Efficiency of Private Sector Banks in India (2005-2010)

P Varadharajan, Dr P Vikkraman

Abstract

*The main focus of the study on "Efficiency of Private Sector Banks", was to measure the efficiency levels of the 15 private sector banks taken for the study. The secondary objectives were to compute and evaluate the details of the input and the output of the different banks to analyze the performances in each of the five years and to rank the three most efficient and three least efficient banks. The significance of the study, apart from measuring efficiency, relates to the best practices of the banks to achieve a high level of efficiency. The deposits, advances, non performing assess (NPAs), interest and operating expenses and the investments were taken and the efficiency score% was computed using the formula output/input *100. Further, the mean scores were compiled to discover the independent and overall efficiency and the year of highest efficiency. The findings of the study were that the NPAs posed a major threat to the bank. The failure to monitor the quality of assets was the main problem behind the NPAs. Also, the credit processes were not scrutinized properly unless there was a fall in any of the years. Lending to the priority sectors also contributed much to the NPAs. Based on the study, the recommendations include, conducting recovery camps, increasing customer database, continuous monitoring of the quality of assets and stricter credit policies. It was concluded that the formation of unique strategies for each issue stated above and providing customized services would alone assist the banks to uphold their efficiency levels.*

INTRODUCTION

Private banking in India has been there since the beginning of the banking system in India. The first private bank to be set up in India was IndusInd Bank. IDBI, a private sector bank, is the tenth largest development bank in the world. Initially, all the banks in India were private banks, which were established in the pre-Independence era to cater to the banking needs of the people. In 1921, three major banks i.e. Bank of Bengal, Bank of Bombay and Bank of Madras, merged to form the Imperial Bank of India. In 1955, after the declaration of the first-five year plan, Imperial Bank of India was subsequently transformed into SBI. Following this,the nationalization of major banks in India occurred on 19 July 1969. The Government of India issued an ordinance and nationalized fourteen of the largest commercial banks of India, including PNB, Allahabad Bank, Canara Bank, Central Bank of India, etc. Thus, public sector banks revived to take up leading roles in the banking structure.

In 1994, the Reserve Bank of India issued a policy of liberalization to license a limited number of private banks, which came to be known as New Generation tech-savvy banks. Global Trust Bank was, thus, the first private bank after liberalization; it was later amalgamated with OBC. Then HDFC became the first to receive an 'in principle' approval from the RBI to set up a bank in the private sector. At present, Private Banks in India include leading banks like ICICI, ING Vysya Bank, Kotak Mahindra Bank, etc. Undoubtedly, being tech-savvy, private banks play a vital role in the Indian banking industry.

STATEMENT OF THE PROBLEM

India's public sector banks (PSBs) are compared unfavorably with their private sector counterparts, domestic and foreign. Efficiency measures a firm's performance relative to a benchmark at a given point in time. While determining the efficiency between public and private sector banks,

there arise several differences like objectives, output produced, freedom in decision-making, models adopted and different constraints faced in their operations. The results thus obtained are also not wholesome and are subject to variations. Hence, the efficiency of the private sector banks has been only studied exclusively, since the private sector has gained importance in the recent years.

SIGNIFICANCE OF THE STUDY

The measurement of efficiency of banking institutions serves two important purposes. It helps to benchmark the relative efficiency of an individual bank against the 'best practice' banks and secondly, it helps to evaluate the impact on various stakeholders like customers, investors etc. It also paves way for researchers to mark this as a base for further examination of the efficiency of these banks in the later years, given the reforms in economic policies. The more efficient a financial system is in such resource generation and in its allocation, the greater is its contribution to productivity and economic growth. As resource allocation improves and real returns increase, savings would presumably respond and higher resource generation should result. Because banks provide transaction services and payment systems, an efficient banking system has significant positive externalities, which increases the efficiency of economic transactions in general. In the Indian context, the unfolding of a slew of financial sector reform measures since the early 1990s has been present. An important objective of these measures is to increase the operational efficiency of the banking sector as a whole, as well as those of individual institutions. However, efficiency measurement in this sector is not straightforward because it is difficult to define and measure both the inputs and outputs of a bank. There is also the question of the various concepts of efficiency that can be employed to compute relative efficiency scores of individual banks. This study takes into account the main inputs and outputs of a bank in common. Once the efficiency scores are worked out, appropriate policies to enhance efficiency can be designed. However the dimensions along which performers are clearly demarcated from non-performers are properly identified.

OBJECTIVES OF THE STUDY

Primary objective:

To measure the efficiency of the private sector banks in India from among the banks selected for the study.

