

A VALUATION OF PT XYZ (PERSERO) TBK

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Abstract. The number of airplane user increased year by year that makes airlines industry can be considered as a profitable business. PT XYZ is quite strong because of their achievement and even being the one of the best airlines in the world, but its share price continues to decline and even in 2017 XYZ generated negative earnings. This research aims to estimate the intrinsic value per share of XYZ as a comparison value to the share price and to determine whether the share price is overvalued or undervalued using FCFF method. The result is intrinsic value of XYZ is IDR 378 and it is lower than the market share price which is IDR 404. This research also aims to determine whether the share price of XYZ is underpriced or overpriced compared to its competitors. XYZ's PBV is lower than its competitors; this means that XYZ is underpriced. Based on historical data, XYZ in 2017 has negative retained earnings which means they have cumulative loss from the previous year. Because of this deficit, investors would not have the courage to set a high price for XYZ, and this causes XYZ to have a low share price in stock market.

Keywords: Airlines Industry, Valuation, Free Cash Flow to The Firm, Relative Valuation

INTRODUCTION

XYZ has been admitted to become the Best Regional Airline in the World by Skytrax. Although XYZ is admitted to be the best airlines in Indonesia but its financial condition is not in line with company performance and achievement. Actually PT XYZ has stable revenue and even almost always increases since 2011-2017 but PT XYZ has significant problems in increasing the profit and even the profit tends to decrease. The objectives of this research is to analyze the financial condition of PT XYZ, to compute the intrinsic value of PT XYZ using Free Cash Flow to the Firm and relative valuation method, and to give the recommendation to PT XYZ's shareholder. Most literature review in this research are from Damodaran's book "Investment Valuation". Beside the book the author use some journals, articles, and literatures for finding the theory. The methodologies used for estimating the value of PT XYZ are Free Cash Flow to the Firm and Relative Valuation using Price-to-book (PBV) ratio. The main result of this research is to determine whether PT XYZ is undervalued or overvalued with Free Cash Flow to the Firm method and to know whether PT XYZ is underpriced or overpriced using Relative Valuation method.

LITERATURE REVIEW

This research will use two valuation methods:

- **Free Cash Flow to the Firm method**

Free cash flow to the firm (FCFF) should yield equivalent results, is to estimate the cash flows to the firm prior to debt payments but after reinvestment needs have been met:

$$FCFF = EBIT(1 - \text{Tax rate}) - (\text{Capital Expenditures}) - \text{Change in non cash working capital}$$

The estimation of any advantage is a component of the cash flow created by that benefit, the life of the advantage, the normal development in the cash flow, and the peril related with these cash flow (Damodaran. A, 2015). We calculate the discounted cash flow using the net present value (NPV).

$$\text{Net Present Value} = \sum_{t=0}^n \frac{FCFF_t}{(1+r)^t}$$

The Weighted Cost of Capital

Weighted Cost of Capital (WACC) is important in DCF method because changes in WACC cause large change in the firm value even small. Cost of capital is defined to be the weighted average of the cost of the different components of financing – including debt, equity, and hybrid securities – used by a firm to fund its investment (Damodaran. A, 2015)

$$WACC = \text{Cost of equity} \frac{\text{Equity}}{(\text{Debt} + \text{Equity})} + \text{Cost of Debt}(1 - \text{Tax}) \frac{\text{Debt}}{(\text{Debt} + \text{Equity})}$$

Terminal Value

Since the cash flows cannot be estimated forever, we generally impose closure in discounted cash flow valuation by stopping the estimation of cash flows sometime in the future and then computing a terminal value that reflect the value of the firm at that point (Damodaran. A, 2012). FCFF will be used to estimate terminal value with discount rate and terminal growth. This research assumes that PT XYZ will grow in a stable growth rate on its terminal year. The growth rate will be based on Indonesia's GDP growth. The formula for estimating the terminal value with stable growth rate is:

$$\text{Terminal Value} = \frac{FCFF(1 + g)}{(WACC - g)}$$

The advantage of approach to the valuation of the firm by discounting free cash flow to equity is in the detailed design of the balance sheet and income statement which include all future inflows and outflows of funds. In this way, the projected balance is largely brought to real future balances. The result of estimates based on projected cash flows contributes to more accurate and more realistic value of the company. (Begovic, Momcilovic, & Jovin, 2013).

