

The Fair Share Price That Has the Largest Market Capitalization Empirical Studies of Sectors Related to Indonesian National Logistics System Policy

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Abstract: The emitem companies are competing in improving their performance through an offering of stock price progress. Market stock price is the price that occurs in the market at a certain moment determined by market participants. Declining stock price condition indicates the company's position. The decline in investor interest in investment is reflected in the decline in stock prices. This applies also to related companies as well as to national logistics system policies. The objective of this study was to determine the purchase decision, sales decision, and stockholding decision by using an analytical method dividend discounted Model (DDM), price earnings ratio (PER), and price book value (PBV) on companies listed on the national logistics system. Based on the DDM approach, it is known that the average fair stock price is cheaper than the stock market price. This is because the rate of return that is estimated (k) is smaller than the dividend growth (g). If the company gives dividends continues to rise but the stock market price indicates a stable value, then this is not good for the company because it will make the fair value of shares with the method of deviden discounted model get negative results. Based on the PER approach, it is known that the average fair price of shares is more expensive than the stock market price. This is because the measuring instrument above calculates PER by comparing earnings per share. After that the results are multiplied by the expected EPS. Based on PBV approach Average stock fair price > 1, so that the valuation of fair price of shares is worth overvalued. This is because the measuring instrument for calculating the fair value of the stock using the price book value method takes the value of the total equity.

Keywords: Stock price, dividend discounted, price earnings, price book.

JEL Classifications: C58, G13, Q43

INTRODUCTION

Stock prices show the performance of stocks in the stock market, which must be maintained and enhanced, thus becoming an attractive investment target for investors. Aduda *et al.*, [1] state that Financial markets play a fundamental role in the economic development of a country. They are the intermediary link in facilitating the flow of funds from savers to investors. By providing an institutional mechanism for mobilizing domestic savings and efficiently channeling them into productive investments, they lower the cost of capital to investors and accelerate economic growth of the country. Financial intermediation between borrowers and savers is done by commercial banks. This credit market enables debt financing for investments. An alternative method of intermediation is through equity financing. This is only possible through the development of capital markets.

Capital markets, which deal with securities such as stocks and bonds, are associated with financial resource mobilization on a long term basis. By raising capital directly from the public, they lower the cost of capital. Capital markets also allow for wider ownership among the public, thereby distributing risks and wealth amongst smaller investors. For investors, they provide an effective vehicle for making investment choices which suit their own preferences of risk and returns based on available information. As such, capital markets help the economy to generate more savings and productive investments. A basic feature of an efficient capital market is constant liquidity, an easy mechanism for entry and exit by investors. This requires sufficient volume and size of transactions in the market [2].

In Indonesia there are 435 listed companies listed on the Indonesia Stock Exchange. The issuers are competing in improving their performance through offering potentially lucrative stock market prices, which occur in the market at a given moment and determined through market mechanisms. The market value of shares refers to philosophi that high

potential investment will be accompanied by high risk potential also (high risk-return investment) means always linear profit opportunity with opportunity loss.

Stock price valuation that generates intrinsic value information will be compared to the stock price to determine the decision to sell, buy or hold the stock of the company. If the intrinsic value is greater than the current market value, then the stock is considered undervalued, otherwise if the intrinsic value is less than the current market value, then the stock is considered to overvalue and if the share price equals the fair value of the stock is valued as its true value. The stock price of a company can grow and move quickly. Below is the data of share price of Indonesia Stock Exchange for the period of 2006-2016:



Fig-1: Stock Price Index of Indonesia Stock Exchange Year 2006-2016

Based on the phenomenon of data related to the movement of stock prices, also followed by the movement of dividends, price earnings ratio and price ratio to fluctuating intrinsic value, making investors more careful to make investment decisions. Companies engaged in logistics also compete to survive, avoid bankruptcy and even become the best. This phenomenon encourages every company to do various innovations and business strategy.

The decline in investor interest in investment is reflected in the decline in stock market prices. In an effort to regulate and develop Indonesia's logistics system, the Government of Indonesia determined the Presidential Regulation of the Republic of Indonesia Number 26 of 2012 on Blueprint Development of National Logistics System. The real phenomenon of Indonesia's logistics sector can be seen from several indicators released by the World Bank through the Logistics Performance Index (LPI).

