



## How Merger and Acquisition Affect Firm Performance and Its Quality

Edi<sup>a</sup>      Leony Irayanti<sup>b</sup>

<sup>a</sup> Corresponding Author; International University of Batam, Department of Accounting, Faculty of Economy, Edi.king@uib.ac.id

<sup>b</sup> International University of Batam, Department of Accounting, Faculty of Economy, leony.irayanti@gmail.com

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### Abstract

**Purpose:** Mergers and acquisitions are forms of corporate restructuring. This study was conducted to examine the firm's performance after the company carried out a merger and/or acquisition during the period 2010-2014.

**Design and Methodology:** The variables used in this study are financial ratios such as Gross profit margin ratio, Operating profit margin ratio, Net profit margin ratio, Return on capital employed, Earning per share, Return on assets, Return on equity and Return on net worth. This study also focuses on how the quality of firm earnings changed following a merger and/or acquisitions to know whether the changes in firm profit will also affect the quality of profit.

The sample was selected using a non-probability purposive sampling method. 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 SPSS program.

**Findings:** The results from this study show that the firm's performance has decreased after mergers and acquisitions, but the quality of earnings after mergers and acquisitions have insignificant increases.

**Practical Implications:** Management must discipline themselves to ensure good corporate governance, develop a good approach to the management of assets and liabilities, and pay attention to the knowledge transfer and technology transfer that the company gets for the benefit of the company to be able achieve the synergy of acquisition in order to increase profitability.

**The Significance of The Study:** Statistical evidence found that company profitability will be declining significantly after a merger and acquisition occurred. But separately, this decline also makes the profits that are generated of better quality. This also means that the decrease of profitability is also increasing the better quality of their earnings.

## **1. Introduction and Background**

The influence of globalization has resulted in an increase in economic development and the existence of free markets, which have affected the competitiveness of competition, whether nationally or at international levels. Business competition is definitely experienced by all companies, till it forces companies to have to develop strategies to maintain their existence and improve their performance in order to survive in the market and to be able to achieve company goals, which include, creating maximum profits every year. There are many things that a company can do to keep growing and developing during market competition and developing its business to be better. One of the developments that can be done by the company is business expansion as a business strategy. Business expansion can be done either internally and/or externally.

The company's internal expansion can be done by adding divisions within the company, expanding plant capacity, and increasing production units. The external expansion that is often done by most companies includes mergers and acquisitions. Mergers and acquisitions are a tool for business expansion, getting competitive advantage and synergy (Gupta, 2012). Theoretically, mergers and acquisitions are not the same. The merger is a process when two or more companies join and emerge as new companies, while the acquisition is a process where one company takes over another company and runs its business right (Tanriverdi & Uysal, 2015). Mergers and acquisitions are defined as activities involving corporate takeovers, corporate restructuring, or corporate control that change the ownership structure of the company (Rao & Kumar, 2013). Mergers and acquisitions are business strategies that allow companies to enter new potential markets or new business areas (Malik, Melati, Khan, & Khan, 2014).

Mergers and acquisitions are generally aimed for synergy or added value, not only in short term but also for the long term, while increasing economies of scales and economics of scope and financial strength (Mardianto, Christian, & Edi, 2018). Mergers and acquisitions that affect the company's performance and result in changes in the company's performance and finances will appear in the financial statements. The success or failure of mergers and acquisitions can be seen and assessed from the financial performance of the two companies after mergers and acquisitions.

Mergers and acquisitions are a popular topic, whether in academic research or business environment. Analysis data from the Institute of Mergers, Acquisition, and Alliances around the world shows that in 2017 the company announced more than 50,600 M & A transactions with a total value surpassing US \$ 3.5 trillion (2.9 trillion EUR / 2.5 trillion GBP). Compared to 2016, the number of transactions only grew by 2.9% (IMAA, 2017). The increasing number of M & A transactions indicates that this strategy is increasingly in demand by companies as a strategy for accelerating growth.

In Indonesia, up to April 6, 2017, the M & A action had reached 2.1 billion US\$, which is equal to Rp. 27.93 trillion, with an exchange rate of Rp. 13,300 for 1 US dollars. This number increased by 2.1% in the same period the previous year. The number of agreements reached 56. From this total, 334.1 billion US\$ with complete status, 707.5 US\$ with pending status and 1 billion US\$ with proposed status (Databoks, 2017).

