ISSN: 2581-8341 Volume 06 Issue 07 July 2023 DOI: 10.47191/ijcsrr/V6-i7-27, Impact Factor: 6.789 IJCSRR @ 2023



# Valuation of Software Agency for Pre IPO Using DCF and Relative Valuation Method (Study Case: PT XYZ)

### Ibnu Sina Wardy<sup>1</sup>, Oktofa Yudha Sudrajad<sup>2</sup>

<sup>1,2</sup> School of Business and Management, Institut Teknologi Bandung, Indonesia

ABSTRACT: An Initial Public Offering (IPO) is a pivotal moment in a company's life cycle. It's a process where a private company offers its shares to the public in the capital market to raise funds. The move from private to public affecting the company to prepare for many changes, including increased supervision and the responsibility of delivering value to shareholders. However, before stepping on this significant IPO step, the company needs a clear understanding of various factors, which includes macroeconomic conditions, the dynamics of the market it operates in, and the company's internal conditions. The company, PT XYZ, specializes in creating software solutions, a sector that is currently needed by a lot of company due to digitalization era. Fair share price for PT XYZ must be calculated when it goes public. In addition to understanding the macroeconomic condition, the Porter's Five Forces framework is described to assess the competitive aspect in the market and potential opportunities. After analysing the external factors, the next step is doing in-depth internal analysis. This involved a SWOT analysis by identifying PT XYZ's Strengths, Weaknesses, Opportunities, and Threats, and an evaluation of the company's financial health. The business solution proceeded to the valuation stage, using the Discounted Cash Flow (DCF) method with Free Cash Flow to Equity (FCFE). This process involved making growth projections for the next decade. It anticipates that the company's growth rate would eventually align with Indonesia's Gross Domestic Product (GDP), serving as the long-term growth rate. To ensure a holistic evaluation, there must be a complementary valuation method, Relative Valuation. Three similar companies in the software sector were picked and their EV/EBITDA was used as a multiplier ratio. The two separate valuation methodologies led to two distinct results. Thus the average of these two methods can be proposed. Overvalued or undervalued share pricing can significantly affect investor decisions and the amount of funds raised from the IPO.

KEYWORDS: Discounted Cash Flow; Free Cash Flow to The Equity; Initial Public Offering; Relative Valuation; SWOT Analysis.

#### INTRODUCTION

To survive and develop its business, every company needs substantial capital. One of the ways to get the required funds is by obtaining funds internally, for example by retaining earnings or taking different loans against the assets of the company. The other source for obtaining funds can be raising capital from the capital market by issuing shares. Not only it helps them raise money, but it also provides investors with a medium of exchange through which they can receive dividends from share-holding companies that are owned by investors.

As an offering of the shares, it can be easily purchased by investors and those people who want to own equity in the company. The initial public offering (IPO) is a process that a company uses to raise money for its operation by selling new shares (common stock) in the capital market. Compared to a bond or a bank loan, listing in the capital market means that the company is not bound to pay debts and interest.

PT XYZ as a technology company considers that many companies need to adopt technology as fast as possible. Technology adoption in the world is very fast. No one expected the presence of blockchain technology that can be used as the basis of digital currency and the emergence of Artificial Intelligence (AI) could rapidly transform the world. PT XYZ believes by increasing its capability as a software development agency can be increasing the company's growth. The increasing capability includes expanding the market, adding the number of high-calibre employees, and developing sustainable technology. Those areas of improvement will require considerable capital, therefore, to obtain these funds, PT XYZ plans to put an IPO on the IDX as the first option.

ISSN: 2581-8341

Volume 06 Issue 07 July 2023 DOI: 10.47191/ijcsrr/V6-i7-27, Impact Factor: 6.789 IJCSRR @ 2023

#### **BUSINESS ISSUE**

WWW.ijcsrr.org

This study is motivated by the concern that PT XYZ plans to use an Initial Public Offering (IPO) to raise money in 2024. The change to a public company will not only make it easier to get more revenue in new markets and increase its production capacity, but it will also make clients trust the company more. The IPO is supposed to make sure that the company will also guarantee business sustainability. An Initial Public Offering (IPO) refers to the process through which a privately held company begins selling its shares to the public. The primary aim is usually to generate funds, but companies may also pursue an IPO for reasons such as enhancing their prestige or facilitating an exit for existing shareholders [1]. There are numerous benefits for a company to go public: access to stock market funding, enhanced trust for loan access, cultivating professionalism, enhancing company image, liquidity & profitable divestiture opportunities for founding shareholders, fostering employee loyalty, increasing company value, and ability to sustain operation [2].

