

The Role and Impact of Merger & Acquisition of Banking Sector in Pakistan

Kishwar Ali

School of Finance, Zhongnan University of Economics & Law, Wuhan, China

Atta Ullah

School of management, Huazhong University of Science and Technology, Wuhan China

Abstract

The paper summarizes the arguments and counterarguments in the scientific discussion on determining the effects of mergers and acquisitions for banking institutions. The purpose of this article is to conduct an empirical study to identify the nature of the impact of mergers and acquisitions on Pakistan's financial sector performance. The research in the article is carried out in the following logical sequence: a thorough literature review on the analysis of key aspects of mergers and acquisitions and their impact on the financial and economic performance of banks before and after their practical implementation; the historical basis of the experience of mergers and acquisitions caused by various economic factors, such as: GDP growth, interest rates on loans, monetary policy; financial analysis of bank profitability, solvency and liquidity indicators before and after the merger and acquisition was conducted. Five commercial banks of Pakistan that were involved in the merger and acquisition processes were selected as the subject of study. The study period is presented before and after the merger and includes two years before the acquisition report and two years after the acquisition announcement by analysis of financial ratios of liquidity, solvency and profitability. The results of empirical and theoretical research have shown that there is a positive relationship between merger and acquisition processes and liquidity ratios of banking institutions; and - the negative impact of such processes on banks' profitability and solvency in the short term. The author states that the main limitation of the study is the unavailability of financial data until 2006 and the use of a small sample size and a low likelihood of data collection technique, which is limited by a certain type of people and lack of generalization.

Keywords: merger, acquisition, bank, solvency risk, liquidity, profitability.

JEL Classification: G21, G34.

Cite as: Kishwar, A., Ullah, A. (2019). The Role and Impact of Merger & Acquisition of Banking Sector in Pakistan). *Financial Markets, Institutions and Risks*, 3(3), 113-121. © The Authors, 2019. This article is published with open access at Sumy State University.

1 Introduction

Mergers and Acquisitions are the most useful business technique used by different businesses to increase profitability, efficiency and business expansions, however the financial market and economic environment of a country play a pivotal role for the development of a fruitful M&A. In this context for the last three decades businesses have been intensively using these techniques as strategic tool for the restructuring of the corporate sector. At the beginning these trends were limited to US & UK nevertheless the same pattern has also been adopted by the developing countries. The increase of the trend can be judge from the reality that in US only the previous decade of twentieth century witnessed a threefold enhance in the number of mergers and acquisitions where as a fivefold increase has been reported in terms of value (Coopland et al, 2005) the number and value of the merger transaction in UK was 2532 million Pounds which rose to 32600 Million pounds in 1995(Arnold 1998).The said statements exhibit the increase intention for research in the field of M&A and their consequences as the significance of the issue further increase in case of the financial sector merger as a development of financial sector plays an important role in the development of an economic growth.

Similarly, Pakistan's financial industry is also benefiting, in same way, from M&A since independence. Pakistan banking industry was the most inefficient sector of the economy, with the passage of time financial sector growth and the deregulation changed such sector from government regulated industry in to a highly profitable and competitive industry. However, such phenomena are consistent with different studies i.e. financial development is correlated with economic growth Gold Smith, R.W (1969), Abama R.C et al (2003) Khan and Senhadji (2003).

Pakistan banking industry is in the crisscross of M&A for the last many years because of certain regulatory reasons as this statement is consistent with a SBP circular issued in October 2005 regarding the implementation of Basel II that all banks are required to maintain their capital gradually to the extent of 23 billion at the end of 2013, however this level has been decreased to 10 billion which was also difficult for the banks to raise capital through equity or reinvestment of the profit but the only choice is to merger themselves in order to bring the capital toward the required level, in fact this statement is consistent with the study of Haford, Jassed (2004) that shocks, that may be regulatory and technologically causes industry merger waves. In order to comply regulator instructions and get economy of scale and scope as well as achieve global synergies especially in the financial sector, world's leading banks i.e. RBS, HSBC, ABN Amro, SCB and Barclays have all gone for either mergers or acquisitions (M&A) that resulted in gaining strategic advantage for the underlying banks. The same is also true for Pakistan where numbers of banks either opted for merger or acquisition aimed at gaining strategic competitiveness in the market e.g Faysal Bank, NIB, ABL, Union Bank, KASB and RBS etc.