Secondary objectives:

- To compare the interest and non-interest expenses of the various private sector banks.
- To weigh against the NPAs, advances, deposits and investments of the private sector banks.
- To observe the different amounts of total input and output of the various private sector banks.
- To know the amount of risk present for each element pertaining to the input and the output.
- To calculate the efficient scores of the banks and compare them.
- To rank the three least and the three worst banks, based on the study.

SCOPE AND LIMITATIONS

The study of the efficiency of private banks in India is confined only to the private sector banks of the country. Within the private sector banks, only fifteen banks, have been covered. Further, the data required for efficiency alone has been taken for analysis for the purpose of measurement of efficiency of the selected banks .

LIMITATIONS

- The study is restricted to only fifteen private sector banks taken for the purpose of measurement of efficiency.
- The study confines itself to data from the past five years only.
- The results are limited to the tools used for measurement of efficiency.

THEORETICAL FRAMEWORK

T T Ram Mohan and Subhash C Ray (2004), made a comparison of the efficiency between the public sector banks with their private

counterparts by employing three measures namely Tornquist total factor productivity growth, Malmquist efficiency and revenue maximization efficiency over the period 1992-2000. Out of the six comparisons conducted, the Public Sector banks were at a disadvantage only once and hence had a strong sense of efficiency and productivity. **Abhiman Das Ashok Nag, Subhash C Ray (2005)**, measured the efficiency of all commercial banks using the nonparametric method of data envelopment analysis (DEA). Alternative sources were also used to find the efficiency because of the differences in the objectives and constraints amongst private and public banks. The sources of inefficiencies were found and an attempt was made to find out if liberalization enhanced the efficiency. An important consequence of liberalization was that a bank is now able to go to the stock market to raise equity and thereby absorb a greater degree of risk than before. **Rakesh Mohan (2006)**, in his paper, explored the impact of the banking sector productivity on the rest of the economy. Further a review of the banking sector reforms was made, followed by measurement of productivity and the efficiency of Indian Banking. Finally, the areas germane to this sector at that juncture were provided. **B S Badola, Richa Verma (2006)** identified the key determinants of profitability of Public Sector Banks in India. The analysis was based on step-wise multivariate regression model used on temporal data from 1991-92 to 2003-04. The study has brought out that the variables non-interest income, operating expenses, provision and contingencies and spread have significant relationship with net profits. **Petya Koeva (2003)** provided new empirical evidence on the impact of the liberalization on the performance of Indian Commercial banks. The analysis focuses on examining the behavior and determinants of bank intermediation costs and profitability during the liberalization period. The results suggest that ownership type has a significant effect on some performance indicators and that the observed increase in competition during financial liberalization has been associated with lower intermediation costs and profitability of Indian banks. **Dr K S Srinivasa Rao and Prof Chowdari Prasad (2003)**, dealt with the ranking of the banks with the help of the Camel model. Further, certain ratios were used to support criteria like efficiency and profitability ratios. Finally a transitional analysis, categorizing the banks as best, better, good and moderate was done. **Galagedera, Don U A, Edirisuriya, Piyadasa (2005)**, in their paper, investigated the efficiency and productivity in a sample of Indian commercial banks over the period 1995-2002. Measurement of efficiency was done using the data envelopment analysis technique and productivity change using Malmquist productivity index. The results revealed that there had been no significant growth in productivity during the sample period. When analyzed separately, the public sector banks revealed a modest growth in productivity that appeared to have been brought about by technological change. The private sector banks indicate no growth. In general, smaller banks are less efficient and highly efficient banks have a high equity to assets and high return to average equity ratios. **Varadi Vijay Kumar, Mavaluri Pradeep, Boppana Nagarjuna (2004)**, in their paper, measured the efficiency of all the banks of India using the Data Envelopment Analysis by selecting the weights that maximize each bank's efficiency score under the conditions that no weight is negative, that any bank should be able to use the same set of weights to evaluate its own efficiency ratio, and that the resulting efficiency ratio must not exceed one. Productivity, profitability, Asset quality and Financial Management ratios were calculated for each sector banks. They were later categorized under efficient, less

> Competition is very acute between the private and public sector and within the private sector itself. Hence, every bank needs to formulate its own strategies in order to reduce the losses prevailing from the increased expenses as well as the non-performing assets. The overall model adopted must be developed in such a manner that it is agile and amiable to the policies of the Government/RBI, as well as to the economic slumps.