Analysing the external and internal of the company can also identify whether PT XYZ to be eligible to be listed in one of the boards in Indonesia Stock Exchange (IDX). There are three boards available in IDX. The Main Board of a stock exchange is designed for established, large-scale companies with a proven track record. The Development Board, in contrast, caters to companies that are unable to meet the Main Board's listing requirements or are currently in a state of reorganization. The Acceleration Board serves as a platform specifically for small and medium-sized enterprises (SMEs) to go public, facilitating their initial public offerings (IPOs) to garner capital for business growth and expansion [3].

The enterprise value and share price are key factors in whether an IPO is successful. It affects both investor interest and the amount of money that PT XYZ can raise. If the share price is higher than the fair market value, buyers may not want to buy, even though PT XYZ would get more money. On the other hand, an underpriced offering might bring in buyers, but it would mean less funding for PT XYZ.

### LITERATURE REVIEW

Valuation is the process of determining the current worth of an asset or a company. It involves the use of financial and economic principles to calculate and analyse a firm's intrinsic or relative value. Various methods can be used for this, each with its own strengths and weaknesses, and each suitable for different scenarios. Valuation is not only essential for financial analysts and investors but also plays a crucial role in strategic decision-making for companies [4].

Discounted cash flow valuation is one way to approach valuation, and even though the other valuation method is relative valuation, discounted cash flow valuation serves as the basis upon which all other valuation techniques are constructed. It is common practice to start with a discounted cash flow valuation before applying option pricing models to the process of assets valuation. (Damodaran, 2012). DCF is a fundamental valuation technique that involves forecasting the company's free cash flow and discounting it back to the present value using a required rate of return [5].

There are two key versions of the DCF model based on the type of cash flows that are discounted: Free Cash Flow to the Firm (FCFF) and Free Cash Flow to Equity (FCFE) [4]. A company's free cash flow from operations (FCFF) is the cash that it generates from its core activities and belongs to all capital sources (both debt and equity). When FCFF is discounted using the cost of capital, the resulting number represents the worth of the company's operational assets. The value of the non-operating assets must be added to determine the value of the company [6]. The Free Cash Flow to Equity Model (FCFE) is the highest cash flow remaining after interest and basic payments, which is used for capital expenditures to maintain current assets and acquire new assets for future growth [6]. The Free Cash Flow to Equity (FCFE) model is used to calculate the equity value of a firm. It measures how much "cash" a firm can return to its shareholders and is calculated after considering the taxes, capital expenditure, and debt cash flows.

Relative valuation, also known as multiples-based valuation or comparable company analysis, is a method that values an asset by comparing it to the values assessed by the market for similar or comparable assets. This approach stands on the premise that similar assets should trade for similar prices [4]. Relative valuation is widely used because of its simplicity and the intuition behind it. However, it's important to ensure the comparability of the firms being compared and to understand the fundamentals that might cause multiples to vary across the firm's [5].

The weighted average cost of capital (WACC) for the company is determined by taking into account the proportions of debt (wd), preferred stock (wp), and common equity (wc), as well as the costs associated with those components [7].

ISSN: 2581-8341 Volume 06 Issue 07 July 2023 DOI: 10.47191/ijcsrr/V6-i7-27, Impact Factor: 6.789 IJCSRR @ 2023



In the context of the FCFE model, the Cost of Equity is used as the discount rate. This is because FCFE represents the cash flows available to equity investors after all expenses, reinvestments, and debt repayments are considered. Therefore, it is only logical to discount these cash flows at a rate that reflects the equity investors' required return for bearing the risk of the investment [8].

