

# Impact of Mergers and Acquisitions on Abnormal Returns and Financial Performance of Banks Listed on the Indonesia Stock Exchange

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**Abstract:-** This study examines the stock market performance of Indonesian banking firm conducting mergers and acquisitions (M & A) in the period 2019. The purpose of this study is to investigate the impact of M&A agreements on the performance of takeover banks. A total of 3 firm involved in the 2019 M&A agreement were sampled in this study. This study uses two methods, namely the event study method with a market model approach and an accounting approach-based method, to examine the impact of M&A. The results showed that abnormal returns measured using CAR were not better after M&A and financial performance proxied by ROA, ROE, BOPO, gross NPL, and LDR also showed poor performance after M&A. However, the firm's size showed an increase and was statistically significant after M&A.

**Keywords:-** Mergers, Abnormal Returns, Financial Performance, Banking.

## I. INTRODUCTION

Banks have an important role in encouraging the economy in a country. One way the bank realizes effective and efficient performance to maximize profits can be realized is through expansion. The business expansion in question is external, namely strategic decisions in conducting mergers and acquisitions. In addition to efficiency, acquisitions are also able to create competitive advantages and can create value for the company's shareholders. Acquisitions are also useful as a tool to generate instant revenue or gain a direct advantage over competitors without increasing capacity (Jemison & Sitkin, 1986; Duppati & Locke, 2015). Effective acquisitions can achieve rapid access to high-growth markets, acquire expertise, technology, products, brands, market presence, experienced management, reduce risk, and complement ongoing internal product developments (Duppati & Locke 2015).

There have been many studies related to mergers and acquisition events in the financial services industry, where extensive research has been carried out to find out whether acquisitions are value-creating events or otherwise damage shareholder value, and where different empirical studies have shown conflicting results. Empirical findings by Chaitra, Manjunath, and Rehaman (2019) show that the performance of bank share prices in the short term increases in the post-M&A period and has an impact on shareholder

wealth. Another finding by Chaudary and Mirz (2017) is that acquisitions do create abnormal returns (short-term) for shareholders of the acquiring bank around the time of the acquisition announcement. Empirical evidence suggests that the acquiring bank earns positive abnormal returns and contributes significantly, but the profitability measure does not show a significant increase after M&A (Mittal & Garg 2018), which can be attributed to manager motives that can be driven by agency, arrogance, or synergy (Berkovitch & Narayanan, 1993). Another result shows that the merger agreement does not bring about abnormal changes in stock returns before and after the event date, which implies that the company cannot earn abnormal returns in the post-event period (Mall & Gupta 2015). The observed poor post-acquisition performance in acquiring firms is largely consistent with managerial over-optimism, agency, or snobbery (Agrawal et al., 1992; Loughran & Vijh, 1997; Bhabra & Hossain, 2017). Boubaker & Hamza (2014) argue that managers of firms with large free cash flows are more likely to make value-destroying acquisitions (Jensen, 1986), while Shleifer and Vishny (1989) argue that entrenched managers are willing to make acquisitions and pay more for their targets to avoid losing their jobs. However, acquiring company managers often refer to the value creation from synergies as justification for merger and acquisition transaction decisions. Regardless of the motive, it is from a financial management perspective that the main objective of management is to create value for shareholders or maximize wealth through maximizing the price of the company's common stock (Brigham & Houston 2012).

This study empirically examines the impact of mergers on abnormal returns and short-term financial performance of three private banks in Indonesia, namely PT. Bank IBK Indonesia (AGRS), PT. Bank BTPN Tbk (BTPN), and PT. Bank Oke Indonesia Tbk (DNAR). Given the various empirical findings related to acquisition activities, this study intends to develop existing studies by focusing on three private banking companies in Indonesia. The main problem that will be seen is whether the business expansion carried out through this merger decision tends to be able to create value for the shareholders of the company that takes over, where the company's stock performance is measured using an abnormal return approach and financial performance using several financial ratios, namely Size (Company Size), ROE, ROA, BOPO, gross NPL, and LDR, to see the company's performance after the merger. From a managerial and investor perspective, understanding the performance of the takeover company is very important. This is because

Indonesia is one of the developing countries in Asia with the fastest economic growth in the world, with an average economic growth rate of 5.1% per year, has abundant natural resources, a growing workforce, and a decreasing dependence on foreign funding. (2019, Oxford Economics).