In relation to the ongoing M&A across the world and in Pakistan in particular this work aims to investigate empirically whether M&A is beneficial for financial industry in Pakistan or not. This work is organized by providing literature review in the first section followed by research methodology, analysis and discussion and conclusion is provided in the last section coupled with bibliography and references.

2. Literature Review

Extensive empirical research work has been carried out to determine the financial performance of banks post and pre-merger /acquisition performance in the context of Pakistan's banking industry. It is well evident from the work of Shakoor et al, (2014) who carried out empirical investigation using financial ratios to determine whether financial performance of banks increased as a result of merger and acquisition. Their findings revealed that M&A had a negative influence on the financial performance of the banks operating in Pakistan. The research findings are also consistent with the findings of Kemal (2011) who, by investigating financial performance of RBS both in the post and pre-M&A scenarios, argue that M&A has proved to have negative impact on the financial performance of Banks in Pakistan based on the financial ratio's evaluation. Another study conducted by Afza and Yousuf (2012) also empirically found consistent results in the context of Pakistan's banking industry however their findings revealed that as a result of M&A banks achieved higher level of cost efficiency.

According to Altunbaş, Y., & Marqués, D. (2008) they examined that Average, bank has performed. We also look at domestic issues, which can be very costly to separate institutions from their debt, income, value, collection and size strategy. In order to integrate the cross border, differences between their debt and credit risk dynamic partners are performing highly, while their investment and pricing structure has a negative impact on the Banking sector.

Burki & Ahmad (2008) talked about the effect of changes in governance of banks on the performance of commercial banks in Pakistan's banking area from 1991 to 2005. The conclusion of this paper recommends that, in general, monetary reforms enhance banking sector performance. The winners from the governance trade are the privatized banks and non-public banks selected for M&A, whose post-governance-change competence have enabled them to take advantage of new earnings making possibilities .

Sufian, fadzlan (2004) suggest that the merger programme was successful, mostly for the small and medium size banks in Malaysia, which have benefited the most from the merger and development via economies of scale. On the other hand, our results advise that the better banks should shrink in size to profit from scale advantages. Decision-makers hence ought to be more cautious in promoting mergers as a means to enjoying efficiency gains.

Fixler & Zieschang (1993) illustrate the determinants of cost efficiencies of banks mergers. For this purpose, the methodology is used to estimate pre and post merger cost efficiencies of 348 mergers. From this article it is proved that the cost efficiency improves in most of the banks mergers but the gains were smaller. Efficiency improved only when both the partners of the merger were cost inefficient and it also suggest that the cost savings is depend more on the opportunities facing management than the management quality.

In the US, most studies show that the stock market reacts to the M&A Announcements were positive for target shares target 15 days ago after announcement date (Hunan and Volcan, 1989, Canteen and D, 1991). In

addition, overall average unusual returns remain after the date of declaration It is positive for a period of 15 days after the announcement date. In the same period some negative unusual return events, primarily Positive extraordinary return system systematic appearance. Inside Another case, positive exceptional return is mentioned only four days ago only Announcement (Houston and Ryngaert, 1994).

Before proceeding further, it is highly crucial to have an insight of historical background of M&A.

Historical Background

According to Economy Watch (July 16, 2010) the history of M&A is realized from the past experience of mergers and acquisitions which are caused by different economic factors, typically the macroeconomic environment which consist of GDP growth, interest rates,& monetary policy show a pivotal role in implementing the mergers and acquisitions among companies and organizations, such perception of M&A consist of five waves. The first wave of mergers happened among those companies who were enjoying monopoly in 1897 to 1904 in the area of production like rail road's and electricity in such scenario mostly the mergers were horizontal in nature and took place among heavy manufacturing industries. The first phase was come to an end due to the failure of not achieving the versioned efficiency, sluggish growth of the economy in 1903 and the passing of supreme court mandate by stopping the anticompetitive mergers by using Sherman Act.

