

THE INFLUENCE OF THE INTRINSIC VALUE OF STOCKS ON ITS MARKET PRICE

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Abstract

Stocks have a market price. A fair price is based on the actual condition of the company's fundamental value. We need a fundamental analysis to estimate the movement of stock prices. But the intrinsic value of a stock, as one of the company's fundamental variables, does not necessarily reflect its fair market price. For this reason, this study aims to test whether intrinsic stock value affects the formation of its market price, using a sample of stocks listed on the LQ-45 Index in 2018-2019 on the Indonesia Stock Exchange. The research method used is a quantitative method using linear regression analysis. The regression results show that the intrinsic value variable has a significant positive effect on stock market prices listed on the 2018-2019 LQ-45 Stock Index on the Indonesia Stock Exchange. This result shows that fundamental analysis has a significant effect so that fundamental analysis can be used before making investment decisions. It is hoped that it can be used as a motivation to improve management performance, reflected in the financial statements, and a basis for making policies to increase the intrinsic value of the company shares.

Keywords: *intrinsic value; market price; fundamental analysis.*

Abstrak

Saham memiliki harga pasar. Harga yang wajar didasarkan pada kondisi nilai fundamental perusahaan yang sebenarnya. Kita membutuhkan analisa fundamental untuk memperkirakan pergerakan harga saham. Tetapi nilai intrinsik suatu saham, sebagai salah satu variabel fundamental perusahaan, tidak serta merta mencerminkan harga pasar yang wajar. Untuk itu, penelitian ini bertujuan untuk menguji apakah nilai intrinsik saham berpengaruh terhadap pembentukan harga pasarnya, dengan menggunakan sampel saham-saham yang terdaftar di Indeks LQ-45 Tahun 2018-2019 di Bursa Efek Indonesia. Metode penelitian yang digunakan adalah metode kuantitatif dengan menggunakan analisis regresi linier. Hasil regresi menunjukkan bahwa variabel nilai intrinsik berpengaruh positif signifikan terhadap harga pasar saham yang terdaftar pada Indeks Saham LQ-45 2018-2019 di Bursa Efek Indonesia. Hasil ini menunjukkan bahwa analisis fundamental berpengaruh signifikan sehingga analisis fundamental dapat digunakan sebelum mengambil keputusan investasi. Diharapkan dapat dijadikan sebagai motivasi untuk meningkatkan kinerja manajemen yang tercermin dalam laporan keuangan, dan menjadi dasar pengambilan kebijakan untuk meningkatkan nilai intrinsik saham perusahaan.

Kata kunci : nilai intrinsik, harga pasar, analisis fundamental

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INTRODUCTION

Every investor who invests has the same goal, to benefit from "the positive difference between the selling price and the purchase price of shares (capital gain) and cash dividends received from the issuer" (Mohamad, 2006; Trisanti, 2020). According to Syahyunan (2015), there are two types of investment, namely investment in the real sector (investment in an item used in the production process of a company) and investment in the financial industry (such as securities, bonds, stocks, and so on).

Shares or stocks signify "a person's or business entity's capital participation in a company" (Hermuningsih, 2012; Evi & Pramesworo, 2022). If the company is registered in the capital market, the company is said to be a public company. The public can be the owners of the effects on the primary and secondary markets. The stock exchange is a place where supply and demand for capital meet. The capital offers consist of individuals or institutions with excess funds channeled to third parties for a certain period.

Several values are associated with stocks: book value, market value, and intrinsic value. "Book value is the value of shares based on the books of the issuer company (Fujianti et al., 2020). The values of market prices that occurred in the stock market at the appropriate time are determined by market participants. The intrinsic value is based on the actual value of shares traded (Mulia Hsb et al., 2019)" (Jogiyanto, 2009).

The movement of stock prices can move up or down due to buying and selling by investors. With the direction of stock prices, investors will buy shares at low prices and then sell them back when prices are high to profit. However, on the other hand, investors can also predict wrongly, resulting in losses. (Eliza, 2013)

Factors that influence stock price movements are the law of supply and demand, where the more demand, the higher the price of a stock, and vice versa (Kennedy et al., 2022). The increased demand is caused by the condition fundamental to a company that is rated good and able to generate high

profits in the market by investors. (Santono, 2010)

In addition, external factors affect stock prices, such as inflation rate, interest rate, foreign exchange rate, government policy, competition, technological developments, and others (Maronrong & Nugroho, 2017). However, the most important thing to note is the fundamental factor. Companies with conditions of sound fundamentals, in case of external or macroeconomy, even if not stable, will lead to a fall in stock price, but it is only temporary. Over time, stock prices will return to normal. (Veronica & Pebriani, 2020)

Stocks have a market price. A fair price is based on the actual condition of the company's fundamental value. Suppose the market price reflects the stock's fair price. Its market price does not exceed a reasonable price or vice versa. We need a fundamental analysis to estimate the movement of stock prices, even though it is realized that it is not necessarily 100 percent correct. (Husain, 2017)

Stock valuation determines whether the intrinsic value reflects the stock's market price. The intrinsic values can be used as a benchmark early to pick stocks selected in investing (Hibban & Wardana, 2022). An efficient market can be said if the price of a security does not deviate from its intrinsic value (Boffo & Patalano, 2020). "Intrinsic value is the basis for measuring the value of a stock if the stock price is too low, fair, or considered too high" (Herawanny et al., 2017).

