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Comparative Analysis of Corporate Performance before and after the Merger

(Empiric study on public companies)

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***Abstract*—This study aims to analyze the differences in corporate performance before and after the merger on public companies listed on the Indonesia Stock Exchange. Company performance is measured using financial ratios: Current Ratio, Debt to Equity Ratio, Debt Ratio, Total Asset Turnover, Return on Investment, Return on Equity, and Net Profit Margin. The data used in this research is secondary data through Indonesia Stock Exchange official website: www.idx.co.id. Hypothesis testing used is Paired Sample T-test and Wilcoxon Match Pairs Test. This study is a comparative research type of quantitative approach, measured using SPSS version 20. The populations in this study are all public companies listed on the Indonesia Stock Exchange which effectively merge in 2014. The sample is determined by purposive sampling method, with sample of 4 companies. The results of this study indicate that Debt to Equity Ratio, Debt Ratio, Total Asset Turnover, Return on Investment, Return on Equity, and Net Profit Margin show significant differences.**

***Keywords*—merger; financial performance**

I. INTRODUCTION

Global competition requires companies to develop strategies to survive and competitiveness. For that needed a competitive strategy in developing and maintaining existence in order to achieve company goals. This strategy is done by expanding the company's activities, for example by adding product capacity, building a new company or by buying another company. One of the things that can be done is a merger or a company called a merger.

Merger is a complete absorption by a company against other companies. The acquiring company stays independent of its name and identity, and acquires all the assets and liabilities of the acquired company. After the merger of the acquired company will be lost and become one part with the acquiring company [1].

Mergers are considered to create synergies because the overall value of the company before the merger. In addition to the reason, the company chose merger because there are benefits for the company, such as improving the ability in marketing, research, managerial skills, technology transfer, and efficiency in the form of decreased production cost.

Merger is one of the company's strategy in growing company. Mergers derive from the word merger (latin) which means joining, together, in combination that causes the loss of identity due to this merger. A merger is defined as a business combination of two or more companies that eventually merge into one pre-existing company, eliminating one of the names of companies that merge. In other words that merger is an agreement of two or more companies to join which is survive, while others stop activity or disband [2].

Merger decision is inseparable from the problem, according to Payamta and Setiawan [3]. Costs for merger implementation are quite expensive, and prices are not necessarily certain with expectations. The implementation of the merger also gives a negative recognition to the financial position of the acquiring company (the acquiring company).

Company performance is demonstrated by the ability of a company to deliver value through productivity. Performance appraisal is very important for companies that have gone public. Because the company went public IDAT community is required to improve its performance. This report is a very important part of the corporate merger process. Performance appraisal is also needed for existing companies. It is useful for the implementation of business recovery programs [4].

The synergy of the merger is indicated by the increase of the company's performance, one of which can be known through the observation of the comparison of the company's performance before and after the merger. One of the financial performance benchmarks of firms is financial ratios. Several studies have examined the effect of mergers on company performance, but the results are not always the same. Several studies have suggested that there was a change in company performance before and after the merger, but some other researchers mentioned no significant change.

In the process of corporate performance management assessment, one of the important criteria used is the measure of corporate financial performance [5]. To be able to assess the performance results of company management in the field of finance, used a variety of financial information resulting from the accounting process undertaken company. There are various benchmarks that can be used to assess a company's financial performance, each of which has distinct and specific benefits. According Foerster ratio is a tool that can be done in the form of balance sheet and income statement [6]. The ratio consists of profitability ratio, solvency ratio, market ratio, activity ratio and liquidity ratio.

Research comparing the financial performance before and after merger of many already do, Rao et al. concluded there is no significant difference between Return on Equity, Net Profit Margin, Interest Coverage, Earning Per Share, and Dividend Per Share between before and after mergers and growth [7].

Rashid and Naeem concluded There is a significant difference between the value of Current Ratio (CR) in the period one year before with two, four, and five years after the merger [8]. In addition, Return on Assets (ROA) also shows the number of periods before the year. The Price Ratio (PER) also shows the amount in the period of one year before the merger.

