

***Does Rapidly Growing Revenues Always Produce
An Excellent Company's Value?
DCF & P/E Valuation Assessment on Hospital Industry***

Satria Zemba

Faculty of Economic & Business
Telkom University
Bandung, Indonesia

satriazemba@student.telkomuniversity.ac.id

Riko Hendrawan

Faculty of Economic & Business
Telkom University
Bandung, Indonesia

rikohendrawan@telkomuniversity.ac.id

Abstract

The investment opportunities of the health sub-sector business in Indonesia are still wide open, because capacity of all hospitals in Indonesia is only able to serve 3.25% of the total potential patients, there is still 96.75% potential market that equivalent to 9,501,350 customers. Because of this enormous chance to gain more revenue, absolutely attract investor to make an investment. Not much choice to investing in healthcare business in Indonesia, there is MIKA, SAME, SILO and SRAJ, all of them will be evaluating using DCF and Relative Valuation, to know their fair value. This fair value becomes essential when investors want to make investment decisions, which they will not want to buy stocks if their prices is too high, and not trusting to buy stocks whose prices are falling. This research are meant to be done searching fair value of those company.

This research begin with collecting financial statement for 5 years between 2013 and 2017, using it as the historical aspect to generate forecast for next 5 years 2018-2022. Every income and cost are carefully calculated to create ratio using geometric or arithmetic average. The purpose of forecast is to estimate potential free cash flow that can be produce in the future. This valuation is reveal how good each company to produce more money in the future, no matter how much they growth revenue it self, because in this research we can see company with less revenue growth can make more money than the big one.

Keywords: valuation, healthcare industry, hospital, DCF, relative valuation, FCFF, P/E

1. Introduction

Valuation is a measurement of the actual value of the company, because the company's value was not merely the total amount of assets or number of shares accumulated since its establishment. The real value lies precisely in the potential of the company is generating (or lose) money in the future. The next question is, why companies need a valuation? The answer is simple, it is usually because the company will be traded, for the seller to know what the minimum price they should receive, and for buyers need to know what the maximum price they can offer. But today, valuation not only applied for buying and selling companies, the valuation can be used to: (1) measure performance, (2) to estimate whether the investment measures that they will undertake can add value to the company in the future, (3) to see the market response to the current performance reflected by fluctuations in stock prices, meaning that the stock price exceeds the company's fair value, the market responds well to the company's performance and expects its financial condition to be better in the future, when it is lower meaning the market does not believe in the company's performance and has a tendency to attract its investment.

DCF one of the favorite valuation methods used by practitioners of financial analysis, the approach is about to predict how this company able to generate cash flow in the future, to reveal possibility to generate sufficient profits for the owners. The greater the profit potential of the company, the higher the value of the company (Damodaran, 2002). Many practitioners are proving the accuracy of this method (French, 2013). DCF also offers a sensitivity that enables the analyzer to apply certain scenarios in order to adjust with market growth (Jumono, 2007). It's talk about how to adjust the revenue ratio of the projection.

Relative valuation is no less accurate than the DCF method (Ahmed Sayed, 2016), Basic calculations by measuring and comparing the value of the company's shares in the market and the value of the company based on total revenue, for total revenues is reflecting the fair value of the company (Hartono, 2008), another advantage, that this method is very easy to use and understand even by non-financial reader (Jumono, 2007), Relative valuation has three variants (Jumono, 2007) Price to Earnings Ratio (P/E), Price to Book Value (PBV), and Enterprise Multiple.

The company's value is closely related to the company's net profit, (Penman, 2013) if income increases, the value of companies has also increased. Speaking profit means talking about the free cash money available for companies or for the owner. DCF operational variables involve fundamental data like income statement, balance sheet and capital structure. DCF sensitivity plays role to estimate company's growth is (1) greater than expected - an optimistic scenario; (2) normal growth - moderate scenario; and (3) smaller growth than forecast - pessimistic scenario.

Previous research (Oded, Michel and Feinstein, 2011), Analyzes that the DCF method will be very accurate when companies has a constant capital structure, unchanging composition. Another research applied to 14 manufacturing using the DCF and DDM (Yulfita, 2011) were discovered four of them undervalued, and the rest of it overvalued. Banking (Satjawidjaja, 2012), conducted the valuation using P/E, PBV, DCF indicates the object is undervalued, while using the DDM method stated that object is overvalued. In the mining industry (Hutapea, Poernomoputri and Sihombing, 2012) FCFF results that the value of the company Rp 1,866, higher than its share value of Rp 1,570. P/E and DCF method, have been tested to building construction company (Gheivary, 2013) the result is undervalued. Still in the building construction industry with the same method (French, 2013) support the statement that DCF is an accurate valuation methods. On the other hand in the telecommunications industry (Kramna, 2014), Said that the key is in the accuracy projection and at least 5 years using empirical data. It has been tested on 392 companies (Ahmed Sayed, 2016), agree the DCF and P/E method are accurate, because tolerance induced errors are not significant between prediction and actual.

