BANKING STOCK ABNORMAL RETURN ANALYSIS OF PRE AND POST MERGER AND ACQUISITION IN INDONESIA

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ABSTRACT: The number of mergers and acquisitions (M&A) in Indonesia is growing because of government policy and also their usefulness as a corporate tool to pursue strategic growth and profit. This study aims to analyze the abnormal returns of banking industries pre and post-merger and acquisition in Indonesia. Using a sample of 7 M&A deals in Indonesia from 2018 to 2019, the event study methodology used in this study is Paired Sample T-Test to tell the difference between pre and post abnormal returns. The data that use for calculating is -30 until +30 of Merger and Acquisition. The result shows that from 7 mergers and acquisition there is only one bank that has a significant difference while the rest does not have a significant difference pre and post the event. This research hopefully can be used for further research, useful for investment practitioners.

Keywords: Merger, Acquisition, Abnormal Return, Paired Sample T-Test.

To Cite This Artikel

ABSTRAK: Jumlah merger dan akuisisi (M&A) yang terjadi di Indonesia terus bertumbuh karena peraturan pemerintah yang mendukung terjadinya merger atau akuisisi alasan lainnya adalah kegunaannya untuk perusahaan agar perusahaan terus bertumbuh dan meningkatkan keuntungan. Penelitian ini bertujuan untuk menganalisis abnormal return perbankan di Indonesia sebelum dan setelah melakukan merger dan akuisisi di Indonesia. Dengan menggunakan 7 sample perbankan yang melakukan merger dan akuisisi pada tahun 2018 sampai 2019, dan metodologi yang digunakan adalah Uji Beda (Paired Sample T-Test) untuk menunjukkan perbedaan abnormal return sebelum dan setelah merger dan akuisisi. Data yang digunakan untuk menghitung perbedaannya adalah -30 sampai +30 hari merger dan akuisisi dilakukan. Hasil penelitian ini adalah dari 7 perbankan yang diteliti diketahui hanya satu perbankan yang memiliki perbedaan yang signifikan sedangkan sisanya tidak memiliki perbedaan yang signifikan sebelum dan sesudah merger dan akuisisi. Penelitian ini diharapkan dapat digunakan untuk penelitian selanjutnya maupun digunakan untuk praktisi investasi.

Keywords: Merger, Akuisisi, Abnormal Return, Uji Beda, Event Study Analysis
INTRODUCTION

Merging companies into one or often referred to as mergers and acquisitions are commonplace done by companies in various countries for various reasons from these companies such as additional company capital. Usually, the main objective of the company is to obtain profits, continuity from the company and also perform social functions to the community. Mergers and acquisitions are expected to be able to develop the company for the future of the company (McFadden, 1966).

In a country like the UK, they see that if two companies together are more valuable than two separate companies, so many companies that already have a strong foundation will buy another company. The purchase of the company is expected to increase market share or achieve better company efficiency (Dickerson, Gibson, and Tsakalotos, 1997). And also according to Kominfo (2017), Indonesia itself is a developing country that has many small companies (SMEs) that have high growth so according to Arvantis and Stucki (2015), SMEs should be combined to increase capital from these companies to get corporate profits better.

Much information research related to this topic such as that of Desai and Stover (1985) who researched with a sample of BHC (Bank Holding Companies) in Europe registered in The Wall Street Journal and the New York Time Index, and the result is an increase in stock returns. James and Wier (1987) said that in the US, companies that merged banks there in the 1980s saw an Abnormal Return increase in banking stock returns. Even according to Becher (2000) who conducted a merger analysis of 558 banks in the US registered at the Center of Research in Security Prices (CRSP) from 1980-1997 found a difference where the 90s had values that tended to be more positive than the 80s.

According to Trifts and Scanlon (1987) using US bank samples from 1982-1985 showed no significant change in stock returns after the announcement. According to De and Duplichan (1987) who analyzed 28 samples of corporate mergers in Europe. According to Baradwaj, Dubofsky, and Fraser (1992), they found a negative return during the announcement week on 38 targeting banks, as well as according to Dickens, and Wansley (1989) who found negative returns on 29 banks and 7 banks that did not affect at all.

This research was conducted to find out the comparison of the abnormal return of bank companies shares pre and post conducting mergers and acquisitions in Indonesia. Where at this time in banking there is an interesting phenomenon for further investigation.