#### METHODOLOGY

The research framework aims to assist this research in answering the identified research questions and achieving its objectives, as well as resolving business concerns. In the early phases, business issues are defined to figure out which research questions and objectives will be answered by this study. Financial analysis is carried out by looking at financial reports, including balance sheets, income statements, and company cash flows. This data will determine the financial ratios to see the company's performance as a basis for making a valuation. To determine a company's value using the DCF method, it is important to forecast its 10-year growth rate. This is visible both through external and internal analysis. To determine the valuation using a comparable multiple, it is important to choose a comparable stock exchange company. This can be obtained by evaluating the PT XYZ profile and business from multiple angles. The two results obtained will be a price range that can be recommended to PT XYZ for the pre-IPO valuation price.

The data collection method used to obtain information for the research was collected from two main sources: primary data and secondary data. Primary data was gathered through interviews with the CEO and CFO of PT XYZ. The interviews aimed to gather information on the company's strategy and reasons for the IPO. The interview questions were designed to gain insights into the company's financial performance, growth potential, and competitive advantages. The interviews were conducted in person and were recorded to ensure accuracy in data collection. Secondary data was obtained from the financial reports of PT XYZ, including the company's audited annual reports, financial statements, and other relevant financial data. These reports were collected from company financial databases. The secondary data provided a comprehensive understanding of the company's financial performance, revenue streams, expenses, and other financial metrics that are crucial for the valuation process. The data was also collected from other publicly available sources such as the news portal, Bank Indonesia publication reports, and IMF to quantify the projected growth for the technology sector. Overall, the combination of primary and secondary data collection methods provided a comprehensive understanding of the company's strategy and financial performance, which is essential for the valuation of the company's shares during the IPO process.

The data analysis method used in this study involves a top-down analysis approach. The analysis started with an assessment of macroeconomic conditions and industry analysis before moving on to a qualitative and quantitative analysis of the company's financial performance, which was then used to value the company. The top-down analysis approach provides a comprehensive understanding of the external factors that impact a company's performance, as well as a detailed analysis of the company's financial performance, which is essential for valuing the company. The valuation methods used in this study include the discounted cash flow (DCF) method and the relative valuation method, which are commonly used in the financial industry to value companies. The modified data will be utilized in the discounted cash flow (DCF) method to estimate the fair value of the company. The valuation will be undertaken utilizing the method which provides a sound theoretical framework for a dependable valuation foundation [9]. The discounted cash flow method, which uses cash flows to the firm over its existence and a discount rate that represents the overall risk of the firm's assets, can be used to value a company. To value a company, first one must determine how long high growth will last, how fast it will expand, and what its cash flows will be during that time. By calculating a terminal value and discounting all

last, how fast it will expand, and what its cash flows will be during that time. By calculating a terminal value and discounting all the future cash flows, including the terminal value, back to the present, one can determine a firm's value [6]. Figure 1 provides an illustration of this.

### ISSN: 2581-8341

Volume 06 Issue 07 July 2023 DOI: 10.47191/ijcsrr/V6-i7-27, Impact Factor: 6.789 IJCSRR @ 2023



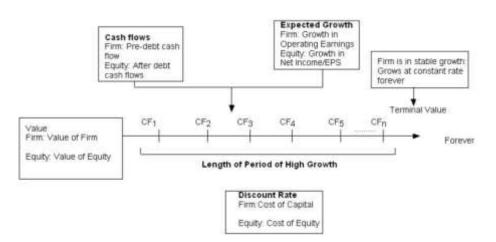


Figure 1. Discounted cash flow valuation [10]

To do relative valuation then, comparable assets need to be identified. The first step in the relative valuation method is to find companies that are similar to PT XYZ. Some things are very important in this process, like how close the business lines are and how big the company's assets are. For a good review for valuation, it is best to choose more than one company. Once the companies that are similar have been found, the next step is to figure out the multiple ratios. Some ratios, like the Enterprise Value to Earnings Before Interest, Taxes, Depreciation, and Amortization (EV/EBITDA), the Enterprise Value to Revenue (EV/Revenue), and the Price Earnings Ratio (PER), are often used to figure out how much company is worth compared to other company. These numbers can be used to figure out how much the enterprise value of PT XYZ.

