

Market Reaction and Share Performance Towards the Merger and Acquisition Announcement of 2015-2019

Gadis Arimbi Puspita^{1*}, Irni Yunita²

gadisarimbi@student.telkomuniversity.ac.id*

Universitas Telkom, Jl. Telekomunikasi No.1, Kabupaten Bandung, Jawa Barat, Indonesia

Received Date : 06.06.2022

Revised Date : 01.09.2022

Accepted Date : 16.11.2022

ABSTRACT

This study aims to analyze differences in market reactions and performance before and before announcing Mergers and Acquisitions in companies listed on the Indonesia Stock Exchange (IDX) in 2015-2019 by measuring differences in Abnormal Return (AR), Trading Volume Activity (TVA), Security Return Variability (SRV), and Actual Return (R) 10 days before and 10 days after the event. The method used is quantitative. The data used are secondary data on daily closing stock prices and the number of shares held during the observation period. The test results show that there is no significant difference in Abnormal Return (AR), Trading Volume Activity (TVA) and Actual Return (R) before and before the event. However, there is a significant difference in the Security Return Variability (SRV) before and before the event.

Keywords : **Abnormal Return; Trading Volume Activity; Security Return Variability; Actual Return; Merger and Acquisition**

ABSTRAK

Penelitian ini bertujuan untuk menganalisis perbedaan reaksi pasar dan kinerja saham Before dan After pengumuman merger dan akuisisi pada perusahaan terdaftar di Bursa Efek Indonesia (BEI) tahun 2015-2019 dengan mengukur perbedaan Abnormal Return (AR), Trading Volume Activity (TVA), Security Return Variability (SRV), dan Actual Return (R) 10 hari Before dan 10 hari setelah peristiwa. Metode yang digunakan adalah kuantitatif. Data yang digunakan adalah data sekunder harga saham penutupan harian dan jumlah saham yang diperdagangkan selama periode pengamatan. Hasil uji menunjukkan tidak ada perbedaan signifikan pada Abnormal Return (AR), Trading Volume Activity (TVA) dan Actual Return (R) Before dan After peristiwa. Namun terdapat perbedaan yang signifikan pada Security Return Variability (SRV) Before dan After peristiwa.

Kata Kunci : **Return tidak Normal; Aktivitas Volume Perdagangan; Variabilitas Pengembalian Keamanan; Return Aktual; Penggabungan dan Akuisisi**

INTRODUCTION

Industrial competition in the Asian region has become increasingly prominent since the entry into force of the Asean Economic Community (AEC) on December 31, 2015. The enactment of the AEC is both an opportunity and a threat for business people, because since the enactment of the AEC, competition among the 10 ASEAN countries will increase. As an effort to increase competitiveness, companies need to formulate the right strategy to maintain their existence in the market. One strategy that can be carried out is an expansion strategy such as mergers and acquisitions.

It is known, the amount of activity and value of mergers and acquisitions in the world led to positive developments from 1990 to 2000. Since 2000 more than 790,000 mergers and acquisitions transactions have been announced worldwide with a known value of more than 57 trillion USD. In the Southeast Asian market itself, the number of activities as well as the value of mergers and acquisitions shows an upward trend with the highest merger value in 2017 of USD 144.8 billion. Meanwhile, the development of merger and acquisition activities in Indonesia in 2015-2019 experienced positive growth. The increase in MnA activity that occurred in Indonesia touched 135% which was indicated to be the influence of the enactment of the AEC.

With so many companies carrying out mergers and acquisitions, there is a view that this action is a strategy to increase corporate value in the face of ever-increasing competition. However, this strategy needs to be studied further related to the added value benefits that will be obtained by the company. Research conducted by Nurussobakh (2016) found that there is a difference between the abnormal return before and after the merger. Yet another study was conducted by Sylvani & Yunita (2017) found no significant difference between abnormal returns before and after the merger announcement. Several other studies conducted by Sihombing & Kamal (2016), Sihombing & Kamal (2016), Gisella & Chalid (2017), Fatemi *et.al* (2017), Rahman *et.al* (2018), Ayu *et.al* (2021), as well as Dewi & Widjaja (2021) Regarding the market reaction and stock performance towards the announcement of mergers and acquisitions, there are inconsistencies in the results of these studies. For this reason, this research will use Abnormal Return (AR), Trading Volume Activity (TVA), and Security Return Variability (SRV) to determine market reaction and use Realized Return (Actual Return) to determine stock performance on merger and acquisition announcements for the period 2015- 2019.

