Chapter-1

Introductory Background and Framework of the study
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1.1. Introduction

In the globalized economy, Merger acts as an important tool for the growth and expansion of the economy. The main motive behind the merger is to create synergy, that is one plus one is more than two and this rationale beguiles the companies for merger at tough times. Merger helps the companies in getting the benefits of greater market share and cost efficiency. Companies are confronted with the facts that the only big players can survive as there is a cut throat competition in the market and the success of the merger depends on how well the two companies integrate themselves in carrying out day to day operations.

Merger is a century old phenomenon in the global history; the present world scenario is such that it is the economic prowess of a country which tends to determine its standing in the world order rather than its military power. The boundaries are disappearing and the flow of goods, services, technology, capital, labour, etc are easier and hassle free comparatively than it were ever before. The production centers are no longer localized with the emergence of transactional corporations which have got productions centers sprawled all over the world. Foreign investment plays a vital role in the development process as it provides the much needed capital influx especially in developing countries. In the past decade it has been observed that a major reason for the sharp increase in the volume of international productions and Foreign Direct Investment (FDI) is merger and acquisition. It is now a preferred mode of entry for starting a business over Greenfield investment. In contrast, mergers that took place in the 1980s for the short term financial gains, the mergers which are taking place in the present era are mainly motivated by strategic and economic gains in the long run \(^1\).

In the recent past, the world has witnessed a dramatic wave of rise in the rate of increase of mergers leading to major restructuring of corporate structure and also the globalization of industry. It has become an important and vital mode for the expansion, eliminating competition, making forays into new market creating synergies, improving economies of scale, and expanding profitability and a host of various other reasons. It has become a preferred mode of investment over Greenfield investment where no facilities exist. The primary concept involved in mergers is that

it is done primarily with the intention of combining two firms in order to create synergy and shareholder value.

1.2. **Statement of the Problem and Issues**

1.2.1. **Statement of the Problem**

The foregoing statement of problem is being verified by the literature review that is presented in the coming section. It is an attempt to substantiate the view that the contemporary problems do not find adequate treatment in the existing literature on the subject. The study is to analyze the financial performance in terms of Profitability, Operational Efficiency and Asset Utilization Capacity, Solvency, Enterprise Value and Business Performance of a strategic mergers and amalgamations in India since economic liberalization with special reference to the Banking sector. Along with it the researcher made an attempt to investigate the impact of mergers on the wealth of shareholders of respective banks. It is probed whether the mergers undertaken are in the interest of the shareholders namely target and the bidder banks.

1.2.2. **Issues**

a. **Synoptic View of M&A’s**: Sector-wise analysis of M&A’s in the international and domestic arena is made to get a better insight into the ongoing trend in global and domestic arena.

b. **Indian Banking Sector**: A detailed study of the Indian banking sector is made in terms of growth and development and a synoptic view of major Mergers/Amalgamations has also been provided.

c. **Post-Merger and Amalgamations Valuations**: The major issue of this study deals with the effects of the mergers on Banks and its measurement in terms of the post-merger financial performance of the banks involved in establishing the variability of the merger.

d. **Identifying the Impact on the Shareholders**: Another issue of this study is to identify the impact of merger and amalgamations on the shareholders’ wealth of target and bidder banks.

e. **Identifying the Variables Affected by the Merger**: To identify affected variables by the mergers is also one of the other issues. For that purpose various statistical and accounting techniques has been used to calculate various variables and
statistics related to the banks and an attempt is made to find out the impact of the merger on their performance.

f. Identifying the Causes for the Movement in financial performance: Another issue dealt in this study is the yearly analysis of the movement in ratios and studying them in the light of both macro and micro factors.

g. Impact of Recession: A major issue faced by the Indian banking sector is the financial crises which hit the world economy in the year 2008 that had a deep impact on the mergers worldwide.

1.3. Chronological Review of Literature

Alhadeff, Charlotte P. and Alhadeff, David A. (1955)\(^2\) found that banks mergers had increased at a sharp accelerated rate during 1953 and 1954, as compared to the merger rates of the forties. Two basic factors behind tremendous mergers were firstly the pressures resulting from uneven rates of growth by different banks for the rapid over-all expansion and secondly to inculcate desired to expand branch bank system. Certain management problems are also believed to might have been involved in the recent upsurge of bank mergers, but they were not the major initiating factor. Similarly, higher operating costs and lower earnings did not exert a systematic pressure upon banks to merge. The fact that banks were often worth more dead than alive are facilitating condition and not a primary cause of recent bank mergers. Since the Consolidation Act of 1918, federal legislation made it easier for banks to merge within and across jurisdictional (chartering) boundaries. Under the laws, bank mergers were also not seriously impeded by antitrust considerations. According to them, the major factors which influence the market results of bank mergers were the particular markets in which mergers occurred, the structure of merging banks, the size of merging banks, the comparative portfolios of merging banks and the immediate impact versus the cumulative effect of mergers.

Rozen, Marvin E. (1962)\(^3\) critically examined the Bank Merger Act of 1960, which stirred up considerable controversy regarding the role of competition in banking. Many recent mergers proposals had intensified interest in this question. The changes


that had taken place in banking since 1930s and the significance of these changes for
the federal regulatory agencies. The study revealed that the agencies were too
involved in trying to weigh the merits of specific merger proposals and were not
paying sufficient attention to their larger task and the maintenance of bank solvency
within a framework of adequate competition. Instead of trying to fix the possible
consequences of specific merger proposals, it was suggested to concentrate on the
maintenance of bank solvency within a context of adequate competition. It was found
more difficult to restore lower levels of concentration and reinvigorate competition.
Also, competition is a fragile plant and countless lessons from history testify that it
can flourish only within certain specialized environments.

Sears, Marian V. (1965) described in his paper the eve of merger mania at the turn of
the century, while citing the Shawmut National Bank example which made a
consolidation of ten national banks in Boston. Many of the characteristics of that
consolidation were exceptions to common generalizations about corporations and
control; mergers and motivations. The peculiar nature of banking corporations and
the peculiar technique of the consolidation of ten national banks in Boston to form
the National Shawmut Bank in 1898 made that event quite distinct from the usual run
of mergers in that period when mergers with vastly inflated capitals were just
becoming high fashion largely because of the consolidation technique followed in
that case. There became evident the amorphous nature of commercial banking
corporations and the nature of control in banking corporations that of their
stockholders and that of their management. The motivation for this consolidation did,
indeed, came from the common complaint of an excess in competition (an excess of
banking capital), but it was not management insiders or promoters who started
proceedings; it was a group of saving banks that were stockholders of the national
banks. Their motivation appeared to have been related more directly to protecting
their own resources, however, and only indirectly to regularizing the national
banking system. They did not qualify for participating in promoters' profits or in
directing the successor bank. They did succeed in their object of disposing of an
unsatisfactory investment at better than market prices. Reducing the banking capital

of Boston was accomplished, and that step apparently had the approval of much of the community. Other consolidations and reductions were also followed.
Klebaner, Benjamin J. (1967) observed that hardly six years elapsed between the long delayed enactment of the Bank Merger Act of 1960 and the 1966 amendment. It was found that the retention is a major role for Justice which not only reduces the danger that the banking agencies will slight in competitive considerations, but also assured at least a minimal uniformity in bank merger policy. To guarantee equal treatment of competing banks more was needed than merely an exchange of opinions on competitive factors, as long as three federal agencies remain separately responsible for supervision of banks under their jurisdiction.

Asquith, Paul and Han Kim, E. (1982) investigated that the merger bids have an impact on the wealth of the participating firms' bondholders and stockholders. Monthly and daily bond and stock returns are calculated relative to the announcement date of a merger bid for a sample of conglomerate mergers. The results showed that the stockholders of target firms gain from a merger bid and no other security holders either gain or lose. Even for these firms, the security holders of the merging firms gained as a whole. Furthermore, the changes in stockholders' wealth were similar in both direction and magnitude to those reported by previous authors. These findings show that the total synergistic gains of merger (whether they are real or financial) did not depend on whether the merger was conglomerate or not. Thus, wealth transfers do occur and they were offset by other effects. The shareholdes of acquired firm's gains abnormal return and their gains did not come at the expense of other security holders.

Laki, M. (1982) studied the last three decades, when the chances of survival of the Hungarian industrial enterprises were influenced by market factors but these were strengthened or weakened by very strong non-market influences. It was easier to find a partner for merging within the spheres of the same hierarchy than outside of it, as well as it is also very similar that in a period of strengthening central control. The

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results showed that the similar growth rates were sufficient to become either incorporator or incorporated enterprises. Taking all this into account and tried to formulate his hypothesis regarding the major (typical) and minor ways of mergers and liquidations of enterprises in Hungary.

White, Eugene Nelson, (1985)\(^8\) opined that the merger movement in banking was partially the product of the boom times of the late twenty century, and it did reflect important long run trends in the industry. Then the number of small banks in rural areas needed to be reduced, and the mergers assisted the weaker institutions with less pain than the massive failures that followed there. Unfortunately, the development was stifled by regulations in most states that forbade branching. Aggressive firms searched for complementarities in the production of financial services and other economies of scale combined which formerly distinct commercial banks, trust companies, savings banks, and investment banks into new diversified institutions. The merger movement, thus, might have strengthened the banking industry before and during its most trying years.

Pastena, Victor and Ruland, William (1986)\(^9\) examined the ability of accounting information to predict bankruptcy. Bankruptcy represents only one of many possible outcomes for the distressed firm. A timely merger can serve as a good bankruptcy alternative. They focused upon both firms related characteristics and the personal interests of owners as determinants of the merger/bankruptcy choice. A probit analysis was used to test the importance of three firm-related variables-revenues, financial leverage, and the magnitudes of tax carry forwards in explaining the merger/bankruptcy decision. The results showed that the distressed firms that merge had lower financial leverage and were larger than firms that enter bankruptcy. Tax carry forwards were not important in the model. They also examined the association of ownership concentration with the merger/bankruptcy choice. The study revealed that distressed firms with high ownership concentration showed an increased tendency to merge rather than to declare bankruptcy. It was suggested that the self interest of managers, rather than just the interests of shareholders and creditors, seemed to help motivate the merger/bankruptcy choice. Also, numerous corporate bankruptcies


occurred every year despite the apparent attractiveness of merger as a possible alternative to bankruptcy for some distressed firms.

Bertin, et al., (1989)\(^1\) studied the successful banks bidding in FDIC which arrange mergers with failed banks by measuring the returns to bank shareholders around the acquisition announcement. The study shows that acquiring banks captured significant positive abnormal returns over the period just prior to and including the failure/merger announcement date. Furthermore, the level of abnormal returns was positively related to the statewide branching provisions as well as to the proportion of outside members serving on the board of acquiring banks. The possible change in bidding behavior can be explained within the context of the rapidly changing bank environment of the 1980s. They suggested that the removal of some restrictions on intrastate and interstate branching had provided banks with more expansion alternatives, thereby reducing the attractiveness of failed bank acquisitions. Also, the increase in FDIC auctions had converted a relatively stagnant failed bank market into an active one, thus enabling the bidding banks to improve their expertise in evaluating failed targets. The bidding behavior was practiced by the acquiring banks as suggested in their study. The gains to successful bidders are not entirely consistent with the findings of research on non-financial acquisitions. That may be due to the peculiarity of the failed bank market, given the recent changes in the industry and the entry restrictions imposed by the FDIC on potential bidders.

Amel, Dean F. and Rhoades, Stephen A. (1989)\(^1\) empirically tested the study which included firm, market, and regulatory characteristics in tests for the determinants of bank mergers and acquisitions to get an indication of the motives for mergers. The results provided no direct support for the argument that mergers were motivated by growth or profit maximization. However, a weak indication that a market for corporate control exists, i.e., there are weak evidence that poorly performing firms (low profits and growth) are acquired. So market share of the target firm stands out, along with per capita income, as attractive to acquiring firms.


Rose, John T. (1993)\textsuperscript{12} studied the proponents and critics of interstate banking arguing over the implications of nationwide banking for bank lending to small business. The study explored the patterns of bank consolidation at the national level and the share of domestic-bank commercial lending extended to small firms, specifically, small manufacturing firms, over the period 1976-90. The evidence indicated that despite the trend towards fewer banking organizations and increased aggregate bank concentration due largely to cross state expansion by super regional banking organizations, no significant down trend is observed in the share of domestic bank credit extended to small manufacturing firms. In spite of that consolidation, available evidence indicated no significant downtrend in small firms' share of domestic-bank credit extended to the manufacturing sector from 1976-90.

Palia, Darius (1993)\textsuperscript{13} analyzed the managerial, regulatory, and financial determinants of US bank merger premiums. The study used both individual acquirer and target bank characteristics. It was also examined that state regulation of acquirer and target banks from a geographically dispersed population, allowed them specifically to test the effect of a varied state regulatory menu. The study found merger premiums to be related to the characteristics of both acquirer and target banks and the regulatory environments in both acquirer and target bank states. The study found evidences that the separation of ownership and control in acquirer and target banks has a significant effect on merger premium.

