



VALUATION OF STOCK COMPANY CONSUMPTION SECTOR INCLUDED IN LQ45 INDEX OF 2014-2018 PERIOD

Dyah Shinta Kusumaningtyas 

Faculty of Management Information Systems, Gunadarma University, Indonesia

dyahshinta1993@gmail.com

Henny Medyawati

Faculty of Management Information Systems, Gunadarma University, Indonesia

medyawati70@gmail.com

Abstract

This study aims to calculate and analyze the valuation of stock of consumption sector companies that are included in the LQ45 Index for the 2014-2018 period using the Discounted Cash Flow (DCF) method. The analytical model used is to use Free Cash Flow to Firm (FCFF). The data used are secondary data in the form of annual reports, financial reports and stock price lists. Data obtained from the company's website, PT. Indonesia Stock Exchange, yahoo finance and investing.com for the 2014-2018 period. The sample used was 6 consumption sector companies included in the LQ45 Index for the 2014-2018 period. The results found that there were 3 companies that were overvalued or had expensive stock prices and 3 companies were still undervalued or their stock prices were still cheap. Its stock valuation simulation uses the CAKe (Cerdas Analisis Laporan Keuangan) system developed by Dimas Raka Prayudha.

Keywords: Stock Valuation, Discounted Cash Flow, Free Cash Flow to Firms, Undervalued, Overvalued

INTRODUCTION

Nowadays, there are many people in Indonesia who know the importance of investing. Surely the people will think about in the future whether they will achieve financial freedom, in the sense that the people are able to meet the needs and desires of their life even though they are not working or have retired. To achieve financial freedom, the people will make various efforts to maintain their funds. One way is to invest. There are two types of investment, namely investment in the real sector and investment in the financial sector. Investment in the real sector is an investment activity by buying real productive assets such as buying land, buildings, gold, machinery, boarding houses, and others. Investing in the financial sector is by buying financial assets for future profits. Examples of investments in the financial sector are investments in the capital market by buying shares or stock, bonds (state bonds), sukuk, mutual funds, ETF (Exchange Trade Funds) and others. People should invest in shares or stock, because investing in the stock market, especially stocks, will provide high returns or profits. In addition to high profits, stocks also include investment instruments that are liquid or that are easy to sell (easy to convert into cash or cash) because we can buy or sell stock in seconds. There are several advantages when buying stock, including the benefits of getting dividends, capital gains and can participate in the RUPS (General Meeting of Shareholders).

To invest in stock, we must determine what stocks are good for us to buy. There are two stock analyzes namely fundamental and technical analysis of stock. Stock fundamental analysis is usually used to analyze what stocks are good to buy by analyzing the company's financial condition. This analysis is usually used for long-term investment analysis. Stock fundamental analysis analyzes the company's financial condition. Fundamental analysis of stock's main goal is to find out the true value of a stock. According to Hartono (2015), there are several values related to stock, namely market value, intrinsic value and book value.

This study will examine the valuation or valuation of the actual stock (intrinsic value), after which it will be compared between prices in the market with the actual value. Stock valuation is an activity to value a stock. This research will use the DCF method that is using one of the models, namely FCFF. The object of this research will use the consumption sector companies included in the LQ45 Index for the 2014-2018 period. The researcher will also simulate the calculation of the intrinsic value of stock with the CAKe system, a system developed by Dimas Raka Prayudha. So the results will appear automatically.

Research Purposes

1. To find out the intrinsic value of consumption sector companies included in the LQ45 Index for the 2014-2018 period. It will be calculated using the DCF absolute method with one of the FCFF models.
2. To analyze the results of the valuation of stock of consumption sector companies that are included in the LQ45 Index for the period 2014-2018. It will be calculated using the DCF absolute method with one of the FCFF models whether they are still undervalued, overvalued or reasonable.
3. Perform simulations of calculating the intrinsic value of stock with the CAKe system and analyze it.

LITERATURE REVIEW

Macroeconomic Analysis

According to Sukamulja (2017), fundamental analysis using top down analysis, the economic aspect is the first aspect that must be considered before the industrial aspects and the microeconomic aspects of the company. Economic aspects are often referred to as macro aspects consisting of Gross Domestic Product (GDP), inflation, interest rates, exchange rates, country risks, political risks, market risks and other economic indicators (labor, trade, business, consumption, capital markets , tax and government).

Industry Analysis

According to Sukamulja (2017), industry analysis is needed to determine the characteristics of the industry where the company is located. In Indonesia there are 9 sectors or industries. This research will examine consumption sector companies. The consumption sector produces daily basic necessities products that are commonly needed such as food, beverages, clothing, cigarettes or tobacco, household products and other personal products. This sector is relatively stable from economic fluctuations because it cannot be reduced from public spending, whatever the financial condition of the community. Consumer goods group stocks are non-cyclical stocks, meaning that it is always needed whatever the economic conditions at the time so that the demand for this product is relatively constant at any price. The performance of the issuers in the consumer products sector is strongly influenced by public consumption.

Microeconomic Analysis of Companies

Microeconomic analysis of the company is the same as internal analysis or from within the company itself. Microeconomic analysis of the company is divided into two namely quantitative

and qualitative analysis. Quantitative analysis is the analysis of a company that can be calculated with numbers, for example by analyzing the company's financial performance. While qualitative analysis is a company analysis that cannot be calculated with numbers, for example analyzing company strategies, the quality of products sold, management who leads, etc. that cannot be calculated with numbers.

Evaluation of the Company's Financial Condition

Analysis of financial performance can be seen from the condition of the company's financial statements. According to Hery (2017), financial statements are the final product of a series of processes for recording and summarizing business transaction data.

Stock Valuation

Valuation can only provide a range of values, not the exact value (precise value) and not an absolute value of an asset, even though in valuation techniques many valuers use mathematical calculations and financial formulas (Djaja, 2017). If the market price is smaller than the intrinsic value, it can be concluded that the stock price is still cheap or undervalued. Vice versa, if the market price is greater than the intrinsic value, it can be concluded that the stock price is already expensive or overvalued. If the market price is equal to intrinsic value, then the stock price is still fair or fair value.

Discounted Cash Flow (DCF)

The DCF model is basically a model that discounts company free cash flow, free cash flow equity, or dividend flow or commonly called the dividend discount model (DDM) period come with associated capital costs (Djaja, 2017).

Free Cash Flow to Firm (FCFF)

According to Djaja (2017) FCFF is an operational net cash flow available simultaneously to investors who contribute to the company's capital structure, or in other words the net cash flow available to debt holders, ordinary shares (stock holders) and preferred stock. It can be said that FCFF is cash flow for the company, in this case for shareholders and corporate lenders. The definition of FCFF is cash available to corporate funders, namely shareholders and bonds after the company has carried out operational and investment activities (Wira, 2014).

