Comparative Study of Performance of Indian Commercial Banks in the Era of Global Melt-Down

R. K. Uppal
Project Director UGC Sponsored MRP, D.A.V. College, Malout (Punjab)
rkuppal_mlt@yahoo.com

Abstract: The gap regarding the costs and profits is widening among the various bank groups. The present paper is an endeavor to study the comparative costs and profits to study the comparative costs and profits among partially and fully IT-oriented bank groups. The paper concludes that even the costs are high in partially IT-oriented bank groups but their profits are also lesser as compare to fully IT-oriented bank groups and there is significant correlation between operating costs and net profits but insignificant correlation between per employee expenditure and net profits. At the end, paper suggests some areas of comprehensive research.

Keywords: *Computerization of banks, ATMs, Costs, Profits in banks*

1. Introduction

LPG has created new competition along with new opportunities and challenges for Indian banking industry. At present, all the bank groups are operating under high competition and each bank group is trying to attract the potential customers with IT-oriented innovative products and services. Recent globalization developments have transformed the environment, in which commercial banks operate, throwing up opportunities as well as challenges. Basel I & II is another significant change which has been created inter and intra-bank group competition. WTO is another area for the banks which have created many opportunities and at the same time, it has thrown many serious challenges. The gap is widening between the fully IT-oriented and partially IT-oriented banks. The recent report on trend and progress of banking in India, March 2006 has shown that only 77.50 % branches of public sector banks are fully computerized whereas new private sector banks and foreign banks have all their branches fully computerized and IT-oriented as well.

Development is the dire need of time. Each and everything will have to develop according to the demand of time otherwise; it will be eradicated from the world. To keep this view in mind our Indian banking industry is developing as per the needs of hour. At the time of independence, the banking system in India was fairly well developed with over 600 commercial banks operating in the country. To ensure better coverage of the banking needs of larger parts of the economy and the rural constituencies, the Government of India created the State Bank of India (SBI) in 1955. Despite the progress in 1950s and 1960s, it was felt that the creation of the SBI was not far reaching enough since the banking needs of people were still not covered sufficiently. In 1969 the 14 largest public sector banks were nationalized which raised the public sector banks share of deposits. The two main objectives of the nationalization were rapid branch expansion and the channeling of credit in line with the priorities of the five years plans. Six more banks were nationalized in 1980. The second wave of nationalization occurred because control over the banking system became increasingly important as a means to ensure priority sector lending, reach the poor through a widening branch network and to fund rising public deficits. Indian banking sector had faced severe structural problems by the end of the 1980s. To face these problems economic reforms were started with the recommendation of Narasimham Committee in 1991. The economic liberalization and globalization has brought new challenges for the whole business particularly to the banking sector due to structural changes in financial market, stiff global competition, dis-intermediation, increased market volatility, introduction of prudential norms, deregulation, mandatory disclosures, rapid technology advancements, customer awareness and expectations, entry of new entrants etc. These all challenges have created significant pressure on the stability and viability of Indian banks. New environmental changes have created the compulsion on Indian banks to reposition themselves so as to become cost effective and market oriented for their survival and growth.

Table 1: Computerization in Public Sector Banks (As on March 31st, 2006)

Technology	Percent
Branches already fully computerized*	48.50
Branches under Core Banking Solutions	28.90
Fully Computerized Banks	77.50
Partially Computerized Branches	18.20

Note: *Other than branches under CBS

There are very few banks in case of public sector banks, which are fully computerized as it can be observed from table 2 that only 10% public sector banks are fully computerized whereas others have their branches computerized to some extent.

Table 2: Computerization of Branches in Public Sector Banks (As on March 31st, 2006)

Extent of Computerization (Percent	Number of Banks
Nil	-
Up to 10	1
10 to 20	-
20 to 30	2
30 to 40	2
40 to 50	-
50 to 60	3
60 to 70	2
70 to 80	2
80 to 90	-
90 to 100	5
100 percent (Fully Computerized)	10
Total*	**27**

Note: *Excludes IDBI Ltd.
Source: Report on Trend & Progress of Banking in India, 2005-06, p. 97

Similarly Table 3 indicates that foreign banks and SBI bank group have the maximum off-site ATMs as %age of total ATMs whereas old private sector bank group have the least off-site ATMs as compared to others having 31.90% of total ATMs.