## **2. Literature Review and Hypothesis Development**

### **2.1. Mergers and Acquisitions**

Resource-Based Theory is a resource-based approach owned by a company in analyzing its competitive advantage, a concept developed from management strategies that analyze and interpret organizational resources so that the organization achieves sustainable competitive advantage. The Resource-Based Theory view underlies the company getting good financial performance and competitive advantage by dominating and utilizing tangible and intangible assets (Wernerfelt, 1984). Resource-Based Theory considers mergers and acquisitions as a strategy used to access the resources of other companies for the purpose of creating competitive advantages and values that are not available in the company. Creating the highest value of existing resources and combining it with other people's resources, this combination can produce optimal returns (Das & Teng, 2000).

### **2.2. Gross Profit Ratio**

GPR is a profitability ratio that shows the relationship between gross profit and total net sales revenues. Mergers and acquisitions can produce significant industrial restructuring and can contribute to rapid industrial growth by generating an economic scale (Gupta, 2012). Two or more companies that conduct mergers and acquisitions are believed to create synergies that can trigger an increase in sales, so the company has a greater ability to earn profits and the company's GPR will increase. Company GPR will experience a significant

increase after mergers and acquisitions (Azhagaiah & Kumar, 2011; Neethu & Viswanathan, 2015; Omoye & Aniefor, 2016).

H<sub>1</sub> = Mergers and Acquisitions have a significant effect on gross profit ratio.

### **2.3. Operating Profit Ratio**

OPR is a profitability ratio that shows the relationship between operating net income and total net sales revenues. Resources from two or more companies can save on the use of operating costs for companies such as salary and rental costs. The company's ability will increase in generating operating profit due to the cost savings made, so that OPR will increase after mergers and acquisitions. Company OPR will experience a significant increase after mergers and acquisitions (Azhagaiah & Kumar, 2011; Ahmed & Ahmed, 2014).

H<sub>2</sub> = Mergers and Acquisitions have a significant effect on operating profit ratio.

### **2.4. Net Profit Ratio**

NPR is the ratio to measuring the relationship between net income after tax and total net sales revenues. Two or more resources from companies that merged can affect NPR and NPR will increase because the company's ability to carry out promotions and sales becomes more effective and efficient. Company NPR will experience a significant increase after mergers and acquisitions (Azhagaiah & Sathishkumar, 2014; Ahmed & Ahmed, 2014; Neethu & Viswanathan, 2015). It experienced insignificant improvement after mergers and acquisitions (Azhagaiah & Sathishkumar, 2014; Singh & Gupta, 2015; Yanan, Hamza, & Basit, 2016).

H<sub>3</sub> = Mergers and Acquisitions have a significant effect on net profit ratio.

### **2.5. Return on Capital Employed**

ROCE is a ratio to measures the relationship between net income before interest and tax with company working capital. After mergers and acquisitions, which affect the higher ROCE value, it shows that the use of assets funded in the company's long-term funding is more efficient in generating operating profit. Company ROCE will experience a significant increase after mergers and acquisitions (Kumara & Satyanarayana, 2013; Ahmed & Ahmed, 2014; Neethu & Viswanathan, 2015; Omoye & Aniefor, 2016).

H<sub>4</sub> = Mergers and Acquisitions have a significant effect on return on capital employed.

## **2.6. Earnings Per Share**

EPS is a profitability ratio that shows the relationship between net income and the number of shares outstanding. Shares that are outstanding after mergers and acquisitions experience changes because the company can make acquisitions using shares so that the net profit that can be shared with shareholders will be different. Company EPS will experience a significant increase after mergers and acquisitions (Chaudhary *et al.*, 2010).

H<sub>5</sub> = Mergers and Acquisitions have a significant effect on earnings per share.

## **2.7. Return on Assets**

ROA is a profitability ratio that shows the level of a company's ability to utilize each asset in generating net income, describing the extent of the return of all company assets. The good synergy that has been achieved after mergers and acquisitions will make the company's ROA better than before mergers and acquisitions happened. Company ROA will experience a significant increase after mergers and acquisitions (Kumara & Satyanarayana, 2013; Omoye & Aniefor, 2016).

H<sub>6</sub> = Mergers and Acquisitions have a significant effect on return on assets.

