# Comparative Analysis of Financial Performance Before and After Mergers and Acquisitions in Companies Listed on The Indonesia Stock Exchange

# Lindiyani\*1 Nizwan Zukhri2 Ari Agung Nugroho3

<sup>1,2,3</sup>Faculty of Economics, Bangka Belitung University

Corresponding author: rmal.agungnugroho@gmail.com, lindiany12@gmail.com

# **Abstract**

This study aims to determine the significance of differences in company financial performance before and after mergers or acquisitions. The variables used to measure a company's financial performance consist of the illiquidity ratio (CR), activity ratio (TATO), solvency ratio (DER,) and profitability ratio (NPM, ROA). The population of this study is all sectors of companies listed on the Indonesia Stock Exchange (IDX) which carried out mergers and acquisitions for the 2016-2020 period totaling 38 companies. iSample was determined by the purposive sampling method and obtained by 17 companies. The financial statements used and analyzed are two years before and two years after the merger or acquisition. The data analysis methods in this study include the Kolmogorov-Smirnov One-Sample normality test, the PairedI sample T-Test, and Wilcoxon'si Signed Ranksi Test. The results of hypothesis testing found that there were no significant differences in all financial ratios before and after mergers and acquisitions.

Keywords: Acquisition, Financial Performance, Merger

#### 1. Introduction

Business competition in the current era of globalization encourages business growth that increases very rapidly. The competition faced now is not only domestically but also abroad, so companies are required to be more innovative to be able to compete competitively (Amatilah et al, 2021). To compete competitively, companies need several strategies to survive, continue to advance, and develop even better than competing companies (Kurniati et al, 2022).

Agustin et al (2021), explained that companies cannot be separated from various kinds of strategic choices in finding the right strategic decisions. Strategies that can be used by companies are internal and external. According to Amatilah et al (2021), internal strategies can be carried out through product development, and launching new products to gain consumer trust by maintaining product quality. While external strategies can be carried out through expansion or combining businesses through merger and acquisition activities.

According to Putri et al (2020), forms of external expansion through business mergers are the choice that companies prefer more often than internal expansion. This is due to several reasons including cost advantages, lower risk, minimizing delays in operations, avoiding takeovers, profits on intangible acquisitions, and other reasons such as tax advantages. Tarigan et al (2016) stated that the world is currently moving toward the era of mergers and acquisitions (M&A). Many companies around the world choose to merge or acquire rather than build a new business from scratch. The following is the development of merger and acquisition activities globally over the past 10 years.

Table I Worldwide Merger and Acquisition Activities 2010-2020

Year	Number of Activity	Total Value (in USD)
2010	44.844	2.750.000.000.000
2011	43.976	2.688.000.000.000
2012	41.480	2.533.000.000.000
2013	39.568	2.536.000.000.000
2014	43.847	3.960.000.000.000
2015	48.052	4.779.000.000.000
2016	49.991	3.646.000.000.000
2017	53.302	3.777.000.000.000
2018	50.607	3.394.000.000.000
2019	49.327	3.370.000.000.000
2020	44.926	2,817.000.000.000

Source: imaa-institute.org, 2022

Based on Table 1, there was a significant upward trend in 2015, 2016 and 2017 compared to the number of M&A activities in 2014 to reach 9.6%. In the following years, the number of mergers and acquisitions decreased. In 2018 it decreased by 5%, followed by 2.5% in 2019 and closed in 2020 by 8.9%.

In Indonesia Since the enactment of PP 57/2010, the Business Competition Supervision Commission has systematically begun to monitor merger and acquisition activities at home and abroad. This recording is a consequence of the implementation of PP 57/2010 which requires business people to notify after carrying out merger and acquisition activities. One year after this rule came into force, the volume of merger and acquisition activities increased significantly in line with domestic and international economic growth. The following is data on the development of merger and acquisition activities in Indonesia for the period 2010-2020:

Table 2. M&A Activities in Indonesia 2010-2020

Year of Mergers and Acquisitions	Number of Companies Conducting Mergers and Acquisitions
2010	3
2011	43
2012	36
2013	69
2014	59
2015	51
2016	65
2017	90
2018	74
2019	120
2020	195

Source: www.kppu.go.id, 2022

Based on Table 2, merger and acquisition (M&A) transactions in Indonesia increased significantly every year over the past decade (2010-2020). From 2016, merger and acquisition activities in Indonesia tend to increase until 2020. Then, in 2020 there was an increase of 63% as well as the highest number for the last 10 years, where 195 business people were carrying out merger and acquisition activities that year.

