

Merger & Acquisition: A Comparative Integration Analysis of Third World Country

Zaib Maroof and Muhammad Jawad

*Department of Leadership & Management Studies, National Defence University Islamabad, Pakistan
Lahore Business School, University of Lahore Islamabad, Pakistan*

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Abstract: After globalization, an upsurge in Merger & Acquisition (M&A) activities has been observed all over the globe especially in last decade, as same contributed towards the economic wellbeing of any country. Companies adopted different Integration Strategies (Vertical, Horizontal & Conglomerate) to undergo the merger deals and accordingly their post merger financial performance analysis was documented for future reference. On the contrary, comparatively inadequate evidence is accessible to appreciate the outcome of this activity in Pakistan, which cannot be taken as reference for future M&A deals. Therefore, the present research investigate in a decent way the impact of various M&A Integration Strategies on the financial performance of the merged firms in Pakistan, with an aim to identify the best suited M&A Integration Strategy in own environment. Available data from pre and post merger financial Statements of 36 merger events categorized broadly into three Integration Strategies (year 2000 to 2010) had been examined using paired sample T-test for difference of means of ratio categorized on four basis i.e. Liquidity Ratio, Profitability Ratio, Operating Expense Ratio & Financial Leverage Ratio. Plausible recommendations were solicited for the benefit of the investors, financial analysts, advisory firms and investment banks.

1 INTRODUCTION

The advancement in the field of information technology has transformed the business markets and have increased competition to manifolds. Companies have expanded their operation across the international boundaries and in order to achieve growth and expansion of products and services, businesses use diverse strategies depending on their business environment and the degree of competition prevailing in the markets. Literature narrated that in order to meet competition different integration strategies are used by firms all across the globe. David (2000) discussed in his book "Strategic Management concepts and cases" that different Integration strategies were adopted by firms at domestic and International level according to the circumstances. Among all the integration strategies the most widely used included vertical integration strategies, diversification strategies and defensive strategies however, the type and mean of adopting and implementing a strategy depends on the circumstances faced by the firms (David, 2000).

Literature infers that firms used different means for growth and expansion of the businesses which mainly included collaboration with the competitors, joint ventures, Merger & Acquisition (M&A) and Outsourcing, strategic alliances and internal development etc. (Santos et al., 2011).

Literature evidenced that among all the means to achieve expansion M&A activity is the most widely used across the globe and has witnessed an upward trend especially in developed countries due to their contributing role in bringing structural economic changes in any country (Santos et al., 2011). The growth of M&A activity had made it an area of interest for large group of investors which can be witnessed with the approximate financial statistics of M&A activities in USA, which is equal to US \$ 2.1 trillion in the last one decade (Bashir et al., 2011). Estimates have also showed that more than 1500 M&A cases have been reported in the USA markets in last decade (Hoang et al., 2007). Researchers have verified that generally the objective of the M&A activity is to expand the customer base, risk minimization, increased possession of distribution

channels and to acquire the assets of the target company which is sometime impossible to acquire through other alternative strategy (Zappa, 2008). Bashir et al., (2011) further argued that integration of firms through M&A activity is backed by different motives, of which the two most prominent are value maximization and non value maximization. M&A activity implied that on the basis of the Integration Strategies there are three types of mergers namely vertical mergers, Conglomerate mergers (diversification) and horizontal mergers (Robert et al., 2012). Vertical mergers have further been categorized into two more types forward (combination with distributors) and backward integration (combination with supplier). However, Horizontal mergers include incorporation of organizations involved in similar business and conglomerate mergers include incorporation of organizations involved in dissimilar business (Robert et al., 2012).

Studies have investigated the M&A activity from different perspective including strategic, financial, accounting, marketing and management. Despite this fact that M&A activity has increased considerably across the globe very little evidence have been found about the M&A activity in Pakistan. Numerous studies have been conducted across the globe that investigated the post merger financial performance and the impact of merger deals on the share holder's wealth patterns. Despite this fact, in Pakistan almost negligible researches have been reported in this area and a very few studies have been found on the subject under study (Bashir et al., 2011). Apropos in view, a need is identified to carry out an in-depth comprehensive analysis of the impact of M&A on the financial performance of the merged firms in Pakistan with an aim to analyze the pre merger & post merger financial statements of all the merged firms in all sector from time period 2000 to 2010 and then identify whether mergers in Pakistan are contributing significantly to financial growth of the companies or not. This study adopted a different methodology to investigate the issue. The review of the literature has evidenced that not a single study has been conducted in Pakistan that investigate the financial performance of the merged companies from the strategic perspective. All the companies that merged during time period 2000 to 2010 adopted certain integration strategy for merging with the target company. Some of the companies merge through vertical integration, some adopt horizontal integration strategy and some merged through conglomerate integration strategy. The current study investigates this issue and analyzed 3 to 5 yrs

premerger and post merger financial performance of the companies merged through vertical, horizontal and conglomerate integration strategies separately, with an aim to examine and compare the financial performance of different types of merger deals held in Pakistan and suggesting the way forward to the advisory firms and investment banks.