According to Hartono (2017) event study is a study to observe the market's reaction to a phenomenon (event) for which the information is published as an announcement. Event studies are commonly used to test the information content of an announcement and can be used to test market efficiency in a semi-strong form.

Brealey *et.al* (2015) explained, a merger is the consolidation of business units into one unit by taking over or buying all of the company's assets and liabilities. In an act of merging the acquiring company owns at least 50% of the shares of the combined company, while the acquired company ceases operations and its shareholders receive a certain amount of cash or shares in the new company. While Acquisition is a takeover of ownership or control over the shares of a company by another company. However, in contrast to a merger, the two companies involved continue to operate as two separate legal entities (Irawanto, 2016).

Event studies analyze the abnormal return of securities that may occur around the announcement of an event. Abnormal Return is the difference between the actual return (actual return) and the normal return which is the return expected by investors (expected return) (Hartono, 2017:667).

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

Trading Volume Activity(TVA) is the development of a lot or at least the volume of stock trading which shows how much an event can affect trading in the capital market (Mardhiah & Yunita, 2021). TVA changes in the capital market show stock trading activity on the stock exchange which reflects the investment decisions of investors.

$$TVA_{i,t} = \frac{V_{i,t}}{V_{m,t}} \quad (2)$$

Stock price reactions and stock return rates can be examined using the Security Return Variability (SRV) indicator. Diantriasih et al (2018) stated that security return variability is a good indicator to see the variability of stock profit levels. SRV is used to test whether an event contains information for the market.

$$SRV_{it} = \frac{AR_{it}^2}{V(AR_i)} \quad (3)$$

Actual Return is the return or stock returns that have occurred. Actual return is calculated using historical data on the company's share price. This actual return can be used as the basis for calculating the expected return in the future(Hartono, 2017:667).

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}} \quad (4)$$

RESEARCH METHOD

The objects used in this study are companies listed on the Indonesia Stock Exchange (IDX) that carried out merger and acquisition activities during the 2015 – 2019 period. The research method used is quantitative using secondary data with a phenomenon study approach. Quantitative research method is a survey method of a certain population or sample where the sampling method is random and the data analysis is quantitative or statistical (Sugiyono, 2019:8).

The variables used in this different test are market reactions and stock performance before and after the announcement of mergers and acquisitions for the 2015-2019 period. Market reaction is described by Abnormal Return (AR), Trading Volume Activity (TVA), Security Return Variability (SRV). While stock performance is described by Actual Return (R).

Data collection techniques in this study used a documentation (archive) strategy. This strategy is a method of secondary data collection through journals, the internet, and articles which are supporting references for research. The unit of analysis in this study is the organization (groups), namely 27 companies listed on the Indonesia Stock Exchange (IDX) which recorded merger and acquisition activities during the 2015-2019 period. In sampling, the technique used is a non-probability sampling technique of purposive sampling. Purposive sampling is a sampling technique with certain considerations (Sekaran & Bougie, 2016). The data used are historical secondary data on daily closing stock prices, JCI closing prices, and trading volume of company shares. The data was collected by accessing the websites of the Indonesia Stock Exchange (www.idx.co.id) and Yahoo Finance (www.finance.yahoo.com).

The processed data were tested for normality using the Kolmogorov-Smirnov test with a significance level of 5%. Kolmogorov Smirnov is used because it is considered more

sensitive in measuring the level of normality of data compared to the chart test (Ghozali, 2013). Hypothesis testing uses the parametric paired sample t-test for normally distributed data, and the non-parametric Wilcoxon sign-rank test for non-normally distributed data. The two models are measuring tools for testing the differences in two groups of paired numerical data (Sunjoyo, 2013). This model is also the most relevant and most commonly used model for analyzing different tests on market reactions and stock performance to a phenomenon (Nurusobakh, 2016).

RESULTS AND DISCUSSIONS

The descriptive statistics of Abnormal Returns (AR) is displayed in table 1.

