THE EFFECT OF MERGERS AND ACQUISITIONS ON FINANCIAL PERFORMANCE OF COMPANIES LISTED IN INDONESIA STOCK EXCHANGE

PENGARUH MERGER DAN AKUISISI TERHADAP PERFORMA KEUANGAN PADA PERUSAHAAN-PERUSAHAAN YANG TERDAFTAR DI BURSA EFEK INDONESIA

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Abstract: General elections and government policies are affecting the company that conducted M&A in Indonesia. Furthermore, financial performance is observed to analyze the impact on M&A companies. The ratio that used in this research is a liquidity ratio that is Current Ratio as the dependent variable and profitability ratio that is Return on Equity, Return on Assets, Operating Profit Margin, Gross Profit Margin, and Net Profit Margin as the independent variable. The data is taken from the company's annual report and the statistical analysis tools used in this research are Stata. To observe the changes in financial performance value the Panel Data Regression is used in this research, for before and after M&A the Wilcoxon Signed Rank Test has been conducted in this research. As a result of the statistical analysis this research has determined the company's financial performance through years and within the period from before and after the company conducted M&A. The result of this research indicates that the average value of the profitability ratios on the company performance before M&A is greater than the period after M&A. Based on the Wilcoxon signed-rank test it is only GPM and CR that have no significant influence on the before and after the company conducted M&A

Keywords: *financial performance, mergers and acquisitions, companies, profitability ratio, liquidity ratio.*

Abstrak: *Pemilihan umum dan kebijakan pemerintah dapat mempengaruhi perusahaan yang melakukan M&A di Indonesia. Selanjutnya, kinerja keuangan akan diamati untuk menganalisis dampaknya terhadap perusahaan M&A. Rasio yang digunakan dalam penelitian ini adalah rasio likuiditas yaitu Current Ratio sebagai variabel dependen dan rasio profitabilitas yaitu ROE, ROA, OPM, GPM, dan NPM sebagai variabel independen. Data diambil dari laporan tahunan perusahaan dan alat analisis statistik yang digunakan dalam penelitian ini adalah Stata. Untuk mengamati perubahan nilai kinerja keuangan, Regresi Data Panel digunakan dalam penelitian ini, untuk analisa sebelum dan sesudah M&A, uji Wilcoxon digunakan dalam penelitian ini. Sebagai hasil dari analisis statistik, penelitian ini dapat menentukan kinerja keuangan perusahaan selama bertahun-tahun dan dalam periode dari sebelum dan sesudah perusahaan melakukan M&A. Hasil dari penelitian ini menunjukkan bahwa nilai rata-rata rasio profitabilitas terhadap kinerja perusahaan sebelum M&A lebih besar daripada periode sesudah M&A. Berdasarkan uji Wilcoxon, hanya GPM dan CR yang tidak memiliki pengaruh signifikan terhadap performa keuangan sebelum dan sesudah perusahaan melakukan M&A.*

Kata Kunci: *performa keuangan, merger dan akuisisi, perusahaan, rasio profitabilitas, rasio likuiditas.*

INTRODUCTION

Research Background

In the beginning, when the company was found there is a lot of problems has been facing before the company became profitable and valuable. When the company struggles with future planning that needs action to survive against the problem, there is a financial performance analysis that needs to determine how valuable the company to conduct M&A.

In term to reach a successful merger and acquisitions Marks (1997), stated that there is no formula for combination success – each case presents its own set of personalities, products, and procedures. Thus, consultations to facilitate mergers and acquisitions must be based on the specific dynamics of the combination at hand. Indonesia company tend to conduct M&A with an overseas company that more valuable and had a big beneficial as accordance in the study by Aik, Hassan, Hassan and Mohamed (2015), the concentration of the corresponding industry tends to rise if the M&A involves the larger firms in the industry. It is a complexation for a large company to maintain their sustainability in achieving some goals especially Indonesia companies that facing economic challenge and threat from external (e.g. government policy, economic crisis, political issue) and internal (e.g. unnecessary expenditure, poor accounting practices, lack of cash flow) factors, M&A are needed for the company to surviving any problem at the hard time.