Based on the various explanations above, this study aims to see whether the intrinsic value of shares affects market prices. Thus, the research question is whether intrinsic value can affect stock market prices by sampling companies' stocks included in the LQ-45 Index in 2018-2019.

LITERATURE REVIEW

After meeting their needs, investors who have excess funds will invest these funds in a specific period to postpone consumption in the present. Then they will gain in the future. "Shares are one of the investment instruments

in the form of securities that are traded in the capital market. People who buy shares will make it participate as owners of the company are.

The fair value of shares or the actual weight of the company is calculated from its fundamental data. It can obtain this value from its income, assets, dividends, prospects, and management factors. One of the goals of financial management is to maximize corporate value” (Kennedy et al., 2022). To achieve this goal is to maximize the value of the stock market price. The higher the stock market price, the higher the company's value. (Damayanti, 2016)

Stock valuation estimates the actual stock value (Asnawi & Wijaya, 2006). Tandelin (2010) states that, “The stock price assessment aims to obtain the intrinsic information value of a stock, then is compared it with the current stock market price. The stock price assessment is carried out by considering the company's fundamental factors.” By evaluating stock prices, we will know the stock's fair price.

The approach to doing this valuation is Discounted Cash Flow (*DCF*). This method estimates the intrinsic value of an asset by discounting the value of future cash flows. According to Damodaran (2006), the *DCF* method assesses the business's equity, values the company, and evaluates a small part of the company. Several discount methods are often used, namely “Free Cash Flow to Firm (*FCFF*) and Free Cash Flow to Equity (*FCFE*)”. In this study, the authors use the *DCF* approach of *FCFE*, where the method is used to determine the intrinsic value of each stock.

“Free Cash Flow to Equity is the remaining cash flow left for shareholders after the company has fulfilled its financial obligations, including debt payments after deducting the funds set aside to meet the capital expenditures and working capital needed” (Damodaran, 2002). Here's the calculation formula:

$$FCFE = Net\ Profit - (Capital\ Expenditure - Depreciation) - (Non-cash\ Working\ Capital$$

Change) + (New Debt Issuance - New Debt Payment)

(1)

Notes:

- The *net profit* is: the net profit of the company
- *Expenditures – Depreciation* is capital expenditure (fixed assets for the current year - fixed assets for last year).
- Changes in *noncash Working Capital* are Accounts Receivable & Inventory – Accounts Payable.
- *New Debt Issuance – New Debt Payment*: Total current year's liabilities – Last year's total liabilities.

In determining the growth rate in the fundamental calculation using the average geometric formula, namely by looking at sales every year. With the formula:

$$Geometric\ Average = \left[\frac{earning_0}{earning_1} \right]^{1/n}$$

(2) Before estimating the *FCFE* value, it is necessary to know the cost of capital from the stock. Calculation of Cost of Equity is the rate of return expected by investors on the funds invested in a company used in the valuation of equity cash flows. According to Brigham et al. (2006), “The Capital Asset Pricing Model (*CAPM*) has based on the proposition that a stock's expected rate of return is equal to the risk-free rate of return, plus a risk premium only reflects the remaining risk after diversification. *CAPM* assumes that the ideal stock market is a market in equilibrium. Investors are price takers; there are no taxes or transaction fees, all publicly traded assets, and investors can borrow or lend an unlimited amount at a fixed, risk-free rate”.

CAPM is used to estimate individual security returns and analyze the relationship between the return and risk. “The goal is to determine the minimum expected return on investment (required rate of return) from risky investments because, in a balanced state, it will be affected by the risk of the stock. In this case, the only calculated risk is a systematic risk or market risk as measured by beta (β). Meanwhile, unsystematic risk is

considered irrelevant because it can eliminate this risk through diversification” (Halim, 2005).

According to the *CAPM* theory, the expected level of income from security can be calculated using the formula:

$$K_s = R_f + \beta [E (R_m - R_f)]$$

(3)

Notes:

- K_s : Required rate of return
- R_f : Free investment rate of return
- β : Company beta coefficient
- R_m : Market portfolio rate of return

The estimated value of *FCFE* is the sum of the present value of *FCFE*. It is discounted by the cost of capital plus the present value of the terminal value, which is discounted by the cost of capital. The formula is:

$$P_0 = \sum_t^n = 1 \frac{FCFE_1}{(1 + Ke)^t} + \frac{P_n}{(1 + Ke)^t}$$

(4)

Notes:

- P_0 : Current intrinsic value (at the end of 2019)
- $FCFE_1 = FCFE_0(1+g)$, where $FCFE_0$ is *FCFE* 2019
- Ke : Cost Of Equity from the company
- g : growth of the company's *FCFE*
- P_n : Terminal Value

P_n is generally in determining the growth rate that remains forever, namely:

$$P_n = \frac{FCFE_{n+1}}{Ke - g}$$

(5)

The investment decision on the price of a stock is to sell, buy and hold. When investors know the intrinsic value (*NI*) of a stock and compare it to the stock market price, they can make investment decisions. The guidelines used in making decisions using intrinsic value (*NI*) are as follows “(Husnan, 2005; Sunariyah, 2006):

- If $NI >$ current market price, then the shares are considered undervalued because they are below their fair value, and a good decision is to buy the shares or hold them if the shares are already owned.
- If $NI <$ current market price, the stock is considered overvalued (the price is expensive) because it is above its fair value, and a good decision is to sell.
- If $NI =$ current market price, then the stock is considered fair value and is in balance. The investment decision taken is to maintain.”

