Impact of Merger on Efficiency of Indian Commercial Banks: A Study on Merger of Oriental Bank of Commerce and Global Trust Bank

Dr. Sarbapriya Ray*
Assistant Professor, Dept. of Commerce, Vivekananda College, Under University of Calcutta, Kolkata, India& Guest Faculty, Dept. of Commerce, University of Calcutta, India

Gopal Chandra Mondal
Research Scholar, Dept. of Economics, Vidyasagar University, India

Dr Mihir Kumar Pal
Professor, Dept. Of Economics, Vidyasagar University, India

Abstract
The study has been undertaken to empirically analyze and assess the impact of merger of Oriental Bank of Commerce and Global Trust Bank on the efficiency of said banks in terms of different financial parameters. Most of the financial indicators of Oriental Bank of Commerce and Global Trust Bank display noteworthy improvement in their operational performance during post merger period. Therefore, the results of the study reveal that average financial ratios of sampled banks in Indian banking sector showed a notable and important improvement in terms of liquidity, profitability, and stakeholders wealth.
Keywords: Merger, India, Oriental Bank of Commerce, Global Trust Bank, efficiency.

1. Introduction:

Banks as financial intermediaries play a major part in economic growth, afford funds for investments, and keep the cost of capital low in an economy. Consolidation of banks via Mergers and Acquisitions (M&A) is not a novel occurrence for the Indian banking system. Among different ways to consolidate the banking industry, the common adopted method followed by banks is merger. Merger of two weaker banks or merger of one healthy bank with one weak bank can be treated as the faster and less costly way to improve profitability than encouraging internal growth.

Mergers and acquisition (M & A) can usually be defined as activities involving takeovers, corporate restructuring, corporate control as well as changes in the ownership structure of firms in any industry. Actually, merger and acquisition which takes place to achieve economies of scale, to encourage diversifications of the products, to enhance profitability along with technological change and deregulation and to reduce the risk as well, can occur through internal and external means. Internally, a firm achieves development and growth by expanding firm's infrastructure activities and customer base and thus profits and revenues via organic path. Externally, inorganic way via Merger and Acquisition offers immediate development and growth. Therefore, M & A can be considered as an inorganic strategy of growth. In the global environment, this strategy has become vital for achieving economies of scale, improving efficiency, reaching out to new markets and building new capabilities.

The process of globalization and liberalization has robustly influenced the Indian banking sector. The banking sector reforms undertaken in India from 1992 onwards were aimed at ensuring the safety and soundness of financial institutions and at the same time making them efficient, functionally diverse and competitive. Financial sector reforms provided banks with operational flexibility and functional autonomy. Apart from achieving greater efficiency by introducing competition through the new private sector banks and increased operational autonomy to public sector banks, reforms in the banking system were also aimed at enhancing financial inclusion, funding of economic growth and better customer service to the public. In February 2005, with a view to further enhancing the efficiency and stability of the banking system, a two-track and gradualist approach was adopted by the Reserve Bank. One track was consolidation of the domestic banking system in both the public and private sectors. The second track was gradual enhancement of the presence of foreign banks in a synchronized manner.

There have been several bank mergers in India in the post-reform period. In all, there has been 33 M&As since the nationalization of 14 major banks in 1969. Of these mergers, 25 involved mergers of private sector banks with public sector banks, while in the remaining 8 cases, mergers involved private sector banks. Out of 33, 21 M&As took place during the post-reform period with as many as 17 mergers/ amalgamations taking place during 1999 and after. Prior to 1999, the amalgamations of banks were primarily triggered by the weak financials of the bank being merged, whereas in the post-1999period, there have also been mergers between healthy banks, driven by the business and commercial considerations.

1.1. Profile of Oriental Bank of Commerce:

Oriental Bank of Commerce is a scheduled commercial bank whose bank's segments include treasury operations, corporate/wholesale banking, retail banking and other banking business operations. The treasury operations segment consists of dealing in securities and money market operations. The corporate/wholesale banking segment includes all advances to trusts, partnership firms, companies and statutory bodies. The retail banking segment includes exposure of approximately five crores to individual, partnership firm, trust, private limited companies, public limited companies and cooperative societies. The other banking business operations segment includes all other banking operations.

Rai Bahadur Lala Sohan Lal, the first chairman of the bank, founded Oriental Bank of Commerce in 1943 in Lahore. Within four years of its coming into existence, OBC had to face 'Partition'. The bank had to close down its branches in the newly formed Pakistan and shift its registered office from Lahore to Amritsar. Lala Karam Chand Thapar, the then Chairman of the Bank, in a unique gesture honoured the commitments made to the depositors from Pakistan and paid every rupee to its departing customers.