The World Bank Survey Logistics Performance Index (LPI) released that in 2007 Indonesia was ranked 43 out of 150 countries, 2010 sharply declined to 75 from 155 countries. The year 2012 has increased to 59th position. This indicates that Indonesia's logistics competitiveness is still under neighboring countries, such as Singapore, Malaysia, Thailand, and even Vietnam that has a relatively similar geographical conditions with the Indonesian archipelago. Indonesia's logistics sector is still unable to provide good support for industrial and economic growth.

Identification of problems in terms of logistics operations resulting in inadequate flow of goods on land, congestion bottlenecks due to road damage, queues at harbors and pedestrian bridges, illegal fees, and others. The impact will lead to high logistics costs, thereby reducing the competitiveness of local entrepreneurs in global markets. The high cost of logistic operation in the sea is lack of port facility, heavy equipment facility, ship size, sea depth, backlink and others.

The development of stock prices will mberdampak on profit or loss. Investors should be able to analyze what factors can affect the stock price so that operational activities can run well. Investors should know whether the stock price shows fair value or not so it can determine the best decision.

LITERATURE

Theory of Investment

According to Paul A. Samuelson and William D. Nordhaus [3] in Wijaya [4], investment is the expenditure of investors on the use of resources such as equipment, buildings, production equipment and machinery or other new equipment that are expected to benefit from investments. Jones [5] defines investment as a commitment to invest some funds in one or more assets for several periods in the future. So Investment is a fund agreement for an object or to some object in the hope of benefiting in the future.

Signalling Theory

The theory of dividend signaling was first created by Bhattacharya [6] in Effendi [7]. In theory this is explained that Information is an important element for investors and business people because information basically presents information, notes or descriptions for the past, present and future for the survival of the company and how its market effects.

According to Brigham [8] in Wijaya [4], the signaling theory explains how investors have the same information as corporate managers about the prospects of a company, but in reality managers often have better information from outside investors. This is called asymmetric information, and can have an important impact on the optimal capital structure. According to Abshor [9] signaling theory is a theory that explains how the acquisition of information is useful to reduce or reduce the risks to be gained.

Stock Price

Stock price is the value of a stock formed in the securities market as a result of supply and demand. The stock price can be defined as the market price. The market price is the most easily determined price because the market price is the stock price in the ongoing market. If the stock market closes, then the market price is the closing price. So it is this market price that states the rise and fall of a stock [10, 11]. Suhardi [12] states that the market price is the market value of each company's stock. Stock price movements are determined by the dynamics of supply and demand. The higher the stock price of a company means the company can get more funds, which can be used to purchase facilities and production equipment.

National Logistics System

In the Blueprint of National Logistics System Development (Perpres No. 26 of 2012) Logistics is defined as part of the supply chain that handles the flow of goods, information and money through procurement, warehousing, transportation), distribution (distribution), and delivery of services (delivery service). The discussion of logistics systems must be comprehensive, including manufacturing and assembly processes, warehousing, distribution, districts / transportation points, transportation terminals, retail sales, goods collection centers, and documents, the destruction and disposal centers of all industrial activities [13].

National logistics system can be defined as a system capable of ensuring the continuity of a process of movement or distribution of goods, materials and finished products from one place to another properly and in accordance with the required number in the national territory scale. Briefly National logistics system is a system that supports the national supply chain management process.

RESEARCH METHODS

Cooper & Schinder [14] menyatakan that explanatory research is research that explains the causal relationship and correlation between variables through hypothesis testing. The method in this study with explanatory research is in penbertujuan to explain the relationship between the variables through hypothesis testing based on field data.

Variable Operational Research

1) Valuation of Dividend Discount Model (DDM)

The assumption of this method is that the stock price calculation model is done by assessing the cash of all cash flows that will be received in the future. The cash flow that investors will receive is in the form of dividends, therefore this method uses dividends for the estimation. In this research using DDM approach with constant growth model.