## **2.8. Return on Equity**

ROE is a ratio that measures the ability of a company to produce net income from capital paid by shareholders. The larger scale of the company plus the motivation of financial synergy obtained from a combination of assets and capital that continuously makes the company's ability to earn a profit (ROE) will increase so that ROE performance will increase compared to before the merger. Company ROE will experience a significant increase after mergers and acquisitions (Ahmed & Ahmed, 2014; Singh & Gupta, 2015; Omoye & Aniefor, 2016).

H<sub>7</sub> = Mergers and Acquisitions have a significant effect on return on equity.

## **2.9. Return on Net Worth**

RONW is a ratio developed from the perspective of an investor who measures how much profit the investor will get or the rate of return on interest from the investor. The good synergy that occurs from the process of mergers and acquisitions will make the company's profitability better than before so that RONW will increase. Company RONW will experience an insignificant improvement after mergers and acquisitions (Chaudhary *et al.*, 2010; Azhagaiah & Sathishkumar, 2014; Singh & Gupta, 2015).

H<sub>8</sub> = Mergers and Acquisitions have a significant effect on return on net worth.

## 2.10. Earnings Quality

Earning Quality is an indicator of the quality of financial information. There is no exact measure so far in measuring how much earnings quality is, only the approach used to proxy the quality of earnings. Adjusted current accruals (REDCA) are used as a proxy for earnings quality (Healy & Wahlen, 1999; Dechow, Richardson, & Tuna, 2003) as follows :

$$REDCA_{i,t} = TCA_{i,t} - EPTCA_{i,t}$$

Where :

$$TCA_{i,t} = \Delta (Current\ Assets)_{i,t} - \Delta (Current\ Liabilities)_{i,t} - \Delta (Cash)_{i,t} + \Delta (Short-term\ and\ Current\ Portion\ of\ Long-term\ Debt)_{i,t}$$

$$EPTCA_{i,t} = \beta_1 \frac{1}{Assets_{i,t-1}} + \beta_2 \frac{(\Delta Net\ Sales_{i,t} - \Delta AR_{i,t})}{Assets_{i,t-1}} + \beta_3 ROA_{i,t-1} + \beta_4 Inflation_{i,t-1} + \beta_5 GDP\ growth_{i,t-1}$$

Source: (Ding, Mo, & Zhong, 2016)

H<sub>9</sub> = Mergers and Acquisitions have a significant effect on earnings quality

## 3. Research Methodology

This research includes quantitative research and uses secondary data. This research requires financial data in financial statements for a period of 3 years before and 3 years after mergers and acquisitions by taking samples of companies listed on the IDX and apply mergers and acquisitions from 2010 to 2014. The sample selection method used was purposive sampling. Paired sample t- was a test to compare two means that are from the same individual, object or related unit, to find out whether there is any statistical evidence between the two means before and after event. Descriptive statistical tests, outlier tests, normality tests, and hypothesis tests (t-test) will be used to test the data.

#### 4. Research Finding

**Table 1:** Descriptive Statistics Result

	N	Minimum	Maximum	Mean	Std. Deviation
GPR_BEF	180	0.000	0.857	0.329	0.200
GPR_AFT	180	-0.337	0.910	0.315	0.223
OPR_BEF	180	-0.219	1.445	0.203	0.159
OPR_AFT	180	-1.741	0.585	0.141	0.262
NPR_BEF	180	-1.197	2.292	0.160	0.274
NPR_AFT	180	-1.522	15.093	0.185	1.164
ROCE_BEF	180	-0.080	0.667	0.163	0.117
ROCE_AFT	180	-0.347	0.454	0.106	0.098
EPS_BEF	180	-1983.000	3549.000	268.123	576.813
EPS_AFT	180	-632.000	1135.850	96.870	189.473
ROA_BEF	180	-0.169	0.341	0.078	0.074
ROA_AFT	180	-0.190	0.227	0.043	0.060
ROE_BEF	180	-0.993	0.626	0.143	0.150
ROE_AFT	180	-0.781	0.328	0.078	0.138
RONW_BEF	180	-0.069	0.773	0.207	0.149
RONW_AFT	180	-0.269	0.477	0.149	0.115
EQ_BEF (in millions)	180	-6310749.000	24649000.000	1563276.840	3924328.858
EQ_AFT (in millions)	180	-11227134.000	69836000.000	2116247.620	6818564.986

