
FUNDAMENTAL ANALYSIS AS A BASIS FOR INVESTMENT DECISION-MAKING WITH THE DISCOUNTED CASH FLOW (DCF) APPROACH

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ABSTRACT

The stock trend has been on the rise recently during the Covid 19 pandemic which has caused several economic sectors to decline. Some cases show that public figures who start investing and selling profits influence their social media followers and make the current generation of teenagers increasingly want to invest. Therefore, it is necessary to have an in-depth understanding of fundamental analysis in investment and what decisions should be made in investing in the Capital Market. The purpose of the research is to find out the right stock investment decisions made in companies listed on the JII70. The type of research used is quantitative research with a descriptive approach. The population in this study was 108 companies, using the purposive sampling technique 21 companies became research samples. Data was obtained from financial reports issued by the Indonesia Stock Exchange. The data analysis model uses the DCF approach. The results showed that the maximum undervalued ratio of stocks in the JII 70 Index for 2019-2021 analyzed was 86%, so investors should buy shares and increase their ownership or maintain their ownership to expect the share price to increase in the future. The stock with the largest overvalued ratio in 2019 was 43%, and the market price was higher than its fair price, so investors did not buy the stock.

Keywords: Fundamental Analysis, Capital Market, DCF, Investment Decision, Jakarta Islamic Index 70

INTRODUCTION

The trend of stocks is on the rise these days during the Covid 19 pandemic which has caused several economic sectors to decline. Some cases show that those public figures who start investing and show off the profits they get from the increase in their shares continue to influence their social media followers to invest like them. This makes the current generation of teenagers increasingly want to invest like their favorite public figures. This is done so that later they can get the same profit. According to statistical data released by PT Kustodian Sentral Efek Indonesia (KSEI) in January 2021, it shows an increase in the number of investors in 2018 from 1,619,372 to 2,484,354 at the end of 2019, which increased by 53.41% (Fadly, 2021). Therefore, it is necessary to have a deep understanding of investment and what decisions must be made in investing in the Capital Market. The Indonesian capital market is very influential in the country's economic sector, with the capital market, investors as parties who have capital can invest in the hope of getting a return. Companies as parties who need capital can use these funds to enlarge their projects. Companies can develop their business and the government can encourage various activities, to provide public prosperity and the country's economy through capital raised from the capital market.

The development of Indonesia's Sharia capital market can be seen from the movement of the Indonesia Sharia Stock Index (ISSI), Jakarta Islamic Index (JII), and Jakarta Islamic Index 70 (JII70). The JII70 is an Islamic stock index launched by the Indonesia Stock Exchange (IDX) on May 17, 2018. The JII70 component only includes 70 of the most liquid sharia stocks listed on the IDX. Similar to ISSI, according to OJK's DES review schedule, JII Islamic stocks are reviewed twice a year, namely in May and November each year (Thian, 2021).

JII70 is an Islamic stock index developed from JII. The JII70 consists of 70 companies that have been selected twice a year according to certain criteria. Selected companies must

carry out activities by Islamic law and have the highest share value among other Islamic companies. The name "Jakarta" in JII70 is taken from the location of the Indonesia Stock Exchange in Jakarta, the capital of Indonesia. The word "Islamic" in JII70 refers to the Islamic sharia principles that must be adhered to by companies listed in this index, including the prohibition of interest, usury and investment in sectors that are considered haram in Islam. The high awareness of the Islamic community in Indonesia, which is predominantly Muslim, to invest in sharia has increased the JII70 stock index according to Figure 1.1 above. In addition, stable economic conditions after the Covid 19 pandemic have also affected the performance of company shares in the JII70 which are dominated by shares of consumer goods, miscellaneous industries and construction issuers (Firda, 2020).

Investment decisions in stock require careful and rational thinking. Investors must be able to analyze whether the shares that occur are worth buying and must also be able to detect price movement and know what variables determine the share price, whether fundamental, technical, or political factors (Yulianti et al., 2009). To support decisions in investing in stocks, the role of information is very important for investors. Information that can be obtained by investors can come from external and internal parties. Information from external companies such as interest rates, economic conditions, and government policies, while information from internal companies is obtained from the company's financial statements (Ervinta & Zahroni, 2013).