The second wave of merger were mainly horizontal or conglomerate in nature Under this phase mostly the merged companies were the producers of primary metals, food products, petroleum products, transportation equipment and chemical however the investment banks played a crucial role in expediting the M&As, nevertheless such phase came to end due to the stock market crash in 1929 and the great depression.

The third wave of merger were mainly conglomerate mergers took place in 1965-69, such mergers were stimulated by high stock prices, Interest rates and strict enforcement of anti-trust law similarly such

Mergers were financed through equity rather than investment bank. This phase was come to end with plan of Attorney general to split conglomerate in 1968 due to the poor performance of the corporation.

The forth wave of mergers stated from 1981 and ended by 1989,was categorized by acquisition targets that wren much larger in size as compared to third phase in fact mergers took place among Oil & Gas industries, Pharmaceuticals, Banking and Airlines industries in such phase foreign hostile takeover were common practice. In fact such phase was ended due to anti-takeover laws, Financial institution Reforms and Gulf war.

The fifth phase started from 1992 and last up to 2000 stimulated by globalization, stock market boom and deregulation, similarly the fifth tendency of merger took place mainly in the banking and Telecommunications industries they were mostly equity base financed rather than debt financed in fact the mergers were motivated by long term rather than short term profit motives. However, the fifth wave of mergers was come to an end with the burst in the stock market bubble.

In view of the above literature, this study aims to broaden the scope of financial ratios variables as well as the research sample period i.e. the pre and post M&A periods to determine whether M&A influence the financial performance of banks in Pakistan.

3 Methodology

In order to determine empirically whether Pakistan's banking sector benefited from merger and acquisition the following hypothesis will be tested empirically through various financial ratios

Hypothesis

Null hypothesis: On the basis of financial ratios analysis financial performances of the banks have not been improved (post-M&A financial performance).

Alternative hypothesis: Financial performances of the merged banks have been improved after M&A.

Data Collection

A none probability sampling technique (purposive sampling) has been used by getting a sample of five commercial banks i.e. Faysal Bank Ltd (FBL), Standard Chartered Bank Ltd (SCBL), Summit Bank Limited

(SBL), NIB Bank Limited (NIB) and Askari Bank limited (ASBL) extracted from 2004 to 2012 from the entire population of mergers and acquisitions in Pakistan, however the said total population of M&A is eighteen.

Similarly such data of mergers and acquisitions have been taken from the website of Competitive commission of Pakistan, while the financial ratios have been obtained from the underline banks annual reports.

Reasons for M&A of The Said Sample Banks:

In-fact there are solid explanations for the underlined banks which either opted for merger or Acquisition in Pakistan. According to assignment directory (Monday, 11 Feb, 2013) stated two reasons for acquiring RBS by FBL, Firstly Faysal bank was interested to increase its market share and the second was to developed themselves as the provider of premiere banking products and also the motivation of becoming the 10th biggest bank of the country.

Likewise, RBS shaky financial condition and the subsequent downfall of the bank led to the decision of the management at RBS to end their operations in Asia by withdrawing their business in Retail and commercial sector.

However, in the case of Union Bank and Standard Chartered Bank, AAJ news, Sale of Union bank to SCB in process. (May, 17 2006) specified that major difference emerged between Saudi owners and the management on the expenditure in the context of Union Bank and the freezing of Foreign Currency accounts in 1998 compelled a number of foreign banks operating in the country sold out their banking licenses and network to either local business concern or to another foreign entity.

According to Pakistan & Gulf economist, (Aug, 23-29, 2010) and tezimandi.com indicated that the major reasons of M&A in banking sector is endeavour to minimum paid up capital requirement demanded by State Bank Of Pakistan, however some experts opposing the creation of Giants after the recent financial crises in United States which subsequently engulfed the entire world.

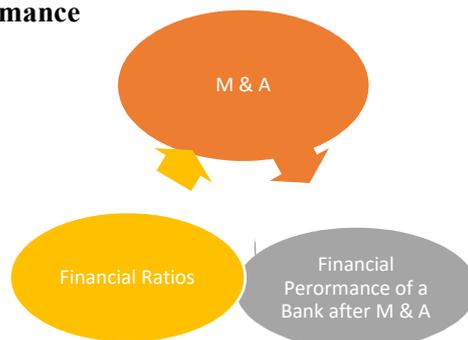
Likewise, the above statements are the main details of the M&A cases regarding Summit Bank, Askari Bank and NIB Bank in Pakistan.

