

Merger and Acquisition in Banking Sector: A Review of the Literature

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Merger and Acquisition in Banking Sector: A Review of the Literature

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Abstract

This paper provides a review of merger and acquisition literature that have examined the theories, the impact of M&A towards banking performance, both conventional and Islamic, as well as the factors associated with M&A activity. The authors have been able to review more than thirty investigations over a twenty-year period, from 1993 to 2017. The study is theoretical and analytical in nature and secondary method has applied. Through a literature review, this study provide an account of the theories and main findings of the literature as well as examines the extent to which M&A give impact to the banking performance and highlights some factors contribute to the successfulness of M&A activity. Overall, the evidence reviewed suggests that M&A affect the conventional and Islamic banks in several different ways. This could be explained by different approaches in handling M&A (i.e., domestic or cross border) and various factors contributing to the decision of conducting the M&A activity. As far as the development and increase interest in Islamic finance are concerned, it is perhaps surprising that very little empirical research on M&A in Islamic banking sector. The paper concludes with several recommendations for future research, the most important of which is the need for a systematic effort on conceptual analysis as well as empirical study on M&A in Islamic banking and finance.

Keyword: Merger and Acquisition, theory, bank performance, Islamic banking

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1.0 Introduction

Mergers and Acquisitions (hereafter M&A) has been in the mainstream news in the recent past (Massoudi&Fontanella-Khan, 2016). Global trend shows a record breaking of \$5 trillion worth of deals worldwide in 2015 which was more than a one-third increase over 2014 and it was \$4.4 trillion in 2007(Liner, 2016). Globalization and financial deregulation of banking sector went through a period of considerable consolidation during 1990s. The financial world has experienced the down side of financial innovation and deregulation in the recent global financial crisis which leads to massive bank failures in the developed economies. Moreover, this affect has been spread in the developing countries as well.

At the age of the competitive business arena, financial enlargement, technological innovation, structural modification of the financial system and demands for the financial products, all financial institutions have to face numerous problems and need to change their business approach accordingly. With a view to keeping face with this changing trends all financial institutions need to espouse strategy to survive in the competitive business world.

M&A is one of the most renowned strategies to make adoption with those changing businesses. According to the efficiency theory, the bottom line and special alchemy of the M&A is for the purpose of synergy. Even though the main bottom line of M&A is to have synergy, element of necessity is equally important for the target banks to be considered. In several cases for example infant bank, bank that is incapable to compete, facing financial distress and unable to maintain requirement of common equity of risk weighted asset, M&A could becomes necessity in the first place rather than to acquire synergy. Hence, it becomes necessary for the banks to be merged or acquired by other matured and stable financial institutions before reach the target of having synergy in the deal.

As far as the M&A is concerned, today's business is not bound within the domestic arena; it has crossed the national boarder. Efficient and well-built financial institutions tend to broaden their market or manoeuvre beyond national boarder throughout foreign direct investment (FDI) in the form of cross border M&A. This strategy creates direct or indirect external or spillover effect on the performance of the banks as well.

The latest literatures show that bank M&A activities has been growing rapidly on the backdrop of global financial crisis, financial deregulation, and market competition in the developed and developing world. However, a recent comprehensive review on this vital issue is still not well documented especially for Islamic banks.

The rest of the chapter is structured as follows. The the next section presents a brief review of M&Aunderlying theories. Further discussion on the impact of M&A towards the performance of banking sector for conventional and its counterpart is presented in section 3. Sections 4extends the review on the factors associated with M&A deals. Finally, section 5 concludes the paper.

2.0 Overview of Underlying Theories of M&A

A number of theories have been applied in the previous studies to explain M&A such as, efficiency theory of merger [Daniya et al. (2016); Weitzel, U., & McCarthy, K. J. (2011)], neoclassical theory [Mitchell, M. and Mulherin, H. (1996) and (Polemis&Paleologos (2014), Petmezas (2009)] behavioural theory [Shleifer&Vishny(2003), Polemis&Paleologos (2014)] and resource dependency theory [Kandil&Chowdhury (2014), Das &Rao (2011), Morris (2004), Kiel & Nicholson (2003)].

Specifically, within the sphere of banking sector, many studies have used efficiency theory and resource dependency theory (RDT). According to efficiency theory, it suggests that 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 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 gains were negative to the bidders' owners, the bidder would not complete the deal.