RESEARCH METHODS

The data used in this research the financial statements for the last two years are from 2017-2018 which have been audited. Descriptive results of this study are an investment decision that can be used as a guideline in trading stock instruments. After obtaining the results of the valuation or stock valuation, the author will simulate the stock valuation calculation using the CAKe system developed by Dimas Raka Prayudha in 2017.

The object is the consumption sector companies included in the LQ45 Index for the 2014-2018 period. The author uses data for the last 5 years (2014-2018) because the list of companies included in the LQ45 index is always updated every 6 months. The author will use company objects that have always been included in LQ45 for the past 5 years. Companies that are always included in the LQ45 index are good companies. The data used in this study are historical stock price data (closing price) by taking data from www.finance.yahoo.com, www.investing.com and annual financial statements (audit) to calculate stock valuation or stock price valuation using the FCF method on the site of PT. Indonesia Stock Exchange (www.idx.co.id) and on the company's official website.

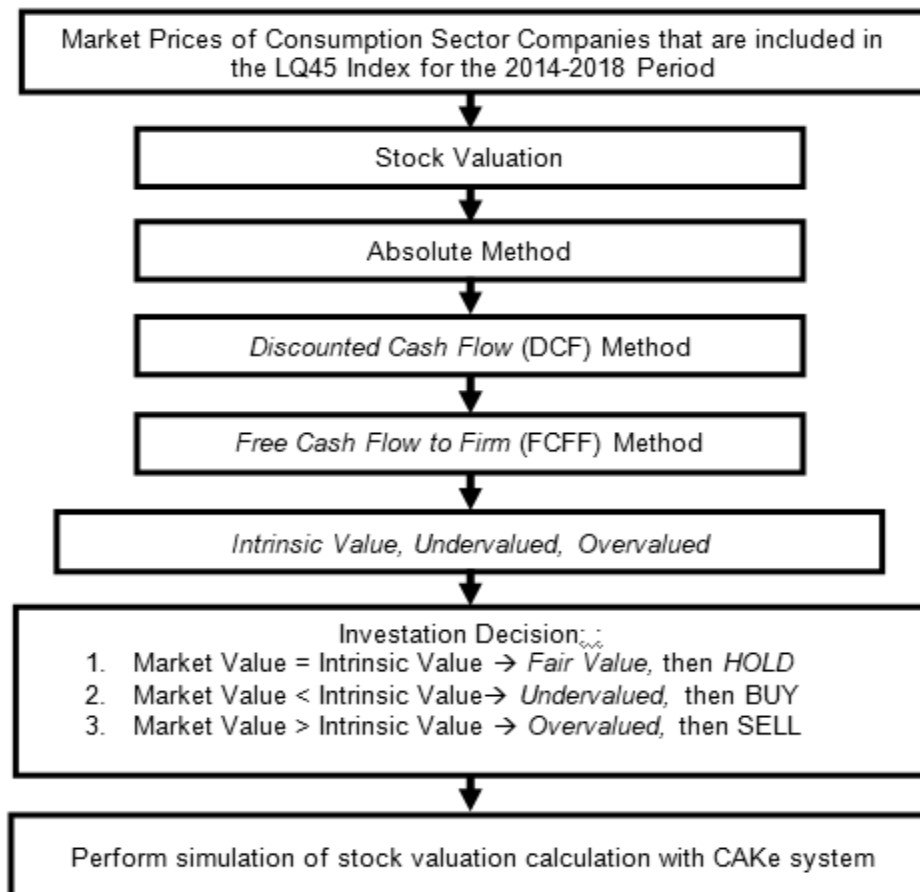


Figure 1 Conceptual Framework

The analytical tool used in this study is the DCF method with one of the models, namely FCFF.

1. Looking for a tax rate or corporate tax rate in Indonesia.
2. Calculating Cost of Equity (CoE)
3. Calculating *Cost of Debt*
4. Calculating *Weighted Average Cost of Capital (WACC)*
5. Calculating NOPLAT (*Net Operating Profit Less Adjusted Tax*)
6. Calculating ROIC (*Return On Invested Capital*) atau ROC (*Return on Capital*)
7. Calculating *Dividend Payout Ratio (DPR)*
8. Calculating *Retention Ratio*
9. Calculating *Expected Growth Rate*
10. Determining Stable Growth
11. Calculating *Capital Expenditure (CAPEX)*
12. Calculating *Changes in Working Capital*
13. Calculating *Terminal Value*
14. Calculating Free Cash Flow to Firm (FCFF) and FCFF Valuation

RESULTS AND DISCUSSION

Valuation of PT. Gudang Garam Tbk. (GGRM)

GGRM is a company included in the Tobacco Manufacturers sub-sector of consumer goods industry. The Gudang Garam cigarette company is one of the leading cigarette industries in Indonesia, which was established in 1958 in the city of Kediri, East Java. Until now, Gudang Garam has been widely known both domestically and internationally as a producer of high quality clove cigarettes.

	2017	2018		
Current Asset	Rp 43,764,490,000,000	Rp 45,284,719,000,000	Tax Rate	25%
Total Asset		Rp 69,097,219,000,000	Risk Free Rate	7.375%
Current Liabilities	Rp 22,611,042,000,000	Rp 22,003,567,000,000	Expected Market Return	20.28%
Total Liabilities		Rp23,963,934,000,000	Beta	0.884
Outstanding Share		1,924,088,000	Cost of Equity (CAPM)	18.78%
Total Equity		Rp 45,133,285,000,000	Cost of Debt (After Tax)	2%
Interest Expense		Rp 677,562,000,000	Weighted Average Cost of Capital	0.130042
EBIT		Rp 11,156,804,000,000	Return on Capital	0.121099
Net Income		Rp 7,793,068,000,000	Dividend Payout Ratio	64.19%
Capital Expenditure		Rp 3,110,989,000,000	Retention Ratio	35.81%
Depreciation		Rp 2,264,730,000,000	Expected Growth Rate	4.34%
Changes in Working Capital		Rp 2,127,704,000,000	Stable Growth	5.020%
Dividend Payment		Rp 5,002,629,000,000	DER	53.10%
FCFF		Rp 5,393,640,000,000		
Intrinsic Value	Rp36,872			
Market Value Desember 2018	Rp83,625			
	OVERVALUED			

Figure 2 GGRM Stock Valuation Results using MS Excel

Based on calculations using MS Excel, intrinsic value is smaller than market value, so it can be concluded that GGRM is overvalued or expensive.