## II. A LITERATURE REVIEW

### A. CONCEPTUAL AND THEORETICAL STUDIES

Takeovers, mergers, and acquisitions are often used synonymously, although there are distinctly different economic implications for takeovers and mergers (Singh, 1971). An interpretation of this distinction defines takeovers and acquisitions as activities whereby the acquiring company can control more than 50% of the target company's equity, whereas, in a merger, at least two companies are combined with each other to form a new legal entity (Piesse et al. 2006).

As a result of increasingly competitive business environments, competition triggers companies to find new ways of growth. It is undeniable that mergers, acquisitions, and alliances are expansion strategies of a company to increase value creation (Papanikolaou 2011) thru competitive advantages and synergies. According to Green (2018), the rationale for mergers and acquisitions is to increase shareholder wealth. Hitt, Harrison, and Ireland (2002) suggest that value creation in mergers and acquisitions can occur if the synergies benefit obtained thru merging and integrating previously separated companies are greater than the costs (including expropriation premium payments) incurred to create those synergies. For this reason, this study uses relevant theories related to mergers and acquisitions, which can support the results of this study.

Resource-Based Theory is a resource-based approach that is owned by a company when analyzing its competitive advantage. The concept was developed from a management strategy that analyzes and interprets organizational resources so that the organization achieves a sustainable competitive advantage. A resource-based theory view underlies companies' ability to get good financial performance and competitive advantage by dominating and utilizing tangible and intangible assets (Wernerfelt, 1984; Edi & Irayanti, 2019). The resource-based theory describes mergers and acquisitions as strategies used to access other firms' resources with the aim of creating competitive advantages and values that are not available in the firm. The synergy motive is attributed to the firm resource-based theory, in which the complementary resource profiles of two firms, such as physical resources, intangible resources, financial resources, and human resources, are integrated in a way that uniquely positions the firm against its competitors (Capron, 1999; Hitt et al., 2012). Creating the most value from existing resources by combining them with other resources is an effective combination to generate optimal returns (Das & Teng, 2000; Edi & Irayanti, 2019).

The interpretation of RBT shows that the company hopes to increase its superiority over competitors thru the synergy of M&A by utilizing the resources of both tangible and intangible assets of each company, which, in the end, is

able to create value for the company's shareholders. This combination of assets and resources will certainly result in economies of scale and a wider scope of companies that are able to innovate to create products or services that have value.

### B. EMPIRICAL STUDIES AND HYPOTHESES

Several studies examining the impact of post-M&A found positive and significant abnormal returns in the short term, although several studies showed different results. In addition, research focusing on the financial performance of M&A firms has provided evidence of an increase in profitability, whereas other studies have found no increase in profitability. This inconsistent finding could be due to the fact that the companies studied differed in many ways. As a result, all the empirical literature on M&A is conflicting, and it is difficult to draw concrete conclusions regarding the existing empirical results. Therefore, it is necessary to conduct research on certain banks, and the findings can be generalized to other banks that have similar characteristics.

Research on the impact of acquisitions in Indonesia by Veronica and Kusuma (2012) The purpose of this study is to examine whether there are differences in stock returns before and after the acquisition. so that investors receive information at the time of the acquisition or find out what happened too late. In particular, Dewi & Widjaja (2020) examined differences in performance and abnormal returns of companies that merged and acquired in the 2014–2018 period in the short term. The findings showed that there were no significant differences in the company's financial performance and abnormal returns before and after mergers and acquisitions. However, the research by Chaitra and Learner (2020), using the event study method on the event window 10 days before (-10) to 10 days after (+10) and an estimated period of 250 days to see the impact of mergers and acquisitions on banking companies in India the results show that the performance of the bank's stock price basically increased in the post-merger period. It is known that the CAAR is statistically significant on most days in the event window period, which indicates that the merger declaration has an impact on shareholder wealth.

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window period, which indicates that the merger declaration has an impact on shareholder wealth.

Another study by Syamsuddin & Pratama (2021) on statistical tests conducted showed that there was no significant difference between the average abnormal return (CAR) of BRISyariah shares before and after the signing of the Conditional Merger Agreement (CMA) of BUMN Sharia Banks. Sakinah & Ikhsan (2020) found that there were differences in the ratio of total asset turnover, while the ratios of ROE, CR, debt to equity ratio, EPS, and abnormal return had no significant differences for the acquiring company. Another study was conducted by Mall & Gupta (2019) using the event study methodology using a 17-day event window, namely -8 to +8 days of stock returns, where the results show that the merger agreement does not bring about abnormal changes in stock returns before and after the event date, which implies that the trader cannot earn abnormal returns in the pre-post event period.

