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The effects of mergers and acquisitions on stock price behavior in banking sector of Pakistan

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Abstract

Mergers and Acquisitions are considered as one of the useful strategies for growth and expansion of businesses. These strategies have widely been adopted in developed economies while are quite often practiced in developing countries like Pakistan. This study aims to explore the effect of Mergers and Acquisitions on stock price behavior of banking sector in Pakistan by using event study analysis for the period of 2002–2012. Market Study Method was used to compute the abnormal and cumulative abnormal returns for analyzing pre and post events effect of the phenomenon on share prices. The results reveal mixed observations of the activity of mergers and acquisitions on stock price performance. Our findings indicate that most of the firms experienced negative while some firms have shown positive abnormal and cumulative abnormal returns following the activity. Overall, the results indicate that the market responded negatively towards the phenomenon of mergers and acquisition in Banking sector of Pakistan. The results would be useful in providing new insights to the investors and management in making their investment related decisions.

Keywords: Merger; Acquisition; Banking sector; Pakistan; Event study

1. Introduction

Organizations need financial resources to expand their operations or growth.[1] Growth can be achieved through launching new products and services or expanding operations beyond the existing resources. There are two resources used for achieving growth, i.e. internal resources and external resources.[2] The business organizations mostly rely on internal sources (retained earnings) for expansion of the business. However, any significant growth opportunity will motivate organizations to rely on external resources, if there are limited internal resources.

The external sources may include loans from banks, partnerships, merger with another company or acquiring other organization. The Mergers and Acquisition (M&As) are the emerging strategies adopted for expansion of the business

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in the corporate world. Due to its rapid growth, many organizations adopted these strategies for expanding their business and approximately four thousand transactions are recorded each year in the business world.[1]

Literature indicates numerous reasons for occurrence of Merger and Acquisitions[1] between organizations. It includes organizational synergy where the merged venture receives high value than each individual firm.[3] It may decrease expenses of the new ventures, maximize shareholder wealth, survival in the dynamic environment and structure, achieve economies of scale and scope, reduce costs and increase returns on equity.[4]

The M&As remained a favorite subject among researcher because of its significant importance in the corporate world.[5] At the beginning of the era, the early M&As transactions have been reported in US in the eighteen century. Afterwards these transaction have been found in European markets in the nineteenth century.[6] These strategies were adopted by many successful businesses of the world. The M&As strategies has been mostly practiced in developed countries, while less often in the developing countries. In addition Hoyle et al.,[7] found a total of 9602 M&As in the corporate world since 2000. They concluded that most of these transactions were recorded in developed countries of the United States and European market, that's why most studies in this field have been conducted in the developed economies.[8] However, in a developing country like Pakistan, these strategies are less practiced and therefore less literature is available in this context. However, in a developing country like Pakistan, M & As have not much used in early nineties, but it is now becoming a useful strategy for growth and expansion in businesses. About one hundred and twenty one events were announced in the financial and non-financial sector during the years 1995 to 2011.[2] The financial sector reported fifty seven mergers and acquisitions from the year 2002−2011 due to competitive environment and changes in regulations from time to time by the Central Bank to improve the banking sector in Pakistan.[9]

The State Bank Pakistan, for instance, has changed the minimum capital[3] requirement for schedule banks from time to time. The paid-up capital was first increased and then decreased to financially strengthen the scheduled banks (SBP, 2008, 2009). In order to fulfill the minimal capital requirement, banks have two options to either issue new shares or to acquire or merge with other banks or firms to meet criteria set by the central bank. The changes in policies and some other factors like political and financial crises have increased transactions[4] of M & As in the banking sector of Pakistan. It is necessary to measure the impacts of these transactions. The study therefore attempts to analyze the pre and post impacts of the phenomenon of mergers and acquisition. The main objective of this study is to analyze the impacts of mergers and acquisitions on the shareholders wealth as well as on the financial performance of banks after mergers and acquisitions in Pakistan**.**

2. Review of literature

The Mergers and Acquisitions have received global recognition as a strategic move in the corporate sector during the past few decades. These strategies have been successfully adopted by many national and multinational organizations. These transactions have brought significant development in different sectors of the world.[10] The analyses indicates that approximately 2549 M&As worth more than $504 billion occurred in the insurance sector from 1990 to 1999, which changed the overall structure of the insurance industry in Europe. In the same manner, the increasing trend of M&As also affected the banking industry structure (Cummins and Weiss, (2004). There are different factors that are associated with increasing trends of M&As among which deregulation and technological advancement are most influencing factors especially in banking sector around the globe. As a result, these factors allowed foreign banks to enter from developed into developing countries through process of Mergers and or acquisitions.

Most of the literature indicates studies that have focused on investigating the developed economies. This is due to the fact that M&As were mostly carried out in developed markets especially US financial market, and therefore, the majority

[1] The Mergers and Acquisitions are different terms, though, in meanings but are often used interchangeably. Merger refers to that form of a financial deal in which two or more organizations combine together and make a single entity while in acquisition, one organization purchases whole or part of another organization.[1] In a merger, the individual identities of the combined companies changed when they form a new entity, while in acquisition, no new company is formed, therefore the identities of the companies remain unchanged.

[2] Source: Official website of Karachi Stock Exchange.

