Valuation Analysis of PT XYZ's Initial Share Value Regarding the 2020 IPO Plan with Discounted Free Cash Flow and Relative Valuation Method

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Abstract. The PT XYZ is a company in the automotive industry in Indonesia that has a plan to offer its initial public offering or IPO in 2020. In the IPO activity it is necessary to analyze the price of the initial shares to be offered. This paper is a case study and aims to find the value of the first shares obtained through the valuation of the company PT XYZ. Valuations are carried out using the Discounted Free Cash Flow to Equity and Discounted Free Cash Flow to the Firm each method with two projection approaches, namely reinvestment rate and sales projections, and with the Relative Valuation method. The results of the valuation of PT XYZ's initial share price for the discounted free cash flow method are in the range of Rp706.76 to Rp2,002.49 per share, while the results of the calculation of relative valuation are at Rp2,433.32 per share

Keywords: valuation, discounted free cash flow, relative valuation, reinvestment rate, sales projection

1. Introduction

Indonesia is the automotive market with the largest car sales in the Southeast Asia region. From ASEAN Automotive Federation data, in 2018 the market share of Indonesian car sales in Southeast Asia reached 32.32% with total sales of 1.2 million units, or an increase of 6.65% from the previous year [1]. The second position of the largest car sales is Thailand which has 1 million units or with a market share of 29.25% in Southeast Asia, followed by Malaysia with sales of 598.7 thousand units, Philippines with 357.4 thousand units, and Vietnam with sales 288.7 thousand units. In 2019 Indonesia car sales decreased by 10.6% from the previous year with total sales of 1.03 million units. Several factors that influenced the decline were 2019 a political year and people chose to wait to buy tertiary needs such as cars [2]. In the future, the Indonesian automotive market still shows great potential to continue to grow in the future, Indonesia's economic growth which still tends to be stable at 5%, an increasing middle class population economically, construction of toll road infrastructure and public roads are factors that can boost car sales growth [3].

Moreover, there is still wide opportunity to grow if we see from the ratio of car ownership, it is recorded that Indonesia is still at 87 units per 1,000 people, still far below other countries in the Southeast Asian region; Malaysia 637 units per 1,000 people, and Thailand 228 units per 1,000 people [4]. Market conditions that have the potential to continue to grow make companies in the automotive sector always develop their business, and execute strategies to win the competition. The need for funding and capital increase is one of the urgencies that arise for companies that want to expand and develop their businesses [5]. One of the new funding sources is through an initial public offering (IPO).

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In the process of offering or issuing initial public shares, one of the main things that needs to be considered is the determination of the share price, this concerns the amount of funds to be received by the company and can also affect the interest of investors to buy the company's shares, research on prices initial shares should be done to find the most appropriate price to be offered to investors. In determining the initial stock price of a company, a valuation will be carried out. In this paper the valuation of the initial share price will be carried out on the object of research, namely PT XYZ which is an automotive company that has a business in the sales of cars, spare parts, and repair services.

In general there are three approaches to valuing or valuing a company [6]. The first approach is to use a discounted casfh flow (DCF) method, which connects the value of an asset in the present by assessing the cash flow generated from the asset in the future. The second approach is to use relative valuation, in which companies estimate the value of an asset by looking at the value or price of other companies' comparable assets through variables that are generally measured in the amount of profit, cash flow, book value, and company revenue. The third approach is to use the contingent claim valuation method, which is valuation using the market value model of an option to value an asset that has stock option characteristics.

In this study the approach used is the discounted cash flow (DCF) method and relative valuation. There have been many previous studies regarding the valuation of IPO shares, but rarely have discussed what method is most suitable for use in accordance with the characteristics of the company being assessed. The method used is not only limited to the main method in determining the intrinsic value of a company, but also how the method of determining the projection of the cash flow itself. This paper will compare three main valuation methods: (1) free cash flow to equity, (2) free cash flow to the firm, and (3) relative valuation. Each free cash flow methods will use two different approach in determining the projection of the cash flow so that there are five ranges of IPO values generated in the analysis : (1) free cash flow to equity with reinvestment rate method, (2) free cash flow to equity with sales projection method, (3) free cash flow to the firm with reinvestment rate method, (4) free cash flow to the firm with sales projection method and (5) relative valuation. PT XYZ is a highly leveraged company if we looked to its capital structure, and categorized as company that are just in growth phase due to significant factors from the automotive industry, so there are some differences in the results of the methods used because the characteristics of the company itself.