After figuring out how much the valuation is, the fair value per share for PT XYZ can be calculated. This calculation is important for possible investors because it helps them decide where to put their money. The stock value is divided by the number of shares that will be sold in the IPO to get the fair value per share. Most of the time, the number of shares includes both the shares that were already there before the IPO and any new shares that were given as part of the IPO. This information gives buyers a way to figure out if the price of the IPO is right.

#### **RESULT AND DISCUSSION**

### A. External Analysis

**PESTEL** Analysis: PESTEL analysis is a top-down approach that helps organizations identify and analyse external factors such as political, economic, social, technological, environmental, and legal, which they cannot control but can affect their competitive advantage [11]. There are many factors in the political category that influence PT XYZ, one of which is the government's tax policy. Taxation policies can have a significant impact, as they can affect the company's profitability and competitiveness. Factors such as economic growth, inflation, and unemployment rates could affect the demand for PT XYZ services, as well as the cost of doing business. Social factors are elements of the external environment that can impact PT XYZ by influencing the attitudes, behaviours, and values of a society. The adoption of new technologies in Indonesia could also impact PT XYZ. Environmental factors are aspects of the surrounding environment that have the potential to influence a company by changing the natural conditions and then affecting the business. Legal factors are elements of the external environment that can impact a business by influencing the laws and regulations that apply to it.

*Porter's Five Forces*: The model known as Porter's Five Forces defines and analyses five competitive forces that assist the company in determining the areas in the industry for its strengths and weaknesses. The analysis known as the "Five Forces" is used rather frequently to define company strategy by determining the structure of the industry. Porter's five competitive forces are themselves highly interdependent with each other [12].

### ISSN: 2581-8341

Volume 06 Issue 07 July 2023 DOI: 10.47191/ijcsrr/V6-i7-27, Impact Factor: 6.789 IJCSRR @ 2023



www.ijcsrr.org

#### New entrants: · Buyer's switching cost is high Much experiences is needed · Low entry barrier for small project High entry barrier for complex project Buyers: Suppliers: Rivalry among competing sellers: · Buyers are not sensitive to price · Software engineers are the highest · High competition between same size company · Buyers are willing to have great expense for developing tech product · Speed of delivery is important key services and software Competition to get high talented High customer loyalty to established partnership · Buyers can not compare easily with engineers is relatively high information in internet Substitutes: There are multiple substitute services in the market and some of them are relatively cheaper especially the company with few portfolio.

Figure 2. Porter's five forces of PT XYZ

### B. Internal Analysis

*SWOT Analysis:* A SWOT analysis is a method for strategic planning that helps a business organization evaluate its strengths and weaknesses, as well as opportunities and threats that may exist in a particular business environment. The acronym SWOT stands for "strengths, weaknesses, opportunities, and threats." [13]. The Table 1 is a summary of the internal and external aspects included in the SWOT analysis of PT XYZ.

Strength	Weakness
<ul> <li>Good branding in first jobber/interns</li> <li>Team independent &amp; healthy WFA culture</li> <li>High-profile experience &amp; portfolio</li> <li>Loyal customers</li> <li>Google Cloud Partner Support</li> <li>Strong digital marketing</li> </ul>	<ul> <li>R&amp;D less adaptive to trend</li> <li>Lack of customer discovery in product development</li> <li>Long-time of internal approval</li> <li>Hiring lead time for new project</li> <li>Not enough development time for automation test</li> </ul>
<ul> <li>Opportunity</li> <li>Education platform partnership with government, Google, and Microsoft</li> <li>DTO BUMN and government</li> <li>Trend in quick commerce &amp; Omnichannel</li> <li>Growth of web3, blockchain, and DAO</li> <li>ESG, Green Economy Exchange</li> </ul>	<ul> <li>Threat</li> <li>Slowing down investment in technology</li> <li>Client budget shift to non-digital</li> <li>More backed investor startups opening in Bandung</li> <li>New &amp; emerging IT company/agency with cheaper cost</li> <li>Shifting to hybrid (online to offline)</li> </ul>

**Table 1.** The SWOT analysis of PT XYZ

Financial Analysis: An analysis of PT XYZ's financial ratios in Table 2. reveals valuable insights into the company's performance and profitability trends over the years.