2. Literature Review

This study is meant to Valuating Indonesian's Healthcare sector in 2018 using Discounted Cash Flow Method and Relative Valuation. The value of the company (Tandelilin, 2010) is defined as the perception of investors on the level of the company's success in managing its resources on the present and reflected in stock prices next year. Because stock prices do not always reflect the true value of a company it is necessary to find the true value or intrinsic value. Method to find intrinsic value is called valuation.

Stock (Hartono, 2008) is proof of ownership of capital in a company and is clearly stated nominal value, the name of the company, the rights-holder obligations. Furthermore, shareholders can receive benefit ownership of stock by dividends or capital gains. Dividends paid by a company issuing shares to the shareholders, the amount varies by consensus, meaning that (Damodaran, 2002) not all company profits should be distributed to dividends. Capital gains obtained when investors are able to sell their shares at a higher price than when purchased. The value of the company will be considered by the investors in investing. In measuring the value of the company, there are two sources of data that can be processed, i.e. technical analysis uses data chart and fundamental analysis of stock movements using the company's financial condition data of the balance sheet, income statement, statement of changes in capital.

Discounted cash flow (DCF) is a valuation method that uses the concept of time value of money. The theory underlying this method (Koller, Goedhart and Wessels, 2010) is all the money that flows in the company of the future (future value), then discounted them to find the fair value of the shares (present value). Discounted cash flow is calculated from the company's

earnings (Jumono, 2007), So that the DCF valuation focuses on free cash flow, which is revenue subtract by all costs. Free cash flow is the right of all capital owner, like creditors lenders, bondholders and shareholders. How to calculate discounted cash flow is through following steps (Damodaran, 2002), (1) Predict free cash flow for the next five to ten years, (2) Determine the appropriate discount rate, to Free Cash Flow to Firm (FCFF) using the Weighted Average Cost of Capital (WACC), (3) Next calculate Terminal Value (TV), which is the present value of all projected free cash flow on a predetermined period. Formula to calculate DCF:

$$DCF = \sum_{n=1}^t \frac{CF_n}{(1 + WACC)^n} + \frac{TV_t}{(1 + WACC)^t} \quad (1)$$

FCFF is cash money or equivalents that available to the company, which can be reinvested or distributed to shareholders and owners of the debt. In financial calculations, FCFF refers to EBIT to be tax deductible, reduced by working capital, subtract by capital expenditures, and added by value of depreciation amortization (Damodaran, 2002):

$$FCFF = EBIT(1 - \text{Tax}) + DA - CAPEX - \Delta WC \quad (2)$$

Investors expect a return of funds already invested, to measure the rate of return in the future through the discount with the calculation of Weighted Average Cost of Capital (WACC). (Damodaran, 2002):

$$\text{Firm Value} = \sum_{t=1}^{t=\infty} \frac{FCFF_t}{(1 + WACC)^t} \quad (3)$$

Weighted Average Cost of Capital (WACC) is funding composition made by a company to conduct its operations (Brigham and Houston, 2009), can be derived from the equity or debt. Weight ratio of capital is important factor for the valuation.

$$WACC = w_d r_d (1 - T) + w_{ps} r_{ps} + w_s r_s \quad (4)$$

Relative valuation also called an asset valuation method by comparing the market value of similar assets. Can be said to measure the value of a company by comparing it to other companies in the same industry. Some Relative Valuation approaches that can be used is the Price to Earnings Ratio (P/E), Price to Book Value (PBV), and EBITDA Multiple. Here is the explanation.