De young, Robert (1994)\textsuperscript{14} observed that during the early 1980s a confluence of events changed the economic, political, and regulatory underpinnings of bank merger policy. Decades old regulations of financial institutions were phased out and the Justice Department relaxed its overall merger antitrust policy and appointments by President Reagan who changed the ideological composition of the Federal Reserve Board of Governors. The results found here showed that the Board relaxed its policy more in markets where thrift competition was significant. While it appears that the Board did alter its treatment of market structure after 1983 and the changes fell far


short of abandoned the structure performance paradigm in favor of an efficient-structure approach. The post-1983 results suggested that (in contrast to the pre-1980 results) the Board became more sensitive to merger-induced which increases the concentration when entry barriers were present and a more sophisticated policy consistent with revisions in the Justice Department's 1982 and 1984 Merger Guidelines were introduced. The results suggested a merger policy that encouraged removing sub optimal banks from the market, also there was little corroborated evidence that the Board practiced an efficiencies defense in either time period. Moreover, there was only marginal evidence that the Board changed its treatment of scale in response to changes in the banking cost literature.

Vijh, Anand M. (1994) analyzed that some of the wealth gains from financial decisions involving changes in security form occur on predictable ex dates. For a sample of 113 spin offs during 1964 to 90s, was documented excess returns of 3 percent on spinoff ex dates and 1.5 percent on merger ex dates. Similar but smaller excess returns had previously been measured around stock split and stock dividend ex dates. The major contribution was to offered microstructure-based explanations of excess returns that occur on predictable event dates and cannot be attributed to the arrival of systematically positive new information. In the case of spinoffs, an explanation of ex-date returns based on a relatively ignored clientele effect was given. Market imperfections resulted in many investors being interested in one but not both of the post divestiture shares. The strength of clientele effect may be judged from an observation that the ex-date trading volumes in parent and subsidiary stocks equal 1.64 and 2.79, respectively, times the trading volumes on unaffected reference dates, despite a 3 percent price discount that could induce many buyers to shift their trades to before the ex-date. In addition, it was also suggested that transaction cost based explanations of why the potential sellers, market makers, and arbitrageurs each may attach a higher price to separate shares that start trading after the ex-date. The spinoff ex-date returns are of the same order of magnitude as announcement date returns and highlight the relative importance of microstructure considerations in financial decisions. The merger ex-date returned were much smaller fraction of the target

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shareholder gains, but they provided further evidence that microstructure considerations can affect stock prices and measured stock returns.

Altunbas, et al., (1997)\textsuperscript{16} examined the cost implications from hypothetical cross border bank mergers in the EU in light of recent claims that substantial cost savings were expected as the result of the EU's Single Market Programmed for financial services. In fact, our results suggested that only limited opportunities for costs saving from big bank mergers and such mergers are more likely to result in an increased in total costs. While there is a large variation in the simulated cost outcomes, the greatest opportunities for cost savings would appear to be generated by mergers between German and Italian banks. In contrast, mergers between French and German banks appear likely to result in substantial cost increased. Although the overall findings suggest limited benefits from cross border mergers between large banks, but that may be a reflection of the methodology. Merger simulations were carried out hypothetically, ignoring any prior information about the pairings. So, they assumed no premiums or merger costs and no further synergies from such things as branch closures or a restructuring of the product mix. These assumptions might caused them to understate the potential reduction in total costs resulting from large bank mergers, and therefore our estimates provide the most pessimistic of total cost reduction outcomes. They concluded that the substantial variation of cost outcomes generated suggests that large banks seeking economies through cross border mergers should select potential partners with great care.

Vennet (1996)\textsuperscript{17} studied the effects of Merger and Acquisitions (M&As) on the profitability and efficiency of banks. The sample of 492 takeovers during the period 1988-1993 was taken. In domestic acquisitions, the target banks exhibits the inferior performance but they are unable to remedy the situation. The post merger efficiency of banks deteriorated, so these mergers of banks do not seem to be benefited to the point of synergy effects. Study revealed that domestic acquisitions driven by the market power motives but they exhibits domestic merger among equal sized partners significantly increased the efficiency and profitability in the post merger period and shows only improvement in cost efficiency in cross border acquisitions. The


efficiency improved does not improved profitability in short run, however acquisitions of banks at domestic level majorly influenced by size maximizations motives.

(Bhattacharyya, et al., 1997)\textsuperscript{18} investigated the impact of liberalization on the productive efficiency of Indian commercial banks. Authors took 70 Indian commercial banks during the stage (1986-1991) of the ongoing period of liberalizations and found that the public banks had been most efficient, however in the beginning of the sample period foreign banks were least efficient but by the end of the period they were nearly as efficient as the public banks.

Rhoades, Stephen A. (1998)\textsuperscript{19} attempted to know the efficiency effect by banks merger with the help of nine case studies of merger by nine authors. The study explored that the merger selected for the study was seemed relatively likely to yield efficiency gains. It was concluded that all the nine mergers resulted in significant cost cutting in line with pre merger projection, and four out of nine mergers were clearly successful in improving cost efficiency. However not all these mergers unambiguously yielded efficiency and profitability improved despite the favorable characteristics and significant reduction of non interest cost achieved in these entire mergers.

Toyne, Michael F. and Tripp, James D. (1998)\textsuperscript{20} specifically focused on the 1990s merger activity in the commercial banking industry which had expanded at a rapid pace primarily due to the loosened of interstate restrictions and the much-improved health of the banking industry. It was also examined that interstate merger activity in the banking industry during the 1991-1995 and measured its impact on stockholder returns and compared the results to a similar study that uses data from the 1980s. Their findings indicated that during the 1990s returns to targets had been significantly positive while returns to bidders had been significantly negative. In addition, they

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found evidence that there was significantly negative revaluation of the combined bidder and target values at the merger announcement. Results from the 1990s continued to confirm the existence of significant positive abnormal returns to target banks as it had been reported in most studies of interstate bank mergers. The results were consistent with the notion that while a reduction in regulatory restrictions on interstate bank mergers and increased profitability in the banking industry had led to higher levels of merger and acquisition activity and the market does not initially reward the acquiring banks. Findings also indicated that the market typically penalized banks on the announcement of merger plans.

Milbourn, Todd T. et al., (1999)\(^\text{21}\) argued in light of the existing empirical evidence, that it was puzzling why banks seemed so keen on getting bigger and expanding the scope of their operations. Researchers found that both the stock price announcement effect as well as the post expansion performance of the bank should be positive. Scale expanding mergers between banks under the conditions identified above should also benefit shareholders and these benefits should show up both in the announcement effect and in the post-merger performance of the bank. Authors focused on banking because it is one industry that faces significant strategic uncertainties, making the assumptions of our analysis particularly applicable. The key assumptions of the analysis were well calibrated both for the expansion of size and scope were highly visible in banking.

(Hadlock, Charles, et al., 1999)\(^\text{22}\) discussed the role of managerial incentives in facing Merger and Acquisitions (M&As). A sample of 84 banks acquisitions was taken and compared a matched samples of banks that were not acquired and analyzed the effects of variables related to managerial incentives, corporate governance and performance on the likelihood a banks were acquired. The results of the study indicated that banks with higher levels of management ownership were less likely to be acquired. It was not found that poorly performing banks as measured by return on assets were


http://dx.doi.org/10.1016/S0378-4266(98)00092-2
particularly likely to be acquired, however they identified the potential cost of high managerial ownership for banks, offsets their cost or not.

Bliss and Rosen (2000)\textsuperscript{23} studied the effects of an CEO compensations on Merger and Acquisitions (M&As). The study examined the relationship between banks mergers and compensations of CEO during the period 1986-1995. It was analyzed that any means adds similar amount to compensations that is any growth is good for CEO compensations. The results indicated that merger increase compensations and increase the stock base wealth of a CEO and reduces the profitability that a bank will make acquisitions.

Samolyk Katherine and Avery, Robert B (2000)\textsuperscript{24} examined small bank lending in local market were related to bank merger in mid-1990s, study revealed the relationship between bank consolidations and the availability of small loans to commercial business in local banking market. Multivariate test was used and result suggested that banks consolidations are more broadly linked to lower estimated loan growth in rural market than in urban ones. The study concluded that bank consolidation through mergers between smaller banks tend to associated with greater small business credit availability in local banking market.

Abd Karim, Mohd Zaini (2001)\textsuperscript{25} argued that the bank's efficiency becomes critically important in an environment of increasingly contestable international markets and examined the evidence concerning the efficiencies of banks in four ASEAN countries to analyze cost competitiveness for commercial banks in each case country. To measure cost efficiencies and scale economies for banks, study estimated a trans-log cost frontier function and used data on the ASEAN banks obtained from IBCA Bank scope. The Results for scale economies indicated that, on average, the ASEAN banks enjoy increasing returns to scale. It was also indicated that the cost inefficiency somewhat offsets scale inefficiency for larger banks. The merger of banks in Malaysia had resulted in increased competitiveness of the Malaysian banks, as indicated by the


decrease in its loan rates. Countries, those were slow in restructuring their banking sector were at further disadvantage, compared with countries such as Malaysia and Thailand. The finding implied that state-owned banks could achieve more cost savings by transforming into privately owned banks. Hence, it was appeared to be some gains from privatization in the banking sector of each country.

Worthington, Andrew C. (2001)\textsuperscript{26} analyzed the role of efficiency in merger and acquisition (M&A) activity in Australian credit unions during the period 1993-1997. The measures of efficiency were derived using the non-parametric technique of data envelopment analysis. The study used to analyze the determinants of merger activity and merger related outcomes in related industry sectors, such as building societies, life insurance companies and commercial banks. The study attempted to encompass the broad range of deposit taking institutions, including banks, building societies and credit unions, in a single study. That might served to highlight additional issues of concern to policy-makers and other interested parties.

(Amilhud et al., 2002)\textsuperscript{27} examined the effects of cross border bank merger on the risk and value of acquiring banks. It was revealed that on an average there was no evidence that cross border merging banks add to the risk expose of either domestic or host country regulators, whether looking at the total risk of the acquirer or it systematic risk relative to various banking industry. The study found that the acquirer risk neither increases nor decreases, on average neither their total risk nor their systematic risk falls relative to banks. However, the study does not supported a systematic policy being adopted by regulators to limit cross border acquisitions, in addition to it was found that announcement effects of cross border merger earn an abnormal return but the CAR of acquiring banks were significantly negative.

Lindblom, Ted and Von Koch, Christopher (2002)\textsuperscript{28} focused on the restructuring of the banking industry appeared too had entered into a new phase. Analyzed result


shows that the opportunity had also been recognized by the bank management as an important synergy effect of the merger. Furthermore, it was shown that top management were determined to choose ‘best practice’ consistently whenever common standard were implemented or integrated (e.g. uniform financial performance measures) or administrative systems and routines. The many close points of similarity between the banks further supported a positive interpretation of the revealed dissimilarities between them. First of all, both banks were large players on the domestic market and possessed a nationwide distribution network of branches, ATMs and banking self-service outlets. Secondly, the representatives of TM in each bank shared the same vision of the need to grow in order to become a competitive bank on the emerging European banking market. The study implied that cross-border bank mergers were offensive mergers rather than defensive ones. Therefore, search for the prospect of cross-selling products and services rather than cost cutting by down-sizing the branch network, when examined the ‘strategic fit’ between potential cross-border mergers.

Dymski, Gary A. (2002) discussed the causes and implications of the global bank merger wave, especially for developing economies. Author argued that the U.S. had unique experience, not paradigmatic and that bank mergers were not efficiency-driven; instead, this merger wave had arisen because of macro structural circumstances and because of shifts over time in banks’ strategic motives. The study also argued that large offshore banks often engaged in cross-border mergers because they want to provide financial services to households and firms that had reached minimal threshold wealth levels. For developing economies, it was suggested that cross-border acquisitions of local banks by offshore banks will have mixed effects; and it cannot be assumed that the net social impact is positive. In section I, author described that bank mergers across the world illustrated the relevance of the model developed. In Section II, macro structural factors determine the options including mergers available to banking firms; a variety of banking strategies can lead to bank mergers, depending on banks’ methods of extracting revenue, their approaches to identifying and relating to customers, and their access to capital markets and to banking alliances. In general, the more important was distressed in motivating bank

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mergers, the less important are strategic elements. Since defensive mergers also involve efforts to protect market share, they tend toward strategic conservatism.

Mumcu and Unal (2002) explored the various aspect of Merger and Acquisitions (M&As) in the Turkish banking industry. Authors studied a series of scenario and assessed the likely impact of Merger and Acquisitions (M&As) in the Turkish banking sector and further compared the banking performance before and after the Merger and Acquisitions (M&As). Finally it is concluded that the mergers in the banking sectors will benefit all banks by reducing competition. By comparing the profits before and after the merger each of the 10 merging fringe banks was not able to get more profit by the merger. But each banks favors of mergers in the sector but do not want it to be the part of mergers. The mergers augmented dramatic improvement in the cost structure and lead to significant increase in market share which in the case of fringe banks had only happened that merged entity becomes one of the dominant banks.

Bharadwaj, Anu and Shivdasani, Anil (2003) stated that tender offers financed entirely by the bank debt are viewed positively by investors. The announcement return for bank-financed acquisitions increase with the extent of bank financing and more favorable when acquirers are poorly performing. The result of the study suggests that bank debt performs an important certifications and monitoring role for acquirer in tender offer. Authors revealed that bank financing is viewed positively by share holder and evidence point to a cost of financial slack that has received little attention.

