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ULLAH, NAZIM and Mat Nor, Fauzias and Abu Seman,  
Junaidah and Uddin, Akther

USIM, USIM, USIM, University of Creative Technology, Chittagong,  
Bangladesh

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# Do Merger and Acquisition Affects Acquirer Bank's Performance? A Comparative Analysis of Pre and Post Performance

NazimUllah<sup>1</sup> Fauzias Mat Nor<sup>2</sup> Junaidah Abu Seman<sup>3</sup> Md. Akther Uddin<sup>4</sup>

## Abstract

Merger and Acquisition is a strategy adopted by the organizations globally to meet the needs of the dynamic business environment, especially in the banking sector. The aim of the study is to investigate and explain the factors of merger and acquisition on the acquirer bank's performance. Several factors associated with M&A namely synergy, size, mode of financing, economics areas, regional effect and bank-specific variables are examined and discussed. Ordinary Least Square (OLS) method is applied on Unbalanced panel data of 47 acquirer banks year from 2008 to 2016. The findings imply that pre-M&A bank's performance is better than post-M&A bank's performance. Bank size does not significantly impact on the post-merger bank's performance. Further, the efficiency ratio is also more sensitive to the performance meaning that it reduces the post-merger bank's performance if the cost to income is higher. While the post-merger bank's performance is not affected by liquidity ratio as their asset size is larger than before the merger. Lastly, dummies for regional, i.e. ASEAN and MENA acquirer banks have negative effect but not significant on the performance which could be due to its poor governance. However further research is needed to study the impact of the corporate governance standard of a country of the acquirer banks.

**Keyword:** Mergers & Acquisitions, Factors, Acquirer bank's performance, and OLS.

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<sup>1</sup> PhD. Candidate, Universiti Sains Islam Malaysia (USIM), E-mail: [kmnazim\\_90@yahoo.com](mailto:kmnazim_90@yahoo.com)

<sup>2</sup> Professor of Finance, Universiti Sains Islam Malaysia (USIM), E-mail: [fauzias@usim.edu.my](mailto:fauzias@usim.edu.my)

<sup>3</sup> Senior Lecturer, Universiti Sains Islam Malaysia (USIM), E-mail: [junaidah@usim.edu.my](mailto:junaidah@usim.edu.my)

<sup>4</sup> School of Business, University of Creative Technology, Chittagong, Bangladesh, E-mail: [aktherpu@gmail.com](mailto:aktherpu@gmail.com)

## ***1. Introduction***

Mergers and Acquisitions (hereafter M&A) for this study is defined as a process of amalgamation of bidder and target. The terminological definition of the merger is the combination of two or more banks whereas either new entity exists or combination of both (e.g.  $\text{bank}_A + \text{bank}_B = \text{bank}_C$  or  $\text{bank}_{AB}$ ) whereas, acquisition implies the combination of two or more banks and target bank cease to exist (e.g.  $\text{bank}_A + \text{bank}_B = \text{bank}_A$ ). M&A is a transaction in which the ownership of bank is transferred or combined. M&A is one of the major aspects of corporate finance in the world.

Generally, the reason behind M&A is that two separate companies together create more value compared to being on an individual stand. With the objective of synergy (i.e., performance enhancement) and wealth maximization, companies keep evaluating different opportunities through the route of merger or acquisition. M&A refers to the aspect of corporate strategy with the buying, selling or combining of bank that enable a bank in a given industry grow rapidly without creating another business entity (Nicholas et. al., 2015). According to Gurusamy (2009), M&A is also to undervalue the target. A merger occurs when two separate entities (i.e., usually of equal size of both companies) combine forces to create a new ownership, management structure, joint organization in which theoretically both are equal partners. Moreover, it is euphemistically called “merger of equals”. Furthermore, in an acquisition or takeover, one business buys a second and generally smaller company which may be absorbed into the parent organization or run as a subsidiary. Legally bigger banks will acquire smaller banks. A company can acquire another company with cash, stock or a combination of the two.

