THE COMPARATIVE OF CORPORATE PERFORMANCE ANALYSIS BETWEEN PRE AND POST MERGERS & ACQUISITIONS COMPANIES IN THE INDONESIA MANUFACTURING INDUSTRIES LISTED ON THE STOCK EXCHANGE IN 2007-2012

Rosiwarna Anwar, Fenny Chintya Debby
Management, Fakultas Ekonomi dan Bisnis, Universitas Indonesia, Jakarta, Indonesia
rwanwar@yahoo.com, rwnwar40@gmail.com
Management, Fakultas Ekonomi dan Bisnis, Universitas Indonesia, Jakarta, Indonesia
fennycd@yahoo.com

Abstract

This study aims to analyze the performance of companies doing mergers and acquisitions that proxies by Return on Capital Employed (ROCE), Return on Equity (ROE), Operating Profit Margin (OPM), Net Profit Margin (NPM), EPS (Earnings Per Share), PER (Price Earning Ratio). This study uses the sample based on 90 companies in Indonesia manufacturing industries for the period from 2007 to 2012. Hypothesis testing is done by using the paired t test. We had documented the results of the study findings of the performance of the company which showed the distinction between two conditions, pre mergers and acquisitions when compared with post mergers and acquisitions of companies. However, many out of the results are not statistically significant.

Keywords: Mergers & Acquisitions; Corporate Performance; Financial Ratios.
Introduction

In Indonesia, mergers and acquisitions (M&A) has been conducted since many years ago. The M&A activities has shown in various industries which driven by changes in economic conditions. The change in economic conditions that experienced by businesses, make corporate management must think how to survive and develop their business with different business strategies in both short term and long term. Amongst other things, the reason companies opt to arrange M&A, due to expectation to the increase of market share, diversification, or increase the vertical integration of existing operational activities, etc.

M&A has been used as one of the effective business strategy for corporate restructuring as a tool in the business world since 1897. M&A activity first took place during the period 1897 to 1904, at that time mostly occurred in horizontal merger, usually the companies involved are in the same industry, between the acquirer (the bidders) and the company being acquired (target). Merger at that time did not go well, due to the failure of the company in achieving the goals of efficiency, lack of legal regulations governing mergers, as well as poor economic growth accompanied by stock market value (Ross, 2009).

Whereas in Indonesia M&A activity started in the early 90s, the first transaction was PT Jakarta International Hotels Development through the purchase of 100% shares of PT Danayasa Arthatama in 1990 (Tirthayatra, 2005). M&A also occurred in 1999, at the time of the crisis in Indonesia resulted in a lot of things happening, including the bankruptcy of four state-owned banks, Bank Bumi Daya (BBD), Bank Dagang Negara (BDN), Bank Ekspor Impor (Exim), and the dan Bank Pembangunan Indonesia (Bapindo). The economic crisis forced the government to merge these four banks, and became one and new entity resulted the merger, namely Bank Mandiri, Bank Mandiri has had been through difficult times in the first three years after the merger, but then the bank can show good performances (Winarti, 2010).

In fact, mostly M&A activities have had failed to improve performance, to accomplish the expected strategies, and achieve financial objectives that have been set prior to the merger. Another fact concomitantly revealed by several investigators including Cartwright and Cooper (1993), analyses the failure rate of M&A has shown relatively high ranging between 50% to 70%. And the failure of the company to achieve the expected financial goals is one of common failure in M&A (Chatterjee, et.al, 1992), and according to Schweiger, et.al (1993) the failure of the company since they had increased its share price after the merger and acquisition, then (Rossane, 2012) mention on failure in M&A activity may lead to some loss of funds that have been invested and not redeemable and lose shareholders wealth.

We adopted several previous studies, the difference is on the selecting independent variables used, periodic time, and locus. This research, we proposed as the first attempt before we compare further to the non-merger companies in terms of the financial ratios’ performances. From these considerations, the authors had conducted research in 2015 with the title "Comparative Analysis of Corporate Performance Between Pre and Post M&A Companies in the Manufacturing Industries listed in the Indonesia Stock Exchange 2007-2012".

Literature review

Corporate Value

According to Brigham and Gapensi (2006), the value of the company is very important because of the higher value of the company will be followed by higher prosperity
shareholders (Hermuningsih, 2013). The value of the company, and the level of stock prices is directly proportional, where the higher the stock price the higher the value of the company.