Went, Peter (2003) studied the qualitative aspects of mergers between two Scandinavian universal banks to determine the arguments for the merger with the help of qualitative analysis. The focus of the study was on the changes response to mergers in legislative and competitive environment as well as used the methodology of

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cognitive maps that links concepts through causative beliefs to describe the strategic decisions processes. A cognitive map reveals that most important causes of merger were complementing or increasing the branch of networks and competencies of banks to reach the customer particularly in corporate banking. It was concluded that increased market coverage and the potential to realize benefit from a more dominating presence were the advantageous of mergers and driven by competitive reasons and not primarily for the efficiencies.

Altunbas, Yener and Ibanez David Marques (2004)\textsuperscript{33} examined the banks performance in Europe as well as emphasized on the strategic similarities between the target and bidder banks while facing Merger and Acquisitions (M&As). The result showed that the overall performance that generally more efficient banks merged with relatively smaller, for better capitalized institutions with more diversified source of income. Authors concluded that consistency of efficiency and deposits strategies of merging partners were enhancing both for domestic and cross border Merger and Acquisitions (M&As). The study supports that difficulties in integrating institution with widely different strategic orientations.

Sufian, F. (2004)\textsuperscript{34} investigated the efficiency effects of Merger and Acquisitions (M&As) on banks. Non parametric frontier approach Data Envelopment Analysis (DEA) was taken to analyse the technical and scale efficiency of Malaysian commercial banks during the merger year, pre and post period. After the analysis it was found that during the merger year the overall efficiency level deteriorated significantly as compared to the pre merger and the post merger overall efficiency of Malaysian bank was higher than the pre merger. The result of the study suggested that Merger and Acquisitions (M&As) were successful but it is most benefited to the small and medium size bank while the larger bank should shrink to benefit from advantages and recommended that decisions of merger should be more cognizant in promoting as a mean of enjoying efficiency gains.


Penas, Maria Fabiana and Unal, Haluk (2004)\textsuperscript{35} examined bond return and bond credit spreads around the announcement of bank mergers during the period of 1991 to 1998. Results showed that bondholder of bidder and target banks gain significant positive bond returns in the month leading to the merger announcement. Their study provide evidence that the relation between announcement month bond and equity return is positive and significant: The result of cross sectional regression identified diversification, TBTF, and to a lesser degree, synergy as possible sources of these gains and for the first time, that was significant benefited to the acquirer on lower cost of fund in debt issues in post merger.

Knapp, Morris, et al., (2005)\textsuperscript{36} analyzed the results of material mergers between bank holding companies (BHCs). Merged BHCs experienced post-merger profitability below the industry average. The market reaction to the merger announcements was significantly negative. The most important causes of the poor post-merger performance were credit quality and the inadequate generation of fee income. Asset mix and capitalization also play a major part. The controllability of these items demonstrates the management challenge associated with a material merger. Also, prior studies of post-merger performance in the banking industry generally focus on data from the 1980s and earlier, the study examined mergers of BHCs using a sample of 80 mergers from the late 1980s and 1990s and performance data through 2002. To reduce noise, the sample was limited to mergers in which the target is large enough to make a material difference in the post-merger results as this feature was not found in most previous studies. These material BHC acquisitions are a high-risk proposition. On average, the acquirer underperforms the industry in the post merger period. The principal forced behind the decline in performance are credit quality and non interest income. Merged BHCs lag the industry in changes in credit quality in each of the five post-merger periods and declined and correlated with the lag in profitability ratios. The credit quality variable COE was also significant in regression models for each of the five post-merger years. This decline could be the result of difficulties in managing the merger process but could also be the result of the buyers returning to more normal levels of credit quality. Buyers had significantly stronger than average credit quality.


in the pre merger year and might had been taking advantage of the higher price/earnings ratio associated with this superior credit quality to make acquisitions. The decline in returns relative to the industry post merger is also accompanied by relative declines in the generation of non-interest income. Again, the merged companies underperform the industry in the post-merger period, but in that case, the strength of the relationship is less. Changes in fee income were correlated with changes in returns, but the correlation was not strong enough to be significant in regression model. They found that the merged institutions increased their investment in loans relative to the industry. However, that increase was negatively correlated with changes in returns and was likely the result of problems with credit quality. So it was concluded that return market reactions to merger announcements mirror the post-merger results; the negative reactions outnumber the positive by two to one. The mean cumulative abnormal return was not significant but the median is significantly negative.

Mehta and Kakani (2006)\textsuperscript{37} stated that there were multiple reasons for Merger and Acquisitions in the Indian Banking Sector and still it captures the interest of a research and it simply because of after the strict control regulations had led to a wave of merger and Acquisitions in the Banking industry and states many reason for merger in the Indian Banking sector. While a fragmented Indian banking structure may be very well beneficial to the customer because of competition in banks, but at the same time not the level of global Banking Industry, and further concluded that merger and Acquisition is an imperative for the state to create few large Banks.

Delong, Gayle and Deyoung, Robert (2007)\textsuperscript{38} analyzed the long-run financial performance of 216 M&As of publicly traded U.S. banking companies those were announced and completed between 1987 and 1999, as well as the ability of the stock market to predict the long run performance. On average, the data were broadly consistent with the previous literature on bank merger and stock market performance: The typical bank merger did not improved post merger financial performance, and investors were unable to accurately predict the future performance of the typical bank.


merger. However, when the data was analyzed in a statistical framework that allow for the possibility that banks and investors can learn from observing the best and worst practices of previous bank M&As. So, they found evidences of improved post merger financial performance as well as evidence of more accurate stock market predictions of the performance. Researchers designed the framework which was based on two broad conjectures about information, merger execution, and merger valuation. It was analyzed that bank managers can learn by observing information that spills over from recent bank mergers, where they distinguished passive learning from the more traditional notion of active learning by doing. Although, no systematic evidence of the latter, and also no persistent evidences consistent with the possibility that merging banks learn by observing was found. More precisely, researcher stated that improvements in post merger financial performance was positively associated with the quantity of observable bank mergers announced and in-process during the previous several years. Similarly, it was also analyzed that investors become better able to accurately value bank mergers by observing the financial performance of previous bank mergers. Moreover, correlation between short run market reactions and long run post merger financial performance was positively associated with the quantity of observable bank mergers during the previous several years. The results were statistically strong for broad measures of post merger financial performance such as ROA and ROE, and were statistically insignificant for more narrow measures of post merger financial performance such as non-interest income, loan-to-asset ratios, and interest rate margins. This was the sensible result consistent with investors that price bottom line impacts rather than individual operational improvements at the post merger bank. Both of these broad conjectures were predicated on the fact that the large and often complex commercial bank mergers of the late 1980s and the 1990s were a relatively new phenomenon. Previous track record of bank merger performance, investors could only based on their evaluations on the accumulated observable in-formation about what kind of bank mergers tended to do well or do poorly. Importantly, while it took time for banks to develop best merger practices and for investors to develop deep information set about bank mergers, so that statistical results were not merely proxies for the passage of time.
Rezitis, Anthony N (2008) examined the effects of mergers on efficiency and productivity of Greek banking industry. Author have used stochastic output distance functions to construct the generalized out Malmquist productivity index and concluded that after the merger activity, technical efficiency along with total factor of productivity declined. The average technical efficiency deteriorated by 15% while for the same time non-merged banks had increased about 8.52% and total factor productivity for the merged banks after merging were turn down negative effects, but increase in technical efficiency.

Anand and Singh (2008) studied the impact of merger announcements of five banks in the Indian Banking Sector on the share holder bank. These mergers were the Times Bank merged with the HDFC Bank, the Bank of Madurai with ICICI Bank, ICICI Ltd with ICICI Bank, Global Trust Bank merged with Oriental Bank of commerce and the Bank of Punjab merged with the centurion Bank. Event study was used to provide the positive impact of merger on the bidder Banks. The announcement of merger of Bank had positive and significant impact on share holder’s wealth. The result showed that the agreement with the European and the US Banks Merger and Acquisitions except for the facts the value of share holder of bidder Banks have been destroyed in the US context, the market value of weighted Capital Adequacy Ratio of the combined Bank portfolio as a result of merger announcement is 4.29% in a three day period (-1, 1) window and 9.71 % in a Eleven days period (-5, 5) event window.

Kuriakose Sony et al., (2009) focused on the valuation practices and adequacy of swap ratio fixed in voluntary amalgamation in the Indian Banking Sector and used swap ratio for valuation of banks, but in most of the cases the final swap ratio is not justified to their financials.

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R. Srivassan et al., (2009)\(^4\) gave the views on financial implications and problem occurring in Merger and Acquisitions (M&As) highlighted the cases for consolidation and discussed the synergy based merger which emphasized that merger is for making large size of the firm but no guarantee to maximize profitability on a sustained business and there is always the risk of improving performance after merger.

Schiereck Dirk et al., (2009)\(^4\) explained the relationship between bank reputation after Merger and Acquisitions and its effects on shareholder’s wealth. This study considered 285 European merger and Acquisition transaction announced between 1997 and 2002 and found that on average wealth not significantly effect by Merger and Acquisitions.

Bhaskar A Uday et al., (2009)\(^4\) stated that Banking sector witness Merger activities in India when banks face the problem of loosing old customer and failed to attract the new customers. It described that the acquiring firms mainly focuses on the economies of scale, efficiency gain, address the need of communication and employee concern and described the integration process was handled by professional and joint integration committee. Road map was prepared and HR integration is done as per schedule and researchers took a case of the Bank of Punjab was acquired the Lord Krishna Bank and later on the Centurion Bank of Punjab was acquired by the HDFC Bank and gave the frame of integration. This study regulated the link between communication, HR integration, management action and consequent contribution of post merger success by conducting interviews in recent mergers of an Indian Banks. It was inferred that proactive communication, changes in organizational structure, and appropriate human resource integration smoothen the journey towards successful integration.

Pamarty, Dr. Murthy (2009) focused on the re-engineering of banking through Merger and Acquisitions (M&As), author studied the predominant factor influencing merger and acquisitions. Researcher took public as well as private sector bank to analyze the performance during pre and post merger period and studied through several angles and evaluated financial implications before and after the merger in the banking industry and how the prices of the security reflects to the announcement of Merger and Acquisitions (M&As) decisions.

(Cerasi, et al., 2009) analyzed the relationship between competitions and concentration in banking industry of France and Italy in Europe by testing the monopolistic competition model of branch banking. Researchers took some indicators for judging the competitiveness and efficiencies in the local market in France and Italy and then used econometrics model to evaluate the impact of horizontal merger of bank on competitions. Researchers addressed through the competitions created in the retail banking markets derived from the model where branching decisions are modeled together with the market structure and estimated parameter that measures the toughness of competition among banks, based on the elasticity of banks profit with respect to branch network size in any given market. And further provide evidences after analysis that in the retail banking industries of France were more competitive than Italy.

(Bhan, 2009) investigated the motives and benefits of mergers in the Indian banking sector and took eight merger deals of the banks in India during the period of reforms from 1999 to 2006. He used the empirical methods and t-test were used to study the short terms changes in the returns of the banks due to mergers along with EVA (Economic Value Added) method was also used to study the efficiency or benefits achieved due to merger. Result found that the post reforms mergers have been efficient for the merging banks but also creates the value for the acquiring banks.

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(Kumar and Suhas, 2010)\textsuperscript{48} studied the value creation through mergers in the Indian banking sector. In the paper, they assessed the impact of merger on both the stock market wealth creation and operating performance. For the purpose of the study, authors used financial ratios and concluded that the mergers in the banking sector were positive for acquiring or bidder banks and negative abnormal return for the target banks. The framework of pre and post merger comparisons of operating performance of acquiring banks were based on the three Models where by cash inflows was deflected by market value of assets, book value of assets and income. Researchers also concluded that the operating performance of banks does not improve after the merger.

Kuriakose and Kumar (2010)\textsuperscript{49} assessed the strategic and financial similarities of merged Banks, and relevant financial variables of respective Banks were considered to assess their relatedness. The result of the study found that only private sector banks favors voluntary merger wave in the Indian Banking Sector and public sector Bank behave reluctant towards their type of restructuring. Target Banks generates more leverage (dissimilarity) than bidder Banks, so the merger lead to attain optimum capital structure for the bidders and asset quality of target firms is very poor except the cases of the HDFC Vs the CBOP merger in 2007. The factor behind voluntary amalgamation were synergies, efficiency, cost saving, economies of scale. The merging partners strategically similarities and relatedness were very important in the synergy creation because the relatedness of the strategic variable have a significant impact on the Bank performance and the effect of merger on the stock market.

Aharon David Y et al., (2010)\textsuperscript{50} analyzed the stock market bubble effect on Merger and Acquisitions and followed by the reduction of pre bubble and subsequent. The bursting of bubble seems to have led to further consciousness by the investors and provide evidence which suggests that during the euphoric bubble period investor took more risk. Merger of banks through consolidation is the significant force of change took place in the Indian Banking sector.


(DusoTomaso et al., 2010)\textsuperscript{52} examined the ability of event studies to capture future mergers profitability measured by accounting data. The sample of large horizontal concentrations during the period 1990-2002 involving 459 firms and measured the post merger profitability was used and established empirical evidence that the event study methodology might be useful for the competitive analysis of mergers. And further shows that the abnormal returns and post merger profitability are positively and significantly correlated for merging firms.

(Ravichandaran.K et al., 2010)\textsuperscript{52} assessed the efficiency and performance of banks using CRAMEL-type variables, before and after the merger for the selected public and private banks which were initiated by the market forces and found that mergers did not seems to enhance the productive efficiency of banks but did not showed any significant difference. Study found that the total advances to deposits and the profitability were the two main parameters which need to be considered as very much affected by mergers and concluded that the main reason for their mergers were to scale up their operations.

