

IMPACT OF MERGERS ON PERFORMANCE OF BANKING SECTOR OF PAKISTAN

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Abstract

This study empirically examines the impact of mergers on performance of the banks in Pakistan. The link between liquidity risk, leverage, capital adequacy, size and performance of merging banks, listed on Karachi Stock Exchange (KSE), which executed at least one merger during 2006-2010 has been discovered using Dougherty model. Moreover, paired t-test has been employed to compare three year pre and post-merger performance of each bank. StataSE Version12, SPSS Version 16 and Microsoft Office Excel 2007 have been used to analyze the data. Regression results show an insignificant impact of mergers on performance of banks and t-test proves that performance of each bidder bank has not improved significantly after mergers.

Keywords: Mergers, Performance.

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Historical Background

The banking sector has vital importance in Pakistan in terms of employment, import and export facilities, source of finance, payment settlement and financial management (Kemal, 2011; Arshad, 2012). Across Pakistan, unprecedented level of mergers is one of the most remarkable reforms affecting the banking sector over the last decade because Basel Accord has accelerated the financial consolidation of banks (Arshad, 2012). Basel accord was implemented to ensure capital obligations and to cope up with unexpected unabsorbed losses. According to this accord two capital standards have been imposed on Pakistani banks; the first one is known as minimum capital requirement (MCR) and the second one known as capital adequacy ratio (CAR). Every bank in Pakistan should fulfill both the limits for their survival otherwise their license could be cancelled. Moreover, SPB ordered each and every weak bank to merge with financially strong bank to fulfill capital requirements. The limitation of MCR was six billion in 2009, ten billion in 2010 and fifteen billion in 2011.

The benefit of consolidation is to improve the performance of weak banks in three ways; at first by improving shareholders' value and efficiency, secondly by enhancing personal supremacy, thirdly by improving financial condition of weak banks. Moreover, mergers can reap the benefits of economies, gain synergy⁴ and trim down costs (Prompitak, 2009; Sinha & Kaushik, 2010).

Eleven merging events have been taken place during 2006-2010. Karachi Stock Exchange reported that 18% bidder banks had repeatedly merged during this time period, where 40% mergers took place only in 2006. Large numbers of empirical studies have been devoted towards the issue of merger and performance across the globe (Altunbas & Marques, 2007; Badreldin & Kalhoefer, 2009) while few researchers have worked in context of Pakistan (Arshad, 12; Kemal,

⁴-Post-merger performance of companies greater than individual pre-merged companies

2011; Naveed, et al., 2011). This research has been designed to inspect the relationship of mergers and performance and the extent of variation in post-merger performance of banks. This research is helpful for policy makers to rationalize their decision and for bidder banks to review their performance level after mergers.

Literature Review

Many studies have been conducted across the globe to investigate various aspects of mergers by using different analysis models e.g., Data Analysis Envelopment Stochastic Frontier Analysis, Wilcoxon Signed-Rank Test and ratio analysis (Sufian & Fadzlan, 2004; Sinha & Kaushik, 2010, Koetter M., 2005 and Arshad, 12). The results of these studies vary dramatically.

Formerly, researchers focused on the stock market but today the trend is shifting from event study to organizational approach. Although research of corporate performance was difficult as compare to event study due to collection of data and construction of valid variables, yet many studies have used this approach to find out accurate results (Altunbas & Marques, 2007; Badreldin & Kalhoefer, 2009; Kemal, 2011 and Arshad, 2012).

Pawaskar (2001), empirically proved worse post-merger performance of Indian firms. The research was carried out for the time period of 1992-1995 using data retrieved from Capitoline-Ole database. Regression results indicated better performance of non-merging firms than merging firms over the defined time period. Moreover, the characteristics of all thirty six mergers showed that liquidity, leverage, profitability growth and tax savings did not show any remarkable significant change after mergers.

