

Stock Value Analysis Using Absolute Valuation and Relative Valuation Approaches

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ABSTRACT

The world of investment in Indonesia has been growing from year to year. This can be seen from the IHSG, which has been rising every year, accompanied by the improving economic growth in various sectors. One of the sectors that plays an important role in the development of the country is the manufacturing sector. The manufacturing sector has a high capitalization value and is quite dominant in Indonesia and abroad. This has attracted the attention of investors to invest their capital. However, before buying and selling a stock, investors first analyze whether the stock they are investing in is overvalued, fairvalued, or undervalued. This study uses the absolute and relative valuation technique to assess stocks using the proxies of Price book value (PBV) and Price earning ratio (PER) and determine whether the stock is overvalued, fairvalued, or undervalued. Sampling was done on manufacturing companies that have consistently distributed dividends during the period 2017-2021. The results of the study are that the shares that were undervalued were CLPI and INDS. In 2018, the shares that were undervalued were CLPI, TOTO, and WTON. In 2019, the shares that are undervalued are ALDO, CLPI, TSPC, and WTON. In 2020, the shares that are undervalued are CLPI, INDF, and TOTO and in 2020, the shares that are undervalued are CLPI, INDF, INDS, and TSPC and only CLPI, INDS shares from 2017–2021 are in an undervalued position and WTON shares in 2021.

Keywords: Stock; Relative Valuation; Absolute Valuation

INTRODUCTION

The development of the world of investment today is very rapid. The many investment options provide challenges for investors to maximize the profits they earn. However, behind the profits generated, there is a risk that arises every time an investment is made in the form of low and high. Investors can minimize risk through derivative transactions as an alternative to hedging. Existing derivative products include stock option contracts (KOS), Exchange Traded Funds (ETFs), Structured Warrants, IDX30 Futures, and Single Stock Futures.

During 2020, the world was shaken by the COVID-19 pandemic, which caused stock markets around the world to be shaken. In Indonesia, in March 2020, the IHSG experienced a significant correction of over 25% from 6,500 to its lowest point of 3,900. The correction that occurred had an impact on investor portfolios and increased risk due to the current market uncertainty. In this regard, the financial markets in Indonesia need to stimulate hedging mechanisms so that it can help investors to reduce the risk of stock volatility and exchange rates.

The variety of derivative products in Indonesia is still limited. Until 2020 there are only two types of derivative instruments, namely IDX LQ45 Futures and Indonesia Government

Bond Futures. Trading volume in these two types of instruments is relatively small compared to other countries. This proves that the market for derivative instruments in Indonesia still needs to be expanded and utilized by investors. In fact, derivative instruments are one of the facilities that can be utilized by investors to be more established in the capital market and as a complement to the investment facilities needed. The lack of knowledge possessed by investors is also one of the obstacles why the derivative market in Indonesia is not developing compared to other countries. The role of the government in providing knowledge related to derivative instruments to local investors must be given more attention.

By using financial statements, the performance of a company can also be reviewed by how the company generates profit. Profit from sales generated by the company and with the presence of stable performance in the coming period. In the long-term investment goal, investors pay attention to information related to the performance of a company. The value of a company has several factors, including liquidity, profitability, leverage, and company size.

In carrying out their goals, investors can look at the company's financial performance over a certain period of time. A good company value can be an attraction for investors to invest their capital in the company. With this goal, companies are required to be careful in making every decision that is made because every decision of the company will have a direct impact on the company's performance. For management, the value of the company will provide investors with an overview of how a company is performing in the present and in the future. In measuring the good or bad of a company's value, the researcher wants to use the approach of absolute valuation and relative valuation in making stock price predictions, the dividend discount model, and the value of price earnings ratio in manufacturing companies.

In the second semester of 2020, the Indonesia Stock Exchange (BEI) will be developing derivative products that aim to provide accommodation for retail investors and complete derivative products. This will have a positive impact on the market and a guarantee for investors to hedge their current portfolios. So, in the future, BAPETTI, OJK, and BEI may re-emerge stock option contracts and various other derivative products. From this background, the researcher is interested in conducting research to assess the valuation of stock option contracts in companies in Indonesia using the Black-Scholes model supported by stock price volatility and closing price.

