# A STUDY ON HOW MERGER AND ACQUISITIONS AFFECT FIRM PERFORMANCE

[1]**David Pirih**,[2]**Gerald Wahyudi**,[3]**Nanik Linawati**

*[1,2]Program Finance and Investment, School of Business and Management*
*Petra Christian University,Surabaya, Indonesia*

*Author's email:*
*[1]D11210508@John.petra.ac.id ;[2] D11210584@John.petra.ac.id*
*;[3]nanikl@petra.ac.id*

*Corresponding author: D11210508@John.petra.ac.id*

**Abstract.** *This study was conducted to examine the performance of publicly traded companies listed on the Indonesia Stock Exchange after they carried out a merger and/or acquisitionduring the period 2014-2021.The sample was selected using a non-probability purposive sampling method. The sample size used consists of 48 companies that went through mergers and acquisitions within the period of 2014 to 2021.Data is analyzed using a descriptive statistical test, outlier test, normality test and hypothesis test (t-test). This study used paired sample t-test to analyze two different paired samples using the STATA program.Statistical evidence found that company Financial Performance measured by Gross profit margin (GPM), Operating profit margin (OPM), Net profit margin (NPM) , return on equity (ROE) , return on asset ( ROA), earning per share (EPS), and return on capital employed (ROCE) are affected significantly by mergers and acquisitions. This confirms that mergers and acquisitions contribute to the differences in the financial performance of acquiring companies in indonesia The primary aim of this research is to explore the differences in Gross profit margin (GPM), Operating profit margin (OPM), Net profit margin (NPM) , return on equity (ROE) , return on asset ( ROA), earning per share (EPS), and return on capital employed (ROCE) caused by mergers for publicly listed companies in Indonesia. The secondary goal is to scrutinize and assess the extent to which mergers and business takeovers influence these financial indicators for the selected publicly listed companies in Indonesia.*

**Keywords**: *corporate action, earnings quality, Mergers and acquisitions*

## 1. INTRODUCTION

Mergers and Acquisitions (M&A) are corporate strategies aimed at creating synergy and adding value, both in the short term and long term. The topic of mergers & acquisitions (M&A) has been increasingly investigated in the literature in the last two decades (Appelbaum et al., 2007), attracting various stakeholders, including policymakers and academics. According to Johan (2011), mergers and acquisitions are more than just combining a company by adding one plus one into two, but it is expected to achieve more than only two. However, many merger and acquisition transactions fail due to the impediments from both sides of the companies involved in the merger and acquisition. The main goal of M&A is to achieve synergy, which can be attained through various means such as increasing economies of scale, strengthening market position, developing new products and services, and gaining access to new markets. It is important to understand that the benefits of M&A extend beyond short-term increases in revenue, cost reduction, and profitability. Long-term benefits include enhanced competitiveness, sustainable growth, and increased company value. However, despite these potential benefits, M&A is also a complex process with inherent risks. Therefore, careful research and analysis are needed to understand the impact and factors influencing the success of M&A in achieving the company's strategic objectives.

Merger and acquisitions are business strategies capable of significantly impacting companies positively. One of their main benefits is the enhancement of the company's economic scale and financial strength. Economic scale refers to a company's ability to reduce average costs per unit by increasing production volume. The value can be created through synergies from productivity, as well as the opportunities generated from the combination of two companies that did not exist when operating individually (Harrison et al., 1991; Capron, 1999; Damodaran, 2005). When two companies merge, they can integrate operations and boost production volume, thus achieving greater economic scale. This can lower average costs per unitand enhance the company's profitability.

Furthermore, mergers and acquisitions can also bolster a company's financial strength. Companies with large sizes will have access to wider sources of funding, making it easier to get capital loans, because that's why companies with large sizes have the ability to survive in the industry and have a greater chance of winning in the competition ( Leman W, Suriawinata S. I., Noormansyah I, 2020) large companiesalso tend to pay lower interest rates on their debt relative to small companies . This is consistent with large companies being less likely to fail and hence being perceived to be less risky by creditors (e.g. Dunne, Roberts and Samuelson 1988; Kenney, La Cava and Rodgers 2016). This increased financial strength enables companies to invest in research and development, new products, market expansion, and further acquisitions.

Synergy can be generated through various means in the context of mergers and acquisitions. One of the primary ways is through increased efficiency, where the combined operations of the merged companies lead to better utilization of resources, elimination of redundancies, and streamlined processes (Damodaran, 2005). For example, by consolidating their supply chains and distribution networks, merged companies can achieve significant cost savings and reduce operational inefficiencies. Additionally, merging companies can benefit from economies of scale, where the larger combined entity can negotiate better terms with suppliers, access more favorable financing options, and spread fixed costs over a larger revenue base. This results in lower per-unit costs and enhanced profitability. Synergy can also be achieved through the sharing of best practices and expertise (Harrison et al., 1991). When two companies come together, they can leverage each other's strengths and capabilities, leading to improved innovation, faster development of new products and services, and enhanced overall performance. Furthermore, mergers and acquisitions can enhance market position by expanding the customer base, increasing market share, and providing access to new geographic markets (Capron, 1999). This strengthened market position can lead to higher revenue and greater competitive advantage. Overall, the creation of synergy through increased efficiency, economies of scale, shared expertise, and enhanced market position is a key objective of mergers and acquisitions, driving value creation and long-term growth.