Whereas, RDT is defined as an explanation of how the external resources like, skilled worker, money, technology and raw materials etc. of an organization affect the behaviour of said organization. Nair, Trendowski& Judge (2008) claims that resources of a firm is consist of tangible assets, human and other intangible assets which are put to 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, T. (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.

3.0 Impact of M&A towards the Banking Performance.

While the importance of M&A is becoming crucial in addressing financial instability, there is relatively lacking, inconclusive and mixed evidence on the influence of M&A on banking performance.

Using data from the US banking sector, Abbas, Q., Hunjra, A. I., Azam, R. I., Ijaz, M. S., & Zahid, M. (2014). finds a direct positive performance in banking productivity, profitability as well as shareholders' value. Similarly, Daniya et al. (2016) find that there is an improved and robust financial performance owing to merger and acquisition, leading to a more financial efficiency in the Nigerian banks. In addition, Okpanachi (2011) implies that between pre and postM&A, post mergers and acquisitions period is more financially efficient than the pre-

period. Similarly, using data from Malaysian banks, Sufian & Habibullah (2014) find that the acquiring banks have been relatively more productive as compare to the target banks.

Whereas, several studies reveal that M&A deal has less important impact on the bank performance. Kandil & Chowdhury (2014) and Gattoufi et al. (2014) show that M&A activity has no significant impact on operational performance of the banks involved. In the similar vein, Piloff&Santomero (1998) and Goyal& Joshi (2011) argue that acquisitions often have a negative impact on employees' behaviour resulting in counterproductive practices, absenteeism, low morale, and job dissatisfaction. It appears that an important factor affecting the successful outcome of acquisitions is the top management's ability to gain employee trusts (Amihud, et al., 2002). Shed light on that, Sufian et al. (2012) have explored and investigate an interesting result in their analysis. It shows that banks' revenue efficiency has significantly improved during the post-merger compared pre-merger period.

In addition, mix result is also found in several studies. Using information from public listed companies from ASEAN countries, Rao-Nicholson et al. (2016) finds negative effect of M&A deal on the performance of the banks. With respect to domestic consolidation, however, they argue that friendly deals help to smoothen integration between the two companies and managers can work proactively to derive synergistic gains from the M&A activity. In the case of domestic deals, it can be quite costly to integrate institutions which are dissimilar in terms of their loan, earnings, and cost, deposit and size strategies. As for cross-border mergers, differences between merging partners in their loan and credit risk strategies are conducive for higher performance, whereas diversity in their capital and cost structure has a negative impact from a performance standpoint (Altunbaş & Marqués, 2008;Antoniadis, Alexandridis & Sariannidis, 2014).

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 andit 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.

Moreover, Antoniadis et al. (2014) review the literature for M&A in the European banking sector and state that there are positive abnormal returns for target banks due to investors' expectations for better utilization of their assets. While, shareholders of acquiring banks suffer minor losses of value that leads to negative abnormal returns. This is due to investors' disbelief on the motives and successfulness of the proposal.

Furthermore, empirical investigation and analysis of Al-Sharkas, A. A., Hassan, M. K., & Lawrence, S. (2008) highlights that there is an improvement at cost and profit efficiency after merger and acquisition in US banking sector. They have Argued that, mergred banks show more cost efficient than non-mergred banks due to application of efficient technology available.

Table 1 summarizes the literature on the impact of M&A on performance of banks.

3.1 Cross border M&A and its impact on banks performance

Nowadays, business is not only bound within the domestic arena but also it crosses the national boarder. Efficient and strong financial institutions tend to broaden their market or manoeuvre beyond national boarder. This could be accomplished through foreign direct investment (FDI) which comes with two approaches namely green filed investment and new operation procurement. The second approach might involve cross boarder M&A. However, to a certain extent, FDI through cross boarder M&A contributes to an external or spillover effect on the performance of the banks.

Amihud et al. (2002) asserts that there is risk of insolvency in cross border M&A. If the acquisition of the foreign target fails and the domestic bank's (acquirer's) solvency is threatened, the acquiring bank may be bailed out either by its own domestic regulator or by the host regulator (the regulator of the target bank). Hence, cross-border mergers may has less advantage for either one or both of the parties involved, i.e, the domestic (acquirer) and host bank regulators (target). This conventional wisdom is based on the traditional notion that it is better for a bank to not put all its "eggs in one basket" and thus geographic diversification is a naturally risk that need to properly consider.