There are various reasons behind the participation of company in mergers and acquisitions. A requirement for specialist skills and resources company sometimes seeks to merge with or acquire another company because the company is keen to acquire a specific skill or resource owned by the other company. Globalization drivers, increasing globalization facilitated to a considerable extent by the growth and development of information and technology, tends to encourage mergers as the geographical separation between individual companies becomes less of an obstacle to organizations working together as single entities, both within the same countries and across international boundaries. A drive to buy into a growth sector or market. Companies sometimes use mergers and acquisitions as a way to enter a desirable new market or sector, particularly if they expect that market or sector to expand in the future.

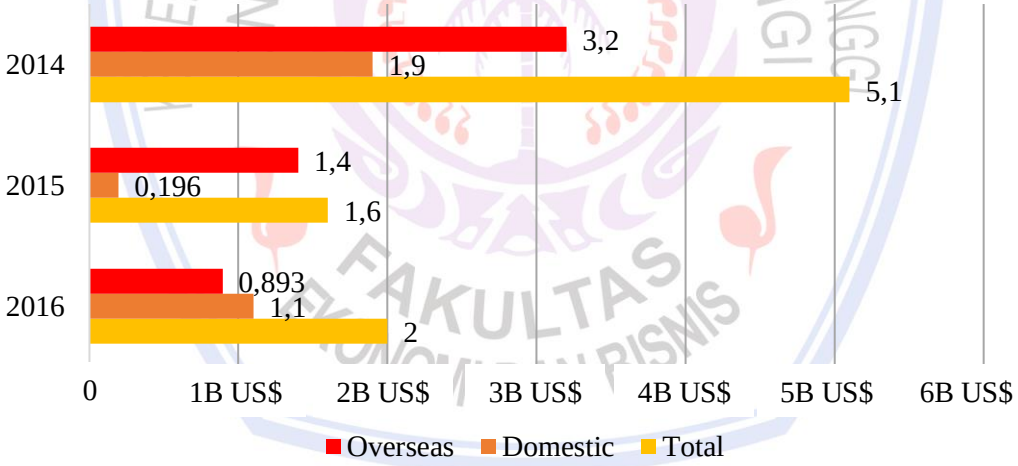

Figure 1. Indonesia Merger and Acquisitions 2014-2016
Source: Katadata, 2017

Valuation of M&A activity in 2016 grew 25.78 percent to 1.98 billion dollars or equivalent to 26.28 trillion rupiah at an exchange rate of 13,300 rupiah per US dollar. The value of M&A that derived from domestic investment worth 1.1 billion dollars and from abroad about 893 million dollars. Total M&A companies in 2015 are the lowest compared with 2014 and 2016 that can indicate if the problem at that year are significantly influenced the trend of M&A in Indonesia.

In 2014 Indonesia is having a general election that triggers some investors to wait and see for the further impact. As statistically, this action can decrease infestation interest of investors. for other factors, Indonesia government is releasing a new policy that only allowed 40% foreign stock at the banking sector's infestation.

Each company that conducted M&A has a different valuation of financial performance, that has a diversity occasion through years. The government policy and company problems that come from the internal and external factors could affect the financial performance of the M&A company.