LITERATURE REVIEW

Investment

According to Tandelilin (2010), investment is a commitment of a certain amount of funds or other resources at present to obtain a certain amount of profit in the future. A person who makes an investment is called an investor. Investors are generally categorized into individual/retail investors and institutional investors. Individual investors consist of individuals who make investments, while institutional investors typically consist of insurance companies, savings institutions (banks and savings and credit institutions), pension funds, and investment institutions. The fundamental factor in investment decision-making is understanding the relationship between expected return and investment risk. The relationship between risk and

expected return from an investment is a direct and linear relationship, so the greater the expected return, the greater the level of risk that needs to be considered (Tandelilin, 2010). In investment science, there is an assumption that investors are rational creatures, meaning that they do not like/avoid uncertainty or risk (risk-averse). The investment will be made if it provides an adequate expected return as compensation for the risk that the investor will bear.

Portfolio Theory

According to Fabozzi (1999), portfolio theory is a development in finance. The theory emerged when Markowitz (1952) developed the basic principles of portfolio theory, called Modern Portfolio Theory. According to Fabozzi (1999), a portfolio is a collection of assets held by an individual or institutional investor in the form of risk-free assets or risky assets. According to Markowitz (1952), the essence of portfolio diversification is "Do not put all your eggs in one basket." The goal of portfolio construction is to reduce risk by diversifying the ownership of securities. The measurement parameters in portfolio analysis are expected return and standard deviation combined in several stocks. One portfolio strategy that investors can use in creating a portfolio is stock selection, where investors analyze the existing stocks based on risk and best return.

Cost of Equity

CAPM is the cornerstone of modern financial economics, proposed by William Sharpe, who was awarded the Nobel Prize in Economics in 1990. It is an "equilibrium" model that is derived using the principles of diversification and some simplified assumptions about investor behaviour and market conditions. Market equilibrium refers to a condition in which, for all securities, market prices are set to balance the demand of buyers and the supply of sellers. These prices are called equilibrium prices. The CAPM model is a development of Markowitz's portfolio theory by introducing the new terms systematic risk and specific/unsystematic risk. The Capital Asset Pricing Model states that in equilibrium, the market portfolio is tangent to the mean-variance frontier of portfolios. Thus, the efficient strategy is a passive strategy. The Capital Asset Pricing Model implies that the risk premium of any individual asset or portfolio is the product of the risk premium on the market portfolio and the beta coefficient.

$$\sum R_i = R_f + \beta_i (R_m - R_f)$$

Di mana:

R_f = Risk free rate

β (beta) = Nondiversifiable risk

R_m = Market Return

Dividend Discount Model

Dividend discount model (DDM) is a method of valuing stocks that is based on the principle that the current stock price is the present value of all future dividends that will be received. DDM typically assumes that all future dividend payments are made annually and that the first dividend is received one year after the stock is purchased. DDM has some limitations, including Assumptions: DDM assumes that dividends will be paid out at a constant rate each year. However, in reality, dividends can fluctuate over time. Risk: DDM does not take into account the risk of the stock. However, stock risk is an important factor that can affect the

intrinsic value of a stock. Estimation: The intrinsic value of a stock that is calculated with DDM is only an estimate. The actual intrinsic value of a stock may differ from the calculated value. Despite its limitations, DDM remains one of the most popular stock valuation methods. This is because DDM is relatively easy to calculate and understand. The intrinsic value of a stock according to DDM can be calculated using the following formula:

1. Expected earnings growth rate (g):

$$g = \text{ROE} \times b \quad (b = 1 - \text{DPR})$$

g = expected earnings growth rate

ROE = Return on Equity

b = tingkat laba ditahan

DPR = Dividend Payout Ratio periode

2. Determine the estimated expected dividend:

$$D_t = D_0 \times (1 + g)$$

D_0 = Dividend per Share

D_t = estimasi Dividend per Share

3. Determine value expected return

$$k = \text{Cost of Capital}$$

P_0 = harga saham periode sebelumnya

4. Calculating the intrinsic value of shares

$$P_0 = \frac{D_1}{k - g}$$

Price to Earnings Ratio

Price Earning Ratio is used to measure how much the share price compares with the profits obtained by shareholders (Sutrisno, 2017). The Price Earning Ratio will be relatively high for companies that have good growth prospects and small but low risk for companies that have slow and risky growth (Brigham & Houston, 2018). The higher the Price Earning Ratio, the more expensive the stock is relative to the share's net income. PER is generally compared with the PER of shares in the same industrial sector (Hadi, 2018). Based on the theoretical studies that have been explained, the author concludes that the Price Earning Ratio has a big influence on changes in share prices, especially in relation to long-term investments. Price Earning Ratio shows the level of share prices with the profits obtained by shareholders. A high Price Earnings Ratio can increase investor confidence and enthusiasm for the issuer's future so that it can increase share prices. The Price Earnings Ratio formula according to (Rose et al., 2012) is as follows:

$$\text{Price Earnings Ratio} = \frac{\text{Harga Pasar Saham}}{\text{Laba per Lembar Saham}}$$

