

Financial Performance of New Private Sector Banks in India: An In-depth Study

Deba Bijaya Mishra
Research Scholar in Commerce
Fakir Mohan University, Remuna Degree College, Balasore, Odisha -756019
Email: debabijaya@gmail.com

ABSTRACT

The economic development of any country largely rests on banks. Hence, only the effective banking system could contribute to the process of growth in a positive way. Private banking activities have been in existence since past in the form of money lending and these are the foundation of economic manifestation of the country. But at some point of time, due to crisis and lack of coordination between banking policy and proper control of the authority, the growth of the banking system was almost obstructed. Globalization was another positive step which brought transformation in the then banking system. Especially, there were significant changes in the prevalent products and services of the banks which the customers avail themselves of and in consequence, the banking sector witnessed noteworthy change. In response to the recommendation of the Narasimham Committee, in July 1991 the RBI, 8 banks are set up after fulfilling the formalities, which are known as 'New Private Sector Banks' The present study is made to find out the overall performance of the new private sector banks in respect to profit margins and factor responsible for it.

Keywords: New Private Sector Banks, Profitability, Factor Analysis, Post Reform Period

INTRODUCTION

The economic development of any country largely rests on banks. Hence, only the effective banking system could contribute to the process of growth in a positive way. Banks are basically to deal with money which is collected in the form of deposits along with their own funds in the form of share capital and resources. They must meet the demand of the customers, pay the interest for the amount and meet the expenses to execute its functions. So, they have to carry on utmost liquidity and earn profit from their transactions. Though maintenance of liquidity and profitability are incompatible yet the equilibrium between liquidity and profitability is to be maintained by the banks which are a proof of commitment of the concerned bank and its ability to pay off the daily expenses. So, liquidity means the ability of the bank to fulfill its obligations and profitability is the ability to earn profit as it is the measurement of overall success of business. The most powerful motivational factor in a business is profitability. To what extent a business is profitable as well as efficient, it is judged from its amount of profit. Profit makes the organization discharge its variegated obligations to society.

Private banking activities have been in existence since past in the form of money lending and these are the foundation of economic manifestation of the country. But at some point of time, due to crisis and lack of coordination between banking policy and proper control of the authority, the growth of the banking system was almost obstructed. However, after Independence, there was rapid growth and progress. The process of nationalization spurred the growth further. The SBI and its subsidiaries were nationalized in 1955, 14 major banks in 1969 and 6 other banks in 1980 were nationalized basically in South India and these are labeled as old private banks and they are 23 in number.

Globalization was another positive step which brought transformation in the then banking system. Especially, there were significant changes in the prevalent products and services of the banks which the customers avail themselves of and in consequence, the banking sector witnessed noteworthy change. After examining the structure, organization, functions and procedures of the financial system, as per the recommendation of the Narasimham Committee, in July 1991 the RBI opened the door for the individuals, corporation, foreign and residents to establish new banks in the private sector obeying stipulated regulations fulfilling other requirements. In response to it, 8 banks are set up after fulfilling the formalities, which are known as 'New Private Sector Banks' These banks could compete with the public sector and foreign banks by providing customer oriented service by virtue of the latest technology.

In order to provide efficient service to the customers, the state-of-art technology for business processing and service delivery was the novel technique that was adopted by the new private sector banks. They could have the upper hand with adequate capital resources, well-trained and professional man-power, computerization, absence of non-performance assets, lieu organizational system branches in important places and variety of products and services, ATMs, EFTs, Credit Cards, Portfolio management etc. Thus a suitable environment was created for competition among all types of banks. The present study is made to find out the over all performance of the new private sector banks in respect to profit margins and factor responsible for it.

OBJECTIVES OF THE STUDY

The main thrust of the study is to make an empirical analysis of profit and profitability of new private banks in India over twelve year's period covering 1999 to 2011. The present study aims at analyzing the performance of new private sector banks operating in India by formulating package parameters for evaluating profitability. The following points can be discussed under the present topic, so these are the specific objectives of the current subject.

1. To analyze the consistency of the profitability of the new private banks.
2. To offer suggestion for the improvement of efficiency of the new private sector banks.

REVIEW OF LITERATURE

Panda and Lall (1991-1992):- suggested in their paper that the profitability of Indian banking system can be improved by short term internal management. They stated that the most important factors of the profitability are productivity deployment of funds, quality of advance, information system, branch expansion policy and organization set up.

