INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE & MANAGEMENT

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A.,
Open J-Gage, India [link of the same is duly available at Inflibnet of University Grants Commission (U.G.C.)],
Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 2255 Cities in 155 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

http://ijrcm.org.in/

CONTENTS

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the area of Computer, Business, Finance, Marketing, Human Resource Management, General Management, Banking, Insurance, Corporate Governance and emerging paradigms in allied subjects like Accounting Education; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Monetary Policy; Portfolio & Security Analysis; Public Policy Economics; Real Estate; Regional Economics; Tax Accounting; Advertising & Promotion Management; Business Education; Management Information Systems (MIS); Business Law, Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labor Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; Public Administration; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism, Hospitality & Leisure; Transportation/Physical Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Digital Logic; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Multimedia; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic and Web Design. The above mentioned tracks are only indicative, and not exhaustive.

Anybody can submit the soft copy of his/her manuscript **anytime** in M.S. Word format after preparing the same as per our submission guidelines duly available on our website under the heading guidelines for submission, at the email address: **infoijrcm@gmail.com**.

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION**:

DATED: _____________

THE EDITOR
IJRCM

Subject: **SUBMISSION OF MANUSCRIPT IN THE AREA OF** .

(e.g. Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)

DEAR SIR/MADAM

Please find my submission of manuscript entitled '____' for possible publication in your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if my/our manuscript is accepted, I/We agree to comply with the formalities as given on the website of the journal & you are free to publish our contribution in any of your journals.

NAME OF CORRESPONDING AUTHOR:
Designation:
Affiliation with full address, contact numbers & Pin Code:
Residential address with Pin Code:
Mobile Number (s):
Landline Number (s):
E-mail Address:
Alternate E-mail Address:

NOTES:
a) The whole manuscript is required to be in ***ONE MS WORD FILE*** only (pdf. version is liable to be rejected without any consideration), which will start from the covering letter, inside the manuscript.
b) The sender is required to mention the following in the **SUBJECT COLUMN** of the mail:
New Manuscript for Review in the area of (Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)
c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any specific message w.r.t. to the manuscript.
d) The total size of the file containing the manuscript is required to be below **500 KB**.
e) Abstract alone will not be considered for review, and the author is required to submit the complete manuscript in the first instance.
f) The journal gives acknowledgement w.r.t. the receipt of every email and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending separate mail to the journal.

2. **MANUSCRIPT TITLE**: The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.

3. **AUTHOR NAME (S) & AFFILIATIONS**: The author (s) **full name**, **designation**, **affiliation** (s), **address**, **mobile/landline numbers**, and **email/alternate email address** should be in italic & 11-point Calibri Font. It must be centered underneath the title.

4. **ABSTRACT**: Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para. Abbreviations must be mentioned in full.

5. **KEYWORDS**: Abstract must be followed by a list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.

6. **MANUSCRIPT**: Manuscript must be in ***BRITISH ENGLISH*** prepared on a standard A4 size ***PORTRAIT SETTING PAPER***. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of every page. It should be free from grammatical, spelling and punctuation errors and must be thoroughly edited.

7. **HEADINGS**: All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.

8. **SUB-HEADINGS**: All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.

9. **MAIN TEXT**: The main text should follow the following sequence:

   INTRODUCTION

   REVIEW OF LITERATURE

   NEED/IMPORTANCE OF THE STUDY

   STATEMENT OF THE PROBLEM

   OBJECTIVES

   HYPOTHESES

   RESEARCH METHODOLOGY

   RESULTS & DISCUSSION

   FINDINGS

   RECOMMENDATIONS/SUGGESTIONS

   CONCLUSIONS

   SCOPE FOR FURTHER RESEARCH

   ACKNOWLEDGMENTS

   REFERENCES

   APPENDIX/ANNEXURE

   It should be in a 8 point Calibri Font, single spaced and justified. The manuscript should preferably not exceed ***5000 WORDS***.

10. **FIGURES & TABLES**: These should be simple, crystal clear, centered, separately numbered &self explained, and **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. It should be ensured that the tables/figures are referred to from the main text.

11. **EQUATIONS**:These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.