Strengthened market position, development of new products and services, and access to new markets. Short-term benefits of mergers and acquisitions may include increased revenue, cost reduction, and improved profitability. Meanwhile, long-term benefits may include enhanced competitiveness, sustainable growth, and increased company value. Mergers and acquisitions generally aim for synergy or added value, not only in the short term but also in the long term, while improving economies of scale and scope as well as financial strength (Mardianto, Christian, & Edi, 2018).

## 2. LITERATURE REVIEW

### *2.1 Gross Profit Margin Ratio*

Gross profit margin is a financial metric used to assess a company's profitability. Gross profit margin indicates how efficiently a company is producing and selling its goods or services. Merger and Acquisition (M&A) is one of the ways companies take to grow faster than organic business growth and can be a channel for companies to strengthen their global market position and increase competitiveness (Sui et al, 2016). According to (Gupta, 2012) Mergers and acquisitions can contribute to rapid industrial growth because it can generate an economic scale .When two or more companies conduct merger and acquisition, it can create a synergies between the company that leads to higher sales, profit, and better Gross profit margin. The GPM ratio, which reflects a company's profit in relation to its sales, is poised to experience a substantial increase following mergers and acquisitions.

H1: The acquiring company’s Gross Profit Margin Ratio experienced significant differences after acquisition.

*2.2 Operating Profit Margin Ratio*

Operating Profit Margin (OPM) shows the company's ability to generate profits that will cover fixed costs or other operating costs (Harahap, 2002). OPM is greatly influenced by the cost of goods sold. If the cost of goods sold increases, the OPM will decrease, and vice versa (Yoshua, 2012). When two or more companies merge or one acquires another, they often combine their resources and operations. When a company enhances its revenue-generating capacity while simultaneously reducing costs, it typically experiences an increase in its operating profit margin. Therefore, post-merger or acquisition, can lead to higher operating profit margins due to higher revenue growth and improved efficiency. Company OPR will experience a significant changes after mergers and acquisitions (Irawan, 2021).

H2: The acquiring company’s *Operating Profit Margin Ratio* experienced significant differences after acquisition.

*2.3 Net Profit Margin*

NPM, or Net Profit Margin, is the ratio of after-tax profit to sales, measuring the net profit generated from each dollar of sales. NPM is used to evaluate a company's efficiency in controlling all expenses related to sales (Kasmir, 2018). Usually when two or more resources are merged it can affect and increase the Net Profit margin of the company because it will increase the company's ability to generate revenue more efficiently and effectively that will lead to higher profitability. According to (Kumaraswamy et al 2019) the company net profit margin experienced insignificant improvement after mergers and acquisitions.

H3: The acquiring company’s Net Profit Margin experienced significant differences after acquisition.

*2.4 Return on Equity*

ROE or Return on Equity is a ratio used to evaluate a company's performance in generating profit from its equity. ROE provides an insight into how efficiently a company generates net income from the equity held by shareholders. The higher the ROE value of a company, the more efficient it is in generating profit using thecompany's equity. The expanded scale of the company, coupled with the financial synergy achieved through the consolidation of assets and capital, consistently enhances the company's profit-generating capacity (ROE). Consequently, the ROE performance is expected to improve post-merger compared to pre-merger levels. According to (Ahmed & Ahmed, 2014; Singh & Gupta, 2015; Omoye & Aniefor, 2016) Company ROE will experience a significant increase after mergers and acquisitions . H4: The acquiring company’s Return on Equity experienced significant differences after acquisition.

*2.5 Return on Asset*

The common profitability ratio used to evaluate a company's performance in generating profit from its assets is Return on Assets (ROA). ROA provides an overview of how well a company utilizes its assets to generate net income. The higherthe ROA value, the more efficient the company is at generating profit using its assets. The favorable synergy resulting from mergers and acquisitions will enhance the company's ROA compared to its pre-merger/acquisition state. According to (Kumara & Satyanarayana, 2013; Omoye& Aniefor, 2016) Company ROA will experience a significant increase after mergers and acquisitions.

H5: The acquiring company's Return on Asset experienced significant differences after acquisition.

*2.6 Earnings Per Share*

Earnings Per Share (EPS) is a profitability metric that elucidates the correlation between a company's net income and the number of shares outstanding. Mergers and acquisitions (M&A) often lead to changes in the number of outstanding shares, as companies may utilize shares as a means to acquire other entities. Consequently, the net profit available to distribute among shareholders can be affected, thereby altering the EPS. This change in outstanding shares post-M&A reflects the company's strategic decisions regarding acquisitions and their impact on the profitability per share, influencing the returns and value proposition for existing shareholders. Company EPS will experience a significant changes after mergers and acquisitions (Irawan, 2021).

H6: The acquiring company's Earnings Per Share experienced significant differences after acquisition.