Table 1. Descriptive statistics of *Abnormal Returns (AR)*

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
AR Before	10	-.332776	.050193	-.02356230	.110542393
AR After	10	-.007847	.023983	.00510832	.011108552
Valid N (listwise)	10				

Source: Processed data, 2021

From these calculations it can be concluded that in the period before the event, the lowest AR value was negative IDR 0.332776 while the highest value was IDR 0.050193. While the average AR value in the period before the event was negative IDR 0.02356 with a standard deviation of IDR 0.110542. Furthermore, in the period after the event, the lowest AR value was negative IDR 0.007847 while the highest value was IDR 0.023983. While the average AR value in the period after the event is IDR 0.005108 with a standard deviation of IDR 0.111085. With an average AR value before the pandemic of negative IDR 0.02356 and an average AR value after the pandemic of IDR 0.005108, it can be said that there was an increase in AR before and after the 2015-2019 mergers and acquisitions.

Table 2. Descriptive statistics of *Trading Volume Activity (TVA)*

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
TVA Before	10	.002255	.005192	.00357857	.000889676
TVA After	10	.002650	.004499	.00329298	.000572242
Valid N (listwise)	10				

Source: Processed data, 2021

From these calculations it can be concluded that in the period before the event, the lowest TVA value was 0.002255 while the highest value was 0.005192. While the average TVA value in the period before the event was 0.003578 with a standard deviation of 0.000889. Furthermore, in the period after the event the lowest TVA value was 0.002650 while the highest value was 0.004499. Meanwhile, the average TVA value in the post-event period was 0.003292 with a standard deviation of 0.000572. With an average pre-pandemic TVA value of 3.57% and an average post-pandemic TVA value of 3.29%, it can be said that there was a decline in TVA before and after the mergers and acquisitions for the 2015-2019 period.

Table 3. Descriptive statistics of Security Return Variability (SRV)

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
SRV Before	10	7.546121	75.785991	30.90888094	17.476285268
SRV After	10	17.966736	3109.986496	420.22258526	951.656738566
Valid N (listwise)	10				

Source: Processed data, 2021

From these calculations it can be concluded that in the period before the event, the lowest SRV value was 7.546121 while the highest value was 75.785991. While the average SRV value in the period before the event was 30.9088094 with a standard deviation of 17.476285. Furthermore, in the period after the event the lowest SRV value was 17.996736 while the highest value was 3109.98. While the average SRV value in the period after the event was 420.222585 with a standard deviation of 951.656738. With an average pre-pandemic SRV value of 30.9088 and an average post-pandemic SRV value of 420.2225, it can be said that there was an increase in SRV before and after the mergers and acquisitions for the 2015-2019 period.

Table 4. Descriptive statistics of Actual Return (R)

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Before	10	-.009067	.015360	.00274130	.008673604
After	10	-.010498	.028586	.00641390	.012434884
Valid N (listwise)	10				

Source: Processed data, 2021

From these calculations it can be concluded that in the period before the event, the lowest R value was negative IDR 0.009067 while the highest value was IDR 0.015360. While the average R value in the period before the event was IDR 0.00274130 with a standard deviation of IDR 0.008673. Furthermore, in the period after the event the lowest R value is negative IDR 0.010498 while the highest value is IDR 0.028586. While the average R value in the period after the event is IDR 0.006413 with a standard deviation of IDR 0.012434. With an average R value before the pandemic of IDR 0.00274130 and the average R value after the pandemic is IDR 0.006413, it can be said that there was an increase in R before and after the merger and acquisition events for the 2015-2019 period.

Table 5. Difference Test of Wilcoxon-Sign Rank Test AR

Test Statistics ^a	
Z	After - Before -.051 ^b
Asymp. Sig. (2-tailed)	.959

Source: Processed data, 2021

Based on the results of the Wilcoxon Sign Rank-Test statistical test on Abnormal Return (AR), the Asymp Sig value was obtained. of 0.959 where the significance value is greater than α (0.05) then H_0 is accepted and H_1 is rejected. This means that there is no significant difference between the Abnormal Return (AR) of IDX-listed companies before and after the announcement of mergers and acquisitions for the 2015-2019 period. Seeing that there is no significant difference in abnormal returns means that there is no significant impact on changes in stock prices before and after the event, although

announcements of corporate mergers and acquisitions can provide positive sentiment for investors with mergers as an expansion strategy and maintaining business in the market.

Table 6. Paired Sample T-Test of TVA Difference Test

	Paired Samples Test							
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
Lower				Upper				
Before - After	.00028559	.00096573	.00030539	-.000405	.00097644	.935	9	.374

Source: Processed data, 2021

Based on the results of the Paired Sample T-test statistic on Trading Volume Activity (TVA), the value of Sig. (2-tailed) of 0.374 where the significance value is greater than α (0.05) then H_0 is accepted and H_1 is rejected. This means that there is no significant difference between the Trading Volume Activity (TVA) of companies listed on the IDX at the time before and after the announcement of the mergers and acquisitions for the 2015-2019 period. Seeing that there were no significant differences in the TVA before and after the announcement, it could mean that the announcement of mergers and acquisitions of IDX-listed companies for the 2015-2019 period did not have a sizeable impact on the volatility of stock trading volume around the event period.