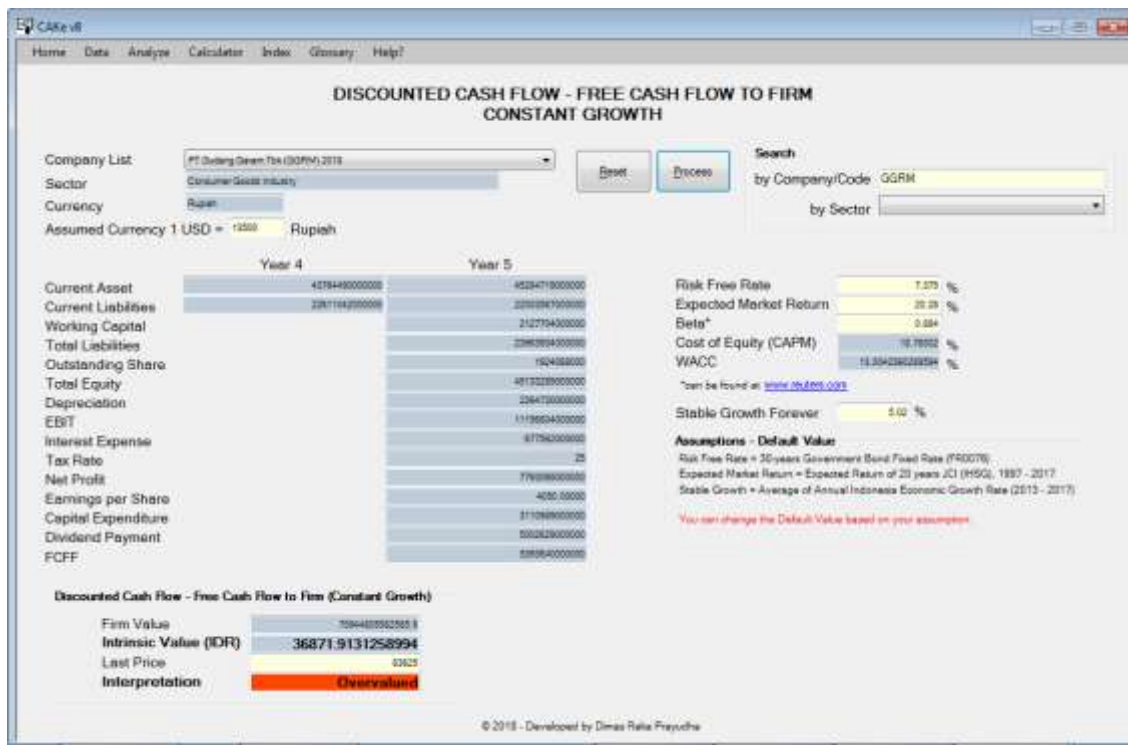


Figure 3 GGRM Stock Valuation Results using CAKe

GGRM is one of the big companies that produce cigarettes. Its competitors include HMSP, WIIM, RMBA, PT. Djarum and others. When the cigarette excise tax rate is raised, it will automatically have an impact on the selling price of the cigarette itself. Besides taxes, cigarettes are also taxed. The display of cigarette advertisements on television is also aired at the hours that are already late at night or hours when small children are sleeping (no longer watching television). This is an effort by the government so that not many people consume cigarettes, especially for young children under age. Because it involves their future, health, and so they are not addicted. In addition, in the Islamic religion, cigarette company shares do not include Islamic shares. So it can be concluded with these facts, and the intrinsic value of GGRM has also been expensive or overvalued, it has not been suggested to be able to buy GGRM shares. Because the intrinsic value is already expensive based on data from the end of 2018.

Valuation of PT. H.M. Sampoerna Tbk. (HMSP)

HMSP is a company included in the consumer goods industry sector of the Tobacco Manufacturers sub sector. HMSP is a leading tobacco company in Indonesia. HMSP is a

subsidiary of PT. Philip Morris Indonesia (PMID) and affiliation from Philip Morris International Inc. (PMI), the world's leading international tobacco company.

	2017	2018		
Current Asset	Rp 34,180,353,000,000	Rp 37,831,483,000,000	Tax Rate	25%
Total Asset		Rp 46,602,420,000,000	Risk Free Rate	7.375%
Current Liabilities	Rp 6,482,969,000,000	Rp 8,793,999,000,000	Expected Market Return	20.28%
Total Liabilities		Rp11,244,167,000,000	Beta	1.154
Outstanding Share		116,318,076,900	Cost of Equity (CAPM)	22.27%
Total Equity		Rp 35,358,253,000,000	Cost of Debt (After Tax)	0%
Interest Expense		Rp 30,495,000,000	Weighted Average Cost of Capital	0.169438
EBIT		Rp 25,490,791,000,000	Return on Capital	0.410238
Net Income		Rp 13,538,418,000,000	Dividend Payout Ratio	92.19%
Capital Expenditure		Rp 989,217,000,000	Retention Ratio	7.81%
Depreciation		Rp 952,892,000,000	Expected Growth Rate	3.20%
Changes in Working Capital		Rp 1,340,100,000,000	Stable Growth	5.020%
Dividend Payment		Rp 12,480,930,000,000	DER	31.80%
FCFF		Rp 17,741,668,250,000		
Intrinsic Value	Rp1,343			
Market Value Desember 2018	Rp3,710			
	OVERVALUED			

Figure 4 HMSP Stock Valuation Results using Ms. Excel

Based on calculations using MS Excel, intrinsic value is smaller than market value, so it can be concluded that HMSP is overvalued or expensive.