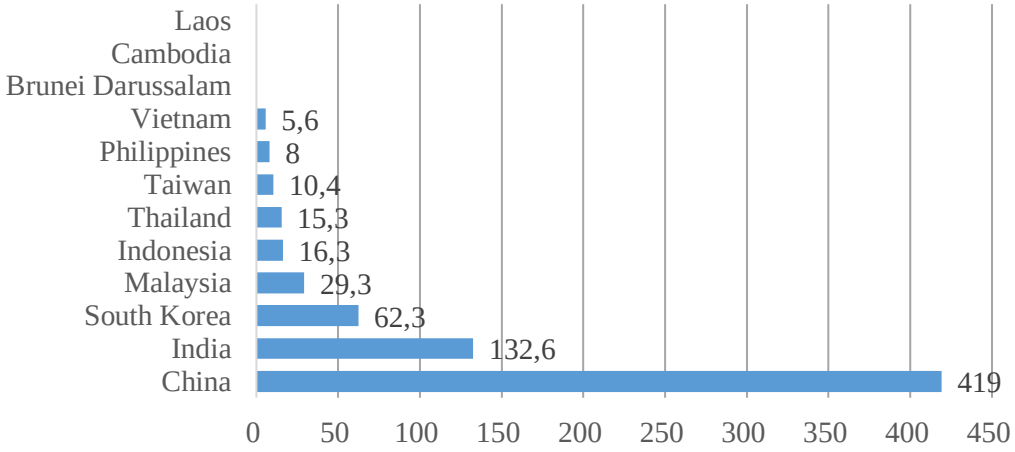

Figure 2. Merger and Acquisition Plans in Developing Market

Source: Katadata, 2016

The strategic plan for mergers and acquisitions in Asia's emerging markets from January to November 2016 reached 712.2 billion dollars equivalent to. 9,472 trillion rupiah at an exchange rate of. 13,300 rupiah per US dollar. This amount decreased 0.8 percent over the same period for the previous year. Indonesia M&A is about 16,3 billion dollars secondly after Malaysia that valuated at 29,3 billion dollars which is Indonesia are standing ate the second larger in Southeast Asia. Each company that conducted M&A has a different valuation of financial performance, which has a diversity occasion through years. For the government policy and company problems that comes from the internal and external factors could affect the financial performance of the M&A company.

Research Objective

To analyze the effectiveness of financial performance analysis for companies to conduct merger and acquisitions.

THEORETICAL FRAMEWORK

Financial Ratio

Financial ratio is a calculation that using financial statement to serve measurement tools in accessing the performance of the company. Financial ratio can be used to analyze trends and to compare the firm's financials to other firms. In some cases, ratio analysis could predict the future of bankruptcy. According to Wild, Subramanyam, and Halsey (2007), the ratio is a tool to provide a view of underlying condition. The ratio is one of the starting points, not the end point. The ratio is interpreted to indicate the exact area that requires further investigation.

Profitability Ratio

Profitability ratios are a class of financial metrics that are used to assess a business's ability to generate earnings relative to its revenue, operating costs, balance sheet assets, and shareholders' equity over time. Sabrin, Sarita, Takdir, and Sujono (2016), defines profitability ratio is to measure the ability of the company makes a profit in relation to sales, total assets, and own capital. This ratio is considered by prospective investors and shareholders as it relates to the share price and dividends to be received.

Liquidity Ratio

Liquidity refers to the speed in the transfer of assets into cash, liquidity ratios primarily focus on the cash flows, it is an indicator to measure a company's ability to meet its short-term liabilities. Liquidity management is achieved through the effective use of assets (Robinson, Henrie, Pirie and Broihahn, 2015).

Mergers and Acquisitions

According to Roberts, Wallace, and Moles (2003), a merger or an acquisition in a company sense can be defined as the combination of two or more companies into one new company or corporation. The study concluded

the point that the expansion of the business activities carried out by combining a company with one or several companies into a single economic entity as an effort to expand the businesses. Acquisitions is the generic term to describe a transfer of ownership while merger is a narrow, technical term for a particular legal procedure that may or may not follow acquisitions. M&A actions are taken for several reasons, growth and diversification of good size, market share, and the financial statement.

Research Hypothesis

The hypothesis that will be tested in this research are:

H_0: There is no significant difference between financial performance of before and after M&A

H_1: There is a significant difference between financial performance of before and after M&A

Conceptual Framework

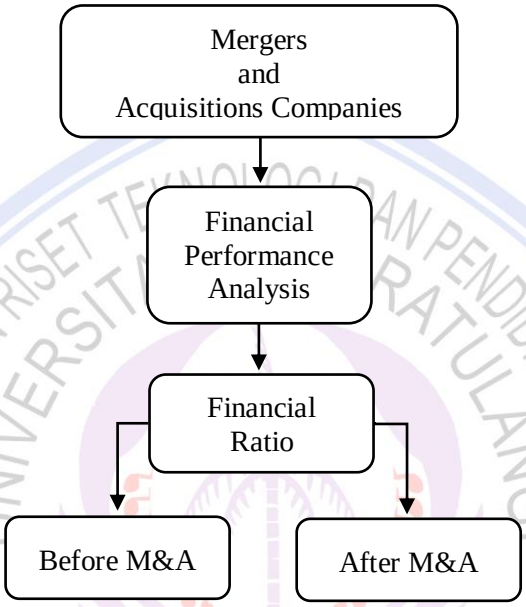

Figure 3. Conceptual Framework
Source: Data Processed, 2019

Financial performance process is determined the company value through the valuation system that represent the effectiveness of financial ratio in some series of years within an analysis before and after company conducted M&A.