One of the analysis techniques used in determining the intrinsic price of a company's shares is the fundamental analysis technique. The fundamental analysis states that each stock has a certain intrinsic value (supposed value). The fundamental analysis calculates the intrinsic price of a stock by using fundamental data in the form of company financial statements, such as profit, dividends, sales, capital structure, risk and so on.

Fundamental analysis is used to compare the intrinsic price with its market price to determine whether the stock price reflects its intrinsic value or not. Once the intrinsic value or price is determined, it is then compared to the market value to determine whether or not the stock is valued. Stocks that have an intrinsic price lower than their market price are called overvalued. Stocks that have an intrinsic price higher than their market price are called undervalued. Conversely, if the intrinsic price of the stock is equal to its market price, it is called correctly valued. The right investment decision to buy shares is in a company whose shares are undervalued (Flopgiardo, 2014). The company's shares are analyzed first before investing, and how fundamental analysis is used to understand the company's performance and growth. Investments made can bring profits to investors and minimize risks.

LITERATURE REVIEW

Capital Markets

According to Sudomo (2016), the capital market is a market where long-term securities, especially bonds and stocks, are issued and traded. This capital market can be divided into two groups, namely the money market and the capital market. The money market is a market that trades capital for a period of less than one year (temporary & short-term). While the capital market with a period of more than one year (temporary long-term & permanent) (Anoraga, 2009). It can be concluded that the capital market is a meeting place for sellers and buyers to conduct transactions to obtain capital. Sellers in the capital market are companies that need capital (issuers), so they try to sell securities in the capital market. The buyers (investors) are parties who want to buy capital in companies that they think are profitable. This capital market is known as the stock exchange.

Mardani (2015) says there are several functions of this capital market, including: (1) Provide a source of (long-term) financing for the business world while enabling optimal allocation of financial resources; (2) Provide an investment vehicle for investors while enabling diversification efforts; (3) Provide a Leading Indicator for a country's economic trend; (4)

Spread ownership of a company to the middle class; (5) Spreading ownership, openness, and professionalism create a healthy business climate; (6) Creating attractive jobs or professions; (7) Provide opportunities to own healthy and prospective companies; (8) An investment alternative that provides potential profits with calculated risks through openness, liquidity, and investment diversification; (9) Fostering a climate of openness for the business world, as well as providing access to social control.

In the current era, not only conventional capital markets are sought after by the public, but the development of Islamic capital markets in Indonesia is also growing rapidly. The Islamic capital market can simply be interpreted as a capital market that applies sharia principles in economic transaction activities and is free from things that are prohibited such as usury, gambling and speculation. This Islamic capital market is a capital market whose entire mechanism of activities, especially regarding issuers and types of securities traded, is by sharia principles.

The Islamic capital market has a concept that the shares traded in the Islamic capital market must come from issuers that meet sharia standards. In addition, the rules of buying and selling shares remain within the guidelines of buying and selling in general, which must fulfill several things such as the pillars, conditions, aspects, mutual willingness (an-taradhin) and avoid elements of gambling (maysir), doubt (gharar), interest (usury), and market engineering (bai' najasy) (Manan, 2012), as Allah says in Surah An-Nisa verse 29 which reads:

"... Do not eat each other's wealth by unlawful means, except by way of a consensual trade between you ..."

In the Qur'an letter An-Nisa verse 29 above, Allah SWT. advises us as His ummah not to do false and we are encouraged to carry out activities that bring blessings by way of commerce (muamalah). One of the commerce in Indonesia that is by Islamic law is sharia securities issued by the IDX. What is meant by sharia securities are securities as referred to in the laws and regulations in the field of capital markets whose contracts, company management and method of issuance fulfill the principles of sharia. There are types of business activities that are contrary to sharia principles, including (Mardani, 2015): (1) Gambling and games are classified as gambling or trading that is prohibited; (2) Conventional/ribawi financial institutions including conventional banking and ta'min; (3) Producers, distributors, and traders of haram food and beverages; (4) Producers, distributors and providers of goods or services that damage morals and are mudarat; (5) Investing in issuers/companies that at the time of the contract the company's profit ratio to ribawi financial institutions is more dominant than the capital.