Sufian & Fadzlan (2004) investigated performance of ten commercial banks for the time period of 1998 to 2003 by using non-parameter frontier approach of data envelopment analysis (DEA). Three inputs i.e., labor, capital and deposits were used where as total

loan and investment and dealing securities were used as outputs. It was revealed that overall post-merger efficiency achieved by the Malaysian banks was about 96%.

Similarly, Koetter M., (2005) used the stochastic frontier analysis (SFA) to examine the German wave of mergers. Results showed that corporative banks performed better than savings banks. Pazarskis, Vogiatzoglou, Christodoulou, & Drogalas (2006), inspected opposite result during research on Greece's wave of mergers. Post-merger performance of fifty Greece companies listed on Athens stock exchange (ASE) during the time period of 1998 to 2002 was compared. Three pre and post-merger years were incorporated and the year of merging event was omitted to validate the results. Pyramid Approach and questionnaire approach witnessed a decreased in performance after mergers.

Furthermore, it was noted that European mergers mostly enjoy positive results due to their strong economy. According to Altunbas & Marques (2007), performance increased by approximately 2.5% and 1.2 % in cross border mergers and domestic mergers respectively. Results indicated that in case of domestic mergers, different capital structure and smaller target size enhanced domestic merging firm's performance and vice versa in case of cross border mergers. Indian financial Institutes also induced positive post-merger performance (Sinha & Kaushik, 2010). They examined seventeen companies during the time period 2000 to 2008 by using non- parametric approach of Wilcoxon Signed-Rank Test. Four parameters, i.e. profitability, liquidity, solvency and efficiency were used to inspect performance and proved significant relationship of performance with mergers and acquisitions. In contrast, Egyptian wave of mergers was not as profitable as in U.S., U.K and India because Egypt is new in the field of banking reforms (Badreldin & Kalhoefer, 2009). Further, ROE basic scheme witnessed that the impact of cross boarder as well as domestic mergers and acquisitions on Egyptian banking sector for year 2004-2007 was unclear.

In addition, Abdur-Rehman & Ayorinde (2011) examined the relationship of mergers and performance of Nigerian banks. They denoted merger by strategic decisions, i.e., liquidity risk, credit risk, capital structure, asset profile and operating efficiency. Return on equity, return on assets and net profit margin were used as performance indicators. Findings of multiple regression analysis revealed positive relationship of performance with mergers and it was suggested that mergers should be implemented to increase performance of banks.

The studies on impact of mergers on performance of banks in Pakistan have mainly focused on one or two banks. As Ullah, et al., (2010) investigated two merging events of Faysal investment bank limited and Atlas investment bank by comparing four years pre and post-merger performance. Three factors; profitability, capital adequacy and solvency were used to determine financial performance. T-test indicates that there was insignificant increase in profit while capital adequacy and solvency had improved significantly. After mergers both banks were in better position due to improvement in technology, administration, and elevated capacity of the banks to pay back their long term liability.

Recently, Kemal (2011) examined performance of one bidder bank by using twenty ratios for the time period of 2006-2009. He investigated the post-merger performance of Royal Bank of Scotland after it merged with ABN AMRO. Profitability, liquidity, leverage, asset management and cash flow were used as determinants of performance. He concluded that failure occurred after mergers. No test was used to verify these results. Similarly, no model was used to verify the post-merger performance during research of SCB (Arshad, 2012). She analyzed one bank's post-merger performance during research of SCB after it merged with Union bank. Profitability, liquidity and capital ratios were used to determine performance. Pre-merger period was 2004-2006 and post-merger period was 2007-2009. The results of eleven ratios declared a decrease in after-merger performance.

Furthermore it has been noted by many researchers (Altunbas & Marques, 2007; Kemal, 2011; Arshad, 12 and Ullah, et al., 2010) supported the fact that mergers have a significant impact on performance of banks and many factors such as liquidity, leverage, capital adequacy and size influence this performance. In addition most of studies used accounting based comparative research method instead of event studies⁵.