Assess a company can open from the perspective of the stock price compared with promised Earning per Share (EPS). The point is how much money should be paid by investors to get every single profit. P/E in modern financial analysis refers to the history of the S&P 500, as low as 5.31 times at December 1917 and highs in May 2009, median is about 14.68 and now currently stable at 26.46 (Shiller, 2018), So many valuation analysts conclude that: undervalued if the P/E value below 14, Fair if the P/E value between 14 and 26, overvalued when the value of P/E over 26 and is called Bubble when it is more than 40. How to calculate the P/E equation as follows (Damodaran, 2002):

$$PER = \frac{\text{Price}}{\text{EPS}} \quad (5)$$

Where EPS is derived from (Brigham and Houston, 2009):

$$EPS = \frac{\text{EAT}}{\text{Shares}} \quad (6)$$

To find a P/E that dividends is growing over years, first calculate value Dividend Per Share (DPS) using the formula (Brigham and Houston, 2009):

$$DPS = \frac{\text{Dividen}}{\text{Shares}} \quad (7)$$

P/E formula thus becomes (Brigham and Houston, 2009):

$$P/E = \frac{\frac{DPS_{t+1}}{EPS_{t+1}}}{k - g} \quad (8)$$

P/E can also be calculated using the value of equity in lieu of the stock price and net income EAT as a substitute for EPS (Hartono, 2008), So that the equation will be like this:

$$P/E = \frac{\text{Value of Equity}}{\text{EAT}} \quad (9)$$

Valuation itself have three methode, (1) DCF, (2) Relative, (3) Options. This research will use DCF and Relative, because both methods can be interlinked and compared the accuracy of each. DCF method and the Relative itself has components of the approach is different, in this study the DCF method will use the component approach FCFF is to calculate the amount of cash a company has, while the Relative Valuation using the component approach P/E which measures the ratio of costs to be paid for the investor to get each one profit.

This study starts from the collected data from the Indonesia Stock Exchange, because there's the source of comprehensive information of public company. Healthcare industry with four hospital, the code MIKA, SAME, SILO and SRAJ. All of them will be valuating in order to find their fair value, based on audited financial statements between 2013 and 2017, using the DCF method through FCFF approach and Relative Valuation through P/E ratio, for 2018 to 2022 projections.

DCF method relies on the assumption that is built to perform projection or estimate of the future. Just like a forecast in common, the results can exceed or less than actual. So many factors can affect revenue, for example, emerging products and replacement service from competitors, new policy of the government, customer's culture, etc. Then it needs comparison scenarios, if it is growing much better than that it has been estimated or otherwise even worse than that.

Relative Valuation there are three method of calculation, (1) Price to Earnings Ratio (P/E); (2) Price to Book Value (PBV); (3) Enterprise Multiple. This study will use the P/E, as a comparison value by DCF.

Financial projections in the future will be done with three scenarios: (1) Optimistic; (2) Moderate; (3) Pessimistic. This scenario is built on the understanding that forecasting can not absolutely accurate, there are always three possible outcomes in making predictions, (1) the result of higher than expected, (2) the same result with the prediction, (3) the result of lower than expected. That is why for (1) higher result than expected it call optimistic scenario; (2) same results as expeted called moderate scenarios; (3) the lower one called pessimistic scenario.

FCFF approach DCF method chosen to determine the company's cash flow. Many practitioners of finance including investors prefer cash money as standard, because this is what they call a real investment returns, the cash that can be share as dividends or reinvested as business expansion.

Company meant to be doing business for long lasting, so that forecast valuations can also be calculated for a period of infinity, it is obviously difficult, we need to limit the period of valuation by targeting a particular year, that's why Terminal Value, which is the last value in the last year were targeted. To search for Terminal Value described in the following equation:

$$TV = \frac{FCFF_{n+1}}{WACC - g_n} \quad (10)$$

In this study conducted forecast for the next 5 years from 2018 to 2022, the value of Terminal Value is placed on a projection of 2022. Calculation value growth during 2018 up to 2022 will be discounted to the current value in 2017. The accumulation of value FCFF and TV is representing the value of the company today.

$$FV = \sum_{t=1}^{t=n} \frac{FCFF_t}{(1 + WACC)^t} + \frac{TV}{(1 + WACC)^n} \quad (11)$$

3. Methodology

3.1 Participants

Research is an attempt to predict, discover or verify the truth. This research operates by processing secondary data, collecting history of corporate financial reports that become the object of research, stock prices related research also empirically collected. All of them are then processed based on valuation theories, to test and get the real value. Therefore, according to Uma Sekaran (Sekaran, 2013) this research is classified as a verification research. This study itself using Postpositivism, where it assumes that every study is influenced by laws or theories, then the theory is carefully tested through supporting data. Methodologically, it is a more detailed procedure on how to conduct a study (Sekaran, 2013). There are two: (1) quantitative method using common data from many objects of research and generating generalizable conclusions; and (2) qualitative method that focuses more on a little object of research but research is done deeply in exploring a problem down to the details. This research uses quantitative methodology.