[3] The minimum capital requirements were increased to Rs. 23 billion up to the end of December 2013 in a circular on 5th September, 2008 (SBP, 2008). In another circular as on 15th April, 2009, the minimum capital requirements were decreased to Rs. 10 billion up to the end of December, 2013 (SBP, 2009).

[4] The financial sector recorded fifty seven activities from the year 2002−2011 (Abbas. *et al*., 2014). The increasing trend in M&As in different sectors of the economy elaborates that these transactions play an important role in shaping the corporate structure of different firm.

of the earlier studies examined US economy.[11] Apart from this, the developing countries also remained attractive for most of the researchers.[12] Literature indicates that the phenomenon of M&As have both positive and negative impacts on the shareholders wealth. Goddard et al.,[10] used sample of 132 events of Asia and Latin America from 1998 to 2009 and found that M&As have positively affected the shareholders value of the target firms without causing any loss to the acquiring firm. Soongswang[13] observes positive impacts of M&As on shareholder's wealth in the target firms but found negative returns for the acquirer firm. Similarly, Chavaltanpipat et al.,[14] reports that M&As have negative impacts on shareholder's wealth on bidder/acquirer organization while positive abnormal returns for the acquired organization at the time of announcement. Guest et al.,[15] finds negative impact on the share returns of the firm after the event. The share returns of the acquiring firm on event day as well as in the event window was found negative after acquisition of the target firm. Their results were similar to other studies in the UK on acquirers in M&As transactions. Cummins and Weiss[16] found negative cumulative average abnormal returns (CAAR) for acquirers and positive for the target firm.

The effects of Mergers and or acquisitions on stock returns is quite established and well examined for developed countries but is still an issue of debate among the researchers in developing economies. This is because of the lack of literature available on the developing economies and it needs to be investigated especially for developing economies.[17] A number of reasons can be associated with the limited amount of literature on the impact of these events in the developing economies. These reasons would include lack of advanced data, source of the events, least use of these transactions and scope in the developing countries.[10,17]

In Pakistan, however, the phenomenon of Mergers and acquisitions is relatively new and is practiced from the last two decades. Therefore, there is less literature available on the effect of M&As on stock returns as compared to other countries.[18] The existing studies in Pakistan provide mixed results on the effect of M&As on stock returns. Few of the studies reported positive results while others have demonstrated negative or no impacts of M&As on share price. Ahmed and Ahmed[19] studied the manufacturing sector of Pakistan from the year 2000–2009 and found similarities in results of Mergers and acquisition in Pakistan are quite similar to the studies conducted for other countries. Mehmood, et al.[41] studied banking and pharmaceutical industry in Pakistan and observed mixed results. They reported positive impacts on share prices of some companies while negative and or even no effect on share prices following the phenomenon of mergers and acquisition in the country.

The aforementioned studies indicate that the literature provides evidence on the effects of mergers and acquisition in some sectors of the economy. However, Banking sector still needs researcher attention as it has witnessed a number of Mergers and Acquisitions in Pakistan, which could have either positive or negative effects on shareholder's wealth of the combined banks. This study attempts to study the impacts of mergers and acquisitions on shareholders' wealth of the banking sector in Pakistan. The study intends to analyze the implication of these events, which would enable regulators, central bank and other regulatory authorities, to revise rules and regulations pertaining to mergers and acquisitions in banking industry in general and associated stakeholders (foreign investors) in particular.

3. Data and methodology

This study includes mergers and acquisitions that took place in the banking sector of Pakistan between the years 2002–2012. The number of mergers and acquisition that took place between the years 1995–2011 are about one hundred and twenty one[5]. These transactions in the last decade increased due to competition and advancement in the banking sector throughout the world. The State Bank of Pakistan is encouraging mergers and acquisitions to improve the banking sector in the country. Consequently, fifty seven (57) events in the financial sector were reported from 2002 to 2012 (Abbas., Hunjra., Saeed., Hassan., & Ijaz., 2014). However, the sample of the study was reduced to eleven events on the following criteria.

I. The transaction was announced during the years 2002–2012.
II. The acquirer firm must be a bank, and the acquired firm belongs to the financial sector of Pakistan.
III. The acquirer bank is supposed to be listed on the Karachi Stock Exchange and needs to be a schedule bank.
IV. The availability of data.

The sample events as shown in Table 1 and were selected from overall mergers and acquisitions in banking sector of Pakistan. These banks were selected on the basis of availability of data. The number of the sample events is less as compared to developed

[5] Source: Karachi Stock Exchange official website.

Table 1
Sample of the study.

Event	Acquirer Banks	Acquired Bank	Date of M&As
E-1	Faysal Bank Limited (FABL)	Al- Faysal Investment Bank (AFIB)	1st November 2002
E-2	Crescent Commercial Bank Limited (CCBL)	Trust Commercial Bank Limited (TCBL)	18th October 2004
E-3	First Dawood Investment Bank Limited (FDIBL)	Industrial Capital Modaraba (ICM)	6th December 2004
E-4	Allied Bank Limited (ABL)	First Allied Bank Modaraba (FABM)	25th August 2006
E-5	KASB Bank Limited (KASB)	International Housing Finance Ltd (IHF)	22nd November 2007
E-6	NIB Bank Limited (NIB)	PICIC Commercial Bank Ltd & PICIC Ltd. (PICIC)	1st January 2008
E-7	KASB Bank Limited (KASB)	Network Leasing Corporation Ltd. (NLL)	17th February 2009
E-8	Investment Capital Investment Bank Ltd. (ICIBL)	Al-Zamin Leasing Corporation Ltd. & Al-Zamin Leasing Modaraba (ALZM)	11th January 2010
E-9	Askari Bank Limited (AKBL)	Askari Leasing Limited (ALL)	10th March 2010
E-10	Faysal Bank Limited (FABL)	The Royal Bank of Scotland Ltd. (RBS)	3rd January 2011
E-11	Summit Bank Ltd. (SMBL)	Atlas Bank Ltd. (ATBL)	11th January 2011