Krishna R. R. (1996):- has presented the profitability analysis in a detailed way. In his opinion, profitability is a rate that expresses profit as a percentage of total aspects or sales or other to represent assets or sales. The numerator and the denominator which can be used in computing the profit will be decided as per the objective of measurement.

Sanjay J.Bhayani (2006):- studied the performance of new private sector banks for the years 2000-2005 using CAMEL model in which he included four important private sector banks like HDFC, IDBI, ICICI and UTI (now AXIS) and the overall performance of IDBI Bank was the best though UTI Bank followed the suit.

Bodla and Verma (2006):- analysed the performance of SBI and ICICI during the period 2000-2005 making a comparison between the two using CAMEL model in which he found the performance of both the banks excellent. Though the performance of SBI surpassed that of ICICI bank yet the overall performance of ICICI bank has been better than that of SBI.

Dhar V. Ganga and Reddy G.Nares (2007):- in their paper entitled "Mergers and acquisitions in the Banking Sector- an Empirical Analysis" analysed the growth and performance of the banks during the periods before and after merger of banks. They observed marked increase in the performance of the merger banks in respect to growth of total assets, revenue, profits, investments and deposit. Among the banks of study, ICICI Bank has attained the growth rate in all respects besides deposits, SBI, BOB and UBI showed consistent performance facing lower risk while centurion Bank, HDFC Bank and ICICI registered greater and consistent performance and higher risk.

Bharathi N.(2010):- made analysis of the profitability and consistency of banks in his paper entitled "Profitability Performance of New Private Sector Banks- an Empirical Study". He included 9 new private sector banks in his study during 10 years 1998-2007. He stated that the private sector banks could grow and develop in the new economic environment giving utmost importance to the areas which asked for much attention and where there was scope for improvement.

Jha and Sarangi (2011):- using three sets of ratios like operating performance ratios, financial ratios and efficiency ratios made analysis of the performance of seven public sector and private sector banks in the year 2009-2010. They used eleven ratios in their study. They could notice that Axis Bank had peak performance followed by ICICI Bank, BOI, PNB, SBI, IDBI and HDFC.

SCOPE OF THE STUDY

The aim of present study is analyzing the performance of new private sector banks during the financial year from 1999 to 2011. The private sector banks are functioning in India since the very beginning of the banking system. In 1991 with the introduction of economic reforms and final sector reforms the new private sector banks were come into force according to the banking regulation act was then amended 1993. For the purpose of the study, the existing eight new private sector banks are taken. Initially, there were 10 banks that were granted approval by the RBI. But Global Trust bank was merged with UTI and Bank of Punjab and Centurion Bank was amalgamated into centurion bank of Punjab, hence the remaining eight banks have been taken up for the study.

METHODOLOGY

The present study will be based on secondary data which are collected from the official directory and data base of Centre for Monitoring Indian Economy (CMIE) namely PROWESS, The sources of data are the published annual reports of the selected banks on the respective websites, magazines and journals on finance etc. The study covers a period of 12 years between the sessions 1999 to 2011 financial year. The 1999-2000 financial year has been chosen as the base year as just after the 10 years of deregulation and implementations of banking sector reforms besides the services of the monetary and banking regulation reform was initiated to strength the banking sectors to overcome the international challenge in the modern global market. The financial information was

collected from various sources which are suitably classified and tabulated for the purpose of interpretation. It has been made starting with simple statistical tools of Factor analysis. Eight New Private Sector banks taken into consideration for the present study in order to judge their profitability irrespective of their size.

ANALYSIS & INTERPRETATION

Factor analysis is a technique, which studies the relationship between two or more variables. It deals with the correlative dependence between independent and dependent variables. While studying the factor analysis, in banking sector profitability factor attached to banking activity is considered a prime one than other related factors.

Factor analysis of Axis bank.

The factor analysis table No. 1 represents factor loading of selected variables for the Axis Bank over the period of 12 years i.e. 1999 to 2011. Analyses have identified three factors out of selected variables under studied. The most important determinant of Factor-I is (X1) interest earned as a percentage of total assets and (X2) Interest expended as a percentage of total assets with factor loading 0.959 and -0.937 respectively. (X6) Burden as percentage of total assets with factor loading 0.824 is also a significant variable for Factor-I. These above significant variables in Factor-I has its influence on other common factor namely – Factor-2 and factor-3 very less.