LITERATURE REVIEW

Merger
A merger is a merger between two or more companies using one company name (Foster, 2001). A merger makes one company remain, while another merges with the merged company. According to Robert Ang (1997) Mergers are often referred to as 100 percent acquisitions, but there is a difference, that is, if the acquisition is, then both parties are still present while the merger is not.

Acquisition
Acquisition is a form of ownership takeover (Husnan, 2002). There are 2 types of acquisitions that are commonly used, namely stock acquisition and asset acquisition. Share acquisition is a purchase of a company through company shares which is usually offered by the bidder company.
to the target company’s shareholders and does not have to go through company management. Conversely, asset acquisition is different from stock acquisition where this acquisition requires the actions of managers so that if the manager does not approve, the company cannot make the acquisition (Rachmawati and Tenderlilin, 2000)

**Abnormal Return**
Abnormal Return is used as a reference point for observing price reactions and market efficiency when something happens. Abnormal Return is the difference between actual returns minus expected returns or expected returns (Jogiyanto, 2000). In other words, Abnormal Return is the advantage of the actual return to normal returns.

**Previous Study**
Many works of literature related to this topic such as Desai and Stover (1985) researched with samples of BHC (Bank Holding Companies) in Europe that were listed in The Wall Street Journal and New York Time Index, and the result was an increase in stock returns. Cornnet (1991) said that if there is a significant positive return on the targeting bank. Ottone and Murgia (2000) with Bank data in Europe from 1988-1997 and Marthur (1989) using company data from Australia, Canada, France, Japan, the Netherlands, Sweden, UK, and West Germany which stated the changes occurred at the time of the announcement of the occurrence merger and acquisition decisions that raised prices by 26%. But in the research of Yeh and Hoshino (2001), they examined 28 banks in Japan in 1981-1998 and found that mergers did not increase company wealth but could add to the company’s long-term profits. Rani, Yadav, and Jain (2015) conducted a study in a company in India with a 2003-2008 sample and showed an increase in profit and operation margins According to Trifts and Scanlon (1987) using US bank samples from 1982-1985 showed no significant change in stock returns after the announcement.

According to De Cossio, Trifts and Scanlon (1988) who analyzed 21 samples of banking mergers in Chicago in 1982-1985, they explained that there was no change in the target company’s return. According to Baradwaj, Dubofsky, and Fraser (1992), they found a negative return during the announcement week at 38 targeting banks, as well as according to Dickens, and Wansley (1989) who found negative returns on 29 banks and 7 banks that did not affect at all. According to Antoniadis, Alexandridis and Sarianidis (2014) who conducted a study in 2010 of the announcement of 3 banks in Greece that found 2 banks experienced an increase in share prices while 1 other bank experienced a decline in share prices. Dickerson, Gibson & Tsakalotos (1997) conducted a study on manufacturing and distribution companies in the UK (2941 companies) that carried out acquisitions and the results were no added value and decreased profitability in the future. According to Zrilic and Hoshino (2001) the formation of the value of shareholders can increase if companies that conduct high liquidation mergers and rapid growth.

**Relationship Between M&A and Abnormal Return**
Merger is a combination of two companies into one new company with a new name, while Acquisition is a merger of two companies using the company name of one of the companies that merged. Both of the company merger activities above are very common in the community and there is even an official government website that shows a list of companies that merged.

In Indonesia at 2018-2019, there are many Banks in Indonesia conducting Mergers and Acquisitions with various objectives such as expanding or expanding a business, some are doing to maintain business continuity, and several other reasons (Pearce and Robinson, 1996). Because
the Mergers and Acquisitions activities can make investors’ reactions to the company will be different from before and cause an Abnormal Return.

The hypothesis of this research shows that there are differences in Abnormal Returns before or after mergers or acquisitions because these activities may be beneficial, detrimental, or have no effect at all on the company. If investors respond positively to the merger or acquisition, the share price will fluctuate positively, and vice versa.

So based on the formulation of the problem, the purpose of the study, the review of previous research libraries and the framework of thinking made before, the hypotheses used are:
1. H0: There is no difference in Abnormal Return pre and post a banking merger or acquisition.
2. H1: There are differences in Abnormal Return pre and post of the merger or acquisition of banking.