Putri dan Atik concluded there is no significant defference between *Current Ratio*, *Quick Ratio*, *Inventory Turnove*r, *Total Asset Turnover*, *Debt Ratio*, *Debt to Equity Ratio*, *Return on Equity*, *Net Profit Margin*, and *Operating Profit Margin* in the period 1 year before and 4 years in a row after mergers and develops [9]. While in the period 1 year before and 4 years after mergers and acquisitions only return on Asset was changed significantly. Although there is 1 ratio that changes significantly but it does not provide enough evidence that mergers and acquisitions affect the financial performance of the company. This study concludes that the synergy motive that can result in the improvement of the company's economy after mergers and acquisitions is not the main factor of the company in conducting mergers and acquisitions. There are other considerations such as corporate rescue from bankruptcy, personal motives or other reasons that cannot be seen directly impact on the company's financial performance.

Rao et al. from Department of Studies in Business Administration University of Mysore, Mysore, India concluded there is no significant difference between Return on Equity, Net Profit Margin, Interest Coverage, Earning per Share and Dividend Per Share between before and after mergers and acquisitions [7].

Jallow et al. concluded that Current Ratio, Cash Ratio, Debt to Equity Ratio, Debt to Equity Ratio, Return on Equity and Return on Investment variables did not show significant differences in the company's financial performance merged [10].

Rani et al. concluded there is significant difference between Net Profit Margin, Cash Ratio dan Debt to Asset Ratio [11]. While Return On Assets, Return On Equity, Current Ratio, *Total Asset Turnover*, *Receivable Turnover*, dan *Debt To Equity Ratio* are not significant difference before and after merger. This indicates that there is a decline in financial performance indicating that the main motive of a merged company is not an economic motive, but a non-economic motive such as the desire to become a large group, market share expansion, and the addition of product lines.

Research on financial performance as measured from the financial side has been examined but it’s still a bit to measure the significant difference between financial performance before and after merger. Therefore researchers motived return to conduct research of its kind. Based on the background, the research question is that, the researcher is there a significant difference between the company's financial performance before and after the merger?.

The purpose of this research is to know the company performance before and after merger of public company for year 2013-2016.

II. METHOD

This research is a comparative research type of quantitative approach, measured using SPSS version 20. The populations in this study are all public companies listed on the Indonesia Stock Exchange which effectively merge in 2014.The sample is determined by purposive sampling method, with sample of 4 companies. The data used in this research is secondary data through Indonesia Stock Exchange official website: www.idx.co.id. Hypothesis testing used is Paired Sample T-test and Wilcoxon Match Pairs Test.

III. RESULTS AND DISCUSSION

The first step in this research is to analyze the data that has been collected by doing descriptive analysis of each variable. Descriptive statistics are used to describe data viewed from mean, median, standard deviation, minimum value, and maximum value [12]. If the standard deviation is greater than the mean value means the existing data has large variations and vice versa if the standard deviation is less than the average value then the existing data has low variation.

Based on descriptive statistical analysis, it is known that if the variable of Current Ratio (CR) is higher then show that the company is getting more liquid. This means that the company has more ability to pay off its debt. CR is used by asset ratio, calculating the minimum value is 0.44 and the maximum value is 4.54. This means that most of the company's ability to eliminate its obligations is 44% while most of the company's ability to repay its obligations is 454%. Average value (average) CR is 1.7202 which means that the average ability of the company to pay its obligation is 172.02% one quarterly report period. The standard deviation CR shows the number of 1.28788 in terms of the ability of the company in paying off its obligations.

Debt Equity Ratio variable measured by using ratio between total liabilities with total equity obtained minimum value of 0.22 and maximum value that is 3.82. This means that for equity ownership the company has at least 22% debt repayment capability, while most companies have the ability to repay 382% of the debt. The greater the value of DER, the greater the company's ability to repay the debt on its equity ownership. The average Debt to Equity Ratio of 1.1029 means that the average Debt Equity Ratio of the company in the quarterly report is 110.29%. Standard deviation Debt Equity Ratio companies show the number of 0.91631 which shows variations in the Debt Equity Ratio of the company.

The Debt Ratio variable is measured by the ratio of total liabilities and total assets, obtaining a minimum value of 0.17 and a maximum value of 0.80. This means that most companies have 17% more than others by 80%. The average value (mean) Debt Ratio of 0.4658 which can mean that the average ability of the company to cash recorded is 46.58%. The deviation standard deviation ratio shows the figure of 0.16699 shown in the Company Debt Ratio.

