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Impact of Merger and Acquisition on Financial Performance of Banks: Evidence from Pakistan

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Abstract

The research was conducted to emphasize on the financial performance of the targeted banks i.e Allied bank, NIB bank and Faysal Bank after merger and acquisition. To analyze the performance two tests were performed namely profitability measures (ROA , ROE and EPS) and paired sample t-test. After the conduction it was concluded that both of them showed the mixed results which leaded some of the banks to the positive impact and some of the banks to the negative impact of merger and acquisition. But if we talk about the overall performance in longer run we can say that banks have slightly shown improvement in their financial performance even if the results of the first year of merger were declined but with the passage of time it increased and a continues to improve.

Keywords: Merger, acquisition, financial performance, banks, return on assets, return on equity, earning per share.

Introduction

In today's cut throttle competition, Merger and Acquisition becomes an important consideration for companies to compete in the market, striving to attain maximum market share among the market, enlarging their market portfolios by trimming down the risk, inflowing towards new markets and geographies, maintaining the economies of scale and scope among other companies[1]. Merger is termed as a combination of two or more firms through expression of interest or acquisition, but it is different from consolidation because in this case no new entity is formed. The main rationale behind the merger and acquisition is that companies want to increase shareholders wealth which is above from the separate entities[2], increase economies of scale, revenue, increase market share, taxation, other diversification, geographical and synergy[3]. Merger is the permutation of more than two companies, normally offering the securities to the stockholders of one company, including the acquiring company in exchange or giving up their stocks where both companies and may be one may lose their entity. Merger happens when acquiring company and target company agree to unite themselves under the legal procedures of merger. Acquisition happens when any takeover by one company of share capital of another by replacement of cash, loan stock or ordinary shares[4].

Since 1980, banking development has been an on-going trend all around the world, but now days it becomes more intensified. Banking developments include numerous factors that are distinctive from country to country based on economic, historical and institutional imperatives. In recent times, the entire economy and financial sector of Pakistan has been more focused towards both media and business circles, in conditions of incomparable challenges being faced. In order to get better the future condition of dissimilar sectors which are under financial crises and financial pressure, regulatory measures are being undertaken at both macro and micro economic level[1].For this reason merger and acquisition takes place to improve the financial crises. This merger and acquisition will modify the full structure of financial industry with the intention of decreasing risk and making sector sound and financially stable.

The purpose of the study is to examine the impact of merger and acquisition of banks on their financial performance. Because banking restructuring is an integral part of the country, banking authorities need to focus that whether this merger or acquisition increase the financial health of the entities or not, sound banking system is vital for the economic growth and stability.

The significance of this study is there are limited researches conducted on this area. According to our knowledge very little research conducted on merger and acquisition on banking sector and none of them studied the performance of the banking sector after the merger or acquisition. This study is contextual based study because in Pakistan very little research conducted on this area. This research will help both the academia and practitioners because in academia researcher will further use this study to explore different aspects of merger and acquisition and practitioner will use this study to make better decision making while doing merger and acquisition decision.

Literature Review: The term merger and acquisition is used globally to achieve business growth and continued existence. Merger is the process of combining two firms to make one big firm whereas acquisition is the process of taking over other company for the same motives[5-7]. Merger and acquisition happens with the objective to achieve efficiency through diversification and economies of scale and increase the level of business activities for improved performance[8].

There are number of studies that have been conducted to examine whether merger and acquisition are solutions to bank problems. Carlettiet al[9], Cabral et al[9] and Szapary [10] scrutinized the linkage between banks merger and acquisition and profitability. According to previous literature provided by Caprion[11] and De-Nicolo[12] concluded that merger and acquisition have positive impact on most of the banking efficiency. Whereas, some of the researches provide blended evidence and some of them fail to show the clear relationship between merger and acquisition and bank performance. Furthermore, some supporting evidence of merger and acquisition is very little of achieving efficiency and cost saving[13]. They also found the after merger banking organization will improve their profit efficiency significantly.