Price to Book Value

Price to Book Value is a market ratio used to measure the performance of stock market prices relative to their book value. This ratio is calculated by comparing the market price of shares with the book value per share. Book value per share is used to measure the value of shareholder equity for each share, and basically, the book value per share is calculated by dividing total equity by the number of shares outstanding (outstanding shares). Companies that can operate well generally have a Price to Book Value ratio above one, which indicates the

stock market value is higher than the book value. The higher the Price to Book Value ratio, the higher the company is valued by investors. (Astohar, 2010). The Price to Book Value formula according to (Rose et al., 2012) is as follows:

$$\text{Price to Book Value} = \frac{\text{Market value per share}}{\text{book value per share}}$$

Stock Price

According to (Darmadji and Fakhrudin in Santy (2017), share prices are prices that are formed from bids and offers during trading time and can change very quickly on the stock exchange floor. One of these changes is influenced by the company's performance, meaning that if the company's performance is good, the potential for investors to invest their capital in the company will be quite large and can increase demand for shares so that share prices also increase. There are several terms used in the stock trading system to explain stock prices, namely: (Hadi, 2018)

1. Previous Price is the price at the close of the previous day.
2. Opening Price is the first price at the opening of the first trading session.
3. Highest Price is the highest share price that occurred during the trading day.
4. Lower Price is the lowest price of the stock throughout the trading day.
5. Last Price, is the last price of a share.
6. Change shows the difference between the previous price and the last price.
7. Closing Price, is the closing price of shares in one trading day determined at the end of session 2 Price fluctuations are triggered by micro and macro factors such as the issuer's fundamental condition, the law of supply and demand in buying and selling shares, SBI interest rates, foreign exchange, foreign funds on the stock exchange, IHSG growth, news and rumors, both related to economic, social, political, security issues as well as plans to reshuffle the working cabinet (Arifin A., 2004).

METHODOLOGY

The population in this research is all manufacturing companies listed on the Indonesia Stock Exchange (BEI) during the 2017-2021 period. The research sample used a purposive sampling method, namely a sampling method based on certain criteria. The data used in this research is data in the form of financial data, especially manufacturing companies listed on the Indonesia Stock Exchange. This financial data has been audited by an independent auditor, as well as the company's share price. Financial reports are obtained from the official website of the Indonesian Stock Exchange (<http://www.idx.co.id>) and company share prices are obtained via the Yahoo Finance website (finance.yahoo.com). Other supporting data is taken via the S&P Platform.

The data analysis that will be carried out is absolute valuation with the following criteria:

1. Calculating the intrinsic value of shares using the dividend discount model method
2. Look for data by calculating the average dividend growth rate from 2016–2021
3. Calculate the intrinsic value of shares from 2016–2021 using the formula:

$$\text{Fair Price} = \text{Div}/(r-g)$$

4. Investment decision criteria:
 Intrinsic value > market value = undervalued
 Intrinsic value < market value = overvalued
 Intrinsic value = market value = fairvalued

The data analysis that will be carried out is relative valuation with the following criteria:

- a) Data sampling using purposive sampling. The sample was taken from manufacturing companies in Indonesia that have consistently distributed dividends for 5 years, and the data is available on SnP Capital IQ.
- b) Calculate PER and PBV values for each period from 2017–2021 using financial reports and the S&P Platform.
- c) Determine the position of the company's share value using the criteria of overvalued, fair valued and undervalued using the Price Earning Ratio (PER) and Price Book Value (PBV) approach with the following conditions:
 - PER : PER >11x, = *overvalued*
 PER = 11x, = *fairvalued*
 PER < 11x, = *undervalued*
 - PBV > 1, = *overvalued*
 PBV = 1, = *fairvalued*
 PBV < 1, = *undervalued*.