12. **REFERENCES**: The list of all references should be alphabetically arranged. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per the following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
- Use (**ed.**) for one editor, and (**ed.s)** for multiple editors.
- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
- The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
- For titles in a language other than English, provide an English translation in parentheses.
- The location of endnotes within the text should be indicated by superscript numbers.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

EVALUATION OF PRODUCTIVITY AND PROFITABILITY OF SELECT SCHEDULED COMMERCIAL BANKS IN INDIA

DR. U.JERINABI
DEAN
FACULTY OF BUSINESS ADMINISTRATION
AVINASHILINGAM INSTITUTE FOR HOME SCIENCE & HIGHER EDUCATION FOR WOMEN
COIMBATORE

LALITHA DEVI.T
RESEARCH SCHOLAR
DEPARTMENT OF COMMERCE
AVINASHILINGAM INSTITUTE FOR HOME SCIENCE & HIGHER EDUCATION FOR WOMEN
COIMBATORE

ABSTRACT
Banks occupy the pride of place in any financial system by virtue of the significant role they play in spurring economic growth by undertaking maturity transformation and supporting the critical payment systems. The protection of depositors' interests and ensuring financial stability are two of the major drivers for putting in place an effective system of supervision of banks. In the wake of recurring bank failures and consequent financial crises over the last two decades, there have been resolute attempts by bank supervisors across the globe to limit the impacts of bank failure and contagion through 'safety nets' in the form of deposit insurance and liquidity support by Central Banks/ Governments. An effective supervisory system is, however, critical for preventing bank failures by ensuring the safety and soundness of banks. The present study is an attempt to evaluate the productivity and profitability of 67 scheduled commercial banks in India using CAMEL supervisory model covering the ten years period of 2002-03 to 2011-12. The banks were judged on five different components under the acronym C-A-M-E-L: Capital adequacy, Asset quality, Management, Earnings and Liquidity. The findings of the study revealed that foreign banks positioned first in terms of their management efficiency, earnings quality and liquidity. Private sector banks ranked second followed by Nationalised banks and SBI and its associates positioned at last.

KEYWORDS
Asset quality Capital adequacy, Earnings, Liquidity, Management.

INTRODUCTION
Banks play a major role in all the economic and financial activities in modern society. All trade and commerce would slow down badly if the banks were not there to handle their financial transactions (Ramachandran N, 1992). The developments of banking have a profound effect on the growth of a country. Enhancing profitability, maintaining liquidity and improving growth performance of commercial banks have key objectives of economic reforms in India and as well as other countries.

Against this backdrop the research paper evaluates the productivity and profitability of select scheduled commercial banks in India using the CAMEL model. It is basically a ratio based model for evaluating the performance of banks. The CAMEL Methodology has been developed and practiced by the North American bank regulators in the 1970s to provide a convenient summary of bank condition at the time of its on-site examination. CAMEL rating is a subjective model which indicates financial strength of a bank, where as CAMEL ranking indicates the banks relative position with reference to other banks.

OBJECTIVES OF THE STUDY
To study the Productivity and Profitability of Scheduled Commercial Banks in India on the basis Management Efficiency, Earnings quality and Liquidity parameters.

RESEARCH METHODOLOGY
The study evaluates the productivity and profitability of select scheduled commercial banks in India using CAMEL model. Productivity is measured on the parameter of Management efficiency and profitability is measured on the parameters of Earnings quality and Liquidity. The sample for the study consists of 67 commercial including 26 public sector banks, 18 private sector banks and 23 foreign banks. The study is based on secondary data as it is obtained from the published reports of Reserve bank of India and "PROWESS" database of Centre for Monitoring Indian Economy (CMIE). Average of each ratio is calculated and the banks were first individually ranked based on the sub-parameters of each parameter. The sum of these ranks was taken to arrive at the group average of individual banks for each parameter. Finally the composite rankings for the banks were arrived at after computing the average of these group averages. Banks were ranked in the ascending/descending order based on the individual sub-parameter. The time period of the study is ten years ranging from 2002-03 to 2011-12.

PARAMETERS USED

Productivity and profitability of the selected banks has been studied on the basis of the following parameters.