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One way to assess the success of mergers and acquisitions is to observe the company's performance after the merger and acquisition are completed, especially the financial performance of both the acquiring company and the acquired company. Because the company's decision in carrying out merger and acquisition activities can affect the company's financial performance. Some companies experienced an increase in financial performance after the merger and some companies experienced a decline in financial performance. (Laiman *et al*, 2017).

The smooth running of a company's activities is influenced by the company's financial performance. The results of the calculation of financial ratios must be compared with the average value of previous years or industries to find out how the company's financial condition and performance. When measuring financial performance, the company's sales, inventory, assets, debt, and equity owned by the company become a benchmark to evaluate whether the company's operations are running well or not (Gunawan, 2019).

Based on the description that has been explained, the author interested in conducting a research entitle "Comparative Analysis of Financial Performance Before and After Mergers and Acquisitions in Companies Listed on The Indonesia Stock Exchange".

### 2. Literature Review

Law Number 40 of 2007 concerning Limited Liability Companies Paragraph 1, explains that a merger is a legal action carried out by one or several companies that merge with other existing companies. The merger results in the assets and liabilities of the merging company will be transferred to the merged company so that the legal entity of the merging company will no longer exist. Meanwhile, the definition of acquisition according to Article 1 Paragraph 11 of Law Number 40 of 2007 concerning Limited Liability Companies, namely as a legal action carried out by an individual or a legal entity to obtain ownership of a Company. KPPU also defines takeover as a body that regulates business competition in Indonesia

Wiyono et al (2017), explained that there are several motivations for mergers and acquisitions, generally as follows:

- 1. The financial motive is the company's ability to create value for the company and its investors. The merger of two or more businesses has a financial motive aimed at achieving an increase in value in the long run.
- Synergistic motive refers to the response obtained when the company conducts merger or acquisition activities. In the context of mergers and acquisitions, this is interpreted as the ability of two or more companies that combine to get higher profits than when done alone.
- 3. Taxation motives encourage several companies to merge. For example, a company with high profits that falls into a higher tax bracket might take over a company that has accumulated a lot of tax losses. The loss from this tax calculation can be converted into tax savings.
- 4. Protect yourself from being acquired by other parties. This can happen if a company is subjected to a hostile takeover from another company. The target company acquires another company and funds the acquisition with debt capital. Because of this debt burden, the company's debt becomes too large to support the company's interests.
- 5. The diversification motive is a business diversification tactic that can be done through business mergers. The purpose of diversification is to encourage the company's activities and operations in securing its competitive position and minimizing the risk of dependence on the core business.
- 6. The motive of management skills and technology is used because of the lack of efficiency in management or the lack of existing technology some companies are not able to develop

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properly. Companies that are unable to effectively finance their technology development can join companies that have good management capabilities or more modern technology.

7. The personal motives of the manager, the reason for the company merger is not only based on financial considerations but can also be based on other factors, such as prestige and ambition. This non-financial motive stems from the personal interests of the management and owners of the company.

According to Fahmi (2018), performance is the result achieved by a company, both profit-oriented and non-profit over a certain period. Furthermore, Fahmi (2018), revealed that financial performance is an analysis carried out to see how well a company applies financial implementation rules properly and correctly. Financial performance is used to see the achievement of the company's work performance within a certain period by knowing the company's success on the activities that have been carried out. Kasmir (2015), states that financial ratios function as a comparison of numbers in financial statements by dividing one number by another. Comparisons can be made between the components of a financial statement with other components, or between components in the financial statements. Therefore, the numbers to be compared can be numbers for one period or more. Financial ratios have many important variables, it is not necessary to calculate all the ratios contained in financial ratios to analyze a situation. In analyzing the position of financial several factors can be used as the most important benchmark, namely the ratio of liquidity, solvency, profitability, and activity.

1. The liquidity ratio is the company's ability to meet and pay all of its short-term financial obligations before the maturity date using available current assets (Dangnga, 2018). *Current Ratio* (CR)

According to Heri (2016), Current Ratio is a ratio that measures a company's ability to pay its short-term obligations that are soon due without using available working capital. Current ratio formula:

$$Current \ Ratio = \frac{Current \ Assets}{Current \ Debt}$$

2. Solvability Ratio

The solvability ratio is a measure of how much a company is financed by debt. The salvability ratio measures a company's ability to pay off all its debts in the short or long term (Dangnga, 2018).