Stiroh[14] conducted the study on United States banks and suggested that as a result of merger and acquisition, there may be more considerable scale of efficiency from larger size of banks. But according to Straub[15] merger and acquisition have failed to show the profitability of banking sector. Amazingly, most of the studies evaluating the pre and post merger performances of the company and found that this potential efficiency is rarely materialized in case of merger and acquisition[16]. Some researcher found that they have no gain effect Beitelet al[17], but David and Yener[18] suggested that M and A play a significantly role in developing the financial performance and efficiency. Despite of Straub[15] and Rhoades[19], most of the researcher found that merger and acquisition strongly contributed to the banking sector profits.

Since late 1980, most of the under developing countries implemented financial reforms as a part of broader market oriented economic reforms[20]. Banks activities will imitate their distinctive role as engine of growth in any economy globally. The significance of financial sector of the economy consists of non banks and banks financial intermediaries, ever increasing financial products and the regulatory framework, in motivating economic growth is extensively accepted in developmental economies.

Role of Mergers and Acquisitions on Firms' Performance: In the process of merger and acquisition all the stakeholders have the expectation that after merger and acquisition the firm will perform better and efficient than two firms did separately. The main motive behind the merger and acquisition is that new company gets benefit from the synergies, economies of scale; reduce operating costs which will help to get better the cash flows. These measures have been used by the different authors to investigate that whether these measures influence the firms' performance or not. According toKithituet al.[3], companies that gone through the merger and acquisition process show little improvement in operations post merger/acquisition. According to the survey conducted byHouston and Ryngaert[21]that comparatively new firms had improved the assets turnover and practiced a diminution in capital expenditures in United States of America, the results explained that cost saving was improved by 13% rather than improvement in income.

Hypothesis1: Merger and acquisition have significant relationship with the financial performance of the banks.

Hypothesis2: Merger and acquisition have no relationship with the financial performance of the banks.

Methodology

In this study we examined that, does merger and acquisition affect the financial performance of the banking sector of Pakistan. This study tries to set up relationship between variables, for example, how (before and after) merger and acquisition affect the profitability of the banking sector. To examine this effect we have selected 3 banks that have been merged or acquired during 2005-2011, but we took the data from 2000 to 2012 to examine that to what extent merger and acquisition affect the company's' profitability. Following are the banks that are used in this study:

The secondary data of the above mentioned five banks are taken from the annual audited reports from 2000 to 2012. Financial data is taken from the profit and loss statement, balance sheet and cash flow statements which are used for the calculation and analysis of financial performance through accounting ratios.

Data Analysis: The ratio analysis is used to analyze the financial performance of the banks that are under study. Data analysis is the method of bringing all the information gathered. Accounting ratios and paired sample t-test is applied on target and acquirer firms of pre-acquisition/ merger period, to examine the performance of both firms. Both pre-merger and post-merger data will compare to each other to determine the changes occur due to merger or acquisition. There are three types of accounting ratios that are used to measure the profitability and these are: ROA, ROE and EPS.

Table-1
Selected Banks

S.#	Institution	Merged Into	Acquired By	Name after Merger	Date Approved
1	Ibrahim Leasing Limited (IBRL)	Allied Bank Limited (ABL)		Allied Bank Limited (ABL)	31-05-2005
2	PICIC Commercial Bank Limited (PICB)		NIB Bank Limited (NIB)	NIB Bank Limited	01-01-2008
3	The Royal Bank of Scotland Limited (RBS)	Faysal Bank Limited (FABL)		Faysal Bank Limited (FABL)	03-01-2011

Results and Discussion

Descriptive Statistics Analysis: Data was taken from the financial statement of these banks. In table 2, we have calculated the ROA of Ibrahim Leasing Limited and Allied Bank Limited from 2001 to 2010. Both the banks merged in 2005. So we calculated the return on assets of pre and post merger. Pre-merger results of Ibrahim Leasing Limited had return on assets of 0.074, 0.08, 0.06, 0.05 and 0.06for the year 2001 to 2005 respectively. Whereas, pre-merger return on assets of Allied Bank limited of 0.063, 0.069, 0.05, 0.04 and 0.05 for the year 2001 to 2005 respectively. The average return on assets of both the banks before merger was 0.068, 0.074, 0.055, 0.045 and 0.055 for the period 2001 to 2005 respectively. After the merger we have calculated the post merger return on asset. In first year of merger the return on asset was fall by 50.9%, but in second year and so on it was gradually increased.