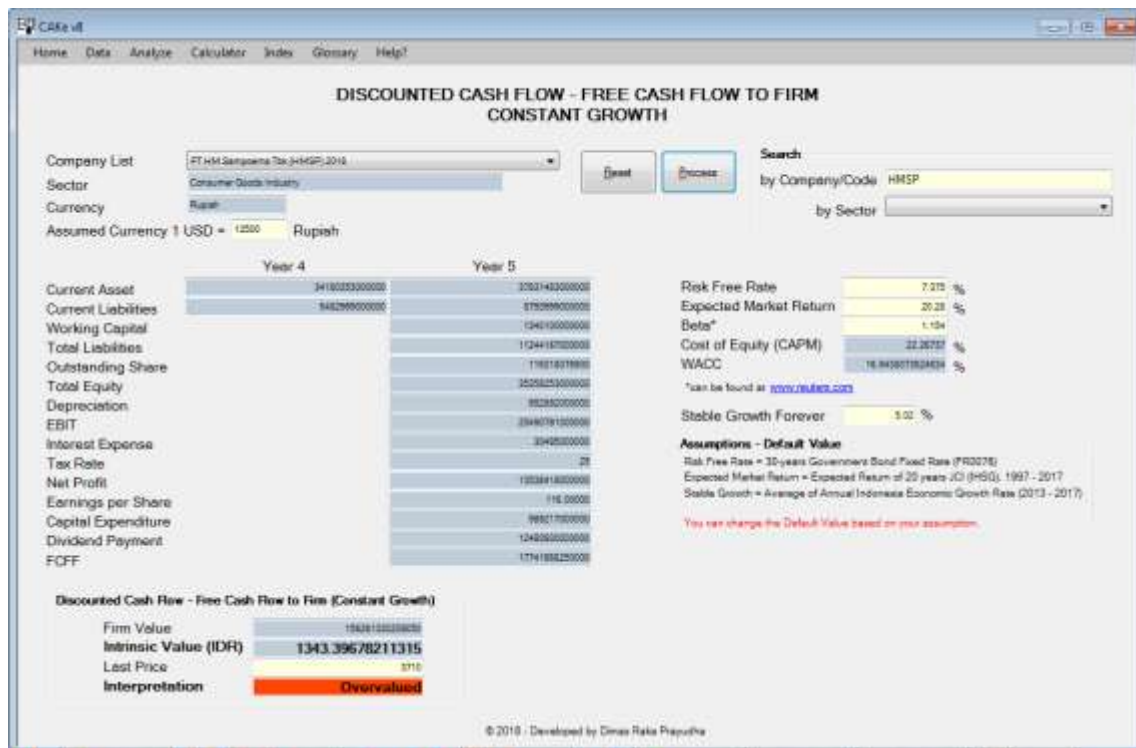


Figure 5 HMSP Stock Valuation Results using CAKE

HMSP is the same as GGRM, a cigarette production company. The big competitors are GGRM, WIIM, RMBA, PT. Djarum and others. We can know that even its competitors are big companies too. Similar to GGRM, this HMSP is overvalued or expensive. The same is the case with GGRM. When the cigarette excise tax rate is raised, it will automatically have an impact on the selling price of the cigarette itself. Besides taxes, cigarettes are also taxed. The display of cigarette advertisements on television is also aired at the hours that are already late at night or hours when small children are sleeping (no longer watching television). This is an effort by the government so that not many people consume cigarettes, especially for young children under age. Because it involves their future, health, and so they are not addicted. In addition, in the Islamic religion, cigarette company shares do not include Islamic shares. Based on this description, it is not advisable to buy HMSP shares at this time, because based on data from the end of 2018 HMSP is already expensive.

Valuation of PT. Indofood CBP Sukses Makmur Tbk. (ICBP)

ICBP is a company included in the consumer goods industry food and beverages sub-sector. ICBP is one of the well-established and leading producers of branded consumer products, with diversified business activities including instant noodles, dairy, snacks, food seasonings, nutrition and special foods and beverages. In addition, ICBP also runs packaging business activities that produce both flexible and cardboard packaging to support its core business activities. Besides Indonesia, ICBP products have also been present in more than 60 countries in the world.

	2017	2018			
Current Asset	Rp 16,579,331,000,000	Rp 14,121,568,000,000		Tax Rate	25%
Total Asset		Rp 34,367,153,000,000		Risk Free Rate	7.375%
Current Liabilities	Rp 6,827,588,000,000	Rp 7,235,398,000,000		Expected Market Return	20.28%
Total Liabilities		Rp11,660,003,000,000		Beta	0.413
Outstanding Share		11,661,908,000		Cost of Equity (CAPM)	12.70%
Total Equity		Rp 22,707,150,000,000		Cost of Debt (After Tax)	1%
Interest Expense		Rp 147,005,000,000		Weighted Average Cost of Capital	0.08715135
EBIT		Rp 6,447,921,000,000			
Net Income		Rp 4,658,781,000,000		Return on Capital	0.140714034
Capital Expenditure		Rp 3,511,630,000,000		Dividend Payout Ratio	55.07%
Depreciation		Rp 841,194,000,000		Retention Ratio	44.93%
Changes in Working Capital		-Rp 2,865,573,000,000		Expected Growth Rate	6.32%
Dividend Payment		Rp 2,565,620,000,000		Stable Growth	5.020%
FCFF		Rp 5,031,077,750,000			
Year Projection	2019 (P)	2020 (P)	2021 (P)	2022 (P)	2023 (P)
FCFF	Rp 5,349,152,198,276	Rp 5,687,335,927,242	Rp 6,046,900,284,446	Rp 6,429,196,994,481	Rp 6,835,663,240,581
PV of FCFF	Rp 4,920,338,089,055	Rp 4,812,035,932,183	Rp 4,706,117,627,186	Rp 4,602,530,702,814	Rp 4,501,223,842,764
Terminal Value					Rp 194,277,433,552,382
PV of Terminal Value					Rp 127,929,973,323,653
Total PV	Rp 151,472,219,517,654				
Intrinsic Value		Rp12,989			
Market Value Desember 2018		Rp10,450			
		UNDERVALUED			

Figure 6 ICBP Stock Valuation Results using MS Excel

Based on calculations using MS Excel, intrinsic value is greater than market value, so it can be concluded that ICBP is undervalued or still cheap.