S. No	Parameter	Variable
1	Management Efficiency	1. Profit per employee 2. Business per employee 3. Return on Net worth 4. Total advances to total deposits
2	Earnings Quality	1. Net Interest Income to Total Assets 2. Burden to working fund 3. Operating profit to total assets 4. Return on Assets
3	Liquidity	1. Liquid Assets to Total Assets 2. Liquid Assets to Demand Deposits 3. Liquid Assets to Total Deposits 4. Cash deposit ratio

REVIEW OF LITERATURE

Rajagopalan (1993) has given a general view on productivity in banks. He opined that profitability and productivity depend on various factors like reduction of costs, recovery of overdue, work reorganization, introduction of computers, etc. He has also identified that establishment expenses play a key role in determining the level of profit. Therefore, attention should be paid on the staffing pattern, he viewed.

Kapil (2005) examined the relationship between the CAMEL ratings and the bank stock performance. The viability of the banks was analyzed on the basis of the Offsite Supervisory Exam Model-CAMEL Model. The M for Management was not considered in this paper because all Public Sector Banks, (PSBs) were government regulated, and also because all other four components—C, A, E and L—reflect management quality. The remaining four components were analyzed and rated to judge the composite rating.

Sanjay Bhayani (2006) in his study analysed the performance of new private sector banks through the help of the CAMEL model. For the purpose, four leading private sector banks – ICICI, HDFC, UTI and IDBI have been taken as sample. After making an analysis of the CAMEL parameters, the author has assigned ranks to all the banks according to their performance in various parameters of CAMEL, and then he assigns them overall ranking. For the purpose of CAMEL analysis, the data of five years i.e, from 2001-01 to 2004-05, has been used. The findings of the study reveal that the aggregate performance of IDBI is the best among all the banks, followed by UTI.

THEORITICAL FRAMEWORK

The parameters used to evaluate the productivity and profitability of scheduled commercial banks in India is briefly described as under:

MANAGEMENT EFFICIENCY

The management of bank takes crucial decisions depending on its risk perception. The ratios used to evaluate management efficiency are described as:

- **Profit per employee**

It shows the surplus earned per employee. It is calculated by dividing the profit after tax earned by the bank by the total number of employees. The higher the ratio, higher is the efficiency of the management. It is more realistic measure of managerial capability in the sense it reflects the use of efficiency of the human resources and also the operational efficiency of the management.

- **Business per employee**

Business per employee shows the productivity of human force of bank. It is used as a tool to measure the efficiency of employees of a bank in generating business for the bank. The higher ratio signifies better managerial capability and the better financial performance of the bank. It is arrived at by dividing the total business by total number of employees. By business, we mean the sum of total deposits and total advances in a particular year.

- **Return on net worth**

It is a measure of the profitability of a bank. It is calculated by profit after tax divided by net worth. Net worth includes capital and reserves.

- **Total advances to total deposits**

This ratio measures the efficiency and ability of the bank's management in converting the deposits available with the bank excluding other funds like equity capital, etc. into higher earning advances. Total deposits include demand deposits, savings deposits, term deposits and deposits of other banks. Total advances also include the receivables.

EARNINGS QUALITY

The quality of earnings is very important criterion that determines the ability of a bank to earn consistently. It basically determines the profitability of bank and explains its sustainability and growth in earnings in future. The following ratios explain the quality of income generation.

- **Net Interest Income to Total Asset**

Net interest income is defined as the difference between interest earned and interest expended as a proportion of average total assets. It is the ratio between spread and total assets. This ratio shows how much a bank can earn for every rupee of investments made in assets. The higher the ratio the better will be the performance of the bank.

- **Burden to working fund**

Burden to working funds ratio is calculated by comparing the non-interest expenditure and non-interest income divided by working funds.

OPERATING PROFIT TO TOTAL ASSETS

This ratio indicates how much a bank can earn from its operations after meeting operating expenses for every rupee of investments made in assets. This is arrived at by dividing the operating profit by total assets. The better utilization of funds will result in higher operating profit. The higher the ratio the better will be the performance of the bank.

- **Return on Assets**

It is the ratio of net profit after tax and total assets. Higher return on assets means greater returns earned on assets deployed by the bank**.**

LIQUIDITY RATIO

Bank has to take a proper care to hedge the liquidity risk; at the same time ensuring good percentage of funds are invested in high return generating securities, so that it is in a position to generate profit with provision liquidity to the depositors. The following ratios are used to measure the liquidity:

- **Liquid Assets to Total Assets**

The proportion of liquid assets to total assets indicates the overall liquidity position of the bank. The liquid assets include cash in hand, Balances with RBI, Balances with banks in India and outside India and money at call and short notice. This ratio is arrived by dividing liquid assets by total assets.