The Bank has witnessed many ups and downs since its establishment. The period of 1970-76 is said to be the most challenging phase in the history of the Bank. At one time profit plummeted to Rs.175 that prompted the owner of the bank, the Thapar House, to sell / close the bank. Then, employees and leaders of the Bank came forward to rescue the Bank. The owners were moved and had to change their decision of selling the bank and in turn they decided to improve the position of the bank with the active cooperation and support of all the employees. Their efforts bore fruits and performance of the bank improved significantly. This was the turning point in the history of the bank. The bank was nationalized on 15 April 1980. At that time, OBC ranked 19th among the 20 nationalized banks. In 1997, OBC acquired two banks: Bari Doab Bank and Punjab Cooperative Bank. The acquisition of these two banks brought with it no additional branches. The bank has progressed on several fronts, crossing the Business Mix mark of Rs.2 lac crores as on 31 March 2010 making it the seventh largest Public Sector Bank in India. The Bank has a network of approximately 2,350 branches. The Bank offers various products and services through branches, such as automated teller machines (ATMs), net-banking and mobile banking channels.

On 14 August 2004, OBC amalgamated Global Trust Bank (GTB). GTB was a leading private sector bank in India that was associated with various financial discrepancies leading to a moratorium being imposed by RBI shortly before it merged into OBC. The acquisition brought with it 103 branches, which increased OBC's branch total to 1092.

1.2. Profile of Global Trust Bank (India):

The liberalization process initiated by the Government of India, during the early 1990's witnessed the entry of several private players in the Indian banking sector. Global Trust Bank (GTB) was one of the earliest private sector banks to be incorporated on October 30, 1994, in Hyderabad. GTB was promoted by Jayant Madhab (Madhab), Ramesh Gelli (Gelli) and Sridhar Subasri (Subasri). Madhab, a development banker, was employed with the Asian Development Bank, Manila. Gelli who was Chairman of Vysya Bank for10 years had played a major role in transforming that bank into one of India's top private sector banks. Subasri was a former bank executive and a close friend of Gelli. The bank's operations were managed by Gelli. Apart from the three promoters, the International Finance Corporation (IFC) and the Asian Development Bank (ADB) were the bank's major shareholders. GTB offered an array of products and services in retail, wholesale, corporate, treasury and investment banking and products for non-resident Indians, apart from depository and advisory services. The bank specialized in lending to the software, energy, telecom, textiles, pharmaceuticals and gems and jewellery sectors. Since its inception, GTB had been in the news several times. The three promoters raised Rs 400 million, considered a substantial amount for individual promoters. With two international financial institutions - IFC and ADB as shareholders, GTB became the first Indian private sector bank to attract equity participation from international investment banks. The initial public offer (IPO) in late 1994 was oversubscribed 60 times. Subscription worth Rs 62.40 bn from over one million investors was received as against the original size of Rs.1.04billion. On opening day, the bank reportedly received deposits worth Rs one billion, which increased to Rs 10 billion by the end of the first year; and Rs 27.06 billion in three years. In three years of operations, the total business exceeded Rs 43.02 billion, making it one of the fastest growing banks in India. It was also the first among Indian banks to raise Tier II capital from multilateral institutions. In five years, GTB's deposits were worth Rs 40 billion out of which 70 per cent were from retail investors.

The collapse of GTB resulted from many mistakes committed by the bank's management. GTB's problems started in 2000 and the imposition of the moratorium finally ended its independent existence. RBI's probe into GTB's accounts revealed a significant erosion of the bank's net worth and huge number of NPAs reflected its weak financials. Moreover, GTB's attempts to strengthen its capital base through investments from overseas failed due to regulatory problems, resulting in the total collapse of the bank. In mid-2000, GTB disbursed loans of Rs 1.4 billion to Ketan Parekh (KP), a leading stockbroker at the Bombay Stock Exchange

(BSE). He used the money to purchase GTB shares from the BSE and the National Stock Exchange (NSE). GTB was involved in the stock market scam of 2001, that the stockbroker Ketan Parekh ran. GTB lent heavily to individuals speculating in the stock market; when the market crashed the bank suffered extensive losses. The bank had been hit by periodic bouts of reckless lending. The initial problems surfaced in 1997-98 when it was revealed that its advances made to small and medium-sized corporates were highly risky. The beleaguered bank, instead of adopting a more conservative approach to banking, actively fuelled the Ketan Parekh-led bull run in the stock market between December 2000 and March 2001. It lent heavily to players in the capital market and when the market crashed the bank's balance sheet suffered a gaping hole because share prices had dropped dramatically. In 2001, when it was attempting a merger with UTI Bank (which also attracted controversy), GTB lent more than Rs.800 crores. Much of the lending proved injudicious.