In regression equation, the hypothetical factors are said to control and account for a certain proportion of the variations in the variable sets. The importance of a given factor for specified variable can exactly be expressed in terms of the variations in the variable that can be accounted for by the factor. For instance (X1) interest earned as a percentage of total assets accounted for the Factor-1 is square of factor loading of variable i.e. $(-0.959)^2 = 0.919681$. It implies that 91.96% of the total variation is counted by Factor-1. The value of communality is showing (0.939) includes that all the three derived factors taken together could explain 93.90 % (communality expressed in percentage) variations in other expenses of banks. Communality value for a given variable is obtained by adding the square of each factor loading for that variable.

Similarly (Y) Net profit as a percentage of total assets has relatively higher loading (-0.709) with factor-2 and all the three factors could explain nearly 92.20% variation in banks profitability. The variable (X7) Non interest income as a percentage of total income is the dominant variable in Factor-1 with factor loading (0.008) but the value of communality over all the three factors of this variable is 97.60%. The other variables which are the negligible in the three factors together but their communality value show the above 85% and below 97% for the factors. The Factor-3 has a higher percentage of variables than other two factors. The overall observation in this table reveals that maximum determinant factors are having low factor loading for the selected variables taken for study. The variance is 3.5441 which is the highest among all three factors. Percentage of the highest Var.0.354 and communality is 0.944.

Table No1 Factor Analysis of AXIS Bank

Principal Component Factor Analysis of the Correlation Matrix				
Rotated Factor Loadings and Communalities				
Varimax Rotation				
Variable	Factor1	Factor2	Factor3	Communality
Y	0.257	-0.709	0.594	0.922
X1	-0.959	-0.127	-0.051	0.939
X2	-0.937	0.113	-0.270	0.965
X3	0.667	-0.477	0.559	0.985
X4	0.472	-0.717	0.395	0.893
X5	-0.461	-0.879	-0.071	0.990
X6	0.824	0.032	0.433	0.868
X7	0.008	-0.988	0.019	0.976
X8	0.168	0.067	0.961	0.957
X9	-0.299	0.256	-0.891	0.949
Variance	3.5441	3.0927	2.8075	9.4443
% Var	0.354	0.309	0.281	0.944

Factor analysis of centurion bank.

Table No. 2 shows the factor analysis of factor loading for various selected factors of centurion bank for the period of 12 years i.e. 1999 to 2011. The variable (X1) interest earned as a percentage of total assets (X2) interest expended as a percentage of total assets show the significant figure with factor loading 0.973 and 0.906 respectively but its influence is less on the Factor-2 and Factor-3. The variables (X5) Non-interest income as a

percentage of total assets, (X6) burden as a percentage of total assets and (X7) Non-interest income as a percentage of total income are showing high level of figure which are most significant determinant for factor-2. Whereas the important determinant (X3) spreads a percentage of total assets and (X4) Non-interest expenses as a percentage of total assets with factor loading 0.931 and 0.964 having significant relation for Factor-3. Rather than other determinant variables than discussed above having very less influence on the various factors. Only (Y) Net profit as a percentage of total assets with factor loading -0.892 for Factor-1 shows a remarkable relation but on other factors it has less influence. It is observed from the communality factor column all the variables are showing extend of above 90%. The very lowest determinant in this table is (X7) Non interest income as a percentage of total income with factor loading 0.011 on the Factor-3 which is having very negligible influence on other factors discussed herewith. In this table (Y) Net profit as a percentage of total assets has negative effect over all factors. The highest variance over all three factors is 2.7939 and communality for the same is 7.8036. The percentage of var is 0.349 which is highest among three factors.

Table No. 2 Factor Analysis of Centurion Bank

Principal Component Factor Analysis of the Correlation Matrix				
Rotated Factor Loadings and Communalities				
Varimax Rotation				
Variable	Factor1	Factor2	Factor3	Communality
y	-0.892	-0.182	-0.336	0.942
X1	0.973	0.166	-0.028	0.976
X2	0.906	0.123	-0.395	0.991
X3	-0.285	0.031	0.931	0.949
X4	0.172	0.080	0.964	0.965
X5	-0.052	-0.997	-0.030	0.997
X6	0.146	0.754	0.633	0.990
X7	-0.309	-0.948	0.011	0.994
Variance	2.7937	2.5428	2.4671	7.8036
% Var	0.349	0.318	0.308	0.975

Factor analysis of Development Credit Bank.