2. Literature Review

Several previous studies have discussed a lot about the valuation of stock prices of companies that are listed and categorized as stable and well-established companies. Previous research also usually only analyzed with only one valuation method. Benaji [7] wrote the valuation method for Perum Pegadaian with FCFE only, Lesmana and Sun [8] wrote the valuation of Garuda Indonesia during the 2011 IPO using the FCFF method only, Khoirudin [9] analyzed the estimated share price of Atlas Resources and PTP Pro with FCFE and relative valuation. For companies that have their own characteristics, especially in their capital structure and are in the process of growing back due to significant factors from the business and industrial environment, several valuation methods need to be carried out and researched to choose the one that fits the condition and character of the company.

In general, the process of valuation of a company can be carried out through five stages [10], namely understanding the business of the company which is done by analyzing the company's

historical financial statements as the basis of projected company performance in the future, then projecting the company's performance, choosing a model and valuation approach match, translate projections into valuations, and apply conclusions from those valuations. The valuation of a company's value must be based on the facts and financial data of the company itself, but reasonable thoughts and intuitive judgment must also be included in the process [11]

The theoretical basis used in this study is the valuation method using discounted cash flow where there are two types of cash flow, namely free cash flow to equity and free cash flow to the firm proposed by Damodaran [6], and relative valuation method valuation. While for the projections of each free cash flow two different methods will be used, namely the reinvestment rate and based on sales projections or percentage of sales.

The present value model or the discounted cash flow model applied for equity valuation obtains the value of ordinary shares as the present value or discounted value of future cash expected to flow to the company. Pinto et. Al [10] said the concept of a discounted cash flow model that can be used and the most widely used is the dividend discount model, the free cash flow model, and the residual income model. Free cash flow is based on cash flow from operations but is also reinvested in the fixed assets and working capital needed for business continuity.

The discounted cash flow approach is a broad valuation model to be adopted and practiced [12]. Lippit and Mastracchio [13] state that the discounted cash flow method is very important in the valuation process and one of the most popular valuation methods to be used. Copeland et.al also stated that the discounted cash flow method was popularized with quite influential literature written by a team associated with consulting firm McKinsey [14].

2.1 Discounted Free Cash Flow to Equity and Free Cash Flow to the Firm

Some discounted cash flow methods that are often used are discounting cash flow predictions using the free cash flow to equity (FCFE) and free cash flow to firm (FCFF) methods. The difference between the two is valuation using free cash flow to equity (FCFE) only measures the value of the company in terms of equity, whereas in free cash flow to firm (FCFF), measures the overall value of the company, including the owner of claims in companies such as bondholders or holders bonds, and preferred stock holders [6]

Equity value using the discounted free cash flow to equity (FCFE) method is obtained by discounting free cash flow to equity (remaining cash flow after paying all obligations, reinvestment requirements, tax obligations, and interest and principal debt) at a certain level of cost of equity (for example required rate of return desired by corporate investors which can be interpreted as cost of equity) [6]. The calculation of discounted FCFE according to Damodaran [6] can be explained in the following formula:

$$Value\ of\ equity = \sum_{t=1}^{t=n} \frac{\text{CF to equity}_{\,t}}{(1+\text{k}_\text{e})^{\text{t}}} + \frac{Terminal\ value_n}{(1+k_e)^n}$$

The value of the company with the discounted free cash flow to firm (FCFF) method is obtained by discussing free cash flow to firm (remaining cash flow after paying all operating costs, reinvestment needs, but not yet paying all obligations to debt creditors or shareholders) at a flat rate - weighted average cost of equity and cost of debt or weighted average cost of capital (WACC), which is the cost of various financing components used by companies, is weighted

by the proportion of market value [6]. The calculation of discounted FCFF according to Damodaran [6] can be explained in the following formula:

$$Value\ of\ firm = \sum_{t=1}^{t=n} \frac{\text{CF to firm}_{\text{t}}}{(1+WACC)^{\text{t}}} + \frac{Terminal\ value_n}{(1+WACC)^n}$$

n	= age of the asset
CF to equity t	= cash flow projections for the value of equity in a certain period (t)
CF to firm t	= cash flow projections for the value of the company in a certain period (t)
r	= discount rate for the value of equity (cost of equity)
WACC	= weighted average cost of equity and debt costs

