
Case Study on Return Company Stock LQ45 Related to Monday Effect and Weekend Effect

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Abstract

The capital market is one of the alternative means to raise long-term funds from the public as an investor in supporting the development of a country. Market timing in the world of stock investment is known as an appropriate time or condition to be inside or outside of the market or it can be interpreted as an appropriate situation for investors to buy assets as well as to sell them. The purpose of this study was to determine the differences in returns that occurred on Monday to Friday on the trading of LQ45 company stock and to find out the Monday Effect and Weekend Effect on trading stocks of LQ45 companies. The type of data used is quantitative data. The data analysis techniques used in this study were one-sample t-test and the independent sample t-test. The results of data analysis of one sample t-test showed that there is a significant difference between the company's daily stock returns included in LQ-45 on trading days in one week on the Indonesia Stock Exchange. The results of the independent sample t-test revealed that there is a significant difference between Monday's stock returns and Friday's stock returns. Average stock return on Monday (0,000777619) is < average stock return on Friday (0,000831429). The results of the independent sample t-test calculation indicated that there is a difference between Friday's stock return and Monday's stock return. The average Friday stock return is positive that is equal to 0,000831429 bigger than Monday, which is equal to 0,000777619.

Keywords: Monday Effect; Stock Return; Weekend Effect

I. INTRODUCTION

Capital market is one of the alternative means to raise long-term funds from the public as an investor in supporting the development of a country. The community as an investor will seek to find a return from each commerce activity that happened in the capital market. Whereas the company can raise funds from the community to overcome the financial difficulties experienced. The capital market, in addition to being a means of finding funds for companies, is also a place of investment for investors. For this reason, in creating a good investment climate and the implementation of good supervision then there is an institution that regulates it.

Market timing in the world of stock investment is known as an appropriate time or condition to be inside or outside of the market or it can be interpreted as an appropriate situation for investors to buy assets as well as to sell them. By looking at the appropriate market timing, investors can obtain profits and minimize risks. In contrast to the efficient market hypothesis all the existing information on the stock market will be reflected in the price at a certain time. Based on the efficient market hypothesis in predicting the rate of return of a stock, the above-average (abnormal return) should not be obtained by investors.

The Monday Effect is a condition which on Monday the stock return is significantly negative. This condition allows the establishment of a guideline to obtain abnormal returns by utilizing the prediction from Monday's return, which is the difference between the expected return and the return obtained. Whereas in an efficient market there should not emerge a constant pattern of price movement and can be used to obtain an abnormal return.

Many studies have proven the effect of The Monday Effect on stock return. The research with the theme was first carried out by (Fields, 1931) who proved that the return on Monday differed from return on the other days. (F.Jaffe, Westerfield, & Ma, 1989) also proven that return on Monday influenced by the condition of the market during the previous week. This is supported by the research result of Abraham and Ikenberry in (Budileksmana, 2005) which is proven that the Monday Effect is largely influenced by the occurrence of the negative return in the previous Friday.

The Weekend Effect is a phenomenon which is the average return on Monday tends to be negative or lower, whereas on Friday stock returns will be higher or positive compared to the average return on other trading days. The Weekend effect was firstly discovered by capital market researchers in the United States. This causes other researchers to be interested in investigating whether weekend effects also occur in other capital markets. According to (Yuhelmi & Afrida, 2010) the weekend effect is contrary to the theory of efficient capital market concepts that have been supported by empirical evidence in many capital markets in several countries. Capital market is said to be efficient internationally if the current price still reflects all relevant appropriately and accurate information.

The sector used in this study is companies that are included in the LQ45 because LQ45 companies are companies whose stock are most actively traded on the Indonesia effect Stock Exchange. This study was conducted with the aim is to determine the differences in return that occurred on Monday to Friday on the trading of LQ45 company stock and to find out the Monday Effect and Weekend Effect on the trading stock of LQ45 companies.

The limitations of this study are only looking for differences and whether Monday effect and weekend effect occurs, so that the next researchers need to do more extensive research related to capital market efficiency and market timing to invest in the capital market.

