

COMPARATIVE ANALYSIS OF THE VALUATION OF FAIR STOCK PRICES USING THE PRICE BOOK RATIO AND PRICE EARNING RATIO METHODS IDX30 ON THE INDONESIAN STOCK EXCHANGE PERIOD 2018 – 2020

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Abstract

This study aims to find out the fair price of shares on the IDX30 index using the Price Book Ratio and Price Earning Ratio Methods. To find out the condition of the stock price of each company belonging to the undervalued or overvalued category based on the results of the valuation using the Price Book Ratio and Price Earning Ratio Methods. The variables used consist of independent variables and dependent variables. The independent variables in this study are PBV (bvs, pbv) and PER (eps, per) while the dependent variable is stock price. This research was conducted on the Indonesian Stock Exchange (IDX) because the dependent variable in this study is the Fair Price of Shares at IDX 30 on the Indonesia Stock Exchange for the 2018-2020 period. The types of data used are qualitative and quantitative as well as the data sources used are primary data and secondary data. The data collection technique is by literature study and documentation. As for data analysis using homogeneity test. From the research results, it was obtained that the significant value of the Price to Book Value (PBV) variable was $0.118 > 0.05$. Meanwhile, the Price Earning Ratio (PER) variable has a homogeneity value of $0.199 > 0.05$. Based on the test of the coefficient of determination, the value of the fair share price ratio is influenced by the Price to Book Value comparison method and the Price Earning Ratio. Partial and simultaneous tests show that fair share prices are influenced by the Price to Book Value comparison method and the Price Earning Ratio both partially and simultaneously.

1. INTRODUCTION

Background problem

The capital market has an important role in supporting the country's economy. The capital market is a means for sellers and buyers to meet to carry out securities trading activities, such as shares, bonds, options, warrants and rights. The institution that provides a venue/container for capital market activities in Indonesia is the Indonesian Stock Exchange. The Indonesian Stock Exchange (BEI) or Indonesian Stock Exchange (IDX) is a capital market in Indonesia. The Indonesian Stock Exchange has an important role as a means for people to invest, which is an alternative investment. The Indonesian Stock Exchange (BEI) is a government institution that acts as the organizer of the stock exchange. This means that IDX is tasked with facilitating securities trading in Indonesia.

One of the instruments in the capital market that is most popular with investors is shares. Shares are securities which are a sign of a person or entity's ownership of a company. Stocks provide high returns but are balanced with high risks. This is because shares are securities that have high risk, high return characteristics.

Investing in capital market instruments is currently one of the methods that capital owners in Indonesia are interested in. Apart from that, the capital market has a role in the economy of a country because the capital market carries out two functions, namely the economic function and the financial function. The economic function of the capital market is to provide facilities that bring together parties who have excess funds (investors) and parties who need funds (issuers).

When investing, the fair value of shares to be bought or sold is very important for investors to know, because this will make it easier for investors to estimate possible profits and losses that will occur in the future. The purpose of stock valuation is to find out whether the market price of a stock is considered too high (overvalued) or too low (undervalued). If the share value is too low (undervalued), then the shares are worth buying. On the other hand, if a share shows a value that is too high (overvalued), it means the share is worth selling. To value shares, there are methods that make it easier for investors to find out the value of shares and determine investment choices.

Intrinsic value stock value actually or should happen. The intrinsic value will later be compared with the share price in the market (market value) to find out whether the company's share price is overvalued, undervalued or overvalued. So, to assess share prices, supporting information and data are needed. This information and data can be obtained from the company concerned, namely from financial reports or annual reports which have been published on the official website of the Indonesia Stock Exchange (BEI).

Investment in physical form expects an increase in the price of the physical assets that have been purchased, resulting in a profit if they are traded. Efficient Financial Management fulfills its objectives used as a standard for assessing efficiency (Sartono, 2000).

Meanwhile, investment in the form of financial assets in the form of shares expects dividends or capital gains as a return on the investment that has been made. Before investing, investors must evaluate the shares they will buy. There are three types of share value you need to know, namely market value, intrinsic value and book value.

Book value is defined as the value calculated by the issuer based on its bookkeeping records. Market value is the share price on the market and intrinsic value is the share value which determines the fair price of a share so that the share reflects the actual share value so that it is not too expensive. This intrinsic value calculation is to find the present value of all future cash flows, both from dividends and capital gains (Sulistiyastuti, 2002).

The object of this research is the index IDX30 which has been consistent in the last three years listed on the Indonesian Stock Exchange (BEI) in 2018-2020. An index containing 30 shares of issuers that are liquid, among others, the author only takes companies Because There are several companies in and out of the index IDX30. The more liquid the stock or grow up Every year, this can show that investors are interested in these shares because they have the possibility of producing high stock returns, be it dividends or capital gains.