Sinha and Gupta (2011)\textsuperscript{53} studied a pre and post analysis of firms and concluded that it had positive effect as their profitability and in most of the cases it deteriorated liquidity. After few years of Merger and Acquisitions(M&As), it came to the point that companies may be able to leverage the synergies arising out of the merger and Acquisition that have not been able to manage their liquidity. Study showed the comparison of pre and post analysis of the firms. It also indicated the positive effects on the basis of some financial parameter like Earnings before Interest and Tax (EBIT), Return on share holder funds, Profit margin, Interest Coverage, Current Ratio and Cost Efficiency etc.

(Kouser& Saba, 2011)\textsuperscript{54} analyzed the effect of merger on the financial performance of Pakistan banking sector, as well as they explored the effect of merger on profitability


\textsuperscript{54}Kouser, R. and Saba, I., ‘Effects of Business Combination on Financial Performance: Evidence from Pakistan’s Banking Sector’, Australian Journal of Business and Management Research, Vol.1, No.8,
of the banks by using six different financial ratios. 10 commercial banks were selected that faced merger and acquisitions (M&As) during the period 1999-2010. All the data were collected from the annual reports of the banks. The study compared three years pre and three years’ post merger financial ratios and applied t-test for statistical inferences. The result recommended that the operating financial performance of all commercial banks in post merger period had declined and shows negative impact on the performance of banks after the mergers.

Alao, Rasheed Olajide (2010) studied the explorative investigations on the Nigerian banking industry. Researcher recommended to shrink the Nigerian banking industry from 25 mega banks to almighty 3 banks with the capitalizations N 300 billions. Only one best emerged bank from multifarious performance rating was taken and conducted test by central bank of Nigeria (CBN) after fulfilling the requirement of N 300 billion bare to represent the existing Nigerian 25 banks. The other two banks came from the foreign banks therefore one from the United States of America and other from the Europe. This makes Nigerian banking sector more sound, strong and good for the economy of the country. The study concluded that the merger of banks in the Nigerian banking industry creates value gains and represent gains to economic efficiency.

Sharma, Manu (2010) studied the M&As in the US banking industry for the formations of mega banks. Five mega banks mergers in the US banking industry were taken and applied event study methodology and accounting performance techniques to determine the valuation affects of structural changes due to Merger and Acquisitions (M&As). In order to scrutinize the decisions whether the merger was successful or not, researcher judged the justifiability of merger on the ground of value creation. And the inference was drawn that only three out of five mergers creates value in the accounting performance, whereas an event study showed that Merger and Acquisitions (M&As) does not creates abnormal return to the share holders of the

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banks but the value creations through mergers show stability however not reactionary on the part of shareholders.

Rai, Dr. Rohan (2011) explored the way of corporate excellence through Merger and Acquisitions (M&As). The case of merger of ICICI bank with Bank of Madurai was taken and emphasized on the need of merger of banks in the economy to make the vibrant one. Author assessed each bank performance before the merger and combined performance after the merger of banks with the help of statistical tools. After analyzing, it was found that ICICI bank could remain successful in achieving rapid growth in many respect but could not realized a few expected benefits including the economy of scale. Further the study concluded that ICICI bank and Bank of Madurai merger created the synergy in most of the parameter of merged entity and show higher growth rates than the projections. The merger of ICICI bank with Bank of Madurai achieved in enhancing geographical reach and customer base, in addition, it was also found that merger was partially successful but achieved long term objectives by integrating the various locations. So it was safely opined that this milestone of strategic Merger and Acquisitions (M&As) is the history of banking.

(Liargovas and Repousis, 2011) investigated the impact of Merger and Acquisitions (M&As) on the performance of Greek banking sector. Event study methodology was done to find whether investors earn cumulative abnormal return or not. The period from 1996-2009 was considered for the study and shows significant positive CAAR (cumulative average abnormal return) by using event window (30 days) 10 days prior to the announcement. However, cash deal raised more significant positives CAARs for the bidder banks. The mergers have no impact to create wealth to the share holders but also indicated significant implications for rejection of semi- strong form of Efficient Market Hypothesis (EMH). The study also examined the operating performance of Greek banking sector with the help of 20 financial ratios and concluded that Merger and Acquisitions (M&As) does not improved the operating performance of banks.


Soongswang, Amporn, (2011) studied the impact of takeover on both the target and bidder firms traded in the stock exchange of Thailand. The event window shows abnormal return (-12, 0, +12) month before and after the announcement by using several metrics. This study used three parametric tests: standardized residual test, standardized cross sectional test and conventional t-test for testing the significance changes in the means. The market and the market adjusted models were used for the estimations of abnormal return for both the target and bidder firms. The method of CAR and BHAR were applied for the measurement of return, the total gains of the event firms were found positive at 29.90% when estimated from the market model and 57.50% estimated market adjusted model. The effects of the takeover on the wealth of the target firm’s shareholders were substantially positive in each time period, before the announcement, at the announcement and after the announcement days. But the bidder firms were negative and positive return. So, most of the findings from the study supported the positive abnormal return rather than negative. Finally it was concluded that takeovers indicates the substantial and positive total gains for the event firm’s shareholders.

EbunoboweiAppah and Sophia, John.M (2011) focused on the efficiency effects through Merger and Acquisitions (M&As) in the Nigerian banking sector. A sample of 10 banks was taken for the study and compared three year pre and three years’ post mean of return on equity. Researchers used descriptive statistics and analysed the data with the help of paired sample t- test. Results found that there was no significant difference in the mean of the return on equity in pre and post merger and acquisitions. They suggests and recommended that Merger and Acquisitions (M&As) in the Nigerian banking sector must be driven by the market forces, further imply that only Merger and Acquisitions (M&As) may not be the only approach for improving performance, stability and efficiency and evaluated that researcher should developed new framework instead of merger and acquisitions.

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Joshua, Okpanachi (2011) studied the comparative analysis of the impact of Merger and Acquisitions (M&As) on financial efficiency of banks in Nigeria. The ratios used were Gross Earning, Profit after Tax and Net Assets of the selected banks for the study. Student t-test was applied for comparing pre and post merger ratios of banks. And results found that post Merger and Acquisitions (M&As) period of banks were more financially efficient than the pre merger period of banks. But the mean of gross earnings and net assets were increased while profit after tax records declined. The study also shows that there was no significant difference between pre and post merger financial performance of banks in Nigeria. So, it was concluded that it is not possible to clearly state whether Merger and Acquisitions (M&As) in the Nigerian banking sector lead to improved financial efficiency.

Kemal, Muhammad Usman (2011) measured the post merger profitability of Royal Bank of Scotland that had under gone Merger and Acquisitions (M&As). Author collected the financial statement for four years (2006-2009) from the annual reports of banks and used 20 financial ratios for testing the performance of banks before and after the Merger and Acquisitions (M&As). The study compared average of all ratios on the basis of number of favorable ratios before and after the merger. The result shows that only 6 ratios out of 20 ratios were improved, the performance of Royal Bank of Scotland (RBS) in terms of profitability, liquidity, assets management, leverage and cash flows had been quite satisfactory before the merger and later on after the merger it got deteriorated. In short it was proved by the researcher that merger of Royal Bank of Scotland (RBS) fails to pull up the profitability and provide evidence of failure of merger in banking history.

Natarajan, P. and Kalaichelvan, K. (2011) discussed the implications of Merger and Acquisitions (M&As) on the financial positions of banks. This study compared 5 years pre and 5 years post merger operating performance of banks. In the study,

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authors focused on the liquidity, operating performance and profitability position of banks after the mergers and found that private sector banks were better in the pre period as compared to their performance in post merger. But the public sector banks shown notable positive change in the post merger performance but there were declined in turning their assets for generating income. It was also identified that the deal of private sector banks had significant negative impact on their liquidity positions as well as overall financial performance of banks. The public sector banks also had significant negative impact in terms of generating incomes relative to their investment in fixed assets after the merger, whereas the performance in respect of their net earnings is positively influenced by Merger and Acquisitions (M&As). However, the financial performance of public and private sector banks does not show any notable changes in their liquidity and profitability levels but net earnings of public sector banks in longer period of 5 years tends to increase as compared to private sector banks.

Raiyani, Jagdish R (2011) examined the effects of mergers on efficiency and productivity of Indian banks, with the help of CAMEL rating researcher evaluated the performance of banks along with t-test for testing the level of significance. The CAMEL model helped to analyze the growth of profitability, spread, liquidity, solvency and assets quality ratios. The sample of the study consists of six banks BOB, PNB, OBC, HDFC, ICICI and CBOP. The five year prior and five year post merger ratios were analyzed and found that the private sector merged banks were more dominating over the public sector banks in terms of profitability and liquidity but on the other hand capital adequacy and NPAs results had opposite.

Natarajan, P., and Kalaichelvan, K (2011) explored the implications of merger process towards the eyes of employees during the merger process and after. The comprehensive survey was done among the employees of banks of merged banks during the post reform period on the effectiveness of mergers. Employees perception about the banks performance was judged, a comprehensive questionnaire was created.

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on point 5 likert scale. The result of the study indicates that public bank organizations need to improve when it is compared to private banks in respect of element like, showing respect for staff, providing information and keeping promises.

Hagendorff, Jens and Vallascas, Francesco (2011)\textsuperscript{66} analyzed the default risk implications of Merger and Acquisitions (M&As) on acquiring banks of Europe. Research exhibited that on average Merger and Acquisitions (M&As) does not modify the risk profile of acquiring banks. As risk is always associated with cross border Merger and Acquisitions (M&As). However the group of least risky banks before Merger and Acquisitions (M&As) experience an increase in default risk after completion of a deal. Further, it was found that merger related risk increases particularly large for cross border and diversifying deal is consistent with a host of theoretical and empirical studies which doubt that variables diversification gains and risk benefits can be realized through bank consolidation.

Goyal and Joshi (2011)\textsuperscript{67} overviewed on Indian banking industry and highlighted the changes occurred in the banking sector after post liberalization and defined the Merger and Acquisitions as per AS-14. The need of Merger and Acquisition in India has been examined under this study. It also gave the idea of changes that occurred after M&As in the banking sector in terms of financial, human resource & legal aspects. And also described the benefits came out through M&As and examined that M&As is a strategic tools for expanding their horizon and companies like ICICI Bank has used merger as their expansion strategy in rural market to improve customers base and market share. The sample of 17 Merger of post liberalization and discussed about communication in M&As and further, the study also lightened the role of media in M&As.

Shobhana, Dr.V.K and Deepa, Dr. N (2011)\textsuperscript{68} studied the technical efficiency of pre and post mergers of banks. The sample consists of 9 banks of the Indian banking sector, Stochastic Production Frontier Approach was applied to measure the technical


efficiency as ratios of output to input. The study revealed that the post merger efficiency of public sector banks such as BOB, PNB, SBI and UBI shows improvement over the pre merger efficiency level while OBC efficiency declined and only UBI shows significant result after the merger. In respect of private sector Indian banks and foreign banks, HDFC and HSBC and SCB achieved higher efficiency in post merger period, however, that the merger deal of UBI with HDFC bank only resulted significant improvement in the technical efficiency.

Goyal, Dr.K.A and Joshi Vijay (2011)\(^6\) proposed a three phases of Merger and Acquisitions (M&As) that begins with pre merger phase, acquisitions phase followed by post merger phase. Researchers took the cases of ICICI bank ltd started merging with SCICI in the year 1996 and recent merger with the Bank of Rajasthan (BOR) in 2010. The study revealed the success story of ICICI bank in the banking industry to become the leader of private banks in India. Authors concluded that merger should divided into three phases namely pre merger phase, acquisition phase and post merger phase and exhibit the chronically merger series of ICICI bank with different companies. Also, Merger and Acquisitions (M&As) are tools for expansion, create synergy and helpful in competitive benefit, simultaneously, study also focused the problems of human resource which results in psychological, healthlı, behavioral and survival problem of personnel’s.

(Venkariya, Dr. shital, 2012)\(^7\) examined the merger activity in the Indian banking sector and provides insights to the impact of Merger and Acquisitions (M&As) on the operating performance of acquiring banks and studied the impact of merger on the share price of selected banks. She classified the human resource issues were classified into two phases which were pre and post merger phases. Pre merger phases consist planning phase and acquisitions phase and integrations phases come in post merger phase. In contrast to the objectives, it was found that share prices of both the banks increases after the merger, along with this current ratio of both banks also improved.


Sikarwar, Ekta (2012) studied the impact of mergers announcement on the shareholder’s wealth and explored the implications of a Merger and Acquisitions (M&As) in India. Author took the cases of state bank of India merged with its associate bank namely the merger of State Bank of India with State Bank of Saurashtra and State Bank of Indore which had occurred on 13th August, 2008 and 27th August, 2010 respectively. The impact of Merger and Acquisitions (M&As) on the share holders wealth was analyzed by using event study methodology. The study concluded mixed evidence about the creation of shareholders wealth and the significant abnormal return was seen in case of State Bank of Saurashtra around the event date that infer the informal efficiency. While on the other hand merger of State Bank of Indore with State Bank of India showed less abnormal return. It concluded that the market price movement was not only affected by publicly information but also reflects by previous information.