Table 1 Summary of studies associated with the impact of M&A on performance of banks

Author(s)	Sample of study	Variables	Methodology	Findings
Daniya et al. (2016)	Nigerin banks, 2002-2008	ROA , ROE	SPSS (descriptive statistics)	Bank witnessed improved and robust financial performance.
Rao-Nicholson, Salaber & Cao (2016)	Banks in ASEAN Countries, 2001-2012	Return on Assets (ROA), sales margin	Cross sectional OLS model.	The industry-adjusted operating performance tends to decline in the years years following an M&A deal.
Abbas, Q., Hunjra, A. I., Azam, R. I., Ijaz, M. S., & Zahid, M. (2014).	Islamic Financial Institutions (IFIs) in the UK, 1984-2014	Total accrual, total accounts receivable, total inventories, total taxes payable, and, total other current liabilities.	Regression as well as difference-in difference estimation	Increase earnings by cost cutting discretionary expenses.
Kandil & Chowdhury (2014)	UK, Banks, 1999 to 2009	ROA, ROI, bank size (bank's revenue), Financial leverage.	Regression model	ROE and ROI increases after M&A. Target shareholder enjoy short term positive rerun. The announcement of M&A has immediate effect on the share price.
Sufia&Habibullah (2014)	Malaysian banks	Income diversification and operating expenses	Non-parametric 'frontier'- oriented Malmquist productivity index (MPI), central tendency ordinary least square (OLS) and fixed effects (FE) panel regression methods	The acquiring banks have been relatively more productive compared to the target banks and banks in the control group.

Author(s)	Sample of study	Variables	Methodology	Findings
Antoniadis, Alexandridis & Sariannidis (2014)	Greek banks 2014	Financial and corporate governance characteristics	Event study methodology	The share prices of bank have risen for the period of time after the day the proposal took place. A few banks however displayed negative returns and was not influenced by the proposal.
Gattoufi, Al- Muharrami & Shamas G. (2014)	Banks in GCC countries, 2003-3007	Return on Equity (ROE), capitalization ratios, net financial margin (NFM), loan loss provision to total assets, loan loss provision to net interest revenue, cost to income ratio.	Average of Market, merged without merged	No significant impact on operational performance.
Sufian et al. (2012)	Malaysia , Banks 1995-2009 Pre merger (1995-1996) Post merger (2002-2009)	Labour, physical capital and deposit Price of labour, price of physical capital and price of deposit.	DEA	An interesting result has been found by the study. It shows that banks' revenue efficiency has not significantly improved during the postmerger compared to the pre-merger period.
Goyal & Joshi (2011)	Indian banks	Human resources management and organization behaviour	Theroretical analysis	Motives is important in the M&A deal.

Author(s)	Sample of study	Variables	Methodology	Findings
Altunbaş &Marqués (2008)	European domestic and cross country banks, 1992-2001	Efficiency, bank size, liquidity loan, credit ratios, credit risk, Target, bidder and bidder post and pre performance.	Theroretical analysis	In domestic deals, it is costly to integrate institutions which are dissimilar in loan, earnings, and cost, deposit and size strategies. Whereas, cross-border mergers, differences between merging partners in their loan and credit risk strategies are conducive to higher performance, whereas diversity in their capital and cost structure has a negative impact from a performance standpoint.
Al-Sharkas, A. A., Hassan, M. K., & Lawrence, S. (2008)	US, Banks 1987-2000	Cost efficiency Profit efficiency (Pre and post merger cost & profit efficiency)	SFA, DEA	The empirical investigation indicates that merger has improved cost and profit efficienty of the banks.
Amihud, DeLong & Saunders (2002)	Worldwide banks, 1985-1998	Total risk (variance of firms stock return)	Panel techniques	Acquirers' risk neither increases nor decreases.
Cybo-Ottone&Murgia (2000)	European country, bank, 1988 to 1997	Theoritical discussion	NA	There is abnormal return during announcement time of M&A. However, there is no significant changes in performance after M&A is concluded.

Author(s)	Sample of study	Variables	Methodology	Findings
Piloff&Santomero (1998)	Banks	Theoritical discussion	NA	Managerial strategy of M&A give more impact towards banking performance other than marketing and accouting performance ratios.