Source: Rahman et al. (2016).[42]

countries due to unavailability of data as there is no specialized database for keeping record of such transactions. The data of the study were collected from different potential sources like financial reports and official websites of the sample banks, State Bank of Pakistan, Karachi Stock Exchange and business recorder. The stock price data of banks were collected from the Website of the Business Recorder which keeps the record of daily stock prices of firms listed on the Karachi Stock Exchange. The stock price data of banks was collected from the website of the Business Recorder which keeps the record of daily stock prices of firms listed on the Karachi Stock Exchange.

3.1. Methodology

The Market Study Method is used which is considered as a standard method for examining the impacts of sample events.[9] This method uses stock price data to examine the returns of stocks in event's transactions.[20] Market studies are those studies in which market reaction is measured by the increase or decrease in share prices of the firm due to the occurrence of certain events. The market reaction is generally measured in the form of Abnormal Returns (ARs), which is the difference between the actual returns and the expected returns of the stock. The main theory of the market study states that how these events affect the share value of the organization. Further, It describes that how the firm's share value is changed into the shape of stock ARs. Previous studies have described ARs as the main variable in the field of event studies.[21]

The abnormal and cumulative abnormal returns of the stock are used in this study to measure the effect of events on stock price before and after the announcement of M&As. The abnormal returns were measured using stock price data of the sample banks. The abnormal returns are the difference between the expected market returns and the actual market returns of the stocks. The Cumulative Abnormal Returns (CARs) is obtained by summing all abnormal returns in the event window of the study.[22]

3.2. Event day and event window estimation

The event day is the day on which firm announce the M&As. This day is very important to measure the impact of these transactions on performance of the banks. If abnormal returns have been occurred before event day, then it may be possible that information about the event have been leaked out to the market. Therefore, for better result of the event, it is necessary that accurate information may be collected from the market.[23] The event day of each event in the study is extracted from the list given on the website of Karachi Stock Exchange.

The event window is the study period in which the ARs and CARs of the stock are measured. Different studies have used different event windows for measuring the returns of the stock prices in the event study methodology. The minimum window period, which has been seen in different studies is three days (one day before and after the event), while the maximum time is 60 days before and 750 days after the events.[24] According to efficient market theory, the event window for study may be short to observe increase or decrease in share prices as a result of some event. The theory supports the short period of time for the event study in mergers and acquisitions. In the long term, the increase or decrease may all be affected by other factors in the economy. However, the shorter window may not give full information on the closing of the market. The announcement information may not reach to the public up to next business day, or it may leak before the announcement and may have effect before the announcement day.[20] In order to overcome the drawback of these effects, the researcher in this study has taken an event window of 91 days that is 45 days before and 45 days after the announcement of the event.

The estimation window is the selected days taken before the event window as the event day may not show a true picture of the event. This window is used in the Market Model to calculate the Expected Returns (ERs) on stocks as a result of announcement of mergers and acquisitions, if there are no merger and acquisition of the acquirer and acquired firm.[20] In this study the estimation window has been considered 250 days before the event window.[25]

3.3. Measuring abnormal returns and cumulative abnormal returns

The Market Study Method is applied to measure the effect of M&As on stock price of the acquirer banks from the announcement of the event. This method determines the difference in actual and the expected returns of the stock price as a result of the transaction. This method has been used by several studies.[20,26−30] The market model allows to retain the frequent events in the sample and give more efficient results from mergers and acquisitions.[31] Brown and Warner[32] argue that risk-adjusted market model does not provide the measurement of abnormal returns significantly. If the market condition is normal, the market model expects that the *bth* bank stock returns at time *t* (*Rbt*) is proportional to the market returns.

$$Rbt = \alpha + \beta Rxt + \varepsilon bt \tag{1}$$

where *Rbt* are the realized returns of *bth* bank stock at time *t* (in days).

α and β are the market model parameters for stock *b*.

Rxt is the returns of market portfolio *x* at time *t* (in days).

εbt is the statistical error term.

The α and β are measured by using the Ordinary Least Square (OLS) regression method for a period of 250 days before the event window.[25] The expected market returns ($\widehat{R}bt$) are calculated by assuming that the stock of *bth* bank returns in normal market, if such an event has not been occurred. The parameters in Eq. (1), α and β are used to calculate the estimated returns, as shown in Eq. (2), of each bank stock in the sample of the study.

$$\widehat{R}bt = \widehat{\alpha} + \widehat{\beta}\mathrm{Rxt} \tag{2}$$

where $\widehat{R}bt$ is the expected return of stock b at time t (in days).

Rxt is the return of market portfolio x at time t (in days).

α and β are parameters for bank stock *b*.

