

Of Intrinsic Value Relative Valuation Techniques: Specific Geographical Review on Listed Companies (Overvalued, Undervalued or Fairvalued) In Indonesia Stock Exchange-30

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Abstract

In making investment investors need to analyze the stock price first before making a decision, in this study Relative valuation technique is used which consists of three approaches, price book value (PBV), Price earning ratio (PER), and Price sales ratio (PSR) for companies that are included in the IDX30 index from 2017 - 2019. After conducting the next analysis, determining the stock position (overvalued, undervalued or fairvalued). Based on these three methods, out of 21 data conducted by the study, only 4 companies were undervalued At Aneka Tambang Tbk, Indah Kiat Pulp & Paper Tbk, Perusahaan Gas Negara Tbk dan Adaro Energy Tbk.

Keywords

PVB, PER, PSR, Stock price

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Introduction

Along with the development of technology and information, people are increasingly aware of the importance of investment as a way to improve welfare and to meet future needs. Currently, there are many choices of investment, with various products and methods that are freely determined according to the character and ability of the investor. In its development, it is now easier to invest in the capital market. After becoming an investor yourself, it is much easier to access information, data, and trades happening on the current exchange. Advances in technology, especially information technology over the past decade, have brought a positive impact on the progress of the investment climate because of the many conveniences it provides. Gradually, Indonesians began to open up to investment in the financial sector, especially the capital market. Until now, although there has been considerable progress in the growth of investors in the capital market. Although it looks easy, but to invest in the capital market, investors should equip themselves with sufficient knowledge. This is an absolute requirement so that investors can get returns from profits consistently. Investing in the capital market, especially as a stock investor, must equip yourself with sufficient knowledge to be able to generate consistent profits. Just like any other investment, investing in the capital market, especially stocks, also has the risk of reducing the investment capital, it could also lead to the loss of the capital being worthless in its entirety. Investing in the capital market is a smart and very interesting way to increase the value of our capital so that we can fight inflation. For information, as of February 16, 2021, the average daily transaction value of the IDX reached IDR 18.89 trillion compared to 2020 which was IDR 9.2 trillion.

Then, the average daily transaction volume also increased, from 11.37 billion shares in 2020 to 21.37 billion shares. Likewise, the average daily frequency increased from 677,430 times to 1.52 million times. From this financial performance, there are several things that are important to be noticed by investors: Revenue growth, earnings per share (EPS) ratio, earnings per share ratio growth ratio, and price to earnings per share ratio (price growth). earnings ratio/PER), the ratio of stock price to the company's profit growth (price earnings growth/PEG ratio), the ratio of stock price to sales (price per sales ratio), the ratio of stock price to book value (price to book value/PBV ratio), debt ratio, net profit margin, return on assets, and return on equity (Yuliani, Sutisna, Oktaviani, & Fatihat, 2020).

The stock price is the price formed on the stock exchange. Generally the stock price is obtained to calculate the value of the stock. The share price is determined based on the law of supply and demand. According to Rahimah, Astuti, and Hamid (2014) the stock price is the price of a share that of the shares concerned in the capital market by market participants and is determined by the demand and supply. One of the investment occurs in the stock market at a certain time determined assessments used to buy shares is to know the position of the stock price, whether it is too expensive or too cheap

Literature Review

Fundamental Analysis

Tandelilin (2010) "Fundamental analysis is an analysis of macroeconomic factors that affect the performance of all companies, then followed by an industry analysis, and finally an analysis of the company that issues the securities is carried out to assess whether the securities issued are profitable. Or detrimental to investors." At this stage by analyzing and comparing the performance of companies in similar industries by comparing using business indicators and financial indicators, several important things that must be considered are: Business performance, management track record, financial performance, and business plans and projections from the company itself. In addition to the top-down analysis approach, you can also use a bottom-up analysis approach, the opposite of top-down analysis, in this bottom-up analysis the analytical framework starts from the company itself. Starting from looking for companies that have good, consistent performance to be owned through their shares

Financial Ratio Analysis

According to Harahap (2009:297), "Financial Ratio is a number obtained from the comparison of one financial statement account with other accounts that have a relevant and significant

relationship." Meanwhile, according to Subramanyam (2014) "Financial ratios are activities to compare the numbers in the financial statements by dividing one number by another." Undervalued is a condition where the required rate of return is greater than the rate of return expected by investors, while overvalued is the rate of return that is lower than the rate of return expected by investors. When the security price reaches an undervalued condition, a rational investor will make a decision to buy shares because they have individual stock returns that are greater than the expected rate of return. Conversely, if the security price reaches an overvalued condition, rational investors will sell the stock because it has an individual rate of return that is smaller than the expected rate of return (Anwar, Kamarudin, Noordin, Hussain, & Mihardjo, 2021).

Price Earning Ratio

According to Eduardus Tandeilin (2017: 387) states that the Price Earnings Ratio (PER) is as follows: "Price Earning Ratio (PER) indicates the number of rupiah of profit that investors are currently willing to pay for their shares. In other words, PER is the price for each rupiah of profit. " The higher the PER value, the smaller the profit earned by each share and the lower the PER value, the greater the profit earned by each share. This PER valuation compares the intrinsic value with the stock price at the close price so that the position of the stock value is obtained. Stock valuation with the PER approach is to make stock price analysis by taking into account the financial performance that is considered to affect the stock value. To calculate the intrinsic value of a stock with PER, it is done by the following formula:

$$PER = \frac{D1 / E1}{k - g}$$

Information :

D1 = Estimate

DPS research year

E1 = Estimated EPS for the year of the study

k = Estimated expected return

g = net profit and expected dividend growth

Price Book Value

Price book value (PBV) is defined as a comparison of the market value of a stock against its own book value so that it can measure the level of stock prices whether overvalued or undervalued (Arya & Zhang, 2009). Assessment with PBV is not based on comparison with the intrinsic value of the stock, but calculated by determining whether the PBV value above or below 1, which means if the PBV value is above 1 indicates that the stock market value is more greater than the book value (overvalued), on the contrary if the PBV is below 1, it means the stock market value is more smaller than its book value (undervalued) (Husnan, 2005). Book value is the value of equity divided by the number of shares outstanding or the value of equity per share.

Price sales ratio

PSR is a ratio used to assess the fair price of shares through sales, To calculate this ratio, the formula for share price divided by sales per share is used. Based on Rosenberg, Weintraus and Hyman (2008) states that at generally companies with PSR below 0.75 is undervalued. This statement is in accordance with which was expressed by Sareewiwatthana and Janin (2017) which stated that selling shares with PSR below 0.75 is too cheap or categorized as undervalued. Second the statement means that the PSR that has a value above 0.75 means it is considered overvalued, but the PBV which has a value below 0.75 means classified as undervalued. So the PSR is formulated as follows:

PSR = Stock price

Methodology Research

Population included in this study are all companies included in the IDX30 index which index listed on the IDX in 2018 - 2020, then selected by Finally, 21 companies have consistently entered the IDX30 index

| No | Code | Company | No | Code | Company |
|----|------|-------------------------------------|----|------|--|
| 1 | ADRO | Adaro Energy Tbk | 12 | INDF | Indofood Sukses Makmur Tbk |
| 2 | ANTM | Aneka Tambang Tbk | 13 | INKP | Indah Kiat Pulp & Paper Tbk |
| 3 | ASII | Astra International Tbk | 14 | INTP | Indocement Tunggul Prakarsa Tbk |
| 4 | BBCA | Bank Central Asia Tbk | 15 | KLBF | Kalbe Farma Tbk |
| 5 | BBNI | Bank Negara Indonesia (Persero) Tbk | 16 | PGAS | Perusahaan Gas Negara Tbk |
| 6 | BBRI | Bank Rakyat Indonesia (Persero) Tbk | 17 | PTBA | Bukit Asam Tbk |
| 7 | BBTN | Bank Tabungan Negara (Persero) Tbk | 18 | SMGR | Semen Indonesia (Persero) Tbk |
| 8 | BMRI | Bank Mandiri (Persero) Tbk | 19 | TLKM | Telekomunikasi Indonesia (Persero) Tbk |
| 9 | GGRM | Gudang Garam Tbk | 20 | UNTR | United Tractors Tbk |
| 10 | HMSP | H.M Sampoerna Tbk | 21 | UNVR | Unilever Indonesia Tbk |
| 11 | ICBP | Indofood Sukses Makmur Tbk | | | |

Source: www.idx.co.id

Data analysis was carried out as follows:

Conducting purposive sampling on the company listed on the IDX30 index on the IDX according to with predetermined criteria

Calculating PER, PBV and PSR values foreach observation period, namely 2018-2020.

PER : stock value > stock price, then stock undervalued

stock value = stock price, then stock in a fair-valued position

stock value < stock price, then stock in an overvalued position

PBV : $PBV > 1$, then the stock is in position overvalued

$PBV = 1$, then the stock is in position fair value

$PBV < 1$, then the stock is in position undervalued

PSR : $PSR > 0.75$ then the stock is in a position overvalued

$PSR = 0.75$ then the stock is in a position fair value

$PSR < 0.75$ then the stock is in a position undervalued

Results and Discussion

To determine the position of the stock against the price the market, in the PER, PBV ans PSR method that must be done is to determine the intrinsic value of the stock. Score intrinsic is the estimated price of the stock on the value ofreal stock. This study aims to determine the value of shares and share value position of sub-sector companies cigarettes (overvalued, fairvalued, or undervalued) using the Price earning ratio assessment method (PER), Price book value (PBV) and Price sales ratio (PSR), and provide investment recommendations to investors in making decisions

the right investment so that you get a good return maximum. As for the stages in estimated shares are as follows:

Table 1. Data for Calculating Price Estimates period 2017 - 2019

| No | Code | 2017 | | | Stock Value |
|----|------|--------|-------|-----------|--------------------|
| | | PER | PBV | PSR | |
| 1 | ADRO | 9,09 | 1,07 | 1,733.05 | <i>Overvalued</i> |
| 2 | ANTM | 110,03 | 0,81 | 766,05 | <i>Undervalued</i> |
| 3 | ASII | 17,80 | 2,15 | 3,455.87 | <i>Overvalued</i> |
| 4 | BBCA | 23,16 | 4,11 | 4,571.69 | <i>Overvalued</i> |
| 5 | BBNI | 13,56 | 1,83 | 4,786.08 | <i>Overvalued</i> |
| 6 | BBRI | 15,48 | 2,68 | 5,951.26 | <i>Overvalued</i> |
| 7 | BBTN | 12,49 | 1,75 | 1,806.47 | <i>Overvalued</i> |
| 8 | BMRI | 18,09 | 2,20 | 6,572.99 | <i>Overvalued</i> |
| 9 | GGRM | 22,32 | 4,04 | 20,562.59 | <i>Overvalued</i> |
| 10 | HMSP | 43.42 | 16.13 | 293.81 | <i>Overvalued</i> |
| 11 | ICBP | 27,34 | 5,11 | 3,172.86 | <i>Overvalued</i> |
| 12 | INDF | 16,06 | 1,43 | 5,004.47 | <i>Overvalued</i> |
| 13 | INKP | 5,71 | 0,71 | 6,924.03 | <i>Undervalued</i> |
| 14 | INTP | 43,45 | 3,29 | 7,100.53 | <i>Overvalued</i> |
| 15 | KLBF | 33,39 | 5,97 | 265,89 | <i>Overvalued</i> |
| 16 | PGAS | 21,87 | 0,98 | 1,757.10 | <i>Undervalued</i> |
| 17 | PTBA | 6,33 | 2,05 | 4,579.77 | <i>Overvalued</i> |
| 18 | SMGR | 29,16 | 1,93 | 5,154.56 | <i>Overvalued</i> |
| 19 | TLKM | 20,21 | 3,99 | 1,047.06 | <i>Overvalued</i> |
| 20 | UNVR | 60,89 | 82,44 | 616,55 | <i>Overvalued</i> |

| No | Code | 2018 | | | Stock Value |
|----|------|-------|-------|-----------|--------------------|
| | | PER | PBV | PSR | |
| 1 | ADRO | 6,24 | 0,60 | 1,733.05 | <i>Undervalued</i> |
| 2 | ANTM | 21,85 | 0,96 | 769,45 | <i>Undervalued</i> |
| 3 | ASII | 14,63 | 1,98 | 3,861.54 | <i>Overvalued</i> |
| 4 | BBCA | 25,72 | 4,46 | 5,329.61 | <i>Overvalued</i> |
| 5 | BBNI | 10,65 | 1,58 | 5,410.75 | <i>Overvalued</i> |
| 6 | BBRI | 14,28 | 2,57 | 1,356.73 | <i>Overvalued</i> |
| 7 | BBTN | 8,93 | 1,16 | 2,045.65 | <i>Overvalued</i> |
| 8 | BMRI | 14,12 | 1,95 | 3,642.99 | <i>Overvalued</i> |
| 9 | GGRM | 20,95 | 3,75 | 21,926.06 | <i>Overvalued</i> |
| 10 | HMSP | 33.40 | 13.74 | 293,27 | <i>Overvalued</i> |
| 11 | ICBP | 26,23 | 5,56 | 1,742.80 | <i>Overvalued</i> |
| 12 | INDF | 17,40 | 1,35 | 5,325.11 | <i>Overvalued</i> |
| 13 | INKP | 6,15 | 1,15 | 7,967.98 | <i>Overvalued</i> |
| 14 | INTP | 82,47 | 3,01 | 6,670.73 | <i>Overvalued</i> |
| 15 | KLBF | 29,61 | 4,89 | 296,41 | <i>Overvalued</i> |
| 16 | PGAS | 11,84 | 1,04 | 1,781.09 | <i>Overvalued</i> |
| 17 | PTBA | 9,45 | 3,32 | 5,989.23 | <i>Overvalued</i> |
| 18 | SMGR | 24,51 | 2,15 | 5,131.75 | <i>Overvalued</i> |
| 19 | TLKM | 19,58 | 3,50 | 1,112.40 | <i>Overvalued</i> |
| 20 | UNVR | 35,57 | 38,62 | 678,03 | <i>Overvalued</i> |

| No | Code | 2019 | | | Stock Value |
|----|------|-------|-------|-----------|--------------------|
| | | PER | PBV | PSR | |
| 1 | ADRO | 7,14 | 0,69 | 2,009.29 | <i>Undervalued</i> |
| 2 | ANTM | 27,56 | 1,21 | 796,59 | <i>Overvalued</i> |
| 3 | ASII | 15,03 | 2,04 | 4,148.13 | <i>Overvalued</i> |
| 4 | BBCA | 27,87 | 4,79 | 5,828.64 | <i>Overvalued</i> |
| 5 | BBNI | 11,16 | 1,52 | 5,918.59 | <i>Overvalued</i> |
| 6 | BBRI | 14,53 | 2,54 | 1,351.32 | <i>Overvalued</i> |
| 7 | BBTN | 9,63 | 1,24 | 2,195.45 | <i>Overvalued</i> |
| 8 | BMRI | 13,76 | 1,86 | 3,963.44 | <i>Overvalued</i> |
| 9 | GGRM | 20,95 | 3,75 | 22,310.67 | <i>Overvalued</i> |
| 10 | HMSP | 34,48 | 14,18 | 270,02 | <i>Overvalued</i> |
| 11 | ICBP | 27,04 | 5,73 | 1,879.91 | <i>Overvalued</i> |
| 12 | INDF | 18,10 | 1,40 | 5,529.77 | <i>Overvalued</i> |
| 13 | INKP | 6,92 | 1,29 | 10,077.34 | <i>Overvalued</i> |
| 14 | INTP | 85,93 | 3,13 | 6,139.16 | <i>Overvalued</i> |
| 15 | KLBF | 31,17 | 5,14 | 311,00 | <i>Overvalued</i> |
| 16 | PGAS | 14,35 | 1,26 | 2,041.94 | <i>Overvalued</i> |
| 17 | PTBA | 9,48 | 3,33 | 6,476.16 | <i>Overvalued</i> |
| 18 | SMGR | 27,01 | 2,37 | 5,342.28 | <i>Overvalued</i> |
| 19 | TLKM | 20,36 | 3,63 | 1,054.43 | <i>Overvalued</i> |
| 20 | UNVR | 41,88 | 50,34 | 993,20 | <i>Overvalued</i> |

Investment decision making is the last step investors take after conduct an assessment of the company's shares which is considered worthy to be used as a place invest, in this case the shares. Based on calculation of shares Tbk using the PER and PBV and PSR obtained the following results Recommended investment decisions to investors based on the condition of the shares for the past three years from company. At Aneka Tambang Tbk, Indah Kiat Pulp & Paper Tbk, Perusahaan Gas Negara Tbk dan Adaro Energy Tbk. because investors can buy company shares with a lower price than it should be, so it is hoped that investors can get maximum capital gains and dividends. In determining the value and position of shares with using the relative valuation method in this study only based on the company's internal conditions obtained from the annual memory report companies that have been audited during the period observation. Therefore, so that the results of the analysis related to determining the value and position of shares can be provide more accurate results, candidates should investors also pay attention to external factors the company in detail analyzes the effect the company's external conditions on performance company.

Table 2.Data for Calculating Price Estimates period 2017 – 2019

| Company | stock condition | <u>Investation Decision</u> |
|---------|--------------------|-----------------------------|
| ADRO | <i>Undervalued</i> | Buy |
| ANTM | <i>Undervalued</i> | Buy |
| INKP | <i>Undervalued</i> | Buy |
| PGAS | <i>Undervalued</i> | Buy |

Conclusions and Suggestions

Of the 21 companies sampled in this study, there are 4 undervalued stocks and eight overvalued stocks. By knowing individual stock valuations, investors can make investment decisions, by buying undervalued stocks and selling overvalued stocks. Before making investment decisions, investors must understand the importance of the calculation method in determining the right investment decision, whether the stock is undervalued and overvalued, so as not to make mistakes in determining stock investment decisions. Before investing in stocks, investors must also pay attention to factors that affect stock prices, such as changes in interest rates, inflation, exchange rate fluctuations, company performance, global and domestic economic conditions, and others.

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