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How Mergers and Acquisitions Affect Manufacturing Company Performance in Indonesia

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ABSTRACT

This study aims to examine the effect of mergers and acquisitions on market performance and financial performance of acquiring companies to show the effect of performance in the short and long term. The study was conducted on manufacturing industry companies that merged and acquired in the period 2012 and 2013. The event study method was used in this research, where the short-term market reaction was measured using market-adjusted CARs in the event period (-1,+1), (-3,+3), (-5,+5), and (-10,+10). Long-term market reaction is measured using the BHAR approach that is adjusted by the market to the period of events (-36, + 36) and (-60, + 60) around the announcement month. As for financial performance both short and long term is measured by comparing the value of Tobin's Q, ROA, ROE, and EPS for 5 years before with 5 years after M&A. As a statistical analysis tool in testing hypotheses using different tests (*paired sample t-test*). The results showed that there were positive and significant differences in the CAR adjusted by the market, while in the long run, the adjusted market BHAR did not show a significant difference, this showed mergers and acquisitions unable to create value for the company's shareholders. Financial performance shows similar results that in the short term there is no significant difference, but in the long run, especially the ROE ratio shows a different and significant in the period (-4,+4) and (-5,+5), while the ratio of ROA and EPS shows a significant difference in the period (-4,+4) but then decreases and is not as significant in the next period.

Keywords: Mergers and acquisitions, event studies, market performance, financial performance

1. INTRODUCTION

Developments in the business environment now have entered the era of globalization or free competition, which is a challenge in the business environment. The impact of free competition requires companies to always improve their business strategies to be able to survive and compete. One strategy commonly used to maintain a company's survival and ability to compete is to expand. The expansion consists of internal expansion and external expansion, where the company's internal

expansion can be done by adding division within the company, expanding factory capacity, increasing production units, and product innovation. External expansion is often done by most companies, one of which includes mergers and acquisitions. Mergers and acquisitions are tools for business expansion, to gain competitive advantage and synergy (Edi & Irayanti, 2019).

But to achieve synergy to create value for shareholders in mergers and acquisitions is not easy. In nature (Boubaker & Hamza, 2014), Jensen (1986) argues that managers of companies with large free cash flows are more likely to make value destruction acquisitions, while Shleifer and Vishny (1989) argue that entrenched managers are willing to make acquisitions and pay more for their target is to avoid losing their jobs. However, acquirer company managers often refer to the creation of value from synergies as justification in merger and acquisition transaction decisions. Regardless of its motives, from a financial management perspective that the main objective of management is to create value for shareholders or to maximize shareholder wealth through maximizing the price of a company's ordinary shares (Brigham & Houston, 2012).

Previous research on the impact of M&A on shareholder value creation has had mixed results. Studies on market performance and financial performance both short and long term conducted by (Duppati & Locke, 2015), (Zaremba & Płotnicki, 2016) found that M&A has an impact on company performance and can create value for shareholders of both long-term acquirer companies. short or long term. Another study on the impact of M&A on financial performance conducted by (Yanan et al., 2016), (Tarigan et al., 2018), shows that M&A improves financial performance, creates value, and expands the market share of acquiring companies. Different results obtained (Nurfauziah & Ainy, 2018), (Harvey, 2015) regarding the impact of M&A, that M&A did not provide an increase in company performance both in the short and long term.

Referring to the results of previous studies that there are inconsistencies in the results obtained, this study intends to examine the impact of mergers and acquisitions on the market performance and financial performance of the acquiring company in the manufacturing industry in Indonesia. This is done by comparing the company's performance before M&A with the performance after M&A both in the short term and long term to provide a picture of the creation of value for the shareholders of the acquiring company.

2. LITERATURE REVIEW

In this section, we will discuss concepts and theories in mergers and acquisitions as well as empirical findings literature that can support this research.

Study Theory and Concepts

According to Sudarsanam (1995), mergers are certain activities, when companies join to combine their shared resources to achieve common goals. In a merger, the two companies merge to form a third entity and the owners of the two companies that remain the joint owners of the new entity, while the quizzes

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themselves can be explained as events where the company takes ownership of a controlling share in another company, a legitimate subsidiary of another company, or certain assets of other companies (Desai & Joshi, 2015). The term merger refers to mergers and acquisitions. The spatial consequences of the two cannot be distinguished and legal differences need not be a concern (Green, 2018). According to (Green, 2018), the rationale for mergers and acquisitions is to increase shareholder wealth. Therefore, mergers and acquisitions are currently the most important activities in the capital market and are still interesting to study.