Some of the previous research can be seen below:

1. Andiyanto, Salim & Irawanto (2015). "Presenting preliminary evidence of method in projecting and determining company's intrinsic value using dividend discounted-constant growth model. That is driven by company capital gain which is not paid its dividend regularly or not at all."
2. Ranjit (2016). "Findings from the empirical analysis indicate that the residual income model is better than the free cash flow to equity model under the income-oriented valuation model. Whereas both Prices to earnings multiple and Price to book value multiple are superior to Price to sales multiple and are equally likely under market-oriented valuation model."
3. Nguyen (2016). "Using the discounted cash flow method with a case study of Kinh Do Corporation (KDC) shows that the value of KDC is lower than what it is valued by the market and by Mondelez International. If the valuation is correct, it is fair to say that KDC was over-priced."
4. Putra et al. (2019). "Have the research results of manufacturing companies in Indonesia which are listed on the Indonesia Stock Exchange (IDX) for the period 2016 - 2017 with certain criteria, show that the shares of companies listed are in overvalued, undervalued, or correctly valued conditions. So investors can decide to buy, hold or sell their shares."

5. Leonardo et al. (2022). "Have the results that allow establishing a significant influence of industry results on the performance of corporate Tobin's Q at the individual level."
6. Mensah et al. (2022). "Recommends that for investors to make a profitable investment decision, they must focus on investments with an intrinsic value equal to or higher than the market price of stocks."
7. Artikis & Kampouris (2022). "Have the results that the new intrinsic value risk factor absorbs the information content and explains better the cross-section of returns, mainly for small size and high book to market value companies."
8. Kennedy et al. (2022). "By the valuation method used are Discounted Cash Flow - Free Cash Flow-to Firm (DCF-FCFF) analysis, the recommendation for IRRA (stock in pharmaceutical industries) is hold."

RESEARCH METHODS

The research method used is a quantitative method using linear regression analysis. The population in this study are all companies listed in *LQ-45* in 2018-2019 on the Indonesia Stock Exchange (*IDX*). The sampling using the purposive sampling method, consisting of 31 stocks of companies included in the *LQ-45* Index in 2018-2019, and its intrinsic value is not in a negative state. The type of data used is quantitative data. The sample criteria in this study are:

- It obtained the list of *LQ-45* stock index companies active on the *IDX* from February 2018 to December 2019 from www.IDX.co.id.
- Viewing the Company's Financial Statements and Balance Sheet.
- The balance published ended on December 31, 2018 - December 31, 2019. This data is for the projection of intrinsic value using the *FCFE* method by looking at the report obtained from www.IDX.co.id.
- The stock price daily for each respective company is from December 2018 until

December 2019 to calculate the beta. Data obtained from www.financeyahoo.com

- Stock market price (closing price) on December 30, 2019. Data obtained from www.finance.yahoo.com.

This study develops from industrial conditions that tend to be stable. Therefore the authors take the *LQ-45* Stock Index as a sample, where stock price movements tend to be more stable than other companies, so the *LQ-45* stock index is a stock that many companies widely consider. Investors because of the active and active movement of shares in stock trading.

The *FCFE* method can be very minimally risky to manipulate due to its complex method. In addition, cash flow is a report with minimal risk of manipulating results; *FCFE* calculations are close to fair prices. However, the drawback is that using this method requires more data; accuracy is required because the steps are long, so it takes longer to get the results. In this study, the authors also use the undervalued, overvalued, and fair value variables as dummy variables as guidelines for making investment decisions.

In this research, fundamental analysis is carried out to determine the stock's intrinsic value that will be used as an investment vehicle. The author uses the Free Cash Flow to the Equity method to find out the fair value. To calculate the fair price of shares, the author will use the financial statements of each company included in *LQ-45*, which is fixed for the period 2018 to 2019. The determination of the year of observation is because it was considered more stable before the world was hit by the pandemic for *COVID-19* massively. After getting the results of the fair value of the stock, it will then be compared with the stock market price on the closing afternoon of December 30, 2019, to determine whether the stock is undervalued or overvalued.

To be able to answer the research question whether intrinsic value affects the market price of shares, the linear regression model used to find the relationship between the independent variable to the dependent

variable of stock market price at the stock exchange was formed.