Abnormal returns, as shown in Eq. (3) are calculated after calculating expected returns of the bank stock. For the *bth* bank, the ARs of the stock on the day *t* will be:

$$ARbt = Rbt - \widehat{R}bt = Rbt - \left(\widehat{\alpha} + \widehat{\beta}\mathrm{Rxt}\right) \tag{3}$$

where *ARbt* is the abnormal return for bank stock *b* on day *t*.

After *ARs*, the cumulative abnormal returns, as shown in Eq. (4), of the stock are measured in the event window of the study. The CARs in the event window (*x, y*) would be:

$$CARb, x, y = \sum_{t=-y}^{t=x} ARb, t \tag{4}$$

where *CARb,x,y* is the aggregate abnormal returns from day *x* to day *y*.

ARb,t is the abnormal returns of stock b at time t (in days).

The abnormal and cumulative abnormal returns are calculated for each bank in sample of the study.

4. Empirical results

The mean returns were calculated to know the average change in share price resulted due to M&As of the selected banks. Increase in mean returns shows a positive impact while decrease in mean returns indicates negative impact after M&As. The data in Table 2 provides details about the mean returns of share prices in pre and post event of M&As in sample banks of the study.

Table 2 represents the difference in mean returns of stock price in M&As transactions in banking sector. The increase in mean returns of share price was observed in five events (E2,E3,E4,E6,E7), while the remaining events (E1,E5,E8,E9,E10,E11) show decline in mean returns. This increase in stock returns indicates significantly higher impacts on the shareholders wealth (share price). The highest increase in mean returns was observed in Event-7 (1.2818%), while lowest negative decrease is observed in Event-3 (0.1435%). The increase in returns in Event-2 is

Table 2
Summary statistics of stock returns before and after M&As.

M&As	Pre-Event	Post-Event	% Change	Effect
FABL-AFIB (E-1)	0.5083	0.2715	−0.2368	Decrease
CCBL-TCBL (E-2)	−0.5339	0.2744	0.8083	Increase
FDIBL-ICM (E-3)	0.3904	0.5339	0.1435	Increase
ABL-FABM (E-4)	−0.3432	0.3882	0.7313	Increase
KASB-IHF (E-5)	3.3375	−0.2569	−3.5943	Decrease
NIB-PICIC (E-6)	−0.2923	0.0930	0.3853	Increase
KASB-NLL (E-7)	−1.5356	−0.2538	1.2818	Increase
ICIBL-ALZM (E-8)	1.2553	0.2176	−1.0377	Decrease
AKBL-ALL (E-9)	−0.0806	−0.9048	−0.8242	Decrease
FABL-RBS (E-10)	0.2664	−0.1815	−0.4479	Decrease
SMBL-ATBL (E-11)	0.7894	−0.3560	−1.1454	Decrease

All figures are mean percentage returns.

0.8083%, Event-4 is 0.7313%, and Event-6 is 0.3853% respectively. These stock returns in these 5 events increased after M&As. These findings are inconsistent with results obtained by previous studies, see for example, Loughran and Vijh[33] and Rau & Vermaelen,[34] who found decrease in returns of merged banks after M&As.

The results indicates that the share price in six events (E1,E5,E8,E9,E10,E11) have observed negative mean returns after M&As. The highest negative change in average returns was found in Event-5 (−3.5943%), followed by Event-11 (−1.1454%), Event-8 (−1.0377%), Event-9 (−0.8242%), Event-10 (−0.4479%) and Event-1 (−0.2368%). The results indicate that these banks didn't find favorable results after M&As. The results corroborates with the findings of Agarwal[35] for European market and Masulis et al.[36] for US market. Similarly, Loughran and Vijh[33] and Rau & Vermaelen[34] found negative share price returns of mergers banks.

4.1. Abnormal returns and cumulative abnormal returns

The abnormal and cumulative abnormal returns of the stock price are computed to know the affects of event on wealth of the stockholders before and after the announcement of M&As. Abnormal returns are the difference between the expected market returns and the actual market returns of the stock. If the market expected returns is 5% and the

Table 3
Differences in average abnormal and cumulative abnormal returns.

		Event day	Pre-Event	Post-Event	Difference
Event-1	AR	−1.79%	−0.28%	−1.19%	−0.92%
	CAR	−14.32%	−12.53%	−68.03%	−55.50%
Event-2	AR	3.33%	−0.48%	0.02%	0.51%
	CAR	−18.42%	−21.74%	−17.30%	4.44%
Event-3	AR	−2.43%	0.20%	0.09%	−0.11%
	CAR	8.58%	11.01%	12.65%	1.64%
Event-4	AR	−0.11%	−0.63%	−0.16%	0.48%
	CAR	−28.66%	−28.55%	−35.75%	−7.20%
Event-5	AR	4.82%	−0.32%	−0.47%	−0.15%
	CAR	−9.61%	−14.43%	−30.88%	−16.45%
Event-6	AR	−1.82%	−0.28%	−0.21%	0.07%
	CAR	−14.25%	−12.44%	−23.76%	−11.32%
Event-7	AR	−4.61%	−1.16%	−0.53%	0.64%
	CAR	−56.98%	−52.37%	−80.61%	−28.25%
Event-8	AR	15.59%	0.57%	−0.35%	−0.92%
	CAR	41.04%	25.45%	25.11%	−0.35%
Event-9	AR	0.07%	−0.20%	−1.06%	−0.86%
	CAR	−9.13%	−9.20%	−56.85%	−47.64%
Event-10	AR	−1.53%	0.04%	−0.09%	−0.13%
	CAR	0.16%	1.69%	−4.09%	−5.78%
Event-11	AR	−4.12%	0.63%	0.14%	−0.49%
	CAR	24.27%	28.39%	30.65%	2.27%

stock returns increased by 9%, then the abnormal returns would be 4% (9−5 = 4). The cumulative abnormal returns is obtained by summing all abnormal returns in the event window of the study.[22]