In a study conducted by Mittal and Garg (2018) on M&A transactions with banks in India during the 2006–2015 period, they found convincing evidence for the acquirer and the profit target. where the t-test for significant abnormal return and positive abnormal return is shown. Firm size and profitability measures are not significantly different in this study. Acquiring firms that earn positive returns are involved in multiple acquisitions and contribute significantly to positive abnormal returns. The returns of the acquirer company also depend on the characteristics of the target company and interest income.

Research on abnormal returns and financial performance of banking companies before and after mergers and acquisitions was carried out by Okalesa, Efni, and Zulfahridar (2014), where the results showed that the CAR variable had insignificant differences in performance before and after mergers and acquisitions. In contrast to other variables, there were significant differences in the variables of NPL, ROA, BOPO, and LDR before and after mergers and acquisitions. On the other hand, research conducted by Edi & Irayanti (2019) to determine the company's performance after mergers and acquisitions found that earnings quality showed an insignificant increase, which indicates that company profits have changed after mergers and acquisitions. This proves that mergers and acquisitions have a negative impact on company profitability.

Silalahi & Ginting (2020), examine differences in financial performance before and after the merger at CIMB Niaga bank, where the findings show that there are differences in the ratios of net profit margin (NPM) and financial leverage multiplier (FLM) before and after the merger, while the ratios of total asset turnover (TATO), ROA, and ROE did not differ before and after the merger, even tho ROA and ROE continued to decline. Another study conducted by Musah, Abdulai & Baffour (2020) regarding the impact of mergers and acquisitions on bank profitability found that there was a negative and statistically insignificant relationship between mergers and acquisitions and return on equity. However, bank size shows a significant relationship with NPM, ROA, and ROE. The results of this study

provide evidence that banks with larger sizes are able to carry out larger financial transactions, reduce spending, and improve financial performance.

Based on some of the empirical findings above, it implicitly illustrates that acquisition decisions can have a negative impact on the performance of post-M&A companies in the short term, especially for banking companies that make M&A decisions in developing countries. The hypothesis of this study is as follows:

**H<sub>1</sub>:** There is no abnormal return for the company's shareholders after the merger and acquisition.

**H<sub>2</sub>:** There is an increase in the company's financial performance after the merger and acquisition.

### III. RESEARCH METHODS

This study uses two methodologies. First, an event study to see the impact of the acquisition in the short term caused by the taking over. According to Fama (1991), event studies are part of the efficient market hypothesis concept. It is assumed that the economic efficiency of the stock market and hence abnormal security returns for both acquiring and target firms, controlling for general market movements and firm systematic risk, represent the economic impact of M&A events (Dickerson et al., 1997; Akben-Selcuk and Altioek-Yilmaz, 2011). Specifically, event studies investigate the market response to the information content of an announcement or publication of a particular event (Tandelilin, 2010). Warner & Brown (1980) conclude that beyond the simple one-factor market model, there is no evidence that more complex methodologies are beneficial. In an event study, the company's performance is compared by using certain event windows, both short-term and long-term, as a result of an event. The event window used varies from one study to another.

Research by Andrade et al. (2001) and Moeller et al. (2003) explains that the three-day window is one of the two most commonly used event windows for merger studies. Another window that is most commonly used begins before the announcement and ends with the completion of the merger (Moeller et al., 2003). Second, the accounting-based method approach uses financial ratios to measure financial performance. The study is based on the analysis of financial data to try to assess the economic impact of M&A by examining changes in the profitability of the companies involved. For example; in this study, profitability measures before M & A were compared with profitability measures after M & A by parametric tests.

