GIAN JYOTI E-JOURNAL, Volume 6, Issue 3 (July-Sept 2016) ISSN 2250-348X
13th National Conference on
"Management, Information Technology and Engineering"(GJ-NatConMITE 2016)
Saturday, 23rd July, 2016 at GJIMT, Sector-54, Mohali-160055, Punjab, India

Camel analysis of selected public sector banks

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Abstract

Banks are the pillars for the development of the economy. They are the storehouse of money. The main aim of this paper is to analysis the financial performance of Indian public sector bank using the camel model . The CAMEL stands for various criteria through which bank performance will be measured .C stands for the capital adequacy ; A stands for the assets quality of banks ; E stands for the earning and profitability & L stands for the liquidity indicators. For the purpose of the study ten years data (2004-05 to 2013-14) of ten public sector banks will be taken. The public sector banks will be selected on the basis of market capitalisation BSE (available on money control).

Key words :- financial performance, public sector bank, camel model.

I. INTRODUCTION

Banks are the pillars for the development of the economy. Banks are the storehouse of the money. The primary function of the banks is to accept money as deposit from those who have surplus money and want to save it. In return bank provides interest to the deposit holders' .Bank also provide cash to those who need money for investment and for other economic purposes in form of loans. Again bank charges interest from the borrowers. The difference between interest charged and interest given is the profit margin of the bank. The strength of the economy depends upon the fact that how efficiently bank is able to mobilise the savings in the productive channel. A bank as an establishment for the custody of money which it pays out on a customer's order. It has emphasized the deposit taking and payment making functions of a bank to the total exclusion of its money creation role (Oxford Dictionary).Banking as the accepting, for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise and withdraw able by cheque, draft, order or otherwise. (Section (5) (1) (b) of the Banking Regulation Act 1934)

ROLE OF BANKS IN ECONOMIC DEVELOPMENT

Banks plays a positive role in the economic development of a country as repositories of community's savings and as purveyors of credit. The banking sector has shown remarkable responsiveness to the needs of planned economy. As a recourse of this, the commercial banks opened a number of branches in urban, semi-urban and rural areas and have introduced number of attractive schemes to foster economic development. the activities of commercial banking have grown in multi-directional ways as well as multi-dimensional manner. The role of modern commercial banks in the development of the economy of India can be summarised as:-

- Mobilisation of the savings
- Capital formation
- Innovations
- Monetary policy
- Priority sector finance
- Agricultural finance
- Industrial finance
- Export finance
- Promotion of banking habit
- Promotion of regional development

No doubt, commercial banks play a vital role in the economic resource allocation of countries. They channel funds from depositors to investors continuously. They can do so, if they generate necessary income to cover their operational cost they incur in the due course. In other words for sustainable intermediation function, banks need to be profitable. Beyond the intermediation function, the financial performance of banks has critical implications for economic growth of countries. Good financial performance rewards the shareholders for their investment. This, in turn, encourages additional investment and brings about economic growth. On the other hand, poor banking performance can lead to banking failure and crisis which have negative repercussions on the economic growth.

CSR AND BANKING SECTOR

Profit is the ultimate goal of commercial banks. All the strategies designed and activities performed thereof are meant to realize this grand objective. Commercial banks could also have additional social and economic goals. In present scenario banks also plays an important role in corporate social responsibility. The phrase Corporate Social Responsibility was coined in 1953 with the publication of Bowen's 'Social Responsibility of Businessmen'. This concept tries to link companies with the society as the companies take their inputs from the society so it's become the responsibility of companies to think about the welfare of the society. Banks should also contribute towards CSR. The fundamental idea of CSR is that business corporations have obligation to contribute to the welfare of the society (Davis William 1984) and to work for social betterment (Fredrick 1986).