RESULTS

A. Figures and Tables

Absolute Valuation

Table 1. Dividends per Share of Each Company

	2017	2018	2019	2020	2021
IDX:AKRA	40.00	48.00	22.00	25.00	29.00
IDX:ALDO	1.60	1.10	1.10	1.50	1.60
IDX:ARNA	12.00	16.00	22.00	30.00	45.00
IDX:CPIN	56.00	118.00	81.00	112.00	108.00
IDX:CLPI	63.87	55.09	56.55	89.39	71.21
IDX:FISH	40.00	150.00	75.00	250.01	280.00
IDX:HMSP	107.30	117.20	119.80	72.80	63.30
IDX:INDF	237.00	0.00	278.00	278.00	278.00
IDX:INDS	100.00	100.00	100.00	85.00	75.00
IDX:SIDO	14.39	17.86	24.31	31.16	37.88
IDX:KLBF	25.00	26.00	26.00	28.00	35.00
IDX:MYOR	27.00	29.00	30.00	52.00	21.00
IDX:MERK	260.00	2,565.00	130.00	122.00	240.00
IDX:TOTO	13.00	18.00	6.00	5.00	12.00
IDX:TSPC	40.00	40.00	50.00	60.00	70.00
IDX:UNVR	183.00	237.00	193.00	187.00	150.00
IDX:WTON	12.13	17.50	15.36	2.94	1.90

Based on table 1, it is found that every company has paid dividends for 5 consecutive years. This data will be used to create a valuation for each sector using the Dividend Discount Model approach

Table 2. Results of Stock Valuation Calculations Using DDM

	2017	2018	2019	2020	2021
IDX:AKRA	1,242.29	1,031.92	827.10	998.32	755.52
IDX:ALDO	761.87	607.56	366.76	506.74	1,348.14
IDX:ARNA	263.76	520.49	476.47	612.32	1,003.58
IDX:CPIN	339.19	2,300.82	880.32	976.88	1,056.73
IDX:CLPI	1,135.17	648.61	551.61	805.49	864.21
IDX:FISH	2,264.16	2,512.11	2,870.83	3,153.31	7,058.58
IDX:HMSP	4,683.46	4,729.44	4,642.98	3,043.95	2,382.48
IDX:INDF	6,257.59	7,200.00	7,082.79	9,141.53	7,611.26
IDX:INDS	1,101.86	2,330.04	2,831.19	2,541.63	2,826.83
IDX:SIDO	334.76	491.55	532.27	516.31	942.17
IDX:KLBF	1,543.71	1,352.53	1,104.90	939.79	1,372.11
IDX:MYOR	1,740.57	1,470.78	2,757.00	3,300.55	1,717.45
IDX:MERK	6,815.18	5,356.27	3,585.44	2,566.91	4,843.77
IDX:TOTO	485.40	311.03	421.53	162.52	238.46
IDX:TSPC	1,485.95	1,159.48	1,107.84	2,150.90	2,348.80
IDX:UNVR	13,766.99	10,614.10	7,967.46	7,575.72	6,280.40
IDX:WTON	453.79	392.02	591.31	310.01	166.99

Table 3. Average Daily Historical Stock Prices

	2017	2018	2019	2020	2021
IDX:AKRA	1,270	858	774	636	822
IDX:ALDO	600	670	380	570	1,000
IDX:ARNA	342	420	440	680	800
IDX:CPIN	3,000	7,225	6,875	6,525	5,950
IDX:CLPI	860	640	775	755	1,025
IDX:FISH	2,400	4,060	3,800	2,620	7,650
IDX:HMSP	4,730	3,710	2,130	1,505	965
IDX:INDF	7,625	7,450	7,925	6,850	6,325
IDX:INDS	1,260	2,220	2,310	2,000	2,390
IDX:SIDO	270	417	635	799	865
IDX:KLBF	1,690	1,520	1,615	1,480	1,615
IDX:MYOR	2,020	2,620	2,050	2,710	2,040
IDX:MERK	8,500	4,300	2,900	3,280	3,690
IDX:TOTO	408	348	298	238	220
IDX:TSPC	1,800	1,390	1,350	1,400	1,500
IDX:UNVR	11,180	9,080	8,560	7,350	4,110
IDX:WTON	500	376	450	386	246

From this calculation, an analysis will be carried out by comparing the company's historical share price with the results of the dividend discount model calculation. Attached is a table calculating the historical average share price for each company.