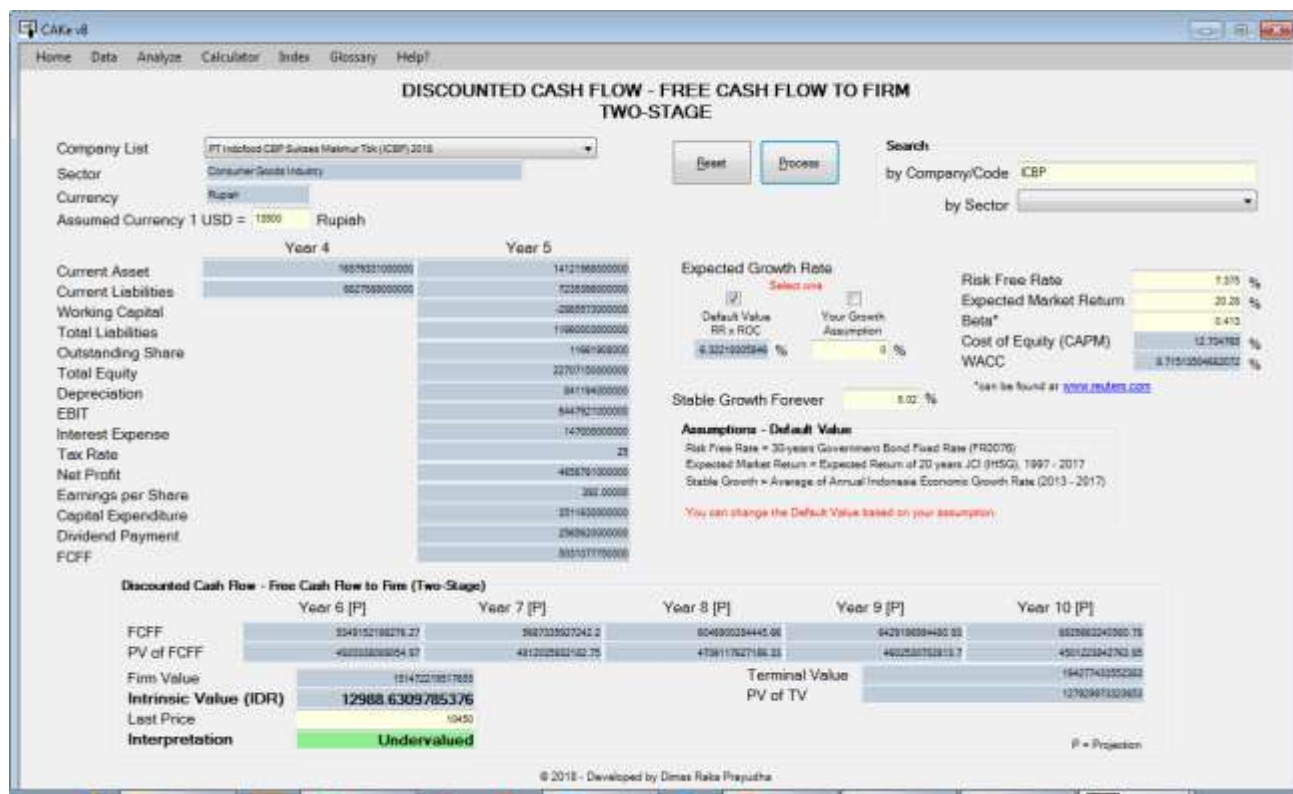


Figure 7 ICBP Stock Valuation Results using CAKE

ICBP is a subsidiary of INDF which is engaged in food and beverages. Many ICBP's product brands have become leaders in each of their market segments or referred to as market leaders. In addition to producing food and beverages, ICBP also manufactures its own packaging facilities. There are many products from ICBP and we are familiar with them everyday. So it can be concluded that the business of ICBP is still very potential, especially Indonesian people who mostly like to consume food and drinks from ICBP because it is easy and practical. Nowadays many entrepreneurs or food sellers are finding innovations or updates in processing ICBP products such as Indomie. Besides that, there are currently a lot of warteg (warung tegal), warkop (coffee shop) and others who provide Instant Noodles like Indomie. In addition, many boarding children are also very fond of consuming Indomie, because it is easy to process and practical. Good financial condition (intrinsic value is still cheap or still undervalued) and good business is also recommended to buy ICBP stocks.

Valuation of PT. Indofood Sukses Makmur Tbk. (INDF)

INDF is a company that is included in the consumer goods industry food and beverages sub sector. INDF has 4 business groups including Branded Consumer Products, Bogasari, Agribusiness and Distribution.

	2017	2018			
Current Asset	Rp 32,948,131,000,000	Rp 33,272,618,000,000		Tax Rate	25%
Total Asset		Rp 96,537,796,000,000		Risk Free Rate	7.375%
Current Liabilities	Rp 21,637,763,000,000	Rp 31,204,102,000,000		Expected Market Return	20.28%
Total Liabilities		Rp46,620,996,000,000		Beta	1.303
Outstanding Share		8,780,426,500		Cost of Equity (CAPM)	24.19%
Total Equity		Rp 49,916,800,000,000		Cost of Debt (After Tax)	2%
Interest Expense		Rp 1,553,151,000,000		Weighted Average Cost of Capital	0.137146745
EBIT		Rp 9,143,020,000,000		Return on Capital	0.07103192
Net Income		Rp 4,961,851,000,000		Dividend Payout Ratio	53.44%
Capital Expenditure		Rp 7,401,591,000,000		Retention Ratio	46.56%
Depreciation		Rp 2,806,102,000,000		Expected Growth Rate	3.31%
Changes in Working Capital		-Rp 9,241,852,000,000		Stable Growth	5.020%
Dividend Payment		Rp 2,651,689,000,000			
FCFF		Rp 11,503,628,000,000			
Year Projection	2019 (P)	2020 (P)	2021 (P)	2022 (P)	2023 (P)
FCFF	Rp 11,884,068,812,135	Rp 12,277,091,325,585	Rp 12,683,111,634,531	Rp 13,102,559,593,961	Rp 13,535,879,274,758
PV of FCFF	Rp 10,450,778,551,108	Rp 9,494,289,308,060	Rp 8,625,341,071,416	Rp 7,835,921,803,551	Rp 7,118,752,754,584
Terminal Value					Rp 163,495,256,940,722
PV of Terminal Value					Rp 85,984,980,146,700
Total PV	Rp 129,510,063,635,418				
Intrinsic Value		Rp14,750			
Market Value Desember 2018		Rp7,450			
		UNDERVALUED			

Figure 8 INDF Stock Valuation Results using MS Excel

Based on calculations using MS Excel, intrinsic value is greater than market value, so it can be concluded that INDF is undervalued or still cheap.