II. LITERATURE REVIEW

The Random Walk Theory

The random walk theory or random walk hypothesis appeared in 1973. The random walk theory is a proposition that states that the current stock price fully reflects the available information about the value of the company and there is no other way to generate the profit beyond the overall market in using this information. This theory is also used to analyze and to adjust information that is objective so that the decision to buy and sell the stock can be done. According to (Malkiel, 1990) this theory is used to describe an investor who wants to seek maximum profit in a short time without a rational rationale.

In this theory, the assumption of price movement is random, therefore although, investors obtain information from insiders but the investor is still unable to predict the future stock price movement appropriately. On the other hands, this theory states that stock price movement in a random and unpredictable direction. It allows an investor unable to obtain return beyond the market return without having more risk. This also means that the difference between the price in a certain period with price in other periods is random. The difference is called the stock price return, which is in a certain period of time meets the average requirements of zero. This means that stock return will not have a significant trend over a long period of time.

The Stock Return

Return or rate of return of the stock is one of the factors that motivate the investor to interact and also as a reward for the courage of investor to bear the risk of an investment that has been done (Tandelilin, 2010). The purpose of the investor in investing is to increase returns without forgetting the investment risk factors that must be faced. In the world of the stock market, an investor who invests in buying stock certainly understands all risks and uncertainties that will be obtained in the future because the game of the stock exchange market relies on a little more of profit, although there are technical ways that can be used by an investor to obtain the best results.

The Differences Stock Return on Monday to Friday

Day of the week effect is a phenomenon that is a form of anomaly from efficient capital market theory. According to this phenomenon, the average daily return is not the same for every trading day, while according to efficient market theory, the stock return will not differ based on the differences in trading days. The phenomenon of the day of the week effect states that there are differences in return for each trading day in one week where at the beginning of the week it tends to produce a negative return and at the end of the week tends to produce a positive return. In some capital the markets, there is a tendency for the lowest return occur on Monday and then increase in other days. Based on this argumentation hypothesis 1 is formulated as follows: There are differences in stock return on Monday to Friday LQ45 companies.

The Monday Effect on Stock Trading in LQ45 Companies

The results of previous studies indicate that there is a negative return for Monday which is called Monday effect. Monday is the beginning of a trading day after a weekend holiday (non-trading day). With the existence of this holiday, it creates a lack of enthusiasm for the capital market and investor mood in investing their capital, so that the stock market's performance will be low. On Monday, the employee mostly experiences psychological makeup, which means that in this condition, employee behaviour and attitudes are influenced by perceptions of Monday's existence as lethargy at the beginning of work after a long two days holiday. As a result, the investors feel pessimistic about the stock held in line with other days. Investors tend to feel it is more appropriate to sell at a lower price on Monday in comparison with holding the stock to resale in the following trading days. The low return on Monday can also be caused by listed companies usually postpone bad news announcements until Friday and were responded by the market on Monday. Other research results obtained evidence that the desire of individuals to sell stock on Monday was higher than buying so that on Monday trading day the stock price was relatively lower compared with the stock price on the other days. It causes return on Monday to tend to be negative. Based on this argument, the hypothesis is formulated as follows: the Monday effect occurs in trading stock of LQ45 companies.

The Weekend Effect on Stock Trading in LQ45 Company.

In general, a high return is obtained in the days leading up to holidays or on Friday, because on Monday there was a lot of selling compared with buying. As a result, the stock price on Monday is lower than other days. The lowest stock return occurred in trading on Monday is caused during the weekend up to Monday, the investor has a tendency to sell stock more than the tendency to buy stock. On Monday, the market experiences a surplus demand for sales (sell order) which is an accumulation of selling demand as long as the market closes on weekends. This can be caused by the psychological factors of investor who encourages to do a transaction and the bid-ask price by the seller. The enhancement in return can also be caused by the investor tends to take profit taking actions to deal with holiday. Based on this argument, the following hypothesis is formulated: Weekend effects occur on the trading stock of LQ45 companies.

III. METHODS

This research was analyzed quantitatively and the data was conducted at the Indonesia Stock Exchange (IDX) by accessing the official website of the Indonesia Stock Exchange, namely www.idx.co.id and www.yahoofinance.com. The sample was selected by using a purposive sampling method, which there was a limitation of the criteria in collecting the sampling. The criteria are set, namely, companies that remain or consistently registered in the LQ45 Index during the period of 2017, which is February 1, 2017, to January 31, 2018, which amounted 42 companies. The data analysis technique used in this study is the one-sample t-test (one-sample t-test) and independent sample t-test.