Table 4. Comparison of Intrinsic Value of Stock Valuation with Market Value

	2017	2018	2019	2020	2021
IDX:AKRA	overvalued	undervalued	undervalued	undervalued	overvalued
IDX:ALDO	undervalued	overvalued	overvalued	overvalued	undervalued
IDX:ARNA	overvalued	undervalued	undervalued	overvalued	undervalued
IDX:CPIN	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:CLPI	undervalued	undervalued	overvalued	undervalued	overvalued
IDX:FISH	overvalued	overvalued	overvalued	undervalued	overvalued
IDX:HMSP	overvalued	undervalued	undervalued	undervalued	undervalued

IDX:INDF	overvalued	overvalued	overvalued	undervalued	undervalued
IDX:INDS	overvalued	undervalued	undervalued	undervalued	undervalued
IDX:SIDO	undervalued	undervalued	overvalued	overvalued	undervalued
IDX:KLBF	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:MYOR	overvalued	overvalued	undervalued	undervalued	overvalued
IDX:MERK	overvalued	undervalued	undervalued	overvalued	undervalued
IDX:TOTO	undervalued	overvalued	undervalued	overvalued	undervalued
IDX:TSPC	overvalued	overvalued	overvalued	undervalued	undervalued
IDX:UNVR	undervalued	undervalued	overvalued	undervalued	undervalued
IDX:WTON	overvalued	undervalued	undervalued	overvalued	overvalued

It can be concluded that if the results show the undervalued category, the decision that investors can take is to buy the shares (buy). If the results show the overvalued category, the decision that investors can take is to sell the shares.

4.1.2 Relative Valuation

Tabel 5. Price Earnings Ratio Value from 2017–2021

	2017	2018	2019	2020	2021
IDX:AKRA	28.1	24.0	21.6	13.6	14.6
IDX:ALDO	25.1	15.4	6.8	12.4	14.5
IDX:ARNA	20.8	19.7	15.0	15.3	12.3
IDX:CPIN	19.7	26.0	30.9	27.8	26.9
IDX:CLPI	6.5	6.2	6.6	6.4	7.3
IDX:HMSP	43.4	31.9	18.1	20.4	15.7
IDX:INDF	16.1	15.7	14.2	9.3	7.2
IDX:INDS	7.3	13.1	15.1	22.3	9.9
IDX:SIDO	15.2	18.8	23.6	25.7	20.5
IDX:KLBF	33.0	29.0	30.2	25.4	23.8
IDX:MYOR	28.3	34.1	22.9	29.4	38.4
IDX:MERK	129.3	51.5	16.6	20.4	12.6
IDX:TOTO	15.1	10.4	21.9	(80.1)	14.5
IDX:TSPC	14.9	12.2	11.0	8.0	8.2
IDX:UNVR	60.9	38.1	44.2	39.1	27.2
IDX:WTON	12.9	6.7	7.7	26.3	25.9

Table 7. Relative Valuation PER Results from 2017–2021

	2017	2018	2019	2020	2021
IDX:AKRA	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:ALDO	overvalued	overvalued	undervalued	overvalued	overvalued
IDX:ARNA	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:CPIN	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:CLPI	undervalued	undervalued	undervalued	undervalued	undervalued
IDX:HMSP	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:INDF	overvalued	overvalued	overvalued	undervalued	undervalued
IDX:INDS	undervalued	overvalued	overvalued	overvalued	undervalued
IDX:SIDO	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:KLBF	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:MYOR	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:MERK	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:TOTO	overvalued	undervalued	overvalued	undervalued	overvalued
IDX:TSPC	overvalued	overvalued	undervalued	undervalued	undervalued

IDX:UNVR	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:WTON	overvalued	undervalued	undervalued	overvalued	overvalued

The data in Table 5 shows that, on average, manufacturing stocks are overvalued, judging from the PER analysis. In 2017, shares that were undervalued were CLPI and INDS. In 2018 the shares that were undervalued were CLPI, TOTO, WTON. In 2019 the shares that were undervalued were ALDO, CLPI, TSPC, WTON. In 2020 the shares that were undervalued were CLPI, INDF, TOTO and in 2020 the shares that were undervalued were CLPI, INDF, INDS, TSPC. When the Price Earnings Ratio value is below the average value, namely 11.24x, it can be used as a consideration to add or buy back the shares at a low price. Meanwhile, when the Price Earnings Ratio value is above the average PER value, it means that the share price is approaching its highest point so that profit-taking or selling the shares can be carried out.