Table 1
List of share price values, BVS, PBV, EPS, PER, in index companiesIDX30 Listed on the Indonesian Stock Exchange (2018-2020)

No	Code	Year	Stock Price	PB V	PER
1	ADRO	2018	1.215	0,60	6,24
		2019	1.555	0,77	6,48
		2020	1.430	1,01	21
2.	ANTM	2018	765	0,96	21,85
		2019	840	1,01	27
		2020	1.935	2,46	42
3.	ASII	2018	8.225	1,98	14,63
		2019	6.925	1,01	13
		2020	6.025	2,46	13
4.	BBCA	2018	5.200	4,46	25,72
		2019	6.685	4,91	30
		2020	6.770	4,66	31
5.	BBNI	2018	8.800	1,58	10,65
		2019	7.850	1,21	9,17
		2020	6.175	1,02	20
6.	BBRI	2018	3.660	2,57	14,28
		2019	4.400	2,72	16
		2020	4.170	2,64	27
7.	TLKM	2018	3.750	3,50	19,58
		2019	3.970	3,38	18
		2020	3.310	2,78	15
8.	UNTR	2018	27.350	8,43	8,43
		2019	21.525	1,36	6,97
		2020	26.600	1,55	14
9.	UNVR	2018	9.080	38,62	35,57
		2019	8.400	46,5	44
		2020	7.350	43,2	39
10.	WSKT	2018	1.680	0,84	4,59
		2019	1.485	0,69	13
		2020	1.440	0,82	5,56
11.	GGRM	2018	83.625	3,75	20,95
		2019	53.000	2,15	11
		2020	41.000	1,39	10
12.	HMSP	2018	3.170	13,74	33,40
		2019	2.100	7,65	18
		2020	1.505	6,11	19
13.	ICBP	2018	10.450	5,56	26,23
		2019	11.150	5,15	22

		2020	9.575	2,34	21
14.	SMGR	2018	11.500	2,15	24,51
		2019	12.000	2,16	41
		2020	12.425	2,09	36
15	BBTN	2018	2.540	1,16	8,93
		2019	2.120	0,93	21
		2020	1.725	1,04	12
16	PTBA	2018	4.300	3.32	9,45
		2019	2.660	0'46	7,41
		2020	2.810	1,95	14
17	MNCN	2018	690	0,94	7,47
		2019	1.630	1,95	836
		2020	1.140	1,23	9,37
18	KLBF	2018	1.520	4,89	29,61
		2019	1.620	30	4,71
		2020	1.480	3,88	26
19	PTPP	2018	1.805	0,73	9,60
		2019	1.585	0,59	14
		2020	1.865	0,81	5,67
20	PGAS	2018	2.120	1,04	14
		2019	2.170	1,13	22
		2020	1.655	0,83	38
21	BMRI	2018	7.375	1,95	14,12
		2019	7.675	1,78	1,3
		2020	6.325	1,56	16
22	BRPT	2018	478	1,05	30.35
		2019	1.510	3.34	570
		2020	1.100	2,31	457
23	CPIN	2018	7.225	6,50	25,59
		2019	6.500	5,32	31
		2020	6.252	4,86	35
24	ERAA	2018	440	1,55	8,27
		2019	359	1,18	26
		2020	440	1,31	18
25	INCO	2018	3.260	1,16	29,48
		2019	3.640	1,35	11.961
		2020	5.100	168	33
26	INDF	2018	7.450	1,35	17,40
		2019	7.925	1,34	9,36
		2020	6.850	0,90	9,98

27	INKP	2018	11.550	1,15	1,15
		2019	7.700	0,75	9,36
		2020	10.425	0,90	9,98
28	INTP	2018	18.450	3,01	6.139
		2019	19.025	3,13	45
		2020	14.475	2,38	36
29	JPFA	2018	2.150	2,61	11,31
		2019	1.535	1,68	13
		2020	1.465	1,51	50
30	ACES	2018	1.490	6,68	27,48
		2019	1.495	5,72	26
		2020	1.715	2,20	42

Source : www.idx30.com

The table above shows that there are 30 companies in index IDX30 namely share price, pbv, per. There was the highest share price, namely the GGRM issuer in 2018, amounting to 83,625 per share, and the lowest was the BRPT issuer in 2018, namely 478 per share, the highest BVS or book value of shares was the GGRM issuer in 2020, amounting to 29,405 and the lowest was the UNVR issuer. In 2020 it was 170, the highest EPS was issuer GGRM of 5655 and the lowest was WSKT in 2020 of -544, and the highest PER was issuer UNVR of 35.57 and the lowest was WSKT of 4.59. Not all shares have good prospects to be used as an alternative for investing, whether in large or small companies. In order to make the right investment decision, an investor must first assess the shares. The results of the assessment must be used as a reference for an overview of the company's value, especially its future prospects.