METODOLOGY

Population and Sample

The population data from this study are all banks in Indonesia. Quoted from CNBC Indonesia (2019) the banking population in Indonesia is 115 commercial banks and 1597 BPR which are considered to be many in a country and the samples taken using the deadline only in 2018-2019 so that only 7 banks that conduct mergers or acquisitions:

<table>
<thead>
<tr>
<th>No</th>
<th>Corporate Name</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ARTO</td>
<td>Acquisition</td>
</tr>
<tr>
<td>2</td>
<td>AGRS</td>
<td>Acquisition</td>
</tr>
<tr>
<td>3</td>
<td>BBCA</td>
<td>Acquisition</td>
</tr>
<tr>
<td>4</td>
<td>BDMN</td>
<td>Merger</td>
</tr>
<tr>
<td>5</td>
<td>BTPN</td>
<td>Merger</td>
</tr>
<tr>
<td>6</td>
<td>DNAR</td>
<td>Merger</td>
</tr>
<tr>
<td>7</td>
<td>BBTN</td>
<td>Acquisition</td>
</tr>
</tbody>
</table>

Sumber : Processed by Author, September 2019

Definition of Operasional Variables

The variables used in this study are independent and dependent. The independent variable used is banking mergers and acquisitions and the dependent variable used is Abnormal Return obtained using the mean adjusted return method. The data analysis technique used in this research is descriptive data analysis using descriptive tables to show the differences between the two Abnormal Returns.

Another technique is using the Paired Sample T-Test, The model of the different tests is used to analyze the research before and after, Different Tests this is also used to evaluate the treatment of the same object but different periods (Xu, Fralick, and Zheng, et al., 2017). According to Widiyanto (2013), paired sample t-tests were used to see the effectiveness of the actions from the existence of differences in the average before and after. The result is to decide to accept or reject H0 from research using alpha 5% which can be seen as follows:

1. If t arithmetic > t table and probability (Sig) <0.05, then H0 is rejected and H1 is accepted, which means there is no significant difference before and after the banks conduct M&A.
2. If \( t \) arithmetic \(< t \) table and probability (Sig) \( > 0.05 \), then \( H_0 \) is accepted and \( H_1 \) is rejected, it means that there are significant differences before and after banks conduct M&A.

**RESULT AND DISCUSSION**

<table>
<thead>
<tr>
<th>Tabel 2. Paired Sample T-Test Tabel</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>Df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agris Pre - Agris Post</td>
<td>-0.05699</td>
<td>0.03368</td>
<td>-0.526</td>
<td>29</td>
</tr>
<tr>
<td>Artos Pre - Artos Post</td>
<td>-0.09352</td>
<td>0.07116</td>
<td>-0.278</td>
<td>29</td>
</tr>
<tr>
<td>BCA Pre - BCA Post</td>
<td>-0.00415</td>
<td>0.00895</td>
<td>0.75</td>
<td>29</td>
</tr>
<tr>
<td>BTN Pre - BTN Post</td>
<td>-0.01565</td>
<td>0.00898</td>
<td>-0.555</td>
<td>29</td>
</tr>
<tr>
<td>Danamon Pre - Danamon Post</td>
<td>-0.04805</td>
<td>-0.00349</td>
<td>-2.365</td>
<td>29</td>
</tr>
<tr>
<td>BTPN Pre - BTPN Post</td>
<td>-0.01082</td>
<td>0.00304</td>
<td>-1.149</td>
<td>29</td>
</tr>
<tr>
<td>Dinar Pre - Dinar Post</td>
<td>-0.03102</td>
<td>0.04392</td>
<td>0.352</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: The data is processed by the author using SPSS 25, Desember 2019

The table above shows the results of the Paired Sample T-Test to determine the difference from the average banking Abnormal Return before and after the company engages in Mergers and Acquisitions, to find out whether or not there is a difference can be seen from:

1. significance \( \alpha <0.05 \) (5%)

2. \( t \) arithmetic \( > t \) table (the value of \( t \) table with \( df = 29 \) and the percentage \( \alpha 0.05 \) is 2.04523)

if both of the above are fulfilled then it can be concluded that the \( H_1 \) assumption is accepted where there are differences before and after the banks make mergers and acquisitions.