Methodology of The Study

Data Source

Secondary annual panel data of six merging banks⁶ for the time period of 2006-2010 has been analyzed by using financial ratios as an analytical instrument (Kemal, 2011; Arshad, 12; Sinha & Kaushik, 2010 and Altunbas & Marques, 2007). Data of was collected from KSE website, Lahore Stock Exchange, and annual reports of concerned banks.

Data Analysis Model

The performance of bidder banks has been investigated through two methods. In first phase, impact of mergers has been measured on performance by using Dougherty (2011) model. In second phase, twelve ratios consisting of 432 observations have been examined for comparative research through Paired T-Test with the mean of $\hat{i}_D = \hat{i}_1 - \hat{i}_2$ and unknown standard deviation $\hat{\sigma}_D$ as recommended by Pazarskis, et al., (2006), and Ullah, et al., (2010) to find the difference between two observations⁷.

5. This fact is supported by Kemal, 2011; Arshad, 12; Sinha & Kaushik, 2010; Ullah, et al., 2010; Pazarskis, et al., 2006.

6. Allied Bank limited (ABL), Atlas Bank, Standard Chartered Bank Limited (SCB), NIB Bank, KASAB Bank, Askari Bank Limited (AKLB)

7. Year of mergers is omitted in this research because longer time span could distort the results, as it usually includes recognition of the number of atypical events, which distort a comparison (Badreldin & Kalhoefer, 2009; Altunbas & Marques, 2007).

Variables and Their Explanation

Profitability

Two aspects of profitability have been studied in this research; first, it has been used as an absolute proxy for performance to measure impact of mergers on performance in phase 1 as used by (Altunbas & Marques, 2007; Abul-Rahman & Ayorinde, 2013), secondly, it has been used as a determinant of performance along with other variables for comparison of annual rate of profitability before and after merging event in phase 2 as used by (Kemal, 2011). Here, return on equity (ROE), return on assets (ROA) and return on investment (ROI) have been used as proxies of profitability. This research finds a connection of profitability with liquidity, leverage, capital adequacy, and size that influence the profitability of bidder banks. This research also compares the performance of individual banks for the time period of 2003-2010. Hence, first hypothesis (H_1) is developed as follows:

H_1 = Mergers have significant impact on post-merger performance of banks in Pakistan.

Liquidity

It refers to ability of bidder banks to meet current liabilities through current assets. According to (Pazarskis, Vogiatzoglou, Christodoulou, & Drogalas, 2006) liquidity increased after merger. That's why, after merger merging firms are in better position to meet the current obligations through current assets. Moreover, their research proved that Greeks firms have better ability to buy services, and goods through short term funding after merger.

In this research proxies used for liquidity are advances to deposit ratio (ADR), advances to assets (ATA) and debt to assets (DAR) (Arshad, 2012). In case of Pakistan, it is expected that status

of bidders improves in terms of liquidity from the period of 2006 to 2010. Therefore, second hypothesis (H_2) is formulated as:

H_2 = Increase in liquidity has a significant positive impact on post-merger performance of banks in Pakistan

Leverage

Leverage shows execution of long-term obligations of bidder banks. It tells either these merged banks have any capacity to meet their outside duties or responsibilities or not. Moreover, (Ghosh & Jain, 2000) examined the theory of financial leverage associated with corporate merger on 239 mergers between the time periods of 1978 to 1987. They said leverage after mergers increase due to two reasons; firstly by unused debts or secondly by increasing debt capacity. This fact is also supported by (Lewellen, 1971). Furthermore, banks which had high leverage had more risk. Negative and significant relationship of leverage and performance was found by (Rehman & Nasr, 2007); (Saliha & Abdessatar, December 2011); (Abdioglu & Buyuksalvarci, 2011). Proxies used for leverage are debt to equity (DTR), debt ratio (DR) and deposit to equity (DEPE). This research intends to find significance of financial leverage (debts) in improving performance of banks, as well as it compares the leverage position for merging banks for the time period 2006- 2010. Thus, third hypothesis (H_3) is proposed as follow:

H_3 = Leverage has a significant negative impact on post-merger performance of banks in Pakistan.