- **Relative Valuation Method**

Relative valuation is that to value assets on a relative premise, prices have to be institutionalized, as a rule by changing prices into multiples of earnings, book values or sales and to find similar firms, which is hard to do since no two firms are indistinguishable and firms in a similar business can in any case contrast on risk, growth potential and cash flow. Relative valuation is substantially more prone to reflect the current mood of the market, since it is an endeavor to quantify relative and not intrinsic value (Damodaran). The multiple used in this research is Price-to-book (PBV) ratio. The price-to-book ratio is computed by dividing the market price per share by the current book value of equity per share. While the multiple is fundamentally consistent, the numerator and denominator are both equity values. Even the firms with negative earnings, which cannot be valued using price-earnings ratios, can be evaluated using price-book value ratios, there are far fewer firms with negative book value for equity than there are firms with negative earnings (Damodaran. A, 2012). The book value of equity is actually the difference between firm's total asset and total liabilities. The formula for calculating PBV ratio is:

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

METHODOLOGY

In this research the author collects relevant theories information that could serve as a guidance to calculate the data for determining research conclusion. Most of literature used as reference in this research is from Damodaran's book "Investment Valuation" (2015). The author also use other sources for this research gained from various reference books, journal articles, and websites. The author describes and find the formula to support the research. Source of data collection is the process to collect data from sources that support the research topic. In this research, the author use secondary data. The data are mainly collected from firm's annual financial report, Yahoo Finance, Pefindo, and IDX since the company is a publicly listed company. Several sources data that are directly taken from financial report of PT XYZ is from 2012 to 2017. To make this valuation the author predicts the financial condition of PT XYZ from 2019 – 2023. The data that are used is five years before and predict five years after. This is because the author assume five years are quite enough to get the best value where if we use more there will increase the uncertainty. In this step, the author will process the data. The author prepares the financial data and input them. The author makes an assumption for making the forecasted financial statement. The author prepares the cost of debt, cost of equity, cost of capital, beta, risk free rate, growth rate, FCFF projection, and terminal value for the discounted cash flow valuation. The author doesn't use FCFE because of XYZ has debt. The author also cannot use Dividend Discounted Model because of PT XYZ didn't pay the dividend for the last several years. The author also prepares the data inputs for relative valuation such as company's closing price and PE ratio, but because of the EPS of XYZ is negative the PE ratio is not doable. The author use PBV ratio to calculate the relative valuation.

FINDINGS AND ARGUMENT

The author make a financial statement projection by using analysts data, growth rate, and ratio. The cost of capital will be calculated based on the Weighted cost of capital (WACC). The WACC of PT XYZ is 11.37%. The projection of FCFF will be added by terminal value at the end of the projection period. The terminal value will be projected using Indonesia's GDP growth in 2017 which is 5.18%, this growth rate is only applicable for FCFF.

Table 1. Free Cash Flow to the Firm Calculation

Valuation using FCFF (in USD)							
PT XYZ							
	0	1	2	3	4	5	Terminal Year
	2018E	2019E	2020E	2021E	2022E	2023E	
Revenue Growth		7.90%	7.90%	7.90%	7.90%	7.90%	
Operating Expense Growth		6%	6%	6%	6%	6%	
Revenue	3,793,218,84 3.07	4,092,883,13 1.67	4,416,220,89 9.08	4,765,102,35 0.10	5,141,545,43 5.76	5,547,727,525 .19	
Operating Expense	(4,492,039,7 31.92)	(4,761,562,1 15.84)	(5,047,255,8 42.79)	(5,350,091,19 3.35)	(5,671,096,66 4.95)	(6,011,362,46 4.85)	
EBIT(1-Tax)	(58,230,983. 77)	1,180,334.70	69,125,841.2 9	146,510,178. 51	234,323,282. 12	333,647,948.8 8	
Depreciation	42,351,581.4 6	45,276,083.3 0	48,402,530.6 4	51,744,868.4 0	55,318,004.4 6	59,137,876.13	
CAPEX	(62,193,069. 08)	(66,487,684. 27)	(71,078,855. 33)	(75,987,060.3 2)	(81,234,191.3 7)	(86,843,652.3 2)	
Change in NWC	(345,815,294 .23)	(227,505,198 .36)	(211,852,188 .80)	(197,374,231. 92)	(186,591,758. 75)	(182,737,712. 16)	
FCFF	(423,887,765 .62)	(247,536,464 .64)	(165,402,672 .20)	(75,106,245.3 3)	21,815,336.4 6	123,204,460.5 3	
Terminal Value							2,092,332,57 1.12
Total FCFF	(423,887,765 .62)	(247,536,464 .64)	(165,402,672 .20)	(75,106,245.3 3)	21,815,336.4 6	123,204,460.5 3	2,092,332,57 1.12
PV of FCFF	(423,887,765 .62)	(226,806,363 .06)	(138,859,188 .45)	(57,772,904.6 6)	15,375,389.1 9	55,459,272.65	1,473,031,89 3.31

The present value of FCFF will be sum up to become the firm value. Then the firm value will be divided by number of common share outstanding to find out the intrinsic value per share. The intrinsic value of PT XYZ is IDR257. Finally this value is compared to the market share price to determine whether it is undervalued or overvalued. According to the market share price in January 2019, PT XYZ's price is IDR 404. In this case PT XYZ's intrinsic value per share is below its market share price which means it is overvalued. Overvalued means the value for the share is actually lower than its price.