This study uses secondary data sources. The company's stock price is obtained through the documentation of historical data on closing prices and the closing of the Jakarta composite index (JCI) as a proxy for the market portfolio, obtained from the website [www.yahoofinance.com](http://www.yahoofinance.com). For financial performance, this study uses data in the form of financial statements of the takeover companies for the periods 2018 and 2020, obtained from [www.idx.co.id](http://www.idx.co.id). The samples in this study were three private banking companies in Indonesia that carried out merger activities in the 2019 period. The sample data was



obtained from the Business Competition Supervisory Commission (KPPU) and [www.sahamok.net](http://www.sahamok.net), where the sample is a takeover company. The sample is drawn based on several criteria; see the table below:

Criteria	Total
(1) Takeover Banking Company that is actively listed on the Indonesia Stock Exchange (IDX) and is M&A for the 2019 Period	6
(2) A takeover bank that publishes financial statements for 2018 and 2020 and has complete historical documentation of stock prices during the research period.	(1)
(3) Banks that conduct M&A transactions more than once in the same fiscal year	(2)
<b>Total sample selected</b>	<b>3</b>

Table 1: Shows the sampling criteria

**A. MARKET MODEL APPROACH (MARKET PERFORMANCE)**

To see the impact of the announcement of acquisition events in the short term, this study uses a short-term event window adopted from the event window used by Duppati & Locke (2015). With five event windows used, namely three days (-1, +1), five days (-1, +3), seven days (-3, +3), twenty-one days (-10, +10), and thirty-one days (-15, +15). Window 0 as the event announcement day is not included in the estimate. Using the market model approach, the estimation period is 120 days starting from 15 days before the announcement day of the event (-15). Return (return) is obtained as the difference in the natural logarithm (Ln) of the daily share price of securities and the market. This reduces the security's systematic risk relative to the market portfolio (Duppati & Locke, 2015). This study uses the standard market model equation to calculate the normal return of a company's common stock:

$$R_{i,t} = (\alpha_i + \beta_i R_{m,t} + \epsilon_{i,t})$$

Where:

- $R_{it}$  : return for company i on day t
- $R_{mt}$  : return on market portfolio (JCI) for day t
- $\alpha_i$  : company intercept period estimatei
- $\beta_i$  : Coefficient of estimation obtained by OLS during the pre-acquisition period
- $\epsilon_{it}$  : residual (random disturbance)

The results of abnormal returns (AR) for company i on day t are obtained as follows:

$$AR_{it} = R_{it} - (\alpha_i + \beta_i R_{m,t})$$

Where,  $AR_{it}$  is the excess return of firm i on day t.

The cumulative abnormal return (CAR) for company i, namely,  $CAR_i$ , is calculated by adding up the average abnormal return over the event period as follows:

$$CAR_{i,(t1,t2)} = \sum_{t1}^t AR_{i,t}$$

Where the CAR of company i on day t, for example, for periods  $t_1$  (-1) and  $t_2$  (+1).

**B. ACCOUNTING-BASED APPROACH (FINANCIAL PERFORMANCE)**

In assessing the company's post-acquisition financial performance, this study uses several financial ratios to show the creation of shareholder value in the short term as a result of the announcement of the acquisition event. The financial performance of the acquiring company was analyzed for 1-year pre-M&A and 1-year post-M&A. The six operational performance measures can be seen in the following table:

Ratio	Formula
<i>Firm size(Size)</i>	Natural Logarithm (Ln) Total assets
<i>Return on assets (ROA)</i>	Net profit / Total Assets
<i>Return on equity (ROE)</i>	Net Profit / Total Equity
<i>Operating Expense to Operating Revenues (BOPO)</i>	Operating Expenses / Operating Income
<i>Non performing loan (NPL)</i>	Subpar Credit + Doubtful Credit + Bad / Total Credit
<i>Loan to deposit ratio (LDR)</i>	Total Credit / Total Funding

Table 2: Formula

The six financial ratios used in the measurement of the operating performance of the takeover company are listed below. First, the impact of firm size on acquisition performance is most likely to result from the effectiveness of the integration process (Hitt et al. 2012). For example, the "same merger" involves two large companies that consistently underperform (Fanto 2001; Weber and Camerer 2003). This suggests that, in terms of relative size to the acquiree, firm size has a complex relationship with M&A performance. Second, ROE measures the profits earned by shareholders and can reflect returns to shareholders. In addition, companies with higher ROE earn higher returns on the investment projects they undertake. Third, ROA measures how the company's profitability is related to its total assets and is used to measure how much net profit will be generated from each company's assets. In addition, a company with a high ROA means that the company's assets can generate more optimal profits. Fourth, BOPO is the ratio between operating expenses and operating income. Operating income is the bank's main income, namely income derived from the placement of funds in the form of credit and other operating income. The smaller the BOPO value from the previous year, the better it means that banks are more efficient in carrying out their operations. On the contrary, the greater the BOPO value, the greater the inefficient operational performance. Fifth, non-performing loans, also known as NPLs (non-performing loans), are loans in which the borrower (the debtor) has stopped paying both principal and interest installments. The higher the NPL value (> 5%), the more it will disrupt the bank's performance in achieving good profitability and also disrupt the health of the bank due to default by the debtor. Sixth, LDR is used in this study to measure the liquidity of the acquiring company. If the LDR is too high, it means that the bank may not have enough liquidity to cover unexpected funding needs. Conversely, if the ratio is too low, the bank