In addition, Gattoufi et al., (2014) argues that regional factor impede cross border M&A. Each region has different set of rules and regulations imposed by the regulators. By the same token, Zou& Simpson (2008) claims that studies related to M&A in developing economies are relatively much lacking. M&A activity can be seen as a means of managing resource dependencies through absorption and integration at a low-cost base and acquiring or consolidating market power position.

Furthermore, Nagano (2013) reports that both inward cross-border M&A and Greenfield FDI attract the host country (target) through opportunities such as to increase population size and per capita income as well as decrease in corporate tax rates. However, a home-country (bidder) firm tends to choose cross-border M&A rather than Greenfield FDI when the host country enforces intellectual property rights laws. Besides, Neto, et al., (2010)states that depending on the potential economic growth of the host country, M&A has a great potential to boost internal competition which could lead to high growth.

The size of the bank is also equally important to have decision to invest abroad. This notion is supported by Focarelli&Pozzellolo (2001) whichfound that the size of the banks is the key determinant of the decision to expand business abroad.

Table 2 provides summary of the impact of cross border M&A on performance of institutions discussed by the previous studies.

4.0 Benefit of M&A in Islamic Banking Sector

Due to several differences in terms of the concept, operations and methodology between Islamic and conventional banking system, it is almost impossible for the two banks to be merged, Askari, H., Iqbal, Z., & Mirakhor, A. (2011). However, there is room for Islamic subsidiary of the conventional banks to merge with Islamic banks. Following are the argument for M&A in the Islamic banking sector.

Datuk Seri ZukriSamat, former Chief Executive Officer (CEO) of BIMB Holdings Bhd. expressed his opinion in the press conference on 28 & 29 of May 2017 by stating that creation of mega Islamic banks through M&A could be rival not only for the other Islamic banks but also the "Big boys" or "Giants" from the conventional side. It would help to survive in the competitive market, boost industry growth, huge potentiality to cross the border and able to be a global hub for Islamic banking sector. Similarly, Dr Alexander von Pock, Principal of Financial Institutions Group mentions that M&A offers a way to build more powerful players with better chances to compete. Likewise, Finance Minister of Bangladesh, AbulMaal Abdul Muhith states that there is provision under the act to facilitate M&A deals for those banks like BASIC bank and National bank Bangladesh Limited which facing financial problems due to the huge amount of non-performance loans (NPLS).

However, empirical studies are still much lacking. Ibrahim &Rizvi (2017) state that size of the Islamic bank is smaller as compared to conventional banks. So, it becomes concern of 'too small to have the economics of scale and scope'. Islamic banks are expected to achieve both economies of scale and scope if M&A activities could be implemented.

Table 2 Summary of studies associated with the impact of cross border M&A on performance of institutions

Author(s)	Sample of study	Variables	Methodology	Findings
Cortés, Agudelo&Mongrut, S. (2017)	Latin America 1995-2010	Country specific variables: interest rate, unemployment rate, GDP, country risk, business freedom index, fiscal freedom index, Industry specific variables: ROE, Market to book value (MBV), standard deviation of the market to book value	Methodology of Harford (2005)	Two M&A waves have found, first between 1995 and 2002, second wave between 2003 and 2010.
Gattoufi, Al- Muharrami & Shamas, G. (2014)	GCC countries, Banks 2003-3007	ROE, capitalization ratios, net financial margin (NFM), loan loss provision to total assets,, loan loss provision to net interest revenue, cost to income ratio.	Average of market, merged without merged	No significant impact on operational performance.
Nagano (2013)	Asia and OCENIA	R&D, GDP, Populatiion, corporate tax, bilateral trade corporate tax	Regresion analysis	 Investor choose green field investment ifthe intellectual property right of host country is higher and have regional network. Investor choose cross boarder M&A if there is protection of shareholder value and extentionof market.
Neto, Brandão & Cerqueira, A. (2010)	53 Countries, FDI (Greenfield investment), 1996-2006.	Mode-encompassing variables (such as economy's size, openness, governance and human development index) and mode-specific variables.	Panel (fixed and random effect)	Investor's protection and cultural variables seem to play an important role in the explanation of M&A and Greenfields.
Zou & Simpson	China, Industry,	Industry size, profitability.	Panel study	Deregulation, as a specific industry shock,

Author(s)	Sample of study	Variables	Methodology	Findings
(2008)	1991-2005	technological intensity		affects acquisition activities significantly.
Amihud, DeLong & Saunders (2002)	General, Banks, 1985 - 1998	Total risk (variance of firms stock return)	Panel techniques	Acquirers' risk neither increases nor decreases.
Focarelli&Pozzellolo (2001)	OECD countries, 2500 banks, 1990 - 1990	ROA, ROE, total asset net income	Regression analysis	Size of the banks is the key determinant of the decision to expand business abroad.