ISSN: 2581-8341

Volume 06 Issue 07 July 2023 DOI: 10.47191/ijcsrr/V6-i7-27, Impact Factor: 6.789 IJCSRR @ 2023



www.ijcsrr.org

 Table 2. Financial ratios of PT XYZ from 2019-2022

9	Dec-2019	Dec-2020	Dec-2021	Dec-2022
Sales growth	n/a	15.79%	83.15%	17.38%
COR growth	n/a	0.06%	136.38%	23.51%
COR/revenue	46.45%	40.14%	51.81%	54.52%
Gross margin	53.55%	59.86%	48.19%	45.48%
EBITDA margin	2.67%	16.63%	13.96%	12.15%
SG&A/Revenue	-51.13%	-42.80%	-35.26%	-35.61%
Net profit margin	0.84%	12.03%	10.66%	8.65%
Effective tax rate	53.30%	22.61%	17.67%	20.15%
Return on asset (ROA)	1.44%	16.70%	16.69%	11.07%
Return on equity (ROE)	1.93%	26.03%	30,43%	21.92%
Current Assets / Current Liabilities	622.88%	346.14%	259.63%	214.35%
Debt to Equity	14.59%	9.96%	5.82%	3.39%
Debt ratio	10.87%	6.39%	3.19%	1.71%

#### C. DCF Method Using FCFE

The business solution to determine the enterprise value of PT XYZ for the IPO plan involves the application of Discounted Cash Flow (DCF) valuation and Relative Valuation methods. Based on each item's trend over the previous year, a forecast for the year after 2022 is generated in Table 3. PT XYZ is currently in the growth phase of its life cycle and is projected to transition into the maturity stage in the next five years. During the growth phase, the company is experiencing a rapid increase in its sales and profits due to innovation in technology, including AI implementation. However, it's anticipated that PT XYZ will eventually enter the decline stage. This change is predicted primarily due to the widespread adoption and increased accessibility of the market regarding the technology. As the technology becomes more common and easy, the implementation costs for companies will decrease, reducing the revenue of PT XYZ.

Table 3. Performance projections of PT XYZ in 10 years

(IDR in millions)						Projec	tions				
**************************************	Dec-2022	Dec-2023	Dec-2024	Dec-2025	Dec-2026	Dec-2027	Dec-2028	Dec-2029	Dec-2030	Dec-2031	Dec-2032
Revenue	31,906,911	39,883,638	49,854,548	59,825,457	70,594,040	81,889,086	93,353,558	104,555,985	115,011,584	124,212,510	131,665,261
% Growth	17%	25%	25%	20%	18%	16%	14%	12%	10%	8%	6%
Cost of revenue	-17,394,127	-21,936,001	-26,921,456	-31,707,492	-36,708,901	-41,763,434	-46,676,779	-51,232,433	-55,205,560	-58,379,880	-60,566,020
% of Revenue	55%	55%	54%	53%	52%	51%	50%	49%	48%	47%	46%
Selling, G&A expenses	-11,362,321	-14,358,110	-17,449,092	-20,340,656	-23,296,033	-26,204,508	-28,939,603	-31,366,796	-33,353,359	-34,779,503	-35,549,620
% of Revenue	36%	36%	35%	34%	33%	32%	31%	30%	29%	28%	27%
Net other income/(expense)	390,447	488,058	610,073	732,088	863,863	1,002,081	1,142,373	1,279,458	1,407,403	1,519,996	1,611,195
% of Revenue	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%	1.22%
Not financial incomei(expens	-84,114	-105,143	131,429	157,714	186,103	215,879	246,103	275,635	303,198	327,454	347,101
% of Revenue	0.26%	0.26%	0.26%	0.26%	0.26%	0.26%	0.26%	0.26%	0.26%	0.26%	0.26%
Share of net loss of associati	0	0	0	0	0	0	0	0	0	0	0
% of Revenue	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Tax expense	-696,423	-873,937	-1,369,610	-1,906,765	-2,560,596	-3,330,603	-4,207,643	-5,172,607	-6,195,919	-7,238,127	-8,251,742
Tax rate		22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
Depreciation	-421,207	-526,508	-658,135	-789,763	-931,920	-1,081,027	-1,232,371	-1,380,255	-1,518,281	-1,639,743	-1,738,128
% Growth	70.6%	25%	25%	20%	18%	16%	14%	12%	10%	8%	6%
Net income	2,760,372	3,098,505	4,855,891	6,760,347	9,078,476	11,808,502	14,918,008	18,339,242	21,967,347	25,662,450	29,256,175
% Margin	9%	8%	10%	11%	1.3%	14%	16%	18%	19%	21%	22%

The rate of return that investors demand when making investments in a firm is known as the cost of equity [6]. The capital asset pricing model (CAPM) approach is used to calculate the cost of equity. According to the CAPM technique, the needed rate of return is calculated by multiplying the risk-free interest rate by the company's beta and the risk premiums.