Table 7. Difference Test of Wilcoxon Sign-Rank Test SRV

Test Statistics ^a	
Z	After - Before -2.191 ^b
Asymp. Sig. (2-tailed)	.028

Source: Processed data, 2021

Based on the results of the Wilcoxon Sign Rank-Test statistical test on Security Return Variability (SRV) the Asymp Sig value was obtained. of 0.028 where the significance value is smaller than α (0.05) then H_0 is rejected and H_1 is accepted. This means that there is a significant difference between the Security Return Variability (SRV) of IDX-listed companies before and after the 2015-2019 merger and acquisition announcement events. Seeing that there is a significant difference in the security return variability of shares of companies listed on the IDX before and after the announcement of mergers and acquisitions for the 2015-2019 period, this means that mergers and acquisitions are informative for the market.

Table 8. Difference Test of Paired Sample T-Test R

	Paired Samples Test							
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
Lower				Upper				
Before - After	-.003672	.0129305	.0040889	-.012922	.00557734	-.89	9	.392

Source: Processed data, 2021

Based on the results of the Paired Sample T-test statistic on Return (R), the value of Sig. (2-tailed) of 0.392 where the significance value is greater than α (0.05) then H0.4 is accepted and H1.4 is rejected. That is, there is no significant difference between the Return (R) of companies listed on the IDX at the time before and after the announcement of mergers and acquisitions for the 2015-2019 period. The absence of a significant difference between the actual stock returns before and after this event indicates that investors do not think that the announcement of mergers and acquisitions of IDX-listed companies in the 2015-2019 period will have an impact on the stock prices of issuers.

Table 9. Descriptive statistics of *Abnormal Returns (AR)*

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
AR Before	10	-.332776	.050193	-.02356230	.110542393
AR After	10	-.007847	.023983	.00510832	.011108552
Valid N (listwise)	10				

Source: Processed data, 2021

From these calculations it can be concluded that in the period before the event, the lowest AR value was negative IDR 0.332776 while the highest value was IDR 0.050193. While the average AR value in the period before the event was negative IDR 0.02356 with a standard deviation of IDR 0.110542. Furthermore, in the period after the event, the lowest AR value was negative IDR 0.007847 while the highest value was IDR 0.023983. While the average AR value in the period after the event is IDR 0.005108 with a standard deviation of IDR 0.111085. With an average AR value before the pandemic of negative IDR 0.02356 and an average AR value after the pandemic of IDR 0.005108, it can be said that there was an increase in AR before and after the 2015-2019 mergers and acquisitions.

Table 10. Descriptive statistics of *Trading Volume Activity (TVA)*

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
TVA Before	10	.002255	.005192	.00357857	.000889676
TVA After	10	.002650	.004499	.00329298	.000572242
Valid N (listwise)	10				

Source: Processed data, 2021

From these calculations it can be concluded that in the period before the event, the lowest TVA value was 0.002255 while the highest value was 0.005192. While the average TVA value in the period before the event was 0.003578 with a standard deviation of 0.000889. Furthermore, in the period after the event the lowest TVA value was 0.002650 while the highest value was 0.004499. Meanwhile, the average TVA value in the post-event period was 0.003292 with a standard deviation of 0.000572. With an average pre-pandemic TVA value of 3.57% and an average post-pandemic TVA value of 3.29%, it can be said that there was a decline in TVA before and after the mergers and acquisitions for the 2015-2019 period.

Table 11. Descriptive statistics of Security Return Variability (SRV)

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
SRV Before	10	7.546121	75.785991	30.90888094	17.476285268
SRV After	10	17.966736	3109.986496	420.22258526	951.656738566
Valid N (listwise)	10				

Source: Processed data, 2021

From these calculations it can be concluded that in the period before the event, the lowest SRV value was 7.546121 while the highest value was 75.785991. While the average SRV value in the period before the event was 30.9088094 with a standard deviation of 17.476285. Furthermore, in the period after the event the lowest SRV value was 17.996736 while the highest value was 3109.98. While the average SRV value in the period after the event was 420.222585 with a standard deviation of 951.656738. With an average pre-pandemic SRV value of 30.9088 and an average post-pandemic SRV value of 420.2225, it can be said that there was an increase in SRV before and after the mergers and acquisitions for the 2015-2019 period.

