

## A Synthesis of the Literature on Impact of Mergers and Acquisitions on Efficiency of Indian Banks

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### Abstract

A lot of mergers and acquisitions activities are taking place at global level as well as at Indian level. So, it becomes imperative to study what are the efficiency gains which boost up these corporate mergers and acquisitions. So, in this study, we have reviewed research papers with the aim to know whether corporate merger and acquisitions in Indian banking sector are motivated by efficiency gains or not. We covered articles from different countries like US, Vietnam, Greek, Malaysian, Europe etc.; and then Indian scenario has also been explored. Mostly studies reported that efficiency has been improved during post-mergers and acquisitions. On the other side, there were very few studies which revealed that the impact of mergers and acquisitions has been negative or there was no improvement in efficiency. So, it can be concluded that banks should go for merger and acquisition after due diligence as M & A deals can be used as an option to strengthen their competitiveness.

### Key Words

Corporate Mergers and Acquisitions, Literature Review, Efficiency Gains, Indian Banking Sector.

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### INTRODUCTION

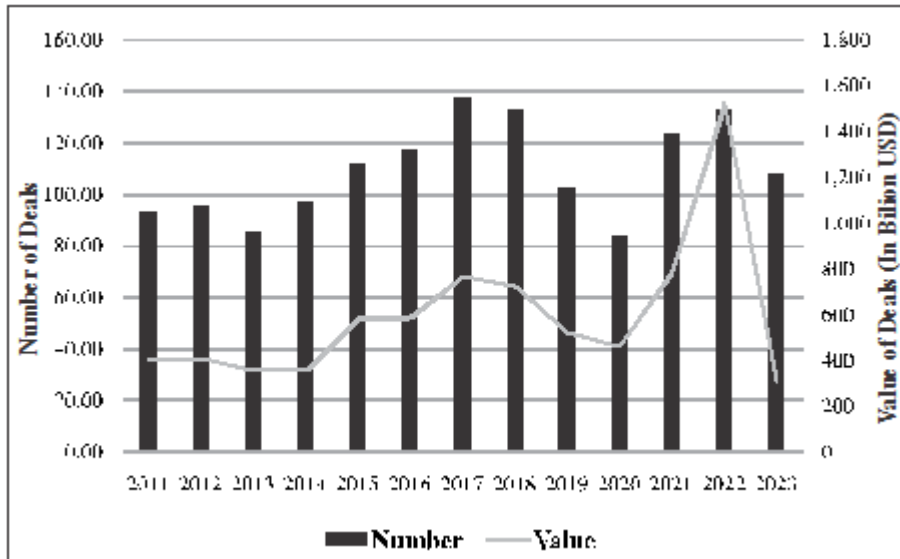
The main motive of every corporation is to enhance the profitability of their enterprise and thereby, raise the prosperity of the owners of the company. There are a variety of growth strategies that an organization can use to achieve these goals. Among several strategies of growth, merger and acquisition has

been considered as one of the most important strategies.

The banking industry plays a crucial part in the economic growth of every nation. An effective banking industry enhances a country's financial and economic system by effectively managing funds and investments. Furthermore, volatility in the banking industry has a detrimental impact on economic development. The relative performance of the banking sector has always been a key concern and it is currently of the highest relevance for both scholars and policymakers.

Globalization, deregulation and technological advancements have led to changes in legislative frameworks in most economies, which have increased competition and facilitated a boom in merger and acquisition activity. The number of merger and acquisition activities has increased significantly in recent years at global level. According to Thomson Financial, Institute for Mergers, Acquisitions and Alliances (IMAA) database, there are 39603 merger and acquisition transactions happened worldwide in the year 2023, with a total transaction value of \$2495 billion. This worldwide trend has also been adopted by Indian firms. The data related to the number and value of deals of mergers and acquisitions from 2011 to 2023 in India has been shown in Figure 1.

**Figure 1**  
**Trends of Mergers and Acquisitions in India**



Source : Thomson Financial, Institute for Mergers, Acquisitions and Alliances (IMAA).

So, it can be seen that a lot of M & A activities are taking place nowadays at global level as well as on Indian level. Indian banking sector is also not an exception to this trend. Now a question arise – what are the efficiency gains which boost up these corporate mergers and acquisitions. So, in this study, we have reviewed research papers with the aim to know whether corporate merger and acquisitions in Indian banking sector are motivated by efficiency gains or not.

This research paper has been structured as follows – following this introduction, section two describes the objectives and research methodology adopted in the study, section three explains the findings of the articles reviewed, section four documents conclusion and discussion.