will not be able to increase its income. The LDR information is one indicator of the financial health of a bank in operating its activities. Through the merger of the companies involved, the bank's performance in managing

bank loans and deposits is improving. The ideal loan-to-deposit ratio is in the range of 78% to 92% (Bank Indonesia).

Event Window Observation																
Takeover Firm	Tak +1)	CAR (-1, 0, +3)			CAR (-1, 0, +3)			CAR (-3, 0, +3)			CAR (-10, 0, +10)			CAR (-15, 0, +15)		
		t-	p-	t-	p-	t-	p-	t-	p-	t-	p-	t-	p-	t-	p-	
		test	value	test	value	test	value	test	value	test	value	test	value	test	value	
BTP	0.4	0.6	0.3	0.7	0.2	0.8	0.0	0.1	0.10	0.						
N	970	5	585	4	772	0	866	8	84	17						
DN	0.0	0.9	-	0.5	-	0.6	0.1	0.9	0.06	0.						
AR	720	5	0.6715	4	0.5600	1	233	1	55	95						
AG	-	0.0	-	0.0	-	0.0	-	0.1	-	0.						
RS	5.3714	1*	4.8452	1*	4.0500	2**	1.6246	8	0.6782	53						

Table 3: Empirical Results of the Cumulative Abnormal Return (CAR) of the Takeover Company

Source: processed data, 2021

Note: (\*) significant at 1% level, (\*\*) significant at 5% level.

Financial performance before and after M&A is measured using a paired t-test for each of the ratio measures considered. To test the normality of the data and the hypothesis, this study uses the help of the STATA software application version 14.

**IV. RESEARCH RESULTS AND DISCUSSION**

**A. MARKET MODEL APPROACH**

Table 3 below shows the results of the cumulative abnormal return (CAR) analysis for the short-term event window ranging from 3 days (-1, 0, +1) to 31 days (-15, 0, +15). From the results of the analysis in the table below, it is known that for all event windows used to measure short-term market performance, it is not statistically significant after M&A, where the t-value for all measurements is < 1.98 (t-table) and probability (p-value) > of the significance level of 5% (α = 0.05). These statistical results are reinforced by the mean values for all event windows, which show a downward trend from the 3 days to be decreasing and negative in the 31-day post-M&A period.

All event windows in measuring short-term market performance are seen only in the short 3 days (-1, 0, +1), 5 days (-1, 0, +3), and 7 days (-3, 0, +3) short windows, which show better performance, but are negative and statistically significant in the AGRS banking company. On the other hand, other companies do not show good performance after M & A. Basically, the difference between the actual return and the expected return can be a positive or negative difference if the negative abnormal return means that the actual return is smaller than the return expected by market participants or investors. A negative and significant CAR indicates that market participants or investors will withdraw their funds and wait for the right time to reinvest (Dwipayana and Wiksuana 2017).

Event Window	Mean	P-value
Pre-event day-AAR	0.0082	0.43
Event day-AAR	-0.1140	0.32
Post-event day-AAR	-0.0174	0.34
CAR (-1, 0, +1)	-0.1050	0.78
CAR (-1, 0, +3)	-0.1429	0.79
CAR (-3, 0, +3)	-0.1415	0.82

Table 4: AAR and CAR surrounding the announcement date  
Source: processed data, 2021

The findings in Table 4 above provide further evidence that the M&A announcements made by the three takeover banks did not show a positive performance in the stock market. These empirical findings provide evidence that there is a disservice to the value of M&A decisions in the short term. In Figure 1 below, the post-M&A abnormal

return is not better than the period before the M&A, where the highest abnormal return occurs on the announcement day. This may be due to information leakage, which triggers a market response 1 day before the announcement day and peaks on the announcement day., then decreases again 1 day after the announcement day and returns to normal for the

following days. Increases in stock prices that occur around the announcement day can also be caused by the stock

market's being in a position of stock price correction.