### ISSN: 2581-8341

Volume 06 Issue 07 July 2023 DOI: 10.47191/ijcsrr/V6-i7-27, Impact Factor: 6.789 IJCSRR @ 2023



www.ijcsrr.org

**Table 4.** Cost of equity of PT XYZ

RÍ	7.10%	Indonesia government bond 10Y
8m-Rf	6.12%	Aswath Damodaran
Beta :	1.141	RUNS
Cost of Equity	14.08%	$Ke = Rf + \beta(Rm-Rf)$

According to the FCFE formula, net income is calculated based on the company's earnings after taxes and interest expenses using growth on the financial forecast in Table 5.

#### Table 5. FCFE of PT XYZ

(in thousands rupiah)				Projections		
	Base Year	1	2	3	4	5
Growth	17%	25%	25%	20%	18%	16%
Net Income After Tax	2,760,372	3,098,505	4,855,891	6,760,347	9,078,476	11,808,502
Depreciation	421,207	526,508	658,135	789,763	931,920	1,081,027
Less: Capital Expenditure	(746,559)	(933, 198)	(1,166,498)	(1,399,797)	(1,651,761)	(1,916,043)
Less: Increase in NWC	(384,148)	(480,185)	(600,231)	(720,277)	(849,927)	(985,916)
Net Borrowing	426,564	533,205	666,506	799,808	943,773	1,094,777
Free Cash Flow to the Equity(FCFE)		2,744,836	4,413,804	6,229,842	8,452,481	11,082,348

(in thousands ruplah)	Projections							
S 6 18	6	7	8	9	10	Steady State		
Growth	14%	12%	10%	8%	6%	5.31%		
Net Income After Tax	14,918,008	18,339,242	21,967,347	25,662,450	29,256,175	30,809,678		
Depreciation	1,232,371	1,380,255	1,518,281	1,639,743	1,738,128	1,830,423		
Less: Capital Expenditure	(2,184,288)	(2,446,403)	(2,691,043)	(2,906,327)	(3,080,706)	(3.244,292)		
Less: Increase in NWC	(1,123,944)	(1,258,817)	(1,384,699)	(1,495,475)	(1,585,203)	(1,669,377)		
Net Borrowing	1,248,045	1,397,811	1,537,592	1,660,599	1,760,235	1,853,703		
Free Cash Flow to the Equity(FCFE)	14,090,192	17,412,088	20,947,478	24,560,991	28,088,629	29,580,135		

This formula assumes that PT XYZ will continue to generate FCFE at the same rate as in the final year of the projection and that the long-term growth rate will be constant. The cost of equity can be estimated using the capital asset pricing model (CAPM). The terminal value is then discounted back to its present value using the appropriate discount rate. The constant growth rate is 5.31% in accordance with Indonesia GDP growth rate in 2022.

This is the output of the computation for the terminal value of PT XYZ:

Terminal Value (TV) = 
$$\frac{Rp 29,580,135}{(14.08\% - 5.31\%)} = Rp 337,206,934$$

The equity value can be calculated by adding the present value of the company's net cash flows to the present value of the terminal value during a stable growth period.