**Merger and Acquisition**

In PSAK (Indonesia Accounting Standard) No. 22 defined that the merger as a form of union of two or more separate companies into one economic entity as a company, merges with another company, or acquire control over the assets and operations of another company. Merger is the complete absorption of one company by another, wherein the acquiring firm retains its identity and the acquired firm ceases to exist as a separate entity.

**The Objectives of Mergers and Acquisitions**

After the classification of the objectives of a company M&A, there are several motives a company M&A, namely as economic motives, and non-economic motives, as follows (Ross, 2009): (1) The economic motive related to the essence of the company's goal to improve the value of the company or to maximize shareholder wealth. In this study several financial ratios as objective measurement are being analyzed, such as: ROCE (Return On Capital Employed), ROE (Return On Equity), OPM (Operating Profit Margin), NPM (Net Profit Margin), EPS (Earning Per Share), PER (Price Earning Ratio). Several M&A economic reasons are: To obtain a source of raw materials, production facilities, technology, network marketing, or market share invaluable (Subramanyam, 2009), To ensure the financial resources or access to financial resources, Strengthen management, Improve operating efficiency, Encourage diversification, Accelerate entry into the market, Achieve economies of scale, Obtain tax benefits, and Synergies, (2) The non-economic motive, sometimes M&A activity is not only for the sake of economic interests of the company, but also for non-economic motives such as prestige and ambition of the management company or the owner of the company.

Another study conducted by Alamsyah (2002) on oil company M&A, get the result that after the M&A of the company has increased to several financial ratios include the profit margin, ROE, ROCE, EPS, and operating income.

In addition other studies conducted by Aruna and Nirmala (2013) in the journal Post Merger acquiring financial performances of selected IT companies in India; they say that two of the three IT companies in careful business shown not produce a positive difference in the profitability of the company after the merger. Two of the three companies showed no significant difference for ROCE of IT company after the merger than before M&A. For OPM and NPM ratio of one in three IT companies have significant difference after the merger, according Azhagaiah and Sathishkumar (2014) in the journal Impact of M&A on Operating Performance that the influence of gross earnings, liquidity, leverage, cost of utilization, growth, operating leverage and ROE towards company M&A in India.

Payamta (2004) examined the effect of M&A on the performance of the manufacturing company 2 years before and 2 years after M&A are proxied by financial ratios and stock returns. In that study produced a fact which shows a decline in performance for the periods before and after M&A both in terms of stock returns and financial ratios, but the values are not statistically significant.

Subsequent research conducted by Saviera (2012 performed the analysis of M&A of companies non-financial, 3 years prior to the merger and three years after the merger; in a study with approximated by financial ratios and Tobin's q ratio. The research results show that the activity mergers and acquisitions did not generate synergies for the company, also
shown the decrease of the net profit margin and ROE, but the decrease was not significant, meaning that M&A made by the company does not affect the value of net profit margin and ROE. Besides of all financial ratios resulted, only debt equity ratio has decreased significantly.

Rossane (2012) conducted a study to analyze the effect of M&A on the financial performance and the method of Economic Value Added (EVA) in manufacturing companies using financial ratios parameters. By using EVA as an indicator of the success of management in managing financial resources owned, this study also tested the performance of the post-acquisition between the acquisition of non-conglomerates and conglomerates. In this study showed that the company experienced changes after M&A with results of an increase in the ROE, EPS, and the net profit margin of the company. In addition there is a significant change after M&A of EVA, ROE, total asset turnover. But among conglomerates and non-conglomerate, the results are significant differences in current ratio, quick ratio, and debt to equity.

Another study conducted by Prima (2010) to see the impact of M&A of non-financial companies. This impact is measured using financial ratios change between before and after mergers and acquisitions. The final conclusion is that the financial ratios that undergo significant changes as a result of M&A is the profit margin and return on assets were decreased after M&A. Also similar study conducted by Turang (2010) with a different study period. This study measures the financial performance of companies are working capital, operating profit, earnings per share, ROE, DER. And the results of the study showed that there were no significant differences in financial performance in the period before and after the M&A activity is executed. Only variable, that is, operating profit shows a significant difference in the fifth year after the merger and acquisition process executed.

Research Hypothesis

A strategy of merger and acquisition being chosen by a company is primarily to increase profitability, the better the company's performances the higher the profit level. In these instances are proxied with ROCE (Return On Capital Employed), ROE (Return On Equity), OPM (Operating Profit Margin), NPM (Net Profit Margin), EPS (Earning Per Share), PER (Price Earning Ratio).

To substantiate the hypothesis of study objective outlined above, 6 pairs hypothesis have been formulated and tested. With the notation where: H0 = there is no significant difference between Pre-merger and Post-merger applicability to ROCE (Return On Capital Employed), ROE (Return On Equity), OPM (Operating Profit Margin), NPM (Net Profit Margin), EPS (Earning Per Share), PER (Price Earning Ratio).

H1= there is significant difference between Pre-merger and Post-merger applicability to ROCE (Return On Capital Employed), ROE (Return On Equity), OPM (Operating Profit Margin), NPM (Net Profit Margin), EPS (Earning Per Share), PER (Price Earning Ratio)

Research Methods

In this study, we analyzes of the company's financial performances contrasting between two conditions, Pre-merger and Post-merger of the M&A using proxies of intended financial ratios: ROCE, ROE, OPM, NPM, EPS, and PER accordingly.

In this study, we analyze the factors of the financial ratio that might affect the company's decision to the period of pre and post mergers and acquisitions. By using financial statement data such that within two year before and two year after merger, and contrasting
both financial statements of companies since then. The years of financial statements used for companies of M&A is the periodic year in which the year is assumed quiet stable after the crisis that occurred in the two consecutive previous years (2007 and 2008). The number of companies studied were 90 companies had been doing M&A.

In this study, we used two research tests include, *Firstly, paired sample t-test* which is parametric test that usually used for testing hypothesis towards two variables. This t-test technique is one technical analysis of significant of the hypothesis result, as well as to support the t test results previously performed. To test two related samples, primarily to test the two-paired samples whether these are from similar population. If these are true, then all parameters from these two samples are relatively similar one another, these samples are paired or related which are measured with similar technique but different treatment (Santoso, 2014). Payamta (2004) indicates the purpose to know the significant of corporate performance changes of pre and post M&A that is by comparing each financial ratios investigated. In the following research model can be explained in this study using different test models used by Rahman and Lambkin (2015) is a model different test performance of the company before and after mergers and acquisitions by using the average of the year before and the average year after merger.

### Research Result

**Test Result of Descriptive Statistics of Corporate Performances average on two years after Merger and Acquisition**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROCE_AFTER</td>
<td>18</td>
<td>-.10</td>
<td>.39</td>
<td>.1602</td>
<td>.13586</td>
</tr>
<tr>
<td>ROE_AFTER</td>
<td>18</td>
<td>-.18</td>
<td>.42</td>
<td>.1526</td>
<td>.16889</td>
</tr>
<tr>
<td>OPM_AFTER</td>
<td>18</td>
<td>-30.56</td>
<td>18.85</td>
<td>7.4038</td>
<td>11.37333</td>
</tr>
<tr>
<td>NPM_AFTER</td>
<td>18</td>
<td>-7.40</td>
<td>13.06</td>
<td>4.9941</td>
<td>5.67293</td>
</tr>
<tr>
<td>EPS_AFTER</td>
<td>18</td>
<td>-12.42</td>
<td>459.54</td>
<td>96.5117</td>
<td>122.09475</td>
</tr>
<tr>
<td>PER_AFTER</td>
<td>18</td>
<td>-44.20</td>
<td>105.74</td>
<td>24.5577</td>
<td>32.48986</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Before examining paired test towards research objects, each data variable must be tested to knowing whether distributed normally. This is important in order when to test using parametric, in these instances paired t-test and independent sample t-test. We use Kolmogorov-Smirnov test.

Sig ROCE > 0.05, and also the others: ROE, OPM, NPM, EPS, and PER have resulted similar results which are > 0.05 as shown table below. Based on K-S test all variables on this research, we can summarize normal distribution.

The results shown where:

**Hypothesis testing:**

1. \(H_{0,1}\): ROCE not significant difference whereas \(H_{1,1}\): ROE significant difference
2. \(H_{0,2}\): ROE not significant difference whereas \(H_{1,2}\): ROE significant difference
3. \(H_{0,3}\): OPM not significant difference whereas \(H_{1,3}\): OPM significant difference
4. \(H_{0,4}\): NPM not significant difference whereas \(H_{1,4}\): NPM significant difference
5. \(H_{0,5}\): EPS not significant difference whereas \(H_{1,5}\): EPS significant difference
6. \(H_{0,6}\): PER not significant difference whereas \(H_{1,6}\): PER significant difference

To test comparison pertaining before and after merger, we use *Paired t-Test* using confidence interval of 95% since the 6 (six) ratio) in questions are normally distributed.

**Normality test result of Corporate Performance average on two years**

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Sig before</th>
<th>Sig after</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROCE</td>
<td>0,816</td>
<td>0,760</td>
<td>Normal Distribution</td>
</tr>
<tr>
<td>ROE</td>
<td>0,743</td>
<td>0,825</td>
<td>Normal Distribution</td>
</tr>
<tr>
<td>OPM</td>
<td>0,968</td>
<td>0,637</td>
<td>Normal Distribution</td>
</tr>
<tr>
<td>NPM</td>
<td>0,933</td>
<td>0,621</td>
<td>Normal Distribution</td>
</tr>
<tr>
<td>EPS</td>
<td>0,128</td>
<td>0,219</td>
<td>Normal Distribution</td>
</tr>
<tr>
<td>PER</td>
<td>0,149</td>
<td>0,394</td>
<td>Normal Distribution</td>
</tr>
</tbody>
</table>

**Table Output Paired t Test**

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Mean before</th>
<th>Mean after</th>
<th>Diff</th>
<th>Sig</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROCE</td>
<td>0,1359</td>
<td>0,1602</td>
<td>0,0243</td>
<td>0,567</td>
<td>(H_{0,1}) Accepted</td>
</tr>
<tr>
<td>ROE</td>
<td>0,1493</td>
<td>0,1526</td>
<td>0,0033</td>
<td>0,943</td>
<td>(H_{0,2}) Accepted</td>
</tr>
<tr>
<td>OPM</td>
<td>7,0174</td>
<td>7,4038</td>
<td>0,3864</td>
<td>0,882</td>
<td>(H_{0,3}) Accepted</td>
</tr>
<tr>
<td>NPM</td>
<td>4,3472</td>
<td>4,9941</td>
<td>0,6469</td>
<td>0,680</td>
<td>(H_{0,4}) Accepted</td>
</tr>
<tr>
<td>EPS</td>
<td>48,2556</td>
<td>96,5117</td>
<td>48,2561</td>
<td>0,015</td>
<td>(H_{0,5}) Rejected</td>
</tr>
<tr>
<td>PER</td>
<td>34,6183</td>
<td>24,5577</td>
<td>-10,0606</td>
<td>0,455</td>
<td>(H_{0,6}) Accepted</td>
</tr>
</tbody>
</table>

From the above test results, only the variable earning per share is experiencing significant difference, while return on capital employed, return on equity, operating profit margin, net profit margin, the price earnings ratio are not experiencing significant difference.

We can summarize the significancies *mean* between two values as explained below:
- ROCE increasing after merger, meaning there is an indication that value added resulted after merger, but not significance difference. This is not proven where merger incapable of returning capital invested.
- ROE increasing after merger, meaning there is an indication that value added resulted after merger, but not significance difference. This is not proven where merger incapable of giving positively impact toward operating efficiency which in turn profit to shareholders.
- OPM increasing after merger, meaning there is an indication that value added resulted after merger, but not significance difference. This is not proven where merger incapable of giving impact toward more competitive which keeping low cost relative to sales.
- NPM increasing after merger, meaning there is an indication that value added resulted after merger, but not significance difference. This is not proven where merger incapable of positively impact toward operating efficiency which in turn showing the companies incapable of using its assets operations management efficiently.
- EPS increasing after merger, meaning there is an indication that value added resulted after merger, but not significance difference. This is proven where merger capable of positively impact toward sharehoders prosperity which in turn profit to sharehoders. However this result can not be generalized, due to companies profit do not show significance differences and higher if compared to before merger. Hence, we assumed this happened because of possibly buying back shares outstanding by the company. This seen where the EPS ratio increasing, whereas the company’s shares seemingly low but net profit still equal amount.
- PER decreasing after merger, meaning there is an indication that investors have not expected overwhelming result after merger. This is not proven where merger incapable of positively impact toward corporates growth in the near future.

