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IMPACT OF BANK MERGER ON NSE NIFTY: A CASE STUDY ON MERGING OF BANKS IN 2020

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INTRODUCTION

Narasimham Committee in the late 1990s recommended consolidation through a process of merging of strong banks. The Committee recommended the closure of the banks those are weaker in comparison to other banks, instead of merging them. The biggest positive aspect of the merging of banks will lead to the formation of banks of scale. There are a large number of banks which are of very small in size in terms of global standards & their growth is restricted by their inability to expand. India needs more global level banks to face global competitiveness. The recent merging of the banks were aimed at addressing this problem.

The announcement of merging of the banks by Finance Minister Nirmala Sitharaman on 30/08/2019, raised the expectation that it would be the most significant event that the country has witnessed since nationalization. The intention to create banks that could compete with the banks of global level & would also serve the needs of a $ 5 trillion economy by 2025.

Keeping in view the above intentions, Finance Minister, Nirmala Sitharaman, declared the merging of ten public sector banks into four entities to improve their liquidity, tackling the issues of non performing assets & risk diversification.

The present paper aims to explore the impact of the merging of the Banks on NSE Nifty, with respect to Stock returns, Volume of share trading & Volume of share turnover.

CONCEPTUAL BACKGROUND

Merging is the combining of two or more organisations into one. The merging of the banks is a particular situation when two banks club their assets & liabilities to become one bank. The most common reasons for bank merger are – diversification, enhancement of financial capabilities, benefits from tax relief and so on. However merging also invites certain challenges such as decision making, coping up the tech interactions, managing the human resources and so on.

The process of bank merging is governed by the Banking Regulations Act, 1949. Firstly the banks, intending to merge should initiate a merger discussion. The Government consults the RBI regarding the scheme of merging and thereafter the scheme for merging is placed before the parliament for approval. The Parliament possesses the right to modify the scheme or reject it outright. The approval from Parliament is necessary for merging of both the merging of Private sector as well as Public sector banks. After merging of the banks, the staffs of both the banks work under a single umbrella regarding their service conditions and wages.
The pros of Bank Merging can be summed up as –

- The operational cost gets reduced
- Both NPA and Risk management can be dealt with much ease
- The enhanced capital base and a better liquidity situation helps in reducing the burden of recapitalization.
- The geographical reach of the banking operation gets enlarged
- It becomes much easier for bigger banks to manage its long term and short liquidity
- Opportunity for technological upgradation becomes much easy to achieve
- Even the stronger banks benefit themselves by achieving new customer base
- It becomes much easier to cope up with the global challenges

- Holding of market share rises
- The weaker banks can benefit from large scale operations

LITERATURE REVIEW

Jayadev & Sensarma (2007) studied the critical issues with respect to the banking system of India emphasising on the views of the stakeholders viz, the managers and the shareholders and observed that forced mergers, do not provide any benefit to either the bidder or the target banks shareholders. But in the case of voluntary mergers, the bidder banks shareholders have gained more than those of the target banks.

Goyal & Joshi (July 2011) probes the motives behind the merger of banks in the Indian banking industry and it was observed that the impact of global economy is unbearable for small and local banks. This appears to be one of the main reasons for merger. Some private banks look upon merger as a strategic mechanism for expanding their geographical reach, particularly to explore the huge potentiality of rural markets of India.

Meena & Kumar (Dec 2014) reviewed the trends observed in Merger & Acquisitions in the context of banking sector of India with reference to three banks that can be considered as leading banks of India. The study is carried out within the time frame 2000 to 2013 comparing the pre and post-merger financial performance of the selected merged banks with the help of some financial parameters and the conclusions suggested that Merger and Acquisition is successful in the banking sector of India to a certain extent.

Kashyap (2021) assessed the reasons responsible for merger in Indian banking sectors with special reference to the merger among Bank of Baroda with Dena Bank and Vijaya Bank. The study concluded that the merger of Bank of Baroda resulted in the better management of capital and widened the area of service and further more their has been a positive impact as a result of the merger upon Bank of Baroda.

Singh & Das (Mar 2018) concluded from their study that strategies with regard to procedural, physical and socio cultural context play a very important role in post merger and acquisition process.

Khan (Nov 2011) made a comparative study using some financial parameters on pre and post merger financial performance of the banks the were merged and the concluded that the banks have been positively effected by the events of merger and acquisitions. The result also suggested that the gains obtain from merger by the merged banks can be passed on as a benefit to the equity shareholder in the form of dividend.