The function equation is formulated as follows: $Y = a + b_1.X_1 + b_2.X_2 + e$. Where: Y = stock market price ; a = constant ; X_1 = intrinsic value with *FCFE* approach ; X_2 = dummy variable (undervalue/fairvalue/overvalue); b = regression coefficient; and e = standard error. From this regression, we want to proceed to test the null hypothesis:

Ho: There is no influence of the intrinsic value of the stock on the market.

Classical assumption tests performed include: “normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test”. A normality test is used to determine whether the data population distribution is normal or not (Priyatno & Afyanti, 2008). “If the distribution is normal, the line connecting the actual data will follow the diagonal line” (Ghozali, 2009). This test is necessary because this study uses regression correlation analysis, requiring normally distributed data.

According to Riyanto (2013), “A *t*-test aims to determine the effect of independent variables on the dependent variable, whether a significant impact or not. Suppose the statistical test results show that H_0 is accepted (if the results show ($t\text{-count} > t\text{-table}$)”. The level of significance (α) in this study is 5%. If the statistical test results show $t.sig > 0.05$, then the results of the statistical test show that H_0 is accepted (Gujarati & Porter, 2008). “Determine coefficient (R^2) is used to see the level of accuracy both in regression, as the shown by the magnitude of determinant coefficient (R^2) between 0 and 1. Deteminan coefficient (R^2) is worth 0 (zero), which means that the independent variables did not influence on the dependent variable. While the determinant coefficient (R^2) is getting closer to the number 1 (one) said that the independent variables affect the variable dependent”. (Gujarati & Porter, 2008)

RESULTS AND DISCUSSION

Calculation of Intrinsic Value

1. Calculation Beta of Company Sample

"Beta measures the systematic risk of a security or portfolio relative to market risk" (Jogiyanto, 2009). Systematic risk cannot eliminate by diversifying because fluctuations in this risk are influenced by macro factors that can affect the market, such as interest rates, foreign exchange rates, government policies, etc. The beta value of each company is different because each company has different stock price movements; the greater the beta value of the company, the greater the sensitivity of the stock to market index movements. From the data processing results, the stock with the highest beta value is *BRPT*, which is 2.85, and the one with the lowest beta is *ICBP*, which is 0.51. So it can conclude that the liable company is *BRPT*, among other stocks, and the least sensitive stock is *ICBP* to the composite stock price index movement.

2. Calculation of Cost of Equity Value

To get the value of the cost of equity in this study is to use the Capital Asset Pricing Method (*CAPM*), which is based on:

- $E(R_m)$ value of 15% calculated from the annualized monthly the composite stock price index return from 2009-to 2019
- The Risk-Free Rate value is obtained from the Bank Indonesia rate data in January 2019, which is 5%, because the projected intrinsic value data is based on $FCFE_t$; $FCFE_t$ projection from *FCFE* 2019.
- Beta value of each sample

After processing the parameters, the value of the market risk premium [$E(R_m) - R_f$] is 10%. So that the cost of equity can be calculated using the *CAPM*. From the data processing results, it can be seen that the greater the beta value, the greater the cost of equity. So it can conclude that the highest cost of equity value is *BRPT* company of 34.33% with a beta value of 2.85, and the lowest is *ICBP* of 10.25% with a beta value of 0.51%.

3. Company Growth

A study to calculate *FCFE* growth using the average geometric method, namely, calculating company growth using sales or

income data in 2016 and 2019. The data processing results show that the highest growth value is *KBLF* company at 43.95%, and the lowest is *UNVR* at 1.00%.

4. Calculation of *FCFE* Value of *LQ-45* Index in 2019

After calculating the growth value, then calculating the *FCFE* value, to calculate the 2019 *FCFE* value in this study using the 2018-2019 financial statements. From the data processing results, it can conclude that the highest *FCFE* value in 2019 was the *BBCA* company of Rp. 190,898,998,825,350 and the lowest is *INTP* of 2,022,049,000,000.

Here are the complete data in tabular form below.