Table No. 3 the factor loading of selected variables for the Development credit Bank over the period of 12 years. i.e. 1999 to 2011. Here we analyse identified three factors out of the selected variables under studied. The most important determinant of factor-1 is (X7) Non-interest income as a percentage of total income with factor loading -0.916 and its influence on other common factors is very negligible. The other two significant variables in Factor-1 are (X1) Interest earned as a percentage of total assets and (X2) interest expended as a percentage of total assets with factor loading 0.860 and 0.893 respectively. In Factor-2 the important determinant are (X4) Non-interest expenses as a percentage of total assets and (X6) burden as a percentage of total assets with factor loading -0.927 and -0.968 respectively which have influence over other common variable except (Y) Net profit as a percentage of total assets with factor loading 0.824. In Factor-3 also three variables (X3) spread as a percentage of total assets, (X8) Advance as a percentage of total deposit and (X9) Net NPA with factor loading 0.848, 0.837 and -0.880 respectively which have significant compact influence over other determinant in this Factor. The lowest determinant over all the Factors is (X6) burden as a percentage of total assets with factor loading 0.040 in Factor-1 having a lowest impact on other factors.

Further, it observed from the communality column all the variables factor derived could explain the variations in selected variables to the extent of above 80% except the factor determinant (Y) Net profit as a percentage of total assets and (X5) Non-interest income as a percentage of total income with factor loading 0.787 and 0.286 respectively. Over all study from the table regarding factor analysis reveals that over three Factors there are some determinants having negative effect as well as positive impact on bank profitability. The highest variance for the three factors is 2.8920 and its communality factor is 8.1268. The percentage of Var 0.289 which is the highest among three factors.

Table No. 3 Factor Analysis of Development Credit Bank

Principal Component Factor Analysis of the Correlation Matrix				
Rotated Factor Loadings and Communalities				
Varimax Rotation				
Variable	Factor1	Factor2	Factor3	Commuality
Y	0.035	0.824	0.328	0.787
X1	0.860	0.198	0.258	0.845
X2	0.893	0.208	-0.070	0.845
X3	0.280	0.058	0.848	0.802
X4	-0.108	-0.927	0.218	0.918
X5	-0.470	0.245	0.071	0.286
X6	0.040	-0.968	0.188	0.973
X7	-0.916	0.047	-0.136	0.859
X8	0.227	-0.354	0.837	0.878
X9	0.389	-0.081	-0.880	0.933
Variance	2.8920	2.7530	2.4819	8.1268
% Var	0.289	0.275	0.248	0.813

Factor analysis of ICICI Bank.

The table No. 4 represents Factor loading of selected variables for the ICICI Bank during the period of 1999 to 2011. The Factor analyses have identified three factors out of the selected variables under studied. The most important determinant of Factor-1 is (X5) Non-interest income as a percentage of total assets with factor loading 0.956 and its influence on the other common factors is very less. The other significant variables are (X1) Interest earned as a percentage of total assets and (X2) interest expended as a percentage of total assets with factor loading 0.926 and 0.925 respectively. (Y) Net profit as a percentage of total assets with factor loading 0.817 of Factor-1 has also highly effect but not good impact on other common factors. In Factor-2(X7) Non-interest income as a percentage of total assets with factor loading 0.886 only an important determinant which has influence over this factor only but on other factors its influence is very less. In Factor-3 all the determinants have not so much impact over this factor. Rather most of the variables have negative effects.

Further, it is observed from the commuality column except four variables(Y)(X7),(X8)(X9) for all other variables derived to the extent of above 90%. The above mentioned four variables which are below 90% of communal effect which have bad impact on bank profitability. The lowest variable (X5) non-interest income as a percentage of total assets in Factor-3 with factor loading -0.024 in this factor analysis. It is revealed that in this factor analysis table more variables in Factor-2 and Factor-3 are having negative effect where as in Factor-1 maximum variables and a few variables of Factor-2 and Factor-3 have positive effect on bank profitability. The highest variance for the three factors is 4.5662 and its commuality factor is 8.2286. The percentage of Var is 0.457 as the highest among three factors.