There are several basic principles in transactions according to sharia in financial investments, including (Anshori, 2008): (1) Transactions are carried out on assets that provide beneficial value and avoid any unjust transactions. Any transaction that provides benefits will be carried out with profit sharing; (2) Money is a means of exchange, not a trading commodity where its function is as a means of exchanging value that describes the purchasing power of an item or treasure. As for the benefits or profits generated based on the principle of the use of goods or prices purchased with the money; (3) Every transaction must be transparent, not causing losses or elements of fraud on one of the parties either intentionally or unintentionally; (4) Risks that may arise must be managed so as not to cause a large risk or exceed the ability to bear the risk; (5) In Islam, every transaction that expects results must be willing to bear risks; (6) Management that does not contain speculative elements and respects human rights and preserves the environment.

Fundamental Analysis

According to Noumasari (2012), fundamental analysis is one way to conduct stock valuation by studying or observing various indicators related to macroeconomic conditions and the condition of a company's industry to various financial indicators and company management. It can be concluded that fundamental analysis is an analysis that aims to

determine the company's performance by analyzing the company's financial statements. Because many factors affect stock prices, there are several stages to conduct fundamental analysis, namely: (1) Economic analysis, which aims to determine the business and business prospects of a company. In economic analysis, there are macro variables including national income, monetary and physical policies, interest rates and so on; (2) Industrial analysis, which aims to determine the weaknesses and strengths of the type of industry of the company concerned. Important things that need to be considered by investors and stock analysis include company sales and profits, industry permanence, government attitudes and policies towards the industry, competitive conditions and share prices of similar companies; (3) Company analysis, which is to determine the company's performance. Investors need information about relevant companies as a basis for making investment decisions. This information includes information on financial statements for a certain period. Another important information is information that is expected, namely information about financial projections or forecasting. This is because the need for information is based on the consideration that the share price is determined by the company's past performance and future expectations (Fauziah, 2019).

So, fundamental analysis is an analysis that aims to determine the company's performance by analyzing the company's financial statements. This can be done by comparing internal and external financial reports (other companies) so that it can be seen which company will be chosen later to invest in.

Stock Valuation

Stock valuation is a method to calculate the estimated fair value of shares (Wira, 2014). The fair price of a stock is often referred to as intrinsic value, which is the value of a stock that is considered to truly represent the performance of a company. There are two categories used for valuing stock prices, namely: (1) Comparative Method. The comparative method is a method used by comparing a company with other companies in a similar industry. This method usually uses varying ratios of stock prices to earnings or sales. The approach often used in this comparative method is the PER approach; (2) Absolute Method. The main factor commonly used in this method is the fundamental factors of the company itself. This method uses financial statements as material for analysis as well as all information related to the company without comparing with other companies. The approaches of this method that are often used are the Dividend Discount Model (DDM) and Discounted Cash Flow (DCF) approaches.

DCF

According to Martono and Harjito (2005), the analysis used to determine the intrinsic value of shares is fundamental security analysis, namely stock price analysis using data derived from the company's financial statements. The value of a business can be found from the estimation of all the company's cash that will be generated in the future and then discounted at the current value (DCF). The basis of the DCF approach is that all future company flows are discounted to the current value. According to Wira (2014), the concept of the time value of money can be used in determining stock prices. The concept states that the current value of money is more valuable than the future value of money. Judging from the basis used by the DCF approach, this indicates that the DCF approach is an approach that uses the time value of money theory. According to Wira (2014), absolute method valuation with the DCF approach can be done using the following steps:

Find dividend

EPS and PER data. Before conducting a valuation, you must find dividend, EPS, and PER data from the company you want to value. The data can be obtained through the company's financial statements.

Calculate the average DPR

EPS Growth, and PER. The data that has been collected is continued by looking for other data, namely DPR, average EPS growth rate and average PER. EPS and PER growth data use certain limitations, namely: (a) If $EPS\ Growth > 0.15$ then the number 0.15 is used; (b)

If EPS Growth < 0.15 then the number 0.10 is used; (c) If the average PER > 17 then the number 17 is used; (d) If the average PER < 17 then the number 12 is used

Calculate the future value of EPS

This stage is projecting EPS for the next 5 years.

Calculate the future value of the share price

Namely calculating the projected share price at the end of the next 5 years by multiplying the future value of EPS by the average PER.

PER = Harga Saham = EPS x PER

Calculate accumulated dividends

This stage calculates the accumulated dividends received over the next 5 years. Dividend data can be obtained by multiplying the future value of EPS by DPR.