### **OBJECTIVES OF THE STUDY**

The main aim of this study is to synthesize and analyze M & A literature in order to know what is the impact of mergers and acquisitions on the efficiency of Indian banks. So, in this study, we have reviewed research papers with the aim to know whether corporate merger and acquisitions in Indian banking sector are motivated by efficiency gains or not. Another objective is to provide some suggestions that can be considered by managers while taking decisions regarding M & A

### **METHODOLOGY**

This study is descriptive in nature based on secondary data. The research articles have been collected using Google Scholar and Science Direct databases mainly. Other websites, journals and published sources have also been used. This study covers articles from different countries like US, Vietnam, Greek, Malaysian, Europe etc.

### **FINDINGS**

The main aim of this study is to synthesize and analyze M & A literature in order to know what is the impact of mergers and acquisitions on the efficiency of Indian banks. There is vast and diverse literature available on merger and acquisitions but mainly in developed nations. So, first of all it becomes imperative to study research articles from various countries and for different time period in order to know the thorough impact. A recent study by Nyugen and Nyugen (2022) aim to analyse the effects of merger and acquisitions on the efficiency level of commercial banks in Vietnam. The sample

of the study was consisted of 30 banks during 2011-2019. The data envelopment analysis and robust truncated regression methods were applied to analyse the data. Based on the results, it has been concluded that there is negative impact of merger and acquisition on banking efficiency. Li (2016) found that acquired and the acquiring bank will gain efficiency due to synergy. The possible reason behind this is that costs may be recovered through synergy and cost reducing techniques. Du and Sim (2016) investigated the efficiency effects of mergers and acquisitions on banks across six emerging economies namely - China, India, Indonesia, Malaysia, Russia and Thailand. The sample was comprised of 960 observations from 120 banks that have announced mergers between 2002 and 2009. To construct an efficiency index, data envelopment analysis has been conducted. The findings indicated that bank mergers and acquisitions increased efficiency for the combined firm. Al-Sharkas *et al.* (2008) observed the impact of bank mergers on cost and profit efficiency in the US banking industry. It has been revealed that the bank mergers improved cost and profit efficiency. Further, the merged banks have lower cost than non-merged banks because of use of most efficient technology and cost minimising input mix. Sufian (2009) analyzed profit efficiency of the Malaysian banking sector due to M & A deals during the period 1997–2003. The empirical results revealed that the profit efficiency of the acquiring banks increased from the merger in six out of the seven merger cases analysed. Another study by Rezitis (2008) evaluated the impact of acquisition on the efficiency and total factor productivity of Greek banks. the time period of the study has been selected from 1993-2004. A total of 10 banks have been included for analysis out of which five banks were engaged in merger activities and five were taken as control group or non-merging banks. The analysis showed that mergers and acquisitions have negative impact on Greek banks' growth in total factor productivity and technical efficiency. Said *et al.* (2008) measured the efficiency effects during both before and after the merger in the context of Malaysian banks. The data envelopment analysis and CAMEL-type variable approach have been applied to check the robustness of the results. The study analysed the mergers that happened in reaction to the financial crisis of 1997. It has been revealed that the productive efficiency has not been improved following the merger. Market response to bank merger announcements in Malaysia between 1999 and 2000 was studied by Isa and Yap (2004). Overall, the market responded favorably to the news of the banks merger, according to their results. Vennet (2002) investigated M & A in European banking sector

and found that there is improvement in profit efficiency of banks during post-merger period. The profit efficiency enhancement may be caused by changes in the pricing behaviour of the acquired banks, positive revenue-generating spill-overs from the new parent bank, or increased market power. Huizinga *et al.* (2001) observed the efficiency effects of banks due to merger and acquisition in Europe during 1994-1998. The sample selected for the study was comprised of 52 banks mergers. It has been revealed that the relative level of profit efficiency increased only slightly, while the merger has a beneficial impact on the cost efficiency of the merging banks. Rhoades (1998) examines the impact of bank mergers on efficiency using nine case studies from America. All case studies followed the same analytical approach, including financial ratios, econometric cost metrics and the impact of merger announcements on the stocks of both acquiring and acquired corporations. All nine mergers produced considerable cost savings that were consistent with pre-merger estimates. It is evident that four of the nine mergers increased cost efficiency, whereas five did not.