RESEARCH METHOD

Research approach

This is a quantitative research as explains quantitative data is required in this research which is a research method based on the paradigm that used to investigate specific population or samples (Sugiyono, 2013). This research data is analyzed by descriptive analysis.

Population, Sample Size, and Sampling Technique

The population of this research is merger and acquisitions companies listed in Indonesia Stock Exchange. The sample is part of the number and characteristics possessed by the population that uses purposive sampling technique. Purposive sampling is a sample determination technique with certain considerations. Which is determining the sample based on the criteria. The criteria are:

1. M&A Company listed in Indonesia Stock Exchange from 2011-2014.
2. Company listed in Indonesia Stock Exchange.
3. M&A Company Monitored by KPPU (*Komisi Pengawas Persaingan Usaha).*
4. Company is Indonesia Domiciled.
5. Have a complete annual report.

Operational Definition and Measurement of Research Variables

An operational definition is a construct in measurable terms by reducing it from its level of abstraction through the delineation of its dimension and elements (Sekaran and Bougie, 2010), it explains about the process of the conceptual variable that measures with data in each variable.

Table 1. Operational and Definition of Dependent Variable

No	Dependent Variable	Measurement	Source
		Liquidity Ratio	
1.	Current Ratio	$\frac{Current\ Assets}{Current\ Liabilities}$	Company Annual Report

Source: Robinson, Greuning, Henry, and Broihahn, 2009

Table 2. Operational and Definition of Independent Variable

No	Independent Variable	Measurement	Source
		Profitability Ratio	
1.	Return on Equity	$\frac{Net\ Income}{Common\ Sharejoder's\ Equity} \times 100\%$	Company Annual Report
2.	Return on Assets	$\frac{Net\ Income}{Total\ Assets} \times 100\%$	Company Annual Report
3.	Gross Profit Margin	$\frac{Gross\ Profit}{Sales} \times 100\%$	Company Annual Report
4.	Operating Profit Margin	$\frac{Operating\ Profit}{Sales} \times 100\%$	Company Annual Report
5.	Net Profit Margin	$\frac{Net\ Income}{Sales} \times 100\%$	Company Annual Report

Source: Journal Review, 2019

Data Analysis Method

Panel Data Regression

This research was conducted panel data to analyze financial performance of M&A companies within multiple sites, periodically observed over a defined time frame. Panel data allow to observe the differences between individual companies and the effect of changes of explanatory variables in time. The equation of panel data for M&A companies are determined using the following formula:

$$\text{Yit} = \alpha + \beta 1\text{X1} + \beta 2\text{X2} + \cdots + \beta \text{mXm}it + \mu i + \varepsilon it$$

Panel data regression model for this research:

$$\text{CR}it = \alpha + \beta 1\text{ROE}it + \beta 2\text{ROA}it + \beta 3\text{GPM}it + \beta 4\text{OPM}it + \beta 5\text{NPM}it + \mu i + \varepsilon it$$

Wilcoxon

Wilcoxon signed-rank test is a rank-based alternative to the parametric *t*-test that assumes only that the distribution of differences within pairs is symmetric without requiring normality (Oyeka and Ebuh, 2012). Wilcoxon signed-rank test is used to test the null hypothesis that the median of a distribution is equal to some value and can be used in place of a one-sample *t*-test, a paired *t*-test or for ordered categorical data where a numerical scale is inappropriate but where it is possible to rank the observations.

RESULT AND DISCUSSION

Descriptive Statistic and Classical Assumption Test

A descriptive statistic is a summary statistic that quantitatively describes or summarizes features of a collection of information. Descriptive statistic can be used in order to see the characteristic of the data distribution.