Debt to Equity Ratio (DER)

According to Heri (2016), Debt to equity ratio (DER) is a ratio that measures the ratio between total debt to company capital.

$$Debt \ to \ Equity \ Ratio = \frac{Total \ Debt}{Total \ Equity}$$

3. Profitability Ratio

A profitability ratio is a measuring tool used to measure how capable a company is of generating profits over a certain period (Dangnga, 2018).

*Net Profit Margin* (NPM)

Net profit margin is a measurement tool used to see the stability of the entity to obtain a specific sales level (Fahmi, 2015).

$$Net \ Profit \ Margin = \frac{\text{Net Profit After Tax}}{\text{Net Sales}}$$

Return of Asset (ROA)

The higher the value of return on assets, the better the condition of a company, conversely if the value of return on assets is low, it can be affected by net profit margins (Kasmir, 2015).

$$Return\ On\ Assets\ (ROA) = \frac{\text{Net Profit}}{\text{Total Aktiva}}$$

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## 4. Aktivity Ratio

The activity ratio is a measuring tool to describe how much or how effective a company is in utilizing all the resources it manages to support its business operations (Dangnga, 2018).

Total Asset Turnover (TATO)

According to Fahmi (2015), total asset turnover is a ratio used to determine the extent to which a company's total assets are effectively turnover.

$$Total \ Assets \ Turnover = \frac{Sales}{Total \ Aktiva}$$

#### 3. Method

The research method used in conducting this research is a quantitative method, with the population used being all sectors of companies listed on the Indonesia Stock Exchange (IDX) and carried out mergers or acquisitions in the 2016-2020 period. The sample was selected by purposive sampling method based on certain criteria, where the number of objects that met the criteria was 17 companies. The data used in this study is secondary data in the form of the company's annual financial statements obtained from the Indonesia Stock Exchange website.

The statistical test used in this study is a data normality test aimed at determining normally distributed data or not using the Kolmogorov-Smirnov one-sample test. Furthermore, hypothesis testing uses the paired t-difference test (Pair-sample T-test) when the data is normally distributed and the Wilcoxon Signed Rank Test alternative test to the paired t-test (Pair-sample T-test) when the data is not normally distributed.

#### 4. Results and Discussion

A comparison of the results of descriptive statistical analysis of companies before and after mergers and acquisitions can be seen in the following table:

Table 3. Results of Company Descriptive Statistical Analysis Before and After Mergers and Acquisitions

	Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation	
Before _CR	34	.28	7.93	2.0500	1.43265	
After _CR	34	.94	5.52	2.0321	1.27337	
Before _TATO	34	.03	1.55	.5753	.37415	
After _TATO	34	.01	1.48	.4994	.35917	
Before _NPM	34	13	.86	.1262	.21138	
After_NPM	34	-2.13	.80	.0239	.43289	
Before _ROA	34	-2.13	.18	0240	.37730	
After _ROA	34	13	.17	.0219	.06022	
Before _DER	34	.14	7.21	1.4859	1.53262	
After_DER	34	.20	35.47	2.6938	5.99967	
Valid N (listwise)	34					

Source: Research results, data processed by researchers (2023)

Based on the results of the analysis in Table 3 shows that the current ratio of companies listed on the IDX before mergers and acquisitions has a minimum value of 0.28, a maximum value of 7.93, a mean value of 2.05, and a standard deviation of 1.43265. Meanwhile, after mergers and acquisitions have a minimum value of 0.94, a maximum value of 5.52, a mean value of 2.0321, and a standard deviation of 1.27337. There is a decrease in the value of the current ratio after mergers and acquisitions because the mean current ratio before mergers and acquisitions is greater than the mean value after mergers and acquisitions.

The company's total asset turnover before mergers and acquisitions has a minimum value of 0.03, a maximum value of 1.55, a mean value of 0.5753, and a standard deviation of 0.37415. Meanwhile, after mergers and acquisitions have a minimum value of 0.01, a maximum value of 1.48, a mean value of 0.4994, and a standard deviation of 0.35917. There is a decrease in the value of total asset turnover after mergers and acquisitions because the mean value of total asset turnover before mergers and acquisitions is greater than the mean value after mergers and acquisitions.