**Discussion**

These results indicate that there was no significant difference in the performance of a public manufacturing company as measured by the financial ratios for the two years before and two years after the M&A, they are approximated that of six financial ratios are analyzed in this study only shows earnings per share results significant difference for these two periods before and after the M&A. This gives an indication that the purpose of M&A is not economically achieved. Possibilities that may occur in this case are the non-economic reasons being more taken into consideration in undertaking companies in M&A activities, such as preventing the bankruptcy of the target company and the possibility of other non-economic reasons.

Based on the observations of many authors of various numbers of financial ratios examined, there were found that the average financial ratios show that the performance of companies after M&A are not better than companies that of before M&A. Allegedly, this was due to the integration of pre planning M&A is not running properly and is unable to provide synergies in companies that after M&A, this resulted in an average performance of those companies are still below the average of companies that before conducting M&A. The reason a company motives to do M&A one of which is to achieve synergies. In addition to M&A by company as a strategy is in order to maintain the company's business, whereas M&A as one reason to get out of the financial problems facing by company.

As it has been explained previously that there are two objectives of the company do M&A, firstly economic objectives which is an increase of corporate profitability and the
welfare of shareholders. But other than economic motives, company has also other motives in doing M&A, and one among others of which is a non-economic motives that rescue target company from bankruptcy, reducing the number of competitors in the industry, the market leader, and wants to enter the market. This connotes to do further research interest further in merger and acquisition, especially myself interest to continue this research with still related comparison among companies of doing and not doing merger.

**Conclusion**

Based on research related to analysis of the company's performance before and after M&A, in companies listed on the Stock Exchange (Stock Exchange Indonesia) in the period 1 January 2007 up to December 31, 2012 obtained the following results:

1. Based on the results of hypothesis testing carried out showed that there were no differences between the financial performance shown by the return on capital employed and return on equity in manufacturing companies before and after the merger which do not have a statistically significant difference when being compared. Although in this study about an increase in return on capital employed, this is in line with research conducted by Aruna and Nirmala (2013) but did not differ significantly. And the ratio of return on equity in this study did not have a significant difference for the 2 years before and 2 years after M&A, the results in line with the research conducted by Payamta (2004).

2. Based on the results of hypothesis testing carried out has showed that there was no difference between the profitability of companies that indicated by margin of operating profit and net profit margin in manufacturing companies before and after the merger. These show that the ratio of operating profit and net profit margin prior to the M&A do not have a statistically significant difference when compared with after M&A, this is in line with the results of research conducted by Payamta (2004).

3. Based on the results of hypothesis testing carried out showed that there was no difference in the rate of return on investment enterprise shown by the earnings per share and price earnings ratio in the period before and after M&A. Although, in this study results that the EPS has a statistically significant difference. However, this result can not be generalized in comparison of pre and after merger, with the assumption that after merger the corporate possibly buy back the stocks. The increase of EPS due to outstanding shares decrease could lead an increasing EPS, and would impact PER decrease; this conclusion confirm the study by Putri (2004), stock buyback causing the corporate seen under-price with equal amount of net profit inherently.
### Table

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Comparison of Corporates Performances</th>
<th>Summaries</th>
<th>Significance</th>
</tr>
</thead>
</table>

Based on the table above, we conclude that within two years period post-merger shown no changes in corporate financial performances generally. From the test result above only earning per share experiencing significant difference, whereas return on capital employed, return on equity, operating profit margin, net profit margin, and price earning ratio are not showing significant differences. If we take closer look in the comparison table, there were found companies had been experiencing changes in financial ratio position after-merger and acquisition. However, many samples among manufacturing companies had been experiencing changes but not significant statistically.

It can be concluded that the performance of companies listed on the Stock Exchange which had done M&A in the year 2007-2012 showed no significant performance improvements seen from a financial standpoint because of an increase in profitability, but the magnitude is not significantly increase. The purpose of a company is not just about improving the profitability of the company, but on the other hand, it also wants the enhancement of wealth of shareholders primarily. By increasing profits which enjoyed by shareholders, automatically the value of the stock will rise and this may increase the value of the company (Senior Business, 2012).
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http://kbbi.web.id