FUNDAMENTAL ANALYSIS IN ASSESSING THE FAIRNESS OF STOCK PRICE AND INVESTMENT DECISIONS IN THE CAPITAL MARKET USING THE APPROACH OF PRICE EARNING RATIO

(Study on the Company's Property Sector, Real Estate, and Building Construction)

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Abstract- The study aims to determine and analyze a stock price at the time of the 1st quarter closing is a reasonable share price, and determine what decisions will be made afterwards. In this research is quantitative descriptive research with the approach method of Price Earning Ratio (PER). This research examines the company's business sector, real estate, and building construction listed on the Indonesia stock exchange that has been on the exchange in the period of 2014-2018. The data source used is secondary data. The sampling techniques in this study used purposive sampling techniques, with the specified criteria obtained by 18 companies that were used as samples. The results of this study showed that 13 stock prices of companies were in overvalued position is ACST, ADHI, BEST, LPKR, MTIA, NRCA, PTPP, PWON, RDTX, SMRA, SSIA, TOTL, WIKA, and decided to sell the shares. As for the 5 stock prices The other company is at an undervalued position is CTRA, GPRA, JKON, JRPT, MKPI and takes a buying decision.

Keywords- Stock Price, Investment Decision, PER Method

I. INTRODUCTION

A. Background

Savings and deposits are a form of investment, in which case savings and deposits are deemed to be able to provide income for investors. Investment is an activity spending some money that we have to replace the money with assets that aim to get return or profit in the future [4]. Investments have a type of media that can be used to invest such as, savings, property investments, stock investments, investment bonds (Treasury) and others. There are 2 types of savings that can be done by such communities, conventional savings, and deposits savings. There are two advantages that can be obtained from investing in capital markets namely, capital gains and dividend. Capital gains are the difference between the purchase price and the selling price, while the dividend is the net profit share given by the company to the shareholders and derived from the profit generated by the company [2].

In this study, researchers will use the fundamental analysis of the financial ratios on a company listed on the stock exchanges in the property, real estate, and building construction sectors, with the price earning ratio (PER) approach method. The result of this research is very helpful for prospective investors to take an investment decision which company capital market will be purchased in a reasonable and inexpensive condition. As for the investors who have invested capital or invest in the market, they can know the right time to release its shares when the price is already high or expensive. The method used is also very easy to apply in the calculation of the fairness of the stock price and is highly recommended for use. Based on the background outlined above, the author wants to do the research with the title: "Fundamental Analysis in assessing the fairness of stock price and investment decision in the capital market using the method approach Price Earning Ratio". In this case the author will use descriptive research with a quantitative data approach.

B. Formulation Of The Problem

Based on the background above, the author formulates the problem as follows:

- Is the stock price of a company listed on the secondary market on March 29, 2019 a reasonable share price?
- What are the recommendations of investment decisions that should be taken by existing investors and investors from the stock price of companies listed on the secondary market on March 29, 2019

C. Research Purposes

The purpose of this research is:
• To find out if the price recorded in the secondary market at the time of closure in 2018 is a reasonable price.
• To know the decision that should be taken based on the price recorded in the secondary market at the time of closure in the year 2018 with the calculation of stock price fairness.

D. Significance of Research
The benefits of this research are:
1. Practical Benefits:
   • Be a reference for related companies to consider the financial performance of the company to attract the attention of investors.
   • Provide input to investors/prospective investors in assessing the fairness of the stock price of the company, so it can help the investors/prospective investors to make a decision in investing with the analysis considering Fundamental. Assisting authors in developing the knowledge decision making investing. As well as increasing knowledge and understanding in investing in the future, there are several factors affecting the stock price of a company itself.
2. Theoretical Benefit:
   Assisting authors in developing the knowledge decision making investing. As well as increasing knowledge and understanding in investing in the future, there are several factors affecting the stock price of a company itself.

II LITERATURE REVIEW
A. Capital Market
Capital Market (Capital Market) is a market for a variety of long-term financial instruments that can be sold. Capital Market is a funding platform for companies and other institutions and as a means for investment activities [1]. Thus, the capital market provides facilities as a means and infrastructures of buying and selling activities and other related activities. Financial instruments traded on capital markets are long-term instruments.