Table 3. Descriptive Statistic

Variable	Obs.	Mean	Std. Dev.	Min	Max
ROE	91	20.69989	30.0498	-63.9	133.2
ROA	91	9.988462	11.35144	-10.1	43.54
GPM	91	34.24297	14.38902	8.24	65.45
OPM	91	21.06736	16.23869	0.3	83.18
NPM	91	13.96802	12.31286	-29	52.21
CR	91	3.321429	2.039739	0.44	10.91

Source: Data Processed, 2019

Descriptive statistics are produced by using Stata. The result of analysis can be interpreted as the character of the data distribution. ROE standard deviation is 30.049 and the mean is 20.699 the value of mean is above 1% standard it means the ROE indicates that the ROE value is overvalued, it can be concluded that all of the company in this research are overvalued. As it is follows by the other variables with the value of mean is above 1% (ROA = 9.988; GPM = 34.242; OPM = 21.067; NPM = 13.968).

Classical Assumption Test

Normality Test

A normality test is a statistical process used to determine if a sample or any group of data fits a standard normal distribution. Skewness-Kurtosis test can be used in order to determine the normality of the data. But since the data used in this research is non-probability sampling panel data, normality will not likely exist.

Table 4. Skewness/Kurtosis Test

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Variable	Obs	Pr(Skewness	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
myResiduals	91	0.0001	0.0000	52.67	0.0000

Source: Data Processed, 2019

Based from the Skewness-Kurtosis test above, could be interpreted that the data distribution is not normal because the significance level is below 0.05%. Nevertheless, this type of data can still be analyzed by using panel data regression.

Multicollinearity Test

This multicollinearity test aims to test if in the regression model found the correlation between independent variables. Multicollinearity can be seen from the calculation of Varian Inflation Factor (VIF). A regression model is said to have no tendency to have multicollinearity symptoms if it has a VIF value less than 10 (Sekaran and Bougie, 2010).

Table 5. Multicollinearity Test

Variable	VIF	1/VIF
ROE	5.90	0.169348
ROA	5.60	0.178480
OPM	3.12	0.320674
NPM	2.55	0.391889
GPM	1.42	0.702365
Mean VIF	3.72	

Source: Data Processed, 2019

The results of the data can be concluded that the VIF value of the 5 independent variables in this research are > 0.10 and < 10.00 which is ROE = 5.90, ROA = 5.60, OPM = 3.12, NPM = 2.55, GPM = 1.42. This proves that the regression model used in this research does not have multicollinearity symptoms.

Heteroscedasticity Test

The heteroscedasticity test aims to test if from the regression model there is an inequality of variance from residual one observation of another. Breusch-Pagan test is used in order to determine whether our model is heteroscedasticity or homoscedastic.

Table 6. Breusch-Pagan/Cook-Weisberg Test

Ho: Constant variance		
Variables: ROE ROA GPM OPM NPM		
	chi2(5) =	16.82
	Prob > chi2 =	0.0049

Source: Data Processed, 2019

In this data output shows that P- chi is 0.00 (below than α = 0.05), then the null hypothesis is accepted and the data does not contain heteroscedasticity.

Autocorrelation Test

The autocorrelation test aims to test if in the linear regression model there is a correlation between the confounding errors in period t with the intruder error in period T-1.

Table 7. Durbin Watson Test

Durbin-Watson d-statistic (6,91) = 1.491597

Source: Data Processed, 2019

This data output shows that the D-W value is 1.491 by considering the number of explanatory variables and number of observations, the dL value is 1.491 and dU 1.864. DW value is 1.491 < DU 1.66559 and less than (4-dU) 4-1.864 = 2.136. then it can be interpreted that there is positive autocorrelation in the model because the value of dW is below the value of dL (1.491 < 1.66559).

Fixed Effect Model

Table 8. Estimation of Fixed Effects

CR	Coef.	Std. Err.	t	P>z	[95% Conf.	Interval]
ROE	.0007821	.0142955	0.05	0.957	-.0277089	.029273
ROA	-.0736944	.0428853	-1.72	0.090	-.1591646	.0117759
GPM	.0907565	.0326114	2.78	0.007	.025762	.1557509
OPM	-.0374625	.0239426	-1.56	0.122	-.08518	.0102551
NPM	.0273598	.0219795	1.24	0.217	-.0164453	.071165
_cons	-.2260694	.9111489	-0.25	0.805	-2.041986	1.589848
F test that all u_i=0: F (12, 73) = 6.91					Prob > F = 0.0000	