One of the most popular approaches used is to use the Price Book Ratio (PBV) and Price Earning Ratio (PER) methods. By using this analysis, an analyst can determine the fairness of share prices which are used to determine the right investment decision between buying, holding or selling shares.

PER is comparison between the market price per share (market price per share) with profit per share (earnings per share). For investors, the higher the PER, the expected profit growth will also increase. To use the PBV and PER methods, data is needed to evaluate the fair price needed data such as equity, number of outstanding shares, close price in 2018, company net profit, and company dividend amount.

Price to Book Value (PBV). PBV is an approach to assessing a stock by looking at the relationship between market price and book value per share (Tandelilin, 2017). According to Hasanah and Rusliati (2017), PBV is better for assessing company shares by industry or similar sectors, so that it is clear how the share prices compare whether they are cheap or expensive. Another approach, namely the Price Earning Ratio (PER), is an approach that is more often used by investors and stock analysts. PER describes the ratio or comparison between share prices and company earnings.

By using this analysis, a researcher can determine the fairness of stock prices which are used to determine the right investment decision between buying, holding or selling shares.

Researchers are interested in conducting research entitled "Comparative Analysis of the Fair Price Valuation of Shares Using the Price Book Ratio and Price Earning Ratio Methods inIdx30 "On the Indonesian Stock Exchange for the 2018 - 2020 period."

Problem Formulation

In order for this research to be in accordance with the objectives to be achieved, it is necessary to have a clear and focused problem formulation. The problem formulation in this research is:

1. What is the fair price of shares in the IDX30 Index using the Price Book Ratio and Price Method Earning Ratio ?

2. Do you know whether the stock price of each company is classified as undervalued or overvalued based on the valuation results of the two methods?

Research purposes

From the above background, the objectives of this research are as follows:

1. Find out the fair price of shares on the IDX30 index using the Price Book Ratio and Price Method Earning Ratio.
2. To determine the condition of each company's share price in the undervalued or overvalued category based on the valuation results using the Price Book Ratio and Price Methods Earning Ratio.

2. LITERATURE REVIEW

Financial management

Currently, financial managers play a very important role. With developments, the financial manager's job is not only to record, make reports, control cash positions, pay bills and find funds. However, financial managers must also be able to invest funds, manage the optimal combination of funding sources, as well as distribute profits (dividend distribution) in order to increase company value.

Every company always needs funds to meet daily operational needs and to develop the company. The funding requirements are in the form of: modal work or for the purchase of fixed assets, to meet these funding needs, the company must be able to find sources of funds with a composition that produces the lowest costs.

Financial management according to Sundjaja and Barlian (2003) in M. Fauzan and D. Rusdiyanti (2022) explains that financial management is "Management related to duties as a financial manager in a business company. Finance managers actively manage the financial affairs of various types of businesses, whether financial or non-financial, private or public, large or small, profit or non-profit. They carry out various activities, such as budgeting, financial planning, cash management, credit administration, investment analysis and efforts to obtain funds.[1]

The term financial management can be interpreted as good fund management related to allocating funds in various forms of investment effectively as well as efforts to collect funds for investment financing or spending efficiently according to Sartono (2012) in A. Lestari and M. Fauzan (2023) [2]. Although the function of a financial manager in every organization is not necessarily the same, in principle the main function of a financial manager is to plan, seek and utilize various ways to maximize the efficiency of company operations. Financial management is related to 3 activities, namely:

1. Activities using funds, namely activities to invest funds in various assets.
2. Fundraising activities, namely activities to obtain sources of funds, both from internal funding sources and external funding sources of the company.
3. Asset management activities, namely after the funds are obtained and allocated in the form of assets, the funds must be managed as efficiently as possible.

From the theories above, it can be concluded that financial management is an effort to manage funds that are collected and allocated to finance all company activities in order to achieve the goals of the company. According to Sudana (2011), company financial management is one of the areas of company functional management which is related to making long-term investment decisions, and managing the company's working capital which includes short-term investment and funding. In other words, corporate financial management is a field of finance that applies principal-financial principles in a company organization to achieve and maintain value through appropriate decision making and resource management.

According to Dewi Utari (2014), financial management is planning, organizing, implementing and controlling the search for funds at the lowest possible cost and using them effectively and efficiently for organizational operational activities. From the theories above, it can be concluded that financial management is an effort to manage funds collected and allocated to finance all company activities in order to achieve the company's goals.