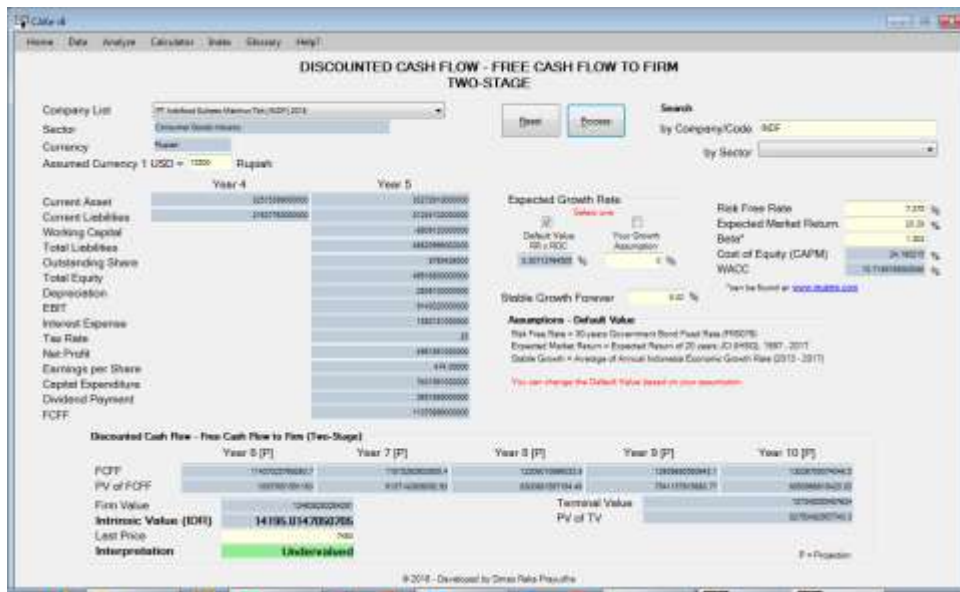


Figure 9 INDF Stock Valuation Results using CAKE

INDF is known as an established and leading company in each of its business categories. INDF has 4 business groups including Branded Consumer Products, Bogasari, Agribusiness and Distribution. Products from INDF include Branded Consumer Products (Products from ICBP), wheat flour (Bogasari, Segitiga Biru, Cakra Kembar, Kunci Biru, Lencana Merah, Taj Mahal, Bogasari Chesa), Pasta (Bogasari, La fonte), Vegetable oils and fats from agribusiness (Bimoli, Palmia, Happy Soya Oil). We can see that the products from INDF are very much on the market and are widely consumed by the community, especially for people who have a culinary business will definitely use a lot of INDF products. So it can be concluded that the business of INDF is very good, besides that the financial condition is also good. So it can be recommended to buy INDF stocks.

Valuation of PT. Kalbe Farma Tbk. (KLBF)

KLBF is a company included in the consumer goods industry pharmaceuticals sub sector. Through the process of organic growth and business mergers & acquisitions, Kalbe has grown and transformed into an integrated healthcare solution provider through 4 business group divisions: Prescription Drug Division, Health Products Division, Nutrition Division, and Distribution and Logistics Division.

	2017	2018			
Current Asset	Rp 10,042,738,649,964	Rp 10,648,288,386,726		Tax Rate	25%
Total Asset		Rp 18,146,206,145,369		Risk Free Rate	7.375%
Current Liabilities	Rp 2,227,336,011,715	Rp 2,286,167,471,594		Expected Market Return	20.28%
Total Liabilities		Rp2,851,611,349,015		Beta	1.298
Outstanding Share		46,875,122,110		Cost of Equity (CAPM)	24.13%
Total Equity		Rp 15,294,594,796,354		Cost of Debt (After Tax)	1%
Interest Expense		Rp 29,738,266,966		Weighted Average Cost of Capital	0.204573353
EBIT		Rp 9,847,925,793,543		Return on Capital	0.407024162
Net Income		Rp 2,497,261,964,757		Dividend Payout Ratio	46.93%
Capital Expenditure		Rp 1,307,327,219,368		Retention Ratio	53.07%
Depreciation		Rp 426,008,232,303		Expected Growth Rate	21.60%
Changes in Working Capital		Rp 546,718,276,883		Stable Growth	5.020%
Dividend Payment		Rp 1,171,878,052,750			
FCFF		Rp 5,957,907,081,209			
Year Projection	2019 (P)	2020 (P)	2021 (P)	2022 (P)	2023 (P)
FCFF	Rp 7,244,945,492,135	Rp 8,810,012,386,657	Rp 10,713,168,006,207	Rp 13,027,446,919,716	Rp 15,841,660,762,502
PV of FCFF	Rp 6,014,532,429,004	Rp 6,071,695,957,400	Rp 6,129,402,781,392	Rp 6,187,658,064,588	Rp 6,246,467,019,674
Terminal Value					Rp 107,770,621,393,005
PV of Terminal Value					Rp 42,494,637,545,492
Total PV	Rp 73,144,393,797,550				
Intrinsic Value	Rp1,560				
Market Value Desember 2018	Rp1,520				
	UNDervalUED				

Figure 10 KLBF Stock Valuation Results using MS Excel

Based on calculations using MS Excel, intrinsic value is greater than market value, so it can be concluded that KLBF is undervalued or still cheap.