Variables:

This study takes three independent variables i.e. Profitability, Liquidity and solvency and their measures to analysis the impact of M&A on the financial performance of a bank in Pakistan. Similarly, a conceptual diagram has been developed to exhibit the impact of M&A on the bank financial performance.

1.5 Conceptual Model:

IV. DV/ Financial Performance



Where IV stands for independent variable and DV for dependent variable.

4 Financial Ratios:

No doubt financial ratios are the most use full tools for financial analysis and checking of organization financial health, however such ratios can be easily computed form the financial statements of an organization, similarly these ratios convert financial statements in to a comprehensible manner that a common man can understand it easily. In fact, this study undertakes three financial ratios and their measure i.e. computed from the financial statements of the sample banks.

Liquidity ratio: Measures,

- a. Deposit to total assets (DTA) = Total liability/Total assets
- b. Advances to deposit ratio (ADR) = Average net loans/Average deposits
- c. Cash to assets ratio (CTA) = Marketable securities + cash/Current liabilities

Profitability ratio: Measures:

- a. Return on assets (ROA) = Net income/Average total asset
- b. Return on Equity (ROE) = Net income/Share holder equity
- c. Net profit Margin (NPM) = Net profit/Revenue
- d. Gross Profit Margin (GPM) = Gross Margin/Net Sales

Solvency ratio: Measures:

- a. Debt to equity ratio (D/E) = Total liability/Total equity
- b. Interest coverage Ratio (I/R) = Earning before Int & tax/Interest expenses

Liquidity Ratio

For a bank this is the cash held by the bank as a proportion of deposits in the bank. The liquidity ratio measures the extent to which a corporation or other entity can quickly liquidate assets and cover short-term liabilities, and therefore is of interest to short-term creditors. Also called cash asset ratio or cash ratio .

Profitability Ratio

Is a measure of profitability, which is a way to measure a company's performance Profitability is simply the capacity to make a profit, and a profit is what is left over from income earned after you have deducted all costs and expenses related to earning the income .

Solvency Ratio

The solvency ratio shows that whether a company's cash flow is enough to gather its short-term and long-term liabilities. The lower a company's solvency ratio, the greater the probability that it will default on its debt obligation.

Analysis and Discussion

Table 1. Liquidity ratio analysis

PRE M&A	2009	68.29	79.68	4.94
	2010	73.06	77.42	8.66
POST M&A	2011	73.36	77.11	7.91
	2012	76.89	79.29	8.21
PRE	2004	80.85	67.31	7.83
	2005	74.91	60.03	8.11
POST	2007	69.33	73.99	10.93
	2008	65.96	78.90	9.07
PRE	2009	82.01	67.31	6.94
	2010	85.28	72.28	6.13
POST	2011	75.18	76.26	6.33
	2012	72.09	67.08	8.72
PRE	2008	81.32	83.39	9.69
	2009	80.96	71.70	10.91
POST	2011	84.77	57.42	9.42
	2012	86.90	53.06	9.43
PRE	2006	65.84	104.32	9.24
	2007	66.05	79.36	6.63
POST	2008	58.46	93.05	5.67
	2009	45.13	106.47	6.01

Source: completed by author.

Looking the financial ratios of the underlying five banks (Table 1) in the pre-merger stage, we find that greater portion of Summit Bank financing is being done through debt-based financing which reached to an unsustainable level of 85.28 percent in the year of 2010 followed closely by Standard Chartered Bank (80.85) and Askari Bank (80.96) in 2004 and 2009 respectively. Contrary to the mentioned banks, DTA ratios of NIB (66.05) and Faysal Bank (68.29) in the pre-merger state is more sustainable comparatively although yet greater portion of the two is being financed through debt-based financing. As standard rules of measures DTA ratio of 1 or close to 1 is being perceived as excessively risky as companies often find it difficult to pay off cost of capital at regular intervals. However, in the post-merger scenarios DTA ratios of NIB, Standard Chartered and Summit Bank dropped down to 45.13 percent 65.96 percent and 72.09 respectively; while DTA ratios of Faysal and Askari Bank moved in upward directions (76.89 and 86.90). It has been revealed that NIB had benefited the most from the underlying M&A by successfully lowering its financing risk by lowering DTA ratio to a more sustainable level of 45.13 percent.