In table-3, we have calculated the ROE of Ibrahim Leasing Limited and Allied Bank Limited from 2001 to 2010. So we calculated the return on equity of pre and post merger. Pre-merger results of Ibrahim Leasing Limited had return on equity of 0.10, 0.14, 0.10, 0.04 and 0.05 for the year 2001 to 2005 respectively. Whereas, pre-merger return on equity of Allied Bank limited of 0.03, 0.04, 0.03, 0.06 and 0.09 for the year 2001 to 2005 respectively. The average return on equity of both the banks before merger was 0.065, 0.09, 0.065, 0.05 and 0.07 for the period 2001 to 2005 respectively. After the merger we have calculated the post merger return on equity. In first year of merger the return on equity was increased by 29.1%, but in second year and so on it was gradually increased.

Table-4 explained the earning per share of the two merged banks. From 2001 to 2005 the earning per share of Ibrahim Leasing Limited was 1.16, 1.40, 1.25, 1.19 and 2.1 respectively, whereas the Allied Bank earnings per share were 3.53, 4.52, 5.35, 4.35 and 6.27 from 2001 to 2005 respectively. When these banks were merged the earning per share was increased by 0.52 from first year and then decreased by 0.07 and 0.17 in the next two years after that it was increased.

In table-5 PICIC commercial bank and NIB bank was analyzed. We examined that how much their financial performance affected by the merger and acquisition. The NIB bank acquired the PICIC commercial bank on 2008, so we calculated the return on asset of PICIC commercial bank and NIB bank. Firstly, return on assets of PICIC commercial bank was 0.01, 0.07, -0.04, -0.05 and -0.05 from 2003 to 2007 respectively. Whereas, NIB bank ROA was 0.01, 0.012, 0.04, 0.03 and 0.06 from 2003 to 2007 respectively. With comparison with the averages of both the banks, in first year the return on assets were decreased by 0.10 and then continuously deceased.

Table-2
Allied Bank Limited ROA

Banks	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Ibrahim Leasing Limited (IBRL)	0.074	0.08	0.06	0.05	0.06					
Allied Bank Limited (ABL)	0.063	0.069	0.05	0.04	0.05					
Average	0.068	0.074	0.055	0.045	0.055					
Allied Bank Limited (ABL)						0.028	0.03	0.04	1.35	1.86

Table-3
Allied Bank Limited ROE

Banks	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Ibrahim Leasing Limited (IBRL)	0.10	0.14	0.10	0.04	0.05					
Allied Bank Limited (ABL)	0.03	0.04	0.03	0.06	0.09					
Average	0.065	0.09	0.065	0.05	0.07					
Allied Bank Limited (ABL)						0.24	0.48	0.49	0.60	0.71

Table-4
Allied Bank Limited EPS

Banks	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Ibrahim Leasing Limited (IBRL)	1.16	1.40	1.25	1.19	2.1					
Allied Bank Limited (ABL)	3.53	4.52	5.35	4.35	6.27					
Average	2.34	2.96	3.3	3.36	4.18					
Allied Bank Limited (ABL)						8.16	7.57	6.43	9.11	10.52

In table-6, Return on equity was examined soPICIC commercial bank had 0.184, 0.21, 0.02, 0.04 and 0.03 from 2003 to 2007 respectively. Whereas, NIB bank ROE was 0.08, 0.12, 0.09, 0.07 and 0.03 from 2003 to 2007 respectively. With comparison with the averages of both the banks, in first year the return on equity was decreased and then it was increased for the next two years and till 2012 it was again decreased.