Table No. 4 Factor Analysis of ICICI Bank

Principal Component Factor Analysis of the Correlation Matrix				
Rotated Factor Loadings and Communalities				
Varimax Rotation				
Variable	Factor1	Factor2	Factor3	Commuality
Y	0.817	0.057	0.192	0.708
X1	0.926	-0.314	0.112	0.969
X2	0.925	-0.240	-0.111	0.925
X3	0.451	-0.382	0.749	0.911
X4	0.883	0.136	0.372	0.937
X5	0.956	0.270	-0.024	0.988
X6	0.171	-0.181	0.795	0.694
X7	0.356	0.886	-0.133	0.930
X8	-0.170	0.768	-0.079	0.626
X9	0.321	-0.362	-0.555	0.542
Variance	4.5662	1.9369	1.7254	8.2286
% Var	0.457	0.194	0.173	0.823

Factor analysis of Indusind Bank.

The table No. 5 represents factor loading of selected variables for the Indusind Bank over the period of 1999 to 2011. Factor analysis has identified three factors out of the selected variables under studied. The most important

determinant of Factor-1 is (Y) Net profit as a percentage of total assets) with factor loading 0.878 and its influence on the other common factors is very less. The other significant variables in Factor-1 are (X3) (spread as a percentage of total assets) and X8 (advance` as a percentage of total deposit) with factor loading 0.862 and 0.782 respectively. The most important determinant in Factor-2 is X7 (Non –interest income as a percentage of total income) with factor loading 0.969 which is highest and only the significant variable in Factor-2. The most important and significant determinant in Factor-3 is X6(Burden as a percentage of total assets). Other significant variable in Factor-3 is X4(Non interest expenses as a percentage of total assets. The value of communality in this table (0.978) concludes that all the three derived factors taken together could explain 97.80% (Communality expressed in percentage) variations in other expense of banks. Communality value for a given variable is obtained by adding the square of each factor loading for that variable.

Similarly, Y (Net profit as a percentage of total assets has relatively higher loading (0.878) with Factor-1 and all the other two factors could explain nearly 81.80% variation in banks profitability. The lowest variables in Factor-1 is (X5) (Non-interest income as a percentage of total assets with factor loading -0.018, in Factor-2 is X8 (advance as a percentage of total deposit with factor loading -0.060 and in Factor-3 is X7(Non interest income as a percentage of total income with factor loading 0.043 which could explain lowest percentage of variation. Further, it is observed from the communality factor column except X1, X3, X8 (Interest earned as a percentage of total assets). Spread as a percentage of total assets, Advance as a percentage of total deposit respectively, other variables could explain to the extent of above 80%. The highest variance for the all three factors is 3.0279 and its communality factor is 8.3180. The percentage of Var is 0.303 which is highest among all three factors.

Table No. 5 Factor Analysis of IndusInd Bank

Principal Component Factor Analysis of the Correlation Matrix				
Rotated Factor Loadings and Communalities				
Varimax Rotation				
Variable	Factor1	Factor2	Factor3	Communality
Y	0.878	0.153	-0.151	0.818
X1	-0.241	-0.660	0.296	0.582
X2	-0.716	-0.559	0.100	0.836
X3	0.862	0.092	0.202	0.792
X4	0.046	0.399	0.904	0.978
X5	-0.018	0.897	0.171	0.834
X6	0.064	-0.144	0.908	0.849
X7	0.081	0.969	0.043	0.948
X8	0.782	-0.060	0.426	0.797
X9	-0.564	0.378	-0.651	0.885
Variance	3.0279	2.8516	2.4385	8.3180
% Var	0.303	0.285	0.244	0.832

Factor analysis of Kotak Mahindra Bank.