- **Liquid Assets to Demand Deposits**

This ratio measures the ability of bank to meet the demand from depositors in a particular year. To offer higher liquidity for them, bank has to invest these funds in highly liquid form. This ratio is arrived by dividing liquid assets by demand deposits.

- **Liquid Assets to Total Deposits**

This ratio measures the liquidity available to the depositors of the bank. This ratio is considered more important as it ensures higher credibility in the minds of depositors. This ratio is arrived by dividing liquid assets by total deposits.

- **Cash deposit ratio**

In order to understand the liquidity position by considering cash in hand, balance with RBI in current accounts, balance with banks in India and money at call and short notice against total deposits.

RESULTS AND DISCUSSION

The results and discussions of the study are described under the following heads:

- Management Efficiency
- Earnings Quality and
- Liquidity

The profit per employee of the selected banks for the purpose of the study is presented in table no: 1.

TABLE 1: PROFIT PER EMPLOYEE (In lakhs)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	1.80	1.90	2.31	8.28	14.87
2003-04	3.02	2.78	2.88	9.09	24.45
2004-05	2.09	2.57	1.23	5.24	9.92
2005-06	2.31	2.76	2.23	4.13	24.85
2006-07	2.94	3.26	2.81	5.15	22.47
2007-08	3.53	4.19	3.78	5.59	32.12
2008-09	4.39	4.78	4.45	4.93	27.78
2009-10	4.82	5.75	4.60	5.70	24.02
2010-11	5.82	6.99	5.20	8.12	31.48
2011-12	5.50	6.99	5.82	8.72	44.82
Mean	3.6223	4.1971	3.5302	6.4952	25.6773
Rank	4	3	5	2	1

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

SBI and its associate banks – 6 , Nationalised banks- 20, New private sector banks -5, Old private sector banks – 13 and Foreign banks -23. Total banks selected – 67. List of banks given in Annexure -1.

By comparing the various ratios on the basis of the mean value of ratios for the period, it has been noted that the profit per employee is very high in case of foreign banks, as the mean value is 25.67 and is thus ranked first. Next is the place of new private sector banks as it is 6.49 and it is lowest in place of state bank of India and its associates as it is 3.62.

TABLE 2 EXHIBITS THE BUSINESS PER EMPLOYEE OF THE SELECTED BANKS DURING THE PERIOD OF 2002-03 TO 2011-12.

TABLE 2: BUSINESS PER EMPLOYEE (In lakhs)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	195.56	245.48	248.61	931.61	932.30
2003-04	230.97	297.23	273.24	848.79	971.67
2004-05	285.68	371.86	319.26	806.96	954.06
2005-06	359.09	436.36	370.45	790.64	1023.72
2006-07	448.37	518.11	426.58	817.75	1068.65
2007-08	552.33	657.70	499.04	829.53	1325.86
2008-09	686.91	811.43	561.59	775.00	1265.14
2009-10	713.75	966.73	633.58	763.69	1562.26
2010-11	855.44	1148.67	744.17	817.80	1760.54
2011-12	965.80	1274.27	821.12	788.08	2105.74
Mean	529.3900	672.7833	489.7636	816.9850	1296.9950
Rank	4	3	5	2	1

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

By comparing the ratio of business per employee of various banks on the basis of the mean value of ratios for the period, it has been noted that the business per employee is very high in case of foreign banks, as the mean value is 1296.99. It exhibits the management ability to optimize the use of its human resources. Next is the place of new private sector banks whose mean value is 816.98 and it is lowest in old private sector banks as it is 489.76 which is lower than the overall mean of 761.18.

The ratio of return on net worth for the various group of banks are given in table no 3.