Source: Data Processed, 2019

The fixed effect result is shown the correlation of each variable and as a significant value at < 0.05 that can be concluded only GPM that has significant effect on CR. For the Chow test it can be concluded that the Prob > F = 0.0000 means the fixed effect is an appropriate model to use. Based on the result the equation of CR is:

$$CRit = -0.22606 + 0.00078ROE - 0.09075ROA + 0.09075GPM - 0.03746OPM + 0.02735NPM + \mu i$$

μi = fixed effect is the coefficient

Random Effect Model

After it is known that the model used is fixed effect model, panel data model still has to be compared again between fixed effect models with random effect model. The random effect test is performed to see which is more appropriate in the use of panel data regression technique. In this research Hausman test is uses to know which panel data regression technique is more appropriate, fixed effect model or random effect model.

Table 9. Hausman Test

Chi2 =	(b-B)'[(V_b-V_b)^(-1)](b-B)
=	10.85
Prob>chi2=	0.0544

Source: Data Processed, 2019

The Hausman test result has a Prob>chi2 = 0.0544 greater than the 0.05 significance level 0.9952 > 0.05 then the random effect model is an appropriate model to use.

Table 10. Estimation of Random Effects

CR	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	
ROE	-.0054258	.0138064	-0.39	0.694	-.0324859	.0216342
ROA	.1571191	.0380968	-0.57	0.567	-.0964522	.0528846
GPM	.0358397	.0236186	1.52	0.129	-.0104519	.0821313
OPM	-.0218048	.0208469	-1.05	0.296	-.0626639	.0190544
NPM	.0097612	0209387	0.47	0.641	-.0312779	.0508002
_cons	1.180394	.7741502	1.52	0.127	-.3369128	2.6977

Source: Data Processed, 2019

Based on the result there is no significant effect of profitability ratio on liquidity ratio because the significance value is > 0.05 and as the result of formula inserted, it is obtained the equation as follows:

$$CRit = 1.18039 - 0.00542ROE + 0.15711ROA + 0.03583GPM - 0.02180OPM + 0.00976NPM + \mu i$$

$\mu i =$ random effect is the coefficient

Wilcoxon

To analyze the impact of financial ratio before M&A to financial ratio after M&A the Shapiro Wilk test are needed to find out if the data is normally distributed or not.

Table 11. Shapiro Wilk Test of Financial Ratio

Variable	Obs.	W	V	z	Prob > z
Diff. ROE	39	0.87390	4.888	3.334	0.00043
Diff. ROA	39	0.89267	4.161	2.996	0.00137
Diff. GPM	39	0.98299	0.660	-0.874	0.80905
Diff. OPM	39	0.89425	4.100	2.965	0.00152
Diff. NPM	39	0.92743	2.813	2.173	0.01487
Diff. CR	39	0.97633	0.577	-.765	0.70846

Source: Data Processed, 2019

Based on the Shapiro Wilk test the result of Prob > z is below 0.05 and there is one variable that has normally distributed. However, this data can be uses for Wilcoxon signed rank test because the rest of the variables are not normally distributed.

Table 12. Wilcoxon Test of Financial Ratio

Ho	z	Prob > |z|
Pre_ROE = Post_ROE	2.875	0.0040
Pre_ROA = Post_ROA	3.670	0.0002
Pre_GPM = Post_GPM	1.082	0.2795
Pre_OPM = Post_OPM	2.756	0.0058
Pre_NPM = Post_NPM	2.693	0.0071
Pre_CR = Post_CR	1.305	0.1919

Source: Data Processed, 2019

The result shown that 4 variables have the Prob > z is below 0.05 and one variable is greater than 0.05 because it is found at Shapiro Wilk test the data are normally distributed. It means there is a significant correlation between ROE, ROA, OPM, and NPM before M&A on ROE, ROA, OPM, and NPM after M&A.

Discussion

Understanding financial performance can be defined as a crucial part of company analysis where the money flows at some point of significance level whether it will bring a positive or negative impact on the company. As a result of the statistical analysis this research has determined the company's financial performance through years and within the period from before and after the company conducted M&A.