## **INDIAN SCENARIO**

In order to know what is the impact of mergers and acquisitions on the efficiency of Indian banks, we have studied Indian literature. Although, the literature on the impact of M & As on banks' efficiency in emerging countries like India is limited but there are some studies which deserve attention. A recent study by Gulati and Garg (2024) evaluated 108 Indian firms to know the impact of merger on financial performance of firms. An improvement in financial performance of firms has been observed in long-term post-merger. Another study by Koley (2024) analyzed that the impact of M & A on the performance of commercial banks in India with special reference to Punjab National Bank. The result showed that the mergers and acquisitions programme have a positive and significant effect on the performance of the Punjab National Bank.

Rakshit (2023) evaluated the impact of bank mergers on cost, revenue and profit efficiency of banks. The sample size was consisted of 70 Indian commercial banks. The time period selected for the study was 1997 to 2017. It has been demonstrated that India's bank profitability is greatly enhanced by increased efficiency levels of revenue and cost. There is another study conducted by Herwadkar *et al.* (2022) and analyzed whether efficiency of banks has been improved or not after merger in Indian banking industry. The study

covered all registered M & A that have occurred during 1997-2020. The study provided evidence that there has been enhancement in the efficiency of acquirers during post-merger period. Satapathy and Patjoshi (2022) conducted a study with the aim to look into the effects of bank efficiency on 10 different banks that have engaged in M & A activities from 2010 to 2013. The findings demonstrate that public sector banks' efficiency dropped sharply after merger, whereas private sector banks' efficiency increased significantly. Nishat and Khan (2020) found that the mere consolidation of banks may neither provide significant improvements in the efficiencies of public sector banks in India, nor be adequate to surmount the obstacles and dangers that they confront. Nishat (2020) discovered that while the scale efficiency of Indian PSBs remained relatively unchanged after the merger, their managerial efficiency experienced a notable improvement as a result of enhanced planning and managing strategies. Ray (2018) measured the impact of merger between Bank of Rajasthan and ICICI Bank on their efficiency in terms of various financial indicators. Data for four years before merger and data for four years after the merger have been collected and analyzed. So, data total of nine years from 2007-08 to 2014-15 has been analyzed. It has been concluded that the average financial ratios of the banks showed a noteworthy and substantial improvement in terms of operational effectiveness, profitability and stakeholder wealth in the Indian banking industry. Singhal (2017) investigated the impact of merger on four banks that have announced their mergers during 2007 to 2017. The study concluded that mergers and acquisitions improved neither financial performance nor financial efficiency. Jayaraman *et al.* (2014) measured the efficiency gains of merged banks in Indian banking sector. The analysis has been conducted on six Indian banks. The time period of the study ranged from 2006-2008. The data envelopment analysis has been applied to analyze the data. It has been noted that the technical efficiency of banks declined right after the merger and began to recover in the third year following the merger. The overall performance of banks was affected due to high-interest rate regime and tight liquidity and the profitability of the banks was also under pressure during the post crisis period. Kumar (2013) analyzed the impact of mergers on banks in terms of different financial and efficiency parameters. An improvement has been reported in all the parameters of the banks during post-merger period. Another study conducted by Kumar (2013) analyzed the pre-merger and post-merger performance of Centurian Bank of Punjab and HDFC Bank by comparing various efficiency parameters. It has been observed that all the parameters except one

**Table 1**  
**A Summary of Studies Associated with the Impact of M & A on Banks' Efficiency**  
**Foreign Studies**

S. No.	Author (Year)	Major Findings
1.	Nyugen and Nyugen (2022)	The study revealed that there is negative impact of merger and acquisition on banking efficiency in Vietnam
2.	Li (2016)	The study found that acquired and the acquiring bank will gain efficiency due to synergy. The possible reason behind this is that costs may be recovered through synergy and cost reducing techniques.
3.	Du and Sim (2016)	The findings indicated that bank mergers and acquisitions increased efficiency for the combined firm.
4.	Al-Sharkas et al. (2008)	The study revealed that the bank mergers improved cost and profit efficiency in US banking industry. Further, the merged banks have lower cost than non-merged banks because of use of most efficient technology and cost minimising input mix.
5.	Sufian (2009)	It analyzed profit efficiency of the Malaysian banking sector due to M & A deals during the period 1997–2003. The empirical results revealed that the profit efficiency of the acquiring banks increased from the merger in six out of the seven merger cases analysed.
6.	Rezitis (2008)	The analysis showed that mergers and acquisitions have negative impact on Greek banks' growth in total factor productivity and technical efficiency of Greek banks.
7.	Said et al. (2008)	In the context of Malaysian banks, it has been revealed that the productive efficiency has not been improved following the merger.
8.	Isa and Yap (2004)	Overall, the market responded favorably to the news of the banks merger in Malaysia, according to their results.
9.	Vennet (2002)	The study investigated M & A in European banking sector and found that there is improvement in profit efficiency of banks during post-merger period. The profit efficiency enhancement may be caused by changes in the pricing behaviour of the acquired banks, positive revenue-generating spill-overs from the new parent bank, or increased market power.
10.	Huizinga et al. (2001)	It has been revealed that the relative level of profit efficiency increased only slightly, while the merger has a beneficial impact on the cost efficiency of the merging banks in Europe.
11.	Rhoades (1998)	The study concluded that four of the nine mergers increased cost efficiency, whereas five did not in America.
<b>Indian Studies -</b>		
S. No.	Author (Year)	Major Findings
12.	Gulati and Garg (2024)	The study reported an improvement in financial performance of firms in long-term post-merger.