TABLE 3: RETURN ON NET WORTH (Per cent)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	23.00	18.85	19.89	16.74	7.65
2003-04	25.05	21.67	19.74	20.33	10.34
2004-05	18.52	15.93	4.65	-8.34	8.62
2005-06	17.10	12.91	10.21	-0.64	5.68
2006-07	18.31	15.23	12.15	11.67	7.33
2007-08	18.95	16.06	13.43	10.19	10.30
2008-09	18.91	15.72	14.23	4.86	10.78
2009-10	17.92	16.70	11.60	68.11	6.04
2010-11	17.42	15.04	12.07	12.07	7.06
2011-12	14.78	18.73	11.94	13.98	8.05
Mean	18.9963	16.6832	12.9919	14.8973	8.1843
Rank	1	2	4	3	5

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

This ratio is useful to measure how well a bank is utilizing the shareholders investment to create returns for them, and can be used for comparison purposes with competitors in the same industry. The above table shows that the mean value of ratio of return on net worth is very high in case of state bank of India and its associates and it is positioned at first rank as the mean value is 18.99 and it is lowest in foreign banks as it is 8.18 and it is ranked as last.

The ratio of total advances to total deposits of various bank groups for the period of 2002-03 to 2010-11 is exhibited in table no 4.

TABLE 4 : TOTAL ADVANCES TO TOTAL DEPOSITS (Per cent)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	53.45	51.57	52.05	67.14	98.27
2003-04	54.13	51.93	52.91	62.78	104.94
2004-05	59.38	68.14	59.22	66.22	114.07
2005-06	68.91	70.44	64.53	65.76	113.89
2006-07	74.24	70.96	66.91	67.89	106.39
2007-08	75.62	71.37	65.89	71.50	105.89
2008-09	74.54	71.06	64.48	76.10	111.30
2009-10	75.12	68.36	67.24	77.58	107.47
2010-11	77.34	105.75	71.86	80.03	154.94
2011-12	79.53	68.67	73.18	84.37	159.76
Mean	69.2264	69.8255	63.8280	71.9383	117.6910
Rank	4	3	5	2	1

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

The average total advances to total deposit ratio of the selected bank groups over the study period is 78.50. Foreign bank groups exhibited a highest mean value of 117.69 and it is ranked first. New private sector banks and nationalized banks occupied the second and third position respectively. Old private sector banks occupied a last position as its mean value of ratio of total advances to total deposits is 63.82.
The ratio of net interest income to total assets for various bank groups is given in table no 5.

TABLE 5: NET INTEREST INCOME TO TOTAL ASSETS (Per cent)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	3.29	3.13	2.78	1.96	3.00
2003-04	3.29	3.29	3.11	2.47	2.94
2004-05	3.42	3.10	3.14	2.44	3.14
2005-06	3.23	2.89	3.22	2.50	2.95
2006-07	2.78	2.74	3.23	2.58	3.48
2007-08	2.28	2.36	2.95	2.78	3.75
2008-09	2.32	2.31	2.92	2.89	4.00
2009-10	2.43	2.28	2.62	2.91	3.33
2010-11	2.96	2.75	3.08	3.17	3.46
2011-12	2.90	2.58	2.96	3.12	3.99
Mean	2.8885	2.7431	3.0021	2.6818	3.4040
Rank	3	4	2	5	1

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

Net interest income (spread) is defined as the difference between interest income earned and interest expended. It is an important indicator of efficiency of the banks. By comparing the mean value of ratios for the period, it has been noted that the net interest income to total assets is very high in case of foreign banks, as the mean value is 3.40 and it is ranked first. New private sector banks are ranked last as its mean value is 2.68. The net interest income of public sector banks shows declining trend from 2002-03 to 2011-12. The net interest income of new private sector banks and foreign banks shows increasing trend from 2002-03 to 2011-12.
The ratio of burden to assets for various bank groups is given table no 6.

TABLE 6: BURDEN TO TOTAL ASSETS (Per cent)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	0.36	0.70	-0.14	-0.46	-0.02
2003-04	-0.10	0.43	0.15	-0.05	-0.83
2004-05	0.59	0.86	1.20	0.59	-0.32
2005-06	0.95	1.04	1.34	0.86	-0.62
2006-07	0.75	0.94	1.19	0.84	-0.07
2007-08	0.50	0.54	0.85	0.67	-0.03
2008-09	0.39	0.46	0.63	0.68	-0.76
2009-10	0.52	0.43	0.74	0.50	-0.16
2010-11	0.79	0.80	1.19	0.69	-0.30
2011-12	0.83	0.70	1.08	0.76	-0.35
Mean	0.5570	0.6883	0.8225	0.5092	-0.3460
Rank	3	2	1	4	5

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

By comparing the ratios on the basis of the mean value of ratios from the period, it has been noted that the burden to total assets is very high in case of old private sector banks and positioned first as the mean value is 0.50. Foreign banks are occupied last position as it is -0.34 and it is lower than the overall mean value of 0.44.
The ratio of operating profit to total assets for various bank groups is given in table 7.