*2.7 Return on Capital Employed*

Return on Capital Employed (ROCE) is a financial ratio that measures a company's profitability and efficiency in generating returns from its capital investments. ROCE measures the relationship between the company's earnings before interest and taxes (EBIT) by its capital employed. It evaluates how well a company utilizes its capital to generate profits.A higher Return on Capital Employed (ROCE) indicates that the company is utilizing its capital more efficiently to generate profits. After mergers and acquisitions, if the ROCE increases, it indicates that the company is making more effective use of its long-term funds to generate operating profits. According to (Kumara & Satyanarayana, 2013; Ahmed & Ahmed, 2014;Neethu& Viswanathan, 2015; Omoye & Aniefor, 2016) The company's ROCE is expected to see a significant increase following mergers and acquisitions.

H7: The acquiring company's Return on Capital Employed experienced significant differences after acquisition.

## 3. RESEARCH METHODS

This research employs a quantitative approach and utilizes secondary data. It examines financial data from financial statements spanning three years before and three years after mergers and acquisitions, focusing on companies listed on the IDX that engaged in merger and acquisition activities between 2014 and 2021. The sample selection method used is purposive sampling. To compare the means from the same entities before and after the events, a paired sample t-test is conducted to determine any statistical differences. Additionally, descriptive statistical tests, outlier tests, normality tests, and hypothesis tests (t-test) are used to analyze the data.

## 4. RESULTS AND DISCUSSION

Table 1: Descriptive Statistics Result

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| GPM _BEF | 48 | 0 | 0.834 | 0.325 | 0.202 |
| GPM_AFT | 48 | -1.042 | 0.808 | 0.277 | 0.285 |
| OPM_BEF | 48 | -0.8 | 1.68 | 0.150 | 0.316 |
| OPM_AFT | 48 | -2.07 | 15.22 | 0.363 | 2.240 |
| NPM_BEF | 48 | -0.81 | 1.57 | 0.118 | 0.305 |
| NPM_AFT | 48 | -2.12 | 15.09 | 0.336 | 2.218 |
| ROE_BEF | 48 | -0.28 | 0.76 | 0.121 | 0.164 |
| ROE_AFT | 48 | -.051 | 0.35 | 0.112 | 0.152 |
| ROA_BEF | 48 | -0.64 | 0.23 | 0.039 | 0.120 |
| ROA_AFT | 48 | -1.73 | 0.28 | 0.019 | 0.269 |
| EPS_BEF | 48 | 0 | 2545.09 | 106.915 | 374.029 |
| EPS_AFT | 48 | 0 | 2964.99 | 125.391 | 435.996 |
| ROCE_BEF | 48 | 0 | 0.316 | 0.032 | 0.073 |
| ROCE_AFT | 48 | 0 | 0.41 | 0.034 | 0.079 |

Table 2: Paired Sample t-test

| | Mean (BFRE) | Mean (AFTR) | t | Sig. (2 - tailed) | Hypothesis |
|---|---|---|---|---|---|
| GPM | 0.32 | 0.28 | 1.324 | 0.00 | Significant |
| OPM | 0.15 | 0.36 | -0.740 | 0.00 | Significant |
| NPM | 0.12 | 0.34 | -0.758 | 0.00 | Significant |
| ROE | 0.12 | 0.11 | 0.364 | 0.00 | Significant |
| ROA | 0.04 | 0.02 | 0.798 | 0.00 | Significant |
| EPS | 106.92 | 125.39 | -1.099 | 0.00 | Significant |
| ROCE | 0.03 | 0.03 | -0.357 | 0.00 | Significant |

The results of this research explained that all variables experienced significant changes. Specifically, the variables that experienced significant differences include Gross Profit Margin (GPM), Operating Profit Margin (OPM), Net Profit Margin (NPM), Return on Equity (ROE), Return on Assets (ROA), Earnings Per Share (EPS), and Return on Capital Employed (ROCE). This indicates that the hypotheses H1, H2, H3, H4, H5, H6, and H7 were accepted. The test results confirmed significant changes in GPM, OPM, NPM, ROE, ROA, EPS, and ROCE after mergers and acquisitions, suggesting that these financial metrics were impacted by the corporate restructuring activities. These findings underscore the financial metrics that can arise from strategic mergers and acquisitions, reflecting better or worse overall performance and profitability post-transaction.

## 5. CONCLUSION

Mergers and acquisitions represent methods of corporate restructuring wherein a company acquires others for various strategic reasons. The primary motivations for these actions include achieving company growth, realizing synergy, reducing risk through diversification, expanding internationally, and seizing new business opportunities. When a company successfully meets its goals post-merger or acquisition, these actions are considered beneficial. Conversely, if the objectives are not met, mergers and acquisitions are deemed unsuccessful. This research aims to analyze the impact of mergers and acquisitions on company performance for firms listed on the Stock Exchange between 2014 and 2021. The results of this research explained that all variables experienced significant changes. Variables that experienced significant differences include Gross Profit Margin, Operating Profit Margin, Net Profit Margin, Return on equity, Return on Assets, Earning Per Share, and Return on capital employed.The test results confirmed significant changes in GPM, OPM, NPM, ROE, ROA, EPS, and ROCE after mergers and acquisitions.

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