International Journal of Advanced and Innovative Research (2278-844)/

Volume 7 Issue 11

The Financial Analysis of State Bank of India Pre and Post-Mega Merger: A Comparative Study

Pushpitha S[*1], Nikitha V Bharadwaj[#2], Dr.Aruna P[#3]

[*1]*PG Research Scholar, Department of Commerce, CHRIST (Deemed to be University), Bengaluru-29.*

pushpitha.s@mcom.christuniversity.in

[#2]*PG Research Scholar, Department of Commerce, CHRIST (Deemed to be University), Bengaluru-29*

nikitha.bharadwaj@mcom.christuniversity.in

[#3]*Assistant Professor, Department of Commerce, CHRIST (Deemed to be University), Bengaluru-29*

aruna.p@christuniversity.in

***Abstract*-- Financial performance refers to measuring the results of the firm's overall operations and policies in monetary terms. In other words, it refers to the evaluation of financial health of the firm for a stipulated time period. This study mainly focuses on the reasons for the mega-merger which took place on 1st April 2017 and the State Bank of India's financial performance pre and post-merger. For this purpose, CAMEL model and paired t- test (IBM SPSS Statistics 22) has been used. The result clearly shows that there is no significant effect on the financial performance post-merger. This result can be used by decision makers to focus and make the merger a successful one**.

Keywords— Merger and Acquisition; Financial performance; Capital adequacy; Asset Quality; Management Efficiency.

INTRODUCTION:

Banking Industry is a prominent area in which mergers and acquisitions makes a colossal financial gain. The merger is not a new concept in Indian Banking Industry. Most of the small and medium-sized banks wish to be merged in order to increase their network and to widen their economics of scale. In India, SBI is the largest commercial banks in terms of assets, branches, deposits, customers and employees. The 3 major roles played by a bank are economic growth, providing funds for the investments and expansion of the economy. In the recent times banking industry has been experiencing a lot of change in respect to regulations and globalization. To sustain in this changing environment banks have to come up with strategies for it to have a sustainable and a long term growth. One of the most commonly applied strategy by the banks is the merger.

A merger is a process of combining different organization into a single organization in order to intensify the financial and operational strengths of those organizations. In the year 1921, Bank of Bombay, Bank of Madras and Bank of Bengal - the three "Presidency Banks" merged to form "The Imperial Bank of India" which worked as the central bank until RBI was established in year 1935. In 1955, after Independence, the Imperial Bank of India become State Bank of India which gained the control over seven banks in 1960. These banks were: - State Bank of Bikaner and Jaipur, State Bank of Hyderabad, State Bank of Mysore, State Bank of Saurashtra, State Bank of Indore, State Bank of Patiala and State Bank of Travancore. To make State Bank of India a bank with trillion dollar business it merged with Kashinath Seth Bank in 2008 and later in 2010, it merged with State Bank of Indore.

In 2017, it merger with its 5 associate banks besides Bharitaya Mahialya Bank to increase its efficiency and centralization of its operation. Now with this mega merger of SBI with its associate banks, SBI is among the top 50 banks globally with respect to assets. This mega-merger has strengthen the banking sectors and at the same time making the Indian banking sector more robust. Now we can see SBI working in both length and breadth of our country and it is all set to egress as a Banking Powerhouse.

©2018 IJAIR. All Rights Reserved

STATEMENT OF PROBLEM

SBI merging with other banks is not a new thing. In 2010, SBI merged with State Bank of Indore and in 2008, it merged with State Bank of Saurashtra in both the cases the main motive was the Expansion of its size, benefit of scale and scope of economy. In 1995, SBI merged with Kashinath Seth bank with a motive of restructuring of weak bank. Again in 2008, State Bank of India merged with Centurion Bank of Punjab. From all these mergers post financial performance was not good. There were no significant improvement in the performance after merger. This situation is not only in India but seen in many developing countries. Performance has been improved post-merger in developed countries but the opposite is seen in developing countries. In spite of this, The State Bank of India has entered into mega-merger with its 5 associate banks in 2017. Hence, there is a need to analyse the financial performance pre and post-merger to see if there is any improvement in its financial performance. This helps to know if there is any change or history has repeated again even though this decision is taken in public interest.