TABLE 7: OPERATING PROFIT TO TOTAL ASSETS (Per cent)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	2.93	2.43	2.93	2.42	3.02
2003-04	3.40	2.86	2.96	2.52	3.73
2004-05	2.83	2.25	1.94	1.85	2.92
2005-06	2.28	1.96	1.89	1.71	3.57
2006-07	2.03	1.95	2.04	1.79	3.56
2007-08	1.78	1.78	2.12	2.11	3.77
2008-09	1.93	1.85	2.28	2.20	4.76
2009-10	1.94	1.83	1.87	2.40	3.49
2010-11	2.17	1.94	1.89	2.48	3.76
2011-12	2.08	1.88	1.88	2.36	4.34
Mean	2.3353	2.0729	2.1778	2.1844	3.6918
Rank	2	5	4	3	1

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

The results of the above table shows that the mean value of the ratio of operating profit to total assets of foreign banks (3.69) is more than the overall mean value of 2.49 and it is ranked first. The mean value of ratio of operating profit to total assets of nationalised banks is 2.07 which is lower than the mean value of all other banks and is ranked last. The operating profit to total assets of all the scheduled commercial banks except foreign banks are declined in 2011-12 when compared to the base year of 2002-03. It shows foreign banks are managing its funds effectively to obtain more profit.
The return on assets for various bank groups is given in table no 8.

TABLE 8: RETURN ON ASSETS (Per cent)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	1.13	1.01	1.30	1.12	1.42
2003-04	1.31	1.26	1.34	1.26	1.79
2004-05	0.96	0.95	0.47	0.46	0.41
2005-06	0.90	0.85	0.82	0.41	1.54
2006-07	0.97	0.94	0.95	0.91	1.79
2007-08	0.96	1.03	1.17	0.92	2.48
2008-09	0.92	0.98	1.25	0.61	2.91
2009-10	0.94	0.97	1.01	0.83	1.96
2010-11	0.96	0.97	1.05	1.27	1.93
2011-12	0.92	0.85	1.10	1.44	2.36
Mean	0.9984	0.9811	1.0454	0.9236	1.8596
Rank	3	4	2	5	1

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

Return on assets is an indicator of efficiency with which banks deploy their assets. The average return on assets ratio of all the selected banks for the purpose of the study is 1.16 and foreign banks (1.85) show more than this and ranked first. The mean value of ratio of return on assets of new private sector banks is 0.92 which is lowest among the selected bank groups and is ranked last.

The ratio of liquid assets to total assets is given in table no 9.

TABLE 9: LIQUID ASSETS TO TOTAL ASSETS (Per cent)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	8.75	8.49	10.83	11.09	18.72
2003-04	7.96	9.39	10.65	12.62	21.96
2004-05	8.61	8.79	11.46	9.37	20.26
2005-06	7.41	9.22	10.72	7.97	24.65
2006-07	9.25	9.88	12.43	10.31	27.60
2007-08	9.32	9.94	13.50	11.08	22.02
2008-09	7.78	9.25	12.65	9.12	22.98
2009-10	7.61	8.90	10.50	9.07	19.76
2010-11	8.23	8.18	8.54	8.67	19.97
2011-12	6.49	10.40	7.38	6.72	18.58
Mean	8.1405	9.2445	10.8670	9.6014	21.6495
Rank	5	4	2	3	1

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

The mean value of ratio of liquid assets to total assets of all the bank groups selected for the purpose of the study is 11.90. High liquid assets to total assets ratio signifies better liquidity position of the bank. Thus on the parameter the foreign banks ranked first as its mean value of ratio of liquid assets to total assets is 21.64 which is higher than the mean value of other bank groups and state bank of India and its associates ranked last as its mean value is 0.87.

The ratio of liquid assets to demand is exhibited in table no 10.