Table 3 shows the results of ARs and CARs of 11 events of the study. The result shows negative effect on ARs and CARs after M&As. The difference of pre and post results for both ARs and CARs for Events 1, 5, 8, 9 and 10 were found negative in an event window of 91 days (−45, +45). The event 3 and 11 reported only negative ARs while event 4, 6 and 7 reported only negative CARs in the event window. The remaining events show positive returns for banks after the announcement of M&As.

Further, the results indicate negative ARs and CARs on the announcement day of M&As in Event 1, 4, 6 and 7 respectively. Furthermore, the results show negative ARs while positive CARs for event 3 and 10 on announcement day. Furthermore, the results indicate negative CARs while positive ARs for Events 2, 5 and 9 on the event day. The results of all the events have been plotted in Fig. 1−11. The results clearly elaborates that most of the banks experienced negative ARs and CARs after M&As.

It can therefore be argued that the Phenomenon of Merges and Acquisitions have mostly negatively affected the shareholders wealth (stock returns) in the banking sector of Pakistan. These observations are in line with those of Cummins and Weiss[16] who also report negative returns after the announcement of M&As. However, the results contradict with those of Flught[37] Soongswang[13] who reported positive returns on shareholders wealth in similar transactions.

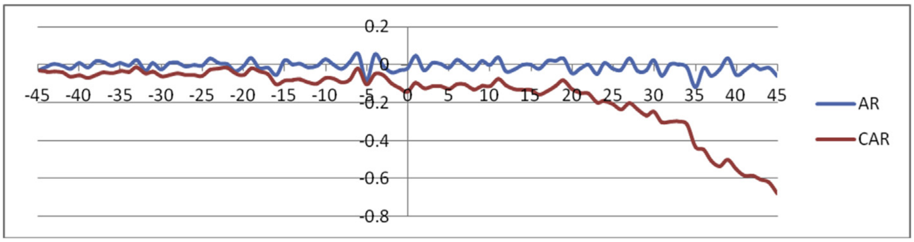

Fig. 1. Abnormal and cumulative abnormal returns of Event 1.

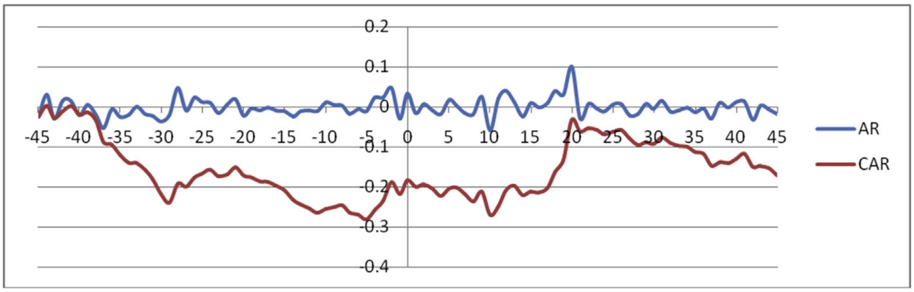

Fig. 2. Abnormal and cumulative abnormal returns of Event 2.

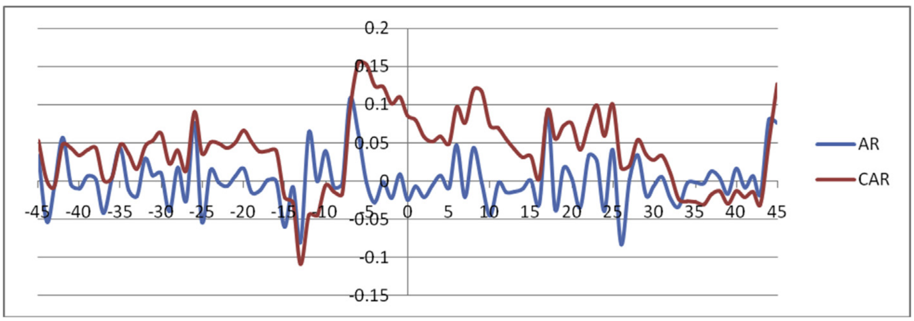

Fig. 3. Abnormal and cumulative abnormal returns of Event 3.

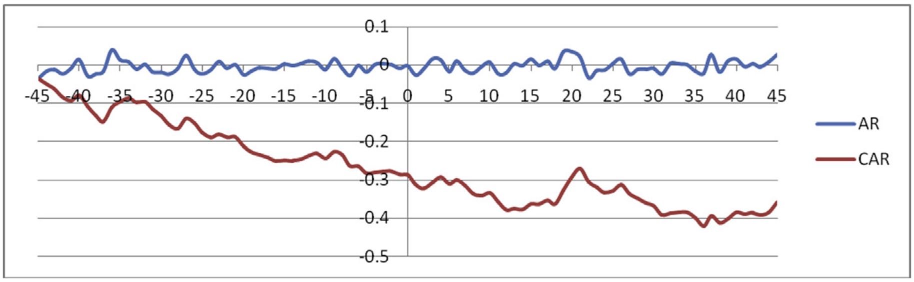

Fig. 4. Abnormal and cumulative abnormal returns of Event 4.