According to Iqbal (2008), incentives are necessarily to increase size through consolidation in order to lower the cost of funding and increase the value of shares. It is important to distinguish how M&A activities work in Islamic finance industry. Iqbal (2008) also claim that there are two matters that should be considered in M&A within Islamic financial institutions. Firstly, there should benefits arising out of economies of scope and scale. Secondly, it is expected that risk management and risk sharing strategy are enhanced diversification. A well-diversified bank has better expected return-risk trade-offs resulting in lower variability of profits and higher security for depositors. These are supported by study of Ibrahim & Rizvi (2017) who find that larger Islamic banks are more stable, at least when they surpass a certain threshold size.

Kandil&Chowdhury (2014) argue that many acquisitions are not failure from an ex post perspective and suggest that an acquirer may sell a business it has improved or a business that it once had synergies with but no longer does. M&A in Islamic banking sector could achieve efficiency which arise through economies of scale or scope. This could happens when there is changes in the market structure which in turn affects the Islamic banks' profits.

In Malaysia specifically, the Central Bank of Malaysia promotes domestic banking institutions to merge (Sufian&Habibullah, 2009). Efficient bank is assumed to be well organized and has a more capability in their banking management. Through M&A, the efficient bank will lead to a transfer of the better management quality to the inefficient bank. This will in turn boost the performance of the merged banks.

Table 3 provides a summary of literature on M&A in Islamic banking sector.

Table 3 Summary of studies of associated with M&A in Islamic banking sector

Author(s)	Sample of study	Variables	Methodology	Findings
Ibrahim, M. H., &Rizvi, S. A. R. (2017)	Bangladesh, Egypt, Indonesia, Jordan, Malaysia, Pakistan, Tunisia, Turkey along with GCC countries, Banks, 1993 to 2004.	Z-score (measure of stability), bank size (total bank asset), regulations, Control variable lending activity, bank profitability, bank liquidity, economic growth, and inflation.	GMM, cross country (dynamic panel)	Larger Islamic banks are more stable, at least when they surpass a certain threshold size. Benefits of having bigger Islamic banks or mega Islamic banks. Improving the regulations.
Kandil, T., & Chowdhury, D (2014)	UK, Islamic Banks, 1999 to 2009	ROA, ROI, bank size (bank's revenue), Financial leverage.	Regression model	The result indicates that there is a statistically significant differences in the performances of Islamic banking sector between pre-post M&A.
Iqbal, Z. (2008)	General, Islamic Financial Institutions (IFIs)	General discussion.	General discussion on IFIs.	It is essential that IFIs expand the scope of their products and services to meetthe challenges of domestic and international markets. Due to small size of the economy, larger banks unable to efficiently use resources and minimize

5.0 Factors Associated with M&A Activity

The decision to embark in M&A depends on several reasons. There are some influential factors that could either directly or indirectly effect the M&A deal. Factors that are associated with the M&A activity reviewed as follows.

Roberts et al. (2003) mentions that the reasons of why one financial institution merged with another institution are due to the rationale and the drivers. Rational indicates strategic implementation whereas, drivers indicates control of the capacity from the economy.

Besides, Barros & Caporale (2012) argue that size also creates further pressure on managers owing to the difficulty of managing large institutions. It is said that mergers are not always beneficial as they might make firms more aggressive when they compete in quantities. This is supported by Pinter (2011) who mentions that this is due to the fact that many of the cost of operation do not increase proportionally with the size of the company.

According to Wadhwa & Syamala (2015), the main motivation behind M&A is to have synergy but inconsistence result has found by the previous studies. As far as motivational factors as concern, many attempts have been made by previous studies to explain the motives of an institution to involve in M&A. An institution involves in M&A with several intentions; to expand into new markets of both national and international, 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; Cigola & Modesti, 2008; Pasiouras & Zopounidis, 2008; Guo& Yang, 2013; Antoniadis.et al.,2014).