The table No. 6 represents factor loading of selected variables for the Kotak Mahindra Bank over the period of 1999 to 2011. Factor analysis has identified three factors out of the selected variables under studied. The most important determinant of Factor-1 is X2 (Interest expended as a percentage of total assets) with factor loading 0.963 and its influence on the other common factors is very less. The other significant factors in Factor-1 are X4 (Non –interest expenses as a percentage of total assets with factor loading `0.950 and X5(Non interest income as a percentage of total assets with factor loading 0.867. The lowest determinant in Factor-1 is X9(Net NPA) with factor loading -0.051. The most significant determinant in Factor-2 is X1(Interest earned as a percentage of total assets with factor loading 0.945. Its influence on other factors is very less. The lowest variance of this Factor-2 is -0.002 of factor loading for X8(Advance as a percentage of total deposit. The most significant determinant in Factor-3 is X8(Advance as a percentage of total deposit) with factor loading -0.968 which has less influence over other factors for the selected variables. The lowest variable in Factor-3 is X4(Non-interest expenses as a percentage of total assets) with factor loading -0.056 which has less significance in comparison with other determinant of the factor. The value of communality in the table concludes that all the three derived factors taken together could explain above 90% (Communality expressed in percentage) variations in other expense of banks. Communality value for a given variable is obtained by adding the square of each factor loadings for that variable. As a result, this bank has good business performance in these accounting years. The highest variance for the all three factors is 4.9973 and its communality factor is 9.7182. The percentage of Var is 0.500 among three factors which is the highest.

Table No. 6 Factor Analysis of Kotak Mohindra Bank

Principal Component Factor Analysis of the Correlation Matrix				
Rotated Factor Loadings and Communalities				
Varimax Rotation				
Variable	Factor1	Factor2	Factor3	Commuality
Y	0.741	-0.379	-0.507	0.950
X1	-0.256	0.945	-0.129	0.975
X2	0.963	0.197	-0.075	0.972
X3	-0.768	0.629	-0.058	0.989
X4	0.950	-0.262	-0.056	0.974
X5	0.867	-0.462	-0.183	0.999
X6	-0.798	0.548	0.241	0.995
X7	0.743	-0.605	-0.275	0.993
X8	0.142	-0.002	-0.968	0.958
X9	-0.051	0.797	0.525	0.912
Variance	4.9973	3.0544	1.6664	9.7182
% Var	0.500	0.305	0.167	0.972

Factor Analysis for Yes Bank

The table No. 7 represents factor loading of selected variables for the Yes Bank over the period of 1999 to 2011. Factor analysis has identified three factors out of the selected variables under studied. The most important determinant of Factor-1 is X2 (Interest expended as a percentage of total assets) with factor loading 0.931 and its influence on the other common factors is less. The other significant variable in Factor-1 is X1(Interest earned as a percentage of total assets) with factor loading 0.910. The lowest variable in Factor-1 is X5(Non interest income as a percentage of total assets) with factor loading 0.059 and its influence on Factor -3 is very significant but, on factor -2 is very negligible and negative variance.

Table No. 7 Factor Analysis of Yes Bank

Principal Component Factor Analysis of the Correlation Matrix				
Rotated Factor Loadings and Communalities				
Varimax Rotation				
Variable	Factor1	Factor2	Factor3	Commuality
Y	0.469	-0.831	0.297	0.999
X1	0.910	-0.411	0.043	0.999
X2	0.931	-0.346	0.019	0.988
X3	0.545	-0.694	0.175	0.809
X4	-0.308	0.846	0.344	0.929
X5	0.059	-0.013	0.986	0.975
Variance	2.3112	2.1766	1.2107	5.6985
% Var	0.385	0.363	0.202	0.950

The most significant variable in Factor-2 is X4(Non interest expenses as a percentage of total assets) with factor loading 0.846 and influence on other factors is very less and even negative variance in factor-1. The lowest variable in Factor-2 is X5(Non interest income as a percentage of total assets) with factor loading -0.013. The most important determinant in Factor-3 is X5(Non –interest income as a percentage of total assets) with factor loading 0.986 and its influence on the other common factors is very negligible. The value of communality concludes that all the three derived factors taken together could explain above 90% except the variable X3(spread as a percentage of total assets) with below 80%. Communality value for a given variable is obtained by adding the square of each factor loadings for that variable. The highest variance is 2.3112 for all three factors and its communality factor is 5.6985. The percentage of Var is 0.385 which is the highest among all three factors.

Factor analysis of HDFC Bank.