Since the company cannot estimate cash flow forever, the company can generally determine discounted cash flow by stopping estimating cash flow in a future period and then calculating the terminal value that reflects the value of a company at one point in time, usually at the end of the projection financial or terminal year [6]

$$Terminal\ value_t = Cash\ flow_{\ t+1}/(r - stable\ growth)$$

In estimating of the cost of equity or cost of capital in a project or CAPM valuation as a discount factor can be used. Despite criticism in the academic literature regarding this model, CAPM remains a preference in every financial study, and is widely used by practitioners [15]. Welch [15] in his study found that about 75.0% of finance professors recommend using CAPM for the cost of capital in the budgeting process. While Graham and Harvey [15] indicated 73.5% of finance directors as respondents surveyed, using the CAPM model. Because CAPM can provide basic economic information and is relatively objective in measuring the required rate of return, this model has been widely used in valuations [8]. The CAPM formula can be described as follows:

$$E(R_i) = R_f + \beta_i[E(R_M) - R_F]$$

The weighted average cost of capital or WACC level of return on capital of a company must be attributed to their shareholders or shareholders and their debt creditors or debt holders [16]. WACC is mostly used to calculate the investment value rather than the fair market value of the company [17]. The WACC calculation method is based on the cost of each net capital structure that has been adjusted for tax. In short WACC is the rate of return or required return of the entire capital structure of the company, namely equity and debt, which has been averaged according to the proportion. According to Damodaran [6] calculations from WACC are as follows:

$$WACC = re\ \frac{E}{V} + rd\ (1-T)\frac{D}{V}$$

2.2 Free Cash Flow to Equity and Free Cash Flow to the Firm

Free cash flow to equity (FCFE) is cash flow available to shareholders after the company takes into account capital expenditure, working capital and corporate debt obligations [6] i.e. cash flows received by shareholders after the company fulfills all its obligations. The FCFE model defines net cash flow after payments to debt and liability providers [10]. The calculation of FCFE according to Damodaran [6] can be explained in the following formula:

$$FCFE = Net\ income - (Capital\ expenditure - Depreciation) \\ - (\Delta\ in\ Noncash\ Working\ Capital) + (New\ Debt\ issued - Debt\ repayments)$$

The free cash flow to the firm model (FCFF) is the cash flow that a company receives before payment of an obligation or debt provider after paying all operational costs, including taxes, and operational investment [10]. Payments to debt or capital providers including to debt or bond holders, ordinary shareholders and preferred shareholders. Damodaran [6] explains the FCFF calculation can use the FCFE figure which is cash flow for shareholders, also by calculating debt holders' cash flows such as adding the principal amount of debt, adding interest payments, deducting new debt and adding payments to preferred shareholders. But to simplify, Damodaran [6] uses an approach that is calculated from operating profit before tax, which has been adjusted for tax payments, which has also been reduced by the need for reinvestment. The calculation of FCFF according to Damodaran [6] can be explained in the following formula:

$$FCFF = EBIT\ (1 - Tax\ rate) + Depreciation - Capital\ expenditure - \Delta\ Working\ capital$$

The difference between FCFE and FCFF arises in cash flows associated with debt such as interest payments, principal payments, and new debt receipts, and other claims not related to equity, such as dividend payments to preferred shareholders. Under certain conditions of debt level, where the company finances its capital expenditure and working capital with a mixture of debt and equity and uses debt to pay the old principal, then the FCFF can be higher than the FCFE rate.