Table 12. Descriptive statistics of Actual Return (R)

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Before	10	-.009067	.015360	.00274130	.008673604
After	10	-.010498	.028586	.00641390	.012434884
Valid N (listwise)	10				

Source: Processed data, 2021

From these calculations it can be concluded that in the period before the event, the lowest R value was negative IDR 0.009067 while the highest value was IDR 0.015360. While the average R value in the period before the event was IDR 0.00274130 with a standard deviation of IDR 0.008673. Furthermore, in the period after the event the lowest R value is negative IDR 0.010498 while the highest value is IDR 0.028586. While the average R value in the period after the event is IDR 0.006413 with a standard deviation of IDR 0.012434. With an average R value before the pandemic of IDR 0.00274130 and the average R value after the pandemic is IDR 0.006413, it can be said that there was an increase in R before and after the merger and acquisition events for the 2015-2019 period.

Table 13. Difference Test of Wilcoxon-Sign Rank Test AR

Test Statistics ^a	
	After - Before
Z	-.051 ^b
Asymp. Sig. (2-tailed)	.959

Source: Processed data, 2021

Based on the results of the Wilcoxon Sign Rank-Test statistical test on Abnormal Return (AR), the Asymp Sig value was obtained. of 0.959 where the significance value is greater than α (0.05) then H0.1 is accepted and H1.1 is rejected. This means that there is no significant difference between the Abnormal Return (AR) of IDX-listed companies before and after the announcement of mergers and acquisitions for the 2015-2019 period. Seeing that there is no significant difference in abnormal returns means that there is no significant impact on changes in stock prices before and after the event, although

announcements of corporate mergers and acquisitions can provide positive sentiment for investors with mergers as an expansion strategy and maintaining business in the market.

Table 14. Paired Sample T-Test of TVA Difference Test

	Paired Samples Test							
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper				
Before - After	.00028559	.00096573	.00030539	-.000405	.00097644	.935	9	.374

Source: Processed data, 2021

Based on the results of the Paired Sample T-test statistic on Trading Volume Activity (TVA), the value of Sig. (2-tailed) of 0.374 where the significance value is greater than α (0.05) then H0.2 is accepted and H1.2 is rejected. This means that there is no significant difference between the Trading Volume Activity (TVA) of companies listed on the IDX at the time before and after the announcement of the mergers and acquisitions for the 2015-2019 period. Seeing that there were no significant differences in the TVA before and after the announcement, it could mean that the announcement of mergers and acquisitions of IDX-listed companies for the 2015-2019 period did not have a sizeable impact on the volatility of stock trading volume around the event period.

Table 15. Difference Test of Wilcoxon Sign-Rank Test SRV

Test Statistics ^a	
Z	After - Before -2.191 ^b
Asymp. Sig. (2-tailed)	.028

Source: Processed data, 2021

Based on the results of the Wilcoxon Sign Rank-Test statistical test on Security Return Variability (SRV) the Asymp Sig value was obtained. of 0.028 where the significance value is smaller than α (0.05) then H0.3 is rejected and H1.3 is accepted. This means that there is a significant difference between the Security Return Variability (SRV) of IDX-listed companies before and after the 2015-2019 merger and acquisition announcement events. Seeing that there is a significant difference in the security return variability of shares of companies listed on the IDX before and after the announcement of mergers and acquisitions for the 2015-2019 period, this means that mergers and acquisitions are informative for the market.

Table 16. Difference Test of Paired Sample T-Test R

	Paired Samples Test							
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper				
Before - After	-.003672	.0129305	.0040889	-.012922	.00557734	-.89	9	.392

Source: Processed data, 2021

Based on the results of the Paired Sample T-test statistic on Return (R), the value of Sig. (2-tailed) of 0.392 where the significance value is greater than α (0.05) then H0.4 is accepted and H1.4 is rejected. That is, there is no significant difference between the Return (R) of companies listed on the IDX at the time before and after the announcement of mergers and acquisitions for the 2015-2019 period. The absence of a significant difference between the actual stock returns before and after this event indicates that investors do not think that the announcement of mergers and acquisitions of IDX-listed companies in the 2015-2019 period will have an impact on the stock prices of issuers

CONCLUSION

Based on the tests that have been carried out, the conclusions that can be drawn are; testing of Hypotheses 1, 2, and 4 were rejected because there were no significant differences in Abnormal Return (AR), Trading Volume Activity (TVA), and Actual Return (R) shares of companies listed on the IDX before and after the announcement of mergers and acquisitions for the period 2015- 2019. However, testing of Hypothesis 3 was accepted because there was a significant difference in the Security Return Variability (SRV) of shares of IDX-listed companies before and after the announcement of mergers and acquisitions for the 2015-2019 period.