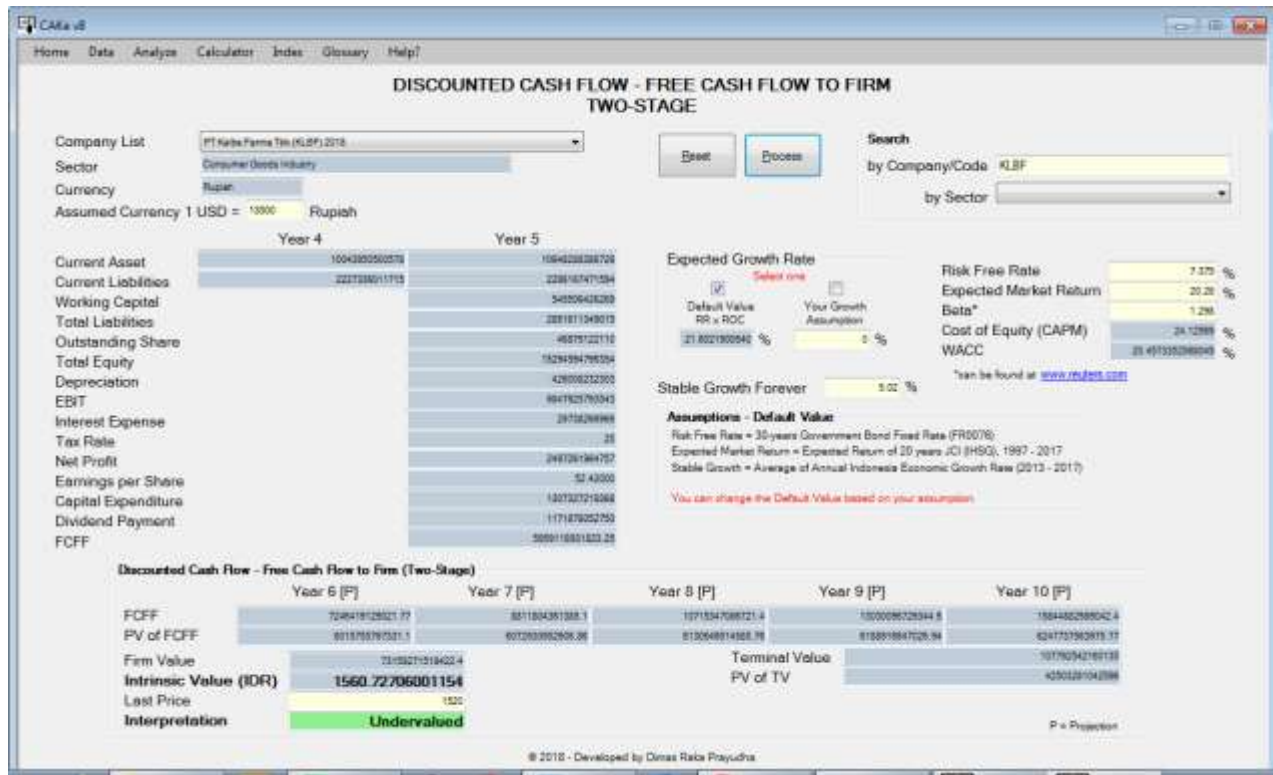


Figure 11 KLBF Stock Valuation Results using CAKE

Kalbe has grown rapidly from a simple business in a garage to become a leading pharmaceutical company in Indonesia. Through the process of organic growth and business mergers & acquisitions, Kalbe has grown and transformed into an integrated healthcare solution provider through 4 business group divisions: Prescription Drug Division, Health Products Division, Nutrition Division, and Distribution and Logistics Division. In the international market, the company has been present in ASEAN countries, Nigeria and South Africa, and has become a national health products company that can compete in export markets. We can see that the business of KLBF is very good, because indeed its products are consumed and easily found in the community. The financial condition is also good, so it is recommended to be able to buy KLBF stocks for those who don't have KLBF stocks.

Valuation of PT. Unilever Indonesia Tbk. (UNVR)

UNVR is a company included in the consumer goods industry cosmetics and household sub-sector. Every day, 2.5 billion people use various Unilever products to look good, feel good, and get a lot of things in life. UNVR is a global company that sells consumer goods with fast sales.

	2017	2018		
Current Asset	Rp 7,941,635,000,000	Rp 8,325,029,000,000	Tax Rate	25%
Total Asset		Rp 19,522,970,000,000	Risk Free Rate	7.375%
Current Liabilities	Rp 12,532,304,000,000	Rp 11,134,786,000,000	Expected Market Return	20.28%
Total Liabilities		Rp11,944,837,000,000	Beta	0.953
Outstanding Share		7,630,000,000	Cost of Equity (CAPM)	19.67%
Total Equity		Rp 7,578,133,000,000	Cost of Debt (After Tax)	1%
Interest Expense		Rp 108,642,000,000	Weighted Average Cost of Capital	0.080539
EBIT		Rp 12,278,630,000,000	Return on Capital	0.471699
Net Income		Rp 9,109,445,000,000	Dividend Payout Ratio	76.03%
Capital Expenditure		Rp 998,329,000,000	Retention Ratio	23.97%
Depreciation		Rp 754,590,000,000	Expected Growth Rate	11.31%
Changes in Working Capital		Rp 1,780,912,000,000	Stable Growth	5.020%
Dividend Payment		Rp 6,926,201,000,000	DER	157.62%
FCFF		Rp 7,184,321,500,000		
Intrinsic Value	Rp32,593			
Market Value Desember 2018	Rp45,400			
Hasil	OVERVALUED			

Figure 12 UNVR Stock Valuation Results using MS Excel

Based on calculations using MS Excel, intrinsic value is smaller than market value so it is concluded that UNVR is overvalued or already expensive.

The screenshot displays the CAKe v8 software interface for a discounted cash flow analysis. The main window is titled "DISCOUNTED CASH FLOW - FREE CASH FLOW TO FIRM CONSTANT GROWTH".

Company List: FT Unilever Indonesia Tbk (UNVR) 2017
Sector: Consumer Goods Industry
Currency: Rp
Assumed Currency 1 USD = 12000 Rupiah

Financial Data Table:

	Year 4	Year 5
Current Asset	7941635000000	8325029000000
Current Liabilities	12532304000000	11134786000000
Working Capital		1780912000000
Total Liabilities		11944837000000
Outstanding Share		7630000000
Total Equity		7578133000000
Depreciation		754590000000
EBIT		12278630000000
Interest Expense		108642000000
Tax Rate		25
Net Profit		9109445000000
Earnings per Share		1194.000000
Capital Expenditure		998329000000
Dividend Payment		6926201000000
FCFF		7184321500000

Assumptions - Default Value:

- Risk Free Rate = 30-years Government Bond Fixed Rate (FR0076): 7.375%
- Expected Market Return = Expected Return of 20 years JCI (IHSG), 1997 - 2017: 20.28%
- Stable Growth = Average of Annual Indonesia Economic Growth Rate (2013 - 2017): 5.020%

Results Summary:

- Firm Value: 248697970728945
- Intrinsic Value (IDR): 32593.4430850387
- Last Price: 45400
- Interpretation: **Overvalued**

Figure 13 UNVR Stock Valuation Results using CAKe

We can see that indeed the business of UNVR is very good. Maybe in the next 10 to 20 years, products from UNVR will still be consumed by many people. If the investment objective is long-term, it is still permissible to buy UNVR stocks. However, when viewed from the valuation of its stocks, the price of UNVR is overvalued by investors. But if in terms of long-term business is still very good.

Table 1 Research Summary

No	Code	Company Name	Conclusion
1.	GGRM	PT. Gudang Garam Tbk.	<i>OVERVALUED</i>
2.	HMSP	PT. H.M. Sampoerna Tbk.	<i>OVERVALUED</i>
3.	ICBP	PT. Indofood CBP Sukses Makmur Tbk.	<i>UNDERVALUED</i>
4.	INDF	PT. Indofood Sukses Makmur Tbk.	<i>UNDERVALUED</i>
5.	KLBF	PT. Kalbe Farma Tbk.	<i>UNDERVALUED</i>
6.	UNVR	PT. Unilever Indonesia Tbk.	<i>OVERVALUED</i>

CONCLUSIONS

Based on the results of research and discussion on the valuation of consumption sector company stocks included in the LQ45 Index for the period 2014-2018 using the Discounted Cash Flow (DCF) method with one of its models, namely Free Cash Flow to Firm (FCFF), it can be concluded as follows :

1. From 6 sample companies, there are 3 companies that are still undervalued and 3 companies are already overvalued (already expensive) their intrinsic value. For companies whose intrinsic value is still undervalued, investors are advised to be able to buy their stocks. And for companies whose intrinsic value has been overvalued, investors are advised to sell their stocks.
2. The system or application of CAKe (Cerdas Analisis Laporan Keuangan) used for the simulation of stock valuation calculation results is the same as the calculation using Microsoft Excel, but must input the financial statement data one by one in accordance with the items needed. There are several advantages and disadvantages to the system, but overall it is good and the results appear automatically.