2.3 Projection of FCF using Reinvestment Rate and Percentage of Sales

Damodaran [6] explains the projections of cash flow receipts can be determined in a growth rate that has aggregated the components of FCFE and FCFF, as well as the growth of its fundamental components (net income for FCFE and operating profit for FCFF). The projected growth of FCFE according to Damodaran [6] can be done the same as the method in projecting dividend growth per share but there is an adjustment using the equity reinvestment rate :

$$Expected\ growth\ rate\ in\ FCFE\ = Equity\ reinvestment\ rate\ x\ Noncash\ ROE$$

$$Equity\ reinvestment\ rate = \frac{(Capital\ expenditure - depreciation + \\ change\ in\ noncash\ working\ capital \\ -net\ debt\ issues)}{Net\ income}$$

$$Noncash\ ROE = \frac{Net\ income - after\ tax\ income \\ from\ cash\ and\ marketable\ securities}{Book\ value\ of\ equity - \\ cash\ and\ marketable\ securities}$$

While for the calculation of the FCFF projection, according to Damodaran [6] is almost the same as the FCFE calculation, the difference lies in the calculation of the rate of return using return on capital as the rate of return on capital. FCFF also does not calculate net issuance debt in its reinvestment rate calculation, and uses the capital component as a divisor of return on capital. The formula is as follows:

$$Expected\ growth\ rate\ in\ FCFF = Reinvestment\ rate\ x\ return\ on\ capital$$

$$Reinvestment\ rate = \frac{Capital\ expenditures - depreciation + change\ in\ noncash\ working\ capital}{EBIT\ (1-t)}$$

$$Return\ on\ capital = \frac{EBIT\ (1-t)}{Capital\ invested}$$

$$Capital\ invested = Book\ value\ of\ equity + book\ value\ of\ debt - cash$$

More complex calculations can be done by projecting each of the components forming cash flow. This approach can see the relationships between these components. The main assumptions that can be used in this cash flow projection approach both in the FCFE and FCFF projections are [10] investments in fixed assets after depreciation and investments in capital expenditure both appear to have a constant relationship with projections of increasing size companies that can be seen from increased sales.

In the FCFE projection, the assumption of capital structure can be represented by looking at debt and equity ratios under constant conditions. By looking at these assumptions, the FCFE component in investment in fixed assets and working capital can be seen financing greater than debt or from equity. But this method is also the result of a simplification in which there is a component of depreciation, and the assumption of depreciation must really be in accordance with the conditions of the company. If depreciation reflects the annual costs of pre-existing capital or fixed assets, the difference with fixed asset investment and depreciation must be adjusted to the growth of capital expenditure needed for the future [10]. In this method some of the inputs needed for the calculation are as follows [10]:

1. Projected sales growth
2. Projected growth in operating profit margins (for FCFF) and net profit margins (for FCFE)
3.Estimated relation between changes in fixed asset investment (capital expenditure / CAPEX) with sales growth
4. Estimated relation between changes in working capital or working capital with sales growth
5. Estimated debt and equity ratio

$$Incremental\ fixed\ capital\ investment$$

$$= \frac{Capital\ expenditure - depreciation\ expense}{Increase\ in\ sales}$$

$$Incremental\ working\ capital\ investment$$

$$= \frac{Increase\ in\ working\ capital}{Increase\ in\ sales}$$

$$Net\ borrowing$$
$$= DER\ (Capex\ investment) + DER\ (Working\ capital\ investment)$$

2.4 Relative Valuation

The most widely used method of price multiplication is the price-to-earnings ratio or P / E ratio. Damodaran [6] explains the use of P / E ratios is a simple calculation so that it becomes an attractive choice ranging from companies that want valuation when initial public offering or IPO to valuation relative to other shares. Other research on pricing calculation when going to an IPO explains the use of the relative valuation method commonly used is the P / E ratio and PBV ratio [18]. Calculation of the P / E ratio according to Damodaran [6] is as follows:

$$PE = Market\ price\ per\ share / Earnings\ per\ share$$
$$EPS = Net\ income\ /\ Shares\ outstanding$$

The ratio used next is the ratio of market price per share compared to the price of a book or price book value ratio (PBV). Some reasons for using PBV are quite extensive for valuation methods are because PBV is relatively more stable and intuitive size that can be compared directly with market prices [6]. PBV is also often used because it can be compared with similar companies even if the company is undervalued, overvalued or has a negative or negative profit. Damodaran [6] explains the PBV calculation is as follows:

$$PBV = \frac{Price\ per\ share}{Book\ value\ of\ equity\ per\ share}$$

3. Method

The method used in this research is a type of qualitative or case study with PT XYZ as the research object. The analytical method used to assess fair prices is a top-down approach with stages of analysis starting from macroeconomic conditions, industrial conditions and company micro analysis both qualitatively and quantitatively. On the basis of this appraisal, the fair value of shares was assessed using the discounted cash flow model and relative valuation. The share price valuation is calculated based on the projected cash flow that the company will receive in the future and its comparison with the value of similar companies. In-depth analysis will be carried out on the company's financial statements. The company's financial statements are in the form of income statements, financial position statements, and cash flow reports historically in the past five years. To get the results of the analysis in the form of projections, which will also bring up the estimated valuation or value of the company, the historical data of the company's financial statements will be reviewed to determine the condition of the company both operationally and its own financial performance. Projections are carried out for the next five years, after that period in the future terminal value will be used in accordance with the calculated discount rate

4. Result And Discussion

The calculations for the terminal value and net present value of each free cash flow approach are as follows:

4.1 Discounted FCFE reinvestment rate method

The calculation is done using the present value for cash flow receipts in the first four years discounted in the level of equity costs of 19.71%, then in the final year of the projected calculation or terminal year calculations are used using terminal values that have been calculated with stable growth. The terminal value will then also be presented to get the NPV value from the FCFE projection. The calculation is as follows:

Table 1. Net Present Value Discounted FCFE Reinvestment Rate Method

		2020	2021	2022	2023	2024
FCFE		2.023.137.154	3.383.707.873	5.659.269.787	9.465.159.442	15.830.530.551
Cost of Equity	19,71%					
g Stable	5,30%					
Terminal Value						115.670.082.828
PV	11.958.748.239					
NPV TV	56.322.332.715					
NPV FCFE	**68.281.080.955**					

From the FCFE calculation using the reinvestment rate method, the NPV of the company's equity value according to projections in the future is Rp. 68,281,080,955.

4.2 Discounted FCFE percentage of sales method

The calculation is done using the present value for cash flow receipts in the first four years discounted in the level of equity costs of 19.71%, then in the final year of the projected calculation or terminal year calculations are used using terminal values that have been calculated with stable growth. The terminal value will then also be presented to get the NPV value from the FCFE projection. The calculation is as follows:

Table 2. Net Present Value Discounted FCFE Percentage of Sales Method

		2020	2021	2022	2023	2024
FCFE		27.943.069.457	27.439.321.985	29.951.561.665	31.538.994.433	33.210.561.138
Cost of Equity	19,71%					
g Stable	5,30%					
Terminal Value						242.662.009.669
PV	75.304.985.672					

NPV TV	118.157.522.773
NPV FCFE	**193.462.508.446**

From the FCFE calculation using the sales projection method, the NPV of the company's equity value according to projections in the future is Rp193,462,508,446.

4.3 Discounted FCFF reinvestment rate method

The calculation is done using the present value for cash flow receipts in the first four years discounted at the level of capital costs or WACC of 14.67%, then at the end of the calculation of the projection or terminal year the calculation is used using the terminal value that has been calculated with stable growth. The terminal value will then also be presented to get the NPV value from the FCFE projection. The calculation is as follows:

Table 3. Net Present Value Discounted FCFF Reinvestment Rate Method

		2020	2021	2022	2023	2024
FCFF		45.420.030.165	48.482.421.097	51.751.290.056	55.240.558.574	58.965.086.828
WACC	14,67%					
g Stable	5,30%					
Terminal Value						662.332.744.297
PV	142.737.929.578					
NPV TV	383.009.142.518					
NPV FCFF	525.747.072.096					

From the FCFF calculation using the reinvestment rate method, the NPV of the company's value according to projections in the future is Rp525,747,072,096. To calculate the equity of the company in accordance with the FCFF method used, the FCFF value which is the overall value of the company will be reduced by the value of the company's book debt when valuation is carried out. The book value of the company's debt is Rp848,429,410,575 so the calculation of the value of its equity is:

Table 4. Net Present Value Equity FCFF Reinvestment Rate Method

NPV FCFF	525.747.072.096
BV Debt	848.429.410.575
NPV Equity	(322.682.338.480)

4.4 Discounted FCFF percentage of sales method

The calculation is done using the present value for cash flow receipts in the first four years discounted at the level of capital costs or WACC of 14.67%, then at the end of the calculation of the projection or terminal year the calculation is used using a terminal value that has been calculated with stable growth. The terminal value will then also be presented to get the NPV value from the FCFE projection. The calculation is as follows:

Table 5. Net Present Value Discounted FCFF Percentage of Sales Method

		2020	2021	2022	2023	2024
FCFF		77.706.908.640	74.333.280.567	91.290.588.311	104.020.847.665	118.447.491.890
WACC	14,67%					
G Stable	5,30%					
Terminal Value					1.330.476.330.633	
PV	244.979.348.653					
NPV TV	769.378.538.090					
NPV FCFF	**1.014.357.886.742**					

From the FCFF calculation using the sales projection method, the NPV of the company value according to the projected future is IDR 1,014,357,886,742. To calculate the equity of the company in accordance with the FCFF method used, the FCFF value which is the overall value of the company will be reduced by the value of the company's book debt when valuation is carried out. The book value of the company's debt is Rp848,429,410,575 so the calculation of the value of its equity is:

Table 6. Net Present Value Equity FCFF Percentage of Sales Method

NPV FCFF	1.014.357.886.742
BV Debt	848.429.410.575
NPV Equity	165.928.476.167

After calculating the numbers of each method of free cash flow can be calculated the price of shares per company by dividing each of the results of the calculation of free cash flow by the number of shares owned by the company. The company currently has 96,611,000 shares, so each share price from the free cash flow calculation can be calculated as follows:

Table 7. Value per Share Comparison

Method	Equity Value	Shares Outstanding	Value per Share
FCFE reinvestment rate	68.281.080.955	96.611.000	**706,76**
FCFE sales projection	193.462.508.446	96.611.000	**2.002,49**
FCFF reinvestment rate	(322.682.338.480)	96.611.000	**(3.340,02)**
FCFF sales projection	165.928.476.167	96.611.000	**1.717,49**

From the results of the analysis using the discounted cash flow approach it can be concluded that the range of the fair price of PT XYZ's initial shares is in the range of Rp706.76 to Rp2,002.49. There is one method that produces negative numbers, the FCFF reinvestment rate

method. This is because the NPV value of the valuation using the FCFF reinvestment rate approach has a smaller value compared to the amount of the company's liabilities so that the cash flow for equity becomes negative. Because the assumption of the total liabilities reduced by the NPV value of the company uses the book value of the company's liabilities or debts at the time of valuation, the amount may exceed the projected FCFF value. Other assumptions can be made by sorting the liability component that can be reduced by the NPFF FCV value. According to Damodaran [6] at least the amount of liabilities reduced by the FCFF NPV value is equal to the amount of liabilities when a company analyzes its cost of debt or in other words the amount of liabilities that have interest bearing debt. Assumptions about changes in the company's equity and debt ratios in the future also affect the value of the company's equity. The high amount of debt due to related parties can also be taken into consideration. Debt conversion or debt to equity swap, especially debt due to related parties, into equity can be done as a restructuring step for the company to improve the capital structure of companies that have too much debt or in highly leverage condition.

Another assumption is that the discount rate is too high or the rate of growth is stable after a small terminal year. Sensitivity analysis can be done by looking at the level of discount factors and what stable growth rate if a method continues to use the same approach. The sensitivity analysis for the FCFF reinvestment rate method is as follows:

Table 8. Sensitivity Analysis for FCFF Reinvestment Rate Method

		WACC						
		10,70%	**11,89%**	**13,21%**	**14,67%**	**16,14%**	**17,76%**	**19,53%**
Infinite Growth Rate	**4,29%**	-1.425	-2.366	-3.128	-3.759	-4.242	-4.661	-5.028
	4,77%	-934	-2.017	-2.875	-3.571	-4.097	-4.548	-4.939
	5,30%	-287	-1.571	-2.558	-3.34	-3.921	-4.412	-4.832
	5,83%	501	-1.046	-2.194	-3.081	-3.727	-4.263	-4.718
	6,41%	1.593	-352	-1.73	-2.758	-3.489	-4.084	-4.581
	7,05%	3.198	606	-1.117	-2.346	-3.191	-3.865	-4.415

By using sensitivity analysis, it can be seen that the factor that causes the calculation of the FCFF reinvestment rate produces a negative price per share is due to the high discount factor, and the low assumption of stable growth projections after the terminal year. In this analysis it can be seen that the stock price valuation using the FCFF reinvestment rate method, the FCFF rate can be higher than the current debt value if WACC is below 11.89% and stable growth after the terminal year is above 5.83%.