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Investment

According to Hartono (2017): "Investment is postponing current consumption to be included in productive assets over a certain period of time. Investment is a commitment of a certain amount of funds or other resources made at this time, with the aim of obtaining a certain amount of profit in the future."

According to Tandelin (2010): "Investment can be interpreted as a commitment of a certain amount of funds or other resources made at this time, with the aim of obtaining a number of benefits in the future."

According to (Jogiyanto (2010): "Investment is a delay in current consumption to be included in productive assets over a certain period of time."

Based on these several definitions, it can be concluded that investment is an activity of placing funds in productive assets with the hope of getting returns from the growth in the value of these assets, within a certain period of time.

Shares

a. Understanding Shares

According to Darsono and Rahman (2018:69): "Shares are a sign of capital participation of a person or party (business entity) in a company or limited liability company. By including this capital, the share purchaser has a claim on the company's income and company assets, and has the right to attend the General Meeting of Shareholders."

According to Hartono (2017:29): "shares are evidence of ownership of the company. Shares are capital participation in ownership of a limited liability company (PT) or usually referred to as issuer".

According to Tandelin (2017:31): "common stock represents ownership of a company. Ordinary shares are certificates that indicate proof ownership of a company".

Based on these several definitions, it can be concluded that shares (stock) are securities which are instruments of proof of ownership or capital participation of individuals or institutions in a company, where the purchaser of shares has a claim on company income and company assets, and has the right to attend the General Meeting of Holders. Shares (GMS).

b. Types of Shares

According to Fahmi (2017:54) there are two types of shares, namely:

- a) Common stock (ordinary shares) is a securities sold by a company which specifies the nominal value (rupiah, dollar, yen, etc.) where the holder is given the right to participate in the GMS (General Meeting of Shareholders) and EGMS (External General Meeting of Shareholders). Ordinary) and have the right to determine whether to purchase a rights issue (sale of limited shares) or not, and then at the end of the year will receive profits in the form of dividends.
- b) Preferred stock (special shares) is a securities sold by a company which specifies the nominal value (rupiah, dollars, yen and so on) where the holder will receive a fixed income in the form of dividends which will be received every quarter (three months).

Stock Profits

Shares traded on the Stock Exchange have several advantages for investors. According to Darsono and Rahman (2018:69), basically there are two profit opportunities that investors can obtain by buying or owning shares, namely:

a. Dividends

Dividends are profit distributions provided by the company and come from the profits generated by the company. Dividends are given after obtaining approval from shareholders at the GMS. If an investor wants to receive dividends, then the investor must hold the shares for a relatively long period of time, namely until the share ownership is within the period where they are recognized as shareholders who are entitled to receive dividends. Dividends distributed by the company can be in the form of cash dividends, meaning that each shareholder is given a dividend in the form of cash in a certain amount of rupiah for each share or it can also be in the form of a share dividend, which

means that each shareholder is given a dividend of a certain number of shares so that the number of shares owned by an investor will increase. with the distribution of stock dividends.

b. Capital Gain

Capital Gain is the difference between the purchase price and the selling price. Capital gains are formed by stock trading activities in the secondary market. For example, an investor buys shares or a total profit of IDR 200,000.00 from the share transaction.

Stock Risk

Apart from having several advantages, shares also have share risks. According to Darsono and Rahman (2018), share owners also have the potential to experience several risks, namely:

a. Capital Loss

Capital loss is a condition when investors sell shares lower than the purchase price. For example, 10 lots of PT ABC shares were purchased at a price of IDR 1,300.00 per share (1 lot = 100 shares), then the share price continued to decline until it reached IDR 1,000.00 per share. Because they are afraid that the share price will continue to fall, the investor sells at Rp. 1,000.00, resulting in a loss of Rp. 300.00 per share or a total loss of Rp. 300,000.00 from the share transaction.

b. Risk Liquidation

The company issuing the shares is declared bankrupt by the court or the company is dissolved. In this case, the claim rights of shareholders have the last priority after all company obligations have been paid (from the sale of company assets). If there is still a remainder from the sale of the company's assets, then the remainder is divided proportionally among all shareholders. If there are no remaining company assets, then shareholders will not receive any proceeds from the liquidation. This condition is the heaviest risk for shareholders. For this reason, a shareholder is required to continuously follow the company's developments.