ADR, a measure for liquidity, of Faysal Bank, Standard Chartered and Summit Bank remain almost the same both pre and post-merger periods hovering between 70 to 80 percent which indicate that higher

Lending is being concentrated by the underlying organizations compared to their ability if withdrawal is made at consistent level. Hence, the liquidity position of the underlying organizations can be at stake. Similarly, NIB pursues an excessive liquidity risk by lending beyond its prudent limit as is evident by its ADR ratio of 104.32 and 106.47 in pre and post-merger periods respectively. Askari Bank limited, however, has considerably raised its liquidity to a more prudent level of 53.06 compared to its pre-merger position of 71.70 which shows the management efficiency to gear up financial resources under calculated risk measures. Similarly, cash to assets ratios of four banks, excluding Askari Bank, are almost similar both in the pre and post-merger periods which shows that the underlying banks have enough liquid cash to pay off their current liabilities hence posing no financial risk. However, CTA ratios for Askari Bank is either near or more than 10 percent which shows that the bank has excessive liquidity which indicates either slow or no financial growth.

Table 2. Profitability Ratio Analyse

BANKS NAME		PROFITABILITY RATIOS			
FAYSAL BANK LIMITED	ROA	ROE	GPM	NPM	
PRE	2009	0.75	11.18	29.55	7.08
	2010	0.53	8.51	29.38	6.04
POST	2011	0.46	7.43	31.94	4.44
	2012	0.47	7.79	31.12	4.94
STANDERD CHARTERD BANK LIMITED					
PRE	2004	2.80	37.00	59.92	48.00
	2005	3.90	53.00	68.29	52.00
POST	2007	1.10	6.64	71.87	12.39
	2008	0.23	1.42	70.44	2.64
SUMMIT BANK LIMITED					
PRE	2009	-5.41	-50.84	18.11	-58.81
	2010	-5.41	-83.98	13.70	-42.68
POST	2011	-1.01	-21.69	5.58	-12.66
	2012	-2.03	-94.38	1.26	-26.63
ASKARI BANK LIMITED					
PRE	2008	0.20	3.06	42.09	2.10
	2009	0.48	7.85	40.05	4.91
POST	2011	0.49	9.64	30.72	4.97
	2012	0.36	6.70	29.10	3.87
NIB BANK LIMITED					
PRE	2006	0.25	3.00	29.40	11.56
	2007	-0.20	-2.00	28.62	-24.45
POST	2008	-4.18	-26.00	28.95	-169.81
	2009	0.33	2.00	29.55	12.8

Source: completed by author.

Looking the profitability ratios of ROA and ROE in the pre-merger periods it has been revealed that Standard Chartered stood to be the most profitable banks by having ROA and ROE ratios of 3.90 and 53.00 percent respectively. However, in the post-merger periods the ratios dropped down considerably which may be attributable to the underlying cost of M&A as well as may due to minimal market reaction. Faysal Bank also found to be maintaining stable profitability indicators which evident from its ROA and ROE ratios of 0.53 and 8.51 respectively. Similar to Standard Chartered Bank, Faysal Bank also experienced downward trends in the ROA and ROE ratios as result of M&A. This again indicated that cost of M&A may be resulting in negatively influencing the acquiring firm in this case Faysal Bank.

On the other hand, NIB and Summit banks found to be experiencing losses in their final year leading to M&A; while the same is being witnessed in the post-merger periods that can put considerable strains on the sustainability of the underlying financial institutions. Askari Bank, however, showed relatively better profitability indicators compared to NIB and Summit Banks both in the pre and post-merger periods indicating better managerial performance of the mentioned organization that resulted in profitability for NIB.