LITERATURE REVIEW

Merger and acquisition can help the banks to develop, deflate, and change the nature of their business and their position in the market. However, there are few challenges faced by the banks in the process of merger such as over lapping of branches, huge bad loans, dismissal of employees etc.., (Satyanarayana, Raju, &Naidy, 2017). The main motive of any organization to undertake merger and acquisition is to improve their organization culture (Chavan & Upadhyaya, 2014). Many studies have been undertaken comparing the financial performance of SBI with other banks. A study conducted on the basis of credit deposit, net profit margin, etc., of SBI and ICICI for a period form 2001-08 to 2011-12 found that SBI is financially sound than ICICI in the context of deposits and expenditure while ICICI is good in its managerial skills (Singh & Tandon, 2012). SBI has large scale based operations than ICICI bank. But the interest expended to interest earned ratio and the operating profit ratio is less while earning per share and net worth is high when compared to ICICI bank for the period of 7 years from 2010-11 till 2016-2017 (Gupta & Kaur 2017).

A study on the analysis of pre and post-merger of SBI and HDFC bank for the period from 1/4/1991 to 31/3/2017 focused on the employee productivity, branch productivity and post-merger performance of the selected banks. However, overall growth is seen between these banks post-merger (Athma & Bhavani, 2016-17). A study which focused on impact of asset quality on operational performance of selected public sector banks in pre and post-merger covering the period of 5 years after 2000 which used census method as the statistical tool concludes that the banks are good in the pre-merger than post-merger (Jegadeeshwaran & Baswaraj, 2017). A study on Return on equity and Return on asset with respect to post-merger's performance of selected banks in Pakistan found out that after the merger these ratios has not been affected. This argument was supported with the fact that Pakistan is still a developing country and hence post-merger performance will turn into a failure (Bawani, Ghias, & Ahmed, 2016). Few researchers argue that the performance of the banks vary with the nature of the bank and the type of the merger. Banks which are heterogeneous in nature in terms of culture will have good improvement in cost efficiency post-merger than compared to those banks which are homogeneous in nature (Lin, 2005). Banks which go into voluntary merger, has seen to improve its performance post-merger than those banks which undergo compulsory merger (Saran & Gopinath, 2011). Further few researchers have raised a concern that government should not encourage the merger of strong and distressed bank as it affects the asset quality of the stronger bank (Tanwar, 2017).

State Bank of India's excellent performance can be accredited by using modern technology, bank reforms and good recovery mechanisms but has to improvise its position in respect to debt-equity, operating profit and non-interest income to total income (S, N K B, S, & V R, 2017). Due to financial sector reforms the Indian banks are getting closer to the global financial world, but still there is a long way to go (Mishra & Agarwal, 2013). It is indeed a big question now as to how far this mega-merger of SBI will turn out to be a fruitful strategy

OBJECTIVES

- To find the reasons behind the mega-merger of the State Bank of India.
- To analyse the financial performance of pre and post-merger of the State Bank of India
- To analyse the impact of the merger on the financial performance of the State Bank of India.

HYPOTHESIS

©2018 IJAIR. All Rights Reserved

H0: There is no significant difference in the financial performance of the State Bank of India per and post-merger.
H1: There is a significant difference in the financial performance of State Bank of India pre and post-merger.

SCOPE

This study is limited to the analysis of Financial Performance of State bank of India.

***PERIOD*:** The period considered for this study is from 2015 till 2018 (i.e.,) 3 years pre-merger (from 1/4/2014 - 31/3/15, 1/4/15 - 31/3/16, 1/4/16 - 31/3/17) and 1 year post-merger (from 1/4/17 – 31/3/18).

RESEARCH METHODS

SOURCE OF DATA: The study conducted is based on the secondary data. The source of data such as State Bank of India Annual report, Ace Analyzer, related journals from Proquest, Jstor and from relevant websites was used.

