THE ANALYSIS OF ACQUIRER FIRMS' FINANCIAL PERFORMANCE BEFORE AND AFTER MERGER AND ACQUISITION (INDONESIA STOCK EXCHANGE 2003 – 2013)

Ryan Andika Azwat

Brady Rikumahu, SE., MBA

Management of International ICT Business, Faculty of Economics and Business, Telkom University <u>rvandika@students.telkomuniversity.ac.id</u>, <u>bradyrikumahu@telkomuniversity.ac.id</u>

Abstract

Conducting corporate merger and acquisition is faster and more favorable strategy in order to survive and grow. This research aims to examine the impact of merger and acquisition on financial performance of the firms measured by financial ratios, whether significant differences found before and after merger and acquisition. The sample of this research consists of 11 firms taken by purposive sampling method. The data of financial ratios are obtained from the Indonesian Capital Market Directory (ICMD) from year 2003 to 2013. The data analysis method used to answer the hypotheses is Paired T Test. The synergy is then measured by examining some pre- and post-merger and acquisition financial ratios (5 years before and 5 years after). The result shows that all financial ratios are not significatly different before and after merger and acquisition, meaning merger and acquisition have not yet brought significant impact on the financial performance of the firms.

Key words: Mergers and Acquisition, Financial Performance, Synergy

1. Introduction

Chandler (1980) in Reddy (2015) described that growth usually happens in two ways "either the enterprise itself built new offices, plants, and opened mines, all of which were normally paid for out of retained earnings, or it obtained them through the acquisistion of or merger with other enterprises". In line with Professor Chandler, according to Samaras (2007), a firm can grow in two ways, either by performing mergers and acquisitions (external growth), or by increasing its own assets or output through the reinvestment of its cash flows in existing businesses (internal or organic growth). Both types have advantages and drawbacks. Internal growth provides more corporate control, less risky and protects organizational culture, but is a planned and slower way to grow, on the contrary external growth provides faster growth, less competition and higher market power but managers from both sides may fail to agree on the best way to run the company (Samaras, 2007). Achieving high organic revenue growth is more of a challenge in mature product markets, and thus many organizations in these markets rely on international expansion (Lynch, 2006 in Kling, et al., 2009). Organic growth also requires more stages, such as market research, product design, experts recruitment, market testing and construction of production facilities. Thus, compared to organic growth, merger and acquisition strategy is a faster and more favorable strategy to grow.

Bain, a consultant company, encourages companies to perform merger and acquisition. Bain argued that most companies which generated sustained, profitable growth and created value for shareholders rely on a combination of organic growth and mergers and acquisitions. According to Bain, companies with no merger and acquisition activities got an average of 3.3% in annual total shareholder return, whereas companies that engage in merger and acquisition activities averaged 4.8%. Bain also stated that the most successful acquisitive growers often outperformed the most successful organic growers, which allowing them to gain market share faster than their counterparts. Merger and acquisition also have become major strategic tools for multinational's corporations' growth (Hitt, Harrison and Ireland, 2001 in Ferreira, et al., 2014) and many firms based in emerging market have not only been undertaking merger and acquisistion outside of their domestic markets (Mayer and Thaijongrak, 2013 in Lebedev, et al., 2014). Moreover, the majority of OFDI (outward foreign direct investment) from emerging markets is created through cross-border mergers and acquisitions (Deng and Yang,

2015). The main motives behind corporate mergers are synergy, tax considerations, purchase of assets below

replacement cost, diversification, manager's personal incentives and breakup value (Brigham and Daves, 2002:862-864), however synergy is the most dominant motive behind merger and acquisition as stated by Hamidah and Noviani (2013).

However, merger and acquisition still have several problems, according to Surjani (2003) in Gunawan and Sukartha (2013), the main problem is the difficulties in achieving an effective integration between acquired and acquirer firms. Suta (2000) in Gunawan and Sukartha (2013) stated that the high cost for merger and acquisition is also the problem caused by this strategy, as it involves many parties like brokers investment bankers, law firms and accounting firms, moreover if the payment of conducting merger and acquisition is utilizing loan (Wibowo, 2012). Merger and acquisition may also bring bad impact on current staff, as this strategy often accompanied by laying off many staff (Wibowo, 2012). The impact of merger and acquisition will affect the company's financial performance, which is measured by the financial ratios. Thus the changes occured after merger and acquisition can be seen from company's financial performance through the analysis of financial ratios. Financial ratios are used to analyze the company's ability to pay its long term and short term debt, the effectivity in using its assets, and its profitability after doing merger and acquisition. Gitman (2009:57) explains that financial ratios can be divided for convenience into five basic categories: liquidity, activity, debt, profitability and market ratios. According to a basic accounting theory, the increasing scale along with the synergy obtained after merger and acquisition should result in the increasing of revenues, meaning merger and acquisition should positively improve the financial performance of the companies (Payamta, 2004 in Auqie, 2013).