1.1 Study Objectives

- Does adopting Horizontal, Vertical and Conglomerate integration strategies have any effect on the financial performance of merged companies in Pakistan or not?
- Does financial performance of the Horizontally, Vertically and Conglomerate merged enhanced in Pakistan from the time period 2000 to 2010 as per 3 to 5 yrs premerger and post merger financial data or not?

2 LITERATURE REVIEW

Fan and Goyal (2002) revealed that vertical mergers contributes positively towards the wealth creation of the merged companies and significantly impact the performance of the company. Coontz (2004) discovered significant role of mergers in reducing systematic risk of the companies while horizontal and conglomerate mergers does not. Chang and Thomas (1989) concluded that risk and return of the merged firms is more closely associated with the structural factors related to markets and business than with the diversification strategy used for the mergers. Hitt et al., (1990) revealed that Merger and Acquisition activity is positively related to the managerial commitment and innovation. Sinha et al., (2010) investigated the impact of merger and acquisition on the financial efficiency of the financial institutions in India and showed that M&A activity significantly improved the financial performance of financial institutions in India (Sinha et al., 2010). Selcuk and Kiyamaz (2013) demonstrated that the returns of the acquiring firms decreased as a result of the merger and further the smaller firms reported more abnormal returns as compared to the larger firms. Ramswamy (1997) concluded that the banks merged through horizontal integration strategy showed an improved financial performance after the merger as compared to those merging with the strategically dissimilar banks. Studies further measured the impact of strategic similarities between the bidder and the target firms

on the financial performance of the merged banks in European Union. The results revealed that the financial performance of the merged banks has improved as a result of the Merger and Acquisition activity (Altunba and Ibanez, 2004). Coontz (2004); Kashiramka and Rao (2013); Natarajan and Kalaichelvan (2011) explored the shareholders wealth effects of mergers & acquisitions and reported the gains of shareholder of the target as well as acquirer firms irrespective of the deal announcement period. Liargovas and Repousis (2011) further examined the impact of the merger and acquisition on the performance of the Greek Banking Sector. Event study methodology was used to analyze the data and overall results indicated that Mergers and acquisitions held in Greek banking sector have no impact on their financial performance and also do not create shareholders wealth (Liargovas and Repousis, 2011).

Bashir et al., (2007) investigated the performance record of forty five Mergers and acquisitions (M&A) that took place during 2004 to 2010 in various sectors of Pakistan and proved that the M&A activity has no influence on the wealth maximization of the merged companies in Pakistan, contradictory to the literature and finding of the global researches. Kemal (2011) further analyzed the four years financial statements (2006-2009) of the Royal Bank of Scotland (RBS) to measure its Post-Merger Profitability. The results revealed that the profitability, cash flows, liquidity, leverage and assets management of the RBS has been relatively reasonable previous to the merger agreement but after the merger the financial performance of RBS decreased so the deal failed to improve the profitability of RBS. Arshad (2012) analyzed the post merger performance of Standard Chartered bank Pakistan. Results revealed that the financial performance of the Standard Charter bank also decreased after the merger. Usman et al., (2008) investigated the Operating and financial Performance of Merged Companies in Textile Sector of Pakistan from time period 2001 to 2005. The results revealed that the post merger operating performance of the firms in textile sectors also decreased as compared to the pre merger financial performance. Afza and Yusuf (2011) examined the impact of mergers on efficiency of conventional banks in Pakistan. The results revealed that the mergers held in banking sector reported improvement in the cost efficiency of in Pakistan from 93.83% to 94.15%. Kouser and Saba (2011) examined the impact of M&A activity on the profitability of the merged banks in Pakistan. The

six financial ratios i.e. profitability ratio, return to net worth ratio, invested capital ratio and debt to equity ratio were analyzed using paired sample t-test and the findings evidenced decreased financial performance of commercial banks after the mergers (Kouser and Saba, 2011).