***STATISTICAL TOOL*:** CAMEL parameter, average, ranking (descriptive statistics) and paired t-test are used to analysis State Bank of India's overall financial performance pre and post-merger. Usually CAMEL model is considered as a significant parameter for analyzing the financial performance of the banks (Kaur, 2010), (Mohiuddin, 2014). The main aim of CAMEL parameter is to disclose problems before they glare themselves. RBI has established this model so that the banks can critically analyse their financial statements and assess the health of their banks. The main motive of this model is to help in comparative analysis of the banks. The main advantage of this model is that it focuses on top key aspects which are required to judge the financial position of the bank. It offers a framework within which appropriate ratios can be selected based on the need and requirement (Cargill, 1989).

RESULTS AND ANALYSIS

REASONS FOR THE MERGER

- Merger brings all banks under one single roof. This helps the Central government to annually allocates subsidiary and also contribute towards the share capital and recovery of bad debts. It is helpful and easier even in terms of accountability.

- SBI and its associates together is one of the largest banking entity which has huge amount of bad loans which are irrecoverable. Hence this merger helps in setting off its liabilities by highly revalued assets which is known as corporate restructuring.

- Merger makes the bank better in its performance as after the merger it can cater the needs of the customers from one single bank. This will lead to a huge customer base which in turn enhances the profitability over its depositors. The high cost of integration is not necessary as it is a similar setup.

- Merger ensures centralization of management which will increase the effectiveness of the management decision and efficiency in operations.

- Those associate banks which does not have a good reputation in the public once merged with SBI can lead to a good market impression, and this will in turn generate huge goodwill.

ANALYSIS OF FINANCIAL PERFORMANCE OF SBI PRE AND POST-MERGER

Table I: Showing the Capital Adequacy of the SBI for the period 2015-2018

	Years	Advances / Loans Funds (%)	Rank	Total Debt to Owners Fund	Rank	Capital Adequacy Ratios (%)	Rank
Pre	15	72.78	3	15.08	2	12.79	3
Pre	16	78.34	1	13.55	4	13.94	1
Pre	17	77.39	2	13.87	3	13.56	2
Post	18	71.25	4	15.79	1	12.74	4

(Source: The Annual report of State Bank of India)

©2018 IJAIR. All Rights Reserved

Capital adequacy is analysed using advances to loan funds, total debt to owners fund and capital adequacy ratio. Advances to loan funds is high in pre-merger that is in the years 2016, 2017 and 2015 respectively. While in post-merger, advances to total fund ratio is the lowest. High Total debt to owners fund indicates that there is less protection to the depositors and creditors (Joshi & Joshi, 2002). It is highest in post-merger. Hence we can say that there is less protection to depositors and creditors. The bank is maintaining capital adequacy ratio above 12% which is a prescribed limit given by RBI to all public sector banks.

Table II: Showing the Asset quality ratio of the SBI for the period 2015-2018

	Years	Net NPA To total Assets (%)	Rank	Net NPA To net Advances (%)	Rank	Total Investment To Total Assets (%)	Rank
Pre	15	1.021831696	1	2.12	1	41.11139889	3
Pre	16	1.878456506	3	3.81	3	37.70538558	4
Pre	17	1.691591399	2	3.71	2	54.15614992	2
Post	18	3.065304957	4	5.73	4	60.3940127	1

(Source: The Annual report of the State Bank of India)

The asset quality is analysed using three ratios namely- net NPA to total asset, net NPA to net advances and total investment to total assets. Net NPA to total assets depicts the expertise of the bank to assess its credit risk and the degree of recovery of its debts. It is high post-merger than pre-merger. Net NPA to net advances depicts the financial burden of the bank. Higher the Net NPA to net advances ratio means increase in quality of bad loans (Joshi & Joshi). It is high post-merger than pre-merger. This indicates that in post-merger bad loans has increased. High Total investment to total asset indicates that the bank has kept certain cover of investment as a security against the risk of Non-performing assets (Joshi & Joshi, 2002).This ratio is high post-merger. But however, it affects the profitability of the bank because interest income generated through investment is less than those of the advances.