Stock Price

Investors will make a decision to buy a share and then sell it again. A fairly high share price will provide returns for investors in the form of capital gains. According to Nurlina (2017:37), share prices can be divided into three types of prices, namely:

a. Nominal Price

The nominal price is the price stated in the share certificate which is determined by the issuer to value each share issued. The nominal price is important because dividends paid on shares are usually determined based on the nominal value.

b. Prime Price

The initial price is the price at the time the shares are listed on the stock exchange in the context of an initial public offering for sale of shares called an IPO (Initial Public Offering). Share prices in the primary market are usually set by the underwriter and issuer. In this way, it will be known at what price the issuer's shares will be sold to the public.

c. Market price

The market price is the selling price from one investor to another investor. This price occurs after the shares are listed on the stock exchange. Transactions here no longer involve issuers and underwriters. This price is what is called the price in the secondary market and is a price that truly represents the price of the issuing company, because in transactions in the secondary market, there is very little price negotiation between investors and the issuing company. The prices announced every day in newspapers or other media are the market prices recorded at the closing price of activity on the Indonesian Stock Exchange.

Stock Valuation

According to Tandililin (2017:305), in stock valuation, there are three types of value, namely book value, market value and intrinsic value of shares. Book value is a value calculated based on the bookkeeping

of the share issuing company (issuer). Market value is the value of shares in the market, which is indicated by the price of the shares in the market. Meanwhile, intrinsic value is the actual or supposed value of shares.

According to Suteja and Gunardi (2016:85), it is generally known that there are three types of share values, namely:

- book value, is the value be calculated based on the bookkeeping of the share issuing company (issuer)
- Market value is the price of a share on the market
- Intrinsic value/theoretical value is the actual or supposed value of shares.

According to Suteja and Gunardi (Suteja, 2016, p. 85) investors will make investment decisions involves information on the value of the shares:

- If the intrinsic value of the stock > market value then the stock is said to be undervalued and this is a buy indicator
- If the intrinsic value of the stock < market value then the stock is said to be overvalued and this is a sell indicator.

Normal price

According to Tambunan (2007): "The fair price or intrinsic value of an asset is a price that we can accept as the basic price of ownership of an asset after comparing the level of return we expect (required rate of return) with the level of return that can be given these assets in the future (expected rate of return)".

According to Tandellin (2010), there are three types of value known in stock valuation, namely book value, market value and intrinsic value. Book value is the value calculated based on the bookkeeping of the share issuing company (issuer). Market value is the value of shares in the capital market indicated by the stock price in the market capital. Intrinsic value, also known as theoretical value, is the actual or supposed value of shares. This value is usually referred to as the fair value of a share.

Stock Analysis with Price to Book Value (PBV)

Price to Book Value (PBV) is a calculation or comparison between the market value and book value of a share. With this PBV ratio, investors can find out directly how many times the market value of a share has been appreciated from book its value. This ratio can provide an overview of the potential price movement of a share so that from this overview, indirectly the PBV ratio also has an influence on share prices (Tryfino, 2009). This ratio functions to complete book value analysis. If in book value analysis, investors only know the capacity per share from the share value, in the PBV ratio investors can find out directly how many times the market value of a share has been appreciated from its book value. To compare, the two companies must be from the same business group that has the same nature of business. (Sawir, 2000)

Believes that the Price to Book Value Ratio describes the financial market value of the management and organization of a going concern company. A well-run company with a strong management staff and a functioning organization is at least equal to the book value of its physical assets. So the formula for calculating Price to Book Value is:

$$PBV = \frac{\text{Market Value}}{\text{Book Value}}$$

Stock Analysis with Price Earning Ratio (PER)

Price Earning Ratio (PER) is a ratio used to calculate the rate of return on capital invested in a stock. The smaller the PER of a stock, the better it will be, so it can be concluded that the PER ratio has an inverse influence on share prices (Tryfino, 2009).

According to Tryfino (2009), (PER) is the ratio used to calculate the rate of return on capital invested in a stock. Or, calculate the ability of a stock to generate profits. The aim of this method is to predict when or how many times the profit the company will generate compared to its share price in a certain period. The smaller the PER of a stock, the better. This ratio measures how big the ratio is between the company's share price and the profits obtained by shareholders (Hanafi, 2004).

So the formula for calculating the Price Earning Ratio is:

$$PER = \frac{\text{Price Per Share}}{\text{Share Sheet Profit}}$$

3. RESEARCH METHODS

This research was conducted on the Indonesian Stock Exchange (BEI) because the dependent variable in this research is the Fair Price of Shares on IDX 30 on the Indonesian Stock Exchange for the 2018-2020 period. This research was carried out on the Indonesian Stock Exchange (BEI) because the dependent variable in this research is the Fair Price of Shares on IDX 30 on the Indonesian Stock Exchange for the 2018-2020 period. The types of data used are qualitative and quantitative and the data sources used are primary data and secondary data. Data collection techniques are literature study and documentation. The data analysis uses a homogeneity test.