In mergers and acquisitions, value is created if the benefits of the synergies obtained through the merger and integration of the company which was previously separated are greater than the costs (including payment of various premiums) incurred to create the synergy (Hitt et al., 2002). Regardless of its motives, the M&A decision is a complex activity that is difficult to explain in various studies. This is because it is difficult for economic researchers, with their rough collection of information, to identify sources of profit (Andrade et al. 2001) in (Geiger & Schiereck, 2014)

So that in this study using several relevant theories related to M&A to support the results of this study, the theory used is the theory of efficiency, agency theory, and hubris theory.

The efficiency theory (also called the synergy motive), states that mergers are motivated by synergy, and that wealth creation depends on the operational and strategic suitability of the two companies (Geiger & Schiereck, 2014). According to (Trautwein, 1990), this theory views that the merger was planned and implemented to achieve synergy, in general, divided into three types of synergies, namely (1) Financial synergy results in lower capital costs. One way to achieve this is to reduce the systematic risk of a company's investment portfolio by investing in unrelated businesses. Another way is to increase the size of the company, which can give him access to cheaper capital. The third way is to build an internal capital market. Internal markets can operate with superior information and hence allocate capital more efficiently. (2) Operational synergy can be in the form of a merger of unit operations that have hitherto been separate (eg joint salesforce) or from the transfer of knowledge (Porter, 1985), operational synergy can also reduce the cost of the business units involved or enable companies to offer unique products and services. (3) Managerial synergy is manifested when the bidder company manager has superior planning and monitoring capabilities and can provide benefits for target performance. Meanwhile, according to (Hitt et al., 2002) in general, synergy is considered to benefit the acquiring company through two sources, namely (1) increasing operating efficiency based on scale savings and coverage; and (2) the shared use of two or more expertise.

Agency theory*,* a concept that explains the contractual relationship between *principals* and *agents*. Where *principals* are company owners or shareholders and *agents* are managers and employees who manage the company (Ross et al., 2009). Relationships like this, there is the possibility of a conflict of interest between the principal and the agent, this kind of conflict is called an *agency problem*, because the

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agent does not fully share the owner's goals and because the agent tends to have better information about the task and the business environment, so the agent may have the motivation and opportunity to behave in a way that maximizes the utility of the agent himself at the expense of the principal (Jensen and Meckling, 1976) in (Peng et al., 2016). Thus, the focus of agency theory is on the potential for conflict between agents and principals, where in some cases managers make decisions that seek their interests to ascertain their company's position or managerial bonus after the merger and acquisition agreement Syriopoulos *et al* (2007) in (Papanikolaou, 2011).

Hubris theory was first proposed by Roll (1986). This theory states that managers make mistakes with excessive optimism in evaluating acquisition opportunities because of excessive pride or arrogance. He argues that certain bidders may not learn from past mistakes in the valuation of the target company and can be convinced that the valuation is true. Therefore the takeover phenomenon is a result of the bidder's arrogance. The over-assumption that their judgment is right and never wrong (Akenga & Olang, 2017a). In other words, overconfident managers, who stem from their own attribution bias, tend to associate their initial successes with previous company decisions with their abilities, and ultimately get worse results (Malik, 2014).

Although many other theories can be used in M&A studies, this study follows some previous research that uses the theories above in their research, including studies conducted by (Jallow et al., 2017), (Shingade & Rastogi, 2019), (Akenga & Olang, 2017b), (Geiger & Schiereck, 2014), and (Malik, 2014).

2.1. Empirical Study and Hypothesis

(Duppati et al., 2015). This study aims to examine the short-term and long-term stock market reactions and operating performance on the announcement of domestic and cross-border mergers and Acquisitions by acquirers. The results showed a positive impact on *abnormal returns* in the short term, but for the long term positive and significant abnormal returns only occurred in domestic or domestic mergers and acquisitions. Also, there are differences in the operating performance of companies merged and acquisitions.

(Reddy & Natekar, 2015). This study aims to understand the impact of the acquisition of selected pharmaceutical companies by examining financial performance and market performance by comparing the performance before and after the acquisition. The results show the performance ratios of some companies which show an increase in returns in the period after acquisition, and others show a declining trend. It may take longer (more than 3 years) to realize the actual benefits of the acquisition.

(Gunawan & Sukartha, 2013). The purpose of this study is to determine the improvement of market performance and financial performance after mergers and acquisitions with different payment methods and target companies. Based on the results of the analysis it was found that the market performance of the acquiring

company experienced a significant increase after mergers and acquisitions, while for financial performance, the company did not experience a significant increase after mergers and acquisitions.

(Zakaria & Kamaludin, 2018). This study examines the short-term and long-term stock performance of acquiring companies listed on the Saudi Arabian Stock Exchange (Tadawul) in the period 2000 to the third quarter of 2017. The results of this study show evidence that the market anticipates an increase in value for the acquirer company, perhaps not showed a reaction in the short term but in the long term (over 36 months), the shares of the acquiring company continued to outperform the market hedge. The short term performance in this study also shows that there is value creation for the acquirer, but this is due to a leak of information on the announcement of mergers and acquisitions.

(Shahar et al., 2016). This study aims to examine the long-term stock performance of the acquirer. Using a sample of 208 Malaysian acquisitions from 2000 to 2013. Where this study found that the average company that acquired did not create or destroy value in the long run after controlling performance in a combined manner. This result also shows that investors reacted rationally in evaluating offering companies after the announcement of the completion of the acquisition.

(Fadlitama & Adawiyah, 2016). This study aims to analyze whether there are significant differences in abnormal returns due to the occurrence of merger and acquisition activities that affect the value of shareholders' wealth and to determine shareholder returns after the merger and the proportion of acquisitions announced. The results of this study indicate that there is no significant abnormal return before and after the merger and acquisition activity does not exist. Furthermore, the results show that mergers and acquisitions of more than 50% of the target's interests generate positive returns for the acquirer's shareholders and target companies.

(Duggal, 2015). This study aims to study the impact of mergers on operating performance and financial performance of Indian pharmaceutical companies by using various financial ratios from sample companies in the period 2000 to 2006. Data were analyzed using *paired sample t-tests*. The results showed that there was a positive (+1 year) merger effect on the profitability of the acquiring company but this impact did not last for a period (+3 and +5 years) after the merger in terms of the chosen profitability variable. The results reported in this study show the positive impact of the merger announcement on operations and financial performance in the short term (+1 year).

(Aggarwal & Garg, 2019). This study aims to examine the growth of M&A transactions in India in the past two decades and the impact of mergers on the accounting-based performance of the acquiring company. Where, accounting-based performance is measured on seven variables divided into three categories - profitability, liquidity, and solvency. Performance before the five-year merger compared to five years after the merger. The results show that the merger has significantly affected the profitability and liquidity of the acquiring company positively

in five years but does not have a significant impact on the company's solvency position.

(Mamahit et al., 2019). The purpose of the study is the observed financial performance to analyze the impact on companies that carry out M&A activities. To observe changes in the value of financial performance the Panel Data Regression was used before and after M&A activities and also used the Wilcoxon Signed Rank Test. The results of this study indicate that the average value of the ratio of profitability to company performance before M&A is greater than the period after M&A. Based on the Wilcoxon signed-rank test, only GPM and CR have no significant influence on before and after the company conducts M&A.

(Mahesh & Prasad, 2012). The purpose of this study is to analyze whether airlines in India have achieved financial efficiency during the post M&A period, especially in the ratio of profitability, leverage, liquidity, and capital market standards. The results show that in general, mergers of airlines in India did not have a significant difference in financial performance after M&A. Where, the findings in this study indicate that there is no increase in maintaining return on equity, net profit margins, interest coverage, earnings per share, and dividends per share after M&A.

(Septian & Dharmastuti, 2019). This study aims to analyze the relationship between synergy and company performance by using ROE and Tobin's Q as the dependent variable which is moderated by diversification and there are also several control variables. This study examines 33 cases of merger and acquisition activities in Indonesia from 2010 to 2016. The results of the study show that synergy has a positive effect on ROA and Tobin's Q. While the diversification variable moderates the impact of synergy on ROA and Tobin, s Q shows a decrease in performance company.

Based on empirical findings from some of the above studies, it can be made a hypothesis of market performance and financial performance both short and long term for this research, as follows:

H_1: There is a significant difference in the performance of the market in the short term post-merger and a acquisitions.

H_2: There is no significant difference in the long-term market performance after mergers and acquisitions.

H_3: There are no significant differences in financial performance in the short term or long term after the merger and acquisition.

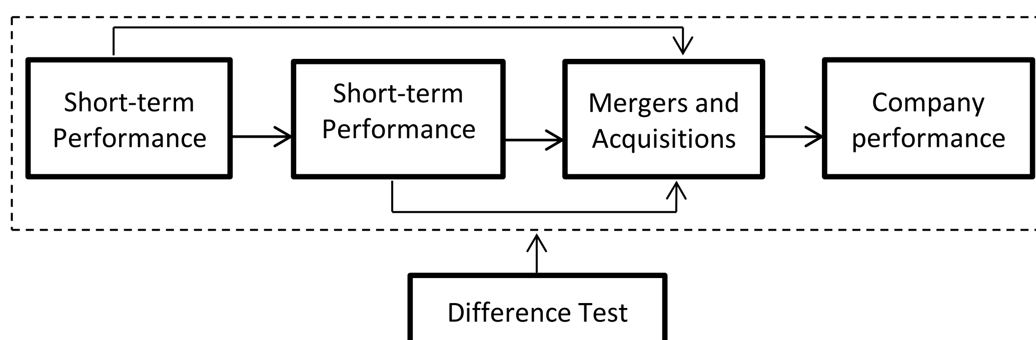

Figure 1: ***Research Model***

3. DATA AND METHODOLOGY

3.1. Data

The research uses secondary data sources, namely the annual financial statements of the acquiring companies listed on the Indonesia Stock Exchange (IDX) and are consolidated financial statements. Whereas the market performance is historical data documentation of the closing price of shares and the closing of the Jakarta composite index (JKSE) obtained from the website *www.yahoofinance.com*. Sample research is an industrial manufacturing company that performs the M&A activity period of 2012 and 2013 and was registered at the Business Competition Supervisory Commission (KPPU) and the acquirer. Because this study compares the performance before and after M&A in the short and long term, the sample is drawn based on several criteria, including:

- Acquisition companies in the manufacturing industry that are actively listed on the IDX and which publish consolidated financial statements for the period 2008 to 2018. The 2018 period was chosen for analysis in the long run.
- Acquisition companies that are in a merger and acquisition transaction take over the majority investment (> 50% of shares after the takeover). So the effect of mergers and acquisitions on the acquiring company can give clear results.
- There are no overlapping transactions for the period under study, this is done so that there is no bias in the results of the analysis.

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The following number of samples drawn based on the criteria above can be seen in the table below:

Table 1. Criteria for sampling

Criteria	total
Acquisition company that is actively listed on the IDX	10
Criteria (1)	(4)
Criteria (3)	(1)
Criteria (4)	(3)
Selected total sample	**2**

Source: data processed, 2020

3.2 Methodology

This research uses the event study methodology to analyze short-term performance and long-term performance after mergers and acquisitions. According to Fama (1991), the study of events is part of the concept of an *efficient market hypothesis* (*efficient market hypothesis*). More specifically, event studies investigate market responses to information content from announcements or publications of certain events (Tandelilin, 2010). Thus, the focus of event studies is the impact of a particular type of event on a company on the price of the securities of the affected company (Warner & Brown, 1980).

Short-term Market Performance

To see the effect of announcing M&A events in the short term, this study follows the approach used by (Duppati & Locke, 2015; Zakaria & Kamaludin, 2018). With five windows of events used, they are three days (–1, 0, +1), seven days (–3, 0, +3), ten days (–5, 0, +5), and twenty-one days (- 10, 0, +10). Using the *market – adjusted model* approach, the formula for obtaining an *abnormal return* is:

$$AR_{i,t} = R_{i,t} - R_{M,t} \quad \text{(1)}$$

In addition to abnormal return, this study also uses a cumulative abnormal return (CAR) to provide better information, the formula is stated as follows:

$$CAR_{(t_1,t_2)} = \sum_{t=t_1}^{t_2} AR_t \quad \text{(2)}$$

CAR is used to measure *returns* with the *market-adjusted model* approach that is obtained in the period $t_{1 \text{ to }} t_2$, for example, the events of day -1 before and day +1 after mergers and acquisitions.

Long-term Market Performance

For long-term performance, this study uses an approach that is very familiar to be used, by following previous studies such as research by (Duppati & Locke, 2015; Kiesel et al., 2017; Zakaria & Kamaludin, 2018) namely the Buy and Hold Abnormal approach Return (BHAR). The event window used is (–12, +12), (–36, +36) and (–60, +60). Where the BHAR for each company in the sample in the (t) event period is calculated using the equation below:

$$BHAR_{i,(t_1,t_2)} = \left[\prod_{t=1}^{T}\left(1 + R_{i,t}\right) - 1\right] - \left[\prod_{t=1}^{T}\left(1 + R_{M,t}\right) - 1\right] \quad \text{(3)}$$

This approach is used to measure the market-adjusted BHAR obtained by shareholders during the period of the measured long-term events.

Financial performance

As the market performance, the approach is r basis of accounting on financial performance in this study follows several previous studies by (Duppati et al., 2015; Septian & Dharmastuti, 2019), but the financial ratios used according to the purpose of viewing shareholder value. Financial ratios in this study are *Tobin's Q, Return on Assets* (ROA), *Return on Equity* (ROE), and *Earning per Share* (EPS). Financial performance will be compared in 1 year before 1 year, 3 years, and 5 years after the M&A event to provide a description of the creation of value for the shareholders of the acquiring company. The operational definition of these four ratios can be seen in the following table:

Table 2. Formula

Ratios	Formulas
Tobin's Q	The market value of all outstanding shares + debt / Total Assets
ROA	Earnings before interest and tax / The total value of assets
ROE	Net income / Shareholder's equity
EPS	Net income / Outstanding shares

The four financial ratios used, where Tobin's Q measures how well management manages company assets, where companies that have high Q ratio values are companies that tend to have attractive investment opportunities or significant competitive advantages (Ross et al., 2009). ROA is a measure of net income against total assets, where ROA measures how the profitability of a company is related to its total assets and can be used to measure how much net income can be generated by company assets. Also, companies with higher ROA mean company assets can generate earnings more efficiently (Duppati et al., 2015). While ROE is used in this study, because one of the returns can be reflected in ROE (Brigham & Houston, 2012) and EPS is a ratio that measures how much net income is distributed to each shareholder, EPS with high value is certainly preferred, because this value shows that more profits will be distributed to shareholders.

Both market performance and financial performance in the short and long term in this study will be tested using *a Paired sample t-test* with the help of SPSS 25 for all three hypotheses.

4. ANALYSIS AND DISCUSSION RESULTS

4.1. Analysis Results

In Table 4.1, it can be seen that n use-values *mean* CAR post-M & A around the day of the announcement of the events of 4% increase from the CAR before the events of - 1.4%, this shows M & A can provide the value of *the abnormal returns* are positive for the shareholders within 10 days post-M&A. But this did not last long, because the d natural long-term market performance, the value of *the mean* Bhar adjusted market post-M & A decreased performance is compared before, meaning that long-term market performance after M&A is not better than the performance before. The company's financial performance also declined after M&A. In the long term, there is no visible synergy, meaning that there is a destruction of value for shareholders from M&A activities for the acquirer involved.

Table 4.1. Descriptive Statistics Before and After M&A

Variable	N	Minimum	Maximum	The mean	Std. Deviation
CAR Pre	20	-0.1000	.2000	-0,014000	0.0964856

CAR Post	20	-0,1500	0.3900	0.040000	0.1450227
BHAR Pre	60	-0,2375	.7667	0.021537	0.1788644
BHAR Post	60	-0,4198	0.2901	-0,012337	0.1058274
Tobin's Q Pre	10	-0.06	4.16	1.5740	1,46975
Tobin's Q Post	10	.36	6.46	2.77270	2,26498
ROA% Pre	10	11.86	20.43	15,4160	2.77699
ROA% Post	10	2.22	16.96	9,6510	6.34663
ROE% Pre	10	19,20	29.56	22,6490	2,99059
ROE% Post	10	3.14	23.67	12.8490	8.27346
EPS Pre	10	69.49	1479.83	424,7490	484.79129
EPS Post	10	40.95	180.85	80.3000	46.86457

Source: data processed, 2020

As far as the hypothesis test in Table 4.2 of Panel A is taken, it can be seen that the short-term market performance through CAR shows that there are positive and significant differences in abnormal returns at the 5% confidence level after M&A, in the event period (-3, + 3), (-5, + 50), and (-10 + 10), but in periods (-1, + 1) there were no significant differences.

Table 4.2. Hypothesis Test Results of Acquisition Company Market Performance

Paired Samples Test			
Period of Event	t	df	Sig. (2-tailed)
Panel A (CAR)			
(-1, + 1)	2,259	1	0.265
(-3, + 3)	3,594	5	0.016 *
(-5, + 5)	4,342	9	0.002 *
(-10, + 10)	6,039	19	0,000 *
Panel B (BHAR)			
(-36, + 36)	0.918	35	.365
(-60, + 60	1,209	59	0.232

Source; data processed, 2020. *Note: * is significant at 5%*

The long-term performance of the acquiring company is worse than the short-term, can be seen in Table 4.2 Panel B, where the average BHAR market-adjusted compared to the event period (-3 6, + 36) and (-60, + 60) shows no difference post M&A performance. Long-term abnormal returns in the period of the event analyzed are not statistically significant to the acquirer's shareholders.

In addition to market performance, the results of hypothesis testing for the acquirer's financial performance in the short and long term can be seen in Table 4.3 below:

Table 4.3. Hypothesis Testing of Financial Performance

Paired Samples Test			
Period of Event	t	df	Sig. (2-tailed)
Short-term			
Tobin's Q (-1, + 1)	-0,593	1	0.659
Tobin's Q (-2, + 2)	-0,630	3	0.573
ROA% (-1, + 1)	1,391	1	.397
ROA% (-2, + 2)	1,996	3	0.140
ROE% (-1 , + 1)	1,034	1	.489
ROE% (-2, + 2)	1,808	3	.168
EPS (-1, + 1)	15,549	1	0.041 *
EPS (-2, + 2)	4,596	3	0.019 *
Long-term			
Tobin's Q (-3 , + 3)	-0,901	5	.409
Tobin's Q (-4, + 4)	-1,536	7	.168
Tobin's Q (-5, + 5)	-1,838	9	0.099
ROA% (-3 , + 3)	2,163	5	0.083
ROA% (-4, + 4)	2,307	7	0.054
ROA % (-5, + 5)	2,599	9	0.029 *
ROE% (-3, + 3)	2,337	5	0.067
ROE% (-4, + 4)	2,749	7	0.029 *
ROE% (-5, + 5)	3,254	9	0.010 *
EPS (-3 , + 3)	1,481	5	0.199
EPS (-4, + 4)	1,970	7	0.090
EPS (-5 , + 5)	2,329	9	0.045 *

Source: data processed, 2020 . *Note: * is significant at 5%*

In table 4.3 above, it can be seen that almost all financial ratios used to measure short-term and long-term financial performance compared to before and after M&A show no significant differences, significant differences only occur in ROA ratios (-4, + 4), ROE (-4, + 4) and (-5, + 5) and EPS (-5, + 5). Based on the results of the above hypothesis test, it can be concluded as follows:

Tabel 4.4. Conclusion Hypothesis Testing

Hypothesis		Decision
H_1	There is a significant difference in the performance of the market in the short term post-merger and a acquisitions.	**be accepted**
H_2	There is no significant difference in the long-term market performance after mergers and acquisitions.	**be accepted**
H_3	There are no significant differences in financial performance in the short term or long term after the merger and acquisition.	**be accepted**

4.2. Discussion

Market Performance

Statistically, there is a significant positive difference in the short-term market performance of the acquiring company, which is indicated by the CAR of the event period of 7 days (-3, + 3), 11 days (-5, + 5), and 21 days (-10, + 10), but in the event period, 3 days (-1, + 1) did not show a significant difference in performance. This means that the market-adjusted abnormal return period of 1 day after the announcement is the same or smaller than the period of 1 day before the announcement of the M&A event, this is because the stock market reaction shows price adjustments based on market information flows after the announcement of the event (Boubaker et al, 2014). The results of this study are in line with the findings of previous studies which also show the effect of mergers and acquisitions on the short-term market performance of the acquiring company, even with a low *abnormal return* value (Zakaria & Kamaludin, 2018), (Putu et al., 2017), (Reddy & Natekar, 2015), (Nisa et al., 2019) and (Gunawan & Sukartha, 2013). The results of this study are also not in line and reject the results of research from studies conducted by (Fadlitama & Adawiyah, 2016) which found that there is no difference in short-term market performance so that it does not provide value for the shareholders of the acquiring company investing more than 50% of the company target.

On the long-term market performance Based on the above statistical test for BHAR in the period (-36, +36) has *the* value of 0.918 and significant at 0.365 and BHAR period (-60, + 60) has a value of 1.209 significant at 0.232, so it can it was concluded that there was no difference in market performance in the long term after the merger and acquisition. This implies that market performance after mergers and acquisitions has an *abnormal return* that is lower than in the period before the event, where the descriptive statistical test shows the average amount *of* long-term *abnormal return* before the event of 2.15% while the average after the event decreased by -1.23%. This means that investor confidence is low in the activities of mergers and acquisitions conducted by the acquirer involved. According to Duppati and Locke (2015), that short-term performance gives shareholders confidence and expectations on the long-term performance of companies involved in M&A. These findings provide evidence that the M&A conducted by the acquiring company is not able to create value for the company's shareholders.

The results of this study are in line with research conducted by Gregory and McCorriston (2005), Oler *et al* (2008), and Giannopoulos *at al* (2017). This finding is also supported by agency theory which views that because agents or managers do not fully share the owner's goals and because they tend to have better information about the tasks and business environment, so agents may have motivation and opportunities to behave in ways that maximize the agent's utility at the expense of the principal or company owner (Jensen and Meckling, 1976). Besides, these findings are consistent with the hubris theory, that this underperformance can be justified by managerial arrogance, which causes the acquirers to overestimate the takeover advantage (Roll, 1986; Boubaker and Hamza, 2014).

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Financial performance

In the short-term financial performance, only the EPS ratio statistically shows the difference in performance after mergers and acquisitions, in the period (-1, + 1) with a *p-value* of 15.549 and significant at 0.041, for the period (-2, + 2) with *a p-value* of 4.596 and significant at 0.019. If seen from the average value (*mean*) in the descriptive statistical test the performance of the period before is better than the performance after mergers and acquisitions for short periods. These findings are in line with research conducted by Edi and Irayanti (2019), Nurfauziah and Ainy (2018), whose research findings indicate that there is no difference in financial performance after mergers and acquisitions. These results illustrate that mergers and acquisitions for the acquirer companies involved cannot create value for shareholders in the short term.

Financial performance, in the long run, shows results that are similar to the short run, where overall the results of the analysis of the *paired sample test* for all financial performance variables on average do not show any difference in performance, for that it can be concluded that in the long run it is unable to provide a positive return for shareholders or it can be said that there was damage to the shareholders for the period under study. Only a few ratios indicate that there are significant differences after mergers and acquisitions, including the ROA ratio period (-5, + 5) significant at 0.029, ROE ratio period (-4, + 4) significant at 0.029 and period (-5, + 5)) significant at 0.010 and a period EPS ratio (-5, + 5) significant at 0.045. These findings are in line with research conducted by Mamahit *et al* (2019) which shows that the average value of profitability ratios shows that the company's performance before mergers and acquisitions is greater than the period after mergers and acquisitions. The results of this study are also in line with research conducted by Duggal (2015), where the results show there is no post-merger increase in the long-term financial performance of 3 years (+3) and 5 years (+5) periods.

The results of this statistical analysis show that the acquirer company has not been able to maximize the utilization of shared resources after the merger in other words there has not been created a synergy from the merger, especially managerial synergy and research and technology synergy. This means that there is no maximum transfer of knowledge and technology after the merger because the market value of a company must be reflected by the expected return of *intangible capital* created from research and development (Johnson and Pazderka, 1993; Ivarsson and Christensen, 2012). Besides, companies that have high Q ratio values are companies that tend to have attractive investment opportunities or significant competitive advantages (Ross *et al* ., 2009).

5. CONCLUSION

The market performance of the acquiring company in the short term shows a positive abnormal return for its shareholders, meaning there is a positive market response to the M&A announcement, but this does not last for a long time. Because in the long run, the market performance continues to decline, even in the event

period compared does not show differences in performance. This also applies to the financial performance of acquirers after M&A. This likely happened because investors in Indonesia did not have great expectations for the future of the announcement of mergers and acquisitions by the acquirer involved. Also, according to Uddin and Boateng (2009), that certain transaction characteristics, company-specific and geographical (target form, acquisition strategy, the geographic target company, and payment method) do indeed affect the *abnormal return* of the acquirer. Another possibility, the lack of response from foreign investors, because the involvement of foreign parties can generate positive returns due to positive market perceptions about the merger's success or differences in deal offerings or types of mergers that the market believes will grow successfully in the future (Shah and Arora, 2014). These findings illustrate that there was damage to the value of the acquirer's shareholders involved after M&A.

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