Due to the competitive business arena, financial enlargement, technological innovation, structural modification of the financial system and demand for the financial products. Financial institutions have to face numerous problems and need to change their business approach accordingly. With a view to keeping pace with this changing trend, financial institutions need to espouse strategy to survive in the competitive business world. M&A has been in the mainstream news in the recent past (Massoudi and Fontanella-Khan, 2016). The global trend shows a record of 2.5 trillion value of M&A deal in the first half of 2018 which is 61% higher than first half of 2017 but the number of deals reduced by 10%. Globalization and financial deregulation of the banking sector went through a period of considerable consolidation during the 1990s. The financial world has experienced the downside of

financial innovation and deregulation in the recent global financial crisis which leads to massive bank failures in the developed economies. Moreover, this scenario has been spread in the developing countries as well.

The next section provides a brief discussion of the theoretical underpinnings followed by empirical underpinnings in M&A. A review of factors of M&A and the methodology are presented in the following sections, respectively. In section 6 reports estimation result and discussion. The conclusion and recommendation are presented in the last section.

## ***2. Methodology and Data: Theoretical Underpinnings***

Generally, theories of M&A are divided into two such as shareholder's value maximization (value creation strategy) and shareholders non value maximization (value reduction strategy), Weitzel& McCarthy (2011). Shareholder holder's value maximization is explained by efficiency or synergy theory while shareholder's value reduction theory is explained by management entrenchment theory and hubris theory. Other theories are also used by the previous study such as the theory of merger waves, i.e. behaviour theory & neoclassical theory.

Shed light on that, efficiency theory of merger has applied by [Daniya, Onotu, & Abdulrahman, (2016); Weitzel& McCarthy, (2011)] while application of neoclassical theory [Mitchell & Mulherin (1996) and (Polemis & Paleologos (2014), Petmezas (2009)] moreover, behavioural theory [Shleifer & Vishny (2003), Polemis & Paleologos (2014)] and furthermore, resource dependency theory [Kandil & Chowdhury (2014), Das & Rao (2011), Morris (2004), Kiel & Nicholson (2003)]. On the other hand, shareholder's non value maximization theory, i.e. management entrance theory is used by Shleifer&Vishny (1989) and Weitzel& McCarthy (2011) and Managerial hubris theory has used by Hayward & Hambrick (1997); Malmendier&Roll (1986) and Tate (2008).

Specifically, within the sphere of the banking sector, many studies have used efficiency theory and resource dependency theory (RDT). According to efficiency theory, mergers are planned, and it will only occur when they are expected to generate enough realizable synergies to make the deal beneficial to the parties, bidder, and target. Similarly, several studies [i.e., Daniya et al. (2016) Wadhwa&Syamala (2015) and Weitzel& McCarthy (2011)] mention that the main motive of M&A is to gain synergy (operating and financial synergy). These synergies could be in the form of the reduction in cost or increase in revenue.

It is the symmetric expectations of gains which results in a 'friendly' merger being proposed and accepted. If the gain in value to the target is not positive, it is suggested that the target firm's owners would not sell or submit to the acquisition. Similarly, if the gain negative to the bidders' owners, the bidder would not complete the deal.

Whereas, Resource Dependency Theory (RDT) is defined as an explanation of how the external resources like i.e. skilled worker, total asset, money, technology, and raw materials etc. of an organization affect the behavior of the said organization. Nair, Trendowski & Judge (2008) claim that the resources of a firm consist of tangible assets, human and other intangible assets which produce productive services planned by the firm. In addition, Rao-Nicholson (2003) notes that board members contribute to the important external resources and can maximize firm's performance. Similarly, Morris (2004) states that RDT is could explain the impact of social action and organizational changes towards an organization. RDT offers an externally focused perspective of why an organization might acquire or merge with another organization. Since the issue is not clear and become inconsistency among studies and need efforts to further investigate. Therefore, the following paragraphs discuss the empirical investigation on the issue.