In table-7, earning per share of PICIC commercial bank had 2.23, 2.17, 1.27, 0.12 and 0.08 from 2003 to 2007 respectively. Whereas, NIB bank EPS was 1.32, 1.57, 1.10, 1.15 and 1.21 from 2003 to 2007 respectively. With comparison with the averages of both the banks, EPS was continuously decreased.

In table-8, we calculated the return on assets of Royal bank of Scotland and Faysal Bank Limited from 2006 to 2012 respectively. Both the banks were merged in 2011. Return on asset of Royal Bank of Scotland was 0.003, 0.003, 0.004, 0.006 and 0.009 and Faysal bank ROA was 0.04, 0.02, 0.008, 0.006 and 0.007 from 2006 to 2010 respectively. From the averages of both the bank, we can found that ROA was firstly decreased and after that it was increased.

Return on equity of Royal Bank of Scotland Limited was calculated in table-9, the results calculated were 0.027, 0.028, 0.037, 0.045 and 0.005 and Faysal bank had 1.11, 0.77, 0.21, 0.19 and 0.16 from 2006 to 2010 respectively. Relating with the averages of both the banks, after merger the bank ROE was increased.

In table-10, earning per share was calculated which shows that RBS had 0.07, 0.05, -1.2, -0.05 and -0.02 from 2006 to 2010 whereas Faysal bank EPS was 1.15, 2.11, 4.29, 1.97 and 1.45. The merger of these banks increased the EPS of the bank.

Table-5
NIB Bank Limited ROA

Banks	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
PICIC Commercial Bank Limited (PICB)	0.01	0.07	-0.04	-0.05	-0.05					
NIB Bank Limited (NIB)	0.01	0.012	0.04	0.03	0.06					
Average	0.01	0.04	0	-0.01	0.01					
NIB Bank Limited (NIB)						0.001	0.003	-0.06	-0.013	0.0001

Table-6
NIB Bank Limited ROE

Banks	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
PICIC Commercial Bank Limited (PICB)	0.184	0.21	0.02	0.04	0.03					
NIB Bank Limited (NIB)	0.08	0.12	0.09	0.07	0.05					
Average	0.132	0.165	0.055	0.06	0.04					
NIB Bank Limited (NIB)						0.008	0.01	0.74	-0.14	0.002

Table-7
NIB Bank Limited EPS

Banks	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
PICIC Commercial Bank Limited (PICB)	2.23	2.17	1.27	0.12	0.08					
NIB Bank Limited (NIB)	1.32	1.57	1.10	1.15	1.21					
Average	1.775	1.87	1.185	0.63	0.645					
NIB Bank Limited (NIB)						0.21	0.17	-2.50	-0.34	0.004

Table-8
Faysal Bank Limited ROA

Banks	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
The Royal Bank of Scotland Limited (RBS)	0.003	0.003	0.004	0.006	0.009		
Faysal Bank Limited (FABL)	0.04	0.02	0.008	0.006	0.007		
Average	0.02	0.01	0.006	0.006	0.008		
Faysal Bank Limited (FABL)						0.004	0.005

Table-9
Faysal Bank Limited ROE

Banks	2006	2007	2008	2009	2010	2011	2012
The Royal Bank of Scotland Limited (RBS)	0.027	0.028	0.037	0.045	0.005		
Faysal Bank Limited (FABL)	1.11	0.77	0.21	0.19	0.16		
Average	0.56	0.39	0.24	0.11	0.08		
Faysal Bank Limited (FABL)						0.15	0.19

Table-10
Faysal Bank Limited EPS

Banks	2006	2007	2008	2009	2010	2011	2012
The Royal Bank of Scotland Limited (RBS)	0.07	0.05	-1.2	-0.05	-0.02		
Faysal Bank Limited (FABL)	1.15	2.11	4.29	1.97	1.45		
Average	0.61	1.08	1.54	1.94	1.44		
Faysal Bank Limited (FABL)						1.55	1.53

Profitability Measures Of Banks (Paired Sample T-Test): Table-11 shows the paired sample t-test. In this table we have calculated the ROA, ROE and EPS of Allied Bank Limited as it was mentioned earlier that it got merged with Ibrahim Leasing Limited in 2005.After performing the paired sample t-test we have come to the conclusion that it shows the positive and significant values which means that overall profitability of Allied Bank has increased after merging which is a good thing.