Ramaswamy (1997) investigated efficiency gains from Banks in Pakistan. Findings revealed that efficiency effect is marginal and pre merger efficiency of acquirer didn't contribute anything in efficiency gains (Ramaswamy, 1997). Usman et al., (2010) investigated the impact of Scale Efficiency in Banking Sector of Pakistan. For analytical purpose banks were divided into three categories: domestic private banks, state owned Banks, and foreign owned banks. Foreign owned banks reported more efficiency, followed by state owned banks and domestic private banks (Usman et al., 2010). Kayani et al.,(2013) examined the impact of merger and acquisition on operating performance and shareholder wealth in Pakistan banking sector and showed that the operating performance & shareholder wealth of the banks decreased after the merger (Kayani et al., 2013). Hence, from the extensive review of the literature we can conclude that the researchers across the globe have studied the M&A activity from different perspectives and investigated the diversified issues encountered by the merged firms concerning the HR, Marketing and finance. Some studies investigated the organizational differences among the acquired and target firms and further investigated the cross country determinants, HR Practices and organizational structure of merged firms around the globe. Researchers also examined the impact of Merger and Acquisition on the post merger financial performance, Share holder wealth maximization, Operating financial performance and profitability of the merged firms in different countries by adopting different methodologies i.e. event study methodology, financial ratio analysis technique etc. Apropos in view, no study have been found in the literature that investigates the impact of mergers and acquisition on the financial output of all the merged companies in Pakistan from the time span 2000 to 2010. The contribution of the current research is that it investigates the influence of different integration strategies (Vertical, Horizontal & Conglomerate) upon financial output of the merged companies. It distinguish the Merger deals held from 2000 to 2010 on the basis of Integration strategies (Vertical, Horizontal & Conglomerate) and then evaluates financial output through financial ratio system by using their yearly financial declaration with an idea

to categorize that whether implementing diverse integration strategies have some influence on the financial output of the merged companies or not. Further it also categorize and advocate the best integration strategy to Investors, MNCs, advisory firms and Investment Banks for the future merger deals in Pakistan.

Ratio, Sales Growth Ratio, NPM, ROE, Interest Coverage Ratio, Operating Expense Ratio and Debt to Equity Ratio Horizontal, Vertical and Conglomerate Mergers

$$U_1=U_2$$

2.1 Horizontal/ Vertical/ Conglomerate Mergers

There is a significant difference between the Pre-Merger and Post-Merger means of

- H1:H8:H15** Current Ratio of Horizontal, Vertical and Conglomerate Mergers.
- H2:H9:H16** Sales Growth Ratio of Horizontal, Vertical and Conglomerate Mergers.
- H3:H10:H17** NPM of Horizontal, Vertical and Conglomerate Mergers.
- H4:H11:H18** ROE of Horizontal, Vertical and Conglomerate Mergers
- H5:H12:H19** Interest coverage Ratio of Horizontal, Vertical and Conglomerate Mergers
- H6:H13:H20** Operating Expense Ratio of Horizontal, Vertical and Conglomerate Mergers
- H7:H14:H21** Debt to Equity Ratio of Horizontal, Vertical and Conglomerate Mergers

$$U_1 \neq U_2$$

H₀: There is no significant difference between the Pre Merger and Post Merger means Current

3 METHODOLOGY: STUDY VARIABLES

Liquidity situation of the company is calculated through Current ratio, Profitability of the firms is calculated through Net Profit Margin & Return on Equity, Operating expense ratio is used to measure Operating efficiency of the company and Debt to equity & Interest coverage ratio is used to measure financial Leverage of the firms.

3.1 Population/Sample Size

For the purpose of current study initially 60 Merger events were observed from the time period 2000 to 2010 based on three Integration Strategies i.e. Horizontal, Vertical and Conglomerate mergers. However 24 merger deals were excluded later on the basis of non accessibility of the financial statistics. Therefore, final sample comprises of 36 merger deals which were analyzed separately after distinguishing them on the basis of three integration strategy. Almost 17 of the total merger transactions/deals were integrated through vertical strategy about 9 were merged through horizontal strategy and 10 were merged through Conglomerate strategy.