Capital Adequacy

Capital adequacy act as defense line in case of threat of technical insolvency. Either bank has capital financing by the equity shareholders (owners) or by debt financing by creditor, in both cases, high capital adequacy ratio means lower risk and lower advances. Moreover, decrease in profitability took place due to higher capital asset ratio (Ahmad & Nafees) ; (Abdioglu & Buyuksalvarci, 2011). It

indicates the extent to which an institution's capital base covers the risk inherent in its operations. Capital adequacy works as a trigger for mergers in Pakistan (Kemal, 2011; Arshad, 12; Ullah, et al., 2010). Although both limits relate with capital but there is very fine difference between them. MCR means nominal amount which bank have to hold for its survival while 10% CAR is required on ongoing basis as prescribed by SBP. MCR could not be used to reduce as unabsorbed losses because that amount was not for risk management but for viability of business. Both limits are necessary for survival of banks in Pakistan. In absence of any one of them their license could be cancelled. According to SBP, many small banks fulfill MCR and increase their capital adequacy ratio by doing merger activity. The research considers ratio of shareholder's equity to customer deposits (SAR) and shareholder's equity to total assets (SEPE) as proxies for capital adequacy. Capital adequacy has negative impact on performance of banks Abdioglu and Buyuksalvarci (2011). So that, the hypothesis (H_4) is:

H₄= Capital Adequacy has a significant negative impact on post-merger performance of banks in Pakistan.

Size

Here size of bidder banks instead of relative size is used to find accurate consequences because according to Powel (2005) relative size gives ambiguous results in case of mergers. Moreover, improvement in performance of larger banks took place after merger while vice versa results had been found in small banks (Cornett, McNuttand, & Tehranian, 2006). Large size of the firm is indication of increase in profitability. (Altunbas & Marques, 2007). Logarithm of size used as proxy for size. Therefore, fifth hypothesis (H_5) is formulated as:

H₅= Size has a significant positive impact on post-merger performance of banks in Pakistan.

In addition, comparative performance of each bank is also examined because comparison is the ever best source to measure the performance of merging banks (Kemal, 2011; Arshad, 12 ; Sinha & Kaushik, 2010 ; Ullah, et al., 2010 ; Pazarskis, et al., 2006). For this reason a sixth hypothesis (H_6) is derived;

H_6 = Improvement in the financial ratios occur after mergers.

Model Selection for Post Merger Performance

Dougherty (2011) method has been applied to validate and scrutinize suitable model for performance measurement. It states that when random sampling is used, both random effect regression and fixed effect regression model should be applied. Secondly, Housman specification test has been applied to check the applicability of one of these two models. Based upon the results of Dougherty (2011) model, fixed effect regression model is favorable to measure the impact of mergers on performance as given in equation I and II.

Regression models

$$ROE = \beta_0 + \beta_1 (liq_{it}) + \beta_2 (lev_{it}) - \beta_3 (SAR_{it}) + \beta_4 (siz_{it}) + \mu_{it} \quad (I)$$

$$ROA = \beta_0 + \beta_1 (liq_{it}) + \beta_2 (lev_{it}) - \beta_3 (SAR_{it}) + \beta_4 (siz_{it}) + \mu_{it} \quad (II)$$

Where; ROE= return on equity of bank i at time t, ROA= return on assets of bank i at time t, Liq= liquidity of bank i at time t, Lev= leverage of bank i at time t, SAR= capital adequacy of bank i at time t, Siz= size of bank i at time t, μ_{it} =error term of bank i at time t and between banks error.