IV. RESULT AND DISCUSSION

The testing of the first hypothesis by using a different test analysis is done to test the differences in return that occur from Monday to Friday in trading stock on the Indonesia Stock Exchange. Based on the first hypothesis with the t-test one sample (one-sample t-test) was obtained the following results:

Table 1
One-Sample T-Test Test Result
One-Sample Test

| Test Value = 0 | | | | | | |
|-----------------------|-------|-----|-----------------|-----------------|---|------------|
| | t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | | Lower | Upper |
| Daily Return | 3,480 | 209 | ,001 | ,0007041615 | ,000305288 | ,001103035 |

Source: Processed Data, 2019

Based on Table 1, the results of the t-test for one sample (one-sample t-test) can be seen the value of t arithmetic is 3.480. The value of t table at 95 percent confidence level and degree of freedom ($dk = 209$) is 1.97130. So the value of t count $>$ t table ($3,480 > 1,97130$), or t count is in the area of rejection H_0 or the reception area H_a . This means that there is a significant difference between the daily stock return on trading days in one week in Indonesia Stock Exchange. Thus, the first hypothesis which states that there are differences in stock return on Monday to Friday on the Indonesia Stock Exchange is accepted.

The second hypothesis states that a Monday effect occurs on stock trading on the Indonesia Stock Exchange which resulted in negative stock return at the beginning of the week. This test is carried out by testing the independent sample t-test. This independent samples t-test uses two independent groups, namely stock return on Monday with Friday's stock return so that there is no relevance between one group and another group. The purpose is to analyze whether there is a difference between the average stock return on Monday with the average stock return on Friday on the LQ 45 Index or not. Like other parametric statistical tests, the independent samples t-test using the data requirements that must be normally distributed. The normality test can be done with Kolmogorov-Smirnov One-Sample. The purpose is to find out that the data for t-test testing is normally distributed. The results of the calculation of the normality test can be seen in Table 2 below:

Table 2
Normality Test Result
One-Sample Kolmogorov-Smirnov Test

| | | <i>Unstandardized Residual</i> |
|----------------------------------|----------------|--------------------------------|
| N | | 84 |
| Normal Parameters ^{a,b} | Mean | ,001386190 |
| | Std. Deviation | ,0026985971 |
| Most Extreme Differences | Absolute | ,073 |
| | Positive | ,073 |
| | Negative | -,056 |
| Test Statistic | | ,073 |
| Asymp. Sig. (2-tailed) | | ,200 ^{c,d} |

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

Based on the calculation of the normality test in Table 2 by using the Kolmogorov-Smirnov One-Sample test, it can be seen that the Kolmogorov-Smirnov value or test statistic for the residual variable is 0.073 and the Asymp value. Sig. (2-tailed) for unstandardized variables of 0.200 bigger than the value of α , which is 0.05, so that the data used is declared to be normally distributed and proper to use the statistical test as parametric data analysis techniques. After seeing the results of the normality test, it is known that the data are normally distributed, then the independent sample t-test is performed. The results of the independent sample t-test can be seen in Table 3 below:

Table 3
Independent Sample T-Test Test Results
One-Sample Test

| | Test Value = 0 | | | | | |
|--------------|----------------|-----|-----------------|-----------------|---|------------|
| | t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | | Lower | Upper |
| Daily Return | 3,480 | 209 | ,001 | ,0007041615 | ,000305288 | ,001103035 |

Source: Processed Data, 2019

Based on Table 3 above, it is caused by F count Levene test is 3.082 with sig. 0.083 > 0.05, then it can be concluded that H_0 is accepted, namely the variance of every same group (homogeneous). Thus the analysis of the results of the t-test must use the equal variances assumed assumption. From the results of the independent sample t-test calculation, it can be seen that the value of t at equal variances assumed (t count) is 2,109 with $df = 82$ so that the value of t table is 1.66365 for a significant level of 5%. With the probability value (Sig.) 0.038 < 0.05, it can be concluded that H_0 is rejected and H_a is accepted, which means that there is a difference between the average stock return on Monday and the average stock return on Friday.