Ghosh & Dutta (March 2015) explored the strategic impact of merger and acquisition in the banking sector and concentrated on 10 merger and acquisition deals that took place in the Indian banking sector during the time frame from 2000 to 2010. The study focused on measuring the changes in the performance level of the banks using selected financial and HR parameters. The study concluded a non-significant change in performance in post merger period as compared to pre merger period.

Herwadkar, Gupta & Chavan (Dec 2022) analysed the influence of merging of banks on the short term and medium term performance of the acquirer banks. The study concluded that the efficiency of the acquirer banks increased after merging due to enhancement in the productive capacity the study also indicated that there has been an increase in the wealth of shareholders of acquiree banks.

Ravi (July 2019) studied the causes and effects of bank mergers to Indian economy & as well as the need for bank mergers & concluded that concept of merger and acquisition can also be a risky process which has to be adopted cautiously, as it may bring various problems to the company in terms of the management, its working, etc. But overall, the concept is definitely contributing to the economy especially in the banking sector domestically as well as on the global level.

Soniya M (Dec 2018) focused on the reasons of mergers and acquisition of banks in India, to identify the relationship between CAMEL Variables (Capital Adequacy, Asset Quality, Management Quality, Earning Quality & Liquidity) and financial performance of Indian Banks and to examine the impact of Mergers and Acquisition on Camel Variables of Indian Banks before and after the merger & concluded that the main reason why Indian Banks merge or absorb other banks, is to enlarge their share in the market and increase their profitability. Further, Merger and Acquisition expand the capital base as well as the value of the shareholders of the banks thus enabling the banks to access more resources and especially credit facilities that ensure that the business has liquidity. This enhances the stability and effectiveness of operations of the organization increasing customer's satisfaction.

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Patel (July 2016) examined the comparative position of pre & post-merger financial performance of selected banks. The study highlighted the major gaps in financial performance compared through Economic Value added. The study revealed that the financial performance of the banks enhanced after merging in major cases.

Khan & Ikram (2012) studied the efficiency of the Indian stock market with respect the announcement of merger & acquisitions in the Indian banking sector by employing the standard risk adjusted rate of return & concluded that the announcement of merger does not have any significant impact on the stock price of banks & therefore neither before nor after the merger announcement the investors are able to earn abnormal or excess return.

Goyal & Joshi (March 2012) explored the growth of ICICI Bank Ltd. through mergers, acquisitions, and amalgamation & concluded that Mergers and acquisitions (M&As) are considered as corporate events which helps an organization to create synergy and provide sustainable competitive advantage, but, simultaneously these sorts of corporate events have the potential to create severe personal trauma and stress which can result in psychological, behavioural, health, performance, and survival problems for both the individuals and companies.

OBJECTIVES OF STUDY

1. To study whether merging of banks has any impact on Stock returns.
2. To observe whether merging of banks has any impact on the volume of shares traded.
3. To examine whether merging of banks has any impact on the share turnover.

RESEARCH METHODOLOGY

The present paper is focussed on empirical study and is based on secondary data only, collected from website of National Stock Exchange, Wikipedia, articles related to bank merger published in The Hindu, RBI occasional papers and several other relevant research papers.
The closing prices, volume of shares traded & volume of share turnover are collected from NSE Bank of Nifty.
To compute the stock returns the following formula is adopted

$$r_t = \log (P_t/P_{t-1}) \text{ or } r_t = \log (P_t) - \log (P_{t-1})$$

Where r_t is the logarithmic daily return at time t. P_{t-1} and P_t are closing prices at two successive days t-1 and t respectively.
As the merger of Banks occurred on 01/04/2020, for the purpose of study, the data are split into two different time periods
– Pre merger period from 01/01/2017 to 31/03/2020
– Post merger period from 01/04/2020 to 31/08/2023
The test statistic used for the purpose is t test to analyse whether the bank merging had any impact on

- Stock returns
- Volume of Shares traded
- Volume of Share turnover

The formula used for T test assuming unequal variance is

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

Where s_1 & s_2 are the standard deviations of two groups, $\bar{x}_1$ & $\bar{x}_2$ are means of two groups, n_1 & n_2 are the sample sizes.
Accordingly, the null hypothesis & alternative hypothesis framed are as follows
H_0: There does not exist any significant effect of merging of banks on stock returns
H_1: There exists significant effect of merging of banks on stock returns
H_0: There does not exist any significant effect of merging of banks on Volume of Shares traded
H_1: There exists significant effect of merging of banks on Volume of Shares traded
H_0: There does not exist any significant effect of merging of banks on Volume of Share turnover
H_1: There exists significant effect of merging of banks on Volume of Share turnover