B. Stock
According to Tandelilin [7], the stock is interpreted as a letter stating the proof of ownership of the company's assets that have issued shares.

C. Stock Price Assessment
• According to Simatupang [5], the fair value of the shares is the value given by the investor or the capital market against any stock traded on the stock exchange with the guidelines in every industry of the company. In conducting an analysis the valuation of a stock can be done with two different methods of its characteristics. The two methods mentioned are: Technical analysis of technical analysis is a method used to estimate stocks by observing changes or price movements over time ago [3].
• Fundamental analysis fundamental analysis can be said as an investment instrument that has a strong foundation or intrinsic value that can be assessed how the current and future conditions will have a good impact [3].

D. Intrinsic value and market value
Intrinsic value is a value that shows the original price of the company, while the market value is a value resulting from various calculations on the demand and supply made in the capital market Own.

1. Analysis of Financial Ratios
   Profitability Ratio
   • Return On Equity (ROE)
     \[
     \text{Return on equity} = \frac{\text{Net Profit After Tax}}{\text{Stockholders Equity}}
     \]
   • Dividend Per Share (DPS)
     \[
     \text{DPS} = \frac{\text{Dividend Paid}}{\text{Number Of Share of Common Stock Outstanding}}
     \]

2. Value Market Ratio
   According to Kodrat & Indonanjaya [3], this ratio measures prices.
   • Earning Per Share (EPS)
     \[
     \text{EPS} = \frac{\text{Earning After Tax}}{\text{Number Of Share of Common Stock Outstanding}}
     \]
   • Dividend Payout Ratio (DPR)
     \[
     \text{DPR} = \frac{\text{DPS}}{\text{EPS}}
     \]

3. Approach Price Earning Ratio (PER)
   Expected level of growth
   \[
   g = \text{ROE} \times (1 - \text{DPR})
   \]
   • EPS Estimation
     \[
     \text{EPS}_{t+1} = \text{ROE} \times (1 + \text{DPR})
     \]
   • DPS Estimation
     \[
     \text{DPS}_{t+1} = \text{DPS} \times (1 + g_{\text{max} - \text{rate}})
     \]
   • Calculating the implied return
     \[
     \text{PER} = \frac{\text{D}_t / E_t}{k - g}
     \]
   • Calculating PER estimation
     \[
     k = \frac{\text{DPS}_{t+1}}{\text{PO}} + g
     \]
   • Determine the intrinsic value of shares
     \[
     \text{Nilai Intrasik} k = \text{Estimasi EPS} \times \text{PER}
     \]

E. Investment decision
Calculation results using a price earning ratio (PER) approach will be used as a consideration of the current price listed on the Indonesia Stock Exchange. With the following description:

1. If intrinsic value (NI) > The price of stock listed on the current stock exchange is considered too cheap (undervalued), and the decision to be taken is to buy the stock or withhold when it already has a stock The.
2. When the intrinsic value (NI) < of the stock price listed on the current stock exchange is valued too expensive (overvalued), and the decision to be taken is to sell the stock.
3. If the intrinsic value (NI) = The price of the stock listed on the current stock exchange, the stock price is reasonable (correctly valued), and the decision to be taken is not to buy the stock or do not sell if it already has a stock The.

III METHOD OF RESEARCH

A. Types of Research

In this study used descriptive research in which the research has a purpose for developing existing and real concepts and not conducting hypotheses. The approach that is also done in this research is a quantitative approach; it’s called quantitative method because of research data in the form of numbers and analysis [6]. So in this study will analyze a fairness of the stock price with a price earning ratio (PER) approach.

B. The focus of Research

Scope research is a limitation that facilitates the implementation of research to be more effective and efficient in separating certain aspects of an object. The scope of this research is the company’s sector of property, real estate, and construction of the building services listed in the composite stock price Index (IDX) Indonesia Stock Exchange (IDX).

C. Population and Samples

Populations in this study are the entire service sector of property, real estate, and building construction with total population are 73 companies. The sampling technique used is a technique of non-profitability sampling i.e. purposive sampling where determines the sampling by weighing certain criteria among others, the company that provides regular dividend for the last 4 years, and companies that have been listed on the Indonesia’s stock Exchange or initial public offering (IPO) at least 4 last year. There are 18 companies that comply with these criteria that will be used as sample of the research, they are: PT. Acset indonusa Tbk (ACST), PT. Adhi karya (Persero) Tbk (ADHI), PT. Bekasi Fajar Industrial Estate (BEST), PT. Ciputra Development Tbk (CTRA), PT. Perdana Gapuraprima Tbk (GPRA), PT. Jaya Konstruksi Manggala Prata (JKON), PT. Jaya Real Propety Tbk. (JPRT), PT. Lippo Karawaci Tbk (LPKR), PT. Metropolitan Ktjana Tbk (MKPI), PT. Metropolitan Land Tbk (MLLA), PT Nusa Raya Cipta Tbk (NRCA), PT PP Persero Tbk (PTPP), PT. Pakuwon Jati Tbk. (PWON), PT. Roda Vivatex Tbk (RDTX), PT. Summarecon Agung Tbk (SMRA), PT. Surya Semesta Internusa Tbk (SSIA), Total Bangun Perasada Tbk (TOTL), and Wijaya Karya (Persero) Tbk (WIKA).

D. Type and source of Data

Types and sources data used in this study are secondary data. Data collection techniques on this research are documentation. Documentation is a collection of documents that can provide information or evidence relating to the process of systematic collection and management of documents. The documentation conducted by researchers in this research is to compile the archive data obtained from the Indonesia’s Stock Exchange (IDX). Data analysis method is used to analyze the data that has been collected using analysis of Price Earning Ratio (PER) method with the following description:

1. Fairness assessment of stock price to assess the fairness of the stock price needs to be calculated to calculate some of the necessary criteria:
   - Description of the development of the company's performance report.
   - Description of the development ratio of profitability and ratio to market value is by calculating ROE, EPS, DPS, and DPR
   - Finally, the PER approach is carried out
2. Investment decision
   - After determining the intrinsic value then compared to the stock price listed on the Indonesia’s stock exchange at this time (overvalued, undervalued, correctly valued).
   - Decision making will be made (buy, hold, Mansell).

IV RESULTS AND DISCUSSION

Results of research will discuss the acquisition of secondary data, the analysis of fundamental analyses and the comparison between intrinsic value and stock price.

A. The development of annual financial report of each company period 2014-2018.

| Emitter Code | EARNING AFTER TAX (IN MILLION RUPIAH) |
|--------------|---------------------------------------|
| ACST         | 103,799 45,386 64,360 149,702 8,101 |
| ADHI         | 326,616 87,754 404,857 524,539 513,258 |
| BEST         | 391,353 214,155 337,312 481,720 420,291 |
| CTRA         | 1,794,143 1,753,690 1,143,006 966,452 1,326,395 |
| GPRA         | 91,601 76,023 53,737 35,701 52,979 |
| JKON         | 216,246 247,654 329,681 301,167 273,977 |
| JRPT         | 727,884 869,777 1,014,232 1,114,019 1,054,538 |
| LPKR         | 2,999,884 616,914 1,636,156 1,858,325 (1,053,510) |
| MKPI         | 457,464 894,443 1,191,768 1,186,587 1,029,941 |
| MTLA         | 309,217 238,637 309,280 537,522 511,352 |
| NRCA         | 277,872 191,227 94,470 134,454 103,056 |
| PTPP         | 532,065 2,037,652 1,277,066 1,808,446 2,116,609 |
| PWON         | 2,597,079 1,408,606 1,776,412 2,002,490 2,851,349 |
| RDTX         | 232,634 260,638 258,948 248,247 269,785 |
| SMRA         | 1,385,717 1,086,441 595,879 509,452 707,802 |
| SSIA         | 512,571 368,666 800,051 1,212,376 74,612 |
| TGL          | 163,751 184,765 210,411 220,939 241,512 |
| WIKA         | 750,796 709,311 1,128,809 1,308,466 2,213,543 |