efficient and inefficient. In Public sector banks, most of them fell into efficient and less efficient and private sector banks fell into less efficient and inefficient while foreign banks showed wide disparities. **Allen N. Berger, David B. Humphrey (1997)**, in their paper, estimated the efficiency of the U.S commercial banks using the frontier analysis. After measuring the efficiency through the parametric and non-parametric methods, the average efficiency and dispersion of efficiency for U.S. commercial banks was found. Finally, the similarity of average efficiency estimates across countries and by the type of financial institution was done and the results of 21 nations were compared and some new directions for future research were recommended. **Amandeep Singh and Ankush Mahajan (2010)**, showed the performance of the banks in Bathinda region during recession. Using the non-performing assets, loan disbursements of the banks and trends in savings of the banks, the performance was judged. T-test was also used. The results indicated that the performance of the Public sector banks was much better than the private sector banks during the time taken for the study. **Dr Vikas Chowdary, Dr Sanjeev Gupta (2008)**, attempted to analyze the total factor productivity changes of Indian public sector banks during the post reforms period from 1991-2007. A non parametric Malmquist productivity Index was applied to calculate productivity. Total factor productivity was decomposed into technical efficiency and technological change and technical efficiency change was further decomposed into pure efficiency change and scale efficiency change. It was concluded that the efficiency of the banks showed a declining trend in the period of the study. **Rachita Gulati (2011)**, measures the extent of technical, pure technical and scale efficiencies of Indian domestic banking industry using the non-parametric technique of data envelopment analysis. The empirical results show that only 9 of the 51 domestic banks operating in the financial year 2006/07 are found to be efficient and, thus define the efficient frontier of the Indian domestic banking industry. The new private sector banks dominated in the formation of the efficient frontier. However, significant differences between large and medium banks appeared with regard to scale efficiency. The results pertaining to Tobit analysis revealed that the exposure to off-balance sheet activities and profitability are the most influential determinants of the technical efficiency. **B S Bodia and Richa Verma Bajaj (2007)** analyzed the efficiency of 29 private sector banks in India using the DEA analysis. The results of the study indicated that there was a lot of scope for the private sector banks to improve their efficiency level as at the most, only around 30% of the private sectors were found to be efficient, with main concentration towards reducing the NPAs.

RESEARCH METHODOLOGY

Research Design

Descriptive research is used for the purpose of this study. Descriptive research is a type of conclusive research. It describes attitudes, perceptions, characteristics and situations. It allows the researcher to have considerable background knowledge relating to the problem and helps build on previously generated information. The relation between two variables is brought out for which the sample selection and the size would be representative of the target population. Further, this type of research requires that the research plan should be clear and properly structured and there are substantial amounts of resources. Findings obtained from descriptive studies are conclusive and the results can be used for decision making.

Sample Size

The study was done with fifteen private sector banks of India as sample.

Source of data

Secondary data was used for the study, which encompassed websites, magazines, newspapers, financial statements and research papers.

Sample Technique

Probability sampling method was adopted for the study. It is a method of sampling that

utilizes some form of random selection. Amongst the various types of probability sampling, simple random sampling in which n units out of N such that each NCn has an equal chance of being selected, has been used.

Tools Used For The Study

The following were the tools used to measure the objectives:

Mean : The arithmetic mean, often referred to as simply the mean or average when the context is clear, is a method to derive the central tendency of a sample space. Suppose we have sample space. $\{x_1, \ldots, x_n\}$

Then the arithmetic mean A is defined via the equation.

$$A := \frac{1}{n} \sum_{i=1}^{n} x_i$$

STANDARD DEVIATION

Standard deviation shows how much variation or "dispersion" there is from the "average" (mean, or expected/budgeted value). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data are spread out over a large range of values. In finance, standard deviation measures the volatility of a specific element like investment.

DEA

Data Envelopment Analysis is widely used to measure the relative productivity of various financial institutions such as banks, insurance companies and mutual funds. DEA was first applied by Sherman and Gold (1985) for assessing the efficiency of the branches of banks. In the banking industry, the DEA model is preferable to the econometric approach of efficiency measurement because it has numerous advantages. It can simultaneously analyze several inputs and outputs, which is an attractive characteristic as production in banking industry involves multiple inputs and outputs. This model is used to derive a single aggregate score, which indicates the performance status of each decision making unit relative to a designated group of peers. This model is capable of any perceived slack in inputs used or output produced and provides insights into the possibilities of increasing output and/or conserving inputs in order for an inefficient decision making unit to become efficient. The model calculates maximal performance measure for each production unit relative to all other production units in the observed population with the sole condition that each production unit lies on or below the extreme frontier. DEA uses the principles of linear programming theory to examine how a particular decision making unit like a bank operates relative to other units in the same sample. Efficiency is measured as the ratio of outputs to inputs. An efficient firm does not necessarily produce the maximum level of output, given the set of inputs. Rather, efficiency means that the firm has the 'best practices' in the sample. The input variables considered are interest expenses, operating expenses and NPAs. The outputs considered include deposits, advances and investments. The study analyzes the performance using 'production approach' where the banks are considered service providers.