4.5 Relative Valuation Method

The company's stock price with book value for 2019 is known to be Rp1,986 per share. Figures are obtained by dividing the total equity by the number of shares. The profit per share or earnings per share of the company at the book value of 2019 was Rp371.55 per share. This figure is obtained by dividing the amount of net profit divided by the number of shares outstanding. Next is to include a discount for market liquidity (Discount for Lack of Marketabilities) where this discount is a deduction from the value of an equity as a reflection of the lack of closed company information about the market. DLOM must be considered for calculation in the valuation of private companies and companies that will conduct initial public offering [19]. But the exact calculation of DLOM itself is still very biased and tends to be

confidential depending on financial models, empirical studies, and other cases [19]. As a closed company, discounts for shareholders are in the range of 20% -50%. DLOM can be determined from companies is an average of 30%, so the calculation is as follows:

Table 9. Value Per Share Relative Valuation Method

	Multiples	**PBV**	**EPS**	**Value**
PBV	0,900	1.986.388	-	1.787,75
P/E	10,500	-	371,55	5.164,58
Average	-	-	-	3.476,17
DLOM	30,0%	-	-	1.042,85
Value per Share				**2.433,32**

Based on calculations using relative valuation, it can be determined that the fair share price per share of the company is Rp2,433.32.

5. Conclusion

From the calculation of stock prices based on three broad methods, namely FCFE, FCFF, and relative valuation models produce different prices. The FCFE reinvestment rate model produces a value per share of Rp706.76. FCFE sales projection model produces a value per share of Rp2,002.49. FCFF sales projection model produces a value per share of IDR 1,717.49. While from the method of relative valuation the number per share produced is equal to Rp2,433.32. For the negative stock price calculation results cannot be used as a reference, but based on an analysis of negative values, companies can change the projected assumptions and also restructure capital structure so that debt is not too high.

The value of the initial shares proposed in this study is the result of the FCFF method valuation using sales projections where the price per share valuation is Rp1,717.49. Based on Damodaran's explanation of the selection of valuation methods [6], valuation valuation for companies with characteristics owned by PT XYZ is more appropriate using the FCFF method. Where the FCFF method is suitable for companies that have very high or very low leverage levels and are in the process of changing the leverage level to a more ideal number. Valuations using FCFE will be difficult in the character of PT XYZ because of the volatility in the payment or issuance of new debt, and equity itself which has a small proportion will be very sensitive to the assumptions of growth rates and risks. While the FCFF valuation method will be more appropriate using the sales projection method, where sales projections also take into account macro economic conditions and the development of the industry itself. For the reinvestment rate method, the growth assumption used in calculating capex and working capital as FCF forming components is the same as historical data. While from the condition of the company PT XYZ, capex and growth working capital based on projected sales can change according to the percentage of sales increase. The company can choose a fair value per share in the price range produced in this study while considering other aspects. Whether it's from the assessment of other analysts, underwriters, as well as the assessment of the company itself.

From the five methods used in calculating the company's initial share price of PT XYZ, the overall method produces a value of initial shares that vary in positive amounts, except for calculations using the FCFF reinvestment rate method. As in the previous explanation, the

negative initial share value resulting from the FCFF reinvestment rate method is caused by the NPV value of the company's equity also recorded negative value because the current book debt value of the company is higher than the NPV FCFF value of the reinvestment rate method. Based on the previous explanation, changes in projected assumptions can be made such as:

1. The assumption of a decrease in WACC as well as an increase in the assumption of company growth after terminal year can increase the value of FCFF in accordance with the FCFF sensitivity analysis of the reinvestment rate method.
2. Assumption of debt restructuring by converting debt or debt to equity swap, especially PT XYZ's debt due to related parties, into equity will reduce the book value of the company's debt.
3. The value of a company's debt which is a deduction from the NPFF FCFF value of the reinvestment rate method can be calculated at least from the value of the debt containing only interest or interest bearing debt used in determining the cost of debt [6]

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