Abnormal Return Testing Before and After the Earnings Announcement

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ABSTRACT: This study examines the existence of abnormal returns on the days before and after the annual earnings of stocks in the IDX 30 index over the 2017 – 2019 period. This study used the event study method to observe abnormal returns of stocks in the IDX 30 index at six days before and six days after the annual earnings announcement. The results showed that there was no abnormal return on stocks in the IDX 30 index before or after the announcement.

Keywords: abnormal return, earnings announcement, event study

1 INTRODUCTION

Investors always intend to get the maximum return on every investment activity carried out. The behavior of individual investors in financial decision making is not only influenced by rationality (economic and objectivity data) considerations but also by irrational, such as psychological habits of investors, emotions, and moods of individual investors (Rystom & Benson 1989 in Virginia et al. 2012).

Research conducted by Fama (1970) in Syed & Bajwa (2018) regarding the efficient market hypothesis, found that capital market prices are determined by available information. This can be interpreted that every investor does not have perfect knowledge of the information; thus, it can be said that an investor is not likely to get more returns than the market. However, by utilizing anomalous information, both company information (right issue, profit announcement, and dividend announcement) and government information (presidential election, fuel price hike, electricity cost increase, and others, etc.) will enable investors to get abnormal returns.

Research conducted by Lee et al. (2013) in Felimban (2018), researched the impact/effects of the announcement of a rights issue on stock returns. In this study, there is a process of wealth transfer between investors who utilize and the right issue and investors who do not utilize the rights issue. The results found that there is no change in stock returns on the day before the announcement until the day after the announcement of the rights issue. Meanwhile, two days before and after the announcement, as well as three days before and after the announcement of the rights issue, found a significant negative result. This means that investors do not get abnormal returns when buying or selling shares during the announcement period of the rights issue.

Likewise, earnings announcements are important information for investors to determine the decision to buy or sell shares (Syed & Bajwa (2018) because it is fascinating to discuss the information contained in earnings announcements in a company. Besides, Syed & Bajwa (2018) said that information about earnings announcements could be used by investors to assess the profitability and financial strength of the company.

Research by Iqbal & Farooqi (2011) on the Karachi Stock Exchange showed that stock prices have moved to adjust prices before announcements until the day of the earnings announcement. While on the day after the earnings announcement, there is no surprising abnormal return. This shows that the information contained in the earnings announcement
has been absorbed before the announcement, therefore, on the day after the earnings announcement, the market will reflect the information available, thus on the Pakistan stock market, investors find it challenging to get an abnormal return.

While the results of research by Virginia et al. (2012) found there is a significant abnormal return before the earnings announcement information was published, this shows that there is information leakage. However, the results of Sharma & Chander's research (2009) showed that there is an abnormal return long before the earnings announcement until several days after the earnings announcement is made. These results are also in line with research by Alzahrani & Skerratt (2010), who found abnormal returns before the earnings announcement was made until the day after the earnings announcement.

Syed & Bajwa (2018), said that the market reacts strongly to an announcement; when the results of earnings announcements exceed market expectations, stock prices will rise, and when the results of earnings announcements are below market expectations, stock prices will fall.

Based on previous research, this study will examine the presence or absence of abnormal returns on the day before and after the announcement of earnings in the IDX 30 index. IDX 30 is 30 stocks, the stocks of which are taken from stocks that are in the LQ 45 index. The stocks taken are the most liquid.

2. RESEARCH METHODS

This study used the event study method, which is a study utilizing an event. The event used was the earnings announcement in the IDX 30 index. The window dressing period used was D-day-6 to D-day+ 6 (Syed & Bajwa 2018). The estimation period used 125 days (Syed & Bajwa 2018, Das, 2014). Quantitative data used were abnormal returns that occur on days around earnings announcements. Abnormal return is a form of stock market reaction to an event that contains information. According to Afego (2013), abnormal returns can be formulated as follows:

$$AR_i = R_i - (\alpha_i + \beta_iRm)$$

(1)

Where:

**AR** = Abnormal return of securities i in the event period t.

\(R_i\) = Actual Return of i security in the event period t

\(\alpha_i\) = Intercept for i security

\(\beta_i\) = Slope coefficient that is a beta of the i security

\(Rm\) = Return market index in the estimated period t

According to Mahmoudi (2016), to calculate the actual return can be formulated as follows:

$$R_t = \ln(P_t) - \ln(P_{t-1})$$

(2)

Where:

\(R_t\) = Actual return of i security in the t event period

\(P_t\) = closing price of shares in i stock on day t

\(P_{t-1}\) = closing price of shares in i stock on t-1 day

The data type used in this study were secondary data, namely data in the form of historical data such as closing prices of stocks in the IDX 30 Index. The closing price data and annual report publications were obtained from www.investing.com, yahoo finance, www.wsj.com, www.idnfinancial.com, and www.idx.co.id. The sample criteria used were all issuers listed continuously in the IDX 30 index from February 2017 to August 2019 and published financial statements in 2016 to 2018, so that it can be said that the stocks on the IDX 30 index from February 2017 to August 2019.

