A Study of Cultural, Economic Performance and Research and Development Environment in PSBS after Mergers and Acquisition

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Abstract

The study focuses on delving into the impact of mergers & acquisitions on the public Sector Bank with the focus on economic performance, cultural performance and research development environment. This aims to assess the alignment between the perspective of respondent as well as the existing literature on the premises. While analysing these premises the findings showed that there is a strong consensus among respondents regarding merger and acquisition as the developmental strategy for PSBS. It means the correlation between PSBI as well as RDE2 supports the assertion of literature on the significant impact of these on the need for growth and intensification in the R&D environment. M&A has a considerable influence on the cultural & economic Performance of PSBS. Further, it shapes the R&D landscape. The IV (RDE1, EP1, and CP2) demonstrated a strong relationship with DV which is PSB1, that meets 94.6% of requirements. All of this aligns well with the respondent's view and literature.

Keywords: Economic Performance, Cultural, Mergers and Acquisition, P, Research & Development Environment

Introduction

The action of mergers and acquisition (M&A) is regarded as some of the most sought-after forms of strategic methods that are implemented by companies. This strategic development is gaining popularity globally among several institutions for their features of enabling better engagements and expanding market reach (González-Torres *et al.* 2020). Mergers and acquisitions being implemented as a restriction and developmental strategy by institutions and corporations for its cultural and economic activities as well as influencing the research and development (R&D) environment among businesses and academics.
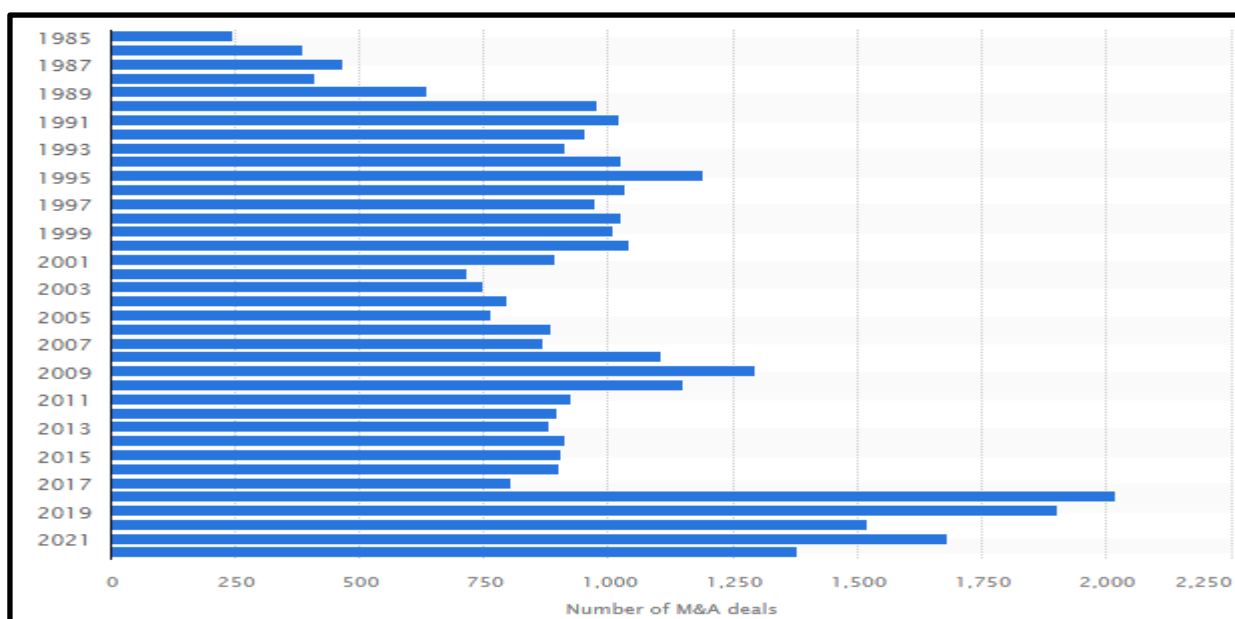

Figure 1: Banking sector Mergers and Acquisition deals globally
(Source: Statista Research Department, 2023)