Calculate the total future value

The next stage is to calculate the future value of the total share price, namely by summing up the share price at the end of year 5 with the accumulated dividends for the 5 years.

Determine the rate of return

Before calculating the fair price, the desired rate of return must be determined.

$$r = r_{\text{risk free rate}} + r_{\text{risk premium}}$$

Calculate the present value (fair price)

The last step is to calculate the fair price of the shares by finding the present value of the total future share price.

Investment Decision

Investment is the placement of several funds in the present to obtain future profits. Investment can be divided into two types, namely investment in real assets and financial assets. According to Herlianto (2008), investment in real assets can take the form of land, gold, machinery, or buildings. Investment in financial assets takes the form of deposits, stocks, bonds or warrants.

Investment in financial assets is divided into two types, including (Dewi et al., 2018): (1) Direct investment is an investment that purchases financial assets that can be traded in the capital market, derivatives market, or money market. Direct investment can also be done by purchasing non-traded assets, usually obtained from commercial banks. These assets can be in the form of certificates of deposit and savings; (2) Indirect investment is carried out by purchasing securities from companies, in the form of mutual funds.

Based on the period, investment is divided into three: short, medium and long-term. Based on the risk, every investment choice must be related to two things, namely return and risk. These two things are related and contradictory. Investment is referred to as "high risk high return, low risk low return". Based on Arabic, risk can be defined as gharar, leading to uncertainty. In simple terms, then, risk is equated with uncertainty, where uncertainty is said to be gharar and there is a prohibition, so it will be more complicated. Therefore, it is important to undertake efforts to sharpen and differentiate the definition of risk or gharar. Here is a hadith that explains investment:

"Fadhlah bin Ubaid Al-Anshari r.a said that the apostle was presented with a necklace containing merja/gems and gold to sell while he was in Khabair. The necklace in question came from Ghanimah. So the Apostle ordered to take the gold from the necklace and separate it, then the Apostle said, gold should be sold / exchanged for gold of the same weight "(HR. Muslim).

The hadith above explains about investment using the right rules and does not harm the parties involved. In Islamic banking, this hadith teaches us to invest according to the exchange rate and its benefits, such as deposits. Deposits in Islamic banking are Islamic

deposits, where the form of investment has been adjusted based on the mudharabah principle. Islamic deposits for individual customers or business entities have a period of 1, 3, 6 and 12 months or daily (on-call) options of 7, 14 or 21 days. The term of the product will be completed if it has matured or the customer closes the deposit before maturity.

After obtaining the results of the stock price assessment process (valuation), of course, investors must take action on whether to sell or buy shares based on the results of their analysis. Three guidelines are commonly used, namely (Harianto, 1998): (1) If $NI >$ current market price, then the stock is undervalued, and therefore worth buying or holding if the stock is already owned; (2) If $NI <$ current market price, then the stock is overvalued and therefore should be sold.; (3) If $NI =$ current market price, then the stock is fairly valued and is in an equilibrium condition.

The stock investor after analyzing the stock and getting the intrinsic value of the company's stock, then he can make an investment decision whether he wants to buy, sell, or hold the stock.

Jakarta Islamic Index 70

The Jakarta Islamic Index 70 (JII70) is an Islamic stock index launched by the IDX on May 17, 2018. The JII70 constituents consist of only the 70 most liquid sharia stocks listed on the IDX. Just like ISSI, the review of sharia stocks that become JII constituents is conducted twice a year, namely in May and November, following the DES review schedule organized by OJK. The liquidity criteria used in selecting 70 sharia stocks that become JII70 constituents are as follows (idx.co.id): (1) Sharia stocks that are included in the ISSI constituents have been listed for the last 6 months; (2) 150 stocks are selected based on the order of the highest average market capitalization over the past 1 year; (3) From these 150 stocks, 70 stocks were selected based on the highest average daily transaction value in the regular market; (4) The remaining 70 stocks are the selected stocks in JII 70.

The Islamic stock index is named JII70 because this index consists of 70 stocks of companies that meet sharia criteria and have a large market capitalization on the Indonesia Stock Exchange. The name "Jakarta" is added because the Indonesia Stock Exchange is located in Jakarta, the capital city of Indonesia.