ANALYSIS OF DATA

As per the first objective of study, the null hypothesis & alternative hypothesis framed are
H_0: There does not exist any significant effect of merging of banks on stock returns
H_1: There exists significant effect of merging of banks on stock returns

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Using T test for Independent sample we obtain the following result

Group Statistics

Group		N	Mean	Std. Deviation	Std. Error Mean
Stock Return	Pre Merger	795	0.000034584	0.0061908416	0.0002195665
	Post Merger	845	0.000453343	0.0168824049	0.0005807724

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Stock return	Equal variances assumed	8.961	0.003	-0.659	1638	0.510	-0.0004187592	0.0006355141	-0.0016652651	0.0008277
	Equal variances not assumed			-0.674	1079.074	0.500	-0.0004187592	0.0006208913	-0.0016370503	0.0007995

The result obtained from the above analysis suggests that null hypothesis cannot be rejected at 5% level of significance as the p value (0.5) is greater than the level of significance (0.05). This implies that the test results are not significant & there exists no impact of Bank merger on Stock returns.

As per the second objective of study, the null hypothesis & alternative hypothesis framed are
H_0: There does not exist any significant effect of merging of banks on Volume of Shares traded
H_1: There exists significant effect of merging of banks on Volume of Shares traded

Using T test for Independent sample we obtain the following result

Group Statistics

Group		N	Mean	Std. Deviation	Std. Error Mean
Volume of Shares traded	Pre Merger	698	171695623.5473	128862004.55453	4877498.80383
	Post Merger	845	267869713.0615	138600369.41230	4767997.65712

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Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Volume of Shares traded	Equal variances assumed	24.798	0.000	-14.003	1541	0.000	-96174089.51426	6868288.05248	-109646268.19234	-82701910.83618
	Equal variances not assumed			-14.100	1519.612	0.000	-96174089.51426	6820835.45027	-109553337.70957	-82794841.31895

The result obtained from the above analysis suggests that null hypothesis is rejected at 5% level of significance as p value is lower than level of significance. This implies that the test results are significant & there exists a significant impact of Bank merger on Volume of shares traded.

As per the third objective of study the null hypothesis & alternative hypothesis framed are
H_0: There does not exist any significant effect of merging of banks on Volume of Share turnover
H_1: There exists significant effect of merging of banks on Volume of Share turnover

Using T test for Independent sample we obtain the following result

Group Statistics

Group		N	Mean	Std. Deviation	Std. Error Mean
Volume of Share turnover	Pre Merger	698	4494.1669	2493.15155	94.36718
	Post Merger	845	7728.2882	3181.54086	109.44833

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Volume of share turnover	Equal variances assumed	40.251	0.000	-21.875	1541	0.000	-3234.12139	147.84565	-3524.12131	-2944.12146
	Equal variances not assumed			-22.379	1536.840	0.000	-3234.12139	144.51333	-3517.58555	-2950.65722

The result obtained from the above analysis suggests that null hypothesis is rejected at 5% level of significance as p value is lower than level of significance. This implies that the test results are significant & there exists a significant impact of Bank merger on Volume of share turnover.

CONCLUSION

The bank merging is important for consolidation and expansion. Such merging is also necessary for the Indian economy as India needs more banks which are global in nature to meet the competition that is exists at the global level. The bank merging will provide answer to lot of problems of the economy. The bank merging will provide the much-needed financial base for the merged banks to compete in global level. Merging helps banks create a scale comparable to global banks and capable of global competitiveness. The paper aims to find out the response of share market to such merger. To study the repercussions of bank merger on share market, the merging of the several banks carried out on 1st April 2020 was chosen by the researcher. The analysis was carried out in respect of stock returns, volume of shares traded & volume of share turnover. Data from Nifty Bank was chosen for analysis & time period was segregated into two different components – from 01/01/2017 to 31/03/2020 (the period prior merging of banks) & from 01/04/2020 to 31/08/2023 (the period post merging of banks). t test was implemented for analysing the data. The analysis of the data revealed that although there is no remarkable effect of bank merger on stock return, but bank mergers have a remarkable effect on volume of shares traded & volume of share turnover. This implies that from investors point of view, there is nothing much to worry about, since the stock return remains unaffected by such mergers, but both the volume of shares traded & volume of share turnover gets affected by such merger.

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