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Effects of Mergers and Acquisitions on the Financial Performance of Acquirer Banks: An Evidence-based Study from Pakistan

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Abstract

While facing the challenges of globalization and technological advancements, firms consistently aspire to gain a competitive edge over their adversaries. The objective of this study is to investigate whether mergers and acquisitions improve the financial performance of acquirer banks. For this purpose, data is collected from eleven banks listed on Pakistan Stock Exchange (PSX) that underwent the process of merger and acquisition between 2009 and 2012. The financial performance of these banks is analyzed with the assistance of financial ratios. Additionally, paired sample t-test is applied on the ratios to find out the statistics whether significant or not after the enhancement of the banks' financial performance. Out of the six financial ratios, only three financial ratios showed significant change. Furthermore, two ratios improved, while one ratio deteriorated. The remaining three ratios were not statistically significant. Thus, this paper is useful for firms, financial organizations and banks since it provides information that would help them make informed financial decisions.

Keywords: acquisitions, assets quality, financial performance, leverage, liquidity, mergers, profitability

Introduction

At present, the world has become a global village where every firm wants to improve its efficiency and maximize their profits. In the past two or three decades, mergers and acquisitions took place on a large scale because the business environment had been changing rapidly. Merger and acquisition is considered an effective approach to achieve better financial performance. This approach is being implemented by organizations all over the world.

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Recently, this approach has become popular and is being used for growth and development of various firms. Furthermore, the business environment has also changed due to technological advancements. Each organization aims to successfully follow its visions and objectives so it can be prosperous, their ultimate goal is to increase its share and compete in the market. Merger and acquisition are used as a tool to increase shareholder value in the market. It also helps companies efficiently run their business through acquiring efficient technology.

“A merger is an integration of two or more firms into one and firm agrees to share the control of the joint business with other owners” (Ahmed & Ahmed, [2014](#)). “An ‘acquisition’ is a process in which a company or an individual acquires the assets of another company, either directly by taking the ownership or indirectly just by taking control of the company’s management” (Chen & Findlay, [2003](#)). According to the term that is used in [IFRS 3] business combinations, true mergers are sometimes mentioned to as transactions, while equal mergers are also almost always referred to as transactions. In January 2008, a revised version of IFRS 3 was issued, and after 1 July 2009, it classified business combinations as an entity. To put it simply, IFRS 3 business combination is that framework of accounting where the acquirer (an entity that gains control of the acquire) gets control of a business. For example, mergers or acquisitions, that generally require assets and liabilities, are accounted for by using the acquisition method. This method is used to measure the fair value of these assets and liabilities at the date of their acquisition.

Mergers are called transactions where the companies ownership, other business associations, or their working units are moved or joined (Owolabi & Ajayi, [2013](#)). When a company enters into a merger, it strengthens the company and offers it room to grow, this not only improves competition but also highlights synergistic benefits. Thus, mergers play a vital role in achieving financial strategies and varied objectives/goals in an organization. There are two ways for a company growth: organic growth and inorganic growth. When a company grows from its own resources, it is known as organic growth or internal growth. When the company seeks funds from outsiders in the shape of the merger with another business, it is known as inorganic growth. Inorganic growth is also called external growth

and is the most preferable approach for mergers. A merger also comprises of vertical (same production line), conglomerate (unrelated line of business), horizontal (same line of business often competitors), and cross the border (between an organization in different countries). Various factors stemming from mergers lead to the creation of synergy among firms. These factors also help the firm to get the maximum benefit from the market or revenue enhancement, economies of scale in research, production, savings, and operational efficiencies, increased capacity in sales, cost efficiency etc

Kouser and Saba (2011) conducted research on how business combinations affect financial performance of banks and concluded that there is a decline in profitability and networth ratio after merger and acquisition. Ismail et al. (2011) found out that the effect of mergers and acquisition is negative, which highlights that the performance of firms is not improved even after mergers and acquisitions. (Kalimeris, 2010) research showcased that mergers and acquisitions are effective tools for those companies who want to enter new businesses or markets.