(Saluja, et al., 2012) appraised the impact of merger on financial performance of HDFC bank. The case of merger of merger of HDFC bank with Centurion bank of Punjab (CBOP) was taken and applied CAMEL-MODEL approach for evaluating the financial performance of HDFC bank after acquired Centurion bank of Punjab (CBOP). The CAMEL- MODEL approach had many ratios for examining the performance and comparing 2 years pre and post 2 years ratios of Merger and Acquisitions (M&As). The study concluded that the impact of merger on HDFC bank financial performance is significantly affected and also indicates better performance and improved position of HDFC bank after the merger. The study was supported by highlighting the fact that two successful banks merged to form strong entity that may perhaps match public sector banks in size as well as in strength in the country.

Ashton, John K. (2012) found three key findings in the study; First, mergers had a minimal influence on instant access and notice deposit interest rates. Second, the level of interest rate change did not vary substantially with the size of deposits and the time

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elapsed before and after merger but smaller deposits do displayed greater variability in the degree of interest rate change over time. Third, the availability of notice deposit services for customers with very high and low levels of investment declines after mergers. For other deposit services it was considered that, the availability of services remains unchanged by mergers. This study found contrast with past US and Italian studies where mergers had a strong negative influence on depositors. There were substantial differences between the national UK retail banking markets as examined in the study and US and Italian regionally based banking markets considered in past studies. The key policy recommendations emerging from these findings relate to the interpretation of merger guidelines.

S, Devarajappa (2012) in his paper specifically determined that the merger was a useful tool for growth and expansion in Indian Banking Sector. It is helpful for survival of weak banks by merging into larger bank. The study showed the impact of merger on financial performance of Indian Banking sector. Comparison was made between pre and post merger performance in terms of Gross Profit margin, Net Profit margin, Operating Profit margin, Return on Capital employed, Return on Equity and Debt equity ratio. And the result indicated that, the return on equity, debt -equity ratio and Gross Profit margin had shows the improvement after the merger: Student t-test was applied for analyzing the pre and post merger performance of banks and result suggested that after the merger the financial performance of the banks had increased. The most important was that to generate net higher profit after the merger in order to justify the decision of merger undertaken by the management to the shareholders.

1.4. Research Gap

Review of literature shed light on various gaps in the previous researches carried out in this field. The Researcher intends to put an honest effort to provide his sincere contributions in this regard. Majority of the aforesaid studies are based on trends, policies, framework, human resource and few works found in the field of financial profitability of banks in India and requisites which are investigated. Profitability and financial analysis of mergers/amalgamations are not given due importance or

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adequately explored as was in the case of Vennet (1996)\textsuperscript{75} and Mehta and Kakani (2006)\textsuperscript{76}. Some of the studies highlight the problems as in the case of Vijh (1994)\textsuperscript{77} and Anand and Singh (2008)\textsuperscript{78}, which stated that the shareholders of Bidders Banks suffered as a result of mergers but appropriate measures to make the merger profitable were not dealt within the study. While some studies mention the theoretical implications of mergers and amalgamations and they do not look into practical application of it as is seem in the case of Bhaskar, et al., (2009)\textsuperscript{79}, Natarajan and Kalaichelvan (2011)\textsuperscript{80} and Goyal and Joshi (2011)\textsuperscript{81}. Therefore, the major limitation seems that in most of the studied, post merger analysis, i.e. analyzing how the merged or resultant banks perform financially after the merger is not done which is extremely important from the point of view of the viability and success of the merger and amalgamations.

Some studies cannot be generalized as the sample size is very small as in S, Devarajappa (2012)\textsuperscript{82} while some works suffer from statistical limitations as in Venkariya (2012)\textsuperscript{83}

The researcher has made an effort to address these research gaps and has made an attempt to make complete and comprehensive study on merger or amalgamations. The research related to banks mergers is different. It is compiled, analyzed and reviewed in order to develop an understanding about the topic and also understand the work that has been carried out in this area. It has been found that Mergers / Amalgamations are of late becoming a potent tool in the hands of Indian government. It is found that though lot of studies have been done on this topic the merger mania in the last few years is creating waves all over the world and the thesis has been so designed so as to evaluate the latest Merger and Amalgamations involving Indian banking sector which is the back bone of Indian economy.

\textsuperscript{75}Vennet, R. V. op.cit.pp.1557-1558
\textsuperscript{76}Mehta and Kakani .op.cit.pp.12-13
\textsuperscript{77}Vijh, Anand M. op.cit.pp.608-609
\textsuperscript{78}Anand, M., & Singh, J. (2008).op.cit.pp.53-54
\textsuperscript{79}Bhaskar A Uday et al., op.cit.pp
\textsuperscript{80}Natarajan, P., and Kalaichelvan .op.cit.pp
\textsuperscript{81}Goyal, K. A. and Joshi, V. op.cit.pp.164-165
\textsuperscript{82}S, Devarajappa, op.cit.pp.
\textsuperscript{83}Venkariya, shital, op.cit.pp.
1.5. Importance and Utility of the Research

Research studies these days are gaining an unprecedented focus and attention. A researchable area in any academic discipline is an area that has an ample scope to be explored. The scope in itself poses some potential problems that need to be answered. The present study is an empirical work based on secondary source of information. The study not only fulfills the requirement of the academic degree but also it is part of my social commitment to bring out the facts and realities of Mergers and Amalgamations and its impact on the Indian banking sector since economic liberalization. The study will not only to its readers but shall help the future researcher as their guide. The study further makes an attempt to point out and suggest that mergers and amalgamations will play a very crucial role for becoming the Indian banks of global standard.

1.6. Scope of the study

In the contemporary world, Mergers have become popular due to globalization, liberalization, technological developments & intensely competitive business environment. The world economy is facing serious difficulties in terms of failure of major banks and financial institutions, future growth prospects became very uncertain exposing major economies to deep recession. In spite of this, in the midst of all the darkness and disorder of the world economy, India’s banking sector has been amongst the few to maintain resilience. But in India there is a need of growing balance sheet, faster credit expansion, increasing profitability and productivity similar to banks in developed countries. This study emphasizes the Mergers and Amalgamations as the key enabler for rapid growth of the Indian banking Industry. The study of strategic Merger and amalgamations in India since economic liberalization in the Indian banking sector would cover a span of nearly two decades i.e., from 1991 to 2013. This span of period would be more than sufficient to find out the trends in the financial performance of banks vis-a-vis merger and acquisitions particularly in the Indian banking sector. Keeping this in mind the present study is mainly focused on the financial performance of both Banks before and after the Mergers and Amalgamations on the basis of trends and reports and also studies the synergies and value that are created as a result of merger. A separate study is dedicated to study the impact of merger on the shareholder’s wealth of Target and
Bidder Banks. The study also investigates the idea for restructuring the banks through Merger and Amalgamations for better performance and maintaining international standard. Besides this backdrop, Indian banking sector has been selected as the theme of the research study on Mergers in the Indian context. For this several measures are employed for appraising the financial and operating performance of the banks before and after the merger.

1.7. Objectives of the study
The main objectives of the study are as given below:

1. To study the major Mergers / Amalgamations deals that have been taken place globally and in India.
2. To study the Mergers / Amalgamations in Indian Banking sector since economic liberalization and its financial performance in the last few years.
3. To examine the pre and post merger Profitability, Solvency, Operational efficiency and Asset utilizations capacity of banks to know whether the Mergers and Amalgamations led to the profitable situations for the merging and the merged Banks.
4. To identify the value change through merger by comparing the Enterprise value of Banks before and after the merger.
5. To examine the Business Performance of Banks before and after from Merger and Amalgamations.
6. To find out the impact of Mergers and Amalgamations announcement on the shareholder’s wealth of Bank.
7. To suggest measure for rapid and planned growth of Indian Banking sector on international basis by using merger as an effective tool.

1.8. Hypotheses of the study
To achieve the aforesaid objectives, six hypotheses have been developed to fulfill the ultimate results of the study. Six hypotheses have been further bifurcated into fifteen sub hypotheses to cover up the various dimensions of mergers and amalgamations.

[1] Testing the significant difference between Pre and Post merger Profitability of Banks.
$H_0$ (Null Hypothesis) = There is no significant difference between Pre and Post merger Profitability of Banks.

$H_a$ (Alternative Hypothesis) = There is a significant difference between Pre and Post merger Profitability of Banks.

**Sub Hypotheses:**

1. Testing the significant difference between the Pre and Post Merger Net Profit Margin (NPM) of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significant difference between the Pre and Post Merger Net Profit Margin (NPM) of Merged Banks.

$H_a$ (Alternative Hypothesis) = There is significant difference between the Pre and Post Merger Net Profit Margin (NPM) of Merged Banks.

2. Testing the significance difference between Pre and Post merger Earning Per Share (EPS) of merged Banks.

$H_0$ (Null Hypothesis) = There is no significance difference between Pre and Post merger Earning Per Share (EPS) of Merged Banks.

$H_a$ (Alternative Hypothesis) = There is significance difference between Pre and Post merger Earning Per Share (EPS) of Merged Banks.

3. Testing the significance difference between the Pre and Post Merger Price to Earnings (P/E) ratio of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significant difference between the Pre and Post Merger Price to Earnings (P/E) ratio of Merged Banks.

$H_a$ (Alternative Hypothesis) = There is significant difference between the Pre and Post Merger Price to Earnings (P/E) ratio of Merged Banks.

4. Testing the significance difference between the Pre and Post Merger Enterprise value to Profit before Depreciation Interest Taxes and Amortization (EV/PBDITA) ratio of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significant difference between the Pre and Post Merger Enterprise value to Profit before Depreciation Interest Taxes and Amortization (EV/PBDITA) ratio of Merged Banks.

$H_a$ (Alternative Hypothesis) = There is significant difference between the Pre and Post Merger Enterprise value to Profit before Depreciation Interest Taxes and Amortization (EV/PBDITA) ratio of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significant difference between Pre and Post merger Operational efficiency and Asset utilization capacity of Banks.

$H_a$ (Alternative Hypothesis) = There is a significant difference between Pre and Post merger Operational efficiency and Asset utilization capacity of Banks.

**Sub Hypotheses:**

1. Testing the significance difference between the Pre and Post Merger Total Asset Turnover Ratio (TATR) of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significant difference between the Pre and Post Merger Total Asset Turnover Ratio (TATR) of Merged Banks.

$H_a$ (Alternative Hypothesis) = There is significant difference between the Pre and Post Merger Total Asset Turnover Ratio (TATR) of Merged Banks.

2. Testing the significance difference between the Pre and Post Merger Return on Assets (ROA) of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significant difference between the Pre and Post Merger Return on Assets (ROA) of Merged Banks.

$H_a$ (Alternative Hypothesis) = There is significant difference between the Pre and Post Merger Return on Assets (ROA) of Merged Banks.


$H_0$ (Null Hypothesis) = There is no significant difference between Pre and Post merger Solvency of Banks.

$H_a$ (Alternative Hypothesis) = There is a significant difference between Pre and Post merger Solvency of Banks.

**Sub Hypotheses:**

1. Testing the significance difference between the Pre and Post Merger Interest Coverage Ratio (ICR) of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significant difference between the Pre and Post Merger Interest Coverage Ratio (ICR) of Merged Banks.

$H_a$ (Alternative Hypothesis) = There is significant difference between the Pre and Post Merger Interest Coverage Ratio (ICR) of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significant difference between Pre and Post merger Enterprise Value of Banks.

$H_a$ (Alternative Hypothesis) = There is a significant difference between Pre and Post merger Enterprise Value of Banks.


$H_0$ (Null Hypothesis) = There is no significant difference between Pre and Post merger Business performance of Banks.

$H_a$ (Alternative Hypothesis) = There is a significant difference between Pre and Post merger Business performance of Banks.

Sub Hypotheses:

1. Testing the significance difference between Pre and Post merger Total Income (T I) of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significance difference between Pre and Post merger Total Income (T I) of Merged Banks.

$H_a$ (Alternative Hypothesis) = There is significance difference between Pre and Post merger Total Income (T I) of Merged Banks.

2. Testing the significance difference between Pre and Post merger Total Expense (T E) of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significance difference between Pre and Post merger Total Expense (T E) of Merged Banks.

$H_a$ (Alternative Hypothesis) = There is significance difference between Pre and Post merger Total Expense (T E) of Merged Banks.

3. Testing the significance difference between Pre and Post merger Market Capitalization (MCap) of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significance difference between Pre and Post merger Market Capitalization (MCap) of Merged Banks.

$H_a$ (Alternative Hypothesis) = There is significance difference between Pre and Post merger Market Capitalization (MCap) of Merged Banks.

4. Testing the significance difference between Pre and Post merger Interest Expense (I E) of Merged Banks.
$H_0$ (Null Hypothesis) = There is no significance difference between Pre and Post merger Interest Expense (IE) of Merged Banks.

$H_A$ (Alternative Hypothesis) = There is significance difference between Pre and Post merger Interest Expense (IE) of Merged Banks.

5. Testing the significance difference between Pre and Post merger Net Sales (NS) of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significance difference between Pre and Post merger Net Sales (NS) of Merged Banks.

$H_A$ (Alternative Hypothesis) = There is significance difference between Pre and Post merger Net Sales (NS) of Merged Banks.

6. Testing the significance difference between Pre and Post merger Net Profit (NP) of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significance difference between Pre and Post merger Net Profit (NP) of Merged Banks.