3. RESULTS AND DISCUSSIONS

The object of this study was the stocks of companies in the IDX 30 index. There were 3 companies with invalid data, so only 27 companies were used.

Table 1. Results of One-Sample testing

<table>
<thead>
<tr>
<th>Period</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-6</td>
<td>1.539</td>
<td>0.128</td>
</tr>
<tr>
<td>t-5</td>
<td>1.347</td>
<td>0.182</td>
</tr>
<tr>
<td>t-4</td>
<td>0.524</td>
<td>0.601</td>
</tr>
<tr>
<td>t-3</td>
<td>0.604</td>
<td>0.548</td>
</tr>
<tr>
<td>t-2</td>
<td>-0.952</td>
<td>0.344</td>
</tr>
<tr>
<td>t-1</td>
<td>0.286</td>
<td>0.775</td>
</tr>
<tr>
<td>t</td>
<td>0.299</td>
<td>0.766</td>
</tr>
<tr>
<td>t+1</td>
<td>0.008</td>
<td>0.994</td>
</tr>
<tr>
<td>t+2</td>
<td>-0.489</td>
<td>0.626</td>
</tr>
<tr>
<td>t+3</td>
<td>0.128</td>
<td>0.899</td>
</tr>
<tr>
<td>t+4</td>
<td>-0.589</td>
<td>0.558</td>
</tr>
<tr>
<td>t+5</td>
<td>-2.508</td>
<td>0.014*</td>
</tr>
<tr>
<td>t+6</td>
<td>-1.571</td>
<td>0.120</td>
</tr>
</tbody>
</table>

*significant at \(\alpha = 1\%\).

Table 1 shows that there were no abnormal returns before and after the announcement of annual earnings for the 3 year study period. Abnormal returns only occur at D-day + 5 after the announcement of annual earnings. The existence of an average abnormal return on a ninth day after the earnings announcement indicates a market delay in responding to information. These results are in line with research by Virginia et al. (2012), Telaumbanua, and...
Sumiyana (2008), which explained that investors are generally slow in absorbing earnings announcement information. The existence of average abnormal return at \( t + 5 \) is suspected because investors lack information about earnings announcements on the day the information is published (at \( t_0 \)). According to Félimban (2018), a late investor reaction to an event is due to lack of experience, and investors also lack information so that investors are unable to respond to information completely and accurately. There are a number of examples that show the company's annual earnings announcements differing from publication media, for example, the company announced on April 23, 2016, Tempo media published on May 2, 2016, while Kompas published on May 4, 2016.

At \( t-2 \), there is a negative average abnormal return indicating the market predicts a lower return than the actual return. This is presumably due to an indication of information leakage that occurred before the earnings announcement was made. Virginia et al. (2012) also found a significant average abnormal return at \( t-9 \) and concluded that there was an indication of information leakage where some investors received information, and some did not receive information. Telaumbanua & Sumiyana (2008) also explained in the study that there would be an indication of earnings information received by the Capital Market and Financial Institution Supervisory Agency that had leaked beforehand so that at the time of the earnings announcement, there was no significant reaction.

Similarly, \( t + 2 \), \( t + 4 \), \( t + 5 \), and \( t + 6 \) show negative abnormal returns. It shows that the market responds after several days of earnings announcements. Virginia et al. (2012), Telaumbanua & Sumiyana (2008), and Félimban (2018) stated that investors are slow in absorbing information on earnings announcements. This is similar to before because of investors’ lack of information about earnings announcements. The late investor reaction to an event is due to lack of experience, and investors also have lack information so that investors are unable to respond to information completely and accurately.

4. CONCLUSIONS

The results showed that the abnormal return did not occur before the day of the annual earnings announcement. Abnormal returns only occur on the 5th day after the earnings announcement day, besides that day, there was no abnormal return on the IDX30 index over the 2017 - 2019 period. The results also showed that there are indications of information leakage that occurred before earnings announce-
ments and long-term investors in absorbing earnings announcement information because of investors’ lack of information about earnings announcements.

Theoretically, the results of the study are in line with Das (2014), Iqbal & Farooqi (2011), who in the majority did not find any significant abnormal returns on the days of earnings announcements. The existence of average abnormal return on days \( t-2 \), \( t + 2 \), \( t + 4 \), \( t + 5 \), and \( t + 6 \) after the announcement is suspected because of indications of information leakage where there are some investors who receive information and some others do not receive information, also the market is late in responding to earnings announcement information. This is consistent with Virginia et al. (2012), Telaumbanua & Sumiyana (2008), and Félimban (2018) that proposed late responses are caused by inexperience and lack of information so that investors are unable to respond to information in full. Practically, the results of this study showed that no abnormal return occurs on the day before and after the annual earnings announcement over the 3 year study period.

REFERENCES