The statistical table No. 8 represents factor loading of selected variables for the HDFC Bank over the period of 1999-2011. Factor analysis has identified three factors out of the selected variables under studied. The most important determinant of Factor-1 X6 (Burden as a percentage of total assets) with factor loading 0.958 and its influence on the other common factors is very less. The other significant variables in Factor-1 are X3(spread as a percentage of total assets), X4 (Non-interest expenses as a percentage of total assets) and X9(Net NPA) with factor loading 0.944, 0.941 and 0.861 respectively. In case of HDFC Bank the variation of (Y) Net profit as a percentage of total assets accounted for the factor-1 is square of factor loading of variable i.e.(0.201)² =

0.40201. It implies that 40.20% of the total variation is counted by Factor-1. Similarly other variations can be calculated. The value of communality concludes that all the three factors taken together could explain above 90% variations profitability of banks. The lowest variation in Factor-1 is X2(Interest expended as a percentage of total assets) with factor loading -0.064. The most important determinant in Factor-2 is X2 (Interest expended as a percentage of total assets) with factor loading 0.985 which has a great influence over the other variables in the factor. The lowest variance of this factor is X3(spread as a percentage of total assets) with factor loading 0.071. The most important determinant in Factor-3 is (X5) Non interest income as a percentage of total assets with factor loading 0.945 and lowest determinant in this Factor-3 is X2(interest expended as a percentage of total assets) with factor loading 0.001.

Table NO. 8 Factor Analysis of HDFC BANK

Principal Component Factor Analysis of the Correlation Matrix				
Rotated Factor Loadings and Communalities				
Varimax Rotation				
Variable	Factor1	Factor2	Factor3	Communality
Y	0.201	0.083	0.204	0.089
X1	0.482	0.863	0.045	0.978
X2	-0.064	0.985	-0.001	0.975
X3	0.944	0.071	0.082	0.902
X4	0.941	0.130	0.210	0.947
X5	0.275	0.124	0.945	0.983
X6	0.958	0.098	-0.130	0.944
X7	-0.164	-0.515	0.833	0.985
X8	0.708	-0.515	0.350	0.889
X9	0.861	0.134	0.316	0.859
Variance	4.3151	2.3170	1.9194	8.5516
% Var	0.432	0.232	0.192	0.855

Further, it is observed from the communality factor column, except for (Y) Net profit as a percentage of total assets all other variables derived factor variations in selected variables to the extend of above 85%. This is in conformity with the result of correlation analysis which revealed that a good impact on profitability of the bank. The highest variance for the all three factors is 4.3151 and communality factor for the same is 8.5516. The percentage of Var among all three factors is 0.432

CONCLUSION AND SUGGESTIONS

Factor analysis is a technique, which studies the relationship between two or more variables. It deals with the correlative dependence between independent and dependent variables. While studying the factor analysis, in banking sector profitability factor attached to banking activity is considered a prime one than other related factors. Though HDFC Bank, Kotak Mahindra Bank and Yes Bank show better performance in profitability but other private sector banks could not make improvement in the profitability to the desired levels. Hence, the banks are suggested to improve profitability in the competitive environment by transforming branches from transaction dispenses to relationship centres. The banks should shed high cost deposits and strive for deposit mix thereby reducing the cost of deposit and improve profitability. They should increase profitability by improving the utilization of manpower and increase in ancillary earning. They should develop special skills, knowledge and management capabilities in their staff for undertaking non-fund business.

The profitability of banks can be improved by popularizing the concept of profit planning that profitability should be the hall mark of each banking operation at all levels. The banks can strengthen their position in the competitive world by enhancing efficiency through a control over squeezing spread, increasing non-interest income and maximising business per employee and per branch etc. High yielding advances should be promptly marketed to improve earning and wasteful expenditure should be cut down

References:

1. Panda,J.and Lall,G.S., 'A Critical Appraisal on the profitability of Commercial Banks',Indian Journal of Banking & Finance,Vol.5,1991-92.
2. Krishna,Dr.R.R., 'Profitability Analysis:An Overviews,'Indian Banking Today and Tomorrow,Sept.1996.
3. Sanjay J. Bhayani (2006), "Performance of New Private sector Banks- A Comparative Study", Banking Review, pp. 55-59
4. Bodla B S and Verma, Richa (2006), Evaluating performance of banks through CAMEL model: A case study of SBI and ICICI, The ICFAI Journal of Bank Management Vol-3 Aug, pp. 49-63
5. Dhar V Ganga and Reddy G Nares (2007) "Mergers and acquisitions in the Banking Sector- an