Other profitability ratios i.e. GPM and NPM show almost similar trend exhibited by ROA and ROE for the sampled banks. GPM ratios for Faysal Bank and Standard Chartered Bank have moved in upward direction in the post-merger periods (31.12 and 70.44) compared to their pre-merger ratios of 29.38 and

68.29 Respectively. This shows that both organizations have adequate income to pay their operating and other expenses. This is further evident by the relatively stronger NPM ratios of 4.94 and 2.64 respectively in the post-merger periods. The NPM ratios for both Faysal Bank and Standard Chartered moved in the downward direction but yet remain stable compared to Summit and NIB Banks which showed negative NPM ratios indicating losses both in pre and post-merger periods. However, Askari Bank remained highly profitable in both pre and post-merger periods exhibiting stronger GPM and NPM ratios. Hence, it can be argued that except Summit and NIP Bank, the rest of the bank proved to be profitable as a result of their underlying M&A transformation.

Table 3. Solvency Ratio Analysis

BANKS NAME		SOLVANCY RATIOS			
FAYSAL BANK LIMITED		D/E	IC		
PRE	2009		14.76	1.97	
	2010		15.10	1.35	
POST	2011		15.36	1.39	
	2012		15.60	1.48	
STANDERD CHARTERD BANK LIMITED					
PRE	2004		6.10	8.43	
	2005		5.08	9.69	
POST	2007		4.90	3.40	
	2008		5.04	1.96	
SUMMIT BANK LIMITED					
PRE	2009		6.82	-2.38	
	2010		9.50	-8.80	
POST	2011		10.54	-1.18	
	2012		12.18	0.09	
ASKARI BANK LIMITED					
PRE	2008		47.60	1.22	
	2009		47.19	1.78	
POST	2011		46.11	1.63	
	2012		41.00	1.46	
NIB BANK LIMITED					
PRE	2006		9.61	1.05	
	2007		6.20	0.64	
POST	2008		4.80	0.46	
	2009		4.00	1.16	

Source: completed by author.

Moreover, debt to equity ratios of the underlying organizations reveals almost similar pattern both in the pre and post-merger periods. Askari Bank found to be highly leveraged by maintaining 47.19 and 41.00 percent in the pre and post-merger periods that represent nearly half of its financing through debt rather than equity.

The rest of the banks maintained sustainable level debt against their equity-based financing that put in highly solvent position. NIB bank found to be having the least (4.00 percent) than the rest of the bank that shows its risk averse strategy. Standard Chartered bank found to be having stronger IC ratios compared to the rest of the banks indicating that Standard Chartered is highly solvent to make debt- servicing liabilities adequately. Summit Bank, however, found to be having negative IC ratios both in pre and post-merger periods indicating greater risk and potential insolvency to pay off its debt expenses; while the rest of the banks maintain desirable level of IC ratios.

5. Conclusions

As it is well evident fact that merger and acquisitions are the most useful technique used by the entities to create synergy, through such synergy and teamwork the institutions or entities are capable to bring efficiency and effectiveness in their work. However the mergers and acquisition deals took place give push to business expansion and move upward the firms resources, likewise the merged and acquired firms management worked confidently that the new merged and acquired firms can prove that the M&A has positively influenced the firms performance. This study concluded that the firm performance cannot take the influence of mergers and acquisitions deals as well. As for as this study analysis is concerned out of three measurement ratios just one ratio remained positive named as liquidity while other two ratios such as profitability and solvency showed negative impact of mergers and acquisitions on firm performance. This study used ratios of two years earlier and two years after mergers and acquisitions deals and found overall negative impact but these results are of short time period. It is analyzed that mergers and acquisitions don't have impact on firm performance in the short time period but it might be possible this deal has impact on the firm performance in the long run .

Beside the above statement it is also thought that the data of M&A falls in the Global financial recession period as the said financial recession started in the end of 2007 and last up to 2011 which badly slapped the financial institutions globally, might having its effect on the underlined M&A banks, however it is suggested that a neutral, recessionary free year like 2014 ought to be taken into consideration for comparison which will exhibit that the negative influence is due to financial recession or not.

6 Limitation of the study

The main limitation of the study is non availability of financial data before 2006 and the use of small sample size and the non probability sampling technique which is confined to specific type of people and lack of generalizibility.

