$$
3. *market value of invested capital to book value invested capital ratio* with the following formula:
$$MVIC/BVIC = \frac{[\text{Stock Price X Outstanding shares}] + \text{Interest bearing Debt}}{\text{Equity} + \text{Interest bearing Debt}}$$

## D. RESULTS AND ANALYSIS

PT Link Net Tbk's revenue comes from Broadband Internet and network revenues, cable television and other revenues. During the projection period, Broadband Internet and network revenues are assumed to increase by 5.60% from Broadband Internet and network revenues in the previous year, based on the assumed growth of the internet industry in Indonesia in 2022. During the projection period, cable television revenues are assumed to increase by 4.00 % of cable television revenue

in the previous year, based on the assumed growth of cable television in Indonesia in 2022. Meanwhile, for other income, it is assumed to increase by 5.60% from other income in the previous year, following the assumed growth of the internet industry in Indonesia in 2022.

After calculating the projected free cash flow (net cash flow) of PT Link Net Tbk, the next thing to do is calculate the terminal value of the free cash flow in 2026 and beyond, where the long-term sustainable growth value is assumed to be 0%, so that the following calculation is obtained:

$$Terminal\ Value = \frac{\text{IDR } 2{,}284{,}312 \text{ x } (1 + 0\%)}{(9.94\% - 0\%)}$$

$$Terminal\ Value = \text{IDR } 22{,}972{,}842$$

Then, from the business value, add the non-operational assets of PT Link Net Tbk and subtract the interest-bearing debt owned by PT Link Net Tbk as of December 31 2021. Next, look for an indication of a value of 20% because the shares that will be acquired are 20% and then deduct the marketability discount. according to Bapepam regulations. The following is a table that explains PT Link Net Tbk's calculations using the Discounted Cash Flow method from 2022-2026:

**Appendix 4**

**PT Link Net Tbk**
**Discounted Cash Flow Method (DCF)**
**Per 31 December 2021**
(Expressed in millions of Rupiah unless otherwise stated)

| Year | Free Cash Flow | Discount Rate | Present Value |
|---|---|---|---|
| 2022 | 2,469,130 | 0.910 | 2,245,817 |
| 2023 | 2,255,826 | 0.827 | 1,866,235 |
| 2024 | 2,230,220 | 0.752 | 1,678,181 |
| 2025 | 2,238,620 | 0.684 | 1,532,151 |
| 2026 | 2,284,312 | 0.623 | 1,422,024 |
| Terminal Value | 22,972,842 | 0.623 | 14,300,998 |
| Total Enterprise Value | | | 23,045,405 |
| Added - Non-operational assets as of December 31, 2021 | | | 270,796 |
| Less - Interest-bearing debt as of December 31, 2021 | | | (3,345,514) |
| Value Indication 100% Equity before DLOM | | | 19,970,687 |
| Value Indication of 20% Equity before DLOM | | 20% | 3,994,137 |
| Less: Marketability discount (DLOM) | | 30% | (1,198,241) |
| **Fair Market Value of Shares of 20% Equity** | | | **2,795,896** |

Then the upper and lower limits are calculated in accordance with Bapepam regulations which state that the value range must not exceed 7.5% of the value used as a reference for the range. The author decided to maximize the lower and upper limits, namely 7.5%, for use in this research. Thus, the lower and upper limits are obtained with the following calculations:

Lower limit = IDR 2,795,896 million x 92.5%
= IDR 2,586,204 million or
= IDR 2,586,204 million / 572,639,097 shares
= IDR 4,516 per shares

Upper limit = IDR 2,795,896 million x 107.5%
= IDR 3,005,588 million or
= IDR 3,005,588 million / 572,639,097 shares
= IDR 5,289 per shares

In the Abnormal Income Method, net profit during the projection period is reduced by the return on the Book value of Equity with the assumption that equity is depreciated following a straight line multiplied by WACC to produce Abnormal Income. The next thing to do is calculate the terminal value of abnormal income in 2026 and beyond using the following calculation:

$$Terminal\ Value = \frac{\text{Abnormal Income 2026 x } (1 + \text{g})}{(\text{WACC} - \text{g})}$$

Where the assumed growth value is 2%, so the following calculation is obtained:

$$Terminal\ Value = \frac{\text{IDR } 1{,}195{,}271 \text{ x } (1 + 2\%)}{(9.94\% - 2\%)}$$

$$Terminal\ Value = \text{IDR } 15{,}348{,}048$$

Then, the business value is added to the book value of PT Link Net Tbk and subtracted from the interest-bearing debt owned by PT Link Net Tbk as of December 31 2021. Next, an indication of the value of 20% is sought because the shares that will be acquired are 20%. The following is a table that explains PT Link Net Tbk's calculations using the Abnormal Income method from 2022-2026:

**Appendix 5**

**PT Link Net Tbk**
**Abnormal Income Method**
**Per 31 December 2021**
(Expressed in millions of Rupiah unless otherwise stated)

| Year | Net Income | Return on Equity | Abnormal Income | Discount Rate | Present Value |
|---|---|---|---|---|---|
| 2022 | 240,718 | 493,998 | (253,280) | 0.910 | (230,373) |
| 2023 | 571,016 | 395,198 | 175,818 | 0.827 | 145,453 |
| 2024 | 712,078 | 296,399 | 415,679 | 0.752 | 312,787 |
| 2025 | 1,049,880 | 197,599 | 852,281 | 0.684 | 583,316 |
| 2026 | 1,294,071 | 98,800 | 1,195,271 | 0.623 | 744,077 |
| Terminal Value | | | 15,348,048 | 0.623 | 9,554,429 |
| Total Enterprise Value | | | | | 11,109,690 |
| Added - Equity as of December 31, 2021 | | | | | 5,249,342 |
| Less - Interest-bearing debt as of December 31, 2021 | | | | | (3,345,514) |
| Value Indication 100% Equity | | | | | 13,013,518 |
| Value Indication 20% Equity | | | | 20% | 2,602,704 |
| **Fair Market Value of Shares of 20% Equity** | | | | | **2,602,704** |

Then the upper and lower limits are calculated in accordance with Bapepam regulations which state that the value range must not exceed 7.5% of the value used as a reference for the range. The author decided to maximize the lower and upper limits, namely 7.5%, for use in this research. Thus, the lower and upper limits are obtained with the following calculations:

Lower limit = IDR 2,602,704 million x 92.5%
= IDR 2,407,501 million or
= IDR 2,407,501 million / 572,639,097 shares
= IDR 4,204 per shares

Upper limit = IDR 2,602,704 million x 107.5%
= IDR 2,797,906 million or
= IDR 2,797,906 million / 572,639,097 shares
= IDR 4,886 per shares

For the relative valuation of PT Link Net Tbk before and after the Acquisition, the following ratios were compared:

1. *price to earnings ratio* (P/E ratio),
2. *price to book value ratio* (P/BV ratio) dan
3. *market value of invested capital to book value invested capital ratio*(MVIC/BVIC)

The ratio above is used to analyze the value of PT Link Net Tbk before and after the acquisition. The following is a table that explains PT Link Net Tbk's calculations:

**Appendix 6**

**PT Link Net Tbk**
**Relative Valuation**
**31 December 2021 & 2022**
(Expressed in millions of Rupiah unless otherwise stated)

| | a | b | c | d | e | a Xb = f | d + f = g | c + d = h | a / (e/b) = i | a / (c/b) = j | g / h |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Stock price | Outstanding Shares | Equity | Interest-bearing Debt | Net Income | Market Capitalization | MVIC | BVIC | P/E | P/BV | MVIC/BVIC |
| 2021 | 4,000 | 2,863,195,484 | 5,249,342 | 3,345,514 | 885,319 | 11,452,782 | 14,798,296 | 8,594,856 | 12.94 | 2.18 | 1.72 |
| 2022 | 2,620 | 2,863,195,484 | 4,968,040 | 5,345,559 | 240,718 | 7,501,572 | 12,847,131 | 10,313,599 | 31.16 | 1.51 | 1.25 |

Based on the results of a comparison of the three existing ratios, it can be said that the value of PT Link Net Tbk before being acquired was greater than after being acquired. However, this may change depending on the performance of PT Link Net Tbk in the future.

To analyze the feasibility of the PT Link Net Tbk transaction, the DCF value was subtracted from the transaction value as an indicator of the feasibility of the acquisition transaction. Based on the information obtained, PT Link Net Tbk was acquired for IDR 8.7 trillion for 66.03% of the shares so that the acquisition price for 20% of the shares was around IDR 2,635,166 million. Meanwhile, the DCF value obtained is around IDR 2,795,896 million so there is a calculation as follows:

NPV = -Investment + DCF
= -2,635,166 million + 2,795,896 million
= 160,730 million

Based on the calculations above, there are positive results for the NPV calculation so that the acquisition can be said to be feasible.

## E. CONCLUSION

The previous chapter's research and discussion focused on evaluating the fair market value of PT Link Net Tbk shares in light of PT XL Axiata Tbk's acquisition in 2022, utilizing the Discounted Cash Flow (DCF) and Abnormal Income methods. The findings of this assessment are as follows: Firstly, employing the DCF method yielded a fair market value of IDR 2,795,896 million, equivalent to IDR 4,882 per share, with a fair value range of IDR 2,586,204 million to IDR 3,005,588 million, or IDR 4,516 to IDR 5,289 per share. Secondly, utilizing the Abnormal Income method resulted in a fair market value of IDR 2,602,704 million, or IDR 4,545 per share, with a range of IDR 2,407,501 million to IDR 2,797,906 million, or IDR 4,204 to IDR 4,886 per share. Thirdly, comparing the transaction value of LINK shares by EXCL Tbk at IDR 4,800 per share, it's deemed fair in both methods. However, the research had limitations, such as a

five-year projection period and relatively general assumptions based on industry averages. To address these limitations, future research should extend the projection period and employ more detailed assumptions or utilize projections provided by the company's management. Investors are encouraged to conduct valuations before making investment decisions based on these findings.

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