4. RESULTS AND DISCUSSION

Research result

Deep research object study this is a financial report on a company listed on IDX30 on the Indonesian Stock Exchange. In the annual financial report there is a balance sheet consisting of: assets current, current liabilities, share capital and others and the profit and loss statement consists of net sales, cost of goods sale, gross profit, profit before income tax, profit before minority interest and others. Meanwhile, the variable consists of 2 (two) variables, namely the independent variable (free) Fair Price Valuation of Shares (Share Price) while the variables bound (dependent) are Price to Book Value and Price Earning Ratio. The research method used is a quantitative approach. With the title Comparative Analysis of Fair Price Valuation of Shares Using the Price Book Ratio and Price Earning Ratio Methods Idx30 On the Indonesian Stock Exchange for the 2018 - 2020 period.

a. Price to Book Value (PBV)

PBV or price to book value is a ratio used to assess whether the price of a share of a company is cheap or expensive. This ratio comparison is obtained from the book value of the company. Price to Book Value (PBV) is the result of the share price per share divided by the book value of share capital per share.

Meanwhile, book value itself is the capital controlled by the company. The amount is obtained by subtracting total assets from debt. Later, this book value will be listed in the assets column on the company's balance sheet. Price to book value is a reference for investors in choosing share prices. If the PBV value is less than 1, it can be said that the share price is cheap. But on the other hand, if the value is more than 1, then the share price of that issuer tends to be expensive. The following are the results of the development of the price to book value of companies on IDX 30 listed on the Indonesian Stock Exchange.

Table 2

Development of Price to book value in IDX 30 which are listed on the Indonesian Stock Exchange from 2018 to 2020

Company Code	Price to Book Value		
	2018	2019	2020
ADRO	0,60	0,77	1,01
ANTM	0,96	1,01	2,46
ASII	1,98	1,01	2,46
BBCA	4,46	4,91	4,66
BBNI	1,58	1,21	1,02
BBRI	2,57	2,72	2,64
TLKM	3,50	3,38	2,78

UNTR	8,43	1,36	1,55
UNVR	38,62	46,5	43,2
WSKT	0,84	0,69	0,82
GGRM	3,75	2,15	1,39
HMSP	13,74	7,65	6,11
ICBP	5,56	5,15	2,34
SMGR	2,15	2,16	2,09
BBTN	1,16	0,93	1,04
PTBA	3,32	0,46	1,95
MNCN	0,94	1,95	1,23
KLBF	4,89	30	3,88
PTPP	0,73	0,59	0,81
PGAS	1,04	1,13	0,83
BMRI	1,95	1,78	1,56
BRPT	1,05	3,34	2,31
CPIN	6,50	5,32	4,86
ERAA	1,55	1,18	1,31
INCO	1,16	1,35	168
INDF	1,35	1,34	0,90
INKP	1,15	0,75	0,90
INTP	3,01	3,13	2,38
JPFA	2,61	1,68	1,51
ACES	6,68	5,72	2,20

Source: Processed Data

Based on the table above, it can be seen that the company's price to book value from 2018 to 2020 experienced fluctuations and tended to decrease at the end of the year. This is caused by the large increase in the number of shares outstanding compared to total equity company, this is because loans to banks increased from the previous period.

b. Price Earning Ratio (PER)

Price to Earning Ratio, abbreviated as PER, is a ratio that describes the share price of a company compared to the profit or profits generated by the company (EPS). PER analysis of a company can be done by comparing PER in similar industries. Price to earnings ratio (PER) or the comparison of a company's share price and earnings per share is a ratio that is quite popular among stock investors. This ratio is often used by investors to assess whether a stock is expensive or cheap.

The following are the results of the development of the company's Price Earning Ratio on IDX 30 which is listed on the Indonesian Stock Exchange.

Table 3
Development of Price Earning Ratio in IDX 30 which are listed on the Indonesian Stock Exchange from 2018 to 2020

Company Code	Price Earning Ratio
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	2018	2019	2020
ADRO	6,24	6,48	21
ANTM	21,85	27	42
ASII	14,63	13	13
BBCA	25,72	30	31
BBNI	10,65	9,17	20
BBRI	14,28	16	27
TLKM	19,58	18	15
UNTR	8,43	6,97	14
UNVR	35,57	44	39
WSKT	4,59	13	5,56
GGRM	20,95	11	10
HMSP	33,40	18	19
ICBP	26,23	22	21
SMGR	24,51	41	36
BBTN	8,93	21	12
PTBA	9,45	7,41	14
MNCN	7,47	8,36	9,37
KLBF	29,61	4,71	26
PTPP	9,60	14	5,67
PGAS	14	22	38
BMRI	14,12	1,3	16
BRPT	30,35	5,70	4,57
CPIN	25,59	31	35
ERAA	8,27	26	18
INCO	29,48	11,961	33
INDF	17,40	9,36	9,98
INKP	1,15	9,36	9,98
INTP	61,39	45	36
JPFA	11,31	13	50
ACES	27,48	36	42