TABLE 10: LIQUID ASSETS TO DEMAND DEPOSITS (Per cent)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	87.10	98.64	155.50	134.33	281.84
2003-04	82.25	111.34	141.84	132.28	332.76
2004-05	98.86	108.72	145.13	93.81	484.70
2005-06	83.88	107.73	134.38	78.36	1134.90
2006-07	126.49	116.93	151.72	104.22	1204.70
2007-08	121.07	123.60	166.37	111.19	259.81
2008-09	110.59	129.05	191.35	84.66	235.33
2009-10	119.24	121.71	156.73	71.03	200.76
2010-11	131.77	124.28	136.48	67.81	247.94
2011-12	140.14	122.32	142.86	63.96	201.75
Mean	110.1387	116.4313	152.2360	94.1638	458.4484
Rank	4	3	2	5	1

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

The mean value of the ratio of liquid assets of demand deposits of all the scheduled commercial banks shows that 186.28 and foreign banks shows the mean value of 458.44 which is highest amongst the other bank groups and ranked first. New private sector shows lowest mean value of 94.16 and is ranked last.

The ratio of liquid assets to total deposits of various banks is shown in table no 11.

TABLE 11: LIQUID ASSETS TO TOTAL DEPOSITS (Per cent)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	11.07	9.84	12.49	14.62	43.00
2003-04	10.00	10.99	12.17	16.55	57.67
2004-05	10.46	10.89	13.01	12.32	58.11
2005-06	9.16	11.46	12.33	10.23	66.20
2006-07	11.32	11.88	14.55	13.32	63.00
2007-08	11.55	11.83	16.07	14.68	49.83
2008-09	9.49	10.81	14.82	12.31	49.59
2009-10	9.17	10.04	12.34	12.92	39.67
2010-11	10.04	14.31	10.28	12.21	48.47
2011-12	7.89	8.46	8.85	9.86	44.68
Mean	10.0153	11.0515	12.6916	12.9003	52.0220
Rank	5	4	3	2	1

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

The liquid assets to total deposits show the ability of the bank to meet its short term liability requirement and higher the ratios better the liquidity management of the bank. The mean value of the ratio of liquid assets to total deposits of the selected banks during the period of study shows that 19.73. Foreign banks have liquid assets to total deposit ratio of 52.02 which is highest amongst the other bank groups and thus ranked first. The mean value of ratio of liquid assets to total deposits of state bank of India and its associate is 10.01 and is thus ranked last position.

The cash deposit ratio is exhibited in table no 12.

TABLE 12. CASH DEPOSIT RATIO (Per cent)

Year	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
2002-03	6.13	6.84	6.05	8.41	5.90
2003-04	6.28	7.58	6.52	10.49	8.73
2004-05	6.01	7.34	6.84	7.01	9.14
2005-06	5.62	7.04	6.33	5.52	10.07
2006-07	8.26	7.31	7.16	7.35	8.74
2007-08	9.99	9.57	9.21	10.39	13.29
2008-09	7.06	7.52	6.84	7.42	8.47
2009-10	7.13	7.47	7.84	8.70	10.49
2010-11	8.24	7.36	7.05	8.60	9.52
2011-12	6.62	5.69	5.53	6.45	9.99
Mean	7.1302	7.3717	6.9372	8.0328	9.4344
Rank	4	3	5	2	1

Source: Data compiled and calculated from Statistical Tables Relating to Banks in India, R.B.I., Mumbai, Issues of relevant years.

The above table shows the cash deposit ratio of five bank groups for the period of 2002-03 to 2011-12. Cash deposit ratio is calculated to understand the liquidity position of the bank by considering cash in hand, balance with RBI in current accounts, balance with banks in India and money at call and short notice against total deposits. The mean value of the cash deposit ratio of foreign banks is 9.43 which highest amongst the other bank groups and is ranked first.

The group ranking of the selected bank groups on the basis of management efficiency is given in table 13.

TABLE 13. GROUP RANKING OF THE SELECTED BANK GROUPS ON THE BASIS OF MANAGEMENT EFFICIENCY

Ratio	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
Profit per employee	4	3	5	2	1
Business per employee	4	3	5	2	1
Return on net worth	1	2	4	3	5
Total advances to total deposits	4	3	5	2	1
Average	3.25	2.75	4.75	2.25	2.00
Rank	4	3	5	2	1

Foreign banks show excellent managerial capability and are thus ranked first on the basis of management efficiency. New private sector banks and nationalized banks occupied second and third position respectively. Fourth and fifth positions on the basis of management efficiency are occupied by State bank of India and its associates and old private sector banks.