## *Empirical Underpinnings*

Merger and Acquisition (M&A) is an ancient business expansion strategy that took place in the late 19<sup>th</sup> century with the 1<sup>st</sup> wave of merger in 1895. M&A is adopted by the organizations globally to meet the needs of the dynamic business environment. Although M&A is an old strategy it is still applicable in the several industries, i.e. technology, life science, finance and telecommunication (Table A1.4). Since the financial sector is concerned, this study discusses on banking sector in detail. As shown in the Table A1.4, column 3, financial sector is the second largest sector compared to other sectors. A big deal (e.g., 68% growth) has conducted in 2015 which is the highest growth for years among the sectors. Following literature reviews have discussed empirically regarding the impact of M&A on the financial performance.

Since factor is concerned, synergy is one of the important factors of having M&A deal. Without proper justification, none of the financial organization would engage in the deal. It is strongly argued and explains in M&A, synergy is the main motive. As supported by Smirnova (2014) motives of having M&A deal. Among them, economies of scale and scope, cost minimization strategy, market expansion, innovation and development of products & services, value creation strategy, amalgamation of the human capital, liquidation strategy, reduction of tax liability and adjustment of debt, reduce the number of competitors and ensure corporate growth and strategy have been selected.

Moreover, Aladwan (2015) has analyzed the impact of size on the performances of the Jordanian commercial banks. The estimation result explains that there is an inverse relationship between size and bank performances, i.e. bank performance tends to increase when bank size decrease. Shed light on that, Kosmidou, Pasiouras, Doumpos, & Zopounidis (2006) argue small banks are better than larger producing more performances. By applying GMM method, Micco et al. (2007) have conducted the study in Kenya in the commercial banks and finding reveals that the size does not matter in determining bank performance.

Otterspeer (2016) has used Kogut and Singh index to measure national culture. This index is used to measure cultural distance based on the four cultural dimensions of Hofstede, i.e. individualism, power distance, uncertainty avoidance, and masculinity. The empirical analysis has found that there is a positive relationship between cultural differences, i.e. more cultural differences more change in performances.

Finally, mode of financing, i.e. cash, stock or both also have a great impact of the performance of M&A. According to the recent study by Oyetade & Dobрева, (2017) and Iankova (2014), involving parties can exchange cash, stock or both of them but more precisely when the value of the stock of acquirer is overestimated in the market then better to offer stock otherwise cash. Interestingly the study of the André & L'Her (2004) has investigated that the relationship between post-M&A performance and the method of payment. They have proved that, in general, the M&A deals financed by stocks have a weaker performance in the long-run. Most of the cases cash rather stock has a positive impact on the performances of the target and acquirer.

However, on the basis of the above empirical analysis, the impact of factors on the bank's performance is inconclusive. It needs to revise, re-examine and further effort is needed. Therefore, this paper analyses the stated factors theoretically as well as empirically to investigate the issue.

#### ***Factors of M&A that impact on bank's performance.***

In the previous studies that are mentioned in the following paragraphs. There is relatively lacking, inconclusive and mixed evidence on the impact of M&A on bank's performance. This paper gives further efforts to re-examine the selected factors such as synergy, sizes, regional effect and mode of financing. Following literatures are reviewed.

According to George et al. (2012), characteristics of the banking sector, the size and activity of the financial market play a vital role in M&A. While, Salama (2015) has used the choice of strategic partner, pay the right price and target evaluation. However, in this paper, four factors such as synergy, size, regional effect and mode of financing are analyzed and discussed.

- ***Synergy***

According to the efficiency theory, synergy is one of the most important factors for the bank to engage with M&A deal. A number of studies are reviewed in the following paragraphs.

Many attempts have been made by the previous study to explain the motives behind M & A. An institution involves in M & A with several intentions to expand into new markets of both national and international such as to exploit strategic opportunities (challenges) through

synergies and convergence of industries, to reduce the number of competitors, to enhance and obtain new integrated knowledge, to combine superior technology, to gain access to better and greater resources, to achieve greater efficiency through economies of scale and scope as well as to increase market power [Smirnova (2014), Antoniadis et al. (2014) and Abbas et.al(2014), Guo& Yang (2013), William (2009), McClure (2009), Miller (2008), Pasiouras&Zopounidis (2008), Cigola and Modesti (2008)]. Furthermore, Michael Taillard (2012) highlights that the ultimate goal for any M&A activity is to make money.