The empirical studies have shown that CSR disclosure activism varies across companies, industries and time (Gray et al.,). The latest CSR practice that the Ministry of Corporate Affairs has notified the Companies (Corporate Social Responsibility Policy) Rules, 2014, commonly referred to as the CSR Rules with effect from 1st April 2014. Accordingly, section 135 of the New Companies Act, 2013, at least two per cent of the average net profits of the Company made during the three immediately preceding financial years shall be spent for every financial year for the benefit of the society commencing from 1st April 2014. CSR is the policy in which the firm goes beyond compliance and engages in „"Actions that appear to further social good, beyond the interests of the firm and that which is required by Law"(McWilliams and Seigel,2001) and it at least knowingly does not do anything harm to its stakeholders(Campbell,2006)

II. STATEMENT OF THE PROBLEM

An Analysis of Bank Performance And Corporate social responsibility Initiatives : A Comparative Study of Public and Private Sector Commercial Banks in India.

III. OBJECTIVE OF THE STUDY

- To evaluate the financial performance of public and private sector commercial banks in India.

IV. REVIEW OF LITERATURE

Wrinker, Iraker&Tanko (2008) took 11 commercial banks of Nigeria over the period of nine years. The findings revealed that Camel Model is insufficient to show the complete picture of the performance of banks. They also identified the one best ratio in each acronym of the CAMEL. The studies also said that the acronym should be changed from CAMEL to CLEAM.

Mihir Dash &AnnyeshaDas (2009) undertook the study of public and private/foreign banks using camel analysis. The study concluded that private/foreign banks are far better than public sector banks in respect to management, earnings and profitability.

TabbusumNazir(2010) had evaluated the Punjab National bank and Jammu and Kashmir bank on the basis of camel analysis. It has been concluded that both banks are performing well but Jammu and Kashmir bank is performing bit better than PNB bank in regard to asset quality, earning ability management efficiency in regard to business per employee and profit per employee but income ratio of PNB is better.

Aswini(2012) concluded that Indian banking sector was the best performer in the world banking industryseeing tremendous competitiveness, growth, efficiency, profitability and soundness, especially in the recent years.

Kabir (2012) said that Camel is a rating system generally used by the government policy cycle, regulating bodies regulating commercial banks, that is, central banks and non-governmental policy research centres for the purpose of assessing the soundness of a savings association or a bank

Prasad &Ravinder(2012) had evaluated twenty nationalized banks on the basis of CAMEL analysis. The results revealed the on an average Andhra bank was at the top most position followed by bank of Baroda and Punjab & Sindh Bank. It is also observed that Central Bank of India was at the bottom most position.

S. M. Tariq Zafar, AdeelMaqbool& Syed Imran Nawab Ali (2012) had evaluated the financial performance of ten Indian commercial banks during the period of 2005-10. The study concluded that the banks had improved their performance in all the aspects from the year 2005-06 to 2009-10. Further in comparison to public and private sector banks, the public sector banks were showing better performance as compared to the private sector banks.

Misra&Aspal(2013) had seen the performance of State Bank Group using CAMEL approach. The study revealed that SBBJ is at top in terms of capital adequacy ratios and have good asset quality but need to improve management skills. The SBP had adequate capital base but earning capacity is not good. Similarly, SBI had good liquidity position but need to asset quality. SBT had efficient management and good earnings ratios but need adequate capital base. At last SBM had good earning capacity but lack in liquidity ratios.

Vincent OkothOngore&GemechuBerhanuKusa (2013) had undertaken the study of all the licensed domestic and foreign commercial banks operating in Kenya. The author included both micro and macro variables as independent variables and (ROA, ROE & NIM) as a proxy of profitability as dependent variables. The study revealed that the variables of the CAMEL model significantly affect the performance of banks. But liquidity did not very much affect the performance as compare to other factors like capital adequacy, asset quality, management qualities & earning efficiency.

DeeptiTripathi, Kishore Meghani& Swati Mahajan(2014) took the comparative study of Axis bank &Kotak Mahindra bank using camels approach after the reforms. The study revealed that no bank is perfect in the all parameters of the camel model. But an overall result concluded that comparatively Axis bank's performance is better that the performance of Kotak Mahindra bank.