Table 3: Branches and ATMs of Scheduled Commercial Banks (As on March 31st, 2006)

Bank Group	Number of ATMs			%age of Off-site to Total ATMs
	On-site	Off-site	Total	
G-I	4812	2353	7165	32.80
G-II	1775	3668	5443	67.40
G-III	1054	493	1547	31.90
G-IV	2255	3857	6112	63.10
G-V	232	648	880	73.60
Total	**10128**	**11019**	**21147**	**52.10**

In the present scenario, it is pertinent to note whether costs and profits are moving in the same direction in the fully and partially IT-oriented bank groups and some strategies should be prepared to reduce the operational cost, per employee expenditure and per branch expenditure in all the bank groups particularly in the public sector banks. The present study is concerned that how costs and profits are moving in the different bank groups.

Some studies conducted in India and abroad related to this aspect but not in large numbers. Vashisht (2004) analyzed the functioning of commercial banks in the globalized environment. Uppal & Kaur (2006) studied

the cost and benefit analysis to suggest best portfolio for deposits, borrowings, investments and advances. Narasimham & Thampy (2002) analyzed activity based costing in banks. A very few studies have been conducted in this area so we hope that this paper will be an addition to the existing literature in this area. The objectives of the study are

1. To study the trends in costs and profits of partially and fully IT-oriented bank groups.
2. To study and analyze the correlation between costs and profits of partially and fully IT-oriented bank groups.

2. Review of Literature

Chhimpa (2002) proposed a view that bank credit itself is being encroached by other financial instruments and non-banks. In these competitive times, bank lending decisions require relevant and credible information architecture to control credit process and help framing future views on the activity under lending consideration, interest rates, flow of money etc. Combination of modern tools of risk management, experience of and maturity in lending banker, hopefully minimize inflow of future NPAs. Any help from external environment could be bonus on that. Gupta and Kumar (2004) analyzed that redeeming feature of banking sector reforms is the continuing fall in gross and net NPAs as a proportion of total assets for all bank groups except private sector banks. Huge backlog of NPAs needs resolution of the earthiest as otherwise it can weaken the foundation of entire financial system. Gujral (2003) examined that with the enactment of this landmark Securitization Act, though a giant leap forward has been taken, yet there is a still a long way to go. The Act is not a financial TADA. It is a tool and not a weapon in the hands of the bank to shoot the defaulters. It is an enabling provision, an extra right, which will be used by banks very sparingly, as a last resort to nail the hardware defaulters only. This Act is certainly not a toothless piece of legislation. But eventually it is the end result that will tell on the judgment day, otherwise NPA blues will continue to haunt bank though in a different way.

Jain (2000) suggests some solutions for a strong banking. He suggest that technology changes, human resource development, improvement in corporate governance, reforming legal system and rural finance will help in making banking system strong. There will be greater role for IBA in co-ordination among banks for cost reduction, use of technology, sharing of information for better risk management and in all the important strategies and solutions narrated above. Kaveri (2001) suggest some strategies given by RBI to prevent the NPAs. Other strategies to prevent the NPAs are stock inspection, study of ledger book transactions, scrutiny of periodicals statements and discussions with borrowers and co-bankers. Kumar (2000) concludes that if NPA recovery rate is high, further disbursement would be automatically high. However, if NPA rise beyond the manageable limits, the health of the banking system would be jeopardized and the recycling of funds which is the key element in development would be severely stilled. An effective monitoring and control, aided by proper legal reforms would change the contours of NPA in Indian banking on par with internal standards and build resilience for a stronger and vibrant financial system to realize the objectives of the reforms measures implemented so far. Lahiri and Mokashi (2000) emphasis on a capital adequacy for strong banking system. They suggested that meeting regulatory capital requirement, is however, not a substitute for banks own assessment of their economic capital and all banks eventually need to arrive at and comply with their economic capital levels where they exceed the regulatory capital levels.