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

Where,

$$D_1 = D_0 \times (1 + g)$$

$$k = R_f + \beta_i \cdot (R_m - R_f)$$

$$g = ROE \times (1 - DPR)$$

2) Valuation of Price Earning Ratio (PER)

Price earning ratio (PER) PER is the ratio between the stock price and the company's net profit, where the stock price of an issuer is compared to the net profit generated by the issuer in a year.

$$P_0 = \text{PER} \times E_0$$

$$\text{PER} = \frac{\text{Price per Share}}{\text{EPS (Earning per Share)}} \times 100\%$$

Where:

$$E_0 = \text{EPS} \times (1 + g), g = \text{ROE} \times (1 - \text{DPR})$$

3) Valuation of Price to Book Value (PBV)

To find the book price (Book Value) of the stocks studied, then used the formula, Po [15].

$$P_0 = \text{PBV} = \frac{\text{Total Ekuiti}}{\text{Number of shares outstanding}} \times 100\%$$

RESEARCH RESULTS

The existence of a fair stock price with Dividend Discount Model Approach

Valuation of common stock is very important yet a very complex process. The stock requires a deeper analysis compared to preferred stock or debts. The major techniques of valuation of common stock are: (i) Relative valuation models which is based on the earnings power of the firm, the book value and sales. (ii) The discounted cash flow techniques, where the value of stock is estimated based upon the present value of some measure of cash flow including dividends, operating cash flow among others [16]. The outcome of the analyses and comparisons show that some share valuation models paint a more accurate picture of the actual share price of a firm than other. The multiples valuation model in particular gave the closest intrinsic value to market share price than any other valuation model [17].

Stock measured are ordinary shares with the assumption that the stock price calculation model is done by assessing cash from all cash flows to be received in the future. The cash flows that the investor will receive in the form of dividends, therefore this method uses dividends for estimation. In this research using DDM approach with constant growth model. Here is the result of calculation using DDM method.

With share price information, dividend payouts, and earnings for one company over a period of more than 120 years, comparing the actual stock price to the expected price - calculated using some of the most commonly used fundamental valuation methods. Because this method depends on input estimates - such as discount rates and growth rates - we discuss expected price sensitivity with different estimation techniques and relevant assumptions in various economic conditions. During the sample period, it was found that the dividend-based model performed well in explaining the true price; its performance is better than the commonly used profit-based model (such as the Fed Model) [18].

In 2013, there are 2 companies or 8.33% that are directly or indirectly linked to the National Logistics System Policy, which has an undervalued share price so that investors can purchase shares offered by the company. In 2014, has an overvalued stock price so that investors can sell shares offered by the company. By 2015, it has a stock price that is too high so investors can sell shares offered by the company.

By 2016, there is one company or 4.17% having undervalued share price so that investors can buy the shares offered by the company. In 2017, there are 4 companies or 16.67% have undervalued share prices so that investors can buy shares offered by the company. Based on the comparison of fair price of stock and stock market price using DDM, PER and PBV method known that there is difference of analysis, here is the result:

Table-1: Comparison of Fair Prices and Stock Market Prices

No.	Years	Decetion	Metode		
			DDM (Company)	PER (Company)	PBV (Company)
1	2013	<i>Undervalue</i>	2	24	1
		<i>Correctly Value</i>	0	0	0
		<i>Overvalue</i>	22	0	23
2	2014	<i>Undervalue</i>	0	23	2
		<i>Correctly Value</i>	0	0	0

		<i>Overvalue</i>	24	1	22
3	2015	<i>Undervalue</i>	0	21	3
		<i>Correctly Value</i>	0	0	0
		<i>Overvalue</i>	24	3	21
4	2016	<i>Undervalue</i>	1	23	2
		<i>Correctly Value</i>	0	0	0
		<i>Overvalue</i>	23	1	22
5	2017	<i>Undervalue</i>	4	20	6
		<i>Correctly Value</i>	0	0	0
		<i>Overvalue</i>	20	4	18

Source: Data processed (2018)

Based on the results of DDM method analysis, the average fair stock price is cheaper than the stock market price, so the decision is classified as overvalued. This is because companies that distribute high dividends tend to be more attractive. To investors so that stock market prices will continue to increase along with the demand for stock so that the stock market price is more expensive than the fair price.

According to Parahita [19] in Rahma [20] DDM method itself is actually very rarely used because it is difficult to find a company that meets the requirements so that the method can be used. In addition, DDM has a fundamental weakness that is expected to be smaller than growth, then the assessment will provide a negative value. If the expected result equals the growth, then the fair price of the stock becomes unlimited. However, this DDM method is good enough to provide an initial insight for who wants to learn about stock valuations.