Findings and Discussion

In descriptive statistics (Table 1), ROE is -.3% with standard deviation of 72.7893%. Minimum value indicates a bidder bank loss 172.7% after merger. Mean value of ROA is -0.7% with the standard deviation of 3.8783%. Bidder banks earned 6.1% after merger. In case of liquidity, average liquidity is 105%. Higher post-merger liquidity is an indication

of soundness of the banking sector in terms of payment of short term liabilities. Furthermore, statistical descriptive showed that leverage is 509% before merger and becomes 1296% after merger. This drastic increase in leverage after merger is not a sign of good performance because bankruptcy could be occurred due to low level of shareholders funds as compared to debt financing (Saliha & Abdessatar, December 2011). Capital adequacy is 9% before mergers and becomes approximately double after merger, i.e., 16% it is equal to decrease in performance because mostly high rate of capital adequacy becomes burden instead of blessing due to poor management (Abdioglu & Buyuksalvarci, 2011). Bidder banks slightly decreased their performance in post merger time period by enhancing their size only by 1%. Mostly small firms enjoy better results and vice verse performance in case of large size due to diseconomies of scale Bohren & Schindele (2010).

Table 1:
Post-merger Descriptive Statistics

Variables	Minimum	Maximum	Mean	Std. Deviation
ROE	-1.727	1.912	-.00300	.727893
ROA	-.088	.061	-.00735	.038783
Liquidity	.460	5.120	1.05176	1.129304
Leverage	3.895	32.813	12.9621	8.068381
SAR	.025	1.003	.16482	.233953
Size	7.405	8.622	8.15424	.449685

Correlation

Pearson correlation matrix shows there is no multi-collinearity effect. ROE and ROA are strongly correlated with one and other at 90% with a significant level of 5%. Because of this reason, two dependent variables ROE and ROA have been used to estimate performance.

Table 2:

Post-merger Correlation

	ROE	ROA	Liq	Lev	SAR	SIZ
ROE	1					
ROA	.899**	1				
Liq	-.375	-.504*	1			
Lev	.364	.232	-.184	1		
SAR	-.043	.067	-.047	-.467	1	
SIZ	.172	.444	-.333	.272	-.378	1

**Correlation is significant at the 0.05 level (2-tailed).

Impact of Mergers On Post-Merger Performance

In case of post-merger performance, fixed effect regression model is suitable as Chi² of Hausman specification test is significant at 10%.

Table 3:

Fixed-effects model

Variables	Coefficients	Standard Error	T	P-value
Liquidity	1.427838	1.367192	1.04	0.331
Leverage	-.0624967	.0621562	-1.01	0.348
SAR	-3.00605	1.634629	-1.84	0.109
Size	-3.591509	2.447521	-1.47	0.186
_cons	29.56803	20.08165	1.47	0.184

R-square within = 0.4456, between = 0.4607 and overall = 0.0536,
F = 1.41 Prob. > F = 0.3248

Table 4:

Random-effects model

Variables	Coefficients	Standard Error	Z	P-value
Liquidity	.5786016	1.185791	0.49	0.626
Leverage	.0245087	.0225853	1.09	0.278
SAR	.1485933	.7861494	0.19	0.850
Size	.3138364	.3868941	0.81	0.417
_cons	-3.195716	3.589175	-0.89	0.373

R-square within = 0.0132, between = 0.8740 and overall = 0.1303, Wald Chi² = 1.80 Prob. > Chi² = 0.7729

Table 5:

Hausman Specification Test

Variables	Fixed	Random	Difference
Liquidity	1.427838	.5786016	.8492366
Leverage	-.0624967	.0245087	-.0870055
SAR	-3.00605	.1485933	-3.154643
Size	-3.591509	.3138364	-3.905345

Chi² = 7.83, Prob.> Chi² = 0.0982*

Table 3 and 4 showed fixed effect regression and random effect regression in case of ROE as performance measure. R-Square of fixed effect model is greater than random effect model while in between and overall R-Square is greater in fixed effect model. Then Hausman test is applied (see table 5) to check the applicability of fixed effect model or random effect model. It shows fixed effect model is suitable as Chi² is significant at 10%.