In addition, Gattoufi & Soie (2009) and Pinter (2011) state that there are two ways in which the acquirer may take over the target banks, i.e. either through statutory merger or purchase of assets. They argue that this action could lead to an improvement of the shareholder value, efficiency enhancement and the boost of operating synergies and managerial motives. They categorize motivations for M&A into three broad types; shareholders wealth maximization goals, managerial self-interest and other factors which make the environment is more attractive to M&As.

Accordingly, Smirnova (2014) has mentioned and discussed motives of having M&A deal. Among them, economies of scale and scope, cost minimization strategy, market expansion, innovation and development of products & services, value creation strategy, amalgamation of the human capital, liquidation strategy, reduction of tax liability and adjustment of debt, reduce the number of competitors and ensure corporate growth and strategy have been selected.

- *Size*

With regards to the announcement time of the size-adjusted combined performance of both the bidder and the target, Cybo-Ottone & Murgia (2000) find that this factor is important in M & A deal and it is economically relevant. They argue that only the combined value of domestic deals creates shareholder value, whilst cross-border deals do not capture positive expectations from the market.

As analyzed by Kasimodouet al. (2006), two types of bank size, i.e. big and small according to their asset volume. The results of their study conclude that small banks show higher performance compared to large banks.



Similarly, as critically analyzed by Aladwan (2015), bank profitability increases as the asset size decreases. He has conducted his study in Jordan commercial banks from 2007 to 2012. He argues that regression result shows that small and medium-sized banks have statistically significant impact on the Jordanian commercial banks. Furthermore, bank size increase and decrease its profitability and vice versa. Inversely, Micco, Panizza & Yanez (2007) have conducted the study in Kenya in the area of the commercial banks and their empirical analysis has revealed that the size does not matter in determining bank profitability.

In addition, it becomes incentives for Islamic banking sector to have economies of scale and scope through M&A deal. In line with that, Ibrahim & Rizvi (2017) and Iqbal (2008) emphasize that to become-mega bank or big bank, there is no other alternative way except for M&A. Through M&A, the problem of economic scale and scope operation could be minimized.

- ***Regional effect***

Three regions i.e. the Middle East and North Africa (MENA), Association of Southeast Asian Nations (ASEAN) and European Union are selected to examine the effect on bank performance. A number of regional studies are reviewed and discussed in the following paragraphs.

Cultural differences, i.e. the transfer of capabilities and the sharing of the resources is one the regional effect on the M&A activities, Otterspeer (2016). However, firm can better share and transfer knowledge between individuals and groups than markets. Human integration is the development of a shared identity and positive attitudes towards the new organization. This socio-cultural integration is most important to realize synergy. In sum, cultural differences could result in conflicts and difficulties and therefore make the economic performance of M&As less likely. This statement is supported by Basuil & Datta (2018), differences in culture make it difficult for acquiring firms to accurately assess foreign targets, especially in service industries where such assets are often intangible. Failure to do so can result in overpayment and acquisition failure.

- ***Modes of financing***

Mode of financing, i.e. cash, stock and combination of both also has a great impact of the performance of M&A performance. According to Kwenda, Oyetade, & Dobрева, (2017) and

Iankova (2014), when the value of the stock of acquirer is overestimated in the market, it is advisable to offer stock rather than cash. Interestingly André & L'Her (2004) proves that, in general, the M&A deals financed by stocks have a weaker performance in the long-run.

### 3. Research Method

#### 3.1 Data Collection

This paper employs a panel data of 47 (out of 70 commercial banks) acquirer banks from the year 2008 to 2016 (Table A1.3). Data is collected from Bloomberg, FitchConnet database and Financial statement. After filtering, 23 banks are omitted from the data set due to outlier, missing financial information and data range don't fell within selected time.