**Table 6.** Equity value of PT XYZ

Year	FCFE	PV of FCFE
1	2,744,836	2,406,018
2	4,413,804	3,391,392
3	6,229,842	4,195,894
.4	8,452,481	4,990,156
5	11,082,348	5,735,142
6	14,090,192	6,391,633
7	17,412,088	6,923,541
8	20,947,478	7,301,156
9	24,560,991	7,503,921
10	28,088,629	7,522,382
Terminal Value	337,206,934	90,306,990
Equity	Value	146,668,227

ISSN: 2581-8341 Volume 06 Issue 07 July 2023 DOI: 10.47191/ijcsrr/V6-i7-27, Impact Factor: 6.789 IJCSRR @ 2023



In anticipation of its Initial Public Offering (IPO) scheduled for 2024, PT XYZ needs to establish the number of shares to be issued. This number plays a crucial role in the determination of the per-share stock price, which is a significant aspect for potential investors. The process begins with identifying the Book Value of equity that PT XYZ will get in 2024. This information can be gathered from the company's projected balance sheet, which is forecasted from the historical company's financial status.

**Table 7.** Number of shares of PT XYZ

(in thousand)	2019	2020	2021	2022	2023	2024
Book Value	5,555,732	6,857,513	9,526,107	12,594,033	17,001,945	22,952,625
Value growth		23%	39%	32%	35%	35%
					Book Value	22,952,625,143
				No	Book Value ominal Value	22,952,625,143 100

#### D. Relative Valuation Method

In the relative valuation, examining the comparison for PT XYZ is an important step. As a company operating in the field of IT consultancy and providing software as a service, PT XYZ has certain similarities to other firms listed on the Indonesian Stock Exchange. Specifically, these companies: WGSH, RUNS, and JATI which offer comparable services.

Table 8 shows how equity value and enterprise value can be calculated from the share price, share outstanding, and net debt from selected comparable companies, JATI, WGSH, and RUNS, which operate in similar business domains and have recently entered the Indonesian Stock Exchange.

Table 8. Equity and enterprise value of selected comparable companies

	Share	Share			
Company	Price	Outstanding	Equity Value	Net Debt	<b>Enterprise Value</b>
JATI	168	3,262,500,000	548,100,000,000	82,529,911,883	630,629,911,883
WGSH	142	1,042,500,000	148,035,000,000	-25,669,989,000	122,365,011,000
RUNS	134	983,557,875	131,796,755,250	-14,659,053,000	117,137,702,250

Sourcing from the revenue, EBITDA, and net income data obtained from each of the respective companies, the next step involves the calculation of the ratios, specifically EV/Revenue, EV/EBITDA, and Price-to-Earnings (P/E). These ratios will provide insights into the companies' valuation relative to their operational performance and profitability in Table 9.

Table 9. Average multiple ratios of selected comparable companies

Company	Revenue	EBITDA	Net Income	EV / Revenue	EV / EBITDA	P/E
JATI	507,347,976,514	33,666,059,462	23,423,706,988	1.2	18.7	23.4
WGSH	26,693,281,000	5,575,138,000	4,776,726,000	4.6	21.9	31.0
RUNS	31,286,997,000	4,964,479,000	3,440,159,000	3.7	23.6	38.3
			AVERAGE	3.2	21.4	30.9

Based on the calculations on Table 10, PT XYZ's enterprise value using EV/EBITDA multiple is 83,086,719,902 IDR. To get equity value, the enterprise value can be reduced by net debt to get an equity value of IDR 82,660,155,90. By dividing it by the number of shares, the share price would be **IDR 360**.

ISSN: 2581-8341 Volume 06 Issue 07 July 2023 DOI: 10.47191/ijcsrr/V6-i7-27, Impact Factor: 6.789 IJCSRR @ 2023

Table 10. Share price of PT XYZ using relative valuation

Average EV/EBITDA from comparables	=		21.4
EBITDA PT XYZ	=	IDR	3,878,001,126
Enterprise Value PT XYZ	=	IDR	83,086,719,902
Less: Net Debt	=	IDR	426,564,000
Equity Value PT XYZ	=	IDR	82,660,155,902
Number of shares	=		229,526,251
Share price	=	IDR	360

#### E. Average Share Price

The FCFE Valuation and the Relative Valuation methods come to different conclusions about how much the valuation of PT XYZ is. The FCFE method says that the price per share is IDR 639, but the Relative Valuation method says it is IDR 360. If the Relative Valuation method's price of IDR 360 per share is taken as the market price, then the FCFE method's price of IDR 639 per share shows that PT XYZ's stock is overpriced. The share price needs to be re-adjusted by taking the average of the values from both valuation methods. In this case, the average price of a share comes out to be IDR 500. This new price will be used as a point of reference or standard for PT XYZ's IPO in 2024.