Source: Financial Statement www.rto.co.id
### TABLE II. STOCKHOLDERS (IN MILLION RUPIAH)

| Emiten Code | Stockholders (In Million Rupiah) |
|-------------|----------------------------------|
| ACST        | 647,336                          |
| ADHI        | 1,751,543                        |
| BEST        | 2,849,501                        |
| CTRA        | 11,421,377                       |
| GPR A       | 889,966                          |
| JKON        | 1,763,393                        |
| JRPT        | 3,208,343                        |
| LPKR        | 17,646,444                       |
| MKPI        | 2,161,693                        |
| MTLA        | 2,037,136                        |
| NRCA        | 999,933                          |
| PTTP        | 2,390,270                        |
| PWON        | 8,283,071                        |
| RDTD        | 1,351,775                        |
| SMRA        | 5,992,636                        |
| SSIA        | 3,038,873                        |
| TOTL        | 799,235                          |
| Wika        | 4,978,758                        |

Source: Financial Statement www.rti.co.id

### TABLE III. DIVIDEND PAID (IN MILLION RUPIAH)

| Emiten Code | Dividend Paid (In Million Rupiah) |
|-------------|-----------------------------------|
| ACST        | 19,750                            |
| ADHI        | 121,795                           |
| BEST        | 21,954                            |
| CTRA        | 431,557                           |
| GPR A       | 8,553                             |
| JKON        | 68,495                            |
| JRPT        | 177,748                           |
| LPKR        | 349,228                           |
| MKPI        | 194,379                           |
| MTLA        | 49,265                            |
| NRCA        | 69,440                            |
| PTTP        | 126,203                           |
| PWON        | 236,379                           |
| RDTD        | 28,119                            |
| SMRA        | 331,353                           |
| SSIA        | 140,092                           |
| TOTL        | 119,350                           |
| Wika        | 170,982                           |

Source: Financial Statement www.rti.co.id

### TABLE IV. NUMBER OF SHARE OF COMMON STOCK OUTSTANDING

| Emiten Code | Number Of Share of Common Stock Outstanding |
|-------------|---------------------------------------------|
| ACST        | 500,000.0                                   |
| ADHI        | 1,801,320                                     |

Source: Financial Statement www.rti.co.id

### TABLE V. CLOSED PRICE 2018

| Emiten Code | Closed Price 2018 |
|-------------|--------------------|
| ACST        | 1,555              |
| ADHI        | 1,858              |
| BEST        | 208                |
| CTRA        | 1,010              |
| GPR A       | 110                |
| JKON        | 364                |
| JRPT        | 740                |
| LPKR        | 254                |
| MKPI        | 22,500             |
| MTLA        | 448                |
| NRCA        | 386                |
| PTTP        | 1,805              |
| PWON        | 620                |
| RDTD        | 5,500              |
| SMRA        | 805                |
| SSIA        | 500                |
| TOTL        | 560                |
| Wika        | 1,655              |

Source: www.idx.co.id

### TABLE VI. DEVELOPMENT OF FUNDAMENTAL VARIABLES (ROE)

| Emiten Code | ROE                          |
|-------------|------------------------------|
| ACST        | 16.03%                       |
| ADHI        | 18.65%                       |
| BEST        | 13.73%                       |
| CTRA        | 15.71%                       |

Source: www.idx.co.id
### TABLE VII. DEVELOPMENT OF FUNDAMENTAL VARIABLES (EPS)

| Emiten Code | ROE | Dividend Payout Ratio |
|-------------|-----|-----------------------|
| ACST        | 3.28 | 0.23 |
| ADHI        | 2.02 | 0.18 |
| BEST        | 2.46 | 0.20 |
| CTRA        | 0.87 | 0.07 |
| GPRA        | 1.28 | 0.10 |
| JGON        | 2.42 | 0.18 |
| JRPT        | 2.67 | 0.21 |
| LPKR        | 2.54 | 0.18 |
| MRDA        | 2.56 | 0.18 |
| NRC          | 2.55 | 0.18 |
| PTTP        | 2.52 | 0.18 |
| PWON        | 2.50 | 0.18 |
| RDTX        | 2.50 | 0.18 |
| SMRA        | 2.50 | 0.18 |
| TOTL        | 2.50 | 0.18 |

Source: www.rti.co.id (Data processed, 2019)

### TABLE VIII. DEVELOPMENT OF FUNDAMENTAL VARIABLES (DPS)

| Emiten Code | Dividend Payout Ratio |
|-------------|-----------------------|
| ACST        | 2014: 1.28 | 2015: 1.29 | 2016: 1.30 | 2017: 1.31 |
| ADHI        | 2014: 2.02 | 2015: 2.03 | 2016: 2.04 | 2017: 2.05 |
| BEST        | 2014: 3.42 | 2015: 3.43 | 2016: 3.44 | 2017: 3.45 |
| CTRA        | 2014: 4.43 | 2015: 4.44 | 2016: 4.45 | 2017: 4.46 |
| GPRA        | 2014: 5.62 | 2015: 5.63 | 2016: 5.64 | 2017: 5.65 |
| JGON        | 2014: 6.15 | 2015: 6.16 | 2016: 6.17 | 2017: 6.18 |
| JRPT        | 2014: 7.45 | 2015: 7.46 | 2016: 7.47 | 2017: 7.48 |
| LPKR        | 2014: 8.44 | 2015: 8.45 | 2016: 8.46 | 2017: 8.47 |
| MRDA        | 2014: 9.43 | 2015: 9.44 | 2016: 9.45 | 2017: 9.46 |
| NRC         | 2014: 10.55 | 2015: 10.56 | 2016: 10.57 | 2017: 10.58 |
| PTTP        | 2014: 11.50 | 2015: 11.51 | 2016: 11.52 | 2017: 11.53 |
| PWON        | 2014: 12.50 | 2015: 12.51 | 2016: 12.52 | 2017: 12.53 |
| RDTX        | 2014: 13.50 | 2015: 13.51 | 2016: 13.52 | 2017: 13.53 |
| SMRA        | 2014: 14.50 | 2015: 14.51 | 2016: 14.52 | 2017: 14.53 |
| TOTL        | 2014: 15.50 | 2015: 15.51 | 2016: 15.52 | 2017: 15.53 |

Source: www.rti.co.id (Data processed, 2019)

C. Price Earning Ratio Approach Method (PER)

1. ACST
   - DPS Year 2019 (Rp): 60.91
   - EPS Year 2019 (Rp): 12.15
   - Value Intrinsic: 1,553.86

2. ADHI
   - DPS Year 2019 (Rp): 31.67
   - EPS Year 2019 (Rp): 157.70
   - Value Intrinsic: 1,583.31

3. BEST
   - DPS Year 2019 (Rp): 10.97
   - EPS Year 2019 (Rp): 47.78
   - Value Intrinsic: 1,100.48

4. CTRA
   - DPS Year 2019 (Rp): 11.52
   - EPS Year 2019 (Rp): 77.61
   - Value Intrinsic: 208.32

5. GPRA
   - DPS Year 2019 (Rp): 1.05
   - EPS Year 2019 (Rp): 0.0547
   - Value Intrinsic: 0.0642

Source: www.rti.co.id (Data processed, 2019)
| Emiten | Code | Value Intrinsic | Stock Price | Information |
|--------|------|----------------|-------------|-------------|
| ACST   | Rp 1,553.86 | Rp 1,575.00 | Overvalued |
| ADHI   | Rp 1,583.31 | Rp 1,645.00 | Overvalued |
| BST    | Rp 208.32 | Rp 240.00 | Overvalued |
| CTRA   | Rp 1010.48 | Rp 1,000.00 | Undervalued |
| GPRA   | Rp 110.57 | Rp 100.00 | Undervalued |
| JKON   | Rp 364.70 | Rp 316.00 | Undervalued |
| JRPT   | Rp 364.70 | Rp 316.00 | Undervalued |
| LPKR   | Rp 254.62 | Rp 288.00 | Overvalued |
| MKPI   | Rp 22,449.40 | Rp 16,200.00 | Undervalued |
| MTLA   | Rp 447.32 | Rp 450.00 | Overvalued |
| NRCA   | Rp 42.41 | Rp 44.75 | Undervalued |
| PTPP   | Rp 400.55 | Rp 420.00 | Overvalued |
| PWON   | Rp 618.25 | Rp 630.00 | Overvalued |
| RDTX   | Rp 1,802.48 | Rp 2,150.00 | Overvalued |
| SMRA   | Rp 5.46 | Rp 9.56 | Overvalued |
| SSIA   | Rp 29.69 | Rp 31.50 | Overvalued |
| TOTL   | Rp 29.69 | Rp 31.50 | Overvalued |
| WIKA   | Rp 29.69 | Rp 31.50 | Overvalued |
| Source: Data processed, 2019 |

Based on table 10 above is known results of comparison between intrinsic value calculation result with the approach method and the share price closing of the first quarter 2019 on March 29, 2019 and it is known that:
1. The company's overvalued shares have 13 companies including ACST, ADHI, BEST, LPKR, MTLA, NRCA, PTTP, PWON, RDTX, SMRA, SSIA, TOTL, WIKA. Because the current stock price is above intrinsic value.

2. The company's undervalued shares are 5 companies including CTRA, GPRA, JKON, JRPT, MKPI. Because the current stock price is below intrinsic value.

E. Investment Decision

| Emiten Code | State of Share Prices | Investment Decision |
|-------------|------------------------|---------------------|
|             |                        | Existing Investor   |
|             |                        | Sell                |
|             |                        | Hold                |
|             |                        | Prospective Investor|
|             |                        | Sell                |
|             |                        | Hold                |

| ACST        | Overvalued             | Sell                |
|-------------|------------------------|---------------------|
|             |                        | Hold                |
| ADHI        | Overvalued             | Sell                |
|             |                        | Hold                |
| BEST        | Overvalued             | Sell                |
|             |                        | Hold                |
| CTRA        | Undervalued            | Hold                |
|             |                        | Buy                 |
| GPRA        | Undervalued            | Hold                |
|             |                        | Buy                 |
| JKON        | Undervalued            | Hold                |
|             |                        | Buy                 |
| JRPT        | Undervalued            | Sell                |
|             |                        | Hold                |
| LPKR        | Overvalued             | Sell                |
|             |                        | Hold                |
| MKPI        | Undervalued            | Hold                |
|             |                        | Buy                 |
| MTLA        | Overvalued             | Sell                |
|             |                        | Hold                |
| NRCA        | Overvalued             | Sell                |
|             |                        | Hold                |
| PTPP        | Overvalued             | Sell                |
|             |                        | Hold                |
| PWON        | Overvalued             | Sell                |
|             |                        | Hold                |
| RDTX        | Overvalued             | Sell                |
|             |                        | Hold                |
| SMRA        | Overvalued             | Sell                |
|             |                        | Hold                |
| SSIA        | Overvalued             | Sell                |
|             |                        | Hold                |
| TOTL        | Overvalued             | Sell                |
|             |                        | Hold                |
| WIKA        | Overvalued             | Sell                |
|             |                        | Hold                |

Source: Data processed, 2019

Based on table XI above we can conclude that, there are 13 companies that are in the condition overvalued then the decisions we will take are selling such as ACST, ADHI, BEST, LPKR, MTLA, NRCA, RDTX, SMRA, SSIA, TOTL, PTTP, PWON, and WIKA. For companies in undervalued conditions, there are 5 companies, namely CTRA, GPRA, JKON, JRPT, and MKPI.

Companies that are experiencing overvalued conditions are taken investment decisions for selling to investors who already own the shares, but for those investors who do not yet have advised not to make a purchase until the price is already on a reasonable position. For companies whose share conditions are undervalued, then the investment decision making is made to be bought by prospective investors and for the investors who already have advised to withhold.

B. Recommendations

The advice that can be given based on the results of the study obtained is as follows:

1. For state conditions the company that is in the overvalued position is carried out investment decision to sell the stock and for the prospective investor not to make the purchase.
2. For state condition, the company that is in the position of undervalued investment decision to buy shares.
3. In addition to the intrinsic assessment in the purchase of stock prices, it is necessary to do some analysis such as the company's economic analysis of the company, national economic analyses on the property sector, real estate, and building construction, and technical analysis of the company's stock graphs to strengthen investment decisions.

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