The word "Islamic" in the JII70 index refers to Islamic sharia principles that must be adhered to by companies listed in the JII70 index. These sharia principles include the prohibition of interest, usury, and investment in sectors that are considered haram in Islam. Thus, the name "Jakarta Islamic Index 70" describes the Islamic stock index located in Jakarta and consists of 70 stocks of companies that meet sharia criteria in Islam (idx.co.id).

METHODS

The research method used in this research is quantitative research with a descriptive approach. Quantitative research is research based on positivism philosophy, which is used to research certain populations or samples. data collection using research instruments and quantitative data analysis aims to test predetermined hypotheses (Sugiyono, 2016). The research method used in this research is quantitative research with a descriptive approach. Quantitative research is research based on positivism philosophy, which is used to research certain populations or samples. data collection using research instruments and quantitative data analysis aims to test predetermined hypotheses (Sugiyono, 2016).

The research location is to compile this research by taking data directly through the official website of the Indonesia Stock Exchange (IDX) which is the sample in the study. The research location is intended to obtain data information containing company financial reports that can be accessed through the site <https://idx.co.id> in which there are shares of companies listed in the Jakarta Islamic Index 70 (JII70) IDX index for the period 2019 to 2021 which are then reprocessed into populations and samples in this study. According to Sujarweni (2015), population is the entire amount consisting of objects or subjects, which

have certain characteristics and qualities then determined by the researcher to be studied and conclusions drawn. In conducting a study, researchers generally limit the population with the aim that the research population is similar/homogeneous to reduce the level of difficulty in research. The population in this study are all companies listed on the JII70 BEI for the 2019-2021 period. The total population of companies listed on the JII70 for the 2019-2021 period to date is 108 companies. This study uses a non-probability sampling technique, namely purposive sampling. Purposive sampling is a sampling technique with certain considerations or criteria. Researchers determine the number of samples to be used using certain criteria. The criteria determined by the researcher in this study are shown in Table 1 below:

Table 1. Sample Selection Criteria

No.	Sample Selection Criteria	Sample Amount
1.	Companies listed on JII70 for the period 2019-2021	108
2.	Companies that are not consistently indexed in JII70 for the 2019-2021 period	(68)
3.	Companies whose financial statements are not presented in rupiah	(4)
4.	Companies that do not distribute dividends for the period 2019-2021	(15)
Total companies in the sample		21

Source: Researcher, 2023

Table 2. Company Sample List

No.	Code	Company Name
1	AALI	Astra Agro Lestari Tbk.
2	ACES	Ace Hardware Indonesia Tbk.
3	AKRA	AKR Corporindo Tbk.
4	ANTM	Aneka Tambang Tbk.
5	CPIN	Charoen Pokphand Indonesia Tbk
6	CTRA	Ciputra Development Tbk.
7	DMAS	Puradelta Lestari Tbk.
8	ICBP	Indofood CBP Sukses Makmur Tbk.
9	INDF	Indofood Sukses Makmur Tbk.
10	INTP	Indocement Tunggul Prakarsa Tbk.
11	JPFA	Japfa Comfeed Indonesia Tbk.
12	KLBF	Kalbe Farma Tbk.
13	LINK	Link Net Tbk.
14	LSIP	PP London Sumatra Indonesia Tbk.
15	MIKA	Mitra Keluarga Karyasehat Tbk.
16	MYOR	Mayora Indah Tbk.
17	PTBA	Bukit Asam Tbk.
18	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk.
19	TLKM	Telkom Indonesia (Persero) Tbk.
20	UNTR	United Tractors Tbk.
21	UNVR	Unilever Indonesia Tbk.

Source: Researcher, 2023.

Based on the criteria and the results of the calculation and selection shown in the table above, a research sample of 21 companies was obtained. The companies that are the sample of this study can be displayed in Table 2.

The data used in this research is secondary data. With the data collection technique, this research uses library and documentary study methods, namely the annual financial statements contained in the JII 70 IDX in the period 2019 to 2021. This study uses the DCF approach where the stages in analyzing the data include the following: (1) Calculate EPS, PER, and DPS; (2) Calculate the Future Value of EPS; (3) Calculate the future value of the stock price; (4) Calculate Accumulated profit earned and dividend; (5) Calculate Total Share Price; (6) Yield/ Discount Rate; (7) Calculate Fair Price; (8) Apply the result of the investment decision

RESULTS

Earning Per Share (EPS)