In this study in line with the findings of Kodithuwakku [21], that dividends are essential in fair share price exchange. It takes an understanding of the factors that determine the value of dividends, which can also be attributed to the stock price. This study found a positive relationship between specific company-specific factors of dividends per share (DPS), earnings per share (EPS) and net asset value per share (NAVS) and stock prices.

The existence of a fair stock price Price Earning Ratio Approach, PER

Price Earning Ratio (PER) is one of the most basic measures in fundamental stock analysis. Simply put, PER is a comparison between the stock price and the company's net profit, where the stock price of an issuer is compared to the net profit generated by the issuer in a year.

Table-2: Price Earning Ratio, PER

Kode Perusahaan	PER					rata-rata
	2011	2012	2013	2014	2015	
AALI	13.70207	12.67	20.45	14.80	34.50	19.22
ADMF	8.034161	6.97	4.78	9.66	4.80	6.85
AMRT	39.72324	32.21	2.99	32.96	50.68	31.71
ARNA	6.981892	18.97	25.33	24.41	49.45	25.03
ASII	14.03308	13.70	11.60	13.57	14.75	13.53
BBCA	18.14232	18.68	18.20	18.94	18.53	18.50
BMTR	11.8221	16.64	24.49	17.21	61.99	26.43
BSDE	16.93869	13.12	8.53	7.91	14.77	12.25
FAST	20.0002	26.81	24.25	27.56	18.55	23.43
INCO	10.50574	38.48	50.01	16.92	24.76	28.13
INDF	8.049938	10.54	11.23	12.32	9.34	10.29
ITMG	8.735674	11.24	11.39	6.98	7.43	9.15
JSMR	23.18969	24.12	25.98	39.43	27.28	28.00
KLBF	22.42643	30.38	29.23	40.29	29.70	30.40
MEDC	10.22911	92.26	24.25	29.78	(1.08)	31.09
MNCN	15.72696	19.59	20.92	19.35	12.60	17.64
PANS	4.618965	9.61	14.60	9.76	45.57	16.83
PGAS	12.59724	12.72	10.04	15.77	11.77	12.58
PNIN	1.584948	16.35	2.20	1.81	1.75	4.74
SCCO	5.849691	4.91	8.62	5.90	5.02	6.06
SMGR	17.17098	19.08	17.04	17.20	14.50	17.00
TLKM	4.590401	4.96	9.56	12.11	13.07	8.86
UNTR	16.7611	12.54	11.33	13.14	19.09	14.57
WIKA	9.149535	17.75	15.56	30.09	22.89	19.09

Source: Data processed (2018)

The largest average value of 31.71 from AMRT and the lowest average value of 4.74 obtained from PNIN. The highest average value was 3352.44 obtained from ITMG and the lowest average value was -10.45 obtained from MEDC.

Table-3: Dividend Growth Rate

kode perusahaan	G					rata-rata
	2011	2012	2013	2014	2015	
AAI	0.240354	0.223246	0.16399	0.185824	-0.00461	0.162
ADMF	0.141723	0.122007	0.16377	-0.48049	0.075013	0.004
AMRT	0.146379	0.134542	0.144608	0.137102	0.097986	0.132
ARNA	0.141603	0.201679	-0.07282	0.158061	0.082959	0.102
ASII	0.249466	0.220323	0.198892	0.162562	0.109584	0.188
BBCA	0.230986	0.208795	0.185954	0.201538	0.176739	0.201
BMTR	0.096926	0.130632	0.05698	0.052514	-0.00674	0.066
BSDE	0.109882	0.12397	0.195348	0.202013	0.093109	0.145
FAST	0.027332	0.161503	-0.03926	0.077267	0.110955	0.068
INCO	0.133284	0.036441	0.025031	0.095857	0.026502	0.063
INDF	0.121784	0.09769	0.09217	0.086489	0.068078	0.093
ITMG	0.380773	0.236801	0.142248	0.111585	0.001838	0.175
JSMR	0.061348	0.102165	0.052323	0.059634	0.065583	0.068
KLBF	0.127196	-0.41403	0.131014	0.135711	0.109046	0.018
MEDC	0.073214	0.007216	0.026228	0.037156	-0.25915	-0.023
MNCN	0.138369	0.177169	0.18521	0.144516	0.075513	0.144
PANS	0.182839	0.176192	0.156481	0.216562	-0.22614	0.101
PGAS	0.343193	0.255457	0.177503	0.112907	0.052444	0.188
PNIN	0.130312	0.012583	0.087494	0.105744	0.07143	0.082
SCCO	0.175875	0.206091	0.0757	0.131118	0.115238	0.141
SMGR	0.169873	0.16317	0.125912	0.223472	0.111715	0.159
TLKM	0.204964	0.227286	-0.24748	0.16455	0.212251	0.112
UNTR	0.188099	0.157178	0.157135	0.108774	0.066637	0.136
WIKA	0.13453	0.1417	0.150952	0.116424	0.181643	0.145

Source: Data processed (2018)

The largest average value of 0.201 obtained from BBCA and the lowest average value of -0.023 obtained from MEDC.