One consequence was that merger talks with UTI Bank fell through. The Reserve Bank of India (RBI) forced Gelli to resign. Gelli's successor resigned after six months, and Gelli's son joined the board of directors. In 2004, Gelli briefly returned to the bank in February 2004 before being again forced to resign. RBI examined GTB's accounts for 2001-02 and found that GTB's net worth had turned negative, but did not close the bank. GTB did not address its problems. Instead, and despite its dire straits, GTB continued to grow. It had 87 branches in 2002-2003, and grew to 103 branches before the RBIC forced it to close. It also paid interest on deposits at a rate equal to or better than other banks in its area. GTB sought to recapitalize itself by bringing in new investors. In mid-2004 GTB was in close talks with Newbridge Capital. Newbridge was to invest US$200million, subject to RBI approval. However, RBI was reluctant to permit private investors to restructure GTB.

1.3. The Merger of Oriental Bank of Commerce and Global Trust Bank

All these factors resulted in the imposition of moratorium by RBI on GTB. On July 24, 2004, the Government of India imposed a moratorium on Global Trust Bank (GTB), a leading private sector bank, on the grounds of 'wrong financial disclosures.' The moratorium was for three months from close of business on July 24, 2004 till October 23, 2004. Earlier, the Reserve Bank of India (RBI) had announced that GTB's net worth had turned negative as it had incurred huge losses and accumulated a significant number of non-performing assets (NPAs). RBI stated that the numbers reported in GTB's balance sheet did not match its audited figures. Moreover, GTB failed to provide satisfactory explanations to most of RBI's queries regarding its capital market exposures and why prudent lending norms were not observed in disbursing huge amounts for investments in the stock market. RBI said the moratorium was imposed in public interest and to protect the interests of depositors.

On July 26, 2004, RBI announced that GTB would be merged with the Oriental Bank of Commerce (OBC). As per the scheme, OBC took over all the assets and liabilities of GTB on its books. It acquired all 104 branches of GTB, 275 ATMs, a workforce of 1400 employees and one million customers at an estimated merger cost of Rs. 8 billion. OBC's total business volume was expected to reach Rs 65 billion and the total branch network to cross 1,100. All corporate accounts including salary accounts were transferred to OBC. The entire amount of paid-up equity capital of GTB was adjusted towards its liabilities. There was no share swap between GTB and OBC, which meant that GTB shareholders were the ultimate losers, as they did not get any shares of OBC. Moreover, OBC enjoyed a huge tax break by acquiring GTB's NPAs worth Rs 1.2 billion and impaired assets of Rs. 3 billion.

The issue of impact of mergers on the efficiency of banks has been well studied in the literature. Most of the literature related with the impact of mergers on the efficiency of banks is found in developed countries like European Countries and USA. In India, literature on bank merger is very meager. Very few research studies have been conducted so far to assess the impact of mergers on the performance of Indian Commercial banks. The present study makes notable contribution to the existing literature on banking efficiency in India.

Therefore, the objective of the study is to critically analyze and evaluate the impact of merger of Oriental Bank of Commerce and Global Trust Bank on their operating performance in terms of different financial parameters. The results have been obtained analyzing the data four years before and after the merger took place. The study has further attempted to investigate and test whether there exist any significant deviations in the results achieved by the banks after merger.

2..Methodology:

2.1.Collection of data:

The financial and accounting data of banks has been mainly collected from banks' Annual Report of several years to evaluate the impact of M&As on the performance of said banks. Financial data has also been collected from *www.moneycontrol.com* for the study.

2.2. Method of Analysis:

For attaining the result, pre and post merger performance have been compared. The pre and post merger financial performance have been achieved in terms of Investment- Deposit Ratio, Priority sector advance as % to total advance, Deposit per employee, Advance per employee, Interest income as a % of total income, Non-interest income as a % of total income, Interest expenses as a % of total expenses, Establishment expenses as a % of total expenses, Other operating expenses as a % of total expenses, Spread as a % to Assets, Interest Income as % to average working funds, Non-interest Income as % to average working funds, Operating profit as % to average working funds, Return on Asset, Net NPA as % to net advances, Capita Adequacy Ratio [CAR(%) etc.