Table III: Showing Management Efficiency of the SBI for the period 2015-2018

	Years	Total Advances to Total Deposits (Rs)	Rank	Profit Per Employee (cr)	Rank	Business Per Employee (cr)	Rank
Pre	15	8245000	2	614410.66	1	134911208.6	4
Pre	16	8457000	1	478997.86	3	153770974.8	3
Pre	17	7683000	3	500274.5	2	172538127.5	2
Post	18	7100000	4	-247,971.10	4	175,776,620.83	1

(Source: The Annual report of the State Bank of India)

Management efficiency is analysed using 3 ratios namely- Total advances to total deposits, profit per employee, and business per employee. High Total advances to total deposits ratio means that the bank depends more on deposits for lending advances vice-versa (Joshi & Joshi, 2002). This ratio is high in pre-merger than post-merger. With this it is evident that bank depends more on deposits for lending advances post-merger. High Profit per employee depicts high efficiency of the management (Joshi & Joshi, 2002). It is high in pre-merger in the year 2015 followed by 2017 and 2016 respectively and the lowest is in post-merger with a negative value (loss) of Rs.-247971.10 crores. Business per employee measures the productivity of the bank. This ratio is high post-merger followed by 2017, 2016 and 2015 respectively. Therefore even though the profit earned per employee has been reduced post-merger but their productivity has been increased.

Table IV: Showing the Earning quality of the SBI for the period 2015-2018.

	Years	Return on Equity %	Rank	Return on Average	Rank	Expenses to Income%	Rank

©2018 IJAIR. All Rights Reserved

				Assets%			
Pre	15	11.17	1	0.68	1	49.04	2
Pre	16	7.74	2	0.46	2	49.13	3
Pre	17	7.25	3	0.41	3	47.75	1
Post	18	-3.78	4	-0.19	4	50.18	4

(Source: The Annual report of the State Bank of India)

Earning quality is analysed using 3 ratios namely- Returns on average assets, Return on equity and expenses to income. High Return on average assets indicates higher income generating capacity (Joshi & Joshi, 2002). It is high pre-merger in the year 2015 and then it has drastically reduced to negative value post-merger. Hence bank should concentrate in effective exploitation of its assets. High Return on equity depicts that the banks is able to efficiently utilize its equity base in earning better return to its investor (Gadhia, 2015). This ratio is high pre-merger in 2015 while it decreases over the years and in post-merger it is least with the negative value. Hence bank is not able to efficiently utilize its equity base in earning better return to its investors. Expenses to income ratio is high post-merger when compared to its pre-merger which indicates that expense is more than income post-merger.

Table V: Showing the Liquidity position of the SBI for the period 2015-2018

	Years	Current Ratio	Rank	Quick Ratio	Rank	Cash Ratio	Rank
Pre	15	1.362	4	10.78	4	0.8	2
Pre	16	1.399	3	10.84	3	0.7523	3
Pre	17	1.644	1	11.94	2	0.8241	1
Post	18	1.48	2	13.83	1	0.2078	4

(Source: The Annual report of the State Bank of India)

Liquidity of the bank is analysed using 3 ratios namely- current ratio, quick ratio and cash ratio. Higher Current ratio indicates that the bank is highly liquid. Lower the ratio more difficult for the bank to meet its current obligations. But too high current ratio is also not advisable because this indicates that the bank is not effectively using its current assets. The ideal current ratio is 2:1. The Current ratio is high in the year 2017 followed by 2018 (post-merger). Quick ratio is more conservative than compared to current ratio. Quick ratio is high in post-merger while least in pre-merger in the year 2015. It is usually said that the acceptable cash ratio should not be less than 0.2. If it is less than 0.2 times, then it means the bank has poor asset utilization capacity. It measures the absolute liquidity of the business. However, the cash ratio is 0.207 times post-merger which is slightly higher than the required limit.