#### CONCLUSIONS

The result of equity value estimation using the method of free cash flow to equity obtained by the present value at the end of 2022 is IDR 146,668,226,662. This value was computed using an estimation of a long-term growth rate of 5.31%, a figure that aligns with Indonesia's GDP growth rate in 2022. This long-term growth projection provides a reasonable outlook for PT XYZ's future performance. From the equity value, the stock price per share by using the FCFE method with the number of outstanding shares at 229,526,251 is IDR 639.

On the other hand, the Relative Valuation method utilizes the valuation multiple of comparable firms as a benchmark for PT XYZ. Specifically, the EV/EBITDA multiple, which offers a useful comparison of a company's enterprise value to its earnings before interest, taxes, depreciation, and amortization, was employed. JATI, RUNS, and WGSH were chosen as comparable companies due to the similarity in their business and similarity on EV/EBITDA ratio. The comparable companies used in this analysis had an average EV/EBITDA ratio of 21.4. By applying this multiple to PT XYZ's own EBITDA, we obtained an equity value of IDR 101,647,022,902. From this value, using the number of outstanding shares at 229,526,251, it is obtained that the price per share using relative valuation is IDR 360.

Assuming the share price of IDR 360 derived from the Relative Valuation method represents the market benchmark, the share price of IDR 639 generated from the FCFE method suggests an overpriced valuation (overvalued) for PT XYZ's stock. Consequently, PT XYZ will need to adjust its proposed share price downward. Taking both valuation methods into account, the average share price stands at IDR 500 per share.

#### REFERENCES

- Anderson, S. C., Beard, T. R., & Born, J. A. (1995). Initial Public Offerings: Findings and Theories. New York: New York.
- 2. IDX. (2015, December 20). Panduan Go Public. Retrieved from Indonesia Stock Exchange: <u>https://www.idx.co.id/Portals/0/StaticData/Information/ForCompany/Panduan-Go-Public%20\_Dec-2015.pdf</u>.
- 3. IDX. (2023, 06 30). FAQ. Retrieved from IDX Go Public: <u>https://gopublic.idx.co.id/en/faq/</u>
- Damodaran, A. (2006). Damodaran on Valuation: Security Analysis for Investment and Corporate Finance (Vol. 324). John Wiley & Sons.
- 5. Fernandez, P. (2002). Valuation Methods and Shareholder Value Creation. Academic Press.
- 6. Damodaran, A. (2012). Investment Valuation: Tools and Techniques for Determining the Value of Any Asset, University Edition, 3rd Edition. John Wiley & Sons.



### www.ijcsrr.org

### ISSN: 2581-8341

Volume 06 Issue 07 July 2023 DOI: 10.47191/ijcsrr/V6-i7-27, Impact Factor: 6.789



IJCSRR @ 2023

- 7. Ehrhardt, M., & Brigham, E. (2005). Financial Management Theory and Practice (Twelfth Edition). South Western: Thomson.
- 8. Brealey, R. A., Myers, S. C., & Allen, F. (2011). Principles of Corporate Finance. McGraw-Hill/Irwin.
- Koller, T., Goedhart, M., & Wessels, D. (2020). Valuation: Measuring and Managing the Value of Companies, 7th Edition. McKinsey & Company.
- 10. Damodaran, A. (2001). *The Dark Side of Valuations: Valuing Old Tech, New Tech, and New Economy Companies*. NJ: Prentice Hall.
- 11. Dinçer, H., & Yüksel, S. (2020). Handbook of Research on Decision-Making Techniques in Financial Marketing. IGI Global.
- 12. Grundy, T. (2006). Rethinking and reinventing Michael Porter's five forces model. Strategic Change 15(5), 213-229.
- 13. Dalton, J. (2019). Great Big Agile. Berkeley: Apress.

Cite this Article: Ibnu Sina Wardy, Oktofa Yudha Sudrajad (2023). Valuation of Software Agency for Pre IPO Using DCF and Relative Valuation Method (Study Case: PT XYZ). International Journal of Current Science Research and Review, 6(7), 4128-4137