Based on the Wilcoxon signed-rank test GPM and CR have no significant influence before and after the company conducted M&A as found in study by Rehan, Khan, and Khan (2018), GPM before M&A has no significant effects on GPM after M&A. According to Cahyarani and Pustikaningsih (2017), ROE, ROA, and OPM before M&A have significant effects on ROA, ROE, and OPM after M&A.

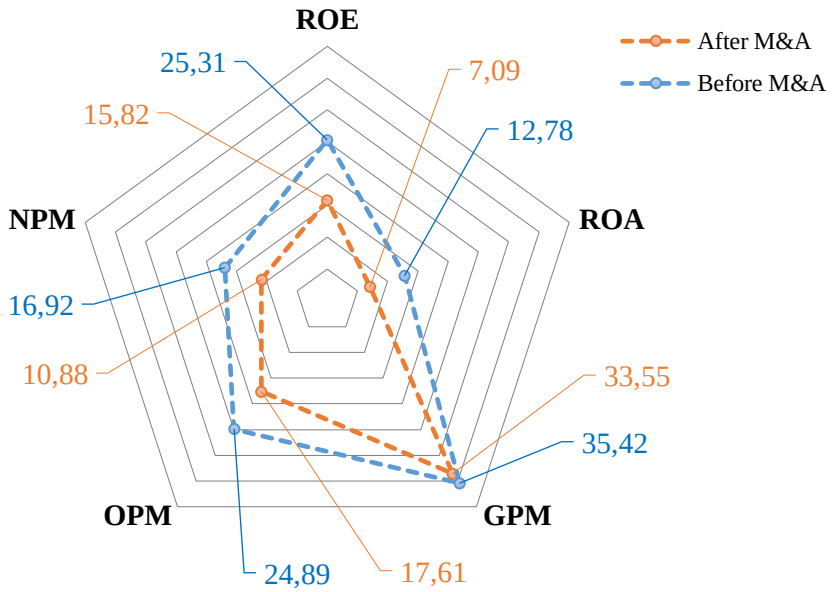

Figure 4. Average of Profitability Ratio Before M&A and After M&A

The financial ratio for M&A has been analyzed through profitability and liquidity and it is shown that the financial ratios before M&A are greater than financial ratios after M&A.

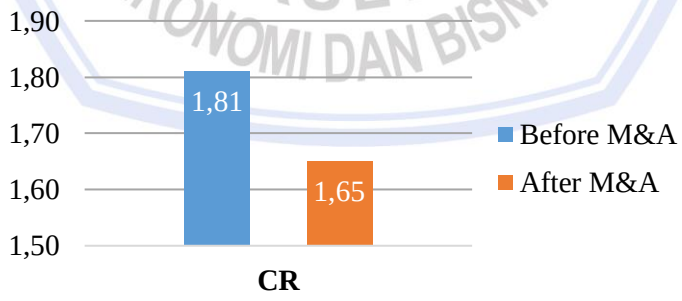

Figure 5. Average of Liquidity Ratio Before M&A and After M&A

The average value of the profitability ratios indicates that the company performance before M&A is greater than the period after M&A as Paymata and Setiawan (2004), explained that the M&A process required a relatively large amount of money and capital, so the company had not been able to optimally utilize its own capital to generate maximum profit. The liquidity ratios result indicates that the average value the company's performance after M&A was not necessarily greater than before M&A. There was no significant increase or decrease in the period before and after the acquisition. The acquisition should mean that the company's current assets were

combined so that the company's ability to fulfill its short-term obligations should be better (Beverly, Sutejo and Muhardi, 2019).

CONCLUSION AND RECOMMENDATION

Conclusion

The result of the panel data model shown that the profitability ratio has no significant effect on liquidity ratio even though the company are conducted M&A. As a comparative analysis Wilcoxon signed-rank test has shown the significant differences on the financial performance before M&A and after M&A. These variables have a significant influence before and after the company conducting M&A, the variable is Return on Equity, Return on Asset, Operating Profit Margin, and Net Profit Margin. There are two variables that has no significant influence before and after M&A which is Gross Profit Margin and Current Ratio.