Analysis carried out using the PER method can be known about the decisions to be taken, namely:

- In 2011 all samples in the study had undervalued stock values.
- In 2012 there are 23 companies that have undervalued stock value and 1 company has an overvalued stock value.
- In 2013 there are 21 companies that have undervalued stock value and 3 companies have overvalued stock value.
- In 2014 there are 23 companies that have undervalued share value and 1 company has an overvalued stock value
- In 2015 there are 20 companies that have undervalued stock value and 4 companies have an overvalued stock value.

The fair share price of the stock is more expensive than the stock market price. This happens because a low PER indicates that the stock price is cheap to buy and the better per-share performance in generating profits for the company. According to Elina [22] Usefulness of PER to see how the market value of company performance is reflected from Earning Per Share. According to Margaretha [23], the price / earnings ratio or often referred to as Price Earning Ratio (PER) is the ratio of market value indicating the amount that investors are willing to pay for each rupiah reported profit.

With this PER value, investors can predict the company's ability to generate future profits. The smaller the value of PER then the cheaper the stock price to be purchased and the better per-share performance in generating profits for the company. This suggests that better per-share performance will ultimately affect investors to buy stocks.

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Analisis harga saham wajar dengan Price to Book Value Approach

According to Hamonangan [24], Price to Book Value, PBV is also considered suitable in the calculation of stock valuations and is a method that is widely used by analysts.

Table-4: Price to Book Value, PBV

Kode perusahaan	PBV					rata-rata
	2011	2012	2013	2014	2015	
AALI	5340.88	5936.22	6508.23	7503.13	7429.00	6543.49
ADMF	4421.37	5035.77	6021.99	4067.57	4360.79	4781.50
AMRT	453.50	861.98	689.74	79.64	116.80	440.33
ARNA	263.26	329.53	104.68	124.26	121.87	188.72
ASII	18733.04	2218.53	2625.91	2972.17	3129.02	5935.73
BBCA	1720.70	2124.83	2594.47	3190.26	3748.83	2675.82
BMTR	760.80	997.05	940.45	1100.66	1077.19	975.23
BSDE	471.92	601.91	697.02	1055.81	1148.08	794.95
FAST	1804.27	2151.80	551.83	598.04	558.82	1132.95
INCO	1614.56	1675.29	2116.88	2234.49	2491.70	2026.59
INDF	3600.08	3888.22	4370.30	4695.49	4911.10	4293.04
ITMG	8552.04	8578.77	10466.62	9890.29	9971.03	9491.75
JSMR	1229.49	1439.38	1598.09	1680.15	1818.92	1553.20
KLBF	641.58	145.17	181.33	209.44	233.35	282.17
MEDC	2361.03	2446.84	3301.83	3434.43	2842.21	2877.27
MNCN	493.58	522.88	542.42	666.23	1115.47	668.11
PANS	1089.94	1323.05	1431.29	1822.84	1459.38	1425.30
PGAS	702.72	931.16	1368.39	1506.84	1683.39	1238.50
PNIN	1970.95	2289.61	3416.61	3901.41	4366.06	3188.93
SCCO	2525.75	3181.41	3441.97	3961.38	4486.37	3519.37
SMGR	2463.97	3062.43	3675.95	4215.18	4626.27	3608.76
TLKM	6049.70	6644.64	853.44	949.35	926.87	3084.80
UNTR	7374.26	8660.31	9557.00	10343.05	10522.49	9291.42
WIKA	368.59	464.46	524.77	810.88	884.36	610.61

Source: Data processed (2018)

Based on table-4 above, it is known that the highest average value is 9491.75 obtained from ITMG and the lowest average value is 188.72 obtained from ARNA.

Table-5: Price Stock Price, Po

Kode perusahaan	PBV					Pt					
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	
AALI	5340.88	5936.22	6508.23	7503.13	7429.00	21700	19700	25100	24250	15102	
ADMF	4421.37	5035.77	6021.99	4067.57	4360.79	12700	9800	8100	7200	3470	
AMRT	453.50	861.98	689.74	79.64	116.80	3950	5250	450	500	580	
ARNA	263.26	329.53	104.68	124.26	121.87	365	1640	820	870	500	
ASII	18733.04	2218.53	2625.91	2972.17	3129.02	74000	7600	6800	7425	6000	
BBCA	1720.70	2124.83	2594.47	3190.26	3748.83	8000	9100	9600	13125	13300	
BMTR	760.80	997.05	940.45	1100.66	1077.19	990	2400	1900	1425	1100	
BSDE	471.92	601.91	697.02	1055.81	1148.08	980	1110	1290	1805	1800	
FAST	1804.27	2151.80	551.83	598.04	558.82	9950	12000	1900	2100	1150	
INCO	1614.56	1675.29	2116.88	2234.49	2491.70	3200	2350	2650	3625	1635	
INDF	3600.08	3888.22	4370.30	4695.49	4911.10	4600	5850	6600	6750	5175	
ITMG	8552.04	8578.77	10466.62	9890.29	9971.03	38650	41550	28500	15375	5725	
JSMR	1229.49	1439.38	1598.09	1680.15	1818.92	4200	5450	4725	7050	5225	
KLBF	641.58	145.17	181.33	209.44	233.35	3400	1060	1250	1830	1320	
MEDC	2361.03	2446.84	3301.83	3434.43	2842.21	2425	1630	2100	3800	795	
MNCN	493.58	522.88	542.42	666.23	1115.47	1310	2500	2625	2540	1855	
PANS	1089.94	1323.05	1431.29	1822.84	1459.38	1290	3200	4000	4975	4100	
PGAS	702.72	931.16	1368.39	1506.84	1683.39	3175	4600	4475	6000	2745	
PNIN	1970.95	2289.61	3416.61	3901.41	4366.06	415	520	670	745	545	
SCCO	2525.75	3181.41	3441.97	3961.38	4486.37	3125	4050	4400	3950	3725	
SMGR	2463.97	3062.43	3675.95	4215.18	4626.27	11450	15850	14150	16200	11400	
TLKM	6049.70	6644.64	853.44	949.35	926.87	7050	9050	2150	2865	3105	
UNTR	7374.26	8660.31	9557.00	10343.05	10522.49	26350	19700	19000	17350	16950	
WIKA	368.59	464.46	524.77	810.88	884.36	610	1480	1580	3680	2640	

Source: Data processed (2018)

Table-6: Fair Stock Price Comparison

Kode perusahaan	Po					Standar 1,0				
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
AAAI	4.1	3.3	3.9	3.2	2.0	>1.0	>1.0	>1.0	>1.0	>1.0
ADMF	2.9	1.9	1.3	1.8	0.8	>1.0	>1.0	>1.0	>1.0	<1.0
AMRT	8.7	6.1	0.7	6.3	5.0	>1.0	>1.0	<1.0	>1.0	>1.0
ARNA	1.4	5.0	7.8	7.0	4.1	>1.0	>1.0	>1.0	>1.0	>1.0
ASII	4.0	3.4	2.6	2.5	1.9	>1.0	>1.0	>1.0	>1.0	>1.0
BBCA	4.6	4.3	3.7	4.1	3.5	>1.0	>1.0	>1.0	>1.0	>1.0
BMTR	1.3	2.4	2.0	1.3	1.0	>1.0	>1.0	>1.0	>1.0	>1.0
BSDE	2.1	1.8	1.9	1.7	1.6	>1.0	>1.0	>1.0	>1.0	>1.0
FAST	5.5	5.6	3.4	3.5	2.1	>1.0	>1.0	>1.0	>1.0	>1.0
INCO	2.0	1.4	1.3	1.6	0.7	>1.0	>1.0	>1.0	>1.0	<1.0
INDF	1.3	1.5	1.5	1.4	1.1	>1.0	>1.0	>1.0	>1.0	>1.0
ITMG	4.5	4.8	2.7	1.6	0.6	>1.0	>1.0	>1.0	>1.0	<1.0
JSMR	3.4	3.8	3.0	4.2	2.9	>1.0	>1.0	>1.0	>1.0	>1.0
KLBF	5.3	7.3	6.9	8.7	5.7	>1.0	>1.0	>1.0	>1.0	>1.0
MEDC	1.1	0.7	0.6	1.1	0.3	>1.0	<1.0	<1.0	>1.0	<1.0
MNCN	2.7	4.8	4.8	3.8	1.7	>1.0	>1.0	>1.0	>1.0	>1.0
PANS	1.2	2.4	2.8	2.7	2.8	>1.0	>1.0	>1.0	>1.0	>1.0
PGAS	4.5	4.9	3.3	4.0	1.6	>1.0	>1.0	>1.0	>1.0	>1.0
PNIN	0.2	0.2	0.2	0.2	0.1	<1.0	<1.0	<1.0	<1.0	<1.0
SCCO	1.2	1.3	1.3	0.9	0.8	>1.0	>1.0	>1.0	<1.0	<1.0
SMGR	4.6	5.2	3.8	3.8	2.5	>1.0	>1.0	>1.0	>1.0	>1.0
TLKM	1.2	1.4	2.5	3.0	3.4	>1.0	>1.0	>1.0	>1.0	>1.0
UNTR	3.6	2.3	2.0	1.7	1.6	>1.0	>1.0	>1.0	>1.0	>1.0
WIKA	1.7	3.2	3.0	4.5	3.0	>1.0	>1.0	>1.0	>1.0	>1.0

Source: Data processed (2018)

Table-7: Valuation of Price Book Value

Kode perusahaan	Hasil				
	2011	2012	2013	2014	2015
AAAI	overvalue	overvalue	overvalue	overvalue	overvalue
ADMF	overvalue	overvalue	overvalue	overvalue	undervalue
AMRT	overvalue	overvalue	undervalue	overvalue	overvalue
ARNA	overvalue	overvalue	overvalue	overvalue	overvalue
ASII	overvalue	overvalue	overvalue	overvalue	overvalue
BBCA	overvalue	overvalue	overvalue	overvalue	overvalue
BMTR	overvalue	overvalue	overvalue	overvalue	overvalue
BSDE	overvalue	overvalue	overvalue	overvalue	overvalue
FAST	overvalue	overvalue	overvalue	overvalue	overvalue
INCO	overvalue	overvalue	overvalue	overvalue	undervalue
INDF	overvalue	overvalue	overvalue	overvalue	overvalue
ITMG	overvalue	overvalue	overvalue	overvalue	undervalue
JSMR	overvalue	overvalue	overvalue	overvalue	overvalue
KLBF	overvalue	overvalue	overvalue	overvalue	overvalue
MEDC	overvalue	undervalue	undervalue	overvalue	undervalue
MNCN	overvalue	overvalue	overvalue	overvalue	overvalue
PANS	overvalue	overvalue	overvalue	overvalue	overvalue
PGAS	overvalue	overvalue	overvalue	overvalue	overvalue
PNIN	undervalue	undervalue	undervalue	undervalue	undervalue
SCCO	overvalue	overvalue	overvalue	undervalue	undervalue
SMGR	overvalue	overvalue	overvalue	overvalue	overvalue
TLKM	overvalue	overvalue	overvalue	overvalue	overvalue
UNTR	overvalue	overvalue	overvalue	overvalue	overvalue
WIKA	overvalue	overvalue	overvalue	overvalue	overvalue

Source: Data processed (2018)

In 2012, 23 companies or 95.83% of companies that are directly or indirectly associated with the National Logistics System policy have overvalued share prices, so investors can sell their shares while 1 company is 4.17% which has undervalued share price so investors can buy shares offered by the company. In 2013, there are 22 companies or 91.67% that have overvalued stock prices, so investors can sell their own shares and 2 companies, or 8.33% have undervalued share price so that investors can buy shares offered by the company. In 2014, there are 22 companies or 91.67% overvalued, so investors can sell their shares and 2 companies or 8.33% have undervalued shares so that investors can buy shares offered by the company.

By 2015, there are 22 companies or 91.67% of companies that are directly or indirectly linked to the National Logistics System policy to rate stock prices too high so investors can sell their shares and 2 of them or 8.33% have undervalued share prices so that investors can buy shares offered by the company. By 2016, there are 18 companies or

75% of companies overvalued in so that investors can sell shares owned and 6 of them or 25% have undervalued share prices so that investors can buy shares offered by the company.

Based on the results of analysis using PBV method known that the average fair price > 1 , this happens because companies that have high PBV tend to be more attractive to investors so that stock market prices will continue to increase along with stock demand is much more expensive than the fair price.

According to Fayana [25] Price Book Value is used because it provides an illustration of how many times investors apply a share based on the book value per share. The book value per share itself is obtained from total equity divided by the number of shares outstanding. There are several advantages of PBV, namely book value is a stable and simple measure that can be compared with market prices. A model will not work well if the stock price is compared with the intrinsic value directly. The stock price model will get erroneous results when the estimated value of the stock price is compared to the intrinsic value directly [26]. It is appreciated that the importance of comparing book prices with market prices for known nilia investments. Many researchers try to explain the dependence between stocks price and intrinsic value of a stock in detail. Their research is based on the theoretical formulations of both terms. common stock, preferred stock, staff share, etc. Research focusing on the relationship between the theoretical price (book price) and market price important not only for academic workers and investors. Results required for different participants in financial markets [27].

Based on the results of analysis using the PBV method, it is possible that the PBV method is so high that the stock price is going to be more attractive to investors. than the fair price. According to Fayana [25] Price Book Value is used because it provides an illustration of how many times a share value based on the book value per share. The book value per share itself is obtained from total equity divided by the outstanding number of shares. There are several advantages of PBV, that is book value is a stable and simple measure that can be compared with market prices. Fair value of petrocompany shares (book value) earned will be compared with market value. The average quarterly market value is calculated by taking the average closing price of the company's stock price. Then the intrinsic value (book value) is calculated against the corresponding market value [28].

CONCLUSIONS

- In the research results, can be found that the average fair price of shares is cheaper than the stock market price. This is because the rate of return that is estimated (k) is smaller than the dividend growth (g). If the company gives dividends continues to rise but the stock market price indicates a stable value, then this is not good for the company because it will make the fair value of shares with the method of deviden discounted model get negative results. If the fair price of the stock is negative or cheaper than the stock market price, the decision will be overvalued (sell). In overvalued conditions, many investors want to sell shares rather than those who want to buy shares because in the condition of overvalued investors will get capital gains.
- In the results of research, more results are found in the valuation of the fair value of shares get undervalued. Is known because the measuring instrument above calculates PER by comparing earnings per share. After that the results are multiplied by the expected EPS. By using the expected EPS then the company will get an overview of the company's performance in getting a profit. A low PER indicates that the firm's stock price is undervalued or cheap so investors can take the decision to buy and better per share performance in generating profits for the company. The better performance per share will affect many investors to buy the stock.
- In the results of the study, it is more found that the valuation of the fair price of shares get overvalued. Based on the results of analysis using PBV method known that the average fair price of stock > 1 , so that the valuation of the fair value of shares is overvalued. This is because the measuring instrument for calculating the fair value of the stock using the price book value method takes the value of the total equity. this happens because companies that have high PBV tend to be more attractive to investors so that stock market prices will continue to rise stock conditions were classified overvalue then investors can take a decision to sell shares in order to gain a profit (capital gain).

RECOMMENDATIONS

- The company to pay more attention to the company's performance as well as the market reaction to the dividend payout. The company must continue to improve its performance in its operational and investment activities, so that the company can continue to distribute dividends. If dividends are distributed, companies should see a market reaction, positive or negative. If it gives a positive reaction, then the next dividend should be increased. If the reaction is negative, the company still has to increase dividend payout with a little more value than before, so in the future, on the increase of this dividend the company gets a positive value in the market.
- The company continues to improve its performance and optimize and streamline costs incurred in the company. With the increased performance of the company as well as optimizing and efficient costs that occur within the company, it will increase profits and will increase confidence in the company. This trust comes from the

performance of companies that can optimize and streamline costs resulting in increased profits. Profit is the most important factor seen by investors, because of the profit that shows how the company's operational activities during the year.

- The company continues to improve its performance and reduce its dividend payout. Since dividend payout will reduce the current year's profit or retained earnings, by decreasing current income or retained earnings the total value of equity will decrease. Because the total component of equity consists of one of which is the current profit and retained earnings. If the firm reduces the dividend distribution, then the total equity will increase resulting in a fair value of the stock price using the price book value method will increase.

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