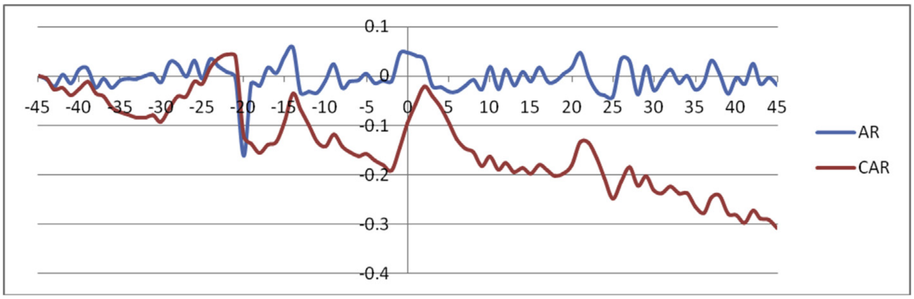

Fig. 5. Abnormal and cumulative abnormal returns of Event 5.

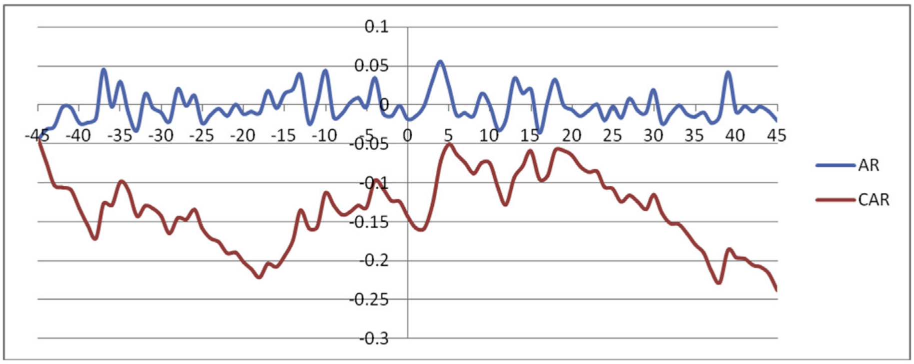

Fig. 6. Abnormal and cumulative abnormal returns of Event 6.

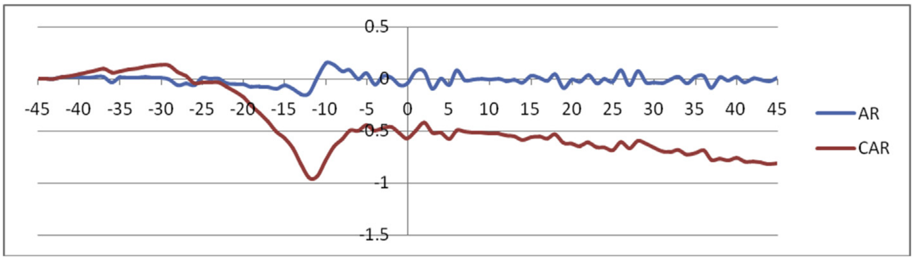

Fig. 7. Abnormal and cumulative abnormal returns of Event 7.

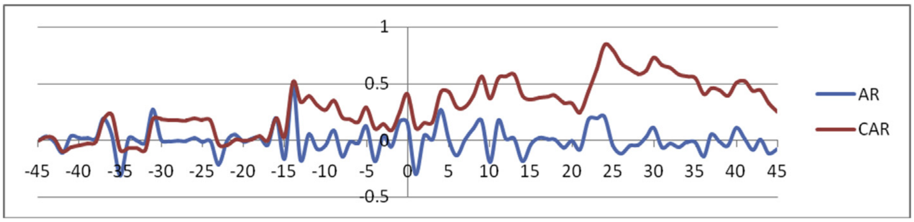

Fig. 8. Abnormal and cumulative abnormal returns of Event 8.

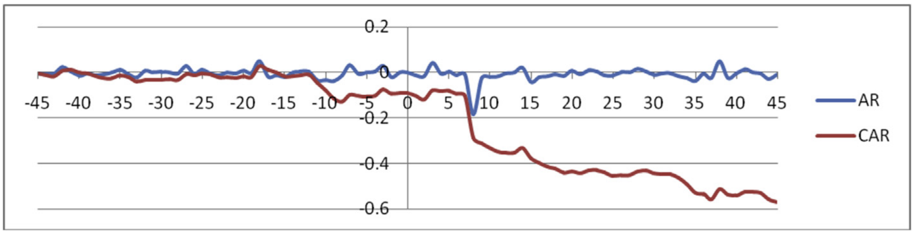

Fig. 9. Abnormal and cumulative abnormal returns of Event 9.

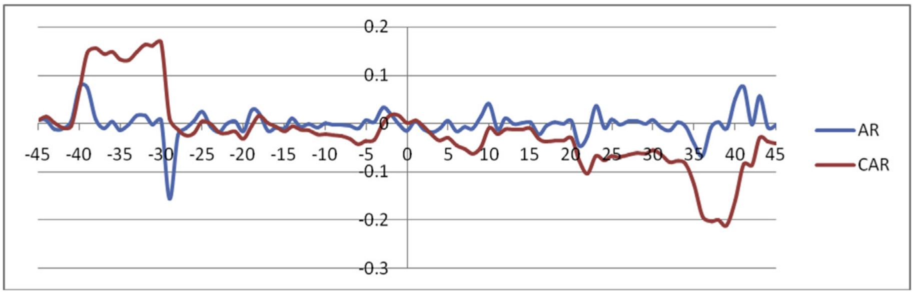

Fig. 10. Abnormal and cumulative abnormal returns of Event 10.