13.	Koley (2024)	The study analyzed the impact of M & A on the performance of commercial banks in India with special reference to Punjab National Bank. The result showed that the mergers and acquisitions programme have a positive and significant effect on the performance of the Punjab National Bank.
14.	Rakshit (2023)	It has been demonstrated that India's bank profitability is greatly enhanced by increased efficiency levels of revenue and cost.
15.	Herwadkar et al. (2022)	The study provided evidence that there has been enhancement in the efficiency of acquirers during post-merger period.
16.	Satapathy and Patjoshi (2022)	The findings demonstrate that public sector banks' efficiency dropped sharply after merger, whereas private sector banks' efficiency increased significantly.
17.	Nishat and Khan (2020)	It has been found that the mere consolidation of banks may neither provide significant improvements in the efficiencies of public sector banks in India, nor be adequate to surmount the obstacles and dangers that they confront.
18.	Nishat (2020)	The study discovered that while the scale efficiency of Indian PSBs remained relatively unchanged after the merger, their managerial efficiency experienced a notable improvement as a result of enhanced planning and managing strategies.
19.	Ray (2018)	It has been concluded that the average financial ratios of the banks showed a noteworthy and substantial improvement in terms of operational effectiveness, profitability and stakeholder wealth in the Indian banking industry.
20.	Singhal (2017)	The study concluded that mergers and acquisitions improved neither financial performance nor financial efficiency.
21.	Jayaraman et al. (2014)	It has been noted that the technical efficiency of banks declined right after the merger.
22.	Kumar (2013)	An improvement has been reported in all the parameters of the banks during post-merger period.
23.	Kaur and Kaur (2010)	The study observed that mergers resulted into higher level of cost efficiencies for the merging banks.
24.	Singh (2009)	The study found that bank mergers that occurred after 2000 had no negative effects on the acquiring banks' profitability or cost-efficiency and any temporary losses were swiftly made up.
25.	Gourlay et al. (2006)	It has been reported that there is a significant improvement in the efficiencies for the merging banks.



have enhanced during post-merger period. Kaur and Kaur (2010) investigated the effects of mergers and acquisitions on the cost efficiency of Indian banks. This study covered a time period of 1991-2008. It has been found that mergers resulted into higher level of cost efficiencies for the merging banks. Singh (2009) found that bank mergers that occurred after 2000 had no negative effects on the acquiring banks' profitability or cost-efficiency and any temporary losses were swiftly made up. Gourlay *et al.* (2006) examined the efficiency gains of mergers among Indian banks. the time period of the study ranged from 1991-2005. It has been reported that there is a significant improvement in the efficiencies for the merging banks.

## CONCLUSIONS AND DISCUSSION

The main aim of this study is to synthesize and analyze M & A literature in order to know what is the impact of mergers and acquisitions on the efficiency of Indian banks. The literature review section covers articles from different countries like US, Vietnam, Greek, Malaysian, Europe etc. and then Indian scenario has also been explored. Mostly studies reported that efficiency has been improved during post-mergers and acquisitions. On the other side, there were very few studies which revealed that the impact of mergers and acquisitions has been negative or there was no improvement in efficiency. So, it can be concluded that banks should go for merger and acquisition after due diligence as M & A deals can be used as an option to strengthen their competitiveness. Further, it was also observed that merger between weak and strong banks did not give any efficiency benefits to the merged banks. So, such kind of mergers should not be promoted in Indian banking sector. It has also been observed that among all the techniques, the data envelopment analysis is widely used for the analysis in the literature. The study suggests that the Indian managers could adopt M & A as an effective strategy for corporate growth. This result could be useful for policymakers when thinking about promoting M & A as a way to improve the banking system.

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