SUGGESTIONS

Based on the conclusions above obtained in this study, it can be given suggestions for further research as follows:

1. Using a larger sample, for example, not only in the consumption sector companies registered at The Indonesia Stock Exchange but also other sector companies with a longer period, so the results can illustrate the overall condition of the intrinsic value of company stocks in Indonesia.
2. In addition, it can also use a sample of companies listed on the foreign stock index with a longer period, so the results can illustrate the condition of the intrinsic value of foreign stocks and can be compared with the intrinsic value of stocks in Indonesia.
3. Using other stock valuation tools or methods such as the Relative Method using Price to Book Value (PBV), Price to Earnings Ratio (PER) and the Absolute Method using the Dividend Discount Model (DDM) method, the Discounted Cash Flow method with the Free Cash Flow model to Equity (FCFE) and others.
4. Using other free applications or systems to calculate stock valuations, in addition to the CAKe (Cerdas Analisis Laporan Keuangan) application. In addition to free systems or applications, users can also use paid applications. Or it could also for further research can develop or create their own applications or systems that are more sophisticated, practical and easy in calculating stock valuations, for example, it can be used with smartphones or cellphones, not only with laptops or computers.

REFERENCES

- Hartono, Jogiyanto. (2015). Teori Portofolio dan Analisis Investasi. Yogyakarta : BPFE -Yogyakarta.
- Sukamulja, Sukmawati. (2017). Pengantar Pemodelan Keuangan dan Analisis Pasar Modal. Yogyakarta : CV. Andi Offset (Penerbit Andi).
- Hery. (2017). Analisis Laporan Keuangan Integrated and Comprehensive Edition. Jakarta : PT. Gramedia Widiasarana Indonesia.
- Djaja, Irwan. (2017). All About Corporate Valuation Memetakan, Menciptakan, Mengukur dan Merealisasikan Nilai Perusahaan. Jakarta : PT. Elex Media Komputindo.
- Wira, Desmond. (2014). Analisis Fundamental Saham. Jakarta : Exceed.
- Ratag, Suryani Miyoko. (2013). Perlakuan Akuntansi Capital Expenditure dan Revenue Expenditure pada PT. Bank Sulut. Jurnal EMBA, 1(3), 179-189.
- Damodaran, Aswath. (2012). Investment Valuation: Tools and Techniques for Determining the Value of Any Asset. USA : Wiley Finance.
- Khatik, S.K. dan Milind Patil. (2018). Company Valuation using free cash flow technique: A case study of National Thermal Power Corporation Limited. Journal of Advance Management Research, ISSN: 2393-9664, 06(03), 110-122.
- Rahadjeng, Peni Asih. (2018). Firm Valuation a Case Study on the Acquisition of Baker Hughes by General Electric. Tesis. Tidak dipublikasikan. Jakarta : Universitas Gadjah Mada.
- Hidayat, Taufik, Nila Firdausi Nuzula dan Ari Darmawan. (2017). Penerapan Analisis Fundamental menggunakan Discounted Cash Flow dan Price Earning Ratio untuk menilai Kewajaran Harga Saham (Studi pada Perusahaan

Multinasional yang terdaftar di Bursa Efek Indonesia Periode 2011-2016 dan Induk Perusahaannya). *Jurnal Administrasi Bisnis (JAB)*, 50(2), 20-29.

Rachmawati, Rani dan Nila Firdausi Nuzula. (2018). Stock Valuation Using Free Cash Flow to Equity (FCFE) and Price Earning Ratio (PER) (Study at Companies Listed on LQ-45 Index in Indonesia Stock Exchange Period August 2017 - January 2018). *Jurnal Administrasi Bisnis (JAB)*, 57(2), 88-97.

Jatnika, Oktana Indriyatna dan Nila Firdausi Nuzula. (2017). Analisis Fundamental untuk Menilai Kewajaran Harga Saham dengan Pendekatan Discounted Cash Flow (Studi Pada Perusahaan dengan Kapitalisasi Pasar Terbesar dari Jakarta Islamic Index dan FTSE Bursa Malaysia Hijrah Shariah Index Periode 2011-2015). *Jurnal Administrasi Bisnis (JAB)*, 50(2), 56-65.

Khoirudin, Rifki. (2017). Penilaian Saham PT. Pembangunan Perumahan Properti dalam Rangka Initial Public Offering. *Jurnal Keuangan dan Perbankan*, 21(1), 37-46.

Paramitha, Adhy Listya, Sri Hartoyo dan Nur Ahmad Maulana. (2014). The Valuation of Initial Share Price Using the Free Cash Flow to Firm Method and the Real Option Method in Indonesia Stock Exchange. *Jurnal Manajemen dan Kewirausahaan*, 16(1), 9-16.

Hasani, Noor El. (2014). Estimasi Nilai Pasar Wajar Saham PT. MNC Land (Persero) Tbk. dalam rangka Right Issue Tahun 2014. Tesis. Tidak dipublikasikan. Yogyakarta : Universitas Gadjah Mada.

Astuti, Lestari Puji. (2013). Penilaian Harga Wajar Saham PT. Kimia Farma (Persero) Tbk. dan PT. Indofarma (Persero) Tbk. menjelang Akuisisi. *Jurnal MIX*, III(2), 146-159.

Yulfita, Ulfa. (2013). Penilaian Harga Saham Sektor Manufaktur yang terdaftar di Bursa Efek Indonesia (Periode 2009 – 2011). *Jurnal EMBA*, 1(3), 1089-1099.

Hutapea, Ecryna Cyntia, Tyara Pratiwi Poernomoputri dan Pardomuan Sihombing. (2013). Analisis Valuasi Nilai Wajar Saham PT. Adaro Energy Tbk menggunakan Metode Free Cash Flow To Firm (FCFF). *Journal of Applied Finance and Accounting*, 5(2), 240-270.

Siregar, Grace Sintari, Harianto dan Trias Andati. (2012). Analisis Valuasi Harga Saham Perdana dengan Metode Free Cash Flow to Firm dan Relative Valuation (Studi Kasus : PT. Krakatau Steel Tbk.). *Jurnal Program Pascasarjana Manajemen dan Bisnis Institut Pertanian Bogor*.

Prayudha, Dimas Raka. (2018). User Manual CAKe Application.