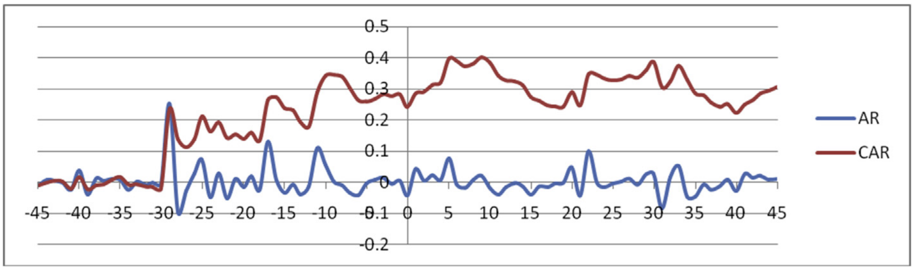

Fig. 11. Abnormal and cumulative abnormal returns of Event 11.

5. Conclusion and implications

This study analyzed the effect Merges and Acquisitions on shareholder wealth (stock returns) in the banking sector of Pakistan over the period 2002 to 2012. The study objective of the study is to conduct analysis of the banking sector in terms of abnormal and cumulative abnormal returns of stock price. The empirical findings suggest mixed results of ARs and CARs of sample events of the study. Few of the events show positive returns while most of the events show negative returns following the announcement of Merges and Acquisitions. The ARs in post event show negative results in seven events, whereas the CARs in post event were found negative in eight events. The results of the few remaining events have reported positive ARs and CARs for the merged banks. On the event day, the ARs were found negative in six events while in seven events, the CARs were negative. However, the overall results show a negative effect on ARs and CARs after merger transactions. The results of the study corroborates with Franks, et al.,[38] while inconsistent with most of the studies (Hagendorff et al.,[39] Soongswang[13]; Goddard et al.[10]; Doukas & Lang[40]; Cummins & Weiss, (2004).

The results of the study suggest that the markets did not respond well to the M&As of the banks and therefore, the acquired banks did not perform well after M&As. From the analyses it can be derived that the phenomenon of Merges and Acquisitions did not provided potential benefits to all firms in the banking sector except few because most of firms experienced declines in their market value (share price). The results also suggest that internal management have did not forwarded efficient decision by going through process of M&As. Finally, the results indicate that few of the firms get benefit from M&As which suggests that there exist some potential benefits associated with M&As in banking sector, therefore, firms can choose M&As after carefully analyzing the potential future benefits.

Furthermore, the study suggests that the banks would also focus on alternatives of M&As that are to get talented human resources, technological advancement, increase in market share and customer chain, etc. These motives will indirectly increase the firm value. The government may also formulate comprehensive policies about technology up gradation, minimum capital requirement, capital adequacy ratio, legal framework (change in Section 48 of Banking Companies Ordinance 1962), fiscal measures (change in income tax rates for banks), introduction of the concept of Newco (by facilitating merger of foreign banks not incorporated in Pakistan by issuance of license), fast track processing and moral suasion regarding banking sector so that merged banks in loss can get support. The positive change in these policies may help boost the performance of the so acquired or merged firms. The study was limited to examining the M&As that take place in banking sector of Pakistan. Further, A study on other sectors of the economy would be more useful for assessing the effects of Mergers and acquisitions on stock returns.