GolamMohiuddin(2014) had selected two major banks of Bangladesh for his studies . The data for 5 years studies revealed that the performance of both the banks was quite satisfactory as per the acronym of CAMEL model.

Krupa R, Trivedi(2014) had applied the Camel analysis on the scheduled co-operatives of the Surat city and diagnosed that capital adequacy was satisfactory and they had very good recovery system. The co-operative banks were also using their assets efficiently but return on equity ratio was not very satisfactory. The management is efficient but overall liquidity position is not very good.

S.K Khatik&AmitkrNag (2014) had analysed five nationalised banks using CAMEL approach. They ranked the banks according to their performance under each acronym of CAMEL. As per their ranking Bank of Baroda has been ranked at the top position, the Union Bank of India and Dena Bank secured the 2nd position, the next was the State Bank of India which secured the 4th position and in the last position was the UCO Bank which secured the 5th position.

Sushendra Kumar Misra&Parvesh Kumar Aspal(2014)had applied Camel model on SBI group. He concluded that SBBJ need to improve management efficiency, SBP need to work on their earning capabilities, SBI should improve their asset quality, SBM need to improve liquidity position.

Palaneswri and Suriya(2015) had evaluated financial performance of TamilnaduMercantile banks using camel rating system. The study concluded that overall performance and financial position is quite satisfactory. The computed ratios as capital adequacy ratio, asset quality ratio, management efficiency ratio, earning ability ratio and liquidity ratios.

V. RESEARCH DESIGN:-

Database

This research is based on the secondary data available on RBI website, IBA website, Money Control and annual reports of various banks. The study will be based on the analysis of the last ten financial year'si.e 2005-06 to 2014-15. The top ten Banks both in public sector based on Market Capitalisation BSE (Available on money control.com) has been taken as database.

Research technique

CAMELS Model is used for measuring the financial performance of the public sector banks. CAMEL is a basically, a ratio based model to evaluate the performance of bank under various criteria. Soundness of a bank measured on a scale of 1(strongest) to 5(weakest).The CAMELS ratings is a supervisory rating system originally developed in the U.S. to classify a bank's overall condition. It's applied to every bank and credit union in the U.S. supervisory regulators. Bank examiners (trained and employed by the country's central bank) award these ratings. The CAMEL stands for various criteria through which bank performance is measured.

- **C** stands for the **Capital Adequacy**.

This ratioalso known as **Capital to Risk (Weighted) Assets Ratio** (**CRAR**), is the ratio of a bank's capital to its risk. National regulators track a bank's CAR to ensure that it can absorb a reasonable amount of loss and complies with statutory Capital requirements

The various agencies have given guidelines for minimum requirement of CAR ratio. These are as follows:-

Minimum Basel II Recommendation - 8

RBI guidelines - 9%

Banks undertaking insurance - 10%

Local Areas Bank - 15%

Under capital adequacy further four ratios are taken in this studies . These are:-

1. **CAR RATIO**:- it is the combination of Tier I and Tier II capital.

Formula**: -** Formula for calculating this ratio is:

$$CAR = \frac{\text{Tier I capital} + \text{Tier II capital}}{\text{Risk Weighted Assets}} * 100$$

Analysis:- The higher ratio is preferable**.** It shows that the bank is adequately capitalized.

2. **DEBT/EQUITY RATIO:-**This ratio is used to measure the company's financial leverage. It indicates how much debt the company using to finance its assets.

Formula: - $D/E\ Ratio = \frac{\text{Total Liabilities}}{\text{Shareholder's Equity}} * 100$

Analysis: -The lower D/E ratio is preferable.

3. **ADVANCES TO TOTAL ASSETS RATIO:-**This ratio indicates that how many assets has been given as the advances. An aggressive bank will try to earn more profits by giving out more advances.

Formula: -$\frac{\text{Advances}}{\text{Total Assets}} *100$

Analysis: - The higher ratio for advances to total assets is preferable.