- Empirical Analysis”ICFAI Reader, (March 2007), (Pg: 42-50)
6. Dr. N. Bharathi (2010), “Profitability Performance of New Private sector banks- An Empirical Study”, Indian Journal of Finance, Mar-10, pp. 16-24.
 7. Jha, D.k., and D.S.Sarangi (2011), “Performance of New Generation Banks in India: a Comparative study,”International Journal of Research in Commerce and Management, Vol.2, No.1, pp-85-89.
 8. Dwivedi A. K. & Charyulu D.K. (2011): “ Efficiency of Indian banking industry in the post reform era”, Working paper No. 2011-03-01, IIM, Ahmedabad, March, pp.1-15
 9. Das, A. (1999) “Profitability of Public sector banks: A Decomposition model”, RBI occasional papers, pp.20
 10. Das, Abhiman, (2002), Risk and productivity changes of public sector banks, economic and political weekly, February 2, pp. 437-448
 11. Das & Abhiman 1997. ‘Technical, Allocative and Scale Efficiency of Public Sector Banks in India’, Reserve Bank of India Occasional Papers, vol. 18, No.2 and 3, pp. 279-301.
 12. DeYoung, R. and T. Rice (2004), “Non-interest income and financial performance at U.S. commercial Banks”, The Financial Review, pp.39
 13. Davis, E. (1992), “Output and productivity in banking”, Scandinavian Journal of Economics, 1994 supplement.
 14. Ganeshan, P, “Determinants of Profit & Profitability of Public Sector Banks In India: A Profit Approach”, Journal of Financial Management & Analysis, 2001, 14(1), 27.
 15. Goyal R & Kaur R (2008),”Performance of New Private Sector Banks in India”, The Indian Journal of Commerce, Vol-61, No.3, July-Sept, pp.1-12
 16. Gjirja, Matilda (2004), “Efficiency and Productivity in Swedish banking”, www.hgu.se/files/fakultetskansli/abstract/gjirja.pdf
 17. Guarda P and A Rouabah (2005), “ Measuring banking output and productivity: a user cost approach to Luxembourgdata”, Banque central due Luxemburg, Memo
 18. Joshi Prasad V. & Dr. Mrs Bhalariao J.V. (2011): “Efficiency evaluation of banking sector in India based on data envelopment analysis”, Indian Journal of Commerce and Management Studies, Vol-II, Issue-3, March 2011.
 19. Janki B (2002), ‘Unleashing employ productivity; A need for a paradigm shift’, Indian Banking association bulletin, vol. XXIV No.3 March, pp. 7-9.
 20. Raut & Mohanty (1985), Determinants of Profitability: A Case Study of A Central Co-Operative Bank, The Rainbow, Orissa Co-operative Union, Bhubaneswar.
 21. Sharma R.K. & Gupta Shashi K (2006), Management Accounting, Principle and Practice, Kalyani Publishers, Ludhian.
 22. Singh Sukhdev and Singh Jagroop, “Management of Services (Banks and Insurance), Kalyani Publishers, Ludhiana.
 23. Thakur, S., (1990), Two decades of Indian Banking: The service sector scenario, Chanakya publications, Delhi.
 24. Varma, C.R.T. (2002), Financial Management, Board of Studies, ICAI, C-1, Noida
 25. zVsawani, T.A., (1968), Indian Banking System, Lalvani Publication House, Bombay.
 26. Banerjee Abhijit V., Shawn Cole and Esther Duflo, 2004. Banking Reform in India, *MIMEO*, MIT.
 27. Bhaumik, Sumon K. and Jenifer Piesse, 2003. Are foreign banks active in emerging credit markets? Evidence from the Indian banking industry, *Working Paper*, Queen’s University, Belfast.
 28. D’Souza, Errol, 2002. How Well Have Public Sector Banks Done? A Note. *Economic and Political Weekly*, March 2, 2002.
 29. www.business-standard.com, www.bis.org, www.blonnet.com, www.economicstimes.com, www.google.com, www.iba.com, www.icaai.org, www.icwai.edu, www.iimm.org, www.rbi.org, www.scribd.com, www.wikipedia.com

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library , NewJour, Google Scholar