Using this sample, pre (e.g., an average of two years before M&A deal) and post (e.g. an average of two years after M&A deal) M&A financial performance of acquirer bank is measured. This time range is chosen based on Yener & Ibáñez (2004) suggestion that two years is sufficient to avoid alteration and inaccuracy of results. He explains that longer time spans may negatively affect the accuracy of results due to effects of other external economic factors. This is supported by Achtmeyer (1994), the benefits of M&A do not take more than two years to materialize.

#### 3.2 Variables

The endogenous variable such as Return on asset (ROA) and return on equity (ROE) are used a proxy for performance (synergy). While, focus variables or key variables such as total asset & cost to income and control variables such as liquidity, total equity to total asset along with dummies such as mode of financing, economic areas, and regional effect are used as an explanatory variable.

##### 3.2.1. Model specification

Two models are designed that is, one general model and extension of that general. Both models are demonstrated below.

(a) General model: Synergy (proxied by performances):

$$ROA/ROE = \alpha + \beta_1 SIZE + \beta_2 TETA + \beta_3 CI + \beta_4 LATA + \mathcal{E} \dots \dots \dots (1)$$

(b) Extension of general model: application of dummies

$$ROA/ROE = \alpha + \beta_1 SIZE + \beta_2 TETA + \beta_3 CI + \beta_4 LATA + \gamma_1 d\_cash + \gamma_2 d\_stock + \gamma_3 d\_domestics + \gamma_4 d\_cross + \gamma_5 d\_r\_mena + \gamma_6 d\_asean + \gamma_7 d\_other + \mathcal{E} \dots \dots \dots (2)$$

Whereas, ROA; return on asset, ROE; return on equity, SIZE; total asset, TETA; Total equity to total asset, CI; cost to income, LATA; liquid asset to total asset,  $D_R$ ; dummies of regional effect, i.e. ASEAN, Middle East and Others ( $D_1= 1$ , ASEAN,  $D_2= 1$ , Middle East,  $D_3=1$ , other, 0, otherwise),  $D_P$ ; dummies mode of financing, i.e. (D=1, Cash, D= 1, Stock &D= 1, Cash &Stock and 0, Otherwise),  $D_A$ ; dummy for domestic and cross boarder M&A (D=1, domestic, o, otherwise),  $\alpha$ ; constant term,  $\beta/Y$ ; coefficient and  $\mathcal{E}$ ; error term.

#### ***4. Results and discussion***

The descriptive statistics of the panel data set for relevant variables is presented in Table 2. In the table, two sets of summary are reported, i.e. statistical summary for pre-merger bank's performance and post-mergerbank's performance respectively. While Correlation matrix of variables is presented in Table 3. The correlation matrix of this table shows that there are no problem of multicollinearity since the correlation between the factors is less than 50 percent.

Table 2. Descriptive Statistics of pre & post bank's performance

	Pre M&A					Post M&A					
	Mean	Median	Maximum	Minimum	Std. Dev.	Mean	Median	Maximum	Minimum	Std.Dev.	Orbs
<b>Dependent variables</b>											
ROA	0.014	0.0130	0.0450	0.000	0.009	0.014	0.013	0.041	0.000	0.008	47
ROE	0.135	0.1410	0.2910	0.000	0.076	0.138	0.125	0.341	-0.007	0.069	47
<b>Focus variables</b>											
CI	0.451	0.470	0.8930	0.000	0.191	0.497	0.495	0.876	0.191	0.151	47
LTA	0.261	0.2890	0.3880	0.000	0.094	0.293	0.308	0.415	0.142	0.073	47
<b>Control variables</b>											
LATA	0.158	0.148	0.5020	0.000	0.127	0.135	0.118	0.431	0.000	0.111	47
TETA	0.100	0.102	0.2200	0.000	0.047	0.105	0.103	0.175	0.037	0.030	47

Table 3. Correlation Matrix

	CI	LTA	ROA	ROE	LATA	TETA
CI	1.000					
LTA	0.056	1.000				
ROA	-0.242	0.292	1.000			
ROE	-0.167	0.261	0.870	1.000		
LATA	0.079	0.127	0.027	-0.054	1.000	
TETA	-0.057	0.475	0.555	0.271	0.144	1.000