Mergers and acquisitions are considered effective tools to create synergy. Furthermore, mergers and acquisitions are important because they allow firms to take advantage of skills specifically offered by other firms, they also allow firms to stay competitive and increase their efficiency. Therefore, the objective of this exploration is to analyze whether acquisitions and mergers have upgraded the financial performance of the acquirer bank in Pakistan or not.

Literature Review

In 1985, the total mergers of firms were less than five thousand around the globe. It gradually increased in 2008 and reached 50 thousand mergers and acquisitions. The gradual increase in mergers resulted from firms actively using strategies of mergers and acquisitions, they employed these strategies to remain competitive and to take advantage of skills that other firms had.

There is a considerable research amount on mergers and acquisitions. Pham (2014) studied the effect of acquisitions and mergers in Czech Republic. In this research, pre- and post- acquisition financial performance of four selected banks and comparisons were done/analyzed using ratios like return on net worth (RONW), earning per share (EPS), debt-equity

(DE), and net profit margin (NPM). In this research, information was gathered for quite a long time previously, then after the fact from annual reports of the selected banks. Furthermore, this data was analyzed through SPSS. The result of the study reveals that performance did not improve significantly.

In a like manner, Abbas et al. (2014) conducted research on Pakistani banks to investigate their financial performance after merger and acquisition. The aim of the study was to assess whether the performance of banks improved or declined after merger and acquisition. This study also discusses the benefits and provides information about mergers and acquisitions. Ten banks were selected and data was collected from the annual reports and the State Bank of Pakistan's (SBP) financial statement analysis of their financial sector. Pre-merger and acquisition data of two years and post-merger and acquisition data of two years was used in this research. In this research, different financial ratios such as return on assets (ROA), ROE, earning per share (EPS), debt to equity (DE) ratio, etc. were calculated, but the results revealed that improvement in performance is not significant.

Abdul Rehman conducted research in Nigeria to estimate whether the banks' performance improves or decline after merger and acquisition. Fifteen commercial banks of Nigeria were selected and 5-year pre- and post-merger and acquisition data was used. Data was collected from the annual reports and financial statements of selected banks and was analyzed by using ratio analysis. The consequence of this review uncovered that there is a solid association between bank performance, mergers, and strategic decisions like credit risk, liquidity risk, etc. These decisions have increased bank performance and thus show that mergers have a positive effect on performance of banks (Abdul-Rahman & Ayorinde, 2013).

Similarly, another study focused on the impact of acquisitions and mergers on the banking sector of Pakistan. In order to analyze the financial performance of banks involved in mergers and acquisitions, a sample of eleven banks, that merged during 2006-2010, was used. Pre- and post-merger and acquisition data of three years was used and paired sample t-test was applied on financial ratios. Finally, the researchers concluded that the

banks' performance did not improve after merger and acquisition (Ahmed & Ahmed, [2014](#)).

Badreldin and Kalhoefer ([2009](#)) investigated the influence of mergers and acquisitions on Egyptian banks in their research. The results of this study revealed that performance did not improve after merger and acquisition, but there was some improvement seen in the credit risk. It was recommend that merger and acquisition must be used by organizations because it is a very effective tool for the growth of the organization. Liargovas and Repousis ([2011](#)) conducted research in order to explore the effect of merger and acquisition on the Greek banking industry. The results of this study revealed that the banks' performance did not develop after merger and acquisition.

This section reviews the literature that focuses on a firm's financial performance before and after a merger and the firm's value among the selected non-financial sector in Pakistan. When a company enters into a merger, it can grow leaps and bounds. The basic motive of mergers is to create synergy, facilitate cost-efficiency, and help firms get maximum benefits in the market.

Merger and acquisition is a methodology which is embraced by many associations, it is used to address the issues related to the financial standing of businesses that fall behind in the market. This methodology gains its significance because it provides easy and accessible opportunity of growth to firms of all sizes all over the world. Nevertheless, the results of the above stated investigations reveal that there are no enhancements in the financial performance of Pakistani banks and the other mentioned banks even after merger and acquisition (Abbas, [2014](#)).