Banking sectors have been facing an increase of mergers and acquisition deals globally and the trends of these activities have been increasing quite recently. The rate of mergers and acquisition deals within the global banking sector has increased from around *803 deals in 2017 to over 1,683 deals in 2021* (Statista Research Department, 2023). These trends of increasing M&A deals provide an illustration of the increasing recognition and integration of this method among the banking sector is gaining momentum. There is a similar trend of development in India as well.
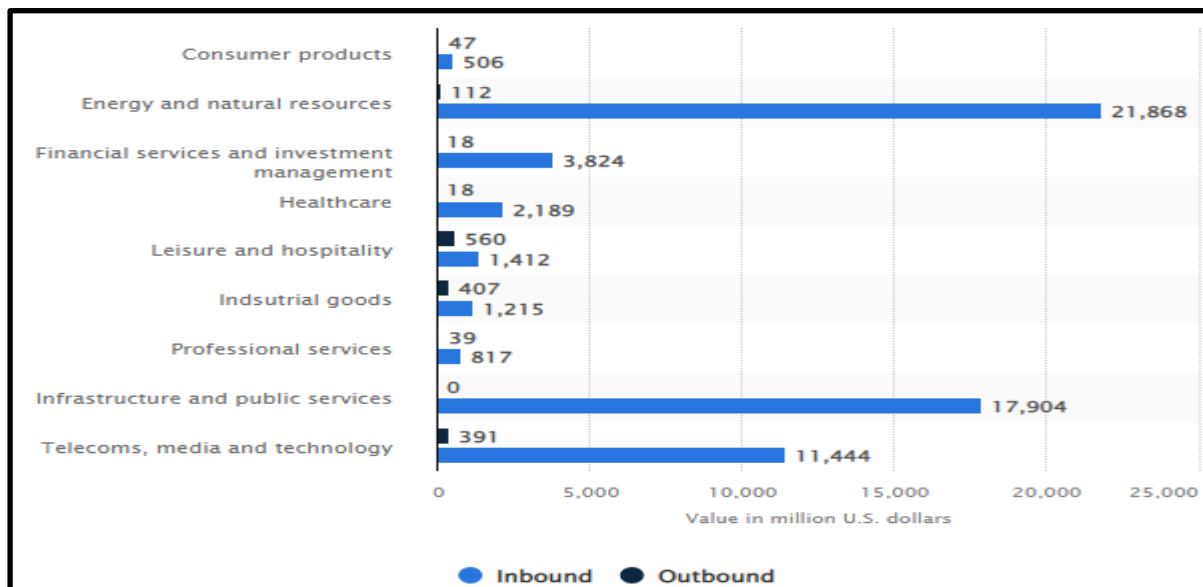

Figure 2: Inbound and Outbound Mergers and acquisition transactions industry wise, India, 2019
(Source: Statista Research Department, 2023)

The development of mergers and acquisitions in India, both outbound and inbound in nature has become popular within several industries. Among multiple industries, the financial services and investment management industry in India observed inbound mergers and acquisitions worth over *$3,824 million USD in 2019* (Statista Research Department, 2023). There is an increase of mergers and acquisitions among Indian banking sectors as a reorganising strategy for gaining competence in the recent globalisation (Aggarwal and Garg, 2022). This brings forth the idea of mergers and acquisition being implemented as a strategic method for improving the activities of the institutions including public sector banks, a subject that will be addressed to and studied further on.

Aim and Objective
The present research study intends to look into the phenomenon of mergers and acquisition of public sector banks (PSBs) and the consequent effects on their cultural and economic performance. The study also aims to comprehend the research and development (R&D) environment in the PSBs following mergers and acquisition activities. The study looks into the following objectives.
- To understand the role of mergers and acquisition in the economic performance of PSBs.
- To recognise the effects of cultural performance after mergers and acquisition of PSBs.
- To study the scope of the research and development environment regarding PSBs after mergers and acquisition.

Literature Review
Impact of mergers and acquisition on cultural performance of PSBs
Mergers and acquisition processes are strategic methods for restructuring and sharing the options and market opportunities of the involved enterprises and are becoming effectively popular. This development is affecting the operational activities of banks, particularly in aspects such as the changes and perceptual alterations impact cultural performance of the banks (Roopesh and Sandhya, 2022). Mergers and acquisitions are strategic processes that are involved with the development of the infrastructure of the institutions that undergo it, in this case public sector banks. These processes impact the existing structure and procedures of the organisation and its workforce causing a high impact

on the cultural aspect of the performance of the banks (Singh *et al.* 2022). Banks following the processes of mergers and acquisition undergo the structural changes of activities and inclusion of incorporated regulation and cultural changes in decision making. The transformational nature of mergers and acquisition are effectively a significant process that has an impact on the cultural aspect of behaviour and operations of PSBs.