Recommendation

There are several recommendations that can applied based on the result of this research. For companies, the external factors are crucial to be prevented which is could be happen anytime in unexpected time. It is expected that company can have a financial forecasting through time even though it is important for company to managing the internal risk which is can determine how big the impact of the external factors. For investors, there will be the time to seek the possibility chance to invest at M&A companies. The long-term profitability could have more advantages rather than the short time profit. Even though the projection is only based on the idea but it is way much better to understand the future risk and profit rather than playing at the safety point of investment. For researcher, M&A companies is a good object to be research it is could be much better to have more data about the company financial performance. This research only had 13 objects as the samples for the better result it is recommend to have more samples and better understanding of government policy that could have an influence on M&A companies.

REFERENCES

Aik, N. C., Hassan, M. K., Hassan, T., & Mohamed, S. 2015. Productivity and Spillover effect of merger and acquisitions in Malaysia. *Management Research Review.* Vol. 38 Iss 3, pp. 320 - 344. doi: http://dx.doi.org/10.1108/MRR-07-2013-0178 Accessed September 12nd 2018

Beverly, C., Sutejo, B. S., and Murhadi, W. R. 2019. Company performance before and after a merger. *Advances in Social Science, Education and Humanities Research.* Vol. 308. doi. 10.2991/insyma-19.2019.8. Accessed September 2nd 2019

Cahyarini, I., and Pustikaningsih, A. 2017. The difference analysis of financial performance before and after the acquisition (Studied on merger and acquire companies listed in Indonesia Stock Exchange). *Jurnal Profita.* Retrieved from http://journal.student.uny.ac.id/ojs/index.php/profita/article/download/9950/9551. Accessed October 28th 2019

Katadata. 2017. Retrieved from https://databoks.katadata.co.id/datapublish/2017/05/15/merger-dan-akuisisi-indonesia-2016-tumbuh-26 Accessed Augustus 3rd 2018

Katadata. 2016. Retrieved from https://databoks.katadata.co.id/datapublish/2016/11/25/indonesia-target-merger-dan-akuisisi-terbesar-ke-5. Accessed Augustus 3rd 2018

Marks, M. L. 1997. Consulting in mergers and acquisitions: Interventions spawned by trends. *Journal of Organizational Change Management.* MCB UP Ltd. Vol. 10 Iss 3 pp. 267 – 279. doi: http://dx.doi.org/10.1108/09534819710171112. Accessed Augustus 3rd 2018

Payamta., and Setiawan, D. 2004. Analisis pengaruh merger dan akuisisi terhadap kinerja perusahaan publik di indonesia. *Jurnal Riset Akuntansi Indonesia* Vol.7(3): 265-282. Retrieved from https://ijar-iaikapd.or.id/index.php/ijar/article/view/121. Accessed October 2nd 2019

Rehan, M., Khan, M. I., and Khan, M. K. 2018. Effects of merger and acquisition on the profitability of banks. *European Academic Research.* Vol. 6. Iss 8. 4029-4044. Retrieved from https://www.researchgate.net/publication/329584833_Effects_of_Merger_and_Acquisition_on_the_Profitability_of_Banks. Accessed October 28th 2019

Roberts, A., Wallace, W., and Moles, P. 2003. *Mergers and Acquisitions.* Edinburgh Business School. Heriot-Watt University. Edinburgh.

Robinson, T., Henry, E., Pirie, W., and Broihahn, M. 2015. International Financial Statement Analysis. 3rd Ed. John Wiley & Sons, Inc. New Jersey.

Sabrin., Sarita, B., Takdir, D., and Sujono. 2016. The Effect of Profitability on Firm Value in Manufacturing Company at Indonesia Stock Exchange. *The International Journal of Engineering and Science*. Vol. 5, Iss. 10. pp. 81-89. Retrieved from http://www.theijes.com/papers/v5-i10/K0501081089.pdf. Accessed March 28nd 2019

Sekaran, U., and Bougie, R. 2010. *Research Methods for Business: A Skill Building Approach*, 5th Ed. John Wiley & Sons, Inc. New Jersey.

Sugiyono. 2010. *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D.* Alfabeta. Bandung.

Wild, J. J., Surabramanyam, K, R., and Halsey, R. F. 2007. *Financial Statement Analysis.* 9th Edition. McGraw-Hill. Prentice Hall.