Table 6:

Fixed-effects model

Variables	Coefficients	Standard Error	T	P-value
Liquidity	.0174223	.0654399	0.27	0.798
Leverage	-.0003659	.0029751	-0.12	0.906
SAR	-.1365507	.0782406	-1.75	0.124
Size	-.2383074	.1171493	-2.03	0.081 *
_cons	1.946098	.9611976	2.02	0.083

R-square within = 0.4337, between = 0.7314 and overall = 0.3047, F = 1.34 Prob. > F = 0.3442

Table 7:*Random-effects model*

Variables	Coefficients	Standard Error	Z	P-value
Liquidity	.0068933	.0605712	0.11	0.909
Leverage	.0012685	.0012064	1.05	0.293
SAR	.0509711	.0409361	1.25	0.213
Size	.0459461	.0209574	2.19	0.028
				**
_cons	-.4064558	.192323	-2.11	0.035

R-square within = 0.1328 between = 0.9020 and overall = .3736 Wald Chi² = 5.82, Prob. > Chi² = 0.2129

Table 8:*Hausman Specification test*

Variables	Fixed	Random	Difference
LIQ	.0174223	.0068933	.010529
Lev	-.0003659	.0012685	-.0016344
SAR	-.1365507	.0509711	-.1875218
Siz	-.2383074	.0459461	-.2842534
Chi ² = 8.64, Prob.> Chi ² = 0.0709			

In case of ROA, Fix and random effect model is shown in above tables. R-Square of fix effect model is greater than random effect model while in between and overall R-Square is greater in fix effect model. Then Hausman specification test is applied to check the applicability of fixed effect model or random effect model. It shows fix effect model is suitable as chi² is significant with value of 8.64 at 10%.

Final discussion of results of Phase 1:

According to table 9, liquidity has insignificantly positive relationship with profitability (Haron, 2004; Hayajneh and Yassine, 2011 and Pazarskis, et al., 2006) while leverage has a negative relationship with profitability (Saliha & Abdessatar, 2011 and Hayajneh & Yassine, 2011). Capital adequacy ratio also shows negative impact on post-merger performance of banking sector of Pakistan (Abdioglu & Buyuksalvarci, 2011). Size has also negative and insignificant

relationship with performance. It is same as found by Samilogu & Demirgunes, (2008). Moreover, negative relationship of size is contradicted from hypothesis H₄.

Results presented in table 9 prove insignificant impact of mergers on performance of banking sector of Pakistan. These results are inconsistent with research of Badreldin and Kalhoefer (2009).

Table 9:

Final Results & Discussion Phase 1

Variables	Post-Merger Performance	
	Coefficients Model1	Coefficients Model2
Liquidity	1.42784	.0174223
Leverage	-.0624967	-.0003659
Capital Adequacy	-3.00605	-.1365507
Size	-3.591509	-.2383074*
_cons	29.56803	1.946098
R-Square: within	0.4456	0.4337
Between	0.4607	0.7314
Overall	0.0536	0.3047
F Statistics	1.41	1.34

Results Phase 2:

It has been noted that there is no improvement in financial characteristics of any bidder bank where all mean values of ratios depicted no improvement and T-Test proves insignificance (see Table 10). Therefore, hypothesis (H₀) i.e. improvement in financial ratios occurs after mergers is rejected.

Only profitability of KASAB increases significantly in terms of ROI (M=.607, S.D=. 1167) condition; t (2)=-4.07, p=.042. While SCB indicates a significant decrease in its ROE after merger (M= -.138, S.D =. 2197) condition; t (2) = 3.21, p= .085. On the whole, post-merger profitability decreases insignificantly (Kemal, 2011; Arshad, 12).

Four out of six banks show an insignificant increase in ADR. Post-merger ATA significantly moves up only in case of the Atlas bank (M = -.9611, S.D =. 2031) condition; t (2) = -3.895, P = .06. Significant increase in DAR took place only in case of AKBL after

merger (M=-.104, S.D=.005) condition; t(2) = -17, P=.037. The liquidity position of bidder banks of Pakistan improves after mergers (Kemal, 2011; Pazarskis, et al., 2006; Lewellen, 1971; Arshad, 12).

Here all banks increase their post-merger leverage. Significant increase in post merger DTR takes place in case of Atlas bank (M = 2.011, S.D = 3.795) condition; t(2) = -3.385, P=.077. Significant increase of DTR also occurred in case of KASAB bank (M = -40.083, S.D= 8.932) condition; t(2) = -3.47, P=.074. DR shows a significant decrease in performance in case of Atlas bank (M = -1.02, S.D = .063) condition; t(2) = -23.64, P = .002. DEPE improves significantly for SCB during a post-merger period of time (M=4.575, S.D = 1.002) condition; t(2) = 12.243, P=.007. KASAB bank showed an increase in DEPE (M= -26.66, S.D = 5.1003) condition; t(2) = -4.75, P=.042. These results supported by Ghosh & Jain (2000).

Table 10: T Test

Banks	Profitability	Liquidity		Leverage		Capital Adequacy		SIZ	
		T	T	T	T	T	T		
ABL	ROE	-1.631	ADR	-2.881	DTR	-1.016	SAR	-983	-13.5***
	ROA	-1.958	ATA	-2.291	DR	.981	SEPE	-1.048	
	ROI	-2.029	DAR	1.680	DEPE	-.982			
Atlas	ROE	1.684	ADR	-1.382	DTR	-3.39**	SAR	.103	-1.333
	ROA	.078	ATA	-3.89*	DR	-1.727	SEPE	.785	
	ROI	.833	DAR	-1.265	DEPE	-1.607			
SCB	ROE	3.212*	ADR	-1.119	DTR	-6.207	SAR	-8.2**	-33.5***
	ROA	2.263	ATA	2.021	DR	-1.762			
	ROI	2.092	DAR	1.868	DEPE	12.2***	SEPE	-1.628	
NIB	ROE	1.023	ADR	1.160	DTR	-2.624	SAR	-1.316	-1.117
	ROA	1.005	ATA	-.709	DR	-.100			
	ROI	1.267	DAR	-.854	DEPE	-1.049	SEPE	-1.437	
KASAB	ROE	-1.222	ADR	2.094	DTR	-3.470*	SAR	.313	-2.563
	ROA	-5.556	ATA	1.580	DR	.759			
	ROI	-4.70**	DAR	.807	DEPE	-4.75**	SEPE	-.356	
ASKARI	ROE	-.362	ADR	2.130	DTR	-2.664	SAR	13.0**	-12.143*
	ROA	.333	ATA	1.571	DR	-2.750	SEPE	57.0**	
	ROI	1.051	DAR	-17.0**	DEPE	-3.568			
Banks	Profitability	Liquidity		Leverage		Capital Adequacy		SIZ	
ABL	ROE	-1.631	ADR	-2.881	DTR	-1.016	SAR	-983	-13.5***
	ROA	-1.958	ATA	-2.291	DR	.981	SEPE	-1.048	
	ROI	-2.029	DAR	1.680	DEPE	-.982			
Atlas	ROE	1.684	ADR	-1.382	DTR	-3.39**	SAR	.103	-1.333
	ROA	.078	ATA	-3.89*	DR	-1.727	SEPE	.785	
	ROI	.833	DAR	-1.265	DEPE	-1.607			
SCB	ROE	3.212*	ADR	-1.119	DTR	-6.207	SAR	-8.2**	-33.5***
	ROA	2.263	ATA	2.021	DR	-1.762			
	ROI	2.092	DAR	1.868	DEPE	12.2***	SEPE	-1.628	
NIB	ROE	1.023	ADR	1.160	DTR	-2.624	SAR	-1.316	-1.117
	ROA	1.005	ATA	-.709	DR	-.100			
	ROI	1.267	DAR	-.854	DEPE	-1.049	SEPE	-1.437	
KASAB	ROE	-1.222	ADR	2.094	DTR	-3.470*	SAR	.313	-2.563
	ROA	-5.556	ATA	1.580	DR	.759			
	ROI	-4.70**	DAR	.807	DEPE	-4.75**	SEPE	-.356	
ASKARI	ROE	-.362	ADR	2.130	DTR	-2.664	SAR	13.0**	-12.143*
	ROA	.333	ATA	1.571	DR	-2.750	SEPE	57.0**	
	ROI	1.051	DAR	-17.0**	DEPE	-3.568			