Table 1. Projection Base Parameters

No	Share	FCFE 2019	Cost of equity (Ke)	Growth (g)	(Ke-g)
1	ANDRO	60,710,896,326,000	20.74%	2.39%	23.14%
2	AKRA	4,006,126,399,000	19.72%	12.57%	7.14%
3	ANTM	10,002,225,957,000	20.64%	-22.75%	43.39%
4	ASII	92,100,000,000,000	20.13%	9.41%	10.72%
5	BBCA	190,898,998,825,350	13.95%	8.18%	5.77%
6	BBNI	154,085,389,000,000	26.10%	7.58%	18.52%
7	BBRI	147,644,073,000,000	20.33%	8.70%	11.63%
8	BBTN	21,363,938,000,000	26.10%	15.94%	10.15%
9	BMRI	142,149,340,000,000	20.02%	6.06%	13.96%
10	BRPT	49,427,549,383,000	34.33%	8.10%	26.23%
11	BSDE	6,287,105,201,359	22.08%	2.38%	19.71%
12	ECXL	38,533,681,000,000	15.81%	5.60%	10.20%
13	HMSP	14,431,827,759,000	16.53%	3.57%	12.96%
14	ICBP	9,331,897,000,000	10.25%	7.16%	3.09%
15	INDF	26,615,130,000,000	13.44%	4.74%	8.70%
16	INDY	22,933,224,443,647	25.17%	-9.84%	35.01%
17	INKP	25,783,870,605,000	26.10%	7.17%	18.93%
18	INTP	2,022,049,000,000	19.41%	1.24%	18.17%
19	KBLF	2,619,979,054,519	15.70%	43.95%	-28.25%
20	LPPF	2,697,086,000,000	22.29%	1.16%	21.13%
21	PGAS	42,565,719,881,656	27.43%	10.59%	16.06%
22	PTBA	3,862,425,000,000	17.55%	15.72%	1.83%
23	PTPP	16,958,150,084,453	30.83%	14.43%	16.40%
24	SMGR	11,568,586,000,000	21.57%	15.60%	5.97%
25	SRIL	7,309,049,581,304	14.36%	9.73%	4.64%
26	TLKM	118,024,000,000,000	11.38%	5.23%	6.15%
27	TPIA	14,116,795,235,199	24.55%	-2.20%	26.75%
28	UNTR	4,314,003,551,000	11.89%	-0.23%	12.12%
29	UNVR	16,962,299,000,000	11.28%	-1.00%	12.28%
30	WIKA	15,991,144,821,000	27.33%	20.20%	7.13%
31	WSKT	51,069,824,664,741	29.70%	9.68%	20.02%

Source: processed by the author

After getting the *FCFE* 2019 value and other components, the data is processed to get the intrinsic value of each sample. After getting the intrinsic value, it is then divided by the number of outstanding shares of each sample company to get the intrinsic value per share. Then will compare it with the market price of the stock. The date used is December

30, 2019. This data is compared with *Po* (intrinsic value at the end of 2019). The following Table 2 shows the intrinsic value of the stock sample.

Table 2. Intrinsic Value per Share

No	Share	Intrinsic Value (Po)	Number of Shares Outstanding	Share of Intrinsic Value	Price *	Under/over/fair **
1	ANDRO	256,122,299,457,878	31,985,962,000	8.007	1.555	Under
2	AKRA	63,140,705,944,083	4,014,694,920	15,727	3.950	Under
3	ANTM	17,807,181,617,944	24,030,764,725	741	840	Under
4	ASII	940,232,976,088,765	40,483,553,140	23,225	6.925	Under
5	BBCA	357,643,856,708,886	24,408,459,900	146,524	33,425	Under
6	BBNI	895,298,876,272,783	18,462,169,893	48,494	7.850	Under
7	BBRI	1,380,128,177,823,210	122,112,351,900	11,302	4,400	Under
8	BBTN	243,998,415,622,155	10,484,100,000	23,273	2,220	Under
9	BMRI	1,079,869,305,220,540	46,199,999,998	23,374	7,675	Under
10	BRPT	203,707,037,710,067	89,017,255,135	2,288	1.510	Under
11	BSDE	32,661,465,100,785	19,246,696,192	1,697	1.255	Under
12	ECXL	398,811,635,405,586	10,706,012,530	37,251	3,150	Under
13	HMSP	115,354,194,027,611	116,318,076,900	992	2,100	Under
14	ICBP	323,479,214,795,320	11,661,908,000	27,738	11,150	Under
15	INDF	320,447,127,366,405	8,780,426,500	36,496	7,925	Under
16	INDY	59,052,250,609,108	5,210,192,000	11,334	1,195	Under
17	INKP	146,008,924,913,054	5,470,982,941	26,688	7,700	Under
18	INTP	11,266,636,969,548	3,681,231,699	3,061	19,025	Over
19	KBLF	13,351,760,230,159	46,875,122,110	285	1,620	Over
20	LPPF	12,912,585,555,622	2,804,883,280	4,604	4,210	Under
21	PGAS	33,964,526,418,433	14,276,103,500	2,379	1,630	Under
22	PTBA	244,018,490,526,771	11,520,659,250	21,181	2,660	Under
23	PTPP	118,307,520,567,597	6,199,897,154	19,082	1,585	Under
24	SMGR	223,921,381,036,519	5,931,520,000	37,751	12,000	Under
25	SRIL	172,866,833,078,588	20,452,176,844	8,452	260	Under
26	TLKM	2,020,291,198,559,140	99,062,216,600	20,394	3,970	Under
27	TPIA	51,604,697,153,255	17,833,520,260	2,894	10,375	Over
28	UNTR	35,499,754,398,201	3,730,135,136	9,517	21,525	Over
29	UNVR	136,778,011,602,384	38,150,000,000	3,585	8,400	Over
30	WIKA	269,646,465,178,573	8,969,951,372	30,061	1,990	Under
31	WSKT	279,832,467,572,972	13,573,951,000	20,615	1,485	Under

*As of December 30, 2019

** Undervalue/overvalue/fair value

Source: processed by the author

Table 3 below shows that the amount of data in this study is 31 data on each variable. The general description of the descriptive statistics of the dependent and independent variables can be explained as follows:

Table 3. Descriptive Statistics

Variable	N	Maximum	Minimum	Mean	Standard Deviation
Intrinsic value	31	146.424	285	20,586	20.270
Under/over/fair value	31	1	0	5	0,006819
Stock Market Price	31	33.425	260	6,287	7.238

Source: processed by the author

Classic Assumption Test

The results of the normality test show that the value of *asyp.sig* (2-tailed) is 0.200 greater than 0.05, so the data is normally distributed. The results of the multicollinearity test showed that the tolerance value was above 0.1, and the *VIF*

was below 10. The independent variables in this study stated that there was no multicollinearity. The results of the heteroscedasticity test showed that none of the independent variables had a statistically significant effect on the dependent variable of the absolute residual value. It can see from the probability that the significance is greater than $= 0.05$. So it can conclude that the regression model of this study passed the heteroscedasticity test. In the autocorrelation test, the results obtained by Durbin Watson of 2.330. So there is no autocorrelation because 2.330 lies between 1.659 - 2.341.

Multiple Linear Regression

Table 4. Results of Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	4.021	.872		
	Intrinsic value	2.007	.000	.731	.608
	Under/over/fair value	8.167	2.137	.422	3.821

Source: processed by the author

Table 4 above shows the results of multiple linear regression testing; the regression equation can be made as follows:

$$\text{Stock Market Price} = 4,021 + 2,007 X_1 + 8,164 X_2 + e$$

Based on the regression equation above, it can be explained as follows:

- The constant value is 4,021, which states that if the independent variables are considered zero, the average stock market price is 4,021
- The intrinsic value regression coefficient (b_1) is 2007 with positive parameters indicating that if there is an increase in intrinsic value by 1 unit, it will have an impact on increasing intrinsic value by 2007
- The under/over/fair value (b_2) regression coefficient is 8,164, with positive parameters indicating that if there is an increase in under/over/fair value by 1 unit, it will increase the intrinsic value by 8,164.

Partial Test (*t-test*)

The *t-test* is used to determine the effect of the intrinsic value of the Index. If it is

under/over/fair value of the *LQ45* shares on the market price in 2019. Comparing the *t-count* and *t-table* numbers, provided that 0.05 significance value and $t\text{-table} = (\alpha/2 ; nk-1) = (0.05/2 ; 31-3-1) = (0.025;27) = 2.051$, it can be seen the effect of each independent variable on the dependent variable. Based on table 4, the results of the *t-test* analysis are as follows:

- We obtained a significance value of 0.000 with the *t-count* value of 6,608. It is based on the *t-test* analysis results for the effect of the intrinsic value of the *LQ-45* stock on the stock market price in 2019. Therefore, the significance value is greater than 0.05 and $t\text{-count} > t\text{-table}$ ($6,608 > 2,048$), so H_0 is rejected, meaning that intrinsic value significantly affected stock market prices on the Indonesia Stock Exchange in 2019.
- We obtained a significance value of 0.001 with the *t-count* value of 3.821. It is based on the *t-test* analysis results for the under/over/fair value effect of the *LQ-45* market price. Therefore, the significance value is greater than 0.05 and $t\text{-count} > t\text{-table}$ ($3,821 > 2,048$), so H_0 is rejected, meaning that the under/over/fair value significantly affects the stock market price on the Indonesia Stock Exchange in 2019.

Simultaneous Test (*F -Test*)

The *F-test* was used to determine whether all independent variables had a simultaneous (simultaneous) effect on the dependent variable. The *F-test* data processing results state the intrinsic value, and under/over/fair value of the stock market with a significance value of $0.000 < 0.05$, so H_0 is rejected. So, the intrinsic value and the under/over/fair value of the *LQ-45* stock predictor of the market price are correct. The intrinsic value of H_a is accepted to simultaneously affect the stock market price Indonesia Stock Exchange (*IDX*) in 2019.

Coefficient of Determination Test (R^2)

The coefficient of determination test is the proportion or presentation of how big the contribution of the independent variables' influence in the regression model to the

dependent variable is. The following are the results of the coefficient of determination test:

Table 5. Coefficient of Determination Test Results (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.813 ^a	.661	.637	2.18453	2.330

a. Dependent Variable: Stock Market Price

Source: processed by the author

Based on Table 5 above, the coefficient of determination of the adjusted R^2 model is 0.661 or 66.1 percent. It means that 66.1 percent of variations or changes in stock market prices can be explained by the variety of variables in the model, namely intrinsic value and dummy variables under/over/ fair value. The remaining 34.9 percent is explained by other variables outside the regression model used in this study.

Discussion

The increase or decrease in intrinsic value will affect the market price of the *LQ-45* stock in 2019. This result shows that fundamental analysis has a significant effect so that fundamental analysis can be used before making investment decisions for shares in *LQ-45* on the *IDX* in 2019. Based on the analysis results, it is known that the under/over/fair value partially has a positive and significant influence on the market price of the *LQ-45* stock in 2019. Thus the stock valuation results can guide investment decisions that investors want to make.