ANALYSIS THE IMPACT OF THE MERGER ON THE FINANCIAL PERFORMANCE OF SBI

Table VI: Showing Mean, the number of ratios (N), standard deviation, standard error mean of the State Bank of India pre and post-merger

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-Merger of Capital Adequacy	34.5889	3	36.01218	20.79164
	Post-Merger of Capital Adequacy	33.2600	3	32.93563	19.01539
Pair 2	Pre-Merger of Asset Quality	16.3561	3	24.23580	13.99254
	Post-Merger of Asset Quality	23.0631	3	32.35696	18.68130
Pair 3	Pre-Merger of Management Efficiency	54133221.5354	3	86345684.42933	49851704.14864
	Post-Merger of Management Efficiency	60876216.58	3	99574471.34184	57489347.83362

©2018 IJAIR. All Rights Reserved

Pair 4	Pre-Merger of Earning Quality	19.2922	3	25.74476	14.86374
	Post-Merger of Earning Quality	15.4033	3	30.17092	17.41919
Pair 5	Pre-Merger of Liquidity	4.4824	3	5.81592	3.35782
	Post-Merger of Liquidity	5.1726	3	7.52446	4.34425

(Source: SPSS data analysis)

The mean value of pre-merger and post-merger of capital adequacy is 34.5889 and 33.2600 while earnings quality is 19.2922 and 15.4033. In both the cases we can see that the mean has decreased post-merger. However, the mean value of pre-merger and post-merger of asset quality, management efficiency and liquidity are 16.3561 and 23.063, 54133221.5354 and 60876216.5767, 4.4824 and 5.1726 respectively. In the above three cases the mean value is high post-merger. Standard deviation is how much it is deviating from its mean. In all the cases we can see that there is not much deviation post-merger when compared to pre-merger.

Table VII: Showing the number of ratios (N), correlation and significance of the State Bank of India pre and post-merger.

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	pre-merger of capital adequacy & post-merger of capital adequacy	3	.999	.023
Pair 2	pre-merger of asset quality & post-merger of asset quality	3	1.000	.004
Pair 3	pre-merger of management efficiency & post-merger of management efficiency	3	1.000	.005
Pair 4	pre-merger of earning quality & post-merger of earning quality	3	.976	.140
Pair 5	pre-merger of liquidity & post-merger of liquidity	3	1.000	.017

(Source: SPSS data analysis)

Correlation of pre-merger and post-merger of capital adequacy is 0.999, which indicates that it is highly positively correlated and its significance value is 0.23 where $p<0.05$ which indicates that it is significant. Therefore, pre-merger and post-merger of capital adequacy of the State Bank of India is significantly positively highly correlated.
Correlation of pre-merger and post-merger of asset quality, management efficiency and liquidity are 1.000 which indicates that it is perfectly positively correlated and their significance values are 0.04, 0.05, and 0.017 respectively where p value is < 0.05 which indicates that it is statistically significant. Therefore, pre-merger and post-merger of asset quality, management efficiency and liquidity of the State Bank of India is significantly positively correlated.
Correlation of pre-merger and post-merger of earning quality is 0.976 which indicates that it is highly positively correlated and its significance value is 0.140 where $p>0.05$ which indicates insignificancy. Therefore, pre-merger and post-merger of earning quality of the State Bank of India is positively highly correlated, but it is insignificant.

Table VIII: Showing Paired Sample T-Test of the State Bank of India pre and post-merger.
Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Capital adequacy Pre-Post	1.32889	3.31812	1.91572	-6.91378	9.57156	.694	2	.560
Pair 2	Asset quality Pre-Post	-6.70702	8.12318	4.68992	-26.88610	13.47207	-1.430	2	.289
Pair 3	Management Efficiency Pre-Post	-6742995.04123	13245164.50298	7647099.29125	-39645807.68142	26159817.59895	-.882	2	.471

©2018 IJAIR. All Rights Reserved

Pair 4	Earning Quality Pre-Post	3.88889	7.54157	4.35413	-14.84541	22.62319	.893	2	.466
Pair 5	Liquidity Pre-Post	-.69022	1.71749	.99160	-4.95671	3.57627	-.696	2	.558

(Source: SPSS data analysis)

From the above table, we can see that the mean value post-merger is more with respect to Capital adequacy and Earnings quality while less with respect to Asset quality, Management efficiency and Liquidity position of the bank. However, the significance value (p) is more than 0.05 in all the cases/Pairs (capital adequacy with 0.560, asset quality with 0.289, management efficiency with 0.471, earnings quality with 0.466 and liquidity with 0.558).