$H_A$ (Alternative Hypothesis) = There is significance difference between Pre and Post merger Net Profit (NP) of Merged Banks.

7. Testing the significance difference between the Pre and Post merger Total Liabilities (TL) of Merged Banks.

$H_0$ (Null Hypothesis) = There is no significance difference between Pre and Post merger Total Liabilities (TL) of Merged Banks.

$H_A$ (Alternative Hypothesis) = There is significance difference between Pre and Post merger Total Liabilities (TL) of Merged Banks.

6) Testing the significant impact on the shareholders wealth of banks with the announcement of mergers and amalgamations.

$H_0$ (Null Hypothesis) = There is no significant impact on the shareholders wealth of banks with the announcement of mergers and amalgamations.

$H_A$ (Alternative Hypothesis) = There is a significant impact on the shareholders wealth of banks with the announcement of mergers and amalgamations.

Sub Hypotheses:

1. Testing the significant impact on the shareholders wealth of Target banks with the announcement of mergers and amalgamations.

$H_0$ (Null Hypothesis) = There is no significant impact on the shareholder's wealth of target banks with the announcement of merger.
Hₐ (Alternative Hypothesis) = There is significant impact on the shareholder’s wealth of target banks with the announcement of mergers and amalgamations.

2. Testing the significant impact on the shareholder’s wealth of Bidder banks with the announcement of mergers and amalgamations.

H₀ (Null Hypothesis) = There is no significant impact on the shareholder’s wealth of Bidder banks with the announcement of mergers and amalgamations.

Hₐ (Alternative Hypothesis) = There is significant impact on the shareholder’s wealth of Bidder Banks with the announcement of mergers and amalgamations.

1.9. Research Design and Methodology

1.9.1 Research Design

This research is designed to examine the financial performance of Indian Banks that expand through Mergers and Amalgamations and to carry out the quantitative, statistical analyses with a view to understand the financial performance in the long run, post merger. An attempt is made by the Researcher to study the financial profile of Target and Bidder Banks both before and after the merger and to apply various financial and statistical tools to evaluate the impact of merger on the financial and operating performance of Banks. It also examines the impact of merger on the shareholder’s wealth of Target and Bidder banks. The Researcher collected the financial data of target and bidder Banks before and after the merger. The data are organized in the form of comparative statements and ratio analysis. For the years prior to the merger, the aggregate financial ratios of both target & bidder Banks are considered and for the post merger, the aggregate financial ratios of bidder Banks alone were used. The relevant statistical tools are used to test the effects of the merger on the financial and operating performance of the Banks. The year of merger are considered in the post merger period for the estimation.

1.9.2 Collection, Compilations and Tabulation of Data

For the purpose of the study, the data have been collected from various secondary sources such as Annual Reports of Banks, Newsletters, reports, surveys, websites and public statement. Various libraries and databases maintained in the country were studied in order to collect the secondary data which was required for the study. The financial Data of Banks has been collected from the Center for Monitoring Indian Economy (CMIE) which is maintaining database since 1991 of Indian Banking
Sector. Security price of the shares and other relevant information related to announcement of mergers and amalgamations of banks were collected from database of the banks maintained by various stock exchanges, i.e., Bombay Stock Exchange (BSE), National Stock Exchange (NSE) and Security Exchange Board of India (SEBI). Data has also been collected from the World Investment Report, Grant Thornton Report, RBI monthly Bulletin, Economic surveys, Handbooks of statistics, Merger Market reports and other relevant resources. The data collected from these resources have been arranged systematically to analyze the problems in a logical manner. The appropriate statistical tools has been applied to arrive at the conclusions and to check out the strategy for future mergers and amalgamations for growth and expansions of Indian banking sector. After collecting the data from various published resources, the data are verified from the alternative sources to be assured about the reliability and accuracy of the data. It was compiled and calculated by using various software programs like EXCEL, SPSS etc. as well as manually for the purpose of analyzing and interpreting the result.

1.9.3 Research Methodology
Researcher has examined five Merger and Amalgamations which had happened in the Indian Banking sector. There are 24 cases of mergers/amalgamations in Indian banking sector since economic liberalization, out of them 5 cases have been selected randomly by the researcher for the study. These mergers happened for the expansion, diversification, survival of sick banks, competition with International market and overall growth. For the purpose of analyzing the profitability of the Target and Bidder Banks and to find the impact of Merger and Amalgamations on shareholder’s wealth various accounting and financial measures are undertaken. Financial ratios have been calculated to ascertain the profitability, operating efficiency and asset utilization capacity, solvency, enterprise value, business performance and market capitalization of the merged Bank in the financial years comprising the time frame of the present study.

Six main hypotheses split into fifteen sub hypotheses are formulated to find out the impact of Mergers and Amalgamations on the profitability, operating efficiency and Asset utilization capacity, solvency, enterprise value, business performance and to analyze the impact on shareholder’s wealth. The profitability parameters are Net Profit Margin (NPM), Earning per Share (EPS), Price to Earnings Ratio (P/E) and
Enterprise Value to Profit before Depreciation, Interest, Taxes and Amortizations (EV/PBDITA). The operating efficiency and Asset utilization capacity parameters are Total Asset Turnover Ratio (TATR) and Return on Assets (ROA), the solvency parameters is Interest Coverage Ratio (ICR). The Enterprise value (EV) and the Business performance parameters are Market Capitalization (MC), Total Income (TI), Total Expense (TE), Interest Expense (IE), Net Sales (NS) Net Profit (NP) and total Liabilities (TL). The financial ratios of the banks to be analyzed both before and after the merger period shows how ratios of banks are changed at the end of financial year. The study has adopted the methodology of comparing pre and post merger aggregate financial performance of Target and Bidder banks both before and after the merger. The year of merger has been included in the post merger period for analyzing the financial performance of banks. For the purpose of analysis ratios analyses and Independent sample t-test are used. In order to analyze the impact on shareholder’s wealth Standard risk adjusted event study (simple linear regression and paired sample t-test) analysis has been done for each banks involved in the following five merger announcements in the Indian Banking sector: Nedungadi Bank with Punjab National Bank (2002), Global Trust Bank with Oriental Bank of Commerce (2004), Bank of Punjab with Centurion Bank (2005), Centurion Bank of Punjab with HDFC Bank (2008) and Bank of Rajasthan with ICICI Bank (2010). The share price data and market index data, namely, BSE500 are taken from the official website of Bombay Stock Exchange of India, however the first date of media announcement of the merger has been taken as the event date (day zero).

1.9.4 Statistical Tools and Techniques Applied

The statistical tools that have been used in order to test the hypotheses are as follows:

1.9.4.1 Regression Technique

Regression is one of the important techniques of statistical analysis which assumes a functional relationship between dependent variable and independent variable(s). If the number of independent variable is single then it known to be a simple regression. In case of linear regression the values of dependent variable changes at a constant rate for a unit change in the value of the independent variable. It helps us to establish the cause and effect relationship between two variables that is estimating the value of
one variable if we have the value of another. In this study it is used to find out the alpha and beta for calculating the expected return of stock price during the event window (-15 to+15). The simple regression takes the linear form of functional relations like:

\[ Y = a + bX. \]

Where,

\( Y \) is the dependent variable,
\( X \) is the independent variable,
‘\( a \)’ is the Y-Intercept,
‘\( b \)’ is the slope of the straight line,

1.9.4.2 Paired Sample t-test

A paired sample t-test is used to determine whether there is a significant difference between the two related means of the same measurement made in two different conditions. In this study, researcher used paired sample t-test while applying Standard Adjusted risk Event Study to compare the expected and actual return of bank stock in the event window period in order to find out the impact on shareholder wealth. The normally used formula to test the significance of the difference between two dependent samples is given below.

\[
t = \frac{\bar{d} - \mu}{s} \times \sqrt{n} \text{ or}
\]

\[
= \frac{\bar{d}}{s} \sqrt{n}
\]

1.9.4.3 Independent Sample Test of significance (T-Test)

Independent sample Test of significance of mean (t-test) for the hypothesis testing is being used by the Researcher for the test of equality of two means. The mean for the pre-merger period and post-merger period are being tested to know whether the means of two normally distributed population are equal.

The Student’s t-distribution is as follows:-

\[
t = \frac{\bar{x}_1 - \bar{x}_2}{s} \sqrt{\frac{n_1 n_2}{n_1 + n_2}}
\]

\[
\bar{x}_1 = \frac{\sum x_1}{n_1}, \quad \bar{x}_2 = \frac{\sum x_2}{n_2}
\]

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\[^{85}\text{Gupta, S P, op.cit. pp.921-925.}\]

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Where $x_1$ is the mean of pre merger ratios of acquiring bank $x_2$ is the mean of post merger ratios acquiring bank, $n_1$ and $n_2$ are the number of observations of 1st and 2nd series respectively. $S$ is the combined standard deviation.

$$S = \sqrt{\frac{\sum(x_1 - A_1)^2 + \sum(x_2 - A_2)^2 - n_1(x_1 - A_1)^2 - n_2(x_2 - A_2)^2}{n_1 + n_2 - 2}}$$

$(n_1 + n_2 - 2)$ Degree of freedom

Where $A_1$ and $A_2$ are the assumed means of 1st and 2nd series.\(^86\)

**1.9.4.4 Levene's Test for Equality of Variances (F- Test)**

The Researcher used Levene's Test for Equality of Variances (F- test) for further support of test of independent samples on pre and post Merger of financials data of Banks. In this test, significance of variances is tested in order to determine whether the two independent estimates of population variance significantly differ between themselves, or whether they establish the fact that both the samples come from the same universe and have a common variance. The variances or deviation from the mean of pre and post M&As ratios have been checked to know whether there is significant difference in mean deviation or not.\(^87\) F -test is calculated is as follows:

$$F = \frac{S_{12}}{S_{22}}$$

Where, $S_{12} = \frac{\sum(x_1 - \bar{x}_1)^2}{n_1-1}$ and $S_{22} = \frac{\sum(x_2 - \bar{x}_2)^2}{n_2-1}$

$S_{12}$ = Larger Estimate of Variance

$S_{22}$ = Smaller Estimate of Variance

$V_1$ = Degree of Freedom of Larger Variance

$V_2$ = Degree of Freedom of Smaller Variance

**1.9.4.5 Standard Risk Adjusted Event Study Methodology\(^88\)**

An Event study is a statistical method to assess the impact of an event like Merger and Amalgamations on the shareholder's wealth. For example, the announcement of a merger between two business entities can be analyzed to see whether investors believe the merger will create or destroy value. The basic idea is to find the abnormal return attributable to the event being studied by adjusting for the return that stems from the price fluctuation of the market as a whole. As the event methodology can be used to elicit the effects of any type of event on the direction and magnitude of stock

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\(^{87}\) Gupta, S P, op.cit., pp.1006-1010.

price changes, it is very versatile. Event studies are thus common to various research areas, such as accounting and finance, management, economics, marketing, information technology, law, and political science. On the other hand, event studies are used to investigate the stock market responses to corporate events, such as mergers and acquisitions, earnings announcements, debt or equity issues, corporate reorganizations, investment decisions and corporate social responsibility.

As stated, the Standard Risk Adjusted Event Study methodology will be used. The information will be retrieved from (http://www.bseindia.com/), such as the historical data for the Banks and the market (BSE 500). The announcement date of the merger will be used as Day zero.

**Steps in Conducting Event Study**

*Step 1:* The dates of announcement of Merger and Amalgamations of Indian banks were collected.

*Step 2:* The prices of the underlying stock (Banks) and market data of BSE 500 were collected for the event duration of -195 to +15 defined as the event period and day of announcement of merger has been taken as the event date zero.

*Step 3:* The returns on the Banks stock and corresponding return of BSE500 Indices were computed for each of these trading (-195 to +15) days.

*Step 4:* The Alpha & beta for the stock were estimated using the returns from a time period outside the event window (using -195 to -15) days

*Step 5:* The expected return of each stock, for each day during the event period (-15 to +15) was calculated using the formula: \( E(R) = \text{alpha} + \text{beta} \times (R_m) \), \( R_m \) is the market return.

*Step 6:* The excess returns was calculated using:
\[
ER = \text{the Actual Return} - \text{Expected Return} E(R).
\]

*Step 7:* Average Excess Returns (AER) was calculated from days -15 to +15 by simply averaging all of the excess returns: \( \text{AER} = \text{sum of the excess returns for day/number of firms (5).} \)

*Step 8:* Cumulative AER, or CAER, was found by adding the AERs from each day from (-15 to +15).

*Step 9:* Graphs of the AER and the CAER from days -15 to +15 were then created.

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In the present study an earnest attempt has been made to use the adequate statistical tools and techniques to find the difference between the financial performance in the pre merger and post merger period. In order to know the impact or rate of change of contribution of various variables in the net profit margin in the pre and post merger and amalgamations regression analysis has been used. However Standard Risk Adjusted event study has also been used to find the impact of Merger and Amalgamations on share holder’s wealth of Target and Bidder Banks.

1.9.4.6 Testing of Hypotheses

Testing of Hypothesis means formulation of an assumption about the population from which the sample is drawn. It is simply a Quantitative statement about the population or it is an assumption that is made about parameter values and then its validity is tested by statistical techniques which ultimately tell us whether the formulated Hypothesis is true or not. For the purpose of Hypothesis testing first of all hypotheses for the study is framed. The sample data is collected and this information is used to decide how likely it is to accept or to reject the set hypothesis. In the present study nine hypotheses have been formulated and brief descriptions of all have been above provided.