The company's net profit margin before mergers and acquisitions has a minimum value of -0.13, a maximum value of 0.86, a mean value of 0.1262, and a standard deviation of 0.21138. Meanwhile, after mergers and acquisitions have a minimum value of -2.13, a maximum value of 0.80, a mean value of 0.0239, and a standard deviation of 0.43289. There is a decrease in the value of net profit margin after mergers and acquisitions because the mean value of net profit margin before mergers and acquisitions is greater than the mean value after mergers and acquisitions.

The company's return on assets before mergers and acquisitions has a minimum value of -2.13, a maximum value of 0.18, a mean value of -0.0239 and a standard deviation of 0.37730. Meanwhile, after mergers and acquisitions have a minimum value of -0.13, a maximum value of 0.17, a mean value of -0.0219 and a standard deviation of 0.06022. There is an increase in the value of return on assets after mergers and acquisitions because the mean value of return on assets before mergers and acquisitions is greater than the mean value after mergers and acquisitions.

The company's debt to equity ratio before mergers and acquisitions has a minimum value of 0.14, a maximum value of 7.21, a mean value of 1.4859 and a standard deviation of 1.53262. Meanwhile, after mergers and acquisitions have a minimum value of 0.20, a maximum value of 35.47, a mean value of 2.6938 and a standard deviation of 5.99967. There is an increase in the value of debt to equity ratio after mergers and acquisitions because the mean value of debt to equity ratio before mergers and acquisitions is greater than the mean value after mergers and acquisitions.

Table 4. Normality Test Results for 2016-2020 Before and After Mergers and Acquisitions

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Tests of Normality							
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	Df	Sig.	Statistic	df	Sig.	
Before _CR	.206	34	.001	.770	34	.000	
After _CR	.249	34	.000	.765	34	.000	
Before_TATO	.214	34	.000	.872	34	.001	
After_TATO	.146	34	.063	.870	34	.001	
Before _NPM	.228	34	.000	.737	34	.000	
After _NPM	.326	34	.000	.531	34	.000	
Before _ROA	.403	34	.000	.300	34	.000	
After _ROA	.159	34	.030	.915	34	.011	
Before _DER	.248	34	.000	.645	34	.000	
After _DER	.339	34	.000	.362	34	.000	

Source: Research results, data processed by researchers (2023)

Based on the results of SPSS output in Table 4 it is concluded that only TATO variables after mergers and acquisitions are normally distributed because they have a sig value of > 0.05, while other variables are not normally distributed because they have a sig value of < 0.05. Based on the results of this analysis, the next analysis uses a non-parametric test analysis, namely the Wilcoxon Signed Rank Test because the variables used are more than 2 variables.

# Wilcoxon Signed Rank Test Results

**Table 5 Wilcoxon Signed Rank Test Results** 

	Test Statistics						
	After CR	After TATO	After NPM	After ROA	After DER		
	-	_	-	-	-		
	Before_CR	Before TATO	Before NPM	Before _ROA	Before _DER		
Z	051 <sup>b</sup>	-1.880 <sup>b</sup>	-1.506 <sup>b</sup>	720 <sup>b</sup>	650 <sup>b</sup>		
Asymp.							
Sig. (2-	.959	.060	.132	.471	.516		
tailed)							

Source: Research results, data processed by researchers (2023)

Table 5 shows that the Wilcoxon signed rank test results on CR, TATTOO, NPM, ROA, and DER have sig values. (2-tailed) that is greater than 0.05. Based on the results of the Wilcoxon signed rank test analysis, a sig CR value (0.959) > 0.05 was obtained, so it was concluded that there was no difference in financial performance as measured by the current ratio. The value of sig TATO (0.060) > 0.05 then it is concluded that there is no difference in financial performance measured by total asset turnover. The value of sig NPM (0.132) > 0.05 then it is concluded that there is no difference in financial performance measured by net profit margin. The sig ROA value (0.471) > 0.05 then it is concluded that there is no difference in financial performance measured by return on assets. The value of sig DER (0.516) > 0.05 then it is concluded that there is no difference in financial performance measured by debt to equity ratio. Thus, it can be concluded that there is no difference in all research variables of current ratio, total assets turnover, net profit margin, return on assets, and debt to equity ratio, which is significant in the 2 years before and 2 years after the company merges and acquisitions.