References

1. 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. <https://doi.org/10.1186/s40497-014-0013-4>.
2. 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. <http://www.ecb.int/> or http://ssrn.com/abstract_id=587265
3. Badreldin, A., & Kalhoefer, C. (2009). The Effect of Mergers and Acquisitions on Bank Performance in Egypt *Journal of Management Technology*, 1-15. <https://core.ac.uk/download/pdf/6296902.pdf>
4. Burki, A. A., & Ahmad, S. (2008). Corporate Governance Changes in Pakistan's Banking Sector: Is There a Performance Effect? *Journal of Economics and Business*, 1-39. [doi:10.1016/j.jeconbus.2009.08.002](https://doi.org/10.1016/j.jeconbus.2009.08.002)
5. Houston, J. F and M. D. Ryngaert (1994), "The overall gains from large bank mergers", *Journal of Banking and Finance*, 18, 1155-76. [https://doi.org/10.1016/0378-4266\(94\)00065-4](https://doi.org/10.1016/0378-4266(94)00065-4)
6. Sultan, J., Ali, A., & Saeed, A. (2013). A Comparison of Technical Efficiency of Performance of Different Banks Before and After Merger: A Study of Pakistan Banking Industry. *Journal of Economics and Sustainable Development*, 4(9), 113-126. <http://www.iiste.org/>
7. Kemal, Muhammad Usman. "Post-merger profitability: A case of Royal Bank of Scotland (RBS)." *International Journal of Business and Social Science* 2.5 (2011): 157-162. <https://pdfs.semanticscholar.org/ae57/e8e964dbd0380e10b8ccd26e0cadcbf1b051.pdf>
8. Muhammad Usman Kemal (2011) Post merger profitability: A case study of Royal Bank Of Scotland RBS *International Journal of business and social science* vol no 2 no 5 <https://pdfs.semanticscholar.org/ae57/e8e964dbd0380e10b8ccd26e0cadcbf1b051.pdf>
9. Muhammad Irfan Shakoor (2014) Do mergers & Acquisitions Vaillate the Banks performance (evidence

- from Pakistan Banking Sector) A research Journal of finance and accounting. Vol 5 no 6. <http://www.iiste.org/>
10. Malik, N. I., Ullah, S., Azam, K., & Khan, A. (2009). The impact of recent global financial crisis on the financial institutions in the developing countries: Global perspectives. *International Review of Business Research Papers*, 5(5), 85-95.
 11. Taltat Afza and Muhammad Usman Yusuf (2012) The Impact of Mergers on Efficiency of banks in Pakistan. *Elixir International Journal Available online at (www.elixirpublishers.com (Elixir International Journal))*.
 12. Rhoades, S.A. (1998). The efficiency effects of bank mergers: An overview of case studies of nine mergers. *Journal of Banking and Finance* 22, 273-291. [https://doi.org/10.1016/S0378-4266\(97\)00053-8](https://doi.org/10.1016/S0378-4266(97)00053-8)
 13. Sathye, M. (2001). X-efficiency in Australian banking: An empirical investigation. *Journal of Banking and Finance* 25, 613-630. [https://doi.org/10.1016/S0378-4266\(00\)00156-4](https://doi.org/10.1016/S0378-4266(00)00156-4)
 14. Sufian, F. (2004). The efficiency effects of bank mergers and acquisitions in a developing economy: Evidence from Malaysia. *International Journal of Applied Econometrics and Quantitative Studies*, 1(4), 53-74. <http://www.usc.es/economet/Journals3/ijaeqs/ijaeqs143.pdf>
 15. Shehzad Akhtar (2014) An empirical analysis of pre and post merger or acquisition Impact on financial performance: a case study of Pakistan. www.ea-journals.org
 16. Tezmandi.com, www.tezmandi.com
 17. AAJ News, <https://www.aaj.tv/live/>
 18. Yap, B. C. F., Mohamed, Z., & Chong, K. R. (2014). The effects of the financial crisis on the financial performance of Malaysian companies. *Asian Journal of Finance & Accounting*, 6(1), 236-248. <http://dx.doi.org/10.5296/ajfa.v6i1.5314>
 19. Zehri, C., Abdelbaki, A., & Bouabdellah, N. (2012). Effects of the current financial crisis on Islamic banks compared to conventional banks. *Banks and Bank Systems*, 7(1), 83-93. businessperspectives.org