4. **EQUITY TO TOTAL ASSETS RATIO:-**This ratio indicates how much amount of total assets will be left with shareholders after paying off the all liabilities.

Formula:-$\frac{\text{Net Worth}}{\text{Fixed assets}} *100$

Analysis:- The higher ratio is preferable as it also shows that new creditors believe in the bank.

A stands for the **Assets Quality of Banks**.

Assets quality related to the left side of the balance-sheet. Bank managers are concerned with the quality of their loans, since that provide earnings for the banks.

The ratio selected under the acronym A are:-

1. **NET NPA TO TOTAL ASSETS:-** Once the borrowers has failed to make interest or principal amount for 90 days, the loan is considered to be non performing asset (NPA).

Formula:-$\frac{\text{Net NPA}}{\text{Total Assets}} * 100$

Analysis:- Lower ratio is preferable as non-payments leads to losses to the bank and poor quality of assets but sometimes increased assets is the cause of lower ratio.

2. **GROSS NPA TO TOTAL ASSETS**:-It refers to the ratio of NPA without providing provision for the same.

Formula :-$\frac{\text{Gross NPA}}{\text{Total Assets}}$ *100

Analysis:- Lower ratio is preferable.

3. **NET NPA TO NET ADVANCES**:-Net NPA are calculated by reducing the cumulative balance of provisions outstanding at the period end from gross NPA. This ratio shows how much loans has been turned to bad debts as against total amount given as loan.

Formula :-$\frac{\text{Net NPA}}{\text{Net Advances}}$ *100

Analysis :- Higher ratio represents that the bad quality of loans are increasing thus lower ratio is preferable.

4. **GROSS NPA TO GROSS ADVANCES**:- This ratio represents the status of NPA without deducting the provision.

Formula :-$\frac{\text{Gross NPA}}{\text{Gross Advances}}$ * 100

Analysis :- Lower ratio is preferable.

M stands for the **Management Capability of the Banks**.

The M component represents the ability of the management to identify, measure, monitor and control the risk. The ratios calculated under the acronym M are :-

1. **BUSINESS PER EMPLOYEE :-**This ratio indicates how well the employees of the banks are working. Basically it shows input output relationship of employee and business.

   Formula :-$\frac{\text{Total Business}}{\text{No. Of Employees}}$ (Deposits + Advances)

   Analysis :**-** Higher ratio indicates the greater efficiency of the employees.

2. **PROFIT PER EMPLOYEE :-**This ratio indicates the contribution of each employee in the profitability of the banks.

   Formula :-$\frac{\text{Net Profits}}{\text{No. Of Employees}}$

   Analysis **:-**Higher ratio is preferable

3. **RETURN ON ASSETS (ROA)** :- It indicates how profitable a bank is in relation to its total assets.

   Formula :-$\frac{\text{Net Income}}{\text{Total Assets}}$ *100

Analysis :- The higher ROA is better.

4. **RETURN ON EQUITY (ROE**) :- This ratio indicates ability of the banks to generate profits from its shareholder's wealth.

Formula :- $\frac{\text{Net Income}}{\text{Shareholder's Wealth}} * 100$

Analysis :- The higher ratio is preferable.

Estands for the **Earning .**

Under the acronym E, ratios will be calculated to see stability in bank's earnings. The following four ratios will be calculated to check the earning of the banks.

1. DIVIDEND PAYOUT RATIO :-The dividendpayout ratio will tell how much percentage of the earnings of the bank is paid as dividend to the shareholders .

Formula :- $\frac{\text{Dividend per share}}{\text{Earning per share}} * 100$

Analysis :- Higher ratio is preferable as more shareholders will be satisfied if regular dividend will be paid.

2. **OPERATING PROFITS TO TOTAL ASSETS :-**This ratio indicates how much operating profits are generated through utilising assets of the bank.