References

1. Alao RO. Mergers and acquisitions (M&As) in the Nigerian banking industry: an advocate of three mega banks. *Eur J Soc Sci*. 2010;15:554–563.
2. Mcshane SL, Von Glinow MA. *Organisational Behavior*. McGraw Hill Co. Inc; 2001.
3. Georgios K, Georgios H. Du Pont analysis of a bank merger and acquisition between Laiki bank from Cyprus and marfin investment group from Greece. Is there an increase of profitability of the new bank? *Kyriazopoulos-Hadjimanolis, MIBES 2011 – Oral*. 2011:157–176.
4. Gattoufi S, Al-Muharrami S, Al-Kiyumi A. The impact of mergers and acquisitions on the efficiency of GCC banks. *Banks Bank Syst*. 2009;4:94–101.
5. Goyal DKA, Joshi V. Mergers in banking industry of India: some emerging issues. *Asian J Bus Manag Sci*. 2011;1:157–165.
6. Focarelli, Panetta, Salleo. Why do banks merge? *J Money Credit Bank*. 2002;34:1047–1066.
7. Hoyle JB, Schaefer TF, Doupnik TS. *Advanced Accounting*. McGraw Hill Co. Inc; 2001.
8. Erel I, Rose C, Michael W. Determinants of cross-border mergers and acquisitions. *The Journal of Finance*. 2012. XVII, No. 3.
9. Abbas Q, Hunjra AI, Saeed R, Hassan E, Ijaz MS. Analysis of pre and post merger and acquisition financial performance of banks in Pakistan. *Inf Manag Bus Rev*. 2014;6:177–190.
10. Goddard J, Molyneux P, Zhou T. Bank mergers and acquisitions in emerging markets: evidence from Asia and Latin America. *Eur J Finance*. 2012;18:419–438.
11. Gaughan PA. *Mergers: What Can Go Wrong and How to Prevent it*. Hoboken, NJ: John Wiley & Sons; 2005.
12. Mueller. Merger policy in the United States: a reconsideration. *Rev Ind Organ*. 1997;12:655–685.
13. Soongswang A. Total gains: do mergers and acquisitions pay investors in the event firms? *Asian J Bus Manag Sci*. 2011;1:136–149.
14. Chavaltanpipat A, Kholdy S, Sohrabian A. The wealth effects of bank acquisitions. *Appl Econ Lett*. 1999;6:5–11.
15. Guest PM, Bild M, Runsten M. The effect of takeovers on the fundamental value of acquirers. *Account Bus Res*. 2010;40:333–352.
16. Cummins JD, Weiss MA. Consolidation in the European insurance industry: do mergers and acquisitions create value for shareholders? *Brookings Wharton Pap Financ Serv*. 2004;2004:217–258.
17. Wright, Filatotchev, Hoskisson, Peng. Strategy research in emerging economies: challenging the conventional wisdom. *J Manag Stud*. 2005;42:1–33.
18. Bashir A, Sajid MR, Sheikh SF. The impact of mergers and acquisitions on shareholders wealth: evidence from Pakistan. *Middle East J Sci Res*. 2011;8(1):261–264.
19. Ahmed M, Ahmed Z. Mergers and acquisitions: effect on Financial Performance of manufacturing companies of Pakistan. *Middle East J Sci Res*. 2014;21(4):706–716.
20. Dilshad MN. Profitability analysis of mergers and acquisitions: an event study approach. *Bus Econ Res*. 2013;3:89–125.
21. Serra. Event study tests: a brief survey. *Universidade do Porto, Working papers da FEP*. 2002;117:2–12.
22. Sharma. Determining value creation through mergers and acquisitions in the banking industry using accounting study and event study methodology. *Eur J Econ Finance Adm Sci*. 2010:61–73.

23. Halpern P. Corporate acquisitions: a theory of special cases? A review of event study cases applied to acquisitions. *J Finance*. 1983;2:297−318.
24. Tuch C, O'sullivan N. The impact of acquisitions on firm performance: a review of the evidence. *Int J Manag Rev*. 2007;9:141−170.
25. Asimakopoulos I, Athanasoglou PP. Revisiting the merger and acquisition performance of European banks. *Int Rev Financ Anal*. 2013;29:237−249.
26. Houston JF, James CM, Ryngaert MD. Where do merger gains come from? Bank mergers from the Perspective of insiders and outsiders. *J Financ Econ*. 2001;60:285−331.
27. Fuller, Netter, Stegemoller. What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions. *J Finance*. 2002;57:1763−1794.
28. Faccio, Mcconnell, Stolin. Returns to acquirers of listed and unlisted targets. *J Financ Quant Anal*. 2006;41:197−220.
29. Dusoa T, Guglerb K, Yurtogluc B. Is the event study methodology useful for merger analysis? A comparison of stock market and accounting data. *Int Rev Law Econ*. 2010;30:186−192.
30. Selcuk EA, Yilmaz AA. The impact of mergers and acquisitions on acquirer performance: evidence from Turkey. *Bus Econ J*. 2011;2011:1−8.
31. Pilloff Santomero. The value effects of bank mergers and acquisitions. In: Amihud Y, Miller G, eds. *Bank Mergers and Acquisitions*. Boston: Kluwer; 1998:59−78.
32. Brown SJ, Warner JB. Measuring security price performance. *J Financ Econ*. 1980;8:205−258.
33. Loughran T, Vijh AM. Do long-term shareholders benefit from corporate acquisition. *J Finance*. 1997;52:1765−1790.
34. Rau PR, Vermaelen T. Glamour, value and the post-acquisition performance of acquiring firms. *J Financ Econ*. 1998;49:223−253.
35. Agarwal S. *Mergers and Acquisition in Tea Industry: A case study*. 2007. Retrieved July 2011.
36. Masulis RW, Wang C, Xie F. Corporate governance and acquirer returns. *J Finance*. 2007;62:1851−1889.
37. Flugt C. *Shareholder Wealth Effects of Mergers and Acquisitions: An Empirical Investigation of Short-term Performance in the European Market*. Denmark: Aarhus School of Business, University of Aarhus; 2009. May 2009.
38. Franks, Harris, Mayers. *Means of Payment in Takeovers: Results for the U.K. and U.S*. Working paper. University of North Carolina; 1987.
39. Hagendorff J, Collins M, Keasey K. Investor Protection and the value effects of bank merger announcements in Europe and the US. *J Bank Finance*. 2008;32:1333−1348.
40. Doukas JA, Lang LHP. Foreign direct investment, diversification and firm performance. *J Int Bus Stud*. 2003;34:153−172.
41. Mahmood I, Aamir M, Hussain CM, Sohai N. Impact of merger/acquisition on share price - a case study of Pakistan. *Eur J Sci Res*. 2012;67:617−624.
42. Rahman Z, Jebran K, Ali A, Batool S, Ahmad W, Ali N. Financial performance of Pakistani banks: Pre and post analysis of mergers and acquisitions. *Journal of Islamic and Business Management*. 2016;6(2):115−133.