When the company conducts an Initial Public Offering (*IPO*), it will sell the issuer's share price at the highest price. On the other hand, as a party providing services to sell shares, the underwriter tries to sell all the shares, so they will try to lower the price by asking for a discount from issuers. Likewise, as the buyer, investors try to buy the shares at the lowest possible price. This phenomenon causes stocks to be undervalued or overvalued, so investors must continue to buy shares in the secondary market, namely buying undervalued shares and selling overvalued shares or maintaining fair value shares.

From the results of this study, it is hoped that it can be used as a motivation to improve management performance, which is reflected in the financial statements, and a basis for making decisions regarding policies to increase the intrinsic value of the company shares.

CONCLUSION AND RECOMMENDATION

The regression results show that the intrinsic value variable affected the market price of *LQ-45* shares on the Indonesia Stock Exchange (*IDX*) in 2018-2019. It means investors still pay attention to the intrinsic value of shares in deciding to buy *LQ-45* shares on the *IDX*. Under/over/fair-valued independent variables significantly influenced the *LQ-45* stock market price in 2019. The right investment decision is to buy undervalued shares, sell over-valued shares, or maintain fair-value shares. This result shows that fundamental analysis has a significant effect so that fundamental analysis can be used before making investment decisions.

The limitations of this study are the short research period and the only use of two independent variables that affect stock market prices, as well as the limited time series data. Suggestions for future research are the sample taken is not only *LQ-45* but also added with other stocks by increasing the research period and adding other variables involved in the study. In addition, we can continue researching the stock market when the COVID-19 pandemic hits.

REFERENCES

- Agus, Riyanto. (2013) *Statistik Deskriptif*. Yogyakarta: Nuha Medika.
- Andiyanto R., Salim U., Irawanto D.W. (2015). Intrinsic value using dividend discounted constant growth model driven by dividend and capital gain growth (The study of BorgWarner Inc., USA). *Jurnal Ekonomi dan Bisnis (JEB)*, Vol. 9(2), 61-73.
- Artikis P.G., and Kampouris C.G. (2022). Is intrinsic value priced in the cross

- section of stock returns?, *Cogent Economics & Finance*, 10:1, 2098607, DOI: 10.1080/23322039.2022.209860
- Asnawi S, Wijaya C. (2005) *Riset Keuangan: Pengujian-pengujian Empiris*. Jakarta: Gramedia Pustaka Utama.
- Brigham, Eugene, Houston. (2006). *Fundamental of Financial Management: Dasar-Dasar Manajemen Keuangan*. Jakarta: Salemba Empat.
- Boffo, R., and R. Patalano. (2020). ESG Investing: Practices, Progress and Challenges, OECD Paris. www.oecd.org/finance/ESG-Investing-Practices-Progress-and-Challenges.pdf
- Damayanti R. (2016). Pengaruh Price Book Value, Operating Profit Margin, Earning per share, Debt to Equity Ratio dan Return on Equity terhadap Harga Saham Perusahaan di Bursa Efek Indonesia (Studi pada Saham Perusahaan LQ-45). *Jurnal Manajemen dan Perbankan*, Vol. (3)1.
- Damodaran, Aswath. (2002). *Investment Valuation: Tools n Technique for Determining The Value of any Assets*, Second Edition. New York: John Wiley & Sons.
- Damodaran, Aswath. (2006). *Damodaran on Valuation: Security Analysis for Investment and Corporate Finance*. 2nd Edition. New York: John Wiley & Sons.
- Eliza (2013). Hubungan Nilai Intrinsik suatu Saham terhadap Harga Pasar Saham Tersebut. *Jurnal Ekonomi*, Vol. (4)1.
- Evi T., Pramesworo I.S. (2022). The Value of the Company's Stock Price Is Influenced By Financial Ratio Analysis. *Himalayan Economics and Business Management*, Vol. 3(2) 123-137. DOI: 10.47310/Hjebm.2022.v03i02.012
- Fujianti L., Hubbansyah A.K., Siswono S., Sinaga L. (2020). The effect of managerial ownership, dividend policy and debt on firm value: the Indonesia Stock Exchange cases. *Inquisitive*, Vol 1(1), 40 – 54.
- Ghozali, Imam. (2009). *Aplikasi Analisis Multivariate Dengan Program SPSS*. Cetakan ke IV. Semarang: Badan Penerbit Universitas Diponegoro.
- Gujarati DN, Porter DC. (2008) *Basic Econometrics*. 5th Edition. New York: McGraw-Hill Education.
- Halim, Abdul. (2005). *Analisis Investasi*. Jakarta: Salemba Empat.
- Herawanny CA., Saifi M., Yaningwati F. (2017). Analisis Dividend Discount Model Pertumbuhan Konstan sebagai Dasar Penilaian Harga Saham dalam Upaya Pengambilan Keputusan Investasi Saham (Studi pada Perusahaan Sub Sektor Makanan & Minuman yang Terdaftar di Bursa Efek Indonesia Tahun 2013-2015). *Jurnal Administrasi Bisnis (JAB)*. Vol. (46)1.
- Hernuningsih, Sri. (2012). *Pengantar Pasar Modal Indonesia*. Yogyakarta: UPP STIM YKPN.
- Hibban M.I., dan Wardana G.K. (2022). Analysis of Fair Price Valuation of Shares in Investment Decision Making in Islamic Banking Issuers on the Indonesia Stock Exchange (Years 2018-2021). *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)* Vol 5(2), 13155-13169. DOI: <https://doi.org/10.33258/birci.v5i2.5162>
- Husain, Fauziah. (2017). Analisis Metode Price Earning Ratio dalam Penetapan Nilai Intrinsik Saham. *Al-Buhuts Jurnal Ekonomi Islam*, Vol. (13)2.
- Husnan, S. (2005). *Dasar-Dasar Teori Portofolio dan Analisis Sekuritas Edisi Keempat*. Yogyakarta: UPP AMp YKPN.
- Jogiyanto. (2009) *Sistem Informasi Manajemen*. Yogyakarta: Andi.
- Kennedy P.S.J., Manullang RM., Sihombing C.N., Tampubolon L.M. (2022). Event Study: Itama Ranoraya Stock Valuation on Indonesia Stock Exchange during the COVID-19 Pandemic. *Journal of Accounting Auditing and Business*,