In order to make a notable comparison of the performance of the merged banks, data for four years prior to the merger and data for four years after the merger have been analyzed. Thus, a period of nine years has been analyzed. The pre-merger (four years before) and post -merger (after four years) of the financial ratios have been compared. The year of merger is considered as base year and denoted as 0 which has been excluded from the analysis. Keeping in mind the objective of the study, we have taken into consideration the mean difference, standard deviation, growth rate(%)as tools of statistical evaluation of our study.

2.3Financial ratio used:

(i) Credit -Deposit Ratio=Total Advance/Total Deposit X 100
(ii) Investment- Deposit Ratio: Total Investment / Total Deposit X 100
(iii) Priority sector advance as % to total advance: Priority sector advance / Total Advance X 100
(iv) Deposit per employee: Total Deposit / no of employees X 100
(v) Advance per employee: Total Advance / no of employee X 100
(vi) Interest income as a % of total income: Interest earned / Total income X 100
(vii) Non-interest income as a % of total income: Non-interest earned / Total income X 100
(viii) Interest expenses as a % of total expenses= Total interest expended / Total expenditure
(ix) Establishment expenses as a % of total expenses = Establishment expense / Total expenditure
(x) Other operating expenses as a % of total expenses = Other operating expenses / Total expenditure
(xi) Spread as a % to Assets =spread (i.e. interest income minus interest expenses)/ Total assets
(xii) Interest Income as % to average working funds =Interest earned/Average working fund (AWF)
(xiii) Non-interest Income as % to average working funds=Non-interest earned/ Average working fund (AWF)
(xiv) Operating profit as % to average working funds= Operating profit/ Average working fund (AWF)
(xv) Return on Asset (ROA)= Net profit/ Average assets
(xvi) Net NPA as % to net advances= Net NPA/ Net advances
(xvii) CAR(%)=Tier-I Capital(%)+Tier-II Capital(%)

2.4. Hypotheses:

Hypotheses have been formulated for testing the significant difference between Pre and Post merger financial indicators which have been depicted below:

H_0 (Null Hypothesis): There is no significance difference between the pre and post merger financial indicators like Investment- Deposit Ratio, Priority sector advance as % to total advance, Deposit per employee, Advance per employee, Interest income as a % of total income, Non-interest income as a % of total income, Interest expenses as a % of total expenses, Establishment expenses as a % of total expenses, Other operating expenses as a % of total expenses, Spread as a % to Assets, Interest Income as % to average working funds, Non-interest Income as % to average working funds, Operating profit as % to average working funds, Return on Asset, Net NPA as % to net advances, Capita Adequacy Ratio [CAR(%) etc.

H_1 (Alternative Hypothesis): There is significance difference between the pre and post merger financial indicators like Investment- Deposit Ratio, Priority sector advance as % to total advance, Deposit per employee, Advance per employee, Interest income as a % of total income, Non-interest income as a % of total income, Interest expenses as a % of total expenses, Establishment expenses as a % of total expenses, Other operating expenses as a % of total expenses, Spread as a % to Assets, Interest Income as % to average working funds, Non-interest Income as % to average working funds, Operating profit as % to average working funds, Return on Asset, Net NPA as % to net advances, Capita Adequacy Ratio [CAR(%) etc.

3. Analysis of results:

Table-1 simply presents pre-merger financial performance for four years 2000-01 and 2003-04 on the basis of some financial indicators depicted below. However, simple ratio shows ups and downs in operating performance of two banks. Of course, post merger financial parameters for 4 year period in table 2 do not indicate merely steady upward performance ,rather, some ratios show dismal downward trend.

Table: 1: Pre-Merger financial performance of Oriental Bank of Commerce and Global Trust Bank (Four years prior) (in percentage)[Merged on 14.08.2004]