Theoretical Framework of the Study

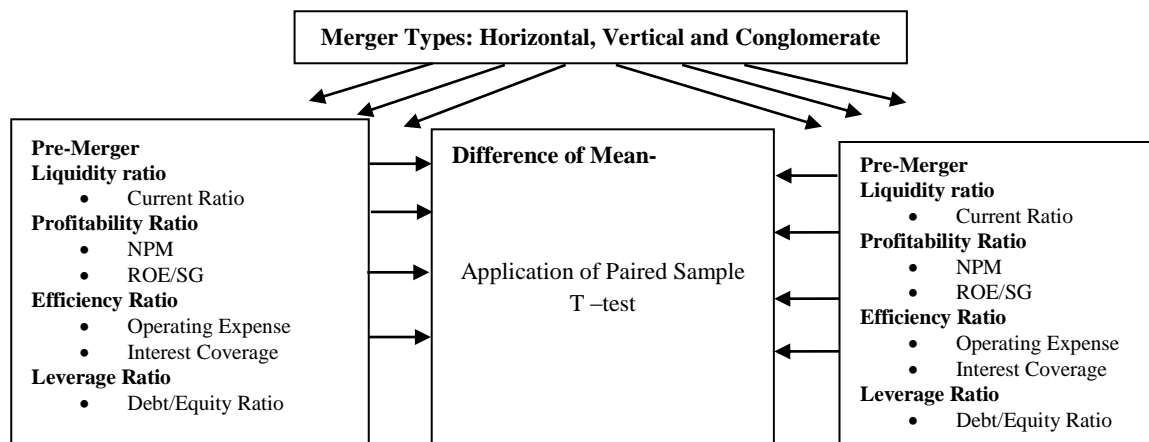


Figure 1: Schematic diagram of the study.

Research Design

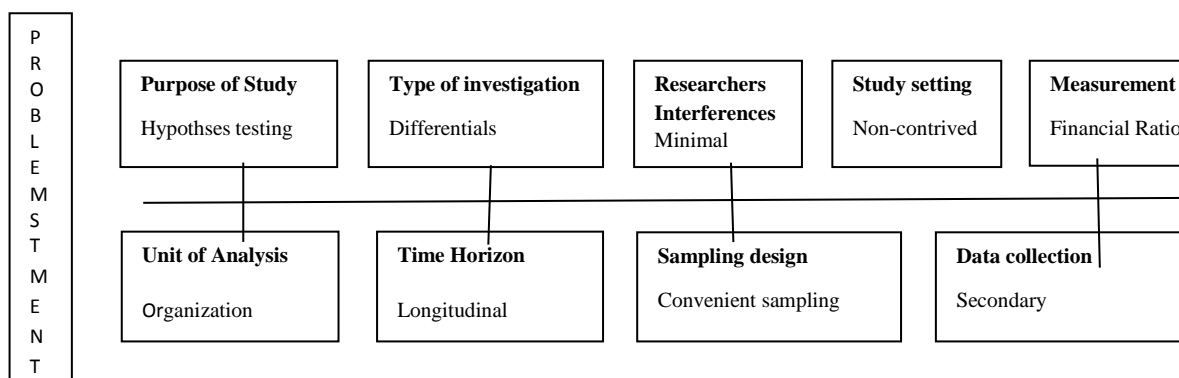


Figure 2: Diagrammatic representation of study research design.

3.2 Statistical Analysis

The financial declaration of every merger events are subsequently evaluated by financial ratio examination. Entire seven ratios used in the study included Current Ratio, Sales Growth ratio, Net profit margin ratio, Return on equity, Operating expense ratio, Interest coverage ratio and Debt to equity ratio to measure the Liquidity, Profitability, Operating Efficiency and financial Leverage of the merged firms.

3.3 Financial Ratio Examination

A technique employed to examine the current, previous and predictable financial output of the companies (Tugas and CPA, 2012). Firstly, for pre-merger period, each variable i.e. Current Ratio, Sales Growth Ratio, NPM Ratio, ROE, Operating efficiency Ratio, Interest coverage Ratio and Debt to Equity Ratio is calculated for each of the three to five years (-5,-4-3,-2,-1) independently for mutually the acquirers' and the target companies in the sample. Likewise, the variables under study are then evaluated for the acquiring companies merely for three to five years post merger era (+1, +2, +3, +4, +5). A combined mean for three years pre and combined mean for three years post-merger period is then computed. The difference between the mean output measure of the pre and post-merger years is then studies. To verify the outcome and significant differences in the output during the pre and post merger era *Paired sample t-test* was used in the current study.

$$\frac{(\bar{x}_1 - \bar{x}_2) - (\mu_1 - \mu_2)}{\sqrt{s^2_1/n_1 + s^2_2/n_2}}$$

Where; X1=Target firm, X2=Acquirer firm, μ_1 =Population of Target firm, μ_2 =Population of Acquirer firm, S1=variance of target firm, S2=Variance of acquirer firm, n1=Sample of target firm, n2=Sample of Acquirer firm.