The group rankings of the selected bank groups on the basis of earnings quality is given in table 14.

TABLE 14. GROUP RANKING OF THE SELECTED BANK GROUPS ON THE BASIS OF EARNINGS QUALITY

Ratio	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
Net interest income to total assets	3	4	2	5	1
Burden to total assets	3	2	1	4	5
Operating profit to total assets	2	5	4	3	1
Return on assets	3	4	2	5	1
Average	2.75	3.75	2.25	4.25	2.00
Rank	3	4	2	5	1

Foreign banks are at the top position and old private sector banks ranked second. State bank of India and its associates and nationalised banks placed in third and fourth position respectively. The last position is occupied by new private sector banks.

The group ranking of the selected bank groups on the basis of liquidity is given in table 14.

TABLE 15. GROUP RANKING OF THE SELECTED BANK GROUPS ON THE BASIS OF LIQUIDITY

Ratio	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
Liquid assets to deposits	5	4	2	3	1
Liquid assets to demand deposits	4	3	2	5	1
Liquid assets to total deposits	5	4	3	2	1
Cash deposit ratio	4	3	5	2	1
Average	4.50	3.50	3.00	3.00	1.00
Rank	5	4	2	2	1

The result of the above table shows that foreign banks have effective liquidity management and it is ranked first amongst the selected bank groups. New and old private sector banks shared the second position whereas fourth and fifth positions are occupied by nationalised banks and State bank of India and its associates.

The overall ranking of the selected bank groups on the basis of management efficiency, earnings quality and liquidity for the period of 2002-03 to 2011-12 is given in table no 16.

TABLE 16. COMPOSITE RANKING OF THE SELECTED BANKS ON THE BASIS OF MANAGEMENT EFFICIENCY, EARNINGS QUALITY AND LIQUIDITY

Ratio	State Bank of India & its associates	Nationalised Banks	Old Private Sector Banks	New Private Sector Banks	Foreign Banks
Management Efficiency	4	3	5	2	1
Earnings Quality	3	4	2	5	1
Liquidity	5	4	2	2	1
Average	4.00	3.67	3.00	3.00	1.00
Rank	5	4	2	2	1

The composite rankings for the selected bank groups were arrived at after computing the average of the group rankings. Foreign banks ranked first on the parameters of management efficiency, earnings quality and liquidity. New and Old private sector banks ranked second followed by nationalised banks. State bank of India and its associates occupied last position amongst all the selected bank groups during the period of study.

CONCLUSION

CAMEL approach is significant tool to assess the relative financial strength of a bank and to suggest necessary measures to improve weaknesses of a bank. In India, RBI adopted this approach in 1996 followed on the recommendations of Padmanabhan Working Group (1995) committee. The present study has been conducted to examine the productivity and profitability of scheduled commercial banks in India on the CAMEL parameters of Management efficiency, Earnings quality and Liquidity. It is found that foreign banks stood at top position in terms of productivity and profitability. Private sector banks ranked second followed by Nationalised banks and SBI and its associates positioned at last.

REFERENCES

1. Annual Reports of Reserve Bank of India (2011-2012).
2. Kapil, S. & Kapil, K, N, (2005). "CAEL's Ratings and its Correlation to Pricing Stocks-An Analysis of Indian Banks". University Journal of Bank Management, 4(1), 64-78.
3. Official Website of the Reserve Bank of India, www.rbi.org.in
4. Rajagopalan, A.V., "Productivity in Banks – An Overview", Trends and Challenges to Indian banking", (Ed.), S.S.Hugar, Deep and Deep Publications, New Delhi, 1993.
5. Ramachandran N. 91992), "Profit Planning as a management tool for Profit maximization", The Banker, January.
6. Ramamurthy, K.R. (1998), "Profitability and productivity in Indian Banking", *Chartered Financial Analyst*, February, pp. 53-54.
7. Sanjay J. Bhayani (2006), "Performance of New Indian Private sector banks: A comparative study", The Icfai Journal of Management Research, Volume 5, No.11, pp 53-70.

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Commerce and Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mail i.e. **infoijrcm@gmail.com** for further improvements in the interest of research.

If you have any queries please feel free to contact us on our E-mail **infoijrcm@gmail.com**.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-

Co-ordinator

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals