The Strategy of Investment Decision Making on Fundamental Analysis

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Abstract:

The objective this study is to empirically test the fundamental analysis whether it can be used as a strategy in making investment decisions in the capital market. The method of this study is using secondary data. The analysis is done fundamentally and compares the intrinsic vale through the Price Earning Ratio approach to market value on close price. The results of this study show that the condition of the sectoral company stock index is in the "overvalued" category based on fundamental analysis, because intrinsic value is lower than market value, that mean investors should not make transactions or "no buy" in 2018 year.

Index Terms: instrinsic, market value and price earnig ratio

I. INTRODUCTION

Shares are very closely related to business activities, by issuing shares of the company, it can become a long-term funding source. In addition, shares can also be used as an instrument to invest. Shares are a sign of participation or ownership of a person or entity in a company or limited liability company. Fahmi (2012) stated that stocks are one of the most sought after capital market instruments by investors, because they are able to provide attractive returns.

The number of retail investors entering the capital market has reached 838,000 new investors in 2017, the first month; 536,000 investors in 2016 and 432,000 investors in 2015, based on the Indonesian Stock Exchange records (http://market.bisnis.com). In addition the Indeks Harga Saham Gabungan (IHSG) in 2017 is assumed to grow by 5% - 10% for the Earning Per Share (EPS) ratio and by 18-19 times for the growth of the Price Earning Ratio (PER) or at 5,700 levels, worth 6,000 points, which translates being in a "moderate" position.

The existence of various changing conditions, investors must be able to consider and evaluate a stock, given the high risk involved in investing. Not all shares listed on the Stock Exchange can

provide maximum results when conducting transactions. Analysis needed to be done in minimizing existing risks before it is decided to be bought, sold or hold shares. One method that is often used to analyze the fairness of stock prices is fundamental analysis using the Price Earning Ratio (PER) approach.

Price earnings ratio (PER) is a comparison between stock prices and earnings per share (earnings pershare) of the company (Fahmi, 2012). This approach uses the value of earnings per share to estimate intrinsic value. According to Tandelilin (2010), the PER approach is also called a multiplier approach, investors will calculate the number of times (multiplier) the value of earnings reflected in the price of a stock. The higher the PER value, the smaller the profit per share and the lower the PER value, the greater the profit per share. This valuation with PER compares the intrinsic value with the stock price when close price so that the value of the stock position is obtained.

Stock valuation of PER approach is to make an analysis of stock prices by taking into account financial performance that is considered to affect the value of shares. Fairness of stock prices can be assessed by comparing the intrinsic value or the actual value of the stock price in the market so that the stock price can be known as overvalued, undervalued, or correctly valued.

The development of sectoral indices over the past 3 years can be considered quite good, except for Agriculture sector companies in the period of Week 4 of April 2017 which has less value compared to 2016, which is 1,864,249 to 1,839,381. This is also evidenced by the development of the index and market capitalization which experienced an increase in the JCI, over a period of 7 years, from the period of 2011 to 2017. However, it has a different performance within 1 day, 3 months, 6 months or 1 year. So that an analysis is needed to minimize the existing risks before it is decided to buy, sell or hold shares before making a stock transaction in the capital market.

In order for the investment decisions made by investors are not wrong, it is necessary to first evaluate the shares to be selected, then it can be determined whether the shares will provide a level of return that is in accordance with what is expected by investors. The general objective of this study is to know and test empirically that fundamental analysis can be used as a strategy in making investment decisions in the capital market.

II.   LITERATURE

Fundamental analysis uses fundamental data, namely data originating from the company's finances, for example earnings, paid dividends, sales and so on, sourced from the company's financial statements and close price shares to calculate the intrinsic value of shares. This intrinsic value depends on the ability to generate profits (potential earnings).

According to Syamsuddin (2011), *Return on Equity* (ROE) is Earning After Tax divided by Stockholders Equity. Earning Per Share (EPS) is Earning Available for Common Stock divided by Number of Share of Common Stock Outstanding. Dividend per Share (DPS) is Dividend Paid divided by Number of Share of Common Stock Outstanding.

According to Tandelilin (2010), Dividend Payout Ratio (DPR) is Dividend per Share divided by Earning per Share. Price Earning Ratio (PER) is Market Price per Share divided by Earning per Share.

The use of fundamental analysis is to determine the level of corporate financial health and the level of dividend growth (dividend growth) (Baresa, Suzana, Sinisa and Zoran, 2013). The intrinsic value of the shares is compared with the stock market value in question to determine whether the stock market value has reflected the actual value or not (Eliza, 2013). Thus, investors can find out the condition of a stock, whether overvalued, undervalued or correctly valued so that a significant difference between intrinsic value to market prices can be known.

a. If the intrinsic value is greater than the market price, then the stock is valued at too low (undervalued). NI> Market Prices
b. If the intrinsic value is lower than the market price, then the stock is considered overvalued. NI <Market Price
c. If the intrinsic value is the same as the market price, then the stock is valued at a fair price and is in a properly valued condition. NI = Market Price

Panda (2013) concluded that there are 2 models that are used to determine the comparison of fundamental values with market value in companies, namely Equity Free Cash Flow and Relative Valuation using the P / E ratio. The results of the study concluded that the Relative Evaluation method, using the P / E ratio is more accurate and practical than using the Equity Free Cash Flow model. Gottwald (2012), states that the P / E ratio is much better to be used to carry out a test, which is not only used to analyze fundamentally but also estimates the intrinsic value of a stock. The stock valuation techniques used are MizonRichard Test, Cox-Magnification Test and Davidson-MacKinnon Test. The results of this study explain.

Sareewiwatthanan (2014) stated that the overall portfolio returns using a low PE, PEG and PERG ratio are better than the average Market Value. While in terms of statement, the use of PE ratios tend to be used. PE (Price Earning to Ratio) is a comparison between Price Earning and Earning Per Share. PEG is a comparison between Price Earning to Ratio (PE) and Earning Growth Rate (Annual Growth in Profit). PERG is a combination of PEG ratios multiplied by a Risk factor (R). Irawan and Wahidahwati (2013) concluded that selling shares was "overvalued" or bought "undervalued" shares.

III.   METHODOLOGY

The method used in this study is a comparative method, which is used to find out about the difference between Instrinsic Value and Market Price variables by collecting data from financial statements and close prices in the period December 2015 to 2017. The design of this study was conducted using secondary data with data collection techniques carried out that is field research, through the site www.idx.co.id, and https://finance.yahoo.com; and library research (library research) for literature studies.

This type of research is quantitative research. The population of this study consisted of 6 sub-sectors of agriculture, 5 sub-sectors of mining, 9 sub-sectors of basic industry, 7 sub-sectors of various industries, 6 sub-sectors of consumer goods industry, 3 sub sectors of propety and real estate, 6 sub-sectors of infrastructure, 6 sub-sectors finance and 9 Trade sub-sectors, so that formulas can be obtained in investment decision-making strategies.

The analysis is done by analyzing financial ratios, determining the intrinsic value of shares with the Price Earning Ratio approach and assessing stock conditions by comparing Instructional Values and Market Prices. By knowing the dividend growth of each stock, the size of the fair value (intrinsic value) of the shares can be determined.

   a. Calculate the expected rate of dividend growth (g)

      g = ROE × *Retention Rate or Retained Earnings,*

      Retentation Rate = 1 – DPR.

      The formula for calculating the expected dividend growth rate is g = ROE × (1 - DPR)

   b. Calculating expected EPS estimates (E1)

      $E_1 = E_0 (1 + g)$, which E_0 = EPS in the previous period

   c. Calculating the estimated estimated DPS (D1)

      $D_1 = D_0 (1 + g)$, which D_0 = DPS in the previous period

d. Calculating the expected rate of return (k)

k = D1/Po + g, which P_0 = Market Value in the precvious period

e. Calculating PER

PER = $\underline{D_1 / E_1}$

k – g

f. Calculating intrinsic value of shares

Intrinsic value = estimated EPS or $E_1 \times$ PER

It can be concluded that the market condition of a stock, whether it is in an "overvalued", "undervalued" or "correctly valued" condition on the sectoral index listed in the Indonesia Stock Exchange.