Total Asset Turn Over is measured by the ratio of net income to fixed assets, obtained a minimum value of. This means that at least the company has a level of effectiveness of the company's assets capable of generating operating income of 9% and at most by 95%. The greater the ratio of Total Assets Turn Over then the greater the level of effectiveness of the company's assets can generate operating income. The average value of Total Turn over Assets is 0.4229, which means that the average level of effectiveness of a company's assets capable of generating operating profit is 42.29%. Standard deviation that shows the number 0.23517 which shows the variation of the effectiveness of the company's assets is able to generate operating income.

Return On Investment is measured by the ratio of net sales to total assets, obtaining a minimum value of -0.03 and a maximum value of 0.12. The greater the ratio of Return on Investment will be the level of effectiveness of the company's assets are able to generate profits. The average value (mean) Return On Investment of 0.0306 which means that the average level of the effectiveness of the company's assets is able to generate profit is 0.0306. Standard deviation that shows the number of 0.04184 which shows variations in the effectiveness of the company's assets can generate profits.

Return on Equity as measured by net income ratio with total equity, obtained minimum value of -0.07 and maximum of 0.20. This means that at least the company has a net profit rate available to shareholders of - 0.07 and a maximum of 0.20. The greater the ratio of Return on Equity, the greater the level of net profit available to shareholders. The mean value of Return on Equity is 0.0454, which means that the average net profit available to shareholders is 4.54%. Standard deviation which shows a number of 0.06611 indicating variations in the level of net profit available to shareholders.

Net Profit Margin as measured by the ratio of net income to total sales, obtained the minimum value of -0.16 for and maximum of. This means that at least the company has a net profit rate available to shareholders of 0.07 and a maximum of 0.20. The greater the Net Profit Margin ratio then the more net income after taxes and interest that can be generated from sales or income. Net profit margin mean value of 0.0527 which means that the average net profit after tax and interest that can be generated from the sale or income is 0.0527. Standard deviation which shows a number of 0.08579 showing the variation in net income after tax and interest that can be generated from sales or income.

The next step is to test the data normality by using *Kolmogorov-Smirnov*. The result is value of significance of Current Ratio equal to 0,033, Debt Equity Ratio equal to 0,036, Debt Ratio 0,452, Total Asset Turn Over equal to 0,713, Return Of Investment equal to 0,426, Return On Equity equal 0,967, Net Profit Margin 0,971. Based on the results of statistical tests show that the variable Current Ratio and Debt Equity Ratio distributed data is not normal because it has a significance level of less than 0.05, while the variable Debt Ratio, Total Assets Turn Over, Return On Investment, Return On Equity and Net Profit Margin has a level of significance exceeding 0.05 so it can be concluded that the data is normally distributed.

Hypothesis test for Debt Ratio, Total Assets Turn Over, Return on Investment, Return on Equity and Net Profit Margin is done by using Paired Sample T-test as normal distributed data. While testing the hypothesis from Current Ratio and Debt Equity Ratio using the Wilcoxon Match Pair Test test because the data is not normally distributed.

The result of Paired Sample T-test between before and after year 1 merger shows the value of t-count on DR equal to -10.628 with a significance value of 0.000. This value is less than the critical limit of the research of 0.05 so that the hypothesis decision is to accept Ha and reject Ho which means there is a significant difference between the Debt Ratio (DR) of the company before and after the 1st year of merger.

Result of testing of Total Asset Turn over (TATO) data obtained t-count equal to 5,158 with significance value equal to 0.000. The value is less than the critical limit of the research of 0.05 so that the hypothesis decision is to accept Ha and reject Ho which means there is a significant difference between the total asset turnover (TATO) of the company before and after the 1st year of the merger.

The results of the test data Return on Investment (ROI) obtained t-count of 1.272 with a significance value of 0.223. The value exceeds the critical limit of the research of 0.05 so that the hypothesis decision is to accept Ho and reject Ha which means there is no significant difference between Return on Investment (ROI) of the company before and after the 1st year merger.

The results of data testing Return on Equity (ROE) obtained t-count of 1.241 with a significance value of 0.234. This value exceeds the critical limit of the research of 0.05 so that the hypothesis decision is to accept Ho and reject Ha which means there is no significant difference between Return on Equity (ROE) of the company before and after the 1st year of merger.

The results of data testing Net Profit Margin (NPM) obtained t-count of 1.490 with a significance value of 0.157. This value exceeds the critical limit of the research of 0.05 so that the decision of the hypothesis is to accept Ho and reject Ha which means there is no significant difference between the Net Profit Margin (NPM) of the company before and after the 1st year of merger.