Besides,Sufian (2011) mentions that M&A occurs to achieve economies of scope rather than economies of scale.Furthermore, Linder & Crane (1993) assess the impact of mergers which focusing primarily on operating income and its three components³. They find that bank can easily gain the economies of scope and economic of scale by holding cash (i.e., cash & other deposit to other bank) and security (i.e., security held for liquidity). This supports the view that merger programme was driven by economic reasons (Sufian & Habibullah, 2009).

In addition, Pinter (2011) highlight 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 improvement of the shareholder value, efficiency enhancement and the boost of operating synergies and managerial motives. They categorised the factors into three broad types; shareholders wealth maximization goals, managerial self-interest and other factors which contribute to the conducive environment for M&A. The study supported by Focarelli&Pozzolo (2001) which states that acquisitions are made for the purpose of

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³ i.e., Operating Income = (Net Interest Income + Noninterest Income) – (Noninterest Expense).

improving the quality of portfolio of acquired banks by having larger bank size.

Table 4 reviews the literature on the factor associated with M&A.

6.0 Conclusion

This paper is a humble attempt to review the literature on mergers and acquisitions, especially in banking sector. The inner objective of the authors is to provide a better picture on the impact of M&A towards both conventional and Islamic banking performance as well as the factors associated with this activity. The observation of the previous studies concluded that M&A effect the conventional and Islamic banks in several different ways. This could be explained by different approaches in handling M&A (i.e., domestic or cross border) and various factors contributing to the decision of conducting the M&A activity. In addition, this study endeavours research on M&A in Islamic banking sector as there is little theoritical research on this timely topic. In the next step, a systematic effort on conceptual analysis as well as data collections on M&A in Islamic banking needs to be in place in order to efficiently analyse the its performance, factors and issues.

Table 4 Summary of studies associated with factors contribute to M&A activity

Author(s)	Sample of study	Variables	Methodology	Findings
Wadhwa & Syamala (2015)	India, firms	Profitability (ROA, ROE), efficienct (sales/TA) and size (asset and sales)	Regression analysis	Profitability and efficiency are important factors in M&A.
Antoniadis et al. (2014)	UK, banks, 2010	Abnormal rae of return (ARR)- total deposit, otalassrt, total equity, deposit, loan, net operating income, employees, branches	Event study methodology	The formation of larger banks through M&As are supported by other aspects concerning liquidity and organisational issues.
Smirnova (2014)	Banks, Kazakistan , 1991-2011	Theoritical discussion	N/A	M&A is depend on motives; external motives and internal motives.
Guo& Yang (2013)	Taiwan, banks ,	Economic state (stock price index), expended intention (growth of branches), capital adequacy, asset quality and performance.	Regression analysis	Banks with higher profitability and lower undue loan ratio have small tendency to involve in M&A. Whereas, banks with lower profit and poor loan quality have more tendency to engage with foreign bank.
Barros &Caporale (2012)	Nigeria, bank, 2000- 2010	Price of capital, price of deposit, operational cost, customer loan and size	Dynamic panel model	Larger size of bank increases cost efficiency and vise- varsa.
Pinter, E (2011)	Banking and insurance companies	General discussion	N/A	The success of M&A depends on the people, organisation, culture and financial assets.
Sufian, F., & Habibullah, M. S (2009)	Malaysia, Bank, (technical efficiency), 1997-2003	Total Deposits, Capital, Personnel Expenses, Loans, Investments, Non-Interest Income.	DEA	The merger programme among the Malaysian domestic commercial banks was driven by economic reasons.

Author(s)	Sample of study	Variables	Methodology	Findings
Wadhwa & Syamala (2015)	India, firms	Profitability (ROA, ROE), efficienct (sales/TA) and size (asset and sales)	Regression analysis	Profitability and efficiency are important factors in M&A.
Cigola & Modesti (2008)	Firms	Exchange ratios	Stockhastic model	There is expected gain within the time horizon of both former firm and combined.
Pasiouras & Zopounidis (2008)	Greek banking industry, 1998-2002	Cost efficiency and liquidity ratios.	Regession analysis	Bank size is negatively related to the acquisition deal.
Roberts et al. (2003)	N/A	Theoretical discussion	N/A	Rationale and the drivers are the factors for M&A.
Focarelli & Pozzolo (2001)	OECD countries, Banks, cross boarder M&A	GDP, bank credit, population, inflation, regulations	Regression analysis.	Size of the bank is the important factor for cross boarder M&A.
Linder & Crane (1993)	Bank, New England, 1982-1987	ROA, operating income,	Matched pair approach	Bank can easily gain the economies of scope and economic of scale by holding cash (i.e., cash & other deposit to other bank) and security (i.e., security held for liquidity).