ANALYSIS AND DISCUSSIONS:-

Table 1.1: Table showing the mean efficiency scores of the banks

BANK	LVB	BOR	KOTAK	SIB	CUB	DHANA	DCB	FED
MEAN (in %)	149.65	513.45	482.20	378.71	244.85	220.30	158.38	561.23
BANK	HDFC	ICICI	INDUS	ING VYS	J&K	KVB	KARNAT	MEAN
MEAN (in %)	550.74	186.55	211.21	237.94	365.45	737	265.47	350.94

The table 1.1 demonstrates the mean efficiency scores of the fifteen banks taken for the study. As depicted, there are fluctuations in the efficiency levels of all the banks. The range of efficiency falls between 149% (Lakshmi Vilas Bank) to 737% (Karur Vysya bank). The mean score of all fifteen banks is 350%. The other banks which have performed quite well are Federal Bank (560%), HDFC Bank (550%) and Bank of Rajasthan (513%). The other banks which have depicted poor levels of efficiency are ICICI Bank and Development Credit Bank with scores of 159% and 186% respectively. However there have been large differences in the performance of efficiency of the private sector banks as the difference between the highest and lowest scores have been nearly 590%.

Figure 1.1: Figure showing the mean efficiency scores of the banks

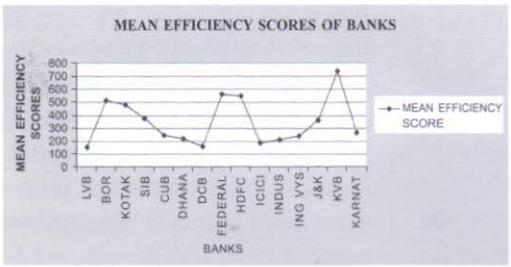


Table 1.2 : Table showing the efficiency score wise frequency distribution of the banks from 2005-10

RANGE	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10
0-100	2	0	0	1	1
100-200	5	3	5	2	2
200-300	3	8	2	5	4
300-400	4	0	2	3	0
400-500	0	0	0	1	3
500-600	0	2	2	0	1
600-700	1	0	2	1	1
700-800	0	0	0	2	1
800-900	0	1	1	0	2
900-1000	0	1	1	0	0

Table 1.2 shows the number of banks in each range of efficiency scores of the banks during the five years. In the year 2005-06, a maximum of five banks fell in the range of 100-200. There was only one bank with efficiency score range of 600-700. In the year 2006-07, banks fell in the range of 200-300 and one bank each fell in ranges of 800-900 and 900-1000. The year 2007-08 saw 5 banks in the range of 100-200 and one each in the range of 800-900 and 900-1000. In 2008-09, there were 5 banks between the score of 200-300 and 3 banks within 300-400. Further, 2 banks were in the range of 700-800. In the year 2009-10, there were 4 banks within the range of 200-300. 3 banks were found between the ranges of 400-500. There were 3 banks between 500-800 and 3 banks between 800-900. The year 2007-08 witnessed 6 banks beyond a score of 500 and 5 banks in 2009-10.

Figure 1.2: Figure showing the efficiency score wise frequency distribution of the banks from 2005-10

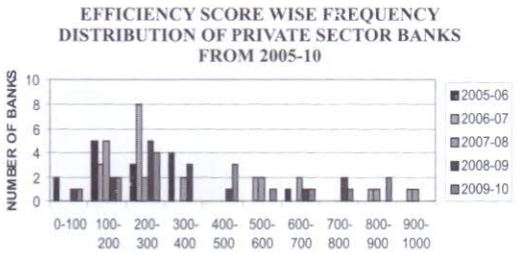


Table 1.3: Table showing the year wise mean efficiency score of the banks from 2005-10

YEAR	2005-06	2006-07	2007-08	2008-09	2009-10
SCORE (in %)	237.71	351.29	406.64	341.18	417.89

Table 1.3 shows the year wise mean efficiency scores of the banks. With a score of 237% in the first year, there was good progress until the fourth year with 406%. In the year 2008-09, the score fell by 16% to 341%. The fifth year recorded a five term high score of 417%. Thus, the fifth year has shown the best efficiency score amongst the five years.