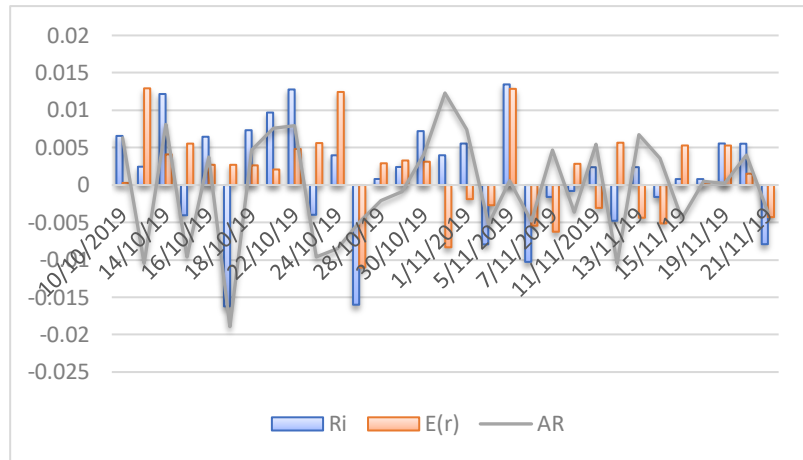


Fig. 1: Abnormal Return (AR) Performance Around Announcement Day

Source: processed data, 2021 (STATA 14).

According to these findings, there appears to be another motive in the company's M&A decisions. Short-term results show poor performance. This illustrates that investors have a negative assessment of the corporate actions taken by the takeover companies. In Figure 1 above, there is a perception of high risk in the future. This is indicated by the expected return (E (r)) on several occasions, which is higher than the actual return (Ri). Therefore, decisively, these findings support hypothesis 1, that there is no post-M&A abnormal return for shareholders of the takeover company, meaning that the impact of the acquisition does not show a positive wealth effect for shareholders in the short term.

**B. ACCOUNTING-BASED APPROACH**

The empirical results of financial performance in Table 5 below show that the bank's financial performance after the M&A is not better than its financial performance before the M&A. This means that there is a decline in performance after the M&A. Better results after M & A are only shown by the size of the company (size). where the size of the company increased significantly at a p-value of 0.0313 < from a significant level of 5% ( $\alpha = 0.05$ ).

Empirical results, especially the size of the firm, illustrate that there is an increase in the size of the bank, in which the company's management strategy has succeeded in utilizing tangible assets and intangible assets from the merger of two companies. company size. This means that an increase in company size will determine the company's ability to access capital in larger financial markets, either through offering shares or bonds. The size of the company also shows that the company has a better level of sales and a higher total asset base. Of course, this is the result of an M & A decision made by management. The results of this study support the argument from resource theory that management strategy is an interpretation of organizational resources to achieve competitive advantage and sustainable

competitiveness.

These empirical findings reject hypothesis 2, which is that there is no increase in financial performance after the announcement of the M&A. However, these findings still need further research, considering that the period used in this study is short-term performance.

**V. CONCLUSIONS AND RECOMMENDATIONS**

This study examines the impact of M&A on abnormal returns and the financial performance of banking companies using two methods, namely the event study method to measure the presence or absence of abnormal returns in the short term and the accounting-based approach method using several financial ratios to measure bank performance after M&A.

The results of the analysis of the event study using a market model approach show that the cumulative abnormal return (CAR) for all short-term windows is not statistically significant. Only the short window of 3 days (-1, 0, +1) shows better performance for the banking company AGRS. Otherwise, the results are different for other companies. Therefore, it is concluded that the average return for the shares of the takeover companies involved in the M&A was not better after the M&A. However, these results cannot be confirmed as a parameter to assess the performance of companies involved in M&A because the event window used in this study is a short-term period.

The results of an accounting-based analysis using financial ratios in measuring financial performance, where the paired t-test parameter shows that the ROA, ROE, BOPO, gross NPL, and LDR values after M&A are not significantly better than values before M&A. Therefore, the empirical results of financial performance do not support hypothesis 2 that there is an increase in the company's financial performance post-M&A.