Economic performance of PSBs influenced by mergers and acquisition

Mergers and acquisition procedures are viewed as tactical development and public sector banks for the purpose of improving the competence in the market. Mergers and acquisitions provide with the opportunity of enhancing the financial and consequently the economic development (Gandhi *et al.* 2020). These developments can be recognized through the diversity that the mergers and acquisition facilitate the institutions that go through them. There are chances of mergers and acquisition being potentially benefactor for public sector banks in India for their opportune profitability (Gandhi *et al.* 2020). Mergers and acquisition are gaining their popularity as a strategic tool for the prospect of encouraging the synergic development generating higher value for the banks. Mergers and acquisitions are recognised and eventually tactfully implemented by banks for its potential of improving the market reach, competitive advantage and increasing margins and dominance (Karthikeyan and Hema, 2020). These economic advancements are the attractive features of the implication of mergers and acquisition for the economic performance and are becoming a popular restructuring strategy for public sector banks.

Effect on research and development environment of PSBs after mergers and acquisition

The activities of the research and development (R&D) environment of the organisations, including the public sector banks are designed to provide for the development of the organisations and their progress. The R&D environment of public banks is strongly impacted with the action of mergers and acquisition. Mergers and acquisition and the research and development of firms are linked with the contribution for improving the operational activities and atmosphere of the merging corporations (Zheng *et al.* 2021). There has been an increase of M&A processes in the Indian market (Das, 2021). The performance of R&D development and its effectiveness is related to the success of M&A implementation. Increase of R&D expenditure is also one of the contributing attributes of mergers and acquisition (Gupta *et al.* 2023). Progressions such as contribution and improvement of the R & D environment and effectively the harmonised operation also are impactful factors of M&A.

Methods

The study implemented multiple methods and instruments for the proceeding of this research. The ***Positivism research philosophy*** is regarded for the present research for its implication of focusing on factual and objective knowledge for research development. The ***deductive research approach*** is an effective means for research approach as it requires being implemented for building a research strategy testing the formed hypotheses against the observations made (Al-Ababneh, 2020). The use of ***descriptive research design*** as the method for determining and describing the research is an effective means of explaining the analysis of the statistical data collected.

The sampling of the target population is a crucial aspect of the research methodology of data collection. ***Purposive sampling*** is used in the case of this research for its implication of concentrating on the selection of respondents from the sample population with the capacity and knowledge regarding the subject being studied (Campbell *et al.* 2020). This research conducts a survey for collection of the data and choosing its respondent sample population from among ***PNB bank employees*** with a minimum of ***two years experience.*** The number of respondents in the sampling population is ***51 participants.*** The ***primary and quantitative data*** is gathered through ***primary data collection methods*** that are done through a survey among the participants in a 5-point Likert scale based questionnaires. The data analysis is selected to be ***primary quantitative data analysis*** for assessment of the directly collected numeric data through statistical elaboration. The research has been implemented ***IBM SPSS*** as its instrument for developing the quantitative data collected from the questionnaires into statistical knowledge.

Results

The following statistical data is evaluated through the means of primary quantitative data analysis and includes the implementation of Descriptive Statistics, Pearson's Correlation, Regression through Model Summary and reliability test using Cronbach's alpha.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. What is your age?	51	0	4	2.31	1.378
2. What is your gender?	51	0	2	.35	.594
3. Mergers and Acquisitions (M&A) are important for reshaping market and financial growth opportunities for Public Sector Banks (PSBs).	51	0	4	2.61	1.150
4. The PSBs after M&A have positive adaptation for cultural changes.	51	0	4	2.12	1.437
5. The cultural changes within the PSBs impact the decision making and performance of PSBs.	51	0	4	2.55	1.238
6. M&A of public banks help in building better economic efficiency.	51	0	4	2.59	1.203
7. PSBs after mergers and acquisitions have a higher market gain.	51	0	4	2.84	1.007
8. M&A activities of public banks augments the existing R&D environment of the banks.	51	0	4	2.65	1.197
9. The R&D activities need extensive development to adapt with changes that M&A processes within PSBs.	51	0	4	2.65	1.055
Valid N (listwise)	51				