Figure 1.3: Figure showing the year wise mean efficiency score of the banks from 2005-10

Table 1.4: Table showing the three most efficient banks according to mean annual efficiency scores

MOST EFFICIENT	KVB	FEDERAL	HDFC
SCORE (in %)	737.99	561.23	550.74

Figure 1.4: Figure showing the three most efficient banks according to mean annual efficiency score

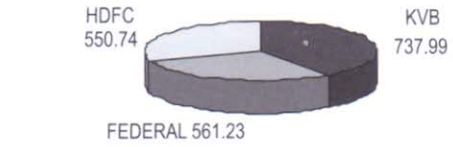
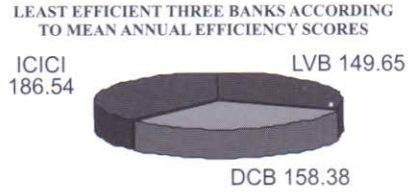


Table 1.5: Table showing the three least efficient banks according to mean annual efficiency scores

LEAST EFFICIENT	LVB	DCB	ICICI
SCORE (in %)	149.65	158.38	186.54

Figure 1.5: Figure showing the three least efficient banks according to mean annual efficiency score



The above figures 1.4 and 1.5 show the results of the study of the efficiency of the private sector banks. The most efficient banks of the private sector from the banks selected for the study are Karur Vysya bank (737%), Federal bank (561%) and HDFC bank (550%). On the darker side, the least efficiency banks are Lakshmi Vilas bank (149%), Development credit bank (158%) and ICICI bank (186%).

FINDINGS

- In Lakshmi Vilas bank, the increase in the efficiency score in the year 2006-07 is attributable to the decrease in the NPA. The provisions for the same increased during the year. Hence the Net profit declined. Since then, the efficiency score has shown a declining trend due to the growth in the NPAs which was more than the increase in the output. Also, there was no attention paid to monitor the credits and hence this resulted in poor efficiency scores throughout the five years.
- Regarding Bank of Rajasthan, the second year showed a steep increase in the efficiency scores due to increase in the business of the bank (advances and deposits) more than the NPA. This was due to strengthening of the monitoring process and legal actions taken against the defaulters of loans. In the consecutive years, a declining pattern of the efficiency scores was witnessed and this was due to the increase in the advances to the priority sector (agriculture) and also the other sectors like Small and Medium Enterprises. This resulted in increased NPAs which hit the efficiency scores.
- The Kotak Mahindra bank showed good consistency in the efficiency scores over the five years. In the year 2006-07, though there was an increase in the NPAs by over 70%, the efficiency score increased by 11% and this was due to the great increase in the business of the bank which did not affect the increase in the input. The general economic buoyancy and the surge in real estate prices ended in the non-recovery of the NPAs. During the following years, several accounts were recovered and the deposits doubled every month. New services like gold debit card, mobile banking, smart fee etc were introduced. Hence the good business resulted in good scores. In the year 2009-10, there again came a rise in the NPAs and this was because of the increase in the advances by 25% when compared to marginal increases in the previous years.
- South Indian bank showed fluctuations in the efficiency scores and this is directly affected by the NPAs. The net profit of the bank jumped by 100% in the year 2006-07 and this was because of the recovery of the debts. Several measures were taken to reduce the NPAs such as recovery camps, issue of notices under securities and reconstruction of financial assets. The rate of recovery was 93% until the third year. In 2008-09, a few large accounts did not adhere to credit discipline and hence the NPAs increased.

The increase in the deposits was mainly due to the NRI accounts which constituted 35% of the deposits in the bank. Increases in the advances to priority sector were 40%. However, in the last year, 2009-10, the recovery of NPAs increased from 225 crores to 269 crores and hence the efficiency scores showed a good improvement of 579%.