Table-11
Allied Bank Limited

	ROA	ROE	EPS
t-test	5.09	12.25	3.33

Table-12 shows the paired sample t-test. The values of ROA, ROE and EPS are shown respectively of NIB Bank and inculcate that they are negative and insignificant so this states that the overall profitability has decreased after merging with PICIC Commercial Bank but the results are not that worst as it's not significantly impacting the equation.

Table-12
NIB Bank

	ROA	ROE	EPS
t-test	-1.04	-0.757	-0.8006

Table-13 shows the paired sample t-test of Faysal Bank. This shows that the values are negative and significant; hence the profitability of the Bank has decreased. The result shows that ROA and ROE have insignificantly decreased hence it's not an alarming situation whereas EPS is showing negative and significant relation that needs to be checked and controlled.

Table-13
Faysal Bank

	ROA	ROE	EPS
t-test	-1.04	-1.33	-6.61

Conclusion

Empirical evidence shows mixed results of merger and acquisition. In this research we studied the effect of merger and acquisition on firm's financial performance. We took three profitability measures, ROA, ROE and EPS and applied paired sample t-test for comparing the pre-post results of the banks under consideration.

Results show that ROA of two banks was increased and one bank return on asset was decreased after the merger and acquisition, but as compared to averages of two institutions the results was first fall below the merged year average but after that it become improved. In this study the results are consistent with the Kithituet. al[3], considering the results of Allied bank limited, average ROA of the two merged bank in 2005 was 0.055 which was first decreased by 0.028 and then it was increased by 0.03, 0.04, 1.35 and 1.86 from 2007 to 2010 respectively. Results of ROA showed that some banks had positive effect of merger and acquisition whereas some banks have negative results.

The study also showed the mixed results of return on equity, some banks show positive effect of merger and acquisition whereas, some banks show negative effect. If we take the results of NIB bank limited, the average ROE was 0.04 in 2007 but after merger it was decreased by 0.008, 0.01 and 0.74 in 2008, 2009 and 2010 respectively. But in 2011 ROE was decreased by -0.14 and then improved by 0.002 in 2012. This merger shows the mixed result. But if we take an example of Faysal bank limited it continuously increased after merger. So in the nutshell ROE has mixed results. The third performance indicator was EPS, this also showed mixed results. Some banks showed increasing effect in earning per share whereas some have decreasing effect. Allied bank showed increasing trend in earning per share whereas, NIB bank shows decreasing effect with respect to average of both merged banks.

Kithituet al[3], mentioned in their studies that overall result concluded that merger and acquisition of new firms increase the profitability. If we conclude the overall result of our study in longer run banks have slightly positive improvement in their financial performance. Though the results of first year of merger were declined but after that it was slightly increased and continues to improve.

By applying the paired sample t-test we came to the conclusion that results of our profitability measures shows Allied bank has been profitable after acquisition as it was positively and significantly reported. NIB and Faysal bank's profitability has however decreased. NIB showing negative but insignificant trend and Faysal depicting a mixed picture as its ROA and ROE has been insignificantly impacted after acquisition but EPS has significantly been decreased. Therefore, these banks not need to create the haphazard situation but they must do the complete analysis before acquiring any bank.

There are many studies that have conducted on merger and acquisition and in this study we have used financial ratios to investigate the financial performance of the firm. Another recommendation is that, merger and acquisition will check on other industries as well to measure their financial performance. The limitation of the study is that we only conduct the research on three banks due to time constraints. To generalize the results, sample size should be increase. Another limitation of this study was that data was not easily available for this reason we have opted only three banks.

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