Formula :- $\frac{\text{EBIT}}{\text{Total Assets}}$

Analysis :- The higher ratio is preferable as it indicates the assets the being utilised to full capacity thus giving maximum profits.

3. **NET INTEREST TO TOTAL INCOME:-**As the main source of income of the banks is the interest income. Thus this ratio indicates how much part of the total income comprised of interest income. Here net interest will be taken i.e. interest earned - interest paid.

Formula :- $\frac{\text{Interest Earned - Interest Paid}}{\text{Total Income}} * 100$

Analysis :- The higher ratio is preferable as it indicates that bank is working very well.

4. NET PROFIT TO TOTAL ASSETS :- This ratio indicates how much profit is left after paying off interest and taxes. Again it is calculated against total assets.

Formula :- $\frac{\text{Earning after interest and taxes}}{\text{Total Assets}} * 100$

Analysis :- The higher ratio is preferable.

L stands for the **Liquidity**

Liquidity refers to the ability of the banks to meet their short term obligations.. They are of particular interest to those extending short-term credit to the firm. An adequate liquidity position means a situation, where organization can obtain sufficient liquid funds, either by increasing liabilities or by converting its assets quickly into cash. The following four ratios are selected to check the liquidity position of the banks.

1. **LIQUID ASSETS TO TOTAL ASSETS:-** This ratio indicates the % of liquid assets in the total assets of the bank balance sheet. This ratio measures the overall liquidity position of the bank. The liquid assets include cash in hand, money at call and short notice, balance with Reserve bank of India and balance with banks . The total assets include the revaluation of all the assets.

Formula :- $\frac{\text{Liquid Assets}}{\text{Total Assets}} * 100$

Analysis :- Higher ratio will be considered better .

2. **LIQUID ASSETS TO TOTAL DEPOSITS :-** This ratio measures the liquidity available to the depositors of a bank. It is calculated by dividing the liquid assets with total deposits.

Formula :- $\frac{\text{Liquid assets}}{\text{Total Deposits}} * 100$

Analysis:- Higher ratio will be preferable.

3. **CREDIT DEPOSIT RATIO :-** This ratio indicates how much bank has lend out of the deposits it has mobilized. This ratio should neither be too high nor too low. Low ratio indicates that the bank is not making full use of its resources. High ratio indicates more reliance on deposits for lending. Thus disturb liquidity of banks.

Formula:- $\frac{\text{Total Advances}}{\text{Total Deposits}} * 100$

Analysis :-This ratio varies from bank to bank. But for the purpose of lending higher ratio is preferable.

4. **CURRENT RATIO** :- The current ratio is a liquidity ratio that measures a company's ability to pay short-term and long-term obligations. To gauge this ability, the current ratio considers the current total assets of a company (both liquid and illiquid) relative to that company’s current total liabilities

Formula :- $\frac{\text{Current Assets}}{\text{Current Liabilities}}$

A ratio under 1 indicates that a company's liabilities are greater than its assets and suggests that the company in question would be unable to pay off its obligations if they came due at that point. While a current ratio below 1 shows that the company is not in good financial health, it does notnecessarily mean that it will go bankrupt.

On the other hand, a high ratio (over 3) does not necessarily indicate that a company is in a state of financial well-being either. Depending on how the company's assets are allocated, a high current ratio may suggest that that company is not using its current assets efficiently, is not securing financing well or is not managing its working capital well. Analysis:-For the purpose of ranking, bank with higher ratio will be ranked one. Banks with a rating of 1 are considered the most stable banks; banks with a rating of 2 or 3 are considered average, and those with rating of 4 or 5 are considered below average, and are closely monitored to ensure their viability. These ratings are disclosed only to the bank's management and not to other banks or to general public

VI. DATA ANLYSIS AND INTERPRETATION

*Table:-1 Camel Rating :**C:- Capital Adequacy***

BANKS	CAR %	R	D/E RATIO %	R	AD 2 T.A %	R	EQUITY 2 T.A %	R	COMPOSITE C	R