Referances

- Abbas, Q., Hunjra, A. I., Azam, R. I., Ijaz, M. S., & Zahid, M. (2014). Financial performance of banks in Pakistan after Merger and Acquisition. *Journal of Global Entrepreneurship Research*, 4(1), 13.
- Al-Sharkas, A. A., Hassan, M. K., & Lawrence, S. (2008). The impact of mergers and acquisitions on the efficiency of the US banking industry: Further evidence. *Journal of Business Finance & Accounting*, 35(1-2), 50-70
- Altunbaş, Y., & Marqués, D. (2008). Mergers and acquisitions and bank performance in Europe: The role of strategic similarities. *Journal of Economics and Business*, 60(3), 204-222.
- Amihud, Y., DeLong, G. L., & Saunders, A. (2002). The effects of cross-border bank mergers on bank risk and value. *Journal of International Money and Finance*, 21(6), 857-877.
- Antoniadis, I., Alexandridis, A., & Sariannidis, N. (2014). Mergers and acquisitions in the Greek banking sector: An event study of a proposal. *Procedia Economics and Finance*, *14*, 13-22.
- Askari, H., Iqbal, Z., & Mirakhor, A. (2011). *New Issues in Islamic Finance and Economics: Progress and Challenges*(Vol. 753). John Wiley & Sons.
- Barros, C. P., & Caporale, G. M. (2012).Banking consolidation in Nigeria, 2000–2010. *Journal of African Business*, 13(3), 244-252.
- Cigola, M., & Modesti, P. (2008). A note on mergers and acquisitions, Managerial Finance, 34 (4), 221-238.
- Cortés et al. (2017). Waves and determinants in mergers and acquisitions: The case of Latin America. *Emerging Markets Finance and Trade*, 53(7), 1667-1690.
- Cybo-Ottone, A., & Murgia, M. (2000). Mergers and shareholder wealth in European banking. *Journal of Banking & Finance*, 24(6), 831-859.
- Daniya et al. (2016). Impact of Merger and Acquisitions on the Financial Performance of Deposit Money Banks in Nigeria. *Arabian Journal of Business and Management Review*, 6(4), 1-5.
- Das, P., &Rao, S. P. (2011). Value Premiums and the January Effect: International Evidence. DeYoung, R. (1997). Bank mergers, X-efficiency, and the market for corporate control. *Managerial finance*, 23(1), 32-47
- Focarelli, D., &Pozzolo, A. F. (2001). The patterns of cross-border bank mergers and shareholdings in OECD countries. *Journal of banking & Finance*, 25(12), 2305-2337.
- Gattoufi, S., Al-Muharrami, S., &Shamas, G. (2014). Assessment of mergers and acquisitions in GCC banking. *International Journal of Accounting and Finance*, 4(4), 358-377.
- Goyal, K. A., & Joshi, V. (2011). Mergers in Banking Industry of India: Some Emerging Issues. *Asian Journal of Business and Management Sciences*, 1(2), 157-165.
- Guo, W. C., & Yang, C. C. (2013). Are bank mergers procyclical or countercyclical? Theory and evidence from Taiwan. *Applied Financial Economics*, 23(1), 1-14.
- Ibrahim, M. H., &Rizvi, S. A. R. (2017). Do we need bigger Islamic banks? An assessment of bank stability. *Journal of Multinational Financial Management*, 40, 77-91.