RECOMMENDATIONS

It is expected that future researchers can use different observation periods in order to find out a more effective observation period, can use different abnormal return models so they can find the most suitable model for testing market efficiency and capital market reactions, and can consider other variables that can describe reactions of market and stock performance against an announcement.

REFERENCES

- Ayu, I. G., Agung, M., Andriani, M. A. S., Dwipradnyana, I. M. M., Nengah, I. G., & Diatmika, D. (2021). Analisis Perbandingan Return Saham dan Volume Perdagangan Saham Before dan Setelah Merger (Studi Kasus pada PT . Bank Syariah Indonesia Tbk .). *Journal Majalah Ilmiah Untab*, 18(1), 108–113.
- Brealey, R. A., Myers, S., & Marcus, A. J. (2015). *Fundamentals of Corporate Finance: Eight Edition* (8th ed.). McGraw-Hill Education.
- Dewi, S. L., & Widjaja. (2021). Analisis Pengaruh Merger dan Akuisisi terhadap Kinerja Keuangan dan Abnormal Return pada Perusahaan di Bursa Efek Indonesia Tahun 2014-2018. *Jurnal Manajemen Bisnis Dan Kewirausahaan*, 5(1), 34–39. <https://doi.org/10.24912/jmbk.v5i1.10277>
- Fatemi, A. M., Fooladi, I., & Garehkoolchian, N. (2017). Gains from mergers and acquisitions in Japan. *Global Finance Journal*, 32, 166–178. <https://doi.org/10.1016/J.GFJ.2017.02.002>
- Gisella, L. P. G., & Chalid, D. A. (2017). Abnormal Return and the Charactersitics of Merger and Acquisition in Indonesia. *Journal of Economics, Business & Accountancy Ventura*, 20(1), 31. <https://doi.org/10.14414/jebav.v20i1.538>
- Hartono, J. (2017). *Teori Portofolio dan Analisis Investasi* (Edisi Ke-1). BPFE Yogyakarta.
- Irawanto, D. (2016). Analisis Kinerja Keuangan Before dan After Akuisisi PT Bank Rakyat Indonesia Tbk. *Jurnal Ilmu Dan Riset Manajemen*, 5(1), 5–24.

-
-
- Mardhiah, D. V., & Yunita, I. (2021). Capital Market Reaction on the Announcement of the First COVID-19 Case in Indonesia By the President of The Republic Indonesia : Case Study of Telecommunication Sub Sectors Listed on the IDX. *International Journal of Advance Research in Economics and Finance*, 3(1), 32–38.
- Nurussobakh. (2016). Perbedaan Actual Return, Abnormal Return, Trading Volume Activity, Dan Security Return Variability Saham Before dan Setelah Merger. *Jurnal Keuangan Dan Perbankan*, 13(1), 62–77.
- Rahman, Z., Ali, A., & Jebran, K. (2018). The Effects of Mergers and Acquisitions on Stock Price Behavior in Banking Sector of Pakistan. *The Journal of Finance and Data Science*, 4(1), 1–11. <https://doi.org/10.1016/j.jfds.2017.11.005>
- Sekaran, U., & Bougie, R. (2016). Research Methods for Business 7th Edition. In *John Wiley & Sons Ltd.* (7th ed.). John Wiley & Sons Ltd.
- Sihombing, N., & Kamal, M. (2016). Analisis Pengaruh Pengumuman Merger dan Akuisisi Terhadap Abnormal Return Saham dan Kinerja Keuangan Perusahaan (Studi pada perusahaan yang melakukan Merger dan Akuisisi pada Tahun 2011 dan terdaftar di Bursa Efek Indonesia). *Diponegoro Journal of Management*, 5(3), 1–15.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Sylvani, N. F., & Yunita, I. (2017). Market Reactions Toward Mergers and Acquisitions Announcement in Telecommunication Firms Listed in. *International Journal of Management and Applied Science*, 3(5), 14–18.pdf