1.9.4.7 Null hypothesis and Alternative Hypothesis

Conventionally, two hypotheses are set in such a way that if one is accepted the other automatically gets rejected. These two hypotheses that are normally used the Null Hypothesis and Alternative Hypothesis.

(a) Null Hypothesis- In the context of statistical analysis, the Null Hypothesis asserts that there is no real difference between the sample and the population in the particular matter under consideration and the term ‘no difference’ mean that the difference, if any, is merely due to sampling fluctuations. It is important that such hypothesis is also known as ‘Null Hypothesis’ and usually denoted by the symbol $H_0$.

(b) Alternative Hypothesis- In the context of statistical analysis, the Alternative Hypothesis specifies those values that the researcher believes to hold true and hopes that the sample data would lead to acceptance of this hypothesis to be true. The Alternative Hypothesis assumes that there is a difference between

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the sample and the population in the particular matter under consideration. The Alternative Hypothesis represented by $H_a$.

1.9.4.8 Level of Significance\(^{92}\)

This is very important concept in the context of Hypothesis testing and it is always some percentage (usually 5%) which should be chosen with great care, thought and reason. It is basically the probability of rejecting of Null Hypothesis when it is true. The researcher has tested the level of significance for 5 percent level. Its means that the probability of error is being committed is 5 in 100.

1.9.4.9 Financial Ratios Analysis\(^ {93} \)

Ratio analysis is an important technique which is widely used for interpreting financial position of the companies. It is also used to analyze various aspects of Asset utilization and operating efficiency, solvency and level of profitability. The profitability parameters are Net Profit Margin (NPM), Earning Per Share (EPS), Price to Earnings Ratio (P/E) and Enterprise Value to Profit before Depreciation, Interest, Taxes and Amortizations (EV/PBDITA). The operating efficiency and Asset utilization capacity parameters are Total Asset Turnover Ratio (TATR) and Return on Assets (ROA), the solvency parameters are Interest Coverage Ratio (ICR), the Enterprise value (EV) parameter and the Business performance parameters are Market Capitalization (MC), Total Income (TI), Total Debt (TD), Net Sales (NS) and Turnover.

1.9.4.10 Net Profit Margin: This ratio measures the relationship between the Net profits (after tax) and sales of the firm and it’s obtained by dividing the net profits by net sales, depending upon the concept of net profit employed and the ratio can be computed are as follows:

$$\text{Net Profit Margin (NPM)} = \frac{\text{Net Profit After Tax and Interest}}{\text{Net sales}}$$

The Net Profit margin indicates the management’s ability to earn sufficient profits on sales not only covers all the revenue operating expenses of the business (including depreciation), the cost of borrowed funds, and the cost of merchandising servicing, but also have the sufficient margin to pay the reasonable compensations to share holder’s on their contribution to the firm. A high ratio ensures adequate return to the

\(^{92}\) Kothari, C R, op. cit., pp.186-187

shareholder’s as well as to enable a firm to withstand adverse economic conditions. A low margin has an opposite implication.\[94\]

1.9.4.11 Earnings per Share (EPS): The portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serve as an indicator of a company's profitability. Earnings per share is a small variation of return on equity capital and is calculated by dividing the net profit after taxes and preference dividend by the total number of equity shares\[95\]

\[
\text{Earnings Per Share (EPS)} = \frac{\text{Net Profit after tax} - \text{preference dividend}}{\text{No. of Equity shares}}
\]

1.9.4.12. Price to Earnings Ratio: It is an equity valuation measure defined as market price per share divided by annual earnings per share. A high P/E suggests that investors are expecting higher earnings growth in the future compared to companies with a lower P/E. It's usually more useful to compare the P/E ratios of one company to other companies in the same industry, to the market in general or against the company's own historical P/E. Generally a high P/E ratio means that investors are anticipating higher growth in the future.\[96\] It is calculated as:

\[
\text{Price to Earnings Ratio (P/E)} = \frac{\text{Market Value Per Share (MPS)}}{\text{Earning Per Share (EPS)}}
\]

Possible interpretation of P/E ratio:

- **N/A**: A company with no earnings has an undefined P/E ratio. By convention, companies with losses (negative earnings) are usually treated as having an undefined P/E ratio, even though a negative P/E ratio can be mathematically determined.
- **0–10**: Either the stock is undervalued or the company's earnings are thought to be in decline. Alternatively, current earnings may be substantially above historic trends or the company may have profited from selling assets.
- **10–17**: For many companies a P/E ratio in this range may be considered fair value.


\[95\] 'Earning per share', retrieved from http://www.investopedia.com/terms/e/eps.asp

17-25: Either the stock is overvalued or the company's earnings have increased since the last earnings figure was published. The stock may also be a growth stock with earnings expected to increase substantially in the future.

25+: A company whose shares have a very high P/E may have high expected future growth in earnings, or this year's earnings may be considered to be exceptionally low, or the stock may be the subject of a speculative bubble.97

4.13. Enterprise Value to PBDITA: This ratio is used to determine the value of a company. The enterprise multiple looks at a firm as a potential acquirer would, use it takes debt into account – an item which other multiples like the P/E ratio not include. EV/PBITDA may be more appropriate than P/E for comparing companies with different financial leverage (debt), because PBITDA is a pre-interest earnings figure, in contrast to EPS, which is post-interest.

P/BIDTA multiple is calculated as:98

\[
\text{Enterprise Value (EV)} = \text{Profit Before Depreciation, Interest, Tax & Amortisation (PBDITA)}
\]

A ratio indicates that a company might be undervalued. The enterprise multiple is used for several reasons:

- It’s useful for transnational comparisons because it ignores the distorting effects of individual countries’ taxation policies.
- It’s used to find attractive takeover candidates. Enterprise value is a better metric than market cap for takeovers. It takes into account the debt which the acquirer will have to assume. Therefore, a company with a low enterprise multiple can be viewed as a good takeover candidate.99

4.14. Total Asset Turnover Ratio (TATR): Total asset turnover is a financial ratio that measures the efficiency of a company's use of its assets in generating sales revenue. The Total Asset Turnover is similar to Fixed Asset Turnover, which both measures a company's effectiveness in generating sales revenue from investments.

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97 The P/E ratio is often used to determine the value of a company. However, it does not include the effect of debt on earnings. The Enterprise Value to PBITDA ratio takes debt into account, making it more appropriate for comparing companies with different levels of leverage.

98 The Enterprise Value to PBITDA ratio is calculated by dividing the enterprise value (EV) by the PBITDA.

99 The enterprise multiple is a useful tool for assessing the attractiveness of a potential acquisition. A low multiple suggests that the company may be a good takeover candidate.
back into the company. Total Asset Turnover evaluates the efficiency of managing all of the company's assets. The higher the Total Asset Turnover ratio, the more effective use of the company's investments Total Assets have become. Total Asset Turnover can be very useful if you watch what actually makes up the Total Assets of the company. A company with low Inventories and strict credit policies to keep Accounts Receivable low will help the Total Asset Turnover look even better. It also depends on all of the company's Total Assets.  

Total Asset Turnover Ratio (TATR) = \( \frac{\text{Net Sales}}{\text{Total Assets}} \)

1.9.4.15 Return on Assets (ROA): This ratio measures the profitability of firm in terms of relationship between net profits and assets. It is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. It is calculated by dividing a company's annual earnings by its total assets. Sometimes this is referred to as "return on investment". The ROA figure gives investors an idea of how effectively the company is converting the money it has to invest into net income. The higher the ROA number, the better, because the company is earning more money on less investment.

Return on Assets (ROA) = \( \frac{\text{Net Profit}}{\text{Total Assets}} \)

1.9.4.16. Interest Coverage Ratio: This ratio is used to test the debt serving capacity of firm. It is often used to determine how easily a company can pay interest on outstanding debt. The lower the ratio, the more the company is burdened by debt expense. The lower the ratio, the more the company is burdened by debt expense. When a company's interest coverage ratio is 1.5 or lower, its ability to meet interest expenses may be questionable. An interest coverage ratio below 1 indicates the company is not generating sufficient revenues to satisfy interest expenses. Ideally companies want the ratio to be over 1.5. The interest coverage ratio is calculated by dividing a company's earnings before interest and taxes (EBIT) of one period by the company's interest expenses of the same period.

Interest Coverage Ratio (ICR) = \frac{\text{Earning Before Interest And Taxes (EBIT)\textsuperscript{103}}} {\text{Interest Expense}}

1.9.4.17. Enterprise Value (EV): A measure of a company's value, often used as an alternative to straightforward market capitalization. Enterprise value is calculated as market cap plus debt, minority interest and preferred shares, minus total cash and cash equivalents.

Enterprise value =
Common equity at market value
+ preferred equity at market value
+ Minority interest at market value, if any
+ Debt at market value
+ Unfunded pension liabilities and other debt-deemed provisions
- Associate company at market value, if any
- Cash and cash-equivalents.

Think of enterprise value as the theoretical takeover price. In the event of a buyout, an acquirer would have to take on the company's debt, but would pocket its cash. EV differs significantly from simple market capitalization in several ways, and many consider it to be a more accurate representation of a firm's value. The value of a firm's debt, for example, would need to be paid by the buyer when taking over a company, thus EV provides a much more accurate takeover valuation because it includes debt in its value calculation.\textsuperscript{104}

1.9.4.18. Market capitalization (MCAP): Market capitalization represents the aggregate value of a company or stock. It is obtained by multiplying the number of shares outstanding by their current price per share.\textsuperscript{105} It is therefore an indicator of public opinion on the total future value or net worth of a business. This also means market capitalization will fluctuate over time and even within the space of a day.

\textsuperscript{103} 'Mehtab, Mariyam', 'A study of Mergers and Acquisitions of Indian steel Industry since liberalization', PhD Thesis Aligarh Muslim University, (2010).

\textsuperscript{104} 'Enterprise Value', Retrieved from http://www.investopedia.com/terms/e/enterprisevalue.asp accessed 20\textsuperscript{th}March,(2013).

\textsuperscript{105} 'Market Capitalization', Retrieved from http://www.Investorwords.com/2969/market_capitalization.html
Short-term changes, though, are more dependent upon share prices as the number of shares outstanding tends to be more stable with time.\textsuperscript{106}

\begin{equation}
\text{Market Capitalization} = \text{Current Stock Price} \times \text{Shares Outstanding}
\end{equation}

1.9.4.19. Sample size and period of the study

For the purpose of the study, the researcher has taken five cases of merger and amalgamations in the Indian banking sector. Twenty four cases of mergers/amalgamations in Indian banking sector since economic liberalization, out of them five cases have been selected randomly by the researcher for the study. The study takes up the major merger and amalgamations deals which have taken place in the private and public (state owned enterprise) sector. The major deals take place in the banking sector since 1991 to 2013 have been taken up in brief in chapter third. The deals to be analyzed have been taken randomly over the period 1991 to 2013. The financial profiles of the Banks involved have been scrutinized minutely before and after the merger and amalgamation in order to find the difference in the financial performance of both the merged and merging entity both before and after the amalgamations.

1.9.4.20. Brief Description of samples (Deals) undertaken

For the purpose of study five mergers and amalgamations involving in the Indian Banking sector are undertaken. A brief description of the Bank Mergers and Amalgamations deals in the Indian Banking sector is provided below. Table 1.9.4.20.1 shows the motives / swap ratio of banks involving in mergers or amalgamation in the Indian banking sector.

1-Public sector Punjab National Bank (PNB) and Kozhikode-based Nedungadi Bank Ltd (NBL) merger (February 1, 2003)

Punjab National Bank (PNB) is an Indian financial services company based in New Delhi, India. PNB is the third largest bank in India in terms of asset size. It was founded in 1895 as a private banking company by Lala Lajpat Rai and is currently the second largest state-owned commercial bank in India. Nedungadi Bank established in 1899 at Calicut in Kerala. It was first private sector commercial bank to be set up in South India. Public sector Punjab National Bank (PNB) took over Kozhikode-based Nedungadi Bank Ltd (NBL) on 1 Feb, 2003. All the 174 branches

\textsuperscript{106} Minds, I, 'Market Capitalization: Money', unabridged edition, iMinds Pty Limited Australia (2009). Retrieved from http://books.google.co.in/books?id=iXHuwPpXMJQC&dq=market+capitalisation&hl=en&sa=X&ei=n0lQeK7MYbNQe7bYHgBw&ved=0CC4Q6AEwAA
of the erstwhile private bank are now working as PNB branches. As on March 31 last year before the amalgamation, NBL had a deposit base of Rs 1,438 crore, advances of Rs 770 crore and Net profit of Rs. 1.27 crore. On the other hand PNB has a deposit base of more than Rs 66,200 crore, advances of over Rs 37,100 crore, Borrowing of Rs. 408.57 crore ,Net profit of Rs. 562.39 crore and total Assets of Rs. 72914.65 crore .With this merger, PNB had a total of around 4,000 branches across.\(^\text{107}\) For the third quarter ended 31 December 2002, NBL registered a 66.2% fall in net profit to Rs 2.02 crore, compared to Rs 5.98 crore in the corresponding period last year. Total income decreased by 19% to Rs 41.66 crore, from Rs 51.38 crore in DQ 2001\(^\text{108}\). This was the seventh merger of another bank with PNB in the 107 years of its existence. Nedungadi Bank leaped on good buying support after the Centre approved the private sector bank's merger with state-run Punjab National Bank Nedungadi Bank scrip spurted by 5.02% to Rs 11.50 on the BSE. A record volume of 65,325 shares was recorded on the counter.