3.2 Measurements

Variables are defined as attributes of a particular scientific field, then to conduct research, these variables are formulated operational definitions. In this study the variable is the intrinsic value of shares based on the fundamental value of the company. The data collected are the annual financial statements of each of the audited companies, their share prices, and other financial instruments if necessary. Data is taken from the Indonesia Stock Exchange site, the period 2013 to second quarter 2017. Operated by DCF valuation method and Relative Valuation.

3.3 Data Analysis

Before entering the FCFF calculation, the preparation that must be done is to simplify the financial statements of each company, at this stage which is summarized balance sheet and income statement. The income statement is simplified to look for ratios of costs and revenues compared with the level of sales (revenue). This ratio is made from a history of the statement of income for 5 years, the average result is used to determine the projected next 5 years. To help facilitate the understanding of the projected ratio, see Table 1.

Each issuer made the calculation of the ratio, starting from the year 2013 until 2016, then compute the average to develop the estimates in 2017 Q3, as the financial statements in 2017

Q3 only to the month of September 2017, the financial statements are incomplete, only 9 month, would be mistaken if directly accumulated with previous years, amounting to 12 months. Therefore, to make the calculation becomes balanced, the income (revenue) in 2017 Q3 divided by 0.75, equivalent to 9 per 12 months.

Table 1. Financial Ratios

	MIKA	SAME	SILO	SRAJ
<i>revenue</i>	6.52%	22.53%	21.49%	24.17%
<i>Cost Of Goods Sales</i>	51.91%	48.06%	66.47%	68.09%
<i>operating Expense</i>	14.89%	1.73%	21.07%	1.44%
<i>Other Operating Expense</i>	0.20%	20.40%	0.00%	32.47%
<i>EBITDA</i>	32.78%	29.75%	12.41%	-3.02%
<i>Depreciation Amortization</i>	4.41%	7.24%	7.57%	16.70%
<i>EBIT</i>	28.35%	21.97%	4.74%	-20.05%
<i>other Income</i>	1.20%	0.04%	-1.03%	0.43%
<i>Finance Income</i>	5.42%	-2.73%	0.21%	2.95%
<i>Finance Cost</i>	0.60%	5.97%	1.04%	8.76%
<i>EBT</i>	34.53%	12.00%	2.99%	-26.56%
<i>tax</i>	20.54%	12.64%	38.81%	10.11%
<i>EAT</i>	28.04%	10.14%	1.91%	-25.90%

Once completing ratios throughout 2013 to Q3 2017, the ratio is geometrically join all the terms of all its components is positive, if there is negative then use average calculation. From here we obtained respective ratios to revenue, cost of good sales, operating costs, depreciation amortization (DA), interest of debt and taxes (tax).

From this ratio can be described that how MIKA doing business is most effectively than other companies, from it performance EBITDA highest among the other, this is reflected in the actual performance of companies that not affected by other income and other expenses outside it core business. Cost of Goods Sales hospital is came from purchasing medicine, salaries of medical experts, the operation of medical devices, and various issues related to medical consumption.

Hospital's operating expense for MIKA and SILO is salary employees who are not medical experts, the general costs such as electricity, water, transportation, and building maintenance and other non-medical equipment, while according to the SAME and SRAJ it is a marketing expense. Conversely in the financial statements SAME and SRAJ, other operating expenses is the employee's salary and non-medical expenses, while MIKA and SILO record it as a marketing expense.

In an ideal projection according to a history of the financial statements of each of the issuer, the ratio using the figures in the table. But in industries exposed to many external factors, difficult to obtain accurate results with ideal conditions, therefore it is necessary to replace the scenario that the ratio of revenue growth (revenue) company with the industry growth rate. Prediction growing healthcare industry in the world is increasing (Deloitte, 2017) particularly

in Asia and Australia from 4.18% to 5.00% by 2020. Thus the reference to be used in conducting the scenario projected revenues are 5.00% of the number of publications by Deloitte in year 2017.

Scenario optimistic obtained from the predicted growth of the industry, plus the difference between a history of the company's growth and history of industrial growth, plus half of the difference in the history of industrial growth and predicted growth of the industry, taken in half because it is considered the probability of growth of the industry is not all affect the full at any one company, but there contributed to the growth of other companies in the same industry.