Table 2. FCFF Valuation Result

Description	Value (USD)
Firm Value	473,240,462.95
Current shares outstanding	25,886,576,254.00
Intrinsic value per share	257.04

USD (30 january)	14,060.00
close price per 30 jan	404.00
downside	-36%

Price to Book Value in relative valuation could be considered as how much times the book value does the investors willing to pay for the stock. Higher PBV means the higher price of a stock. According to the figure below it can be seen that PT XYZ's PBV is low compared to its competitors. It means that PT XYZ is underpriced. The potential buyers in stock market could be interested to buy PT XYZ's stock because of the price is lower than its competitors.

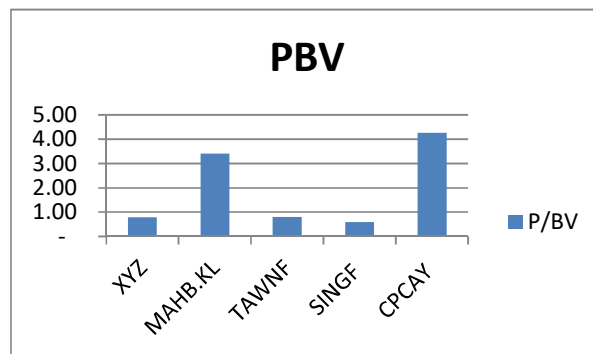


Figure 1. Relative Valuation using PBV

Actually PT XYZ's price is cheaper than its competitors because PT XYZ's retained earnings is negative which means PT XYZ has losses accumulated in the previous years. The negative value is from unappropriated retained earnings. Unappropriated retained earnings is the portion of retained earnings that can be distributed to the shareholders because unappropriated retained earnings is the portion that is not set aside by the company for a specific purpose. As a result of the negative balance in the unappropriated retained earnings, the value of the equity is reduced. Investors will not have courage to set a high price for PT XYZ because of the company's equity that tend to decrease year by year, that's why PT XYZ's price is cheaper compared to its competitors. This can be seen from the table below.

Table 3. PT XYZ and Competitors Retained Earnings

	XYZ	MAHB.KL	TAWNF	SINGF	CPCAY
Retained Earnings	(443,402,426.00)	561,803,389.83	(697,356,792.01)	9,050,147,058.82	5,626,913,265.31
Appropriated	6,081,861.00	0	87,096,296.70	0	0
Unappropriated	(449,484,287.00)	561,803,389.83	(784,453,088.71)	9,050,147,058.82	5,626,913,265.31

All the tables, images and figures should be centered. Figures and images should be numbered (see Figure 2 for an example) and figure headers should be placed under the figure or image; as for the tables, they should also be numbered (see Table 2 for an example) and the table header should be placed at the top. References (if any) of the tables, figures and images should be presented right under the tables, figures and images in the form of author surname and publication year.

CONCLUSIONS

According to the valuation computation using FCFF valuation method, it provides us the firm's internal financial condition for the following projection years. FCFF valuation compares the intrinsic value of PT XYZ with the market share price. With this method, the intrinsic value of PT XYZ is IDR378 per share and it is lower than the market share price which is IDR 404 per share. The poor current financial performance leads to the low intrinsic value per share. From this result, we can see that the firm is overvalued by the market compared to its intrinsic value per share. It means that the market is more optimistic toward the firm compared to how it is fundamentally valued. The author recommend the existing investor to sell the share because of actually the price of PT XYZ is higher than its intrinsic value.

The relative valuation tends to analyze the firm from the market perspective. This research use price-to-book ratio because some components in other multiples are negative and cannot be calculated. Compared to its competitors in the same target market PT XYZ got the second place for the lowest PBV ratio. It means that the price of PT XYZ is cheap. PT XYZ is underpriced compared to its competitors. The reason why PT XYZ is underpriced can be seen that the unappropriated retained earnings was negative which means the PT XYZ has cumulative losses in previous years. Actually based on the PBV ratio PT XYZ may become an interesting stock because its price is cheap. But it is because the negative in retained earnings that would make the investors have no courage to give the high price for PT XYZ. So the author recommends the potential investors to not buy PT XYZ's shares.

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