Serial no.	Ratios	Oriental Bank of Commerce (Bidder Bank)				Global Trust Bank (Target Bank)			
		As on 31-03-2001	As on 31-03-2002	As on 31-03-2003	As on 31-03-2004	As on 31-03-2001	As on 31-03-2002	As on 31-03-2003	As on 31-03-2004
1.	Credit -Deposit Ratio	44.88	49.70	52.59	55.17	53.01	47.07	47.34	35.09
2.	Investment- Deposit Ratio	49.83	48.18	49.58	47.08	49.97	45.01	36.10	33.11
3.	Priority sector advance as % to total advance	38.76	38.53	38.35	38.05	19.38	21.90	26.39	27.87
4.	Deposit per employee	181.63	209.64	220.69	262.54	659.35	561.73	526.71	457.07
5.	Advance per employee	81.52	104.19	116.07	144.84	349.50	264.40	249.32	160.39
6.	Interest income as a % of total income	91.15	86.52	86.15	82.06	84.52	75.96	73.82	68.74
7.	Non-interest income as a % of total income	8.85	13.48	13.85	17.94	15.48	24.04	26.18	31.26
8.	Interest expenses as a % of total expenses	69.7	64.76	61.86	55.29	71.02	69.63	51.55	32.77
9.	Establishment expenses as a % of total expenses	11.16	9.03	10.29	10.98	3.09	3.90	4.19	2.80
10.	Other operating expenses as a % of total expenses	7.41	7.53	6.96	8.34	13.62	14.67	13.46	9.17
11.	Spread as a % to Assets	2.13	2.9	3.57	3.55	1.95	1.05	0.29	-1.12
12.	Interest Income as % to average working funds	10.6	10.4	10	8.9	10.35	9.02	7.42	4.92
13.	Non-interest Income as % to average working funds	1.03	1.62	1.61	1.95	1.90	2.86	2.63	2.24
14.	Operating profit as % to average working funds	2.05	3.14	3.52	4.13	2.32	1.84	0.50	-0.12
15.	Return on Asset	0.73	0.96	1.34	1.67	0.78	0.48	-3.56	-11.28
16.	Net NPA as % to net advances	3.59	3.21	1.44	0.65	3.75	9.23	19.77	27.99
17.	Capita Adequacy Ratio [CAR(%)]	11.81	10.99	14.04	14.47	12.71	11.21	9.78	9.20

Source: Author's own estimate from data collected from Annual report(several years) and www.moneycontrol.com.

Table 2:- Post-merger financial performance of Oriental Bank of Commerce (Four years after) (in percentage)

Serial no.	Ratios	Oriental Bank of Commerce (Bidder Bank)			
		As on 31-03-2006	As on 31-03-2007	As on 31-03-2008	As on 31-03-2009
1.	Credit -Deposit Ratio	66.89	68.97	70.08	69.64
2.	Investment- Deposit Ratio	33.50	30.95	30.76	28.96
3.	Priority sector advance as % to total advance	35.12	33.08	32.13	31.01
4.	Deposit per employee	335.50	434.46	525.92	671.18
5.	Advance per employee	224.42	299.65	368.59	467.39
6.	Interest income as a % of total income	88.17	89.54	91.73	89.21
7.	Non-interest income as a % of total income	11.83	10.46	8.27	10.79
8.	Interest expenses as a % of total expenses	64.98	70.30	77.96	75.91
9.	Establishment expenses as a % of total expenses	12.94	10.54	8.31	8.53
10.	Other operating expenses as a % of total expenses	12.03	12.03	9.65	8.02
11.	Spread as a % to Assets	2.72	2.29	1.85	1.77
12.	Interest Income as % to average working funds	7.13	7.55	8.28	8.58
13.	Non-interest Income as % to average working funds	0.96	0.88	0.75	1.04
14.	Operating profit as % to average working funds	2.06	1.90	1.48	1.62
15.	Return on Asset	1.39	1.21	1.02	0.88
16.	Net NPA as % to net advances	0.49	0.49	0.99	0.65
17.	Capita Adequacy Ratio [CAR(%)]	12.46	12.51	12.12	12.00

Source: Author's own estimate from data collected from Annual report (several years) and www.moneycontrol.com.

Table 3 presents combined financial picture of Oriental Bank of Commerce and Global Trust Bank during pre merger period if they could have been taken together during 2000-01 to 2003-04.Result shows similar upward and downward picture of both banks in terms of selected financial parameters.

Table 3:- Combined average Profile of Oriental Bank of Commerce and Global Trust Bank for the last four financial years before the merger (in Percentage)

Serial no.	Ratios	Oriental Bank of Commerce and Global Trust Bank			
		As on 31-03-2001	As on 31-03-2002	As on 31-03-2003	As on 31-03-2004
1.	Credit -Deposit Ratio	48.95	48.39	49.97	45.13
2.	Investment- Deposit Ratio	49.90	46.60	42.84	40.10
3.	Priority sector advance as % to total advance	29.27	30.22	32.37	32.96
4.	Deposit per employee	420.49	385.69	373.7	359.81
5.	Advance per employee	215.51	184.3	182.70	225.04
6.	Interest income as a % of total income	87.84	81.24	79.99	75.40
7.	Non-interest income as a % of total income	12.17	18.76	20.02	24.60
8.	Interest expenses as a % of total expenses	70.36	67.20	56.71	44.03
9.	Establishment expenses as a % of total expenses	7.13	6.47	7.24	6.89
10.	Other operating expenses as a % of total expenses	10.52	11.1	10.21	8.76
11.	Spread as a % to Assets	2.04	1.98	1.93	1.22
12.	Interest Income as % to average working funds	10.48	9.71	8.71	6.91
13.	Non-interest Income as % to average working funds	1.47	2.24	2.12	2.10
14.	Operating profit as % to average working funds	2.19	2.49	2.01	2.005
15.	Return on Asset	0.76	0.72	-1.11	-4.81
16.	Net NPA as % to net advances	3.67	6.22	10.61	14.32
17.	Capita Adequacy Ratio [CAR(%)]	12.26	11.1	11.91	11.84

Source: Author's own estimate.

In case of merger between Oriental Bank of Commerce and Global Trust Bank, we have found, while comparing between pre and post merger financial performance that mean value of Credit -Deposit Ratio (48.11 vs 68.90, mean difference 20.29, growth rate 42.17%) has increased showing a mean difference of 20.29%

which shows significant appreciation in Credit -Deposit Ratio in terms of growth rate of 42.17%. Investment-Deposit Ratio has also decreased noticeably during post merger period as compared to pre-merger period indicating significant downward trend in the performance of banks' Investment- Deposit (mean value 44.86vs 31.01, mean diff. 13.82, growth rate:-30.81%) although priority sector advance as % to total advance have also increased noticeably during post merger period as compared to pre-merger period (mean value 31.21vs 32.84, mean diff. 1.63, growth rate: 5.22%). Interest income as a % of total income (mean value 81.12vs 89.66, mean diff. 8.54, growth rate 10.53%). Increase in Spread as a % to Assets during post merger period signifies that gap between interest income and interest expenses increases during this period which is good sign for the merged entity of the bank. Interest expenses as a % of total expenses (mean value 59.58 vs 72.29) has increased significantly resulting in broader customer base with more interest obligation of the merged entity. Likewise, Return on Asset, Deposit per employee, Advance per employee have noticeably increased during post merger period.

Operating profit as % to average working funds[mean value 2.17vs 1.77,mean diff. 0.40,growth rate(-18.43%)] during post merger period shows significant decline indicating that adverse changes have taken place in term of operating profit margin in post merger scenario. Capital adequacy is only one of the factors which limit bank's lending capabilities. CAR determines the bank's capacity to meet the time liabilities and other risks such as credit risk, operational risk etc. This ratio is used to protect depositors and promote the stability and efficiency of financial systems around the world. In the simplest formulation, a bank's capital is the "cushion" for potential losses, and protects the bank's depositors and other lenders. Capital Adequacy Ratio (mean value 11.78vs 12.27, mean diff. 0.49, growth rate 4.16%) has improved in post-merger period significantly. Establishment expenses as a % of total expenses (mean value 6.93vs10.08, mean diff. 3.15, growth rate 45.45%) ,other operating expenses as a % of total expenses(mean value 10.15vs10.43, mean diff. 0.28, growth rate 2.76%) show significant increase indicating that due to expansion of number of branches via merger ,establishment expenses and operating expenses may have probably been increased.

Non-interest income as a % of total income, Interest Income as % to average working funds, Non-interest Income as % to average working funds, Net NPA as % to net advances have also declined during post merger period which is beyond expectation. Net NPA as % to net advances (mean value 8.71 vs 0.66, mean diff. 8.05, growth rate -92.42%) significantly declined during post reform period indicating a decline in NPA of merged entity.

Therefore, it can be inferred that out of 17 performance indicators of the two banks, 11 financial indicators of Oriental Bank of Commerce and Global Trust Bank display significant improvement in their operational performance during post merger period and 6 financial indicators show decline in their operational performance.

Table 4:- Mean and Standard Deviation of Pre-merger and Post-merger Ratios of combined (Oriental Bank of Commerce and Global Trust Bank) and Acquiring Bank (Oriental Bank of Commerce)[considering four year pre and post]

		Mean	Mean Difference	Change in ratios	Std.Deviation	Growth Rate(%)
Credit -Deposit Ratio	Pre-merger	48.11		I*	2.09	42.17%
	Post-merger	68.90	20.29		8.00	
Investment- Deposit Ratio	Pre-merger	44.86	13.82	D**	4.29	-30.81%
	Post-merger	31.04			3.53	
Priority sector advance as % to total advance	Pre-merger	31.21	1.63	I	1.75	5.22%
	Post-merger	32.84			2.35	
Deposit per employee	Pre-merger	384.92	106.85	I	25.96	27.76%
	Post-merger	491.77			93.37	
Advance per employee	Pre-merger	201.89	138.12	I	21.60	68.41%
	Post-merger	340.01			85.44	
Interest income as a % of total income	Pre-merger	81.12	8.54	I	5.14	10.53%
	Post-merger	89.66			1.83	
Non-interest income as a % of total income	Pre-merger	18.89	8.55	D	5.13	-45.26%
	Post-merger	10.34			1.83	
Interest expenses as a % of total expenses	Pre-merger	59.58	12.71	I	11.89	21.33%
	Post-merger	72.29			5.91	
Establishment expenses as a % of total expenses	Pre-merger	6.93	3.15	I	0.34	45.45%
	Post-merger	10.08			2.18	
Other operating expenses as a % of total expenses	Pre-merger	10.15	0.28		1.00	2.76%
	Post-merger	10.43		I	1.38	
Spread as a % to Assets	Pre-merger	1.79	0.37		0.38	20.67%
	Post-merger	2.16		I	0.44	
Interest Income as % to average working funds	Pre-merger	8.95	1.37		1.54	-15.31%
	Post-merger	7.89		D	0.50	
Non-interest Income as % to average working funds	Pre-merger	1.98	1.06		0.35	-53.54%
	Post-merger	0.91		D	0.12	
Operating profit as % to average working funds	Pre-merger	2.17	0.40		0.23	-18.43%
	Post-merger	1.77		D	0.44	
Return on Asset	Pre-merger	-1.11	2.24	I	2.62	126.55%
	Post-merger	1.13			0.43	
Net NPA as % to net advances	Pre-merger	8.71	8.05	D	2.62	-92.42%
	Post-merger	0.66			0.39	
Capita Adequacy Ratio [CAR(%)]	Pre-merger	11.78	0.49	I	4.71	4.16%
	Post-merger	12.27			1.59	

***I stands for Increase**
****D stands for Decrease**
Source: Author's own estimate using e.views 5.

In case of merger between Oriental Bank of Commerce and Global Trust Bank, while we consider some fixed parameters like Credit -Deposit Ratio, Priority sector advance as % to total advance, Deposit per employee , Advance per employee, Interest income as a % of total income , Interest expenses as a % of total expenses , Establishment expenses as a % of total expenses , Other operating expenses as a % of total expenses, Spread as a % to Assets , Return on Asset, Capita Adequacy Ratio [CAR(%)], null hypotheses are rejected which lead us to conclude that there are significant differences between pre and post merger above mentioned financial indicators.

Regarding Investment- Deposit Ratio ,Non-interest income as a % of total income, Interest Income as % to average working funds, Non-interest Income as % to average working funds, Operating profit as % to average working funds, Net NPA as % to net advances, Interest Income as % to average working funds, Non-interest Income as % to average working funds, null hypotheses are also rejected signifying that there are significant differences between pre and post merger above mentioned financial indicators.

The results suggest that the performance of banks has been improved in terms of Credit -Deposit Ratio, Priority sector advance as % to total advance, Deposit per employee, Advance per employee, Interest income as a % of total income, Interest expenses as a % of total expenses, Establishment expenses as a % of total expenses , Other operating expenses as a % of total expenses, Spread as a % to Assets , Return on Asset, Capita Adequacy Ratio [CAR(%)],but regarding Investment- Deposit Ratio ,Non-interest income as a % of total income, Interest Income as % to average working funds, Non-interest Income as % to average working funds, Operating profit as % to average working funds, Net NPA as % to net advances, Interest Income as % to average working funds, Non-interest Income as % to average working funds, these ratios show negative trend in post merger period.

4. Conclusion

Empirical results suggest that after the merger, the efficiency and performance of banks have increased in terms of different financial parameters and the success of merger is reliant upon synergy gains created after the merger and overall performance of bank. In the above cases, Null Hypothesis, i.e. there is no difference in mean value of selected variables before merger and after the merger, is rejected in most of the variables and Alternate Hypothesis, i.e. there is a difference in mean value of selected variables before merger and after the merger, is accepted. Majority of the financial indicators of Oriental Bank of Commerce and Global Trust Bank display significant improvement in their operational performance during post merger period. Therefore, the results of the study reveal that average financial ratios of sampled bank in Indian banking sector showed a remarkable and significant improvement in terms of liquidity and leverage parameters, profitability, and shareholders wealth.

In conclusion, we can conclude that government should not be seen merger as a means of bailing out of weak banks. The empirical findings further suggest that strong banks should not be merged with weak banks, as it will have unpleasant consequence upon the asset quality of the stronger banks. The utmost cry of the day is that the strong banks should be merged with strong banks to compete with foreign banks and to enter in the global financial market.

References

Aharon David Y, Gavious Ilanit & Yosefa Rami (2010), “Stock Market Bubble Effects on Mergers and Acquisitions”, The Quarterly Review Of Economics and Finance, vol.50, 456–470.

Anand Manoj & Singh Jagandeep (2008), Impact of merger announcement on shareholders wealth:Evidence from Indian Private sector banks, Vikalpa: Journal for Decision maker,vol.33(1), pp.35-54.

Bakker, HJC and Helmink,JWA(2004),*Successfully Integrating Two Businesses*,Gowar Publishing, Humpshire.

Bruner,R.F(2004),Applied mergers and acquisitions,John Wiley and Sons Inc,New Jersey.

Panwar, S. (2011), Mergers & Acquisitions in Banking Industry – The Need of Hour,*International Journal of Contemporary Practices,* vol.1(2), p. 75-82.

Shanmugam, B. & Nair, M. (2004), Mergers & Acquisitions of Banks in Malaysia, *Managerial Finance,*vol. *(4)* p. 1-18.

DeLong, G.L. (2003). Does Long Term Performance of Mergers Match Market Expectations? Evidence from the US Banking Industry, *Financial Management,* p. 5-25.

DePamphilis,D.M(2005),*Mergers, Acquisitions and other restructuring activities*, 4th Edition, Elsevier.Inc. London.

Devos, E., Kadapakkam, P.R., & Krishnamurthy, S. (2008), How Do Mergers Create Value? A Comparison of Taxes, Market Power, and Efficiency Improvements and Explanations for Synergies. *The Review of Financial Studies*,vol. 22(3), March 27, 2008.

Kuriakose Sony ,M.S Senam Raju, N.V.Narasimham(2009), Voluntary Amalgamations in Indian Banking Sector: Valuation Practices and Adequacy of Swap ratios, Electronic copy available at: http// issn.com/abastract=1653698.

Mantravadi Pramod & Reddy, A Vidyadhar (2007), Mergers and operating performance: Indian experience,The ICFAI Journal of mergers and Acquisitions,vol.4,no.4,pp52-66.

Mehta Jay & Kakani Ram Kumar (2006), “Motives for Mergers and Acquisitions in the Indian Banking Sector – A Note on Opportunities & Imperatives”, SPJCM Working Paper: 06- 13, Retrieved From Http://Papers.Ssrn.Com/Sol3/Papers.Cfm?Abstract_Id=1008717.

Murthy, G.K (2007), Some cases of Bank merger in India: A study .In Bose,J(Ed), *Bank Mergers: The Indian Scenario*,(244-259), Hyderabad: The ICFAI University Press.

Müslümov Alövsat (2002),The Financial Analysis of Post merger Performance of Surviving Firms, *Yapi KrediEconomicReview*,Vol.13(1),RetrievedfromHttp://Papers.Ssrn.Com/Sol3/Papers.Cfm?Abstract_Id =890063.

Sinha Pankaj & Gupta Sushant (2011), Mergers and Acquisitions: A pre and post analysis for the Indian financial services sector, MPRA Paper 31253,Online at: http://mpra.ub.uni-muenchen.de/31253.
Suresh Kumar (2013), Impact of Bank Mergers on the Efficiency of Banks: A study of merger of Bharat Overseas Bank with Indian Overseas Bank, International Journal of Academic Research in Business and Social Sciences December 2013, Vol. 3, No. 12 ISSN: 2222-6990.
Paul.J(2003), Bank of Madura merger with ICICI Bank: An analysis,IIMB Management Review, vol.15(3),p40.
V.Radha Naga Sai ,.Syed Tabassum Sultan (2013) "Financial performance analysis in Banking sector- A Pre & Post Merger perspective" ABHINAN Vol,2,April 2013,ISSN 2320-0073 (pp56-66).
V. Sridhar (2004), The collapse of a bank, Frontline, Volume 21 - Issue 17, Aug. 14 – 27.
Saraswathi, K.V (2007), Crucial HR Management issues in Bank Consolidation: Some cases, .In Bose,J(Ed), *Bank Mergers: The Indian Scenario*,(226-243), Hyderabad: The ICFAI University Pres.
Wikipedia- Oriental Bank of Commerce and Global Trust Bank