

Overreaction Market Analysis, Dividend Policy, Firm Size, and Seasonality to Price Reversal Phenomena

Sulaeman Rahman Nidar^{1*} and Nurul Ulfa²

¹Lecturer of Economic and Business Faculty Padjadjaran University, Indonesia

²Alumnae of Master Science of Management Padjadjaran University, Indonesia

ABSTRACT

Objective – In an efficient capital market, the price of a stock reflects the outstanding and relevant information. However, some studies find that the capital markets are not always efficient. Sometimes investors put too high a price, good news and vice versa. That's why there are variety of capital market anomalies such as the price reversal. This research, test share return following one day a big change of the share price in the Indonesia capital market.

Methodology/Technique – The unit of analysis in this study are the stocks that listed in the Jakarta Islamic Index. Then we used purposive sampling method for sampling and 21 samples obtained shares. These samples, then classified into 11 shares 10 shares winner and a loser. Analysis the user is paired sample t-test and doubled regression. In addition, double regression analysis with market overreaction, dividend policy, firm size and the January effect as independent variables and price reversal as the dependent variable.

Findings – Regression test showed that in the group winner stocks, market overreaction, firm size and January effect have an effect on signs of price reversal. And dividend policy has no significant influence. For the group of loser stocks, market overreaction, dividend policy, firm size and January effect affect both simultaneously and partially on price reversal.

Novelty – The study contributes decision making of investors in Indonesia financial market with its evidences.

Type of Paper: Empirical

Keywords: Market Overreaction; Dividend Policy; Firm Size; January Effect; Price Reversal.

JEL Classification: G11, G14, M41.

1. Introduction

A rational investor will always do an analysis before deciding to invest in the capital market, particularly in financial assets. At the time of analysis and make investment decisions, investors needed information that can be considered in making a decision. This relates to the efficiency in the capital market proposed by Fama (1969). An efficient market is a securities market price reflects all available and relevant information. The investors in the capital market does not always behave rationally in response to the information that issued. The results of the study of various parties find that the market is not always efficient, especially after the

* Paper Info: Received: November 18, 2016

Accepted: April 11, 2017

* Corresponding author:

E-mail: sulaeman.rahman@unpad.ac.id

Affiliation: Lecturer of Economic and Business Faculty, Padjadjaran University, Indonesia

detection of many anomalies that appear in the stock market as the January effect, size effect and including the winner-loser anomaly based on the market overreaction.

Market overreaction are events that are considered important by investors, which could lead investors to overreact. Market overreaction hypothesis was first introduced by De Bont and Thaler (1985), to find a reversal of stock returns where stocks underperforming (loser) will show a better performance than the previous stocks that have performed well (winner). In other words, stocks that have performed well (winner) it will obtain the abnormal return is low. While stocks underperforming (loser) will obtain higher abnormal returns.

Investors will usually set their prices too high to be considered a good news (good news) and put a low price on the news that is considered not good (bad news). One type of information is an important signal for investors to assess the company's prospects that the company's dividend policy. The greater the dividend given by the company, then the company's stock will be increasingly in demand by investors. This means it will drive the demand for the company's shares, which in turn will boost the company's stock price.

In addition to the dividend policy, company size and seasonality also trigger certain reactions in the market. Zarowin (1990) in his research found that the trend of loser stocks outperformed of winner stock does not depend on market overreaction, but because of their size loser stock companies smaller than the size of the winner stock company. If using the same scale of the company, there can be no difference of return on loser stocks and winner stocks. Research results of Zarowin are not relevant to the research in Indonesia Stock Exchange. They mentioned that the size of the company does not have an influence on the market overreaction.

Preliminary data collected indicate that the Indonesian Stock Index, change massively generally followed by a change back in the opposite direction to the price the next day as known phenomenon of stock price reversal (price reversal). Trading day increase or decrease on a massive scale. The largest categorized index changes when (average return of the Indonesian Stock Index) for the increase is greater than 2.5% and to a smaller decline of -2.5%.

The phenomenon of the above, there is a problem that is interesting to study the factors that influence price reversals, and if there is an overreaction of investors that triggers a reversal of a stock, as shown by De Bont and Thaler (1985).

Some research conducted abroad and in Indonesia shows that there are various opinions about the factors that influence the phenomenon of price reversal (price reversal). The phenomenon of price reversal (price reversal) is likely influenced by overreaction investors with information or other factors such as the size of the company (firm size), dividend policy and seasonality.

Researchers intend to conduct further research, especially regarding the hypothesis market overreaction, the size of the company (firm size), dividend policy and seasonality are assumed to have an influence on the phenomenon of price reversal (price reversal) on stocks that are members of the Jakarta Islamic Index in Indonesia Stock Exchange. The hypothesis on research, first, overreaction market of investors influence the phenomenon of price reversal. The second hypothesis is the dividend policy affects the price inversion phenomenon. The third hypothesis, the size of the company (firm size) influence the price reversal phenomenon. The fourth hypothesis seasonality effect on the price reversal phenomenon.

2. Methodology

This study was conducted to prove empirically that there is a market overreaction in shares listed on the Jakarta Islamic Index, causing the phenomenon of price reversal (price reversal). In addition to the factors supposed to influence the occurrence of price reversal (price reversal) which will be examined in this study is marketed overreaction, dividend policy, company size and seasonality.

Technical analysis is used by using a panel data analysis model (pooled data). Panel data (pooled data) are a combination of time series and cross section. The use of panel data regression model allows to capture the characteristics between individuals and between the time that can be different.

Model studies compiled in the following equation:

$$Y = \alpha + \beta_1 X_{1,it} + \beta_2 X_{2,it} + \beta_3 X_{3,it} + \beta_4 X_{4,it} + \epsilon_{it}$$

Where :

Abnormal Return Y = cumulative daily stock company at $t = 1$

α = constant

β_1, β_2 = coefficient regression ..

X1 = the dividend policy of the company

X2 = the size of the company

X3 = January effect

ε = error (confounding factors outside the model)

i = type of issuers t = month

3. Results

To test for the occurrence of a price reversal, the sample needs to be divided into two groups, namely a group of stocks winner and loser stock group. Based on the results obtained by analysis of the multiple linear regression equation as follows:

$$Y = 0.00376 + 20.11927 \text{ OVERRE} - 0.00559 \text{ KEBDIV} - 0.00026 \text{ SIZEEF} - 0.43167 \text{ JANUEF}$$

From the results of the regression output loser in front of a group of stocks to interpret the results as follows:

$$Y = -0.44604 - \text{OVERRE} + 0.61596 \text{ KEBDIV} + 0.04494 \text{ SIZEEF} + 7.94675 \text{ JANUEF}$$

Results of research on two models presented above is as follows, first, that there is significant empirical evidence of the influence of the variable market overreaction of investors against the phenomenon of price reversal either in groups or on group winner stocks loser stocks. The second outcome is obtained that there is empirical evidence that dividend policy does not significantly influence the occurrence of the phenomenon of price reversal in the group winner stocks. While on a group of stocks loser occur a significant influence.

The third result that there is empirical evidence on the size of the company's significant influence in the phenomenon of price reversal both at group winner stocks as well as on a group of stocks loser and final results that seasonality (January effect) significantly affects the price reversal phenomenon.

4. Discussion

In the group of loser stocks, investors overreaction action occurs when positive events. Investors are enthusiastic about the positive information in the market that put a high price on a group of loser stocks. This looks at the different test results conducted on a group of stocks which the loser, there is a difference between before and after the return of positive events.

Market Overreaction action from investors to be one cause of the phenomenon of price reversal. Where the shares that had been the winner (consistent increase the price) changes experienced price declines when there is bad information (bad news) in the market. But this did not last long as investors realize has taken action to make corrections overreaction on stock prices. Correction is done in the short term (daily). This is in line with research De Bondt and Thaler (1985), Atkins and Dyl (1990),

The second result of this research states that the company's dividend policy has an influence on the occurrence of the phenomenon of price reversal. The results of the regression test winner stock group found that the company's dividend policy has no effect on the stock price reversal on the group winner. This is in line with the theory introduced by Miller and Modigliani known as irrelevant theory. Irrelevant theory states that the value of a company is essentially determined only by the ability to generate profit and business risk, in other words the value of a company depends solely on income generated assets, not on how the income is divided between dividends and retained earnings.

Findings on group winner stocks is in line with research which states that the dividend announcement has no information content that is useful for investors. Several other opinions suggest that if companies pay

dividends to shareholders, the opportunity to invest company cash flow will be reduced because the company issued to pay dividends. Meanwhile, with no (delaying) the payment of dividends, the cash can be used for investment opportunities. Investment activity will increase the value of the company and its shareholders will benefit. So that the results of the regression test group winner stock obtained regression coefficient is negative. Because of the large corporations, investors are no longer just looking at the dividend policy as a measure of the progress of the company, but also saw low cash the company, the increase in the number of assets and other policies that can enhance the company's value in the future.

While the loser stock group testing, it was found that the company's dividend policy has a significant influence on the occurrence of the phenomenon of price reversal. The results are consistent with other research when the company announced an increase in dividend payments market will respond positively and vice versa when the company announced a dividend reduction will respond in a negative market. These facts also support the hypothesis of rent extraction because the market interprets that in companies paying dividends to rise, there is the controlling shareholder who do not want to make the exploitation of minority shareholders, and vice versa.

The results of the third states that there is influence of company size on the occurrence of the phenomenon of price reversal. Results of regression test well on the group winner and loser stocks, stating that there is empirical evidence to accept the hypothesis. In other words, either the group winner stock nor losers, there is a significant influence on the size of the company to the occurrence of the phenomenon of price reversal.

This is in line with research conducted by Banz (1981), Zarowin (1990), and Fama (1969). The calculation of the size of the company following the method used by Zarowin (1990). Where the size of the company measured by market capitalization. Therefore, when the stock price changed by one point only, it will have a tremendous effect on the value of the company's market capitalization. Loser enterprise size tends to be smaller than the size of the company so that the winner has a greater risk than the size of a large company (winner). This is because of the difference between companies with small size and big in publishing the financial statements, the company with a small size has led to a reaction which is great due to the financial performance only published after the audited, but not all small companies that publish entirely of information on financial performance, making it the company small size tend to contain risk and greater return compared with companies with big size.

The results of the four studies suggest that seasonality (January effect) has an influence on the price reversal. Regression test results stating that there is significant empirical evidence of the influence of the variable January effect on the variable price reversal either group winner stock as well as in the group of loser stocks.

January effect is a phenomenon in which the stock returns will be higher in January compared to other months. The increase in the return is the result of investor optimism in investing. Additionally, create a tax loss for investors, investors are advised to sell securities that are less profitable at the end of the year, then at the beginning of the year to buy back the same securities. If the total cost of the tax loss is substantial, it may be used to cover the cost of transactions. Measures to sell at the end of the year (December) and buy back at the beginning of the year (January) that causes a decrease in prices at the end of December and the increase in January.

Statistical analysis showed that the January effect makes the stocks that experienced price declines (loser) at the end of the year, changes have increased the price (winner) at the beginning of the year. So the price reversal phenomenon significantly affected by the January effect. January effect will be more pronounced on small stock (loser) because it has a price difference of the supply and greater demand (bid and ask spread price).

The results support previous studies that the Indonesian capital market cannot be said as an efficient capital market. In the theory of efficient capital market, the prices established is the price derived from historical information, coupled with all of the information published. Indirectly, it can be said that if there is a specific announcement, then the market will react in accordance with the directions of the announcement. If the

announcement is good news, then the market will react positively. Vice versa, if an announcement is bad news then the market will react negatively to the announcement.

However, the results showed that investors who invest in Indonesia capital market behaving irrationally by putting up prices too high to good news. Instead, the bad news, investors set the price too low. As concerns the contrarian strategy that is often taken by investors, further research is needed. Does the event of a price reversal that occurred in the market profitable for investors. If the event of price reversal brings benefits for investors, it is possible that these events is the impact of their contrarian strategy.

References

- Atkins, A. B., & Dyl, E. A. (1990). Price reversals, bid-ask spreads, and market efficiency. *Journal of Financial and Quantitative Analysis*, 535-547.
- Banz, R. W. (1981). The relationship between return and market value of common stocks. *Journal of financial economics*, 9(1), 3-18.
- Bremer, M., & Sweeney, R. J. (1991). The reversal of large stock-price decreases. *The Journal of Finance*, 46(2), 747-754.
- Bondt, W. F., & Thaler, R. (1985). Does the stock market overreact?. *The Journal of finance*, 40(3), 793-805.
- Dyl, E. A., & Maberly, E. D. (1988). A Possible Explanation Of The Weekend Effect. *Financial Analysts Journal*, 44(3), 83.
- Fama, E. F., Fisher, L., Jensen, M. C., & Roll, R. (1969). The adjustment of stock prices to new information. *International economic review*, 10(1), 1-21.
- Ferri, M. G., & Min, C. K. (1996). Evidence that the stock market overreacts and adjusts. *The Journal of Portfolio Management*, 22(3), 71-76.
- French, K. R. (1980). Stock returns and the weekend effect. *Journal of financial economics*, 8(1), 55-69.
- Grag, Mukesh, (2011). Large Price Decline, Price Reversal and Firm Characteristics: A Comparative Study of 2008 Financial Crisis. *Corporate Ownership & Control*, 8(2).
- Lakonishok, J., & Smidt, S. (1988). Are seasonal anomalies real? A ninety-year perspective. *Review of Financial Studies*, 1(4), 403-425.
- Lin, H., Zi-Jun, S., Xiu-Yi, L., & Wen-Jun, C. (2013). An Empirical Study on the Overreaction of Shanghai Stock Market. *Chinese Studies*, 2(01), 32.
- Rogalski, R. J., & Tinic, S. M. (1986). The January size effect: anomaly or risk mismeasurement?. *Financial Analysts Journal*, 63-70.
- Rozeff, M. S., & Kinney, W. R. (1976). Capital market seasonality: The case of stock returns. *Journal of financial economics*, 3(4), 379-402.
- Zarowin, P. (1990). Size, seasonality, and stock market overreaction. *Journal of Financial and Quantitative analysis*, 25(01), 113-125.