4 RESULTS AND ANALYSIS

o Horizontal Mergers

The findings of horizontal mergers evidenced that the liquidity position, Sales Growth and profitability of the horizontally merged firms deteriorated after the merger while the Operating efficiency increased, interest coverage Ratio declined and financial leverage/Risk of the horizontally merged firms decreased after the mergers.

o Conglomerate Mergers

The comprehensive analysis of the data revealed that the liquidity position and the sales growth of the firms merged through conglomerate integration strategy decreased after the merger while the profitability in some cases improved and in some cases deteriorated after the mergers. The findings further evidence that the operating efficiency improved after the merger while leverage ratio remained insignificant during post merger period.

o Vertical Mergers

Comprehensively, we can conclude that the liquidity position, Sales growth, profitability and Operating efficiency of the vertically merged firms increased after the merger while the risk/leverage of the vertically merged firms decreased during the post merger period.

5 DISCUSSION

Financial and economic state of Pakistan has encountered numerous challenges among which the predominant is to generate prospects for the investment in Pakistan. Furthermore, from the literature safely accomplished that M&A is considered as an important means to enhance the economic expansion of any country and are frequently performed with an aim to progress the financial output of any industry. On the contrary, in case of Pakistan, same has been proved otherwise. So the current study investigated the issue in Pakistan and explores the impact of different integration strategies (Horizontal, Vertical & Conglomerate) on the financial output of the merged companies in Pakistan. The study differentiated the

Merger deals held from 2000 to 2010 on the basis of Integration strategies (Vertical, Horizontal & Conglomerate) and then measured their financial performance through financial ratio technique and OLS Regression. The results of the financial ratio analysis demonstrated that vertical integration strategy is the most effective among the three Integration strategies adopted by the firms for conducting merger deals in Pakistan from time period 2000 to 2010. The findings further revealed that the firms that adopted vertical integration strategy for merging reported improvement in liquidity position, profitability, Operating efficiency and improved financial leverage during the post merger period and hence is identified as a most effective integration strategy among the three under study.

Table 1: Comparative Analysis of Financial Ratio.

Ser no.	Ratio	Horizontal Merger	Vertical Merger	Conglomerate Merger
1	Current Ratio	Deteriorated (Accepted H1)	Improved (Accepted H8)	Deteriorated (Accepted H15)
2	Sales Growth Ratio	Deteriorated (Accepted H2)	Improved (Accepted H9)	Deteriorated (Accepted H16)
3	NPM	Deteriorated (Accepted H3)	Improved (Accepted H10)	Improved (Accepted H17)
4	ROE	Deteriorated (Accepted H4)	Improved (Accepted H11)	Deteriorated (Accepted H18)
5	Operating Expense Ratio	Deteriorated (Accepted H5)	Deteriorated (Accepted H12)	Deteriorated (Accepted H19)
6	Interest Coverage Ratio	Deteriorated (Accepted H6)	Improved (Accepted H13)	Improved (Accepted H20)
7	Debt to Equity	Deteriorated (Accepted H7)	Deteriorated (Accepted H14)	Insignificant (Accepted H0)
Ser no.	Ratio	Horizontal Merger	Vertical Merger	Conglomerate Merger
1	Liquidity position	Declined	Improved	Declined
2	Profitability	Declined	Improved	In some cases improved /Declined /insig
3	Operating Efficiency	Improved	Improved	Improved
4	Financial Leverage	Declined	Declined	Insignificant neither Improved/ Declined

Note: Comparative analysis of Vertical, Horizontal and Conglomerate Mergers (FY2000-FY2010).

Lastly, the results verified that the adopting different integration strategies for conducting merger deals have significant impact on the Liquidity position, Profitability, Operating Efficiency and Financial Leverage of the merged firms and suggests that Vertical Integration strategy is the most favorable among the three in Pakistani environment and hence recommends Investors, MNCs, advisory firms, and Investment Banks to adopt vertical integration strategy for conducting future merger deals in Pakistan and suggest the best M&A value chain strategy to their clients in merger deals. Further the study recommends that the Planning commission of Pakistan should formulate a proper mechanism for selecting a suitable integration strategy after proper analyzing the previous trends and financial facts in the industry. Lastly the study will also assist policy making organizations in increasing the volume of merger activity in Pakistan by uprooting the factors responsible for failure of mergers in Pakistan and formulating a strategy that can increase the success ratio of merger activity in term of financial performance as it can contribute significantly in improving the economic well of Pakistan.

Moreover, other developing and developed economies should also consider the importance of supply chain strategies i.e. Horizontal, Vertical and Conglomerate strategies before making the merger deals to maximize the shareholder's wealth. The adoption of appropriate strategy of supply chain would also facilitate economies to expand their customer base, minimize risk, increase possession of distribution channels and acquire the assets of the target company which is sometime impossible to acquire through other alternative collaborating strategies like joint venture or franchises etc

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