Source: Processed Data

Based on the table above, it can be seen that the company's Price Earning Ratio from 2018 to 2020 experienced fluctuations and tended to increase at the end of the year. This is caused by the large increase in the price of shares in circulation compared to the share profits earned by the company.

c. Stock Price

The share price is the price of a share that occurs on the stock market at a certain time which is determined by market players and is determined by the demand and supply of the shares concerned in the

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capital market. Share price means the value of the share itself. Shareholders will receive a return on their capital in the form of dividends and capital gains. The following are the results of the development of liquidity ratios seen from the Price Earning Ratio of companies on IDX 30 listed on the Indonesia Stock Exchange.

Table 4

Development of share prices on IDX 30 listed on the Indonesian Stock Exchange from 2018 to 2020

Company Code	Stock Price		
	2018	2019	2020
ADRO	1.215	1.555	1.430
ANTM	765	840	1.935
ASII	8.225	6.925	6.025
BBCA	5.200	6.685	6.770
BBNI	8.800	7.850	6.175
BBRI	3.660	4.400	4.170
TLKM	3.750	3.970	3.310
UNTR	27.350	21.525	26.600
UNVR	9.080	8.400	7.350
WSKT	1.680	1.485	1.440
GGRM	83.625	53.000	41.000
HMSP	3.170	2.100	1.505
ICBP	10.450	11.150	9.575
SMGR	11.500	12.000	12.425
BBTN	2.540	2.120	1.725
PTBA	4.300	2.660	2.810
MNCN	690	1.630	1.140
KLBF	1.520	1.620	1.480
PTPP	1.805	1.585	1.865
PGAS	2.120	2.170	1.655
BMRI	7.375	7.675	6.325
BRPT	478	1.510	1.100
CPIN	7.225	6.500	6.252
ERAA	440	359	440
INCO	3.260	3.640	5.100
INDF	7.450	7.925	6.850
INKP	11.550	7.700	10.425
INTP	18.450	19.025	14.475
JPFA	2.150	1.535	1.465
ACES	1.490	1.495	1.715

Source: Processed Data

Based on the table above, it can be seen that the price of shares owned by the company from 2018 to 2020 experienced fluctuations and tended to increase at the end of the year. This is caused by the large increase in the price of shares in circulation compared to the share profits earned by the company.

Discussion

a. Normality test

The normality test aims to test whether in the regression model, the confounding variables or residuals are normal or not. This is important because in the regression test all assumed values residual follows a normal distribution. If the normality assumption is not met, statistical test results will degrade (Ghozali, 2012). In this study, the normality test was carried out using the Kolmogorov-Smirnov test with a significance level of 0.05 or 5%.

Table 5
Normality test
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		90
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.86296041
Most Extreme Differences	Absolute	.081
	Positive	.068
	Negative	-.081
Test Statistic		.081
Asymp. Sig. (2-tailed)		.198 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: SPSS Processed Data Version 26, 2022

From the results of test data processing Kolmogorov-Smirnov in table 7 it can be concluded that the data is normally distributed with values Kolmogorov-Smirnov The resulting -Smirnov is 0.198 with a significant value produced greater than 0.05, where the data is normally distributed. Additionally test normality can be seen through the p-p plot graph, which is as follows.