Moderate scenario obtained from industrial growth predictions, plus the excess of the company's growth history and history of industrial growth.

Pessimistic scenario obtained only from industrial growth projections, without taking into account factors that historical growth of the company which are usually always higher than the industry growth.

Table 2. Revenue Growth by Scenario

Company	Scenario	Revenue
MIKA	Optimist	7.75%
	Moderate	7.34%
	Pessimist	5.00%
SAME	Optimist	23.76%
	Moderate	23.35%
	Pessimist	5.00%
SILO	Optimist	22.72%
	Moderate	22.31%
	Pessimist	5.00%
SARJ	Optimist	25.40%
	Moderate	24.99%
	Pessimist	5.00%

4. Result and Discussion

The calculation of these scenarios apply to companies whose growth higher than the industry, such as in this study, does not apply to companies whose growth is lower than the industry. Simplified balance sheet to find the total current assets and total current liabilities. Total current assets (CA) minus total current liabilities (CL), will generate working capital (WC). Changes or growth in working capital (ΔWC) from year to year will be a critical component projected FCFF calculation. Of the balance sheet or cash flow statement can be obtained also in total fixed asset investment expenditure (capital expense, CAPEX). FCFF formula so that the components can be obtained here is ΔWC and CAPEX. At this stage, all of the components to construct the projected FCFF is complete.

Table 3. Forecast FCFF

<i>Company</i>	<i>Scenario</i>	<i>Forecast FCFF (in milion)</i>				
		2018	2019	2020	2021	2022
MIKA	Optimis	2,653,473	2,859,030	3,080,511	3,319,150	3,485,108
	Moderat	2,643,376	2,837,313	3,045,479	3,268,918	3,432,364
	Pesimis	2,585,829	2,715,121	2,850,877	2,993,421	3,143,092
SAME	Optimis	940,632	1,164,152	1,440,785	1,783,154	1,872,312
	Moderat	937,516	1,156,451	1,426,513	1,759,642	1,847,624
	Pesimis	798,031	837,932	879,829	923,820	970,011
SILO	Optimis	7,022,867	8,618,300	10,576,180	12,978,845	13,627,787
	Moderat	6,999,403	8,560,809	10,470,529	12,806,263	13,446,576
	Pesimis	6,008,921	6,309,367	6,624,836	6,956,078	7,303,881
SARJ	Optimis	773,316	969,710	1,215,979	1,524,792	1,601,032
	Moderat	770,788	963,379	1,204,091	1,504,948	1,580,195
	Pesimis	647,533	679,910	713,905	749,601	787,081

Calculating WACC is seeking costs arising from the composition of capital. Capital consists of two sources, equity capital and debt capital. Each source has its own cost, equity capital cost depends on the agreement between the directors and commissioners, and the capital of the debt cost is called interest on the long term debt. Composition and capital cost of the four issuers can be seen in table 4 below.

Table 4. WACC Comparison

	MIKA	SAME	SILO	SRAJ
Debt	-	446,915	418,199	116,070
Equity	3,691,081	918,553	3,159,017	1,724,049
Total Capital	3,691,081	1,366,413	3,577,217	1,798,647
Weight Debt	0.00%	32.78%	4.57%	5.92%
Weight Equity	100.00%	67.22%	95.43%	94.08%
Cost Debt	0.00%	11.98%	11.50%	12.50%
Cost Equity	16.84%	18.90%	20.70%	18.39%
WACC	16.84%	15.65%	20.08%	17.96%

MIKA has no debt, equity capital structure only. SAME composition greatest debt, but the interest on the debt is paid relatively small compared to the others. SRAJ composition of small debts, but most large debt interest costs. For the board of directors to manage the company they certainly pleased with the numbers small WACC as SAME, which means that their capital not required much cost. Instead the investor side, they always want the maximum return of any money paid as capital.

4.1 Value of Firm

Discounting FCFF from the beginning of the year valuation until last year valuation with WACC, including Terminal Value in recent years. Then all results are summed and discounted

value of the company or Firm Value. Enterprise value shown in Table 5 is accumulated cash flow forecast during the period valuation, not including the additional cash that has been owned in the last year before 2017, has not been reduced as well with the repayment of long-term debt in the same year.