- The City Union bank shown a satisfactory consistency in the efficiency scores. In the year 2006-07, the decrease in the inputs and the increase in the outputs lead to a good increase in the score. The ratio of input to output was 24:30. However in the third year, the decrease in the score was due to the sharp rise in the NPA. The inputs rose by 70% whereas the outputs by 35%. The year 2008-09 witnessed a good increase in the scores because of the increase in the business of the bank wherein the advances rose due to general elections and the equity markets. The deposits also rose up due to increase in the interest rate. In the final year, highest attention was paid to reduce the NPAs through several measures and there was also increase in the deposits because of the increased demand for credit.
- As regards Dhanlaxmi bank, only the fourth year showed improvement. In the second year, the deposits rose up because of the measures taken to expand the client database. The advances also increased due to the 25% increase in priority sector. The NPAs could neither be prevented, nor could any measures be taken to reduce them. Further in 2007-08, NPAs to the extent of 36 crores were written off and the farm loan debt waivers were announced by the government. Hence this worsened the position. The deposits also slumped due to decrease in its rate. For the first time, securitization of written off accounts by selling the accounts to Asset reconstruction agency was done and hence the NPAs were reduced to one third of its previous year. In 2009-10, the increase in the NPAs is attributable to the recessionary conditions. The increase in the input could not be offset by the rise in the output and hence the efficiency scores fell again.
- The efficiency scores of the Development Credit bank faced wild fluctuations over the years. Until the third year, the increase in the scores can be attributable to the decrease of NPAs to half of its previous year's figure. The profit also showed a steep rise. The recovery of the NPA was 95 crores and this can be traced back to the efforts put in by the Special Accounts Group formed for the purpose of solving the NPA problem. 8 new branches were opened and this increased the business of the bank. In the fourth year, the deposits and the advances declined and the NPA increased due to the economic slowdown, out of which a maximum was attributable to unsecured personal loans. However, in 2009-10, there was a slight improvement in the score because of the decrease in the dependence on unpredictable wholesale deposits and reliance on customer deposits.
- The Federal Bank showed an increasing trend till the third year and vice versa for the last two years. For the first three years, there was increase in the deposits and the model adopted by the bank was such that there was no reliance on bulk deposits. The provision for the NPA also increased to 90%. This resulted in a hike in the scores. The fall of the scores in the last two years from 2008-10 was due to the increase in the advances and expenses hike due to the technological advancement adoption. The employee costs also rose up in these years. Hence the efficiency scores declined.
- HDFC bank showed a declining trend of efficiency scores in the first four years and regained its value in the final year. In the year 2006-07, the deposits and advances increased due to the increase in wholesale advances and the increase in the number of customers by 400,000. The increase in the NPA was due to the RBI

announcement to increase the provision requirements for certain assets like personal loans, credit card receivables etc. In the years 2007-08 and 2008-09, more provisions were made for the NPAs since a more conservative decision was taken by the bank. The expenses rose up because of the increase in the operating expenses and the increase in the salary levels by 50%. However, in the last year, there was a sharp increase in the efficiency score due to the decrease in the NPA and the increase in the deposits and advances.

- As regards ICICI Bank, the efficiency scores continued to decline over five years. The reasons are attributable to the continued increase in the NPA until 2008-09. The personal loans became irrecoverable and the increase in the output was insufficient to handle the inputs. Almost over 70% of the advances became NPAs. However in 2009-10, due to the introduction of a strict policy and decrease in the advances lent and above all, the reduction in the expenses by 30%, the bank could recover its score to an extent in the last year.
- The IndusInd bank showed a declining trend until the third year and then started facing an upward pattern in its efficiency score. In the initial three years, the deposits and the advances increased. The focus was on fee based income and hence the Net profits showed a good improvement. The NPAs increased due to the increase in the advances despite the increasing NPA. No proper steps were taken to monitor the grant of credits. Whereas, in the following two years, there was an increase in the business of the bank in spite of the economic slowdown. There was an increase in the revenue and better cost management was implemented. The quality of the assets was monitored to reduce the slippage. The increase in the output to input was in the ratio 36:26.
- The efficiency scores of IngVysya bank increased until the third year and then showed a declining trend. The first three years showed prospects in each of the variables. The NPA showed a good rate of decline. Aggregate business crossed a milestone figure of 25000 crores and the increase in the output was more than the increase in the input. In the year 2008-09, the increase in the advances was beyond the regulatory limit of 40%. It stood at 43%. The export credit constituted 8% and this was the main reason for the increase in the NPA. In the final year too, there were many reasons for the poor score such as the decrease in the export advances to 26% for 48%. An outstanding amount of 50 crores was due from the Scheduled caste/Scheduled tribes and there was only 4% increase in the deposits compared to 30% in the previous years.
- The efficiency scores of Jammu & Kashmir Bank showed wide fluctuations with a sharp rise in the final year. The causes for the fall in the scores until the fourth year can be traced to increases in NPA and also the advances. In the year 2007-08, there was little recovery of NPA and hence the score showed a small increase of 5%. In the year 2009-10, an exemplary feature was that a prompt asset monitoring was set and hence there was less slippage of assets. The interest expenses and the advances lent to the priority sector (agriculture) declined. The investments consisted of 61% of Statutory Liquidity ratio investments.
- The trend of efficiency scores of Karur Vysya Bank showed a good consistency over the five years. Until the third year, a pro-active approach was followed to reduce the NPA. Time settlements, out of the court settlements and monitoring of assets at the central and divisional offices were carried on. The increase in the deposits was mainly due to Savings Deposit Campaign. The demand deposits hiked to 37%. The advances faced broad based expansion across