Therefore, overall H0 is accepted and there is no significant difference in the mean value of the State Bank of India pre and post-merger in terms of its financial performance with respect to CAMEL model for the period 2015-2018.

FINDINGS

- Even though there is a drag in the profitability because of the higher provisioning the bank remained to be capitalized, which is evident through the capital adequacy ratio 12.74% post-merger (Table I) which is above the prescribed limit of 12%.

- There is less protection to creditors and depositors post-merger which is evident through high total debts to owner's fund ratio post-merger which is 15.79% while in pre-merger 2015, 2016 and 2017 it is 15.08%, 13.55% and 13.87% respectively (Table I).

- SBI's total investments to total assets is high post-merger, the value is 60.394% while in pre-merger 2015, 2016 and 2017 is 41.11%, 37.70% and 54.15% respectively, which means that bank has kept huge amount of assets in form of investment as a security against NPA but it is facing financial burden after merger due to piling up of bad loans which is evident through Net NPA to net advances where in post-merger it is 5.73% while in pre-merger 2015, 2016, and 2017 it is 2.12%, 3.81% and 3.71% respectively. This shows that even though the bank has maintained investment which are made from its assets, it is not enough to reduce the NPA after merger (table II).

- One of the reason for this merger is to improve the management efficiency but Management efficiency has decreased drastically post-merger, which is evident though profit per employee which is -247917.10 crores while in pre-merger 2015, 2016, and 2017 it is 614410.66 crores, 478997.86 crores, and 500274.5 crores respectively (table III). But through paired t-test it is concluded that the overall management efficiency of the bank pre and post-merger has no significant difference. However, the efficiency of employee generating business to the bank is seen increased.

- Shareholders are getting less return from their investments post-merger which is evident through return on equity with -3.78% while in pre-merger 2015, 2016 and 2017 it is 11.17%, 7.74% and 7.25% respectively This shows that shareholders are at risk post-merger (Table IV).

- Post-merger expense are more than incomes this means that the bank is not able to reduce its expenses after merger which is evident through expenses to income ratio. In post-merger it is 50.18% while in pre-merger 2015, 2016, and 2017 it is 49.04%, 49.13% and 47.75% respectively (Table IV)

- From the paired t-test conducted we can conclude that the overall bank's financial performance pre and post-merger in respect to CAMEL model is more than 0.05 (from Table VIII) hence there is no statistical difference between the mean of pre and post-merger. Hence H0 is accepted.

©2018 IJAIR. All Rights Reserved

SUGGESTIONS

- Bank is financed by more of debt than of equity post-merger. This can be highly risky of the bank due to high interest cost and in turn increases the risk of insolvency. Hence it is suggested that the bank should balance the debt and equity otherwise it becomes difficult for the bank to grow because of the high cost of servicing debt.

- It is found from the result that management's efficiency is not good. Hence management should improve its efficiency by implementing modern technology like cloud computing which allows it for wide access of information, proper scheduling of its events, tasks and ensure efficient team management.

- It is suggested that the bank should concentrate more on the reduction of its expenses post-merger.

- The bank should take necessary steps to recover their loans and advances through proper channels. Hence, the rate of non-performing assets can be reduced.

- The bank should introduce new and innovate schemes to attract new customers as well as to retain existing customers.

Conclusion

Through this study, we can concludes that the financial condition post-merger is not that great or in other words, there is not much improvements in the financial condition post-merger when compared to its pre-merger. Hence, this mega merger does not show any remarkable changes in terms of its Capital adequacy, Asset Quality, Management Efficiency, Earnings Quality, Liquidity position and null hypothesis is accepted. Therefore it is concluded that there is no significant difference in the SBI's financial performance pre and post-merger.

REFERENCES

[1] Athma, D. M., & Bhavani, A. (2016-17), Mergers in Banking Sector in India: An Analysis of Pre & Post-Merger Performance of SBI & HDFC Bank, *IOSR Journal of Business and Management (IOSR-JBM)*, 07-16.

[2] Bawani, M. A., Ghias, K., & Ahmed, I. (2016), Post-Merger Performance of the KSE Listed, selected Banks of Pakistan, *Journal of Business Strategies, 10*, 85-106

[3] Cargill, T. (1989), CAMEL Ratings and the CD Market, *Journal of Financial Services Research, 3*.

[4] Chavan, D., & Upadhyaya, M. (2014), An Analytical study on ICICI and Bank of Rajasthan Merger, *Parikalpana - KIIT Journal of Management, 10*(2), 33-38.

[5] Gadhia, N. m. (2015). ' CAMEL' Model, A Conceptual Framework For Financial Performance Evaluation Of Banks In India. *International Journal of Scientific Research,4*.

[6] Jegadeeshwaran, D. M., & Baswaraj, M. (2017, July), Impact of asset quality on operational performance of select public sector banks in the pre and post- merger periods, *International Journal of Advanced Research and Development, 2*(4), 142-151.

[7] Joshi, & Joshi. (2002). *Managing Indian Banks: The Challenges Ahead, Second.* New Delhi: A Division of Sage Publications.

[8] Kaur, H. V. (2010), Analysis of Banks in India—A CAMEL Approach, *Global Business Review*, 257-280, doi:10.1177/097215091001100209.

[9] Lin, P. w. (2005, September), An Empirical Analysis of Bank Mergers and Cost Efficiency in Taiwan, *Small Business Economics, 25*, 197-206, doi: 10.1007/slll87-003-6451-y.

[10] Makkar, A., & Singh, S. (2013), Analysis of the financial performance of Indian commercial banks: a comparative study, *Indian journal of finance, 7*(5).

[11] Mishra, S., & Agarwal, D. K. (2013, May), Measuring performance of banks using CAMEL model: A comparative study of CBI and IB, *International Journal of Management Research and Review, 3*, 2914-2922.

[12] Mohiuddin, G. (2014), Use of CAMEL Model: A Study on Financial Performance of Selected Commercial Banks in Bangladesh, *Universal Journal of Accounting and Finance*, 151-160.

[13] Nandy, D. (2012), Efficiency Study on Proposed Merger Plan of State Bank of India (SBI) and its Subsidiaries: A DEA Perspective, *International Journal of Productivity Management and Assessment Technologies*, 1-17.

[14] S, R., N K B, N., S, L., & V R, N. B. (2017), Analysis of financial performance of state bank of India using camels approach, *International Journal of Applied Research*, 449-452.

[15] Saran, P., & Gopinath, T. (2011, december 10), Weak Bank Resolution Framework in India: Thumbs Up or Down? *Economic and Political Weekly, 46*, 104-109. Retrieved 07 13, 18.

[16] Satyanarayana, D., Raju, D. G., & Naidy, D. S. (2017, January), A case study on mega merger of

©2018 IJAIR. All Rights Reserved

SBI with its five Subsidiaries, *National Journal of Multidisciplinary Research and Development, 2*(1), 22-25.

©2018 IJAIR. All Rights Reserved

[17] Satyanarayana, K. (1994, Feb 26), Capital Adequacy Gaps for Banks: Problems and Prospects, *Economic and Political Weekly*, M37-M44, Retrieved from http://www.jstor.org/stable/4400861.

[18] Singh, D. A., & Tandon, D. P. (2012, November), A Study of Financial Performance: A Comparative Analysis of SBI AND ICICI Bank, *International Journal of Marketing, Financial Services & Management Research, 1*(11), 56-71.

[19] Tanwar , D. N. (2017, January), Performance analysis of Indian banks using camel approach, *International Journal of Commerce and Management Research, 3*(1), 59-67.

©2018 IJAIR. All Rights Reserved