This ratio is a ratio that measures the net income of the company that is ready to be distributed to shareholders divided by the number of shares of the company outstanding. High EPS is one of the attractions for investors to invest in the company. A high EPS value will provide higher income to shareholders. Data on the Earning per Share (EPS) ratio of JII70 index companies in 2019-2021, as Table 3:

Table 3. EPS Data for 2019-2021

<i>Earning Per Share</i>				
No	Code	2019	2020	2021
1	AALI	126,58	242,77	1.275,05
2	ACES	57,76	48,62	49,03
3	AKRA	163,47	242,08	288,37
4	ANTM	8,07	40,53	91,55
5	CPIN	220,48	232,57	221,79
6	CTRA	69,42	73,34	115,42
7	DMAS	27,64	28,19	14,84
8	ICBP	491,90	636,40	731,46
9	INDF	750,38	1.052,47	1.381,19
10	INTP	511,61	479,43	508,80
11	JPFA	158,19	70,17	187,31
12	KLBF	53,62	61,14	68,45
13	LINK	310,40	335,09	317,55
14	LSIP	43,38	130,46	149,87
15	MIKA	53,43	71,97	97,75
16	MYOR	90,35	91,45	57,93
17	PTBA	333,60	195,26	657,60
18	SIDO	53,47	30,99	42,28
19	TLKM	256,40	262,32	362,68
20	UNTR	2.345,99	1.452,48	3.204,24
21	UNVR	929,25	184,97	149,85

Source: Researcher, 2023.

Price Earning Ratio (PER)

PER is used to measure how investors assess the company's growth prospects in the future and is reflected in the share price that investors are willing to pay for each rupiah of

profit earned by the company. Price Earning Ratio (PER) data for JII70 index companies in 2019-2021, are shown in Table 4 below:

Table 4. PER Data for 2019-2021

<i>Price Earning Ratio</i>				
No	Code	2019	2020	2021
1	AALI	115,14	50,77	7,45
2	ACES	25,88	35,27	26,10
3	AKRA	24,16	13,14	14,25
4	ANTM	104,13	47,75	24,58
5	CPIN	29,48	28,06	26,83
6	CTRA	14,98	13,43	8,40
7	DMAS	10,71	8,73	12,87
8	ICBP	22,67	15,05	11,89
9	INDF	10,56	6,51	4,58
10	INTP	37,19	30,19	23,78
11	JPFA	9,70	20,88	9,18
12	KLBF	30,22	24,21	23,59
13	LINK	12,76	7,19	12,60
14	LSIP	34,23	10,54	7,91
15	MIKA	49,97	37,93	23,12
16	MYOR	22,69	29,64	35,21
17	PTBA	7,97	14,39	4,12
18	SIDO	23,84	25,97	20,46
19	TLKM	15,48	12,62	11,14
20	UNTR	9,18	18,31	6,91
21	UNVR	45,20	39,74	27,43

Source: Researcher, 2023.

Dividend Payout Ratio (DPR)

DPR is a comparison of the amount of part of the company's income that will be distributed to shareholders. The dividend payout ratio determines the amount of profit divided in the form of cash dividends and retained earnings as a source of funding. This ratio shows the percentage of company profits paid to shareholders in the form of cash dividends. Dividend Payout Ratio (DPR) data for JII70 index companies in 2019-2021, shown in Table 5 below:

Table 5. DPR Data for 2019-2021

<i>Dividend Payout Ratio</i>				
No	Code	2019	2020	2021
1	AALI	2,65	0,37	0,19
2	ACES	0,05	0,37	0,65
3	AKRA	1,47	0,45	0,43
4	ANTM	1,58	0,07	0,18
5	CPIN	0,54	0,35	0,50
6	CTRA	0,14	0,11	0,07
7	DMAS	0,76	1,49	1,68
8	ICBP	0,40	0,34	0,29
9	INDF	0,31	0,26	0,20

Dividend Payout Ratio				
No	Code	2019	2020	2021
10	INTP	1,08	1,51	0,98
11	JPFA	0,32	0,28	0,21
12	KLBF	0,48	0,43	0,41
13	LINK	0,76	0,51	0,31
14	LSIP	0,44	0,11	0,13
15	MIKA	0,34	0,29	0,37
16	MYOR	0,32	0,33	0,90
17	PTBA	0,98	1,62	0,11
18	SIDO	0,80	0,83	0,80
19	TLKM	0,64	0,59	0,46
20	UNTR	0,40	0,67	0,25
21	UNVR	1,30	1,05	1,11

Source: Researcher, 2023.