- Iqbal, Z. (2008). The Impact of Consolidation on Islamic Financial Services Industry. *Islamic Economic Studies*, 15(2), 80.
- Kandil, T., &Chowdhury, D. (2014). Islamic Banks' Mergers and Acquisitions—Impacts on Performance and Financial Crisis in the United Kingdom. In *The Developing Role of Islamic Banking and Finance: From Local to Global Perspectives* (pp. 119-140). Emerald Group Publishing Limited.
- Kiel, G., & Nicholson, G. (2003). Board Composition and Corporate Performance: How the Australian Experience Informs Contrasting Theories of Corporate Governance. *Corporate Governance: An International Review*, 11(3), 189–205.
- Linder, J. C., & Crane, D. B. (1993). Bank mergers: integration and profitability. *Journal of Financial Services Research*, 7(1), 35-55.
- Liner, E. (2016). What's Behind the All-Time High in M&A? Thirdway report.Retrieved on November, 2017. http://www.thirdway.org/
- Massoudi, A. &Fontanella-Khan, J. (2016, December 30). M&A boom set to continue in 2017. *Financial Times*, Retrieved from https://www.ft.com
- Mitchell, M. and Mulherin, H. (1996) The impact of industry shocks on takeover and restructuring activity, Journal of Financial Economics, 41, 193–229.
- Morris, T. (2004), Bank mergers under a changing regulatory environment. In *Sociological Forum* (Vol. 19, No. 3, pp. 435-463). Kluwer Academic Publishers-Plenum Publishers.
- Nagano, M. (2013). Similarities and differences among cross-border M&A and Greenfield FDI determinants: Evidence from Asia and Oceania. *Emerging Markets Review*, 16, 100-118.
- Nair, A., Trendowski, J., & Judge, W. (2008). [Review of the book *The Theory of the Growth of the Firm*, by Edith T. Penrose. Oxford: Blackwell].
- Neto, P., Brandão, A., & Cerqueira, A. (2010). The macroeconomic determinants of cross-border mergers and acquisitions and Greenfield investments. *IUP Journal of Business Strategy*, 7(1/2), 21.
- Okpanachi, J. (2011). Comparative analysis of the impact of mergers and acquisitions on financial efficiency of banks in Nigeria. *Journal of Accounting and Taxation*, 3(1), 1
- Pasiouras, F., &Zopounidis, C. (2008). Consolidation in the Greek banking industry: which banks are acquired? Managerial Finance, 34 (3), 198-213.
- Petmezas, D. (2009). What drives acquisitions?: Market valuations and bidder performance. *Journal of Multinational Financial Management*, 19(1), 54-74.
- Piloff, S. J., &Santomero, A. M. (1998). The value effects of bank mergers and acquisitions. In *Bank Mergers & Acquisitions* (pp. 59-78). Springer US.
- Pinter, E. (2011). Merger and Acquisition in the Financial Services Industry. *International Journal of Social Sciences and Human Studies.ISSN*, 1309-8063.
- Polemis, M. L., &Paleologos, J. M. (2014). Too big to merge? Evidence from the US banking sector. *Applied Economics Letters*, 21(11), 782-785.
- Rao-Nicholson, R., Salaber, J., & Cao, T. H. (2016).Long-term performance of mergers and acquisitions in ASEAN countries. *Research in International Business and Finance*, *36*, 373-387.
- Roberts et al. (2003). Mergers and Acquisitions. Pearson Education.

- Shleifer, A. and Vishny, R. (2003) Stock market driven acquisitions, Journal of Financial Economics, 70, 295–489.
- Smirnova, Y. (2014). Motives for mergers and acquisitions in the banking sector of Kazakhstan. *Economes questions, issues and problems*, 79-98.
- Sufian et al. (2012). Assessing the effect of mergers and acquisitions on revenue efficiency: Evidence from Malaysian banking sector. *Vision*, *16*(1), 1-11.
- Sufian, F. (2011). Benchmarking the efficiency of the Korean banking sector: a DEA approach. *Benchmarking: An International Journal*, 18(1), 107-127.
- Sufian, F., & Habibullah, M. S. (2009). Do mergers and acquisitions leads to a higher technical and scale efficiency? Counter evidence from Malaysia. *African Journal of Business Management*, 3(8), 340.
- Sufian, F., & Habibullah, M. S. (2014). The impact of forced mergers and acquisitions on banks' total factor productivity: empirical evidence from Malaysia. *Journal of the Asia Pacific Economy*, 19(1), 151-185
- Wadhwa, K., &Syamala, S. R. (2015). An Empirical Examination of Efficiency Theory of Mergers in Emerging Market India. *Theoretical Economics Letters*, 5(06), 757
- Weitzel, U., & McCarthy, K. J. (2011). Theory and evidence on mergers and acquisitions by small and medium enterprises. *International Journal of Entrepreneurship and Innovation Management*, 14(2-3), 248-275.
- Zou, H., & Simpson, P. (2008). Cross-border mergers and acquisitions in China: An industry panel study, 1991–2005. *Asia Pacific Business Review*, 14(4), 491-512.