Table: 1.9.4.20.1. Swap Ratio of Banks involving in Merger and Amalgamations.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Deal Type</th>
<th>Date of merger</th>
<th>Target Company</th>
<th>Motive</th>
<th>Swap Ratio</th>
<th>Swap Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Numerator</td>
<td>Denominator</td>
</tr>
<tr>
<td>Punjab National Bank</td>
<td>Merger</td>
<td>1 Feb,2003</td>
<td>Nedungadi Bank Ltd.</td>
<td>Restructuring of weak Bank-Force merger</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Oriental Bank Of Commerce</td>
<td>Merger</td>
<td>14 August,2004</td>
<td>Global Trust Bank Ltd.</td>
<td>Restructuring of weak Bank-Force merger</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Centurion Bank Ltd.</td>
<td>Merger</td>
<td>1 Oct,2005</td>
<td>Bank Of Punjab Ltd.</td>
<td>Voluntary merger</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>HDFC Bank Ltd.</td>
<td>Merger</td>
<td>23 May,2008</td>
<td>Centurion Bank Of Punjab Ltd.</td>
<td>Voluntary merger</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>ICICI Bank Ltd.</td>
<td>Merger</td>
<td>12 August,2010</td>
<td>The Bank of Rajasthan</td>
<td>Voluntary merger</td>
<td>25</td>
<td>118</td>
</tr>
</tbody>
</table>

Source: Compiled from Report on Trend and Progress, RBI, Various Issues
2-Global Trust Bank (GTB) and Oriental Bank of Commerce (OBC) merger (August 14, 2004)

Oriental Bank of Commerce made a beginning under its Founding Father, Late Rai Bahadur Lala Sohan Lal, and the first Chairman of the Bank. Within four years of coming into existence, it was established in 19 February 1943 and its headquarter at Gurgaon, Haryana, India. Global Trust Bank (Uganda) Limited, commonly referred to as Global Trust Bank (GTBU), is a commercial bank in Uganda which started operations in 2008. Its headquarters are located in a five-storey building on Kampala Road in the center of Uganda’s capital, Kampala. As on 31 March last year before the Merger of Oriental bank of commerce had Deposit of Rs. 35673.50, Borrowings 700.5, Total Assets of Rs. 41006.57 and Net profit of Rs. 686.07 crores. The draft scheme for amalgamation of GTB with OBC had been forwarded to both the banks. The Government of India has sanctioned the scheme for amalgamation of the Global Trust Bank Ltd. with the Oriental Bank of Commerce. The amalgamation had come into force on August 14, 2004. All the branches of Global Trust Bank have function as branches of Oriental Bank of Commerce with effect from that date. Customers, including depositors of the Global Trust Bank had able to operate their accounts as customers of Oriental Bank of Commerce with affect from August 14, 2004. Oriental Bank of Commerce was making necessary arrangements to ensure that service, as usual and was provided to the customers of the Global Trust Bank Ltd.\(^{109}\)

3- Centurion Bank (CB) and Bank of Punjab (BOP) merger (October 1, 2005)

In 1994 Centurion Bank was incorporated on 30 June 1994 and received its certificate of Commencement of Business on 20 July. The Bank of Punjab was founded by Tajammal Hussain and it functions as a scheduled commercial bank, with a network of 324 branches in major business centers throughout the country. It was the seventh largest commercial bank of the Country. It was established in 1989 and its Headquarter was at Lahore, Pakistan. The amalgamation plan between Bank of Punjab and Centurion Bank with a share-swap ratio of 4:9 and the merged entity had henceforth been known as

'Centurion Bank of Punjab. The terms of the share swap deal had, four equity shares of Bank of Punjab fetch an investor nine shares of Centurion Bank. The combined new bank had an asset size of Rs. 9,395 crore with total deposits worth Rs. 7,837 crore and a capital adequacy ratio of 16.1 per cent, according to the figures of the two banks with a net worth of Rs. 696 crore, Centurion Bank of Punjab became in a position to serve 2.2 million customers. The bank has wide network of 235 branches and extension counters and 382 ATMs. As for its management, the Chairman of Centurion Bank, Rana Talwar, and its Managing Director, Shailendra Bhandari, hold their positions in Centurion Bank of Punjab while the Chairman of Bank of Punjab, Tejbir Singh, will have its full-time Executive Director.110

4- HDFC Bank and Centurion Bank of Punjab merger (May 23, 2008)
The Centurion Bank of Punjab (formerly Centurion Bank) was an Indian private sector bank that provided retail and corporate banking services. It operated on a strong nationwide franchise of 403 branches and had over 5,000 employees. It was founded Panaji, 1994 (as Centurion bank). Its Headquarter was at Mumbai. HDFC Bank Limited is an Indian financial services company based in Mumbai, Maharashtra. It was incorporated in 1994. HDFC Bank is the fifth largest bank in India by assets. It is also the largest bank in India by market capitalization as of 3 February 2014. As on Jan 2 2014, the market cap value of HDFC was around USD 26.88B, as compared to Credit Suisse Group with USD 47.63B. The bank was promoted by the Housing Development Finance Corporation, a premier housing finance company (set up in 1977) of India. Before the merger the HDFC Bank Deposit of Rs 68297.94 Borrowings of Rs. 2815.39, Advances 46944.78 and Net profit 1382.54 crores. On the other hand, CBOP ltd had Deposits of Rs. 14863.72, Borrowings of Rs. 930.89, Total Assets of Rs.18482.78 and Net profit of Rs.121.38 crores. HDFC Bank Board on 25th February 2008 approved the acquisition of Centurion Bank of Punjab (CBOP) for Rs 9,510 crore in one of the largest merger in the financial sector in India. The swap ratio of the deal was fixed at 1:29. CBOP shareholders got one share of HDFC Bank for every 29 shares held by them. That was the


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HDFC Bank’s second acquisition after Times Bank. HDFC Bank had jumped to the 7th position among commercial banks from 10th after the merger. However, the merged entity would become second largest private sector bank. The merger strengthened HDFC Bank’s distribution network in the northern and the southern regions. CBOP had closed to 170 branches in the north and around 140 branches in the south. CBOP had a concentrated presence in the in the Indian states of Punjab and Kerala. The combined entity has become a network of 1148 branches. HDFC had also acquired a strong SME (small and medium enterprises) portfolio from CBOP. The merged entities are known as HDFC Bank.111

5. ICICI Bank and Bank of Rajasthan (BOR) merger (August 13, 2010)

ICICI Bank is an Indian multinational bank and financial services company headquartered in Mumbai. Based on 2014 information, it is the second largest bank in India by assets and by market capitalization. The Bank has a network of 3,539 branches and 11,162 ATM’s in India, and has a presence in 19 countries. ICICI Bank is one of the Big Four banks of India, along with State Bank of India, Punjab National Bank and Bank of Baroda. The Bank of Rajasthan is a listed old Indian private sector bank with its corporate office at Mumbai in Maharashtra and registered office at Udaipur in Rajasthan. At March 31, 2009, Bank of Rajasthan had 463 branches and 111 ATMs, total assets of Rs. 172.24 billion, deposits of Rs.151.87 billion and advances of Rs. 77.81 billion. It made a net profit of Rs. 1.18 billion in the year ended March 31, 2009 and a net loss of Rs. 0.10 billion in the nine months ended December 31, 2009.

On the other hand at 31st March 2010, ICICI bank total Income of Rs.331899.3 millions, Total Assets of Rs.3638668.3 millions Net sales of Rs.257069.3 and Net profit of Rs.40249.8 millions. ICICI Bank had entered into an agreement with certain shareholders of Bank of Rajasthan agreed to effect the amalgamation of Bank of Rajasthan with ICICI Bank with a share exchange ratio of 25 shares of ICICI Bank for 118 shares of Bank of Rajasthan which works out to one ICICI Bank share for every 4.72 Bank of Rajasthan shares. This was based on an internal analysis of the strategic value of the proposed

amalgamation, average market capitalization per branch of old private sector banks and relevant precedent transactions. The proposed amalgamation would substantially enhance ICICI Bank’s branch network, already the largest among Indian private sector banks, and especially strengthen its presence in northern and western India. It would combine Bank of Rajasthan’s branch franchise with ICICI Bank’s strong capital base. The valuation implied by the share exchange ratio as mentioned above is in line with the market capitalization per branch of old private sector banks in India. It also compared favorably with relevant precedent transactions. The amalgamation governed by the provisions of Section 44A of the Banking Regulation Act, 1949. The amalgamation also needed the approval of the respective Boards of ICICI Bank and Bank of Rajasthan and to become effective, requires the consent of a majority in number representing two-thirds in value of the shareholders of ICICI Bank and Bank of Rajasthan.\(^{112}\) The merger would substantially enhance the combined branch network to over 2500 across the country and after the completion of the integration of erstwhile Bank of Rajasthan branches with ICICI Bank branches and gives the best services at all times.\(^{113}\)

1.10. Limitations of the Research

It is important to critically evaluate the results of the whole study. The present study has certain limitations that need to be taken into account while considering significance of the study and its contribution. However, some of these limitations can be seen as fruitful avenues for future research under the same theme. This study has focused on fact which is very extensive and major one, i.e. A Strategic Merger and Amalgamations in India since Economic Liberalization: A Case Study of Banking Sector. Clearly, this represents a challenging task for research regardless of the more specific interests that the study may have. In this study, this extensive and complex event has been studied from a rather narrow empirical perspective. The selection of the every case study design naturally brings forth many limitations as far as the generalization of the results of the study is concerned. Another limitation of this study is the perspective adopted, instead of trying to

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understand the effect of merger and amalgamation of merging banks separately, the study has taken both banks before and after the merger in general; this study has been first and foremost limited to the merging of Human resource of both bank perspectives. Although the study has also taken into account other views along the financial analysis, the main perspective from which conclusions are drawn is that of the buyer. This can thus also be seen as a limiting factor in this study.

The major limitation of the study relates to the availability of published data relating to the merger. However the financials of the Banks which are involved in mergers are not readily available and also non-availability of data for certain parameters for the period under study. There is no single data base which keeps the financial profile of Indian banks since then. The problems faced by the Researcher in the computation of the data are mainly due to the availability of data in the published sources. The Annual reports of the bank have been collected from the various sources but in certain cases due to the absence of some figures few ratios could not be calculated. However an earnest attempt is made here to collect authentic data from various sources to ensure that the reliability of the results is not affected in any manner. Moreover the tests are calculated at 5 percent level of significance which means that there is a probability that in a sample of 100 the result might be wrong 5 times.

1.11. Structure of the study

The first chapter provides a glimpse of Mergers and Amalgamations along with the brief introduction and sheds the light on the concepts related to the same. It discusses the statement of the problem and issues and goes on to highlight the utility and importance of the study. It includes reviewing a wide and extensive literature survey relating to the mergers and amalgamations and provides a critical review of the same. The chapter deals with the research design and methodology and entails a description of the scope of the study. A brief discussion on the sample size and period of study is followed by a discussion of the objectives and hypotheses formulated for the study. An insight of various statistical tools and accounting methods used for evaluation of data has been provided. The limitations of the study involving the same are also discussed.
The second chapter details out the conceptual approach of merger and amalgamation and describes the legal distinction between the various terminology related to merger and amalgamation. It gives the introduction of the global and domestic scenario relating to merger and amalgamation. It includes the cross border and Indian scenario of merger and amalgamations. Legal perspectives relating to mergers and amalgamations in India has also been discussed and is followed by a detailed discussion of the relevant provisions of various acts applicable to the same in India.

The third chapter deals with the Merger and Amalgamations in the banking industry and traces its growth and development and provides an overview of the same, it is followed by a discussion of major mergers and amalgamations in the banking sector in India.

The fourth chapter is an in-depth analysis of five major Merger and Amalgamations in the Indian banking Industry involving i.e. Nedungadi Bank with Punjab National Bank, Global Trust Bank with Oriental Bank of Commerce, Bank of Punjab with Centurion Bank, Centurion Bank of Punjab with HDFC Bank and Bank of Rajasthan with ICICI Bank. For the purpose of analyzing the profitability of the Target and Bidder Banks and to find the impact of Merger and Amalgamations on shareholder’s wealth various accounting and financial measures are undertaken. Financial ratios have been calculated to ascertain the profitability, operating efficiency and asset utilization capacity, solvency, enterprise value, business performance and market capitalization of the merged Bank in the financial years comprising the time frame of the present study.

The last and final chapter provides the summary, findings and suggestions of the work. In the end the Researcher suggests directions for future research.
1.12. Conclusion

The critical review of literature gives a wide understanding related to the previous research work on the topic of Mergers and Amalgamations. The research work carried out is designed on the basis of previous work, present data and future prospect along with innovative methods and ideas. The research gap is traced and the work that the researcher intends to do in this thesis is proposed. In this chapter, the scope and objectives of the study have been carved out. The research design and methodology has been discussed at length along with the description of various hypotheses that are tested. The data collection and methods of tabulation are discussed and also various accounting measures and statistical tools and techniques have been discussed. A mention of the limitations faced in the collection of data has also been made. The next chapter deals with the global and domestic scenario along with were border mergers and legal perspective to the same.