Prasad, Sinha and Prasad (2004) examined that NPAs has direct relation to the behavior of the economy as a whole. The increase in quantum of NPAs should not cause a panic, since every year more than Rs. 10,000 crore is realized in NPA accounts. The government of India and the RBI has taken various steps in strengthening the functioning of Debt Recovery Tribunals (DRTs) and evolving a comprehensive settlement policy, which will certainly speed up the recovery in NPA accounts. Samal (2002) proposed a view that it is not possible to eliminate totally the non-performing assets in the banking business but can only be minimized. It is always wise to follow the proper policy appraisal, supervision and follow-up of advances to avoid NPAs. For reduction of NPAs, though there is a greater need of political threat and effective enactment of laws to recover NPAs, the banks should also take advantage of Debt Recovery Tribunals, Lok Adalat, the legislations enacted by the state government and one time settlement scheme. Talwar (2000) emphasized that financial stability requires appropriate action at both the micro and macro level. The micro dimensions

consist of three pillars- institutions, market and infrastructure. Preventive attention by the regulators must then focus on each of the three pillars supporting both the domestic and international financial system namely, the good health of financial institutions through appropriate regulation and supervision, proper functioning of the market and establishment of a sound infrastructure, establishing transparent accounting and adequate disclosure standards.

Hypothesis

Costs and profits of partially and fully IT- oriented bank groups are insignificantly correlated with each other.

3. Research Methodology

The present paper is concerned with the Indian banking industry in the post second banking sector reforms era i.e. 1999-2000 to 2005-06. This period for study is deliberately chosen because a lot of changes occurred during this period and there is a transformation in many banks. The industry is further divided into five parts as below:

G-I:	Nationalized Banks
G-II:	SBI and Its Associates
G-III:	Old Private Sector Banks
G-IV:	New Private Sector Banks
G-V:	Foreign Banks

Further, these bank groups are divided into two parts:

Part A comprises partially IT-oriented banks (G-I, II & III)
Part B comprises fully IT-oriented banks (G-IV & V)

Parameters of the Study:

Net Profits as %age of Total Assets	Y_1
Operating Expenses as %age of Total Assets	X_2
Per Employee Expenditure	X_3

Various statistical techniques like average, standard deviation, co-efficient of variation and t-test are applied to get the desired results where R-square is also calculated to study the extent of effect of independent variables on the dependent variable. Here net profits as percentage of total assets is taken as dependent variable while operating expenses to total assets and per employee expenditure are taken as independent variable. All statistical calculations are made with the help of SPSS 10.00 version.

Database
1. Report on Trends and Progress of Banking in India, 2005-06
2. Various Issues of Performance Highlights, 1999 – 2006

4. Results and Discussion

Trends in Costs and Profits

Operating Expenses as %age of Total Assets: Table 4 shows that operating cost as percentage of total assets is in fluctuating trend in all the bank groups during the study period. On an average, G-V shows the highest ratio of operating cost i.e. 2.93 % as G-IV shows the least cost having 1.76% average ratio with the highest fluctuations of 21.51% in terms of C.V. which shows that there is much competition in this bank group that contributes to reduce their costs and the least operating cost as shown in this table. Year-wise average operating expenses to total assets is the highest in 2000-01 i.e. 2.44% and it is mainly due to the implementation of IT Act and hence increase in cost because of new infrastructural development for technology advancements whereas it is the least in the year 2001-02 i.e. 2.14% with the highest fluctuations in the same year at 32.24% rate in terms of C.V. and this decline is a result of implementation of the technology.

Table 4: Operating Expenses as %age of Total Assets (Percent)

Bank Group	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
G-I	2.53	2.76	2.40	2.33	2.21	2.18	2.02	2.35	0.25	11.40
G-II	2.46	2.66	2.11	2.11	2.21	2.14	2.28	2.28	0.21	9.21
G-III	2.17	1.99	2.07	2.05	1.97	1.96	2.09	2.04	0.34	16.16
G-IV	1.42	1.75	1.10	1.96	2.04	2.06	2.00	1.76	0.37	21.51
G-V	3.22	3.05	3.00	2.79	2.77	2.88	2.79	2.93	0.13	5.80
Average	2.36	2.44	2.14	2.25	2.24	2.24	2.24			
S.D.	0.65	0.55	0.69	0.33	0.31	0.37	0.33			
C.V.	27.54	22.54	32.24	14.57	13.83	16.52	14.73			

Per Employee Expenditure: Table 5 shows increasing trend in per employee expenditure in G-I, II & III whereas G-IV & V shows decreasing trend during the study period. On an average, it is the least in G-I with 14.62% ratio mainly because of more number of employees they have whereas it is the highest in G-V i.e. 78.22% and G-IV is in succession with 54.94% per employee expenditure as these bank groups are still establishing new branches in the market and having lesser number of employees as compared to that of public sector banks. Yearly-basis, average per employee expenditure is the least in the year 1999-2000 i.e. 31.19% but it is the highest in 2002-03 i.e. 42.39% and the fluctuations are also highest in the year 1999-2000 but fluctuations are almost high in all the years under study which shows that there is healthy competition in all the bank groups under study.