**Table 2:** Paired Sample t-test

	Mean (BFRE)	Mean (AFTR)	t	Sig. (2- tailed)	Hypothesis
GPR	0.33	0.32	1.099	0.27	Insignificant
OPR	0.20	0.14	3.283	0.00	Significant
NPR	0.16	0.19	-0.302	0.76	Insignificant
ROCE	0.16	0.11	6.138	0.00	Significant
EPS	268.12	96.87	4.400	0.00	Significant
ROA	0.08	0.04	6.011	0.00	Significant
ROE	0.14	0.08	4.550	0.00	Significant
RONW	0.21	0.15	5.292	0.00	Significant
EQ	1563276.84	2116247.62	-1.044	0.30	Insignificant

The result of this research explained that almost all variables experienced significant changes. Variables that experience significant differences are in the variables OPR, ROCE, EPS, ROA, ROE, and RONW so H<sub>2</sub>, H<sub>4</sub>, H<sub>5</sub>, H<sub>6</sub>, H<sub>7</sub>, and H<sub>8</sub> were accepted. The test results of the GPR, NPR and EQ variables show insignificant changes after mergers and acquisition so H<sub>1</sub>, H<sub>3</sub>, and H<sub>9</sub> were rejected. The OPR, ROCE, EPS, ROA, ROE, and RONW experienced significant decrease after mergers and acquisitions, the GPR decreased insignificantly after mergers and acquisitions while the NPR and EQ experienced insignificant increases after mergers and acquisitions.

## **5. Conclusion**

Mergers and acquisitions are forms of corporate restructuring. The company adopts other companies with certain motives. The main motives for mergers and acquisitions are company growth, synergy, risk reduction through diversification, internationalization, new business opportunities, etc. If the company achieves its objectives after mergers and acquisitions, it can be said that mergers and acquisitions will have a positive impact for the company but if this is not achieved, mergers and acquisitions will be categorized as a failure (Neethu & Viswanathan, 2015). This study is intended to examine the influence of mergers and acquisitions on company performance and earnings quality after mergers and acquisitions of companies listed on the Stock Exchange during the 2011-2014 period. The results of this study indicate that profitability performance after mergers and acquisitions show a significant decline, except for the GPR, which experienced a not so significant decrease after mergers and acquisitions and NPR which experienced insignificant increases. The results of this study find that a company is unable to maximize the utilization of existing resources to the maximum, to increase sales and minimize costs incurred for an operational and non-operational cost. Quality of earnings shows an insignificant increase, which shows that company profits experienced changes after mergers and acquisitions. This proves that mergers and acquisitions have a negative impact on the profitability of the company, but the profit quality generated by the company is higher than before, although not as significant as before.

Corporate restructuring is inseparable from company management planning. The management of the company must still enforce discipline by regulating good corporate governance, encouraging technological progress and increasing capital so it maintains the



sustainability of the company (Sulaiman, 2012). The results of the study show that company management has not been able to utilize the resources obtained after mergers and acquisitions efficiently and therefore they do not get optimal returns.

The limitation of this study is that the calculation of performance was carried out only about the measurement of company performance by using financial ratios as performance benchmarks. Analysis carried out using financial ratios has several weaknesses. First, financial ratios can only be used as a quantitative analysis measurement so that qualitative aspects such as product quality, management competence, and customer service cannot be measured. Furthermore, financial ratios are distorted by inflation, which results in difficulties predicting the mergers and acquisitions trend when the inflation rate experiences fluctuations over the year. The introduction of further mergers and acquisitions will show that the effects of mergers and acquisitions are not just on company performance. So there are some recommendations that can be given for further research. One can make additions and expand the topic of merger and acquisition research, such as: not only testing the differences in economic performance but also paying attention to non-economic factors that may indirectly affect the results of mergers and acquisitions such as: owner's ambitions in wanting to master various industrial sectors, discussing the concept of game theory in mergers and acquisitions, challenges faced in mergers and acquisitions, factors that influence the success and failure of mergers and acquisitions, the influence of company reputation, company size, and cultural differences between companies that merge, and others. Also, research can be done on other forms of business cooperations, such as contractual agreement, joint-ventures, and strategic alliance.

There are managerial implications that management must discipline to ensure good corporate governance, develop a good approach to the management of assets and liabilities, and pay attention to the knowledge transfer and technology transfer that the company gets for the benefit of the company, to be able achieve the synergy of acquisition in order to increase the profitability.

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