Earning Per Share Growth (EPS)

Earning per share growth is used to estimate the increase or decrease in net income distributed to shareholders. This value is the result of reducing the final EPS by the initial EPS divided by the initial EPS to describe the company's profit growth rate. Data on the EPS growth ratio of JII index companies in 2019-2021 are shown in Table 6 below:

Tabel 6. EPS Growth Data 2019-2021

Pertumbuhan Earning Per Share				
No	Code	2019	2020	2021
1	AALI	-0,8	0,92	4,25
2	ACES	-0,05	-0,16	0,01
3	AKRA	-0,59	0,48	0,19
4	ANTM	-0,85	4,02	1,26
5	CPIN	-0,21	0,05	-0,05
6	CTRA	-0,03	0,06	0,57
7	DMAS	1,68	0,02	-0,47
8	ICBP	0,10	0,29	0,15
9	INDF	0,04	0,40	0,31
10	INTP	0,52	-0,06	0,06
11	JPFA	-0,24	-0,56	1,67
12	KLBF	-0,02	0,14	0,12
13	LINK	0,17	0,08	-0,05
14	LSIP	-0,28	2,01	0,15
15	MIKA	0,03	0,35	0,36
16	MYOR	0,12	0,01	-0,37
17	PTBA	-0,34	-0,41	2,37
18	SIDO	0,21	-0,42	0,36
19	TLKM	-0,20	0,02	0,38
20	UNTR	-0,30	-0,38	1,21
21	UNVR	-0,24	-0,80	-0,19

Source: Researcher, 2023.

The data on the results of the calculation of Discounted Cash Flow (DCF) for JII70 index companies in 2019-2021 are shown in Table 7 below:

Table 7. Discounted Cash Flow

Fair Price (DCF)				
No	Code	2019	2020	2021
1	AALI	6.066,21	46.289,78	71.701,47
2	ACES	2.366,17	1.290,46	4.015,00
3	AKRA	6.732,25	18.931,86	3.304,28
4	ANTM	448,09	114,84	4.314,28
5	CPIN	17.465,31	9.396,90	12.055,53
6	CTRA	1.110,36	1.752,56	2.492,23
7	DMAS	65,03	1.568,75	965,00
8	ICBP	9.566,61	21.626,62	19.395,97
9	INDF	6.579,67	18.594,09	19.263,96
10	INTP	24.626,98	62.751,85	43.381,44
11	JPFA	18.736,68	1.678,79	2.207,76
12	KLBF	1.597,36	3.010,67	1.933,25
13	LINK	8.286,62	15.823,93	1.441,96
14	LSIP	638,03	4.896,86	6.570,93
15	MIKA	979,94	3.841,50	7.871,52
16	MYOR	4.220,29	2.043,44	4.047,78
17	PTBA	176.531,76	2.485,75	12.782,88
18	SIDO	987,45	2.432,73	1.380,53
19	TLKM	4.212,01	7.622,29	4.529,61
20	UNTR	118.765,23	13.142,33	106.330,41
21	UNVR	61.995,22	2.274,61	3.489,31

Source: Researcher, 2023.

Stock value at market price. The market price is taken from the closing price of each JII 70 index share in 2019-2021. The following is the market price of JII 70 index stocks in 2019-2021 displayed in Table 8:

Table 8. Share Price Data

Closing Price				
No	Code	2019	2020	2021
1	AALI	14.575	12.325	9.500
2	ACES	1.495	1.715	1.280
3	AKRA	3.950	3.180	4.110
4	ANTM	840	1.935	2.250
5	CPIN	6.500	6.525	5.950
6	CTRA	1.040	985	970
7	DMAS	296	246	191
8	ICBP	11.150	9.575	8.700

Closing Price				
No	Code	2019	2020	2021
9	INDF	7.925	6.850	6.325
10	INTP	19.025	14.475	12.100
11	JPFA	1.535	1.465	1.720
12	KLBF	1.620	1.480	1.615
13	LINK	3.960	2.410	4.000
14	LSIP	1.485	1.375	1.185
15	MIKA	2.670	2.730	2.260
16	MYOR	2.050	2.710	2.040
17	PTBA	2.660	2.810	2.710
18	SIDO	1.275	805	865
19	TLKM	3.970	3.310	4.040
20	UNTR	21.525	26.600	22.150
21	UNVR	42.000	7.350	4.110

Source: Researcher, 2023.