Variable	Obs	Mean	Std. Err	Std. Dev.	Pr (T > t)
Size post-M&A	3	30.74265	1.057439	1.831538	
Size pre-M&A	3	30.14899	1.050576	1.831538	0.0313
ROA post-M&A	3	-0.002381	0.0081437	0.0141053	
ROA pre-M&A	3	0.0054608	0.0074025	0.0128215	0.9765
ROE post-M&A	3	-0.0123018	0.0428916	0.0742904	
ROE pre-M&A	3	0.0186036	0.0451264	0.0781611	0.9600
BOPO post-M&A	3	0.447257	0.6462961	1.119418	
BOPO pre-M&A	3	0.3405053	0.6079402	1.052983	0.0683
Gross NPL post-M&A	3	0.0328667	0.0114335	0.0198034	
Gross NPL pre-M&A	3	0.0372	0.0151596	0.0262572	0.7887
LDR post-M&A	3	1.199933	0.0850138	0.1472481	
LDR pre-M&A	3	0.986	0.0881163	0.1526219	0.0733

Table 5: Financial Performance Measurement Results

Finally, from the empirical results of abnormal returns analyzed, it shows that the Indonesian capital market has a semi-efficient form of efficiency because this is a developing market. Referring to public awareness regarding the importance of investing, this empirical result shows the low public awareness in Indonesia of investing in the Indonesian capital market. There needs to be a role from the government of Indonesia and other stakeholders in socializing this following the government's invitation to "let's save stocks."

## VI. RESEARCH LIMITATIONS

The results of this study need to be developed, considering that this study has limitations, namely: first, it must be admitted that the results of this study have generalizability problems, because only public companies listed on the IDX were examined. Second, the research period used in this study to examine post-M&A bank performance is only short-term, both in terms of market performance and financial performance. The possibility of this short-term period is not sufficient to describe the realization of a positive increase in wealth after the M & A.

## REFERENCE

### • BOOKS

- [1.] Brigham, Eugene F., and Joel F. Houston. 2012. *Financial Management Fundamentals* (Indonesian Edition). 11th ed. edited by SalembaEmpat. Jakarta: Salemba Empat.
- [2.] Hitt, Michael A., Jeffrey S. Harrison, and R. Duane Ireland. 2002. *Mergers And Acquisitions: A Profitable Guide For Shareholders* (Indonesian Translation). PT RajaGra. edited by S. Hariyanto, Sukono, and U. Rohima. Jakarta: Oxford University Press.Inc".
- [3.] Tandelilin, Eduardus. 2010. *Portfolio And Investment: Theory And Application*. 1st ed. Yogyakarta: Kanisius.

### • JOURNAL

- [4.] Akben-Selcuk, E., and A. Altiok-Yilmaz. 2011. "The Impact of Mergers and Acquisitions on Acquirer Performance: Evidence from Turkey." *Business and Economics Journal* 2(1):1–8.
- [5.] Bhabra, Harjeet Singh, and Ashrafee Tanvir Hossain. 2017. "The Sarbanes-Oxley Act and Corporate

Acquisitions." *Managerial Finance* 43(4):452–70. doi: 10.1108/MF-10-2016-0291.

- [6.] Boubaker, Sabri, and Taher Hamza. 2014. "Short- And Long-Term Wealth Gains From UK Takeovers: The Case Of." 30(4):1253–62.
- [7.] Chaitra, K., and M. B. A. Learner. 2020. "An Analysis of Pre and Post-Merger of Indian Banks: An Event Analysis Approach." (August 2019):172–78.
- [8.] Chaudary, Samra, and Nawazish Mirz. 2017. "Domestic and Cross-Border Returns to Bidders in Acquisitions into the E.U." *Economic Research-Ekonomiska Istrazivanja* 30(1):1021–32. doi: 10.1080/1331677X.2017.1311228.
- [9.] Dewi, Sylvi Liani, and Indra Widjaja. 2020. "Analysis Of The Effect Of Mergers And Acquisitions On Financial
- [10.] Performance And Abnormal Returns In Companies In The Indonesia Stock Exchange In 2014-2018." *Jurnal Manajemen Bisnis Dan Kewirausahaan* 5(1):34–39.
- [11.] Duppati, Geeta, and Stuart M. Locke. 2015. "Cross Border Mergers and Acquisitions: Post Acquisition Performance of Indian Corporate." *Int. J. Business Competition and Growth* X(Y):000–000. doi: 10.1504/IJBCG.2015.075274.
- [12.] Dwipayana, I., and I. Wiksuana. 2017. "Testing Market Efficiency on the Indonesia Stock Exchange". *E-Jurnal Manajemen Universitas Udayana* 6(4):246943.
- [13.] Edi, and Leony Irayanti. 2019. "DOI: 10.32602/Jafas.2019.30 How Merger and Acquisition Affect Firm Performance and Its Quality Edi." *Journal of Accounting, Finance and Auditing Studies* 5(3):42–53. doi: 10.32602/jafas.2019.30.
- [14.] Hitt, Michael A., David King, Hema Krishnan, Marianna Makri, Mario Schijven, Katsuhiko Shimizu, and Hong Zhu. 2012. *Creating Value Through Mergers and Acquisitions*.
- [15.] Mall, Pinky, and Kapil Gupta. 2015. "Impact of Mergers on Stock Performance and Risk of Acquiring Firms: Evidence from India." *Researchgate.Net*.
- [16.] Mall, Pinky, and Kapil Gupta. 2019. "Impact of Merger Announcements on Stock Returns of Acquiring Firms: Evidence From India." *Journal of Commerce & Accounting Research* 8(1):46–53.