Table 4. Regression Results of Pre &amp; Post Bank's Performances (ROA)

	Pre M&A	Post M&A
LTA	0.126** [0.05]	0.011 [0.05]
TETA	0.079** [0.04]	0.168*** [0.04]
CI	-0.015 [0.01]	-0.026** [0.01]
Liquidity	-0.045** [0.02]	-0.006 [0.02]
D_cash	0.011 [0.01]	0.005 [0.01]
D_stock	0 [.]	0 [.]
D_domestics	-0.002 [0.00]	0 [0.00]
D_cross	0 [.]	0 [.]
D_R_MENA	-0.008* [0.00]	-0.010** [0.00]
D_R_ASEAN	-0.009** [0.00]	-0.003 [0.00]
D_R_other	-0.004 [0.00]	-0.001 [0.00]
Constant	0.002 [0.01]	0.009 [0.01]
Observations	47	47
R-Squared	0.524	0.502
Adjusted R-squared	0.391	0.364
F-statistic	3.957	3.629
Probability	0.001	0.002

Note: LTA; log of total assets, TETA, total equity to total assets, CI; cost to income, Liquidity; liquid assets to total assets, D\_cash; dummy for modes of financing by cash, D\_stock; dummy for modes of financing by stock, D\_domestic; M&A in national, D\_cross; M&A in international, D\_R\_MENA; dummy for MENA countries, D\_R\_ASEAN; dummy

for ASEAN countries, D\_R others; dummy for other countries; Standard errors in brackets \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Result for pre & post-M&A performance (proxied by ROA) is reported in Table 4. Column 1 indicates pre performance while column 2 post performance. Adjusted R squared 39% and 36% that indicate the variation on the ROA is explained by the model. Interestingly, column 1 is the best compared to column 2 since adjusted R squared is higher 39%. Whereas, F value significance at  $p < 0.01$  further indicates that explanatory variables have the significance on the explaining the variation on the ROA.

In column 1, the coefficient of the total asset is positive and statistically significant at 5% level. Meaning that 1% increase in the total size that leads to increasing bank's ROA to 12.6%. This finding is different from the finding of Aladwan (2015). His findings indicate that bank performance increase when bank size decrease. Interestingly, Micco et al. (2007) have conducted the study in Kenya in the area of the commercial banks and their empirical analysis reveals that the size is not a matter in determining bank's performance.

Similarly, Kosmidou, Pasiouras, Doumpos, & Zopounidis (2006) argue that small banks are better than larger to impact on the bank's performances. The coefficient of equity to asset and liquidity are statistically significant at 5% significance level. Implying that 1% increase in equity to total asset, performance would increase to 7%. While 1% increase in liquidity that would reduce performance to 4.5%. As bank hold more money that impacts on the bank's performance negatively. The dummy variables for regional effect, i.e. ASEAN and MENA are statistically significant at 10% and 5% significance level indicating that bank's performance in ASEAN is 0.9% less compared to other regions. While in MENA is 0.8% less compared to others regions. This findings indicate that M&A deal within the region is not profitable meaning that it is better to involve in cross boarder M&A instead domestic M&A deal.

In column 2, post-M&A performance is reported. The coefficient of equity to total asset is statistical significance at 1% level meaning that 1% increase in capitalization that leads to increase performance to 16.8% which is better than column 1. Similarly, efficiency ratio is measured by cost to income which is disadvantageous from performance perspective. The coefficient of efficiency ratio is negative and statistically significant at 5% level implying that

1% increase in the cost that would reduce performance to 2.6%. Other variables are not statistically significant. The coefficient for dummy MENA is negative and statistically significant at 5% level meaning that bank's performance within MENA region is negative compared to other regions However, remaining regions are not statistically significant.

Table5. Regression Results of Pre & Post Bank's Performance (ROE)

	Pre M&A	Post M&A
LTA	1.572*** [0.43]	0.397 [0.46]
TETA	0.106 [0.34]	0.691 [0.41]
CI	-0.115 [0.09]	-0.281*** [0.10]
Liquidity	-0.497*** [0.16]	-0.142 [0.17]
D_cash	0.077 [0.08]	0.023 [0.07]
D_stock	0 [.]	0 [.]
D_domestics	-0.18 [0.02]	-0.005 [0.02]
D_cross	0 [.]	0 [.]
D_R_MENA	-0.075* [0.04]	-0.078* [0.04]
D_R_ASEAN	-0.069** [0.03]	-0.03 [0.03]
D_R_other	0.009 [0.04]	0.022 [0.04]
Constant	0.048 [0.09]	0.208* [0.12]
Observations	47	47
R-Squared	0.388	0.341
Adjusted R-Squared	0.218	0.159
F-statistic	2.280	1.867
Probability	0.034	0.083

Note: LTA; log of total assets, TETA, total equity to total assets, CI; cost to income, Liquidity; liquid assets to total assets, D\_cash; dummy for modes of financing by cash, D\_stock; dummy for modes of financing by stock, D\_domestic; M&A in national, D\_cross; M&A in international, D\_R\_MENA; dummy for MENA countries, D\_R\_ASEAN; dummy for ASEAN countries, D\_R others; dummy for other countries; Standard errors in brackets \* p<0.1, \*\* p<0.05, \*\*\* p<0.01.



Result for pre and post M&A performance (proxied by ROE) are reported in Table 5, column 1 and column 2 respectively. Adjusted R squared 22% and 16% indicate in the two models imply variation on the ROE explained by the models. Interestingly, column 1 shows the best compared to column 2 since adjusted R squared is 22%. Whereas F value significance at  $p < 0.05$  further indicates that explanatory variables are the significance on explaining the variation on the ROE.

In column 1, the coefficient of total asset is positive and statistically significant at 1% level which states that 1% changes in asset size, it would increase bank's performance to 1.57%. Similarly, the coefficient of liquidity is negative and statistically significant at 1% level implying that 1% raise liquidity proportionally it reduces bank's performance to 0.397%. Two regional dummies are statistically significant at 10% level. M&A deal in Both regions ASEAN and MENA are not beneficial for acquirer since the coefficient is negative and significant at 10% significant level. These values explain that within the region M&A deal is not profitable compared to other regions.

While column 2 implies post M&A performance, the coefficient of cost to income is negative and significance at 1% significance level that explain that 1% increase in cost that reduces performance to 0.281%. Dummy for MENA region is significant at 10% level meaning that M&A performance in the MENA region is not well compared to other regions. If M&A deal has occurred in the MENA region, bank's performance reduce to 7.8%.

Finally, comparing both ROA & ROE, ROA is the best proxy for bank's performance of M&A deal since adjusted Rsquared is 39% which is higher than 22%. Moreover, pre M&A bank's performance is better than post-performance this finding is supported by Sufian et al. (2012) but contradictory with finding of Okpanachi (2011) and Said, Nor, Low & Rahman (2008). While Sufian & Habibullah (2009) have found performance is improved after M&A.

## **5. Conclusion**

This paper reviews and examines the factors of Merger and Acquisitions (M&A) that impact on acquirer bank's performance (proxied by ROA & ROE). Shed light on that, several factors associated with M&A deal, i.e., synergy, bank size, mode of financing, economics area, regional effect and banks specific factors, i.e. liquidity, total equity to total asset and cost to

income ratio are also examined and discussed. The findings of the paper show that size of the bank is not significantly impact the post-merger bank's performance. The reason is due to lack of proper fund management within short period of time (two years after M&A deal). Further, the efficiency ratio is also more sensitive to the performance meaning that it reduces the post merger bank's performance if the cost to income is higher. While the post merger bank's performance is not affected by liquidity ratios their asset size is larger than before the merger. Lastly, dummies for regional, i.e. ASEAN and MENA acquired banks have negative effect but not significant on the performance which could be due to its poor corporate governance. However further research is needed to study the impact of the corporate governance standard of a country of the acquirer bank.

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