Table 5: per Employee Expenditure (Percent)

Bank Group	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
G-I	9.76	12.22	14.30	15.14	15.85	16.71	18.36	14.62	2.88	19.70
G-II	9.30	12.83	14.53	15.68	16.48	17.25	19.57	15.09	3.32	21.33
G-III	13.80	15.35	18.34	18.99	19.88	20.11	21.86	18.33	2.82	15.31
G-IV	46.76	55.23	50.76	75.51	60.91	47.88	47.52	54.94	10.39	18.11
G-V	76.33	85.26	92.99	86.61	74.21	63.65	68.53	78.22	10.52	13.44
Average	31.19	36.18	38.19	42.39	37.47	33.12	35.17			
S.D.	29.67	32.88	34.22	35.55	27.91	21.45	22.18			
C.V.	95.13	90.88	89.60	83.86	74.49	64.76	63.06			

Net Profits as %age of Total Assets: Table 6 exhibits that there is an increasing trend in net profits to total assets ratio in G-I & II till 2003-04 and further starts to decrease in the remaining years whereas G-III, IV & V shows fluctuating trend. On an average, G-V shows the highest ratio of net profits to total assets i.e. 1.35% and G-IV & II are in succession with 0.85% & 0.84% respectively. G-III shows the highest fluctuations of 40.96% in term of C.V. with 0.83% of average net profits to total assets. Yearly-basis, 2003-04 shows the highest net profits to total assets ratio i.e. 1.18% and the highest fluctuations are in the year 2001-02.

Table 6: Net Profit as %age of Total Assets (Percent)

Bank Group	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	Average	S.D.	C.V.
G-I	0.44	0.33	0.69	0.98	1.19	0.89	0.81	0.74	0.30	27.02
G-II	0.80	0.55	0.77	0.91	1.02	0.91	0.86	0.84	0.15	17.86
G-III	0.81	0.59	1.08	1.17	1.20	0.33	0.59	0.83	0.34	40.96
G-IV	0.97	0.81	0.44	0.90	0.83	1.05	0.97	0.85	0.20	23.53
G-V	1.17	0.93	1.32	1.56	1.65	1.29	1.52	1.35	0.25	23.53
Average	0.84	0.64	0.86	1.10	1.18	0.89	0.95			
S.D.	0.27	0.23	0.34	0.28	0.30	0.35	0.35			
C.V.	32.14	35.94	39.53	25.45	25.42	39.32	36.84			

Overall, it is concluded that even the operating cost ration and per employee cost is the highest in foreign banks though their net profits are also the highest among all the bank groups under study and new private banks are following them with the use of advanced technology and attractive marketing strategies but partially IT-oriented bank groups that are SBI group, nationalized banks and old private sector banks are lagged behind even having lesser costs.

Statistical Analysis

Co-efficient Correlation and R-Square Effect between Operating Cost Ratio (X_2) and Net Profit Ratio (Y_1): Table 7 shows significant (at 1% level) and negative correlation between Y_1 and X_2 in G-I, II & V that means with the increase in operating cost, net profits will decrease and vise-versa and again this impact will be to the extent of 0.59%, 0.46% & 0.64% respectively in terms of R-Square that shows the extent of change in dependent variable due to change in independent variable. G-IV shows positive and significant correlation (0.73%) with 0.53% R-Square impact. Overall, the hypotheses that there is insignificant correlation between net profits and operating costs is rejected in all the bank groups except G-III that means this bank group have insignificant correlation between the two variables. R-square is the highest in G-V i.e. 0.64% which shows that with the change of one unit in operating cost; profits will change to 0.64%.