Normal P-P Plot of Regression Standardized Residual

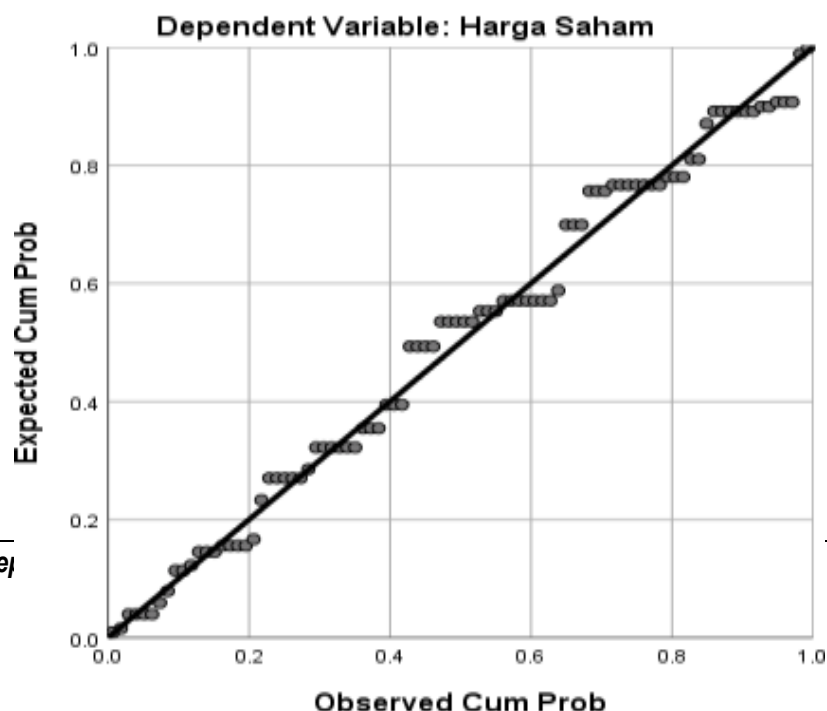


Figure 1 Normality Test Graph

(Source: SPSS Processed Data Version 26, 2022)

From the normality test results graph above, it shows that the plots are still within the scope of the diagonal line of the P-P Plot graph, so you can say data distributed normally.

b. Homogeneity Test

The homogeneity test is a test carried out to determine that two or more groups of sample data come from populations that have the same variance (homogeneous).

The data tested is said to be homogeneous based on its significance value.

- A significance value ($p \geq 0.05$) indicates that the data group comes from a population that has the same variance (homogeneous)
- A significance value ($p < 0.05$) indicates that each group of data comes from a population with a different variance (not homogeneous)

Table 6
Homogeneity Test
Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
PBV	1.757	6	83	.118
PER	1.536	4	85	.199

Source: SPSS Processed Data Version 26, 2022

Based on the table above, it is known that the significant value of the variable is significant *Price to Book Value* (PBV) which is $0.118 > 0.05$, so as the basis for decision making in the homogeneity test is that the variable *Price to Book Value* (PBV) is the same/homogeneous. Meanwhile variables *Price Earning Ratio* (PER) has a homogeneity value of $0.199 > 0.05$, so the basis for decision making in the homogeneity test is the same/homogeneous.

c. Partial Test (t Test)

Table 7
Partial Test Results Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	4.496	1.330		3.382	.001
	PBV	.519	.058	.689	8.971	.000
	PER	.311	.127	.188	2.446	.016

a. Dependent Variable: Stock Price

Source: SPSS Processed Data Version 26, 2022

From table 7 it is known that the t table value is at a significance level of 5% (2-tailed) with: t

$$\text{table} = n - k - 1; \alpha/2$$

$$= 90 - 2 - 1; 0,05/2$$

$$= 87 ; 0,025$$

$$= 1,98761$$

Information:

n : number of samples

k : number of independent variables 1 constant

In accordance with the hypothesis proposed in this research, based on the table above in

detail the following tests were produced:

- a. *Price to Book Value* own t count amounted to 8,971 whereas t table is 1.98761, with a significant value of $0.000 < 0.05$, then H_1 accepted and H_0 rejected, so it can be concluded that partially *Price to Book Value* influence on the Fair Price of Shares on IDX 30 on the Indonesian Stock Exchange for the 2018 - 2020 Period.
- b. *Price Earning Ratio* own t count amounting to 2,445 whereas t table of 1.98761, with a significant value of $0.016 < 0.05$, then H_2 accepted and H_0 rejected, so it can be concluded that partially *Price Earning Ratio* influence on the Fair Price of Shares on IDX 30 on the Indonesian Stock Exchange for the 2018 - 2020 Period.

d. Uji Anova (Uji F)

Table 8
Simultaneous Test Results ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	128.122	2	64.061	84.089	.000 ^b
	Residual	66.278	87	.762		
	Total	194.400	89			

- a. Dependent Variable: Stock Price
- b. Predictors: (Constant), PER, PBV

Source: SPSS Processed Data Version 26, 2022

Hypothesis testing regarding the comparison of the fair price of shares with *Price to Book Value* and *Price Earning Ratio* simultaneously or jointly have a significant effect. Therefore it can be compared that the calculated F value is $84.089 > F$ table is 3.10, so *Price to Book Value* and *Price Earning Ratio* is a method that can calculate the fair price of shares on IDX 30 on the Indonesian Stock Exchange for the 2018 – 2020 period.

CONCLUSION

Based on the results of data analysis and discussion presented in chapter V, several conclusions can be drawn for companies and for future researchers, namely:

1. Based on the research results, a multiple regression equation was obtained in the research.
2. Based on the coefficient of determination test, the comparative value of fair share prices is influenced by the *Price to Book Value* and *Price Earning Ratio* comparison methods.
3. Partial and simultaneous tests show that fair share prices are influenced by the *Price to Book Value* and *Price Earning Ratio* comparison methods, both partial and simultaneous.

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