### 5. Conclusion

Based on the results of the analysis that has been done, it can be concluded that the results of this study are that there is no significant difference in financial performance as measured by the current ratio, total asset turnover, net profit margin, return on assets, and debt to equity ratio before and after mergers and acquisitions in the period 2 years before and two years after mergers and acquisitions. After a merger or acquisition, there is a decrease in financial ratios represented by Current Ratio (CR), Net Profit Margin (NPM), and Total Asset Turn Over (TATO). Meanwhile, the Return on Asset (ROA) and Debt to Equity Ratio (DER) ratios increased.

In general, the company's financial performance after merger or acquisition activities tends to decline. The decline in the company's financial performance indicates that the benefits resulting from merger or acquisition activities cannot be felt by the company within 2 years after the company carries out merger or acquisition activities. The company should consider first when going to merge or acquire so that the company is expected to get maximum profit in the future. In addition, the company also needs to consider and be careful in responding to merger or acquisition activities, because it is not certain that the merger or acquisition has a positive impact on the company.

### References

- International Journal of Business, Technology, and Organizational Behavior (IJBTOB) ISSN: 2775-4936 Vol. 3No. 2, April 2023
- Agustin, R. D., & Widhiastuti, R. N. (2021). Dampak Merger Dan Akuisisi Pada Kinerja Keuangan (Studi Kasus Sektor Perbankan Di Indonesia). *Jurnal Akuntansi Keuangan Dan Perbankan*, 2774-2407.
- Amatilah, F. F., Syarief, M. E., & Laksana, B. (2021). Perbandingan Kinerja Keuangan Sebelum Dan Sesudah Merger Dan Akuisisi Pada Perusahaan Non-Bank Yang Tercatat Di BEI Periode 2015. *Indonesian Journal Of Economics And Management*, 1(2), 375–385.
- Bursa Efek Indonesia, www.idx.co.id. 10 Februari 2022.
- Dangnga, M. T., & Haeruddin, M. I. (2018). *Kinerja Keuangan Perbankan: Upaya Untuk Menciptakan Sistem Perbankan Yang Sehat*. Makassar: Pustaka Taman Ilmu & CV Nur Lina.
- Fahmi, I. (2018). Pengantar Manajemen Keuangan. Bandung: Alfabeta.
- Gunawan, A. (2019). Analisis Kinerja Keuangan Pada Perusahaan Plastik Dan Kemasan Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal KRISNA: Kumpulan Riset Akuntansi*, 10(2), 2301-8879.
- Heri, S. (2016). Analisis Laporan Keuangan. Jakarta: PT Grasindo
- Institute for Mergers, Aquisitions & Alliances (IMAA). imaa-institute.org. 7 Februari 2022
- Kasmir, & Jakfar. (2015). Study Kelayakan Bisnis. Jakarta: Prenadamedia Group.
- Komisi Pengawas Persaingan Usaha. www.kppu.go.id. 17 Februari 2022.
- Kurniati, M., & Asmirawati, A. (2022). Efek Merger Dan Akuisisi Terhadap Kinerja Keuangan Perusahaan Go Public. *Jurnal Perbankan Syariah*, Vol.3, No.1: 72-84.
- Laiman, L., & Hatane, S. E. (2017). Analisis Dampak Merger dan Akuisisi Terhadap Kinerja Keuangan pada Perusahaan Non Keuangan Yang Terdaftar di Bursa Efek Indonesia Periode Tahun 2007 2014. *Jurnal Business Accounting Review*, (517-528).
- Peraturan Pemerintah Nomor 57 Tahun 2010 Tentang Penggabungan Atau Peleburan Badan Usaha Dan Pengambilalihan Saham Perusahaan Yang Dapat Mengakibatkan Terjadinya Praktik Momopoli Dan Persaingan Usaha Tidak Sehat.
- Putri, P., Yasa, I. N., & Julianto, I. P. (2020). Mengungkap Dampak Akuisisi Terhadap Kinerja Keuangan Perusahaan. *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Universitas Pendidikan Ganesha*, 11(3), 2614-1930.
- Tarigan, J., Yenewan, S., & Natalia, G. (2016). MERGER DAN AKUISISI: Dari Perspekti F Strategis Dan Kondisi Indonesia (Pendekatan Konsep Dan Studi Kasus). Yokyakarta: Ekuilibria.
- Undang-Undang Nomor 40 Tahun 2007 Tentang Perseroan Terbatas.
- Wiyono, G., & Kusuma, H. (2017). *Manajemen Keuangan Lanjutan: Berbasis Corporate Value Creation*. Yokyakarta: UPP STIM YKPN.