DISCUSSION

Investment Decision Making

Based on the results of the analysis of the fair price of shares using Discounted Cash Flows (DCF) on the JII70 index for the 2019-2021 period, it can be seen the condition of the company's share price that has been offered on the Indonesia Stock Exchange. The results of the comparison between the fair price using DCF and the market price at the closing price will determine the condition of the stock in making investment decisions. The results of the analysis that have been calculated and the investment decisions that can be taken based on the criteria are shown in Table 9 below:

Table 9. Investment Decision Analysis Result of JII70 Index 2019-2021

Conclusion Of Investment Decision Analysis				
No	Code	2019	2020	2021
1	AAJI	<i>Overvalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
2	ACES	<i>Undervalued</i>	<i>Overvalued</i>	<i>Undervalued</i>
3	AKRA	<i>Undervalued</i>	<i>Undervalued</i>	<i>Overvalued</i>
4	ANTM	<i>Overvalued</i>	<i>Overvalued</i>	<i>Undervalued</i>
5	CPIN	<i>Undervalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
6	CTRA	<i>Undervalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
7	DMAS	<i>Overvalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
8	ICBP	<i>Overvalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
9	INDF	<i>Overvalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
10	INTP	<i>Undervalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
11	JPFA	<i>Undervalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
12	KLBF	<i>Overvalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
13	LINK	<i>Undervalued</i>	<i>Undervalued</i>	<i>Overvalued</i>
14	LSIP	<i>Overvalued</i>	<i>Undervalued</i>	<i>Undervalued</i>

Conclusion Of Investment Decision Analysis				
No	Code	2019	2020	2021
15	MIKA	<i>Overvalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
16	MYOR	<i>Undervalued</i>	<i>Overvalued</i>	<i>Undervalued</i>
17	PTBA	<i>Undervalued</i>	<i>Overvalued</i>	<i>Undervalued</i>
18	SIDO	<i>Overvalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
19	TLKM	<i>Undervalued</i>	<i>Undervalued</i>	<i>Undervalued</i>
20	UNTR	<i>Undervalued</i>	<i>Overvalued</i>	<i>Undervalued</i>
21	UNVR	<i>Undervalued</i>	<i>Overvalued</i>	<i>Overvalued</i>

Source: Researcher, 2023.

Table 9 above explains that the results of the investment decision analysis for each company incorporated in the JII70 index for the 2019-2021 period are different. In 2019 companies that were undervalued included companies with the codes ACES, AKRA, CPIN, CTRA, INTP, JPFA, LINK, MYOR, PTBA, TLKM, UNTR, and UNVR. The companies with overvalued conditions include companies with the code AALI, ANTM, DMAS, ICBP, INDF, KLBF, LSIP, MIKA, and SIDO.

In 2020, companies that are undervalued include companies with the code AALI, AKRA, CPIN, CTRA, DMAS, ICBP, INDF, INTP, JPFA, KLBF, LINK, LSIP, MIKA, SIDO, and TLKM. The companies with overvalued conditions include companies with the codes ACES, ANTM, MYOR, PTBA, UNTR, and UNVR.

In 2021, companies that are undervalued include companies with the codes AALI, ACES, ANTM, CPIN, CTRA, DMAS, ICBP, INDF, INTP, JPFA, KLBF, LSIP, MIKA, MYOR, PTBA, SIDO, TLKM, and UNTR. The companies with overvalued conditions include companies with codes AKRA, LINK, and UNVR.

CONCLUSION

Based on the analysis of the fair price valuation of shares using fundamental analysis to calculate the Discounted Cash Flow (DCF) of the JII 70 index listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period, good investment decisions are based on an understanding of the stock market. A comparative analysis of fair price stock prices is obtained for investors. The maximum undervalued ratio of JII 70 Index 2019-2021 stocks analyzed was 86%, so investors should buy stocks and increase their holdings or maintain their holdings to expect the stock price to rise in the future. In the 2019-2021 JII 70 index, the stocks with the largest overvalued ratio in 2019 amounted to 43%, and the market price is higher than their fair price, so investors do not buy these stocks. When they get them again, sell the stocks at a profit.

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