Table 5. Firm Value by Scenario

Company	Scenario	Firm Value
MIKA	Optimist	22,107,505,752,801
	Moderate	21,822,871,131,253
	Pessimist	20,256,015,789,039
SAME	Optimist	1,116,305,354,674
	Moderate	1,102,471,601,875
	Pessimist	358,405,148,590
SILO	Optimist	15,053,606,986,043
	Moderate	14,858,663,380,779
	Pessimist	3,735,192,954,577
SARJ	Optimist	(68,646,341,425)
	Moderate	(67,863,165,809)
	Pessimist	(37,420,141,843)

4.2 Value of Equity

Equity value indicates the company property in the form of cash flow after the added cash in the last year before the valuation, and reduced long-term debt was left at that. Ideally, this figure shows how much cash flow that can be distributed to the owners of equity. Table 6 below shows how much of the equity owned by each issuer during the valuation period.

Table 6. Value of Equity

Company	Scenario	Equity Value
MIKA	Optimistic	23,192,974,052,705
	Moderate	22,908,339,431,157
	Pessimistic	21,341,484,088,943
SAME	Optimistic	697,581,492,987
	Moderate	683,747,740,188
	Pessimistic	(60,318,713,097)
SILO	Optimistic	13,934,561,570,259
	Moderate	13,739,617,964,995
	Pessimistic	2,616,147,538,793
SRAJ	Optimistic	335,527,737,991
	Moderate	336,310,913,607
	Pessimistic	366,753,937,573

Its value becomes invalid if there is a change in capital structure, because it could be the changing composition of capital will impact the value of the WACC. Assumed cash flows incurred for investment spending stabilized in accordance with the ratio of growth has been built, then this value becomes invalid if the middle of the valuation period there was a large capital investment for example like to acquire another hospital or build a new hospital.

SRAJ which initially had negative corporate value, then became positive on this equity, because SRAJ has large current assets of cash equivalents, although its debt costs are high but because of its small composition it can be covered by cash. If the condition of the inability to generate new cash flow is continuous for a long time, it can be assured that the current assets of SRAJ's cash equivalent will be exhausted for operational cost.

4.3 P/E Ratio

Price to Earnings Ratio, also known as the P/E ratio or P/E, shows how comparisons stock price compared to the company's earnings. This result also indicates how much investors are willing to pay every penny of income of the company. In this study P/E obtained from the equity value divided EAT early years of valuation. The Table 7 shows the value of each issuer according P/E respectively. Companies that have a healthy financial ratios corresponding financial theory as MIKA, SAME and SILO will generate P/E measurable and can be analyzed according to the theory applies. While the company that it EAT always negative as SRAJ will also produce negative P/E ratio so that it becomes difficult to analyze.

Table 7. P/E Ratio

Company	Scenario	P/E
MIKA	Optimistic	31.79
	Moderate	31.52
	Pessimistic	30.02
SAME	Optimistic	6.10
	Moderate	6.00
	Pessimistic	-0.62
SILO	Optimistic	47.24
	Moderate	46.74
	Pessimistic	10.37
SRAJ	Optimistic	-2.00
	Moderate	-2.02
	Pessimistic	-2.62

There is interesting about SAME, although EBIT and EAT is positive, but the value of purchases of investment assets (CAPEX) is high at 32.78% of revenue, force SAME to grow

their revenue at least 10% in order to be able to pay off long-term debt and have less cash flow for shareholder welfare.

Table 8. Fair Value & P/E Ratio

PER Analysis	PER Actual	PER Valuation	Company	Fair Value	Current Value	DCF Analysis
MIKA						
Overvalued	52.96	31.79	Optimist	Rp 1,593.94	Rp 1,810	Overvalued
Overvalued	52.96	31.52	Moderate	Rp 1,574.38	Rp 1,810	Overvalued
Overvalued	52.96	30.02	Pessimist	Rp 1,466.69	Rp 1,810	Overvalued
SAME						
Overvalued	339.81	6.10	Optimist	Rp 591.17	Rp 595	Overvalued
Overvalued	339.81	6.00	Moderate	Rp 579.45	Rp 595	Overvalued
Overvalued	339.81	-0.62	Pessimist	-Rp 51.12	Rp 595	Overvalued
SILO						
Overvalued	124.43	48.33	Optimist	Rp 10,959.79	Rp 9,575	Undervalued
Overvalued	124.43	47.81	Moderate	Rp 10,807.38	Rp 9,575	Undervalued
Overvalued	124.43	18.97	Pessimist	Rp 3,680.89	Rp 9,575	Overvalued
SRAJ						
	-20.4	-2.02	Optimist	Rp 30.94	Rp 242	Overvalued
	-20.4	-2.03	Moderate	Rp 31.01	Rp 242	Overvalued
	-20.4	-2.62	Pessimist	Rp 33.69	Rp 242	Overvalued

The actual price in Table 8 is taken from the closing of stock at www.idx.com at the end of December 29, 2017. DCF shows how much the fair price is, seen from all three companies overvalued, only SILO worth more value than it should on the stock market. It may be that market opinion about the company's reputation plays a role in boosting or weakening a company's share, negative news about the quality of service, could become viral, when it is viral could have a fatal impact on hospital stock price, this could be a future research opportunity. As well as SRAJ, in the last 5 years always losing money, suitable for the object of research about financial distress.