Table 8. Price Book Value from 2017–2021

	2017	2018	2019	2020	2021
IDX:AKRA	3.48	2.14	1.93	1.47	1.80
IDX:ALDO	2.18	2.19	1.17	1.39	2.13
IDX:ARNA	2.56	2.96	2.85	4.14	4.08
IDX:CPIN	3.25	6.50	5.33	4.86	4.04
IDX:CLPI	0.61	0.45	0.51	0.48	0.64
IDX:HMSP	17.78	13.74	7.65	6.11	4.10
IDX:INDF	2.17	2.02	1.92	1.52	1.23
IDX:INDS	0.39	0.67	0.70	0.52	0.59
IDX:SIDO	2.96	4.23	5.99	7.25	8.47
IDX:KLBF	6.25	5.11	4.96	4.07	4.08
IDX:MYOR	6.87	7.63	5.21	5.74	4.21
IDX:MERK	6.24	3.02	2.38	2.46	2.45
IDX:TOTO	2.50	1.88	1.56	1.27	1.18
IDX:TSPC	1.71	1.24	1.17	1.09	1.07
IDX:UNVR	66.40	38.62	46.53	43.23	29.44
IDX:WTON	1.63	1.10	1.16	1.03	0.64

Table 9. PBV Relative Valuation Results from 2017–2021

	2017	2018	2019	2020	2021
IDX:AKRA	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:ALDO	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:ARNA	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:CPIN	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:CLPI	undervalued	undervalued	undervalued	undervalued	undervalued
IDX:HMSP	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:INDF	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:INDS	undervalued	undervalued	undervalued	undervalued	undervalued
IDX:SIDO	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:KLBF	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:MYOR	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:MERK	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:TOTO	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:TSPC	overvalued	overvalued	overvalued	overvalued	overvalued

IDX:UNVR	overvalued	overvalued	overvalued	overvalued	overvalued
IDX:WTON	overvalued	overvalued	overvalued	overvalued	undervalued

From table 6 it can be concluded that most manufacturing companies in Indonesia are in the overvalued category, which means that the current market share price is greater than the company's book value. However, only CLPI, INDS shares from 2017–2021 are undervalued and WTON shares in 2021 are undervalued. When the share price is overvalued, the recommendation is to sell the shares, and investors can buy back the company's shares if the PBV value is said to be undervalued at a lower price than it should be. This is done with the aim of getting maximum income from capital gains and dividends

CONCLUSION

The measurement of absolute valuation in this research uses the dividend discount model and relative valuation in this research uses PER and PBV of manufacturing companies by looking at whether the shares are overvalued and undervalued. For absolute valuation results, in 2017 there were ALDO, CLPI, SIDO, TOTO, and UNVR shares which were undervalued. in 2018 there were AKRA, ARNA, CLPI, HMSP, INDS, SIDO, MERK, UNVR and WTON shares which were undervalued. in 2019 there were AKRA, ARNA, HMSP, INDS, MYOR, MERK, TOTO, WTON shares which were undervalued. in 2020 there were AKRA, CLPI, FISH, HMSP, INDF, INDS, MYOR, TSPC, UNVR shares which were undervalued. in 2021 there are ALDO, ARNA, HMSP, INDF, INDS, SIDO, MERK, TOTO, TSPC and UNVR shares which are undervalued.

In the relative valuation results in 2017, the shares that were undervalued were CLPI and INDS. In 2018 the shares that were undervalued were CLPI, TOTO, WTON. In 2019 the shares that are undervalued are ALDO, CLPI, TSPC, WTON. In 2020 the shares that are undervalued are CLPI, INDF, TOTO and in 2020 the shares that are undervalued are CLPI, INDF, INDS, TSPC and only CLPI, INDS shares from 2017–2021 are in an undervalued position and WTON shares in 2021 for PBV. For shares that have a PER value that is undervalued and PBV is overvalued, so it can be interpreted that the bottom of the PER side of the stock may still rise to its highest point, but you need to be careful because the market value and book value have gone too far and are vulnerable to long-term holding.

However, not all overvalued stocks are undesirable. Investor decisions are an important point in buying and selling shares. Many indicators that influence stock prices are formed in the market. One of them is trading volume and financial ratios such as liquidity, solvency and profitability. The two variables that are used as references by researchers to carry out relative valuation analysis can be used as considerations to find and determine which shares are still relatively cheap and expensive.

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