sectors like agriculture, small businesses, infrastructure etc. The asset quality maintenance was done by getting the corporate clients rated by the credit rating agencies. The lending towards small businesses was rated by SMERA. In 2008-09, there was a little slack in the score due to the economic slowdown. But the system based asset classification and income recognition and the steps taken to reduce the slippages were done to reduce NPA. The recovery in the final year is attributable to the increase in advances for exports, increase in the deposits which crossed a milestone figure of 30,000 crores and the year over year growth of 28%.

- The Karnataka bank also shows fluctuations in the efficiency score over the years. In the second year, there was increase in the deposits, especially due to the current deposits of 19%. The advances lent to the priority sector also increased. But the NPA was irrecoverable. In 2007-08, due to increased credit monitoring, asset recovery was practiced in all the branches with an intensified drive. In the following year, there was another increase in the score due to the increase in the retail term deposits. Lending under various economic schemes turned out to be a satisfactory one. But in 2009-10, the profits fell to a great extent and due to the economic slowdown; the NPAs were irrecoverable especially in the priority sector.
- The mean efficiency score of 350% for the fifteen banks shows a good prospect for the private sector banks. The mean score of all the banks were above 150% and this is mainly due to the corrective actions taken by the banks at the right time. Most of the banks faced a slack only due to the economic slowdown that hit the country in the last quarter of 2008.
- The NPA and the efficiency scores are directly related to each other in almost each bank. The NPA remains the chief threat for most of the banks. In all the years, the maximum number of banks was found to be within the score of 500.
- The highest mean efficiency score was found to be, in the year 2009-10, 417%. This is mainly because of the recovery from the recessionary conditions. Every year, the efficiency scores have increased except for the slack in the 2008-09, which was due to the economic slowdown.
- The most efficient banks registered a score of more than 550% and the least efficient banks had a score of less than 200%.

RECOMMENDATIONS

- Lakshmi Vilas bank has to pay more attention towards monitoring the grant of credits and take necessary steps to reduce the NPAs in future as the same was not taken in the previous years. On account of unavoidable circumstances to reduce the NPAs, the expenses must be reduced in order to maintain the efficiency.
- As regards, Bank of Rajasthan, the advances lent to the priority sectors, namely agriculture and other SMEs must have stricter procedures as it poses the main threat to the efficiency of the bank. Sufficient measures must also be taken to increase the amount of deposits as the bank has witnessed either marginal increase or decline in the previous couple of years.
- For Kotak Mahindra Bank, the increase in the advances remains an issue and hence monitoring the credit process must be implemented. The same level of business must be maintained so that it does not affect the profitability of the bank.
- South Indian bank must continue to conduct recovery camps and other actions in order to prevent further increase in the NPAs. The deposits from the NRIs have increased and hence this must be further encouraged.
- City Union bank must continuously keep a watch over the NPAs since its fluctuations affect the efficiency to a great extent. Further, the deposits and advances can be

increased by launching savings campaign etc.

- The efficiency of Dhanlaxmi bank must be improved to large extent as it is very much reactive, both to the fluctuations in the bank's variables as well as of the economy. The operating expenses must be reduced to a large extent as it is disproportional to the increase in the output.
- Regarding Development Credit bank, the performance of the Special Accounts Group must be scrutinized at frequent intervals as the last two years have not been good for the bank. Further, the reliance on unpredictable bulk deposits must be reduced and customer deposits must be encouraged in order to sustain in the business.
- Federal Bank should conduct recovery campaigns and strengthen its credit policies. Since the NPA has doubled in the final year, it would be advisable to set up a committee to solve this problem and also to keep the fresh NPAs under watch. The employee costs must be kept under control since it has contributed to the major increase in the inputs.
- HDFC bank, though has made efforts to regain the efficiency levels and has shown decrease in the NPAs, would be likely to face debts because of a high increase in the advances lent in the final year. Hence this must be intensely watched in order to not lose its value. The operating expenses must be reduced since there was a 50% increase.
- As regards ICICI bank, the major problem of advances and the NPAs need to be given prime importance in order to sustain in the business. Since the main issue is the personal loans segment, the sectors to which the advances are lent can be broadened still more and equally lent so as to reduce the dependence on a single sector.
- IndusInd Bank's process of monitoring the credit must be enhanced since it has remained the common thread in the initial years. The quality of assets and cost management must be continued to be kept under observation to maintain a good level of efficiency.
- IngVysya bank should persist in increasing the customer base as it is the chief advantage for itself. The level of advances must be brought down since it crossed the regulatory target in one of the years. Further, lending to the Scheduled Castes/tribes must be brought down to a great extent since that posed a threat of 50 crores for the bank.
- As regards Jammu & Kashmir bank, the steps taken to reduce slippage of assets namely, prompt asset monitoring, reduced lending to priority sectors like agriculture etc must be continued. Further the recovery of assets must be done and exclusive programmes must be launched for the same.
- Karur Vysya bank has framed wonderful policies for each of its necessities. The rating of clients, asset monitoring and the other measures are successful and hence the same must be continued in future.
- Karnataka bank must keep a watch over its expenses as they have shown a continuous rise. The lending to priority sector must be reduced since they form a major portion of the advances. The retail term deposits must be further encouraged in order to increase the business.

CONCLUSION

Competition is very acute between the private and public sector and within the private sector itself. Hence, every bank needs to formulate its own strategies in order to reduce the losses prevailing from the increased expenses as well as the non-performing assets. The overall model adopted must be developed in such a manner that it is agile and amiable to the policies of the Government/RBI, as well as to the economic slumps. With the advent of newer technologies in the coming future, the cost management also needs to be well

planned in order to stay with times. Retaining existing customers on one hand and attracting fresh customers on the other, the private sector banks must design different schemes and increase the ability to be flexible and provide customized services to its customers in order to increase its profitability and efficiency.

REFERENCES

- Abhiman Das. Ashok Nag, Subhash C Ray (2005), "Liberalisation, Ownership and Efficiency in Indian Banking: A Nonparametric Analysis", Economic and Political Weekly, pp. 3-8
- Allen N. Berger, David B. Humphrey (1997), "Efficiency of Financial Institutions: International Survey and Directions for Future Research", pp.32-51
- Amandeep Singh and Ankush Mahajan (2010), "Performance Evaluation of Public and Private sector banks in Bathinda region- A study during recession period", pp.21-37
- Badola Richa Verma (2006), "Determinants of Profitability of Banks in India: A multivariate analysis", Delhi Business Review X Vol. 7, No. 2,pp. 3-9
- Galagedera, Don U A, Edirisuriya, Piyadasa (2005), "Performance of Indian Commercial Banks (1995-2002) South Asian Journal of Management", pp.3-12
- Mohammad Hanif Akhtar (2002), "X-efficiency analysis of commercial banks in Pakistan: A preliminary", pp. 4-10
- Petya Koeva (2003), "The performance of Indian Banks during Financial Liberalization, IMF working paper", pp.6-23.
- Rachita Gulati (2011), "Evaluation of technical, pure technical and scale efficiencies of Indian banks: An analysis from cross-sectional perspective", pp. 3-24
- Rakesh Mohan (2006), "Reforms, Productivity and Efficiency in Banking: The Indian Experience", Reserve Bank of India Bulletin, pp.5-1
- Ram Mohan and Subhash C. Ray (2004), "Productivity Growth and Efficiency in Indian Banking: A Comparison of Public, Private, and Foreign Banks", Economics Working Papers. Pp.16-24
- Srinivasa Rao K.S and Prof. Chowdari Prasad (2003), "Can Public Sector Banks Compete with Foreign / Private Banks? A Statistical Analysis" pp.8-24
- Varadi Vijay Kumar, Mavaluri Pradeep, Boppana Nagarjuna (2004), "Measurement of Efficiency of Banks in India", pp.6-20
- Vikas Chowdary, Sanjeev Gupta (2008), "Total Factor Productivity of Public Sector Banks in India: A Malmquist Approach", pp.7-16

WEBSITES:

- www.rbi.org
- www. business.mapsofindia.com
- www.mckinsey.com
- www.moneycontrol.com
- www.personalfinance201.com

❑❑❑

P Varadharajan
Assistant Professor & Co-ordinator
MBA (PT)
PSG Institute of Management,
Coimbatore, Tamil nadu

Dr P Vikkraman
Director (I/C)
Deptt. of Management Studies
Anna University
Coimbatore