Obstacles that arise when data processing is issuers sub health sector is still relatively new as public company, only SRAJ who have a history of financial statements which have been audited for 5 years because SRAJ have IPO since 2011, SAME and SILO has IPO since 2013, the lastes IPO is MIKA 2015. Thus, to form the assumption that the ideal of a history of 5 years on a comparable basis, the financial statements were used from 2013 to 2017, the lucky MIKA

has published financial reports from 2013 as well, however in the 2017 financial report can of the acquisition while in the 3rd quarter, last September 2017.

Constraints arising from the 2017 third quarter is a number in this report is still incomplete 12 months, its value will be wrong if compared with previous years. How to overcome it to be divided by a constant revenue 0.75 stated 9 months out of 12 months, and the ratio of costs could be taken from the geometric mean year 2013-2016.

The other problem comes from the SRAJ financial statements, showing the negative FCFF value. In such a losing financial condition it is difficult to say that the company has free cash flow, the key is free cash flow or FCFF, if the company does not have free cash flow means that DCF cannot be applied here.

In this case, SAME has little bit different situation, they have a pretty good EBITDA growth of more than 29%, but their financial cost is suffering enough to repay long-term debt maturities, EAT grind until the remaining less than 11%. Actually EAT 10.14% is enough to produce free cash flow, as long as revenue grow is not lower than 10%.

The steady growth of MIKA's revenue in the range of 6.52% is the smallest among others which reaches more than 20%, however MIKA is very effective in managing its operations, proving the highest 32.78% EBITDA among its competitors, even its EAT can be maintained at 28.04% of revenues. According to its financial statements, MIKA does not have long-term debt, its capital composition is 100% of equity, so the WACC expense only comes from the return expected by shareholders of 16.84%. The fair value of MIKA according to this valuation is Rp 1.466 to Rp 1,593 depending on the scenario, when compared to the stock price at the closing year of 2017 worth Rp 1,810 then DCF valuation this time stated overvalued. With respect to the PER results when compared to the health industry, the results are also overvalued, meaning investors expect that in the future MIKA value can still be higher, according to the sensitivity of this valuation, if MIKA's revenue growth reaches 10.5%, then it P/E will becomes 53.40 in fair value category based on the industry average of Indonesia's healthcare industry.

5. Conclusions and Recommendations

The purpose of this study is to find the fair value of the companies in the healthcare sub-sector, the method used by the DCF and relative valuation approach with the P/E ratio. Matrix presented in table 8 shows the results of the valuation of MIKA, SAME, SILO and SRAJ valuation period 2018 to 2022, in which the projection is based on assumptions about the financial history of the previous 5 years. MIKA, SAME, SILO shows the results according to the theory of valuation, while SRAJ difficult to analyze because of it financial performance cannot produce enough cash flow.

Before dive too far doing valuation, first thing to do lets to check company's financial statements which will be object of the research, high light in the income statement. If from here found that EAT or even its EBIT have negative value, which means that companies is losing money, and valuation using DCF method should not be continued. Projections should use a complete financial statement 12 months, preferably audited. Estimates report 2017 3rd quarter as in this study is rather risky to do, income can be divided by the constant 0.75 in order to get estimates of the full 12 months, but ratios such as current assets, non-current assets, current liabilities and other debts too risky to be called accurate.

An important analysis of the actual price difference of stocks with the fair price lies in the corporate image in the community, especially investors. A good image of the hospital is reflected in the patient's confidence to rely on his recovery at the hospital, meaning that the patient believes that the hospital's treatment will receive the best possible medical service so that the illness will heal. This big trust is what attracts investors to keep pouring funds. Vice versa, when the medical service is tarnished due to a practice mall case, which is clearly detrimental to the patient, especially if the case is sticking to the surface, exposed by the media, then the investor's reaction will panic, they are afraid the stock will drop so the loss on sale, they flocked to sell the stock while the price is still high. But when the selling volume is high, stock prices will weaken, because those who want to sell more than those interested to buy, according to supply and demand theory.