Many researches regarding merger and acquisition have been conducted, however the results are always different. For example based on the research conducted by Dasmanto (2012), which analyzes the companies listed in Indonesia stock exchange 2000 - 2007, merger and acquisition only give positive impact on total asset turnover (TATO), yet not in company's return on asset (ROA), return on equity (ROE), total debt to total assets ratio (DAR), total debt to total equity ratio (DER) and pretax operating cash flow return on asset (PTOCFROA), moreover a significant decline is found in current ratio (CR), quick ratio (QR) and shares abnormal return. According to Datta, Pinches and Narayanan (1992) and Jensen (1988) in Samaras (2007), acquired companies levered significant positive abnormal returns in most short term studies. However acquirer companies have had mixed results, for example Lorderer and Martin (1992) in Samaras (2007) show a drop in acquirer's postacquisition value, while Frank, Harris, Titman (1991); Capron and Pistre (2002) in Samaras (2007) find no significant changes on acquirer's performance. The same as research conducted by Liargovas and Repousis (2011) regarding merger and acquisition on the performance of Greek banking sector, which concluded that merger and acquisition have no impact and do not create wealth. Based on an article publihed by Business Week regarding the analysis of 302 large mergers from 1995 to 2001 found that 61% of them led to losses by the acquiring firm's shareholders (Brigham and Ehrhardt, 2005:841). According to Roll (1986) in Samaras (2007), no gains after doing merger and acquisition may be caused by hubris, which means the managers are overconfident and destroy the value by miss selecting or over valuing the target firms.

Thus this research aims to reanalyze the acquirer firms' financial performance after 5 years conducting merger and acquisition, considering that synergy should occur after long term implementation which can finally give positive impact on acquirer firms' financial performance measured by its financial ratios. The financial statements of all acquired companies analyzed in this research are taken from ICMD (Indonesian Capital Market Directory) from year 2003 to year 2013. All variables in this research will be tested whether normally distributed or not (normality test) by using Kolmogorov-Smirnov test. Once the normality test has been conducted, all hypothesis will be tested (hypothesis testing) either using parametric test or non parametric test. Thus if the variable is normally distributed, the hypothesis testing will be paired t test, otherwise Wilcoxon test will be used. Both normality and hypotheses testing are using SPSS Statistics 17.0 software. In order to answer the research hypotheses, this research will compare the acquirer company's financial performance 5 years before and 5 years after merger and acquisition.

2. Literature Review

2.1 Merger and Acquisition

Merger derives from a latin word "*Mergere*", which means to unite, to combine or to fuse. Merger is defined as the agreement of 2 or more companies to fuse one another, which will result in only one company stands as a single legal entity, while the others stop their activities permanently (Moin, 2003 in Wibowo, 2012). While acquisition derives from the latin word "*acquisitio*" which means to have. Brealey, Myers and Marcus (1999) in Dasmanto (2012) define the acquisition as the take over activity by buying the assets or shares of a certain company, however the company whose assets or shares purchased is still exist. Moin (2003) in Wibowo (2012) also define that acquisition is the takeover of ownership or control of the assets or shares by another company, but both the acquirer and acquired firms remain as separate legal entities.

2.2 Financial Performance

The most common method in analyzing the firm's financial performance is using ratio analysis, which utilizes the firm's financial ratio, found in income statement and balance sheet as its basic inputs. According to Indumathi, Selvan and Babu (2011) in Dasmanto (2012), the most common financial ratios used to analyze merger and acquisition are Current Ratio (CR), Total Assets Turnover (TATO), Debt to Assets Ratio (DAR), Return on Assets (ROA), Return on Equity (ROE) and Price to Earning Ratio (PER). CR indicates a firm' short term liquidity by comparing the company's current assets with current liabilities. Generally the higher the current ratio, the more liquid the firm is considered to be (Gitman, 2009:58). TATO indicates whether the firm's operations have been financially efficient or not, generally the higher a firm's total assets turnover, the more efficiently its assets have been used (Gitman, 2009:62). DAR measures the proportion of total assets financed by the firm's creditors (Gitman, 2009:64), thus the higher this ratio, the greater the firm's degree of indebtedness and the more financial leverage it has, realizing the remaining percentage must be financed by equity. ROA or return on investment measures the overall effectiveness of management in generating profits with its available assets (Gitman, 2009:68), while ROE measures the return earned on the common stockholders' investment in the firm, generally, the higher this return, the better off are the owners (Gitman, 2009:69). Ultimately this ratio is the most important financial ratio (Brigham and Daves, 2002:227), as this ratio tells the accounting return on the common stockholders' investment (Titman, et al., 2011:93). Price per Earning ratio indicates how much investors have been willing to pay for \$1 of reported earning (Titman, et al., 2011:94). The formula of each ratio usen in this research is expressed as follows:

1.)	Current Ratio (Keown, et al., 2005:73)						
	Current Ratio ———						
2.)	Total Assets Turnover (Keown, et al., 2005:79)						
	Total Asset Turnover (2)						
3.)	Total Debt to Total Assets Ratio (Keown, et al., 2005:80)						
	Total Debt to Total Asset(3)						
4.)	Return on Assets (Gitman, 2009:68)						
	Return on Assets(4)						
5.)	Return on Equity (Gitman, 2009:68)						
	ROE(5)						
6.)	Price per Earning Ratio (Ross, et al., 2010:63)						
	Price per Earning ratio (6)						

2.3 Research Framework

The synergy that should occur after merger and acquisition is reflected in company's financial performance, that are measured by the company's financial ratios. The financial ratios include liquidity ratio, activity ratio, debt ratio, profitability ratio and market ratio. Thus merger and activity should hopefully improve the company's ability to pay its short-term debt (CR), use its assets to generate cash effectively and efficiently (TATO), minimize the use of debt in financing the assets (DAR), maximize the return earned from the available assets (ROA) and from common stockholder's investment in the firm (ROE) and finally improve the investors' confidence on company's future performance (PER). The explanation above can be simplified into the research framework made by an author which can be seen in figure 1.



2.3 Research Hypothesis

Based on the literature reviews, research framework and previous researches stated previously, merger and acquisition should result in the integration of assets, liabilities and equities which can make the company become bigger and gain synergy. Thus the author concludes that all financial ratios after merger and acquisition will be significantly different than before merger and acquisition. Hence the author proposes alternative hypotheses as temporary answers for research questions, which stated as:

H1= Acquirer company's CR is significantly different after before and merger and acquisition

H2= Acquirer company's TATO is significantly different before and after merger and acquisition

H3= Acquirer company's DAR is significantly different before and after merger and acquisition

H4= Acquirer company's ROA is significantly different before and after merger and acquisition

H5= Acquirer company's ROE is significantly different before and after merger and acquisition

H6= Acquirer company's PER is significantly different before and after merger and acquisition

3. **Results**

3.1 Normality Testing

This research is utilizing Kolmogorov-Smirnov Test to analyze whether the data of each variable are normally distributed or not. As explained previously if the sample is normally distributed, the Asymptotic Sig. is more than the level of confidence used in this research, which is 95% or having α 5%, otherwise the sample is not normally distributed. If the data is normally distributed, the hypothesis testing tool will be Paired t Test, however if not normally distributed, Wilcoxon Test will be used. The result of normality testing 5 years before and 5 years after conducting merger and acquisition can be seen in table 1.

Ratios	Y-5	Y-4	Y-3	Y-2	Y-1	Y+1	Y+2	Y+3	Y+4	Y+5	Conclusion
CR	0.544	0.372	0.060	0.046*	0.049*	0.116	0.635	0.115	0.282	0.999	Most are normally distributed
ТАТО	0.995	0.996	0.992	0.766	0.945	0.780	0.998	0.027*	0.825	0.603	Most are normally distributed
DAR	0.857	0.676	0.983	0.966	0.820	0.995	0.851	0.818	0.685	0.723	All are normally distributed
ROA	0.067	0.983	0.637	0.642	0.188	0.478	0.855	0.006*	0.898	0.064	Most are normally distributed
ROE	0.052	0.726	0.564	0.301	0.302	0.074	0.302	0.006*	0.085	0.052	Most are normally distributed
PER	0.150	0.303	0.468	0.121	0.034*	0.086	0.057	0.069	0.026*	0.043*	Most are normally distributed

Table 1

* = not normally distributed, or having α below 0.05

Source: Processed by researcher

Refer to table 1, the normality testing result shows that most of the samples are normally distributed, while the other 13.3% are not normally distributed. Thus it can be concluded that all variables in this research are normally distributed. The data that are normally distributed indicate no distant difference between the data 5 years before and 5 year after merger and acquisition. Thereby assuming the data are normally distributed, the hypothesis testing tool that will be used is Paired t Test.