- [17.] Mittal, Amit, and Ajay Kumar Garg. 2018. "Why Do Acquirers Prefer M&A? Evidence from Banks in India." SSRN Electronic Journal (85354). doi: 10.2139/ssrn.2967102.
- [18.] Moeller, Citation, L. An Analysis, Short-term Performance, and Lin Zhu. n.d. "City Research Online City , University of London Institutional Repository An Analysis of Short-Term Performance of UK Cross-by Chinese Listed Companies."
- [19.] Musah, Alhassan, Mohammed Abdulai, and Hilda Baffour. 2020. "The Effect of Mergers and Acquisitions on Bank Performance in Ghana." Asian Journal of Economics and Empirical Research 7(1):36–45. doi: 10.20448/journal.501.2020.71.36.45.
- [20.] Okalesa, Yulia Efni, and Zulbahridar. 2014. "Comparative Analysis of the Financial Performance of Banking Companies That Go Public on the Indonesia Stock Exchange Before and After Mergers and Acquisitions For The Period Of 2000-2012." Jurnal Tepak Manajemen Bisnis VI(3):90–105.
- [21.] Papanikolaou, Ioannis. 2011. "Corporate Governance Implications and Synergistic Effects of a Shipping Takeover." International Hellenic University.
- [22.] Piesse, Jeniffer, Cheng-Few Lee, Lin Lin, and Hsien-chang Kuo. 2006. "Encyclopedia of Finance, Mergers and Acquisitions: Definitions, Motives and Market Responses." Encyclopedia of Finance, Mergers and Acquisitions: Definitions, Motives and Market Responses 1960:541–52.
- [23.] Sakinah, Ulfa, and Adhisyahfitri Evalina Ikhsan. 2020. "Comparative Analysis of Financial Performance and Abnormal Returns Before and After the Acquisition of Companies Listed on the Indonesia Stock Exchange in 2014." Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi 5(1):59–68. doi: 10.24815/jimeka.v5i1.15436.
- [24.] Silalahi, Kristina, and Mitha Christina Ginting. 2020. "Analysis of the Differences in Financial Performance of Companies Before and After the Merger (Study at Bank Cimb Niaga Listed on the IDX)." Jurnal Manajemen 6:35–46.
- [25.] Syamsuddin, and Versiandika Yudha Pratama. 2021. "The Announcement of Sharia Bank ' s Conditional Merger Agreement . How Investor Reacted? ( Event Study at BRI Syariah )." Journal of Business and Management Review 2(2):136–46. doi: 10.47153/jbmr22.1002021.
- [26.] Veronica, M. Sienly, and Anis Putri Kusuma. 2012. "Analysis of Acquisition Announcements on Stock Returns of Commercial Banks on the Indonesia Stock Exchange for the Period 2005-2011." Proceedings of Conference In Business, Accounting and Management (CBAM) 1(1):615–29.
- [27.] Warner, B., and Stephen J. Brown. 1980. "Measuring Security Price Performance." Journal Of Financial Economics 8:205–58.
- [28.] Zakaria, Nadisah, and Kamilah Kamaludin. 2018. "The Short-And-Long Run Performance Of Mergers And Acquisitions : Evidence From Tadawul." 22(6):1–15.