- Vol. 5(1), 43-55. DOI: 10.24198/jaab.v5i1.38545
- Leonardo M.P., Eduardo C.M.C., María T.H.A.A., Luis T.G.J., Elias L.R.C. (2022). Formalization of a new stock trend prediction methodology based on the sector price book value for the Colombian market. *Heliyon*, 8, e09210. DOI: <https://doi.org/10.1016/j.heliyon.2022.e09210>
- Mensah MO., Peprah WK., Sekyere ABO., Ayaa MM., Daniel B. (2022). Influence of Stocks Intrinsic Valuation on Investment Decision Making: A Literature Review. *International Journal of Academic Research in Business and Social Sciences*, Vol. 12(5), 1268–1275. DOI: 10.6007/IJARBS/v12-i5/1334
- Mulia Hsb S.A., Fachruddin, Fachrudin K.A. (2019). An Analysis on Stock Intrinsic Value with Free Cash Flow to Firm, Relative Valuation, and Abnormal Earning Methods in Plantation Issuer (A Case Study at PT. Austindo Nusantara Jaya, Tbk and PT. Dharma Satya Nusantara, Tbk). *IOSR Journal of Business and Management (IOSR-JBM)*. Vol 21(3), 47-50. DOI: 10.9790/487X-2103044750.
- Nguyen, Tinh. (2016). *The valuation of Kinh Do Corporation using Discounted Cash Flow method*. Bachelor's Thesis Degree Programme in International Business, HAAGA-HELIA.
- Priyanto D, Afyanti W. (2008). *Mandiri Belajar SPSS - Bagi Mahasiswa dan Umum*. Cetakan 2. Yogyakarta: MediaKom.
- Putra A.I.L.W., Putra AD., Dewi MS., Radianto DO. (2019). Differences In Intrinsic Value With Stock Market Prices Using The Price Earning Ratio (Per) Approach As An Investment Decision Making Indicator (Case Study Of Manufacturing Companies In Indonesia Period 2016 - 2017). *Aptisi Transactions On Technopreneurship (ATT)*, 1(1), 94-105.
- Ridwan Maronrong R., Nugrhoho K. (2017) Pengaruh Inflasi, Suku Bunga dan Nilai Tukar terhadap Harga Saham Studi Kasus pada Perusahaan Manufaktur Otomotif Terdaftar di Bursa Efek Indonesia Tahun 2012 – 2017. *Jurnal STEI Ekonomi*, Vol. 26(2).
- Samsul, Mohammad. (2006). *Pasar Modal dan Manajemen Portofolio*. Jakarta: Erlangga.
- Sartono, Agus. (2010). *Manajemen Keuangan Teori dan Aplikasi*. Edisi Keempat. Yogyakarta: BPFE.
- Sunariyah. (2006). *Pengantar Pengetahuan Pasar Modal*. Edisi Keempat. Yogyakarta: AMP YKRN.
- Syahunan. (2015). *Manajemen Keuangan*. Medan: USU Press.
- Tandelilin, Eduardus. (2010). *Portofolio dan Investasi*. Edisi pertama. Yogyakarta: Kanisius.
- Tiwari, Ranjit. (2016). Intrinsic value estimates and its accuracy: Evidence from Indian manufacturing industry. *Future Business Journal*, 2, 138–151. DOI: <http://dx.doi.org/10.1016/j.fbj.2016.10.001>
- Trisanti, Theresia. (2020). Stock split and stock market reaction: the evidence of Indonesian public company. *Humanities & Social Sciences Reviews*, Vol 8(2), 01-07. DOI: <https://doi.org/10.18510/hssr.2020.821>
- Veronica M., Pebriani R A. (2020). Pengaruh Faktor Fundamental dan Makro Ekonomi terhadap Harga Saham pada Perusahaan Industri Properti di Bursa Efek Indonesia. *Islamic Banking: Jurnal Pemikiran dan Pengembangan Perbankan Syariah*. Vol. 6(1). www.idx.co.id. [Retrieved 25 April 2021] [www.finance yahoo.com](http://www.finance.yahoo.com). [Retrieved 25 April 2021]