3.2 Hypothesis Testing

The purpose of hypothesis testing is to examine all hypotheses in this research that state all financial ratios after merger and acquisition is significantly different than before merger and acquisition. As explained previously, if the result shows significance value below α ($\alpha = 0.05$), meaning Ha is accepted, while H0 is rejected. The result of hypothesis testing can be seen in table 2.

			Table 2		
Variables	Mean (y-5)	Mean (y+5)	Difference	Sig. (2 tailed)	Conclusion
CR	2.7073	1.8545	(0.8528)	0.453	H0 Accepted
ТАТО	0.5973	0.6318	0.0345	0.769	H0 Accepted
DAR	0.5773	0.5282	(0.0491)	0.364	H0 Accepted
ROA	5.1364	17.2473	12.1127	0.462	H0 Accepted
ROE	12.0100	37.1445	25.1345	0.410	H0 Accepted
PER	73.9973	45.2227	(28.7746)	0.104	H0 Accepted

Table 2

Source: Processed by researcher

As can be seen from table 2, all financial ratios used in this research are not significatly different after merger and acquisition. This is proved by no significance value that is below α ($\alpha = 0.05$), meaning merger and acquisition that was conducted by acquirer companies bring no impact to their financial ratios or no significant differences 5 years before and 5 years after merger and acquisition.

Statistically CR decreased by 0.08528, this is because the acquirer companies used their current assets to pay merger and acquisition costs such as administration cost, licensing cost and etc. Thus it can be concluded

that merger and acquisition led to the decrease of liquidity, especially in the acquirer firms' current assets. The significance value of CR that is 0.453 also shows that there is no significant difference on companies' ability to pay their short term debts before and after merger and acquisition.

As can be seen from table 2, ROA increased by 12.1127, and ROE increased by 25.1345. Hence, the profitability ratios of the acquirer companies show an improvement after conducting merger and acquisition. The increase of ROA may be caused by the cutting of unnecessary costs, such as laying off the workers in the same fuction, closing the branches with low profitibality, and etc. Thus the increase of ROA are often associated with a good corporate governance. While the increase of ROE could be caused by the increase of company's profit after merger and acquisition. However with the significance value of 0.462 and 0.410 respectively, the increase of ROA and ROE are not significant.

In line with profitability ratios, the activity ratio of the acquirer firms also shows an improvement, which is seen from TATO that increased by 0.0345, meaning after merger and acquisition the acquirer firms are more efficient (reducing the storing time of the asset) in using their assets to generate sales. However with the significane value of 0.769, which is still not below α ($\alpha = 0.05$), the improvement in TATO is still not significant.

On the other hand, the leverage ratio of acquirer firms is statistically decreased by 0.0491, meaning the acquirer firms are able to reduce their debts after merger and acquisition. This is may be caused by the issuance of common stocks by acquirer firms in order to increase the portion of equity financing, because the increase of equity will automatically decrease the portion of liabilities, which in return will decrease the DAR ratio. The significance value of DAR that is 0.364 and not below α ($\alpha = 0.05$) shows that the decrease of DAR after merger and acquisition is unfortunately still not significant.

After merger and acquisition, the PER ratio decreased by 28.7746. It shows the decline in investors' willingness to pay for every \$1 of acquirer firms' reported earning, which indicates the decline of confidence that investors have in the firm's future performance. With the significance value of 0.104, the decrease of PER after merger and acquisition is not significant.

The result of this research is the same with the results found in research conducted by Widyaputa (2006), Aldilarachma (2008), Wibowo (2012), Payamta and Setiawan (2004) and Mantravadi and Reddy (2008) in Saviera (2012), Fatimah (2013), Gunawan and Sukartha (2013), that found merger and acquisition do not significantly affect the firm's financial performance.

4. Cnnclusion

Based on the research results from the testing of all variables 5 years before and 5 years after merger and acquisition, it can be conclued that:

- CR has no significant difference before and after merger and acquisition.
- TATO has no significant difference before and after merger and acquisition.
- DAR has no significant difference before and after merger and acquisition.
- ROA has no significant difference before and after merger and acquisition.
- ROE has no significant difference before and after merger and acquisition.
- PER has no significant difference before and after merger and acquisition.

According to the results of hypothesis testing, all financial ratios are not significatly higher after merger and acquisition. This is proved by no significance value that is below α ($\alpha = 0.05$), meaning merger and acquisition that was conducted by acquirer companies bring no impact to their financial ratios or no significant differences 5 years before and 5 years after merger and acquisition. However, if tested partially some ratios increased and others decreased, yet not significantly. The ratios that increased are TATO, ROA and ROE mostly after 3 years of conducting merger and acquisition. While the ratios that decreased are CR, DAR and PER mostly after 1 year of conducting merger and acquisition.

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