Significant decrease in capital adequacy takes place in both ratios of AKBL (see Table 24). SAR decreases after merger ($M=.00044$, $S.D=.0022$), condition; $t(2) = 13$, $P=.049$. SEPE also decreased after merger ($M=.022$, $S.D=.0007$) condition; $t(2) = 57$, $P=.011$. SAR significantly takes place in case of SCB ($M=.125$, $S.D=.017$) condition; $t(2) = -8.2$, $P=.015$. All other ratios show insignificant results. Four banks showed increase while two banks showed decrease in CAR. Overall capital adequacy has increased after merger is equal to decrease in performance. Although capital is life blood for any financial institution and caused reduction of financial cost but due to poor regulatory frame work, bad personal and asset management or due to agency problems high capital cause negative impact on performance. It becomes burden instead of blessing (Abdioglu & Buyuksalvarci, 2011; Ross, 1977).

All banks increased their size after mergers. ABL shows a significant increase in size ($M=-.504$, $S.D=.049$) condition; $t(2) = -13.505$, $P=.005$. Change of size of SCB also occurs significantly ($M=-.5157$, $S.D=.0236$) condition; $t(2) = -33.479$, $P=.001$. AKBL also shows a significant change in size after merger ($M=-.5218$, $S.D=.0297$) condition; $t(2) = -12.143$, $P=.052$. As increase in size indicates a decrease in performance Bohren & Schindele (2010) that's why null hypothesis accepted.

Conclusion

This research is based on small set of six bidder banks, their limited secondary data prove that bidder banks did not improves their post-merger performance in term of profitability liquidity, leverage, capital adequacy and size. Secondary data was collected through Financial Statement analysis of Financial Sector and through websites of selected bidder banks from the time period of 2003 to 2012. During impact measurement, two dependent variables return on equity and return on assets are used while four independent variables liquidity risk, leverage, capital adequacy level and size of bidder banks. Dougherty (2011) method is applied to find the relationship between these strategic decisions and bank performance. In next phase,

performance has been measured through T-Test. Insignificant impact of mergers on performance is found by this research.

Only two banks Allied bank and Atlas bank improved their performance after merger while all other showed vice versa results. It's evident from this research that mergers did not play significant role in improvement of performance of selected bidder banks. These results are supported by (Kemal, 2011; Badreldin & Kalhoefer, 2009 and Pazarskis, et al., 2006) while contradict with European research of (Altunbas & Marques, 2007). It is fallacious to assume that mergers always fail to improve the performance of Pakistani banks only on the basis of this limited study of six banks that lacks full knowledge about all internal and external motives of bidder banks. Moreover, success or failure of any merger depends upon how they are planned assessed and executed. Furthermore, policy makers should review their decision of mergers and formulate and implement effective policies for improvement in performance of merging banks in Pakistan. This research is limited to a shorter time span. Further research can be done on same topic by using longer time span and various other important factors like inflation, market size, rules and regulation, corporate responsibilities, etc. Moreover, it forms a base for doing research on the topic of mergers in different industries of Pakistan.

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