Table 7: Co-efficient of Correlation and R^2 Effect

Bank Group	Operating Exp. %age of Total Exp. Vs. Net Profits %age of Total Assets		Per Employee Expenditure Vs. Net Profit %age of Total Assets	
	r	R^2	r	R^2
G-I	-0.77*	0.59	0.74*	0.55
G-II	-0.68*	0.46	0.49	0.24
G-III	0.15	0.02	-0.02	0.004
G-IV	0.73*	0.53	-0.07	0.005
G-V	-0.80*	0.64	-0.23	0.05

Note: *Correlation is significant at the 0.05 level (1 – tailed)

Co-efficient Correlation and R-Square Effect between Per Employee Expenditure (X_3) and Net Profit Ratio (Y_1): Table 7 shows that the hypotheses 'there is insignificant correlation between per employee expenditure and net profits' is accepted in all the bank groups except G-I as correlation is insignificant and negative between the both variables where in G-I, it is positive and significant as per employee expenditure cause 0.55% change in net profits with the change of one unit in per employee expenditure. R-Square is the highest in G-I i.e. 0.55% whereas other bank groups have negligible impact of per employee expenditure on the net profits. Overall, it may be concluded that operating cost have significant correlation with the net profits but per employee expenditure not have. That means operating cost is directly or indirectly affecting the net profits so should be taken care of that with some effective strategies to maintain balance between the both. As we have now examined that, even the costs are lesser in partially IT-oriented bank group but still they have lesser profits as compared to that of fully IT-oriented bank groups.

Implications of the Study

The study is mainly concerned with the comparative analysis of costs and profits of partially and fully IT-oriented bank groups to examine that how much and to what extent costs are affecting the profits of bank groups. As there are less number of studies in this area, so this paper will provide platform to the researchers and academicians to go for further detailed research in this area and it will also help to the policy makers, bankers and other interested parties to take important decisions.

5. Conclusion

From this analysis, we may conclude that there is a need to manage the costs of partially IT-oriented bank groups in co-operation with their profits because we have examined that their costs are less as compare to that of fully IT-oriented banks and that is because of lesser adoption of advanced technology but their profits are also the least as compared to that of fully IT-oriented banks. Fully IT-oriented banks are ahead because

they are using advanced technology in combination of innovative products and services along with attractive market strategies. Therefore, partially IT-oriented bank groups should also come up with the advanced technology even their cost will be increased at initial stage but it will produce handsome results with their increased profits as in the fully IT-oriented banks.

Future Areas of Intensive Research
1. Comparative study to analyze the impact of each variable of operating cost on profits.
2. A comprehensive study to examine the costs and profits of partially IT-oriented banks at bank level in comparison to fully IT-oriented banks.
3. Study on implementation of ABC costing in banking industry at large scale.

References

Chhimpa, J. (2002). Incremental NPA: Stem that Inflow, *Vinimaya*, 23(3): 18-21.
Gupta, S. and Kumar, S. (2004). Dimensions and Prospects of Non-performing Assets: Challenges before the Banking Sector Reforms in the New Millennium, Ed. Book Banking in the New Millennium, New Delhi.
Gujral, N. (2003). NPA Blues and the Securitization Act, *Vinimaya*, 24(1): 13-23.
Jain, J. (2000). Strategies and Solutions for a Strong Banking, Proceedings of the Bank Economist Conference 2000: 48-50.
Kumar, R. (2000). NPA Management for Better Banking, Proceedings of the Bank Economist Conference 2000: 68-73.
Kaveri, V. S. (2001). Prevention of NPA Suggested Strategies, *Vinimaya*, 23(8): 7-9.
Lahiri, A. and Mokashi, R. (2000). New Basle Guidelines on Capital Adequacy, Proceedings of the Bank Economist Conference 2000: 118-123.
Narasimham, M.S. & Thampy, A. (2002). Activity Based Costing in Banking Service: A Case Study of a Large Indian Private Sector Bank, *Prajnan*, 31(2): 95-110
Prasad M., Sinha, K. K. and Prasad, K. M. (2004). Post-reform Performance of Public Sector Banks with Special Reference to Non-performance Assets, Edited Book Banking in the New Millennium, New Delhi.
Samal, B. (2002). The NPA Overhung: Magnitude, Solution and Legal Reforms, *Vinimaya*, 23 (3): 12-17.
Talwar, S. P. (2000). Financial Stability and the Role of Banks, Proceedings of the Bank Economist Conference 2000: 109-113.
Uppal, RK & Kaur, R. (2006). Globalization of Indian Banking Sector- Challenges and Future Prospects, Paper Presented in International Conference on Global Arena- Challenges of Tomorrow, New Delhi, 28-30th December.
Vashist, A. K. (2004). Commercial Banking in the Globalized Environment, *Political Journal of India*, 13(2): 1-10