Figure 3: Descriptive Statistics
(Source: IBM SPSS)

The descriptive statistics and its application is used for analysing the clustered nature of the standard deviation (SD) and mean. Andrade (2020) opines that in descriptive statistics, the SD implies the range of scattered or clustered value it has against the mean value. The strongest cluster is mean 2.12 and SD 1.437 in question 4 and lowest in question 7's mean 2.84 and SD 1.007.

Figure 4: Correlation
(Source: IBM SPSS)

Pearson's Correlation is implemented for realising the assessment of correlation between the questions that are based on the variables of the study. A high correlation value ranging above 0.90 denotes strong correlation between variables (Fu *et al.* 2020).The highest correlation value is recognised as 0.971 between question 3 and 9, and the lowest being between questions 4 and 7 with the value being 0.759.

Figure 5: Model Summary
(Source: IBM SPSS)

The regression is done for identifying the relation between the dependent variable (DV) and independent variables (IV) through model summary. The R square values around and above 0.8 specify the strong value of the DV and IV relationships (Chicco *et al.* 2021). The R square in the model summary is 0.946, meaning the DV and the IVs are strongly related.

Figure 6: Reliability Statistics
(Source: IBM SPSS)

Cronbach's alpha is used as a method for recognizing the reliability of the research. Hayes and Coutts (2020) recognise Cronbach's alpha as an acceptable form of reliability test. Cronbach's alpha value for this research is 0.976 for 9 items, making the data highly reliable

Discussion

On the evaluation of the gathered results, it can be observed that the findings thus processed are relatively similar to the previous literature review. The dependent variable that has been identified for this research is the ***Mergers and acquisition in Public Sector Banks (PSB)***,presented in question 3 as ***PSB1***. The research also recognized the following independent variables of ***Cultural performance (CP), Economic Performance (EP), Research and development environment (RDE)*** with the remaining questions from 4 to 9 coded as ***CP1, CP2, EP1, EP2, RDE1 and RDE2*** respectively.

The results and findings regarding the dependent variable of PSB have been observed as a strongly agreed upon aspect of developmental strategy for public sector banks by the respondents. This was determined with the cluster of the SD and means values for PSB1 and also is determined with similar knowledge as shared by the authors in the literatures evaluated. Das (2021) has hinted at the expanding development of the mergers and acquisition processing in India. The correlation between PSB1 and RDE2 also aligns with the assessment that the previous authors of the reviewed literature provided in relation to the impactful performance of mergers and acquisition on the R&D development environment's need for intensification and growth.

In the reviewed articles and journals, it has been observed that mergers and acquisition affect the development of the cultural and economic performance of the public sector banks as well as the R&D activities. Opinions of authors such as Singh *et al.* (2022) and Gandhi *et al.* (2020) regarding the impact of M&A bringing about cultural change in decision-making and financial development of the banks as was seen in the literature review also match the opinion of the respondents. The particular IVs of CP2, EP1 and RDE1 meet an estimate of 94.6% of requirements of the DV PSB1, the

value being higher than 80% and showing a strong relation between the DV and IVs as Chicco *et al.* (2021) suggests. Therefore, it can be positively said that the respondents of the survey are also vigorously holding the same opinions as the authors in the reviewed literature.

Conclusion

The foregoing study regarding the cultural and economic performance and the R&D environment of PSBs after mergers and acquisition has included a survey of 51 participants and resulted in describing the objectives of the research better. The results that had been evaluated enhanced the acquired knowledge of mergers and acquisition being a significant form of strategic method implemented for expanding the scope and financial performance of the PSBs. Through the review of literature and the responses of the questions, it has also been found that cultural performance and its related aspects including decision-making and cultural change of the bank's operations are impacted by mergers and acquisition of public banks in India. This is followed by the realisation of the close link of mergers and acquisition and the R&D environment of the PSBs. Hence, it can be concluded from the acquired knowledge that mergers and acquisitions of PSBs are significantly impactful on the cultural, economic performance and the R&D environment of the public banks.

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