Based on the results of descriptive statistical analysis, it shows that the average stock return on Monday (0,000777619) < average stock return on Friday (0,000831429). This shows that the stock return on Monday was negative or the decline in stock price occurs on Monday. A smaller return at the beginning of the week causing Monday effect occurs, namely return at the beginning of the week (Monday) tend to be smaller than the return on other trading days. Thus the second hypothesis which states that the Monday effect occurs in the trading of stock on the Indonesia Stock Exchange is accepted.

The third hypothesis states that there is a weekend effect on stock trading on the Indonesia Stock Exchange which causing positive stock return and the highest on weekend. The testing of this hypothesis uses the independent sample t-test, which analyzes whether there is a difference between the average stock return on Monday and the average stock return on Friday in the LQ 45 Index or not.

Based on Table 2, it is caused by F count Levene test is 3,082 with sig. 0.083 > 0.05, it can be concluded that H_0 is accepted, namely the variance in every same group (homogeneous). Thus the analysis of the results of the t-test must use the equal variances assumed assumption. Thus, the results of the independent sample t-test calculation, it can be seen that the t value at equal variances assumed (t count) is equal to 2,109 with $df = 82$, then the t table value is obtained 1.66365 for a significant level 5%. With the probability value (Sig.) 0.038 < 0.05, it can be concluded that H_0 is rejected and H_a is accepted, which means that there is a difference between the average stock return on Friday and the average stock return on Monday. Based on the results of descriptive statistical analysis, it shows that the average Friday stock return is positive that is equal to 0.000831429. The average stock return on Friday is 0,000831429 bigger than Monday, which is equal to 0,000777619. This shows that Friday's stock return increased by average 0.08 percent. Even so, the highest average daily stock return occurred on Wednesday, which amounted 0.001141429 when compared with Thursday's average stock return 0, 000617381, Friday's average stock return is bigger but not the highest. Therefore, the third hypothesis that stated weekend effect occurs on the trading of stock in the Indonesia Stock Exchange was rejected.

V. CONCLUSION

The result testing of the first hypothesis (H_1) indicates that there is a significant difference between the stock return on trading days in one week on the Indonesia Stock Exchange from February 2017 to January 2018. This is evidenced through the analysis of one sample t-test, which is significant 0.01 percent. The results testing of the second hypothesis (H_2) indicates that there is a Monday effect on stock trading on the Indonesia Stock Exchange which is causing negative stock return at the beginning of the week for the period February 2017 to January 2018. This is evidenced through the result of independent sample t-test which is the value of sig. 0.038 is smaller than 0.05. The result testing of the third hypothesis (H_3) shows that there is a weekend effect on the stock trading on the Indonesia Stock Exchange which is causing positive stock return increased on weekend for the period February 2017 to January 2018. This is evidenced through the results of the independent sample t-test where the sig value of 0.038 is smaller than 0.05. The implications of this study can be a reference for how the capital market model in Indonesia is not yet classified as an efficient in a strong form, so abnormal return are still often used by the investor to get additional income. This research can be used by the investor to determine market timing if they want to trade stock.

REFERENCE

- Budileksmana, A. (2005). *Fenomena The Monday Effect di Bursa Efek Jakarta*. Solo: SNA VIII.
- F.Jaffe, J., Westerfield, R., & Ma, C. (1989). A twist on the Monday effect in stock prices: Evidence from the U.S. and foreign stock markets. *Journal of Banking & Finance*, 13(4–5), 641–650. Retrieved from [https://doi.org/10.1016/0378-4266\(89\)90035-6](https://doi.org/10.1016/0378-4266(89)90035-6)
- Fields, M. J. (1931). Stock Prices: A Problem in Verification. *The Journal of Business*, University of Chicago Press, 4, 415–415. Retrieved from <https://ideas.repec.org/a/ucp/jnlbus/v4y1931p415.html>
- Malkiel, B. G. (1990). *A Random Walk Down Street*. New York: W.W Norton & company.
- Tandelilin, E. (2010). *Portofolio dan Investasi Teori dan Aplikasi, Edisi pertama*. Yogyakarta: Kanisius.
- Yuhelmi, & Afrida, Y. (2010). Analysis Days Of The Weekend Effect To Days Return At Jakarta Stock Exchange. *Jurnal Manajemen Universitas Bung Hatta*, 5(1).