Moreover, financial specialists recognize the advantages of mergers, acquisitions, and the expense of the mergers or enhancements, which is why they claim that the expenses are the consequence of less proficient ventures made by blended firms, while enhancement is the consequence of less accessibility of stock costs. This finding reveals that it is fruitful to break down and recognize the 'rate hazard' and 'pace of return' of an association's speculation openings. Thus, the results of this study indicate the need for further assessment of mergers and their exigency in corporate rebuilding.

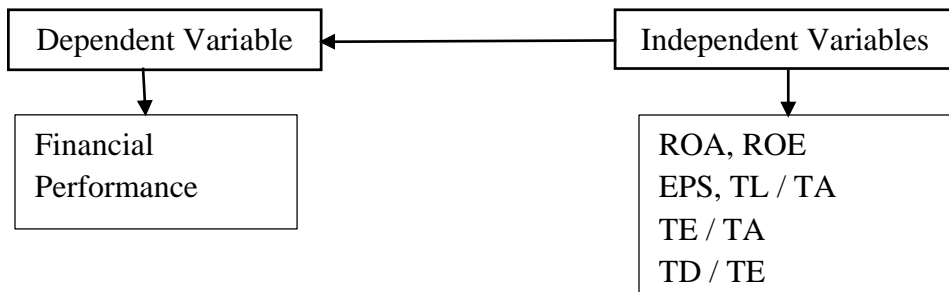
(Yang & Chen, [2005](#)) Consequently, numerous strategies are available to control investors that seek to promote their goal rather than the company's goal. Emotions and moods influence investors and can impact the result of a merger. Emotions also have the potential to hinder the estimation of mergers This study found no connection between emotion and mood factors (Mara, [2006](#))

Research Hypothesis

The hypothesis used in this research in order to analyze the financial performance of acquirer banks in Pakistan after merger and acquisition is developed on the basis of research conducted by (Ahmed and Ahmed, 2014). This research is also the basis of the current study's research objectives. Based on existing evidence, we formulate the following hypotheses:

- H1: ROE of the acquirer bank has improved after merger and acquisition in Pakistan.
- H2: Return on assets (ROA) of the acquirer bank has improved after merger and acquisition in Pakistan.
- H3: Total liabilities to total assets (TLTA) of the acquirer bank has improved after merger and acquisition in Pakistan.
- H4: Earning per share (EPS) of the acquirer bank has improved after merger and acquisition in Pakistan.
- H5: Total equity to total assets (TETA) of the acquirer bank has improved after merger and acquisition in Pakistan.
- H6: Debt to equity (DE) ratio of the acquirer bank has improved after merger and acquisition in Pakistan.

Conceptual Framework



Design and Methodology

Population and Sample

The population of this research includes all banks in Pakistan that have undergone mergers and acquisitions from 2009 to 2012. According to the Competition Commission of Pakistan (CCP), there were fourteen merger and acquisition deals in the banking sector of Pakistan. The sample size of this study includes eleven merger and acquisition deals. Three banks were excluded from the sample because of data availability issues. A non-probability sampling practice is used in this research and data is collected by convince sampling.

Data Sources

In order to collect the data, different data sources are used in this research. Some data sources used in this paper include the competition commission of Pakistan (CCP), annual banks' reports and financial statement examination of the financial sector by the State Bank of Pakistan (SBP).

Statistical Model

To conduct this research, pre-merger and acquisition data of three year and post-merger and acquisition data of three years is used in this research. Six financial ratios are calculated for each bank. Finally, data is analyzed through SPSS, and paired sample t-test is applied to each ratio to check whether the results are statistically significant. Furthermore, the level of the confidence interval is 95% for this study.

We use the paired samples t-test because it allows us to compare two means of the related units or same object. In this case, the two means signify two particular points in time; one point before the merger (pre-merger observation) and one point after the merger or acquisition has occurred (post-merger). The main objective of this test is to conclude if the mean difference between paired observations on any outcome, such as the financial ratios we use to measure performance, is significantly changed from zero. Our data fulfils the requirements of the dependent variable (must be continuous i.e., interval or ratio level-). We use ratio level in this study. To ensure clarity, we also record the paired measurements in two separate

variables. Additionally, the subjects in each sample are the same, each consists of the acquiring bank's pre- and post- merger or acquisition data. The sample of our study represents the population of all mergers and acquisitions that have taken place in the relevant time frame in the financial sector of Pakistan. No outliers, and the distribution is statistically assumed to be normal due to a large number of observations (when the number of observations exceeds 30, it is considered a statically normally distributed sample).

Paired Samples Test contributes the test results in hypothesis. (Reading from left to right):

- In first column: The variables' pair being tested, and the order in the subtraction was carried out. (this table will have multiple rows in case if you have specified more than one variable pair.)
- Mean: The average distinction between the two variables.
- Standard deviation: The standard deviation of the difference scores.
- Standard error mean: The standard error (standard deviation divided by the square root of the sample size). It is used in the computing of both the test statistic and the upper and lower bounds of the confidence interval.
- t : The test statistic (denoted t) for the paired T test.
- df : The degrees of freedom for this test.
- Sig. (2-tailed): The p -value corresponding to the given test statistic t with degrees of freedom df .

Results of paired sample t-test are quoted in a Table 1. The paired samples test gives the hypothesis test results. Reading from left to right:

- First column: The pair of variables being tested, and the subtraction order was carried out.
- Mean: There is average difference between these two variables.
- Standard deviation: The standard deviation of the difference scores.
- Standard error mean: The standard error (standard deviation divided by the square root of the sample size). It is used in the computing of both the test statistic and the upper and lower bounds of the confidence interval.
- t : The test statistic (denoted t) for the paired T test.

- *df*: The degrees of freedom for this test.
- *Sig.* (2-tailed): The *p*-value corresponding to the given test statistic *t* with degrees of freedom *df*.

Table 1

Explanation of the Pairs Used in a Paired Sample T Test

Pairs	Explanation
Pair 1	Pre-merger and acquisition return on assets
Pair 2	Pre-merger and acquisition return on equity
Pair 3	Pre-merger and acquisition earnings per share
Pair 4	Pre-merger and acquisition total liabilities / total assets
Pair 5	Pre-merger and acquisition total equity / total assets
Pair 6	Pre-merger and acquisition debt to equity

Results & Discussion

Descriptive Statistics

Results of descriptive statistics are given below in Table 2. The standard deviation and mean is calculated for each pair before and after the merger and acquisition. There is a significant increase in investment made to total assets, deposits to total assets, NPLs to equity, NPLs write-offs to NPLs provisions, and capital ratio total deposits to total equity. To check whether the difference on financial performance is statistically significant before and after merger, paired sample 't' test is applied by using the methodology of (Leepsa & Mishra, 2012).

Results of Paired Sample T test

Results of paired sample T-test are presented in Table 2, which shows the six performance ratios of banks before and after merger. Out of the six

financial ratios, only three financial ratios are statistically significant. These include earnings per share with a significance value of 0.002, total liabilities to total assets (TLTA) with a significance value of 0.011, and total equity to total assets (TETA) with a significance value of 0.018. The overall result of the sample t-test shows that in the financial sector mergers and acquisitions have a important influence on three aspects of performance. More specifically, earnings per share increases after the acquisition, total liabilities to total assets (TLTA) decrease after acquisition, and total equity to total assets (TETA) increases. These aspects may be directly attributed to the structural changes that take place in the post merged organization; moreover, acquires tend to have outstanding debt, creating a negative impact on the post-merger statistics; and the combination of businesses and equity tends to increase the other two indicators. Interestingly ROE, return on assets (ROA), and debt to equity are insignificant in performance for mergers and acquisitions.

Table 2

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	ROE1-ROE2	-1.234	4.937	0.859	-2.984	0.517	-1.436	32.000	0.161
Pair 2	ROA1-ROA2	0.231	0.866	0.151	-0.076	0.538	1.532	32.000	0.135
Pair 3	EPS1-EPS2	1.027	1.726	0.300	0.414	1.639	3.416	32.000	0.002***
Pair 4	TLTA1-TLTA2	-0.021	0.044	0.008	-0.036	-0.005	-2.712	32.000	0.011**
Pair 5	TETA1-TETA2	0.019	0.044	0.008	0.004	0.034	2.503	32.000	0.018**
Pair 6	DE1-DE2	-0.878	3.379	0.588	-2.076	0.320	-1.493	32.000	0.145

*Significant at 10%, ** Significant at 5%, ***Significant at 1%

Table 3*Results of Performance Ratios*

Variable	Pre M&A Average	Post M&A Average	Significance	Improved/Deteriorated/No Impact
ROE1 - ROE2	1.71	2.95	0.161	No Impact
ROA1 - ROA2	0.48	0.25	0.135	No Impact
EPS1 - EPS2	2.35	1.32	0.002	Improved
TLTA1- TLTA2	0.91	0.93	0.011	Deteriorated
TETA1- TETA2	0.09	0.07	0.018	Improved
DE1 - DE2	4.94	5.82	0.145	No Impact

Table 3 shows the results of performance ratios, in which out of six financial ratios three ratios are statistically significant. Based on the above mentioned results, hypothesis H1, 2, 6 is rejected, which states ROE, ROA, and debt to equity of the acquirer bank has improved after merger and acquisition in Pakistan.

When we conduct this analysis on a bank-by-bank basis, we can identify how each merger or acquisition affected each bank differently. We found insignificant results on all six measures in the merger and acquisition of Summit bank, Faysal Bank, and NIB. The results are significant for Askari Bank, Bank Al- Habib, MCB, Standard Chartered, HBL, Meezan, KASB, and Summit bank.

In the case of Askari bank, the debt to equity (DE) ratio is significant at 5% and indicates a decrease in the mean. In the case of Bank Al Habib, return on assets (ROA) is significant at 10% and shows an increase in the mean, total liabilities to total assets (TLTA) is significant at 10% and shows a decrease in the mean, and lastly, debt-equity (DE) ratio is significant at

10% and shows a decrease in the mean. In the case of MCB, return on assets (ROA) is significant at 1% and shows an increase in the mean, earning per share (EPS) is significant at 1% and shows an increase in the mean, total liabilities to total assets (TLTA) is significant at 1% and shows a decrease in the mean, total equity to total assets (TETA) is significant at 1% and shows an increase in the mean, and finally, debt-equity (DE) ratio is significant at 1% and shows a decrease in the mean. It appears that MCB's merger or acquisition was most successful in terms of performance and the utilized proxies since there was significant impact in five out of the six ratios. Moreover, three ratios showed improvement post-merger, while two ratios showed deterioration post-merger. In the case of Standard Chartered bank, return on assets (ROA) is significant at 1% and shows an increase in the mean, earning per share (EPS) is significant at 1% and shows an increase in the mean, total liabilities to total assets (TLTA) is significant at 1% and shows the decrease in the mean, and finally, total equity to total assets (TETA) is significant at 1% and shows an increase in the mean. It also appears that Standard Chartered bank benefitted from the merger since four of its ratios were significant, while three out of the aforementioned four ratios showed significant improvement post-merger. Only total liabilities to total assets (TLTA) decreased, which is also considered a positive effect. In the case of HBL, return on assets (ROA) is significant at 1% and shows an increase in the mean, earning per share (EPS) is significant at 1% and shows an increase in the mean, total liabilities to total assets (TLTA) is significant at 5% and shows a decrease in the mean, and finally, total equity to total assets (TETA) is significant at 5% and shows an increase in the mean. In the case of Meezan bank, return on assets (ROA) is significant at 1% and shows an increase in the mean, EPS is also significant at 1% and shows an increase in the mean, total liabilities to total assets (TLTA) is significant at 1% but shows a decrease in the mean, and finally, total equity to total assets (TETA) is significant at 1% and shows a small increase in the mean. In the case of KASB, only debt-equity (DE) ratio is insignificant. Return on assets (ROE) is significant at 10% and shows a decrease in the mean, return on assets (ROA) is significant at 1% and shows an increase in the mean, earning per share (EPS) is significant at 1% and shows an increase in the mean, total liabilities to total assets (TLTA) is significant at 1% and shows a decrease in the mean, and lastly, total equity to total assets (TETA) is

significant at 1 % and shows an increase in the mean. In the case of Summit bank, only return on assets (ROE) and debt-equity (DE) ratios are insignificant. Return on assets (ROA) is significant at 1% and shows an increase in the mean, earning per share (EPS) is significant at 1% and shows an increase in the mean, total liabilities to total assets (TLTA) is significant at 1% and shows a decrease in the mean, and lastly, total equity to total assets (TETA) is significant at 1% and shows a minor increase in the mean.

Overall, it is ascertained that mergers in the financial sector of Pakistan have substantially had a positive impact on firms. As eight out of the eleven cases resulted in mostly positive and significant impacts, this strategy is effective for improving performance in banks.

Table 4

Bank-Wise Paired Sample Test

BANKS		Paired Samples Test								
		Mean	Paired Differences				t	Df	Sig. (2-tailed)	
			Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper					
Summit	Pair 1	ROE1	-3.280	6.175	3.565	-18.621	12.061	-0.920	2.000	0.455
		ROE2								
	Pair 2	ROA1	-1.163	2.624	1.515	-7.682	5.355	-0.768	2.000	0.523
		ROA2								
	Pair 3	EPS1	-0.420	2.409	1.391	-6.404	5.564	-0.302	2.000	0.791
		EPS2								
Faysal	Pair 4	TLTA1	-0.090	0.115	0.067	-0.376	0.196	-1.352	2.000	0.309
		TLTA2								
	Pair 5	TETA1	0.090	0.111	0.064	-0.187	0.367	1.400	2.000	0.297
		TETA2								
	Pair 6	DE1	1.433	0.983	0.568	-1.010	3.875	2.524	2.000	0.128
	Pair 1	ROE1	-2.420	8.096	4.674	-22.533	17.693	-0.518	2.000	0.656
		ROE2								
	Pair 2	ROA1	0.130	0.243	0.140	-0.473	0.733	0.928	2.000	0.451
	ROA2									
Pair 3	EPS1	-0.040	0.749	0.432	-1.901	1.821	-0.092	2.000	0.935	
	EPS2									
Pair 4	TLTA1	-0.010	0.010	0.006	-0.035	0.015	-1.732	2.000	0.225	
	TLTA2									

		Paired Samples Test								
		Paired Differences						t	Df	Sig. (2-tailed)
BANKS		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
					Lower	Upper				
Askari	Pair 5	TETA1 TETA2	0.004	0.013	0.007	-0.027	0.035	0.600	2.000	0.609
	Pair 6	DE1 DE2	-0.834	1.960	1.132	-5.703	4.035	-0.737	2.000	0.538
	Pair 1	ROE1 ROE2	-0.173	9.402	5.428	-23.530	23.183	-0.032	2.000	0.977
	Pair 2	ROA1 ROA2	0.947	1.059	0.611	-1.684	3.577	1.549	2.000	0.262
	Pair 3	EPS1 EPS2	3.947	4.366	2.521	-6.900	14.793	1.566	2.000	0.258
	Pair 4	TLTA1 TLTA2	-0.010	0.010	0.006	-0.035	0.015	-1.732	2.000	0.225
NIB	Pair 5	TETA1 TETA2	0.010	0.010	0.006	-0.015	0.035	1.732	2.000	0.225
	Pair 6	DE1 DE2	-3.370	1.288	0.744	-6.569	-0.171	-4.532	2.000	0.045
	Pair 1	ROE1 ROE2	1.550	1.484	0.857	-2.135	5.235	1.810	2.000	0.212
	Pair 2	ROA1 ROA2	0.143	0.123	0.071	-0.163	0.450	2.011	2.000	0.182
	Pair 3	EPS1 EPS2	0.903	1.478	0.854	-2.769	4.576	1.058	2.000	0.401
	Pair 4	TLTA1 TLTA2	-0.020	0.095	0.055	-0.257	0.217	-0.363	2.000	0.751
Bank-Al Habib	Pair 5	TETA1 TETA2	0.020	0.095	0.055	-0.217	0.257	0.363	2.000	0.751
	Pair 6	DE1 DE2	4.993	3.396	1.961	-3.443	13.429	2.547	2.000	0.126
	Pair 1	ROE1 ROE2	-0.077	0.441	0.255	-1.172	1.019	-0.301	2.000	0.792
	Pair 2	ROA1 ROA2	0.277	0.140	0.081	-0.071	0.625	3.420	2.000	0.076
	Pair 3	EPS1 EPS2	0.040	0.716	0.414	-1.739	1.819	0.097	2.000	0.932
	Pair 4	TLTA1 TLTA2	-0.010	0.006	0.003	-0.023	0.004	-3.040	2.000	0.093
	Pair 5	TETA1 TETA2	0.007	0.005	0.003	-0.004	0.018	2.646	2.000	0.118

		Paired Samples Test									
		Paired Differences						t	Df	Sig. (2-tailed)	
BANKS		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference						
					Lower	Upper					
MCB	Pair 6	DE1 DE2	-2.265	1.294	0.747	-5.479	0.948	-3.033	2.000	0.094	
	Pair 1	ROE1	0.693	5.982	3.454	-14.166	15.553	0.201	2.000	0.859	
		ROE2									
	Pair 2	ROA1	0.382	0.010	0.006	0.357	0.406	67.481	2.000	0.000	
		ROA2									
	Pair 3	EPS1	1.277	0.080	0.046	1.078	1.475	27.663	2.000	0.001	
EPS2											
Pair 4	TLTA1	-0.012	0.000	0.000	-0.013	-0.012	-68.181	2.000	0.000		
	TLTA2										
Pair 5	TETA1	0.010	0.000	0.000	0.010	0.011	140.373	2.000	0.000		
	TETA2										
Standard Chartered Bank Limited	Pair 6	DE1 DE2	-4.883	0.442	0.255	-5.982	-3.785	-19.123	2.000	0.003	
	Pair 1	ROE1	1.830	2.633	1.520	-4.712	8.372	1.204	2.000	0.352	
		ROE2									
	Pair 2	ROA1	0.418	0.028	0.016	0.349	0.488	25.850	2.000	0.001	
		ROA2									
	Pair 3	EPS1	1.441	0.118	0.068	1.148	1.734	21.147	2.000	0.002	
EPS2											
Pair 4	TLTA1	-0.013	0.001	0.000	-0.014	-0.012	-43.259	2.000	0.001		
	TLTA2										
Pair 5	TETA1	0.012	0.000	0.000	0.010	0.013	42.017	2.000	0.001		
	TETA2										
HBL	Pair 6	DE1 DE2	-0.103	2.583	1.491	-6.519	6.313	-0.069	2.000	0.951	
	Pair 1	ROE1	0.260	0.980	0.566	-2.174	2.694	0.460	2.000	0.691	
		ROE2									
	Pair 2	ROA1	0.326	0.020	0.012	0.276	0.376	28.045	2.000	0.001	
		ROA2									
	Pair 3	EPS1	0.916	0.068	0.039	0.748	1.085	23.435	2.000	0.002	
EPS2											
Pair 4	TLTA1	-0.019	0.004	0.002	-0.029	-0.008	-7.512	2.000	0.017		
	TLTA2										
Pair 5	TETA1	0.017	0.004	0.002	0.007	0.027	7.039	2.000	0.020		
	TETA2										
Pair 6	DE1 DE2	-0.903	2.862	1.652	-8.012	6.205	-0.547	2.000	0.639		
Pair 1	ROE1	-4.213	3.942	2.276	-14.006	5.580	-1.851	2.000	0.205		
	ROE2										

		Paired Samples Test								
		Paired Differences						t	Df	Sig. (2-tailed)
BANKS		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
					Lower	Upper				
Meezan Bank	Pair 2	ROA1	0.351	0.002	0.001	0.347	0.355	369.853	2.000	0.000
		ROA2								
Limited	Pair 3	EPS1	0.986	0.059	0.034	0.839	1.133	28.906	2.000	0.001
		EPS2								
	Pair 4	TLTA1	-0.014	0.001	0.000	-0.016	-0.013	-40.336	2.000	0.001
		TLTA2								
	Pair 5	TETA1	0.012	0.001	0.000	0.011	0.014	34.244	2.000	0.001
		TETA2								
	Pair 6	DE1	-4.317	3.104	1.792	-12.027	3.394	-2.409	2.000	0.138
		DE2								
KASAB Bank	Pair 1	ROE1	-7.480	3.807	2.198	-16.937	1.977	-3.403	2.000	0.077
		ROE2								
Limited	Pair 2	ROA1	0.369	0.001	0.000	0.367	0.370	1069.362	2.000	0.000
		ROA2								
	Pair 3	EPS1	1.149	0.007	0.004	1.132	1.166	297.720	2.000	0.000
		EPS2								
	Pair 4	TLTA1	-0.015	0.000	0.000	-0.015	-0.014	-147.016	2.000	0.000
		TLTA2								
	Pair 5	TETA1	0.013	0.000	0.000	0.012	0.013	102.593	2.000	0.000
		TETA2								
Summit Bank	Pair 6	DE1 DE2	-0.043	3.197	1.846	-7.985	7.899	-0.023	2.000	0.983
		ROE1	-0.263							
Limited	Pair 2	ROA1	0.361	0.004	0.002	0.351	0.372	149.310	2.000	0.000
		ROA2								
	Pair 3	EPS1	1.094	0.027	0.016	1.026	1.161	69.801	2.000	0.000
		EPS2								
	Pair 4	TLTA1	-0.015	0.000	0.000	-0.016	-0.015	-128.413	2.000	0.000
		TLTA2								
	Pair 5	TETA1	0.014	0.000	0.000	0.013	0.014	137.004	2.000	0.000
		TETA2								
	Pair 6	DE1	0.633	3.003	1.734	-6.826	8.093	0.365	2.000	0.750
		DE2								

Conclusion

At present, firms and banks are facing the challenges of globalization and technological advancements; to tackle this issue, massive mergers and acquisitions have taken place since all firms want to maximize market share and future growth. Firms and companies want to gain competitive advantage by acquiring skills specifically offered by other firms such as maximized efficiency, access to innovative capabilities, and reduction of the risk associated with new products or services.

The aim of this study was to examine the financial performance of the acquirer banks. It investigated whether the aforementioned performance improved or deteriorated after merger and acquisition. Eleven banks were selected for this study. Additionally, three-year pre-merger and three-year post-merger data was collected from each bank. The sampling procedure used in this study was purpose sampling. Furthermore, both the population and sample represented all mergers and acquisitions that took place during the allotted time frame. This also means that aside from the missing data, it is not possible to increase this sample as no other information about mergers and acquisitions that took place during this time frame exists. In this study, six financial ratios were calculated which included return on equity (ROE), return on assets (ROA), earning per share (EPS), total liabilities to total assets (TLTA), total equity to total assets (TETA), and debt to equity (DE) ratio. After the ratios were calculated, the resultant data was analyzed through SPSS by applying a paired sample t-test. We conducted an overall analysis to determine the impact of mergers and acquisitions, and then we applied it bank-wise to determine the individual or case-based outcome of each merger or acquisition.

The results summarized in Table 7 reveal that the performance of banks improved after merger and acquisition. Out of the six financial ratios, only three financial ratios were significant, two financial ratios were improved, and one ratio deteriorated. The last three financial ratios were not statistically significant. Based on these results, hypotheses H1, H2, and H6 were rejected, and it is concluded that the financial performance of acquirer banks improves significantly after merger and acquisition in Pakistani banks. The results were also aligned with the research conducted by (Abbas et al., [2014](#); Ahmed & Ahmed, [2014](#)).

There are certain limitations of this research; first, in this research, the sample incorporated eleven banks only; second, only three year pre-merger and three year post-merger data was used to analyze the financial performance of banks; finally, paired sample t-test statistic was used to analyze the difference. There are other statistical techniques available, which can be used to evaluate pre- and post- merger and acquisition performance.

This research contributes to existing studies in two ways. From a theoretical perspective, this research determines the impact of mergers and acquisitions on performance. Considering that the environmental, economical, political, and social factors are different for each country, we expect the results of this paper to differ from the existing literature and theory. Thus, this study will add to the existing literature by identifying the impact of mergers and acquisitions on banks in a developing economy. From a practical perspective, the results of this study can also be utilized for policy development.

In the future, researchers should utilize data taken from a wider range of Pakistani and international banks, so the resulting research is more valuable. Researchers should also calculate more financial ratios and apply other statistical techniques. Additionally, researchers should include more than three years of data to analyze financial performance.

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