IV. RESULTS AND DISCUSSION

The results of this syudy are determining the comparison of market and intrinsic value on the sectoral index, from 2015 to 2017 period in Indonesia. This is done in order that the investment decisions can be made to assess whether or not it is feasible to invest in the company.

For the agricultural sector there are 22 companies, with a comparison between intrinsic value and market prices for 3 consecutive years (2015 - 2017) indicating the position of the stock in an overvalued condition.

For the mining sector there are 35 companies, of which in 2015 there were 4 companies that were in undervalued conditions, namely PT Indo Tambangraya Megah Tbk (ITMG); PT Bukit Asam Tbk (PBTA); PT Elnusa Tbk (ELSA), PT Timah Tbk (TINS.JK) and the remaining 31 companies in the sector are in overvalued conditions. In 2016 there was only 1 company that was in an undervalued condition, namely PT Bukit Asam Tbk (PBTA) and the remaining 34 companies were in an overvalued condition. In 2017, there were 2 companies that were in undervalued conditions, namely PT Samindo Resources Tbk (MYOH), PT Bukit Asam Tbk (PBTA) and the remaining 33 companies in the sector were in overvalued condition.

For various industries sectors there are 38 companies, where in 2015 there was only 1 company that was in an undervalued condition, namely PT Indospring Tbk (INDS) and the remaining 37 companies were in an overvalued condition. In 2016 and 2017 the entire sector company is in an overvalued condition.

For the basic and chemical industries sector there are 60 companies, where in 2015 there were 5 companies that were in undervalued conditions, namely PT Betonjaya Manunggal Tbk (BTON), PT Indal Aluminum Industry Tbk (INAI), PT Lionmesh Prima Tbk (LMSH), PT Malindo Feedmill Tbk (MAIN), PT Fajar Surya Wisesa Tbk (FASW) and the remaining 55 companies are in overvalued conditions. In 2016 and 2017 there was only 1 company that was in an undervalued condition, namely PT Indal Aluminum Industry Tbk (INAI) and the remaining 59 companies were in an overvalued condition.

For the goods and consumption industry sector there are 33 companies, where in 2015 there were 7 companies that were in undervalued conditions, namely PT Delta Djakarta Tbk (DLTA), PT Chitose International Tbk (CINT), PT Kedaung Indah Can Tbk (KICI), PT Langgeng Makmur Industri Tbk (LMPI), PT Martina Berto Tbk (MBTO), PT Indofarma (Persero) Tbk (INAF), PT Pyridam Farma Tbk (PYFA) and the remaining 26 companies are in the position of overvalued conditions. In 2016, there were 8 companies that were in undervalued conditions, namely PT Mayora Indah Tbk (MYOR), PT Chitose International Tbk (CINT), PT Kedaung Indah Can Tbk (KICI), PT Langgeng Makmur Industri Tbk (LMPI), PT Martina Berto Tbk (MBTO), PT Mustika Ratu Tbk (MRAT), PT Indofarma (Persero) Tbk (INAF), PT Pyridam Farma Tbk (PYFA) and the remaining 25 companies are in an overvalued position. While in 2017, it was the same as in 2016, there were 8 companies that were also undervalued, but the difference between PT Mayora Indah Tbk (MYOR) was no longer in an undervalued position but was replaced by PT Nippon Indosari Corpindo Tbk (ROTI).

Property, real estate and construction sectors have 49 companies, but in 2015 - 2017 the entire company is in an overvalued condition.

Infrastructure, Utility & Transportation sector there are 45 companies, where in 2015 there was 1 company that was in an undervalued position, namely PT Samudera Indonesia Tbk (SMDR), 1 company was in a correctly valued position, namely Baltia Air Lines, Inc. (BLTA) and the remaining 43 companies are in an overvalued position. In 2016, Baltia Air Lines, Inc. (BLTA) is also in a correctly valued position, PT Samudera Indonesia Tbk (SMDR) is in an undervalued position and added 1 more company that is in an undervalued position, namely PT Buana Lintas Lautan Tbk. (BULL), and the remaining 42 companies are in an overvalued position in that sector. Furthermore, in 2017 the conditions are the same as in 2015.

The finance sector has 72 companies where in 2015 there were 3 companies that were in undervalued conditions, namely PT Bank Bukopin Tbk (BBKP), PT Bank Rakyat Indonesia (Persero) Tbk (BBRI), PT BFI Finance Indonesia Tbk (BFIN) and the remaining 69 companies in an overvalued condition. In 2016, there was 1 company that was in an undervalued condition, namely PT BFI Finance Indonesia Tbk (BFIN). In 2017, the condition was also the same as in 2016 there was only 1 company that was in undervalued condition, namely PT Bank Rakyat Indonesia (Persero) Tbk (BBRI), and the remaining 71 companies were in an overvalued condition.

Trade, services and investment sectors have 105 companies, in 2015 there was 1 company that was undervalued, namely PT Tira Austenite Tbk (TIRA) and the remaining 104 companies were in an overvalued condition. This condition is the same in 2017. However, the company that was undervalued was PT Colorpak Indonesia Tbk (CLPI). But in 2016, all companies were overvalued. (Calculation data can be seen in the attachment)

Table 1. The Result of Fundamental Analysis for 9 Sector Index

Sectors Index	2015 year		2016 year		2017 year		Conclution
	Market Value	Intrinsic Value	Market Value	Intrinsic Value	Market Value	Intrinsic Value	
Agriculture	1,432.84	1,291.42	1,629.68	1,466.68	1,372.32	742.39	Overvalued
Mining	756.22	715.53	1,296.01	1,208.21	1,656.63	1,539.76	Overvalued
Miscellaneous Industry	949.18	868.16	1,267.18	1,147.05	1,319.26	1,209.54	Overvalued
Basic Industry Chemical	4,492.73	4,043.77	1,224.33	1,104.73	1,577.97	1,455.72	Overvalued
Consumer Goods Industry	3,831.20	3,621.22	4,584.53	2,511.10	5,461.85	2,523.35	Overvalued
Property, Real Estate & Building Contruction	1,489.63	1,343.62	1,682.92	1,513.85	1,755.24	1,594.87	Overvalued
Infrastructure, Utilities & Transportation	1,079.81	979.70	409.54	966.90	263.17	1,104.43	Overvalued
Finance	1,122.12	1,313.62	1,258.35	1,149.97	1,576.36	1,450.60	Undervalued
Trade, Service & Investment	1,562.78	1,409.18	1,499.61	1,353.49	1,626.32	1,478.49	Overvalued

note: average account of market and intrinsic value

CONCLUSION

Based on the average calculation of fundamental analysis using the Price Earning Ratio (PER) approach, the decisions made by investors for 2018 to not invest in several companies or "not buy", because the condition of the stock in the index deposit is in the overvalued category. However the investor could invest in financial sector due to undervalued category.

But, if partially analyzed for each sectoral index there are several companies that are feasible to invest because the condition of the company's shares is in the category of undervalued or "sale", because intrinsic value is higher than the market value. There are also companies that are in correctly valued conditions in Infrastructure, Utility & Transportation sectors, meaning intrinsic value is equal to market value.

The assessment of investors to invest shares in the sectoral index companies should not only be viewed from the financial side. But, it is also reviewed from various factors and fields. Unstable economic conditions can trigger intrinsic value of the company that is low, but other factors can be analyzed to make stock investments, such as company performance, intellectual capital, and others. In order to make good investment decisions, it is not only fundamentally but technically it also needs to be done. It is better not only to the economic field which is the basis for conducting analysis but also, in the political and social field can be a comparison as a decision-making strategy

ACKNOWLEDGEMENT

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