At Bank Agris seen if the significance value of 0.603 is greater than 0.05 and the \( t \) value of -0.526 is smaller than 2.04523. At Artos Bank, it can be seen that the significance value of 0.783 is greater than 0.05 and the \( t \)-value of -0.278 is smaller than 2.04523. At BCA Bank it can be seen if the significance value is 0.459 which is greater than 0.05 and the \( t \) value is 0.75 smaller than 2.04523. At Bank BTN it is seen if the significance value is 0.583 which is greater than 0.05 and the \( t \) value is amounting to -0.555 smaller than 2.04523. At the BTPN Bank, it is seen if the significance value is 0.26 which is greater than 0.05 and the \( t \)-value of -1.149 is smaller than 2.04523. At the Dinar Bank, it can be seen that the significance value of 0.727 is greater than 0.05 and the \( t \)-value of 0.352 is smaller than 2.04523, which means that the 6 banks above the change are not significant.
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While at Danamon, it can be seen that the significance value is 0.025 which is smaller than 0.05 and the t value is 2.365, greater than 2.04523, which means both of the above conditions are fulfilled and have significant changes.

![Figure 1. Abnormal Return Difference Graph](source)

Depict the difference in average Abnormal Returns before and after 7 banks conducted mergers or acquisitions made within a period of 1 year (2018-2019), overall changes in Abnormal Returns from all banks rose except for two banks namely Bank BCA and banks Dinar which decreases after a merger or acquisition.

Changes in Bank Danamon abnormal return of 0.02577 (2%) with positive upward movement, Bank Agris with a difference of 0.011657 (1%) changed positively, Artos with a difference of 0.011181 (1%) and moved up to positive, BCA has a difference of 0.0024 (0.2%) with a downward movement to negative, BTN has a difference of 0.003342 (0.3%) moving up to positive, BTPN has a difference of 0.00389 (0.3%) go up to a positive value, and the Dinar which has a difference of 0.006446 (0.6%) decreases to negative, overall the average abnormal return movement increases by 0.00671 (0.6%).

The smallest change in abnormal return value occurs in BCA banks that have a change of 0.0024 that he experienced an insignificant change from the picture above can be seen clearly that only Danamon banks have a very far change between before and after namely 0.02577 and This is evident from the results of the previous research in Table 1 which shows that only Danamon banks have significant changes compared to other banks. Previous studies from Antoniadia, Alexandridis, and Sariannidis (2014) also had similar results saying that banks in Greece experienced a decline or an increase in share prices after mergers and acquisitions, with the results of 2 companies experiencing positive and 1 company experiencing negative after mergers and acquisitions.

The 6 banks (Bank Agris, Artos, BCA, BTN, BTPN and Dinar) in Table 1 do not show significant changes in abnormal returns before and after the banks make a merger or acquisition and can be seen from the significance value using alpha 5% (0, 05) and the resulting value is greater than 0.05, which means that the differences in the 6 banks are not significant, and this
result is in line with previous studies which have shown no significant stock price changes after the merger announcement (Trifts and Scalion, 1987) and also in the research conducted by De, Trifts, and Scanlon (1988) which said that there was no significant change in the target company's return. Likewise in the research of De and Duplichan (1987) which states that there is no change in return on the targeting company.

At Bank Danamon, it has a significant positive change when seen from Figure 4.17 and the significance value is below alpha (α) of 5%, which means the movement of stock prices from these banks after the merger has increased significantly. This result is in line with several previous studies conducted by James and Weir (1987) which stated that increased abnormal returns on stock returns from banks that make acquisitions. Other studies also support this result which has the result that significant changes occur before and after mergers and acquisitions in a short period of time (Cybo-Ottone and Murgia, 2000). Along with other studies have the results that the abnormal return of banks after mergers and acquisitions is significantly better than before the mergers and acquisitions are carried out, new information is very influential on the market reaction (Shah and Arora, 2014).

CONCLUSION

Overall, the results of the Abnormal Return analysis before and after banks that merged and acquisitions in Indonesia are known if the results of 7 banks (3 banking mergers and 4 banking acquisitions) merged only Danamon banks that had significant abnormal differences before and after abnormal returns. amounted to 0.02577 (2%) while the banks that made the acquisition did not have a significant difference. Bank Agris with a difference of 0.011657 (1%), Artos with a difference of 0.011181 (1%), BCA has a difference of 0.0024 (0.2%), BTN has a difference of 0.003342 (0.3 %), BTPN has a difference of 0.00389 (0.3%), and Dinar which has a difference of 0.006446 (0.6%) and they have insignificant changes in Abnormal Return before and after a bank merger or acquisition.

LIMITATION AND FUTURE RESEARCH

Information in the form of rumors about mergers and acquisitions of a company spreads very quickly and causes price changes to occur before announcements or activities of the mergers and acquisitions themselves. Research is expected to conduct periods with periods longer than 1 year. It is suggested for future research to use longer period of time, other sector companies and use another method to find the abnormal return.

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