From the results of analysis in this study revealed findings that can only be obtained through the valuation calculation, the findings can be drawn some conclusions:

1. High revenue growth does not guarantee a company can have a high value. Judging from its ability to generate future flows for equity holders.
2. The key to obtaining the company's cash flow lies in how competently they manage the operational costs, meaning the more effective and efficient, the greater the cash flow that can be generated.
3. Applies to all companies, especially those on services such as hospitals, good rating becomes very sensitive, once the customer is massively exposed to events that reduce the rating of the company then to recover the fair price takes a long time. Can be seen in hospitals whose value is undervalued.

6. REFERENCES

- Ahmed Sayed, S. (2016) 'Does sophisticated DCF outperform heuristics driven PE? Evidence from India', *Journal of Advances in Management Research*, 13(1), pp. 42–58. doi: 10.1108/IJEER-02-2016-0064.
- Brigham, E. F. and Houston, J. F. (2009) *Fundamentals Of Financial Management*. 12th edn. Mason, Ohio: South-Western Cengage Learning. Available at: academic.cengage.com.
- Damodaran, A. (2002) *Investment Valuation: Second Edition*. 2nd edn, *Finance*. 2nd edn. New York, USA: John Wiley & Sons, Inc. Available at: http://people.stern.nyu.edu/adamodar/New_Home_Page/Inv3ed.htm.
- Deloitte (2017) '2017 Global Health Care Sector Outlook', *Health Care Sector*, p. 2015.
- French, N. (2013) 'The discounted cash flow model for property valuations: quarterly cash flows', *Journal of Property Investment & Finance*. Emerald Group Publishing Limited, 31(2), pp. 208–212. doi: 10.1108/14635781311302618.
- Gheivary, A. (2013) 'Valuasi Harga Saham PT. Waskita Karya Saat Penawaran Saham Perdana dengan Metode Discounted Cash Flow dan Price to Earning Ratio', *Keuangan*, 1(1), pp. 11–38.
- Hartono, J. (2008) *Teori Portofolio dan Analisis Investasi*. 5th edn, *Keuangan*. 5th edn. Yogyakarta: BPFE.
- Hutapea, E. C., Poernomoputri, T. P. and Sihombing, P. (2012) 'Analisis Valuasi Nilai Wajar Saham PT Adaro Energy Tbk Menggunakan Metode Free-Cash Flow to Firm (FCFF)', *Journal of Applied Finance and Accounting*, p. 240.
- Jumono, S. (2007) 'Teknik Penilaian Perusahaan', *Keuangan*, 4(2), pp. 94–103.
- Koller, T., Goedhart, M. and Wessels, D. (2010) *Valuation: Measuring And Managing The Value Of Companies*. 5th edn. Edited by MCKINSEY & COMPANY. New Jersey: John Wiley & Sons, Inc. Available at: www.wiley.com.
- Kramna, E. (2014) 'Key input factors for discounted cash flow valuations', *WSEAS Transactions on Business and Economics*, 11(1), pp. 454–464.
- Oded, J., Michel, A. and Feinstein, S. P. (2011) 'Distortion in corporate valuation: implications of capital structure changes', *Managerial Finance*, 37(8), pp. 681–696. doi: 10.1108/03074351111146175.
- Penman, S. H. (2013) *Financial Statement Analysis and Security Valuation Fifth Edition*. 5th edn. New York: McGraw-Hill.
- Satjawidjaja, A. (2012) 'Komparasi Nilai Intrinsik Harga Saham Bank Bukopin Tbk Berdasarkan Laporan Keuangan Tahun 2009-2010', *Keuangan*, 1(1), p. 134.
- Sekaran, U. (2013) *Research methods for business, Research methods for business*. doi: 10.1017/CBO9781107415324.004.
- Shiller, R. (2018) *S&P 500 PE Ratio, Irrational Exuberance*. Available at: <http://www.multpl.com/>.
- Tandelilin, E. (2010) 'Dasar-dasar Manajemen Investasi', *Keuangan*, p. 34.
- Yulfita, U. (2011) 'Penilaian Harga Saham sektor Manufaktur Yang Terdaftar di Bursa Efek Indonesia Periode 2009-2010', *Jurnal EMBA (ISSN 2303-1174)*, 1(3), pp. 1089–1099.