The result of Paired Sample T-test between before and after year 2 merger shows t-count value at DR equal to -5,866 with significance value equal to 0.000. The value is less than the critical limit of the research of 0.05 so that the hypothesis decision is to accept Ha and reject Ho which means there is a significant difference between the company Debt Ratio (DR) before and after the 2nd year of merger.

The results of testing Total Asset Turn Over (TATO) data obtained t-count equal to 4,408 with significance value equal to 0,001. This value is less than the critical limit of the research of 0.05 so that the hypothesis decision is to accept Ha and reject Ho which means there is a significant difference between the total asset turnover (TATO) of the company before and after the 2nd year of merger.

The results of data testing Return on Investment (ROI) obtained t-count of 4.223 with a significance value of 001. The value is less than the critical limit of the research of 0.05 so that the hypothesis decision is to accept Ha and reject Ho which means there is a significant difference between the Return on Investment (ROI) of the company before and after the 2nd year of merger.

The results of data testing Return on Equity (ROE) obtained t-count of 3.641 with a significance value of 0.002. The value is less than the critical limit of the research of 0.05 so that the hypothesis decision is to accept Ha and reject Ho which means there is a significant difference between the Return on Equity (ROE) of the company before and after the 2nd year of merger.

The results of data testing Net Profit Margin (NPM) obtained t-count of 4.378 with a significance value of 0.001. This value is less than the critical limit of the research of 0.05 so that the hypothesis decision is to accept Ha and reject Ho which means there is a significant difference between the Net Profit Margin (NPM) of the company before and after the 2nd year of merger.

The result of wilcoxon Match Pairs Test between before and after the 1st year of merger shows that the value of Z obtained from the Current Ratio data is -2.120 with p value (Asymp Sig. 2-tailed) of 0.034 where the value is less than the critical limit of the study is 0.05 so that the hypothesis decision is to accept Ha and reject H0 which means that there is a significant difference between the Current Ratio (CR) before and after the 1st year of the merger.

In the test results Debt Equity Ratio data shows that Z amounted to -3.519 with a significant level of 0,000 where the value is less than the critical limit of the study 0.05 so that the hypothesis decision is to accept Ha and reject H0 which means that there is a significant difference between Debt Equity Ratio (DER) before and after the merger of the 1st year of merger.

The results of the Wilcoxon Match Pairs Test between before and after the 2nd year of merger shows that the value of Z obtained from the Current Ratio (CR) data is -2.556 with p value (Asymp Sig. 2-tailed) of 0.011 where the value is less than the critical limit of the research 0.05 so that the hypothesis decision is to accept Ha and reject H0 which means there is a significant difference between the current ratio (CR) of the whole company before and after the 2nd year of the merger.

In the test results of Debt Equity Ratio (DER) data shows that Z is - 3,285 with a significant level of 0.001 where the value is less than the critical limit of the research 0.05 so that the hypothesis decision is to accept Ha and reject H0 which means there is a significant difference between Debit Equity Ratio (DER) throughout the company before and after the 2nd year of merger.

IV. Conclusion

Based on the results of data analysis and hypothesis testing, it can be taken some conclusions as follows:

- Current Ratio shows a significant difference between the level of Current Ratio before and after the merger. The company's efficiency in using its current assets to manage current liabilities increases after the merger.
- Debt to Equity Ratio indicates a significant difference between the Debt to Equity Ratio level before and after the merger. The company can be said to be able to pay the debt and has no difficulty to maximize its own capital.
- Debt Ratio shows a significant difference between Debt Ratio level before and after merger. The company can be said to be able to pay the entire debt secured by the company's assets.
- Total Assets Turnover shows a significant difference between the level of total asset turnover before and after the merger. The company shows an increase in the company's effectiveness in using all assets to create operating income.
- Return on Investment showed no significant difference between Return on Equity level before and after 1 year of merger but after 2 years merger showed that there is a significant difference between Return on Investment level before and after merger. The higher Return on Investment value means that investment is profitable compared to investment cost.
- Return on Equity showed no significant difference between Return on Equity level before and after 1 year of merger but after 2 years merger show that there is a significant difference between Return on Equity level before and after merger. This indicates an increase in the company's performance for the welfare of shareholders.
- Net Profit Margin showed no significant difference between Net Profit Margin before and after 1 year of merger but after 2 years merger show that there is a significant difference between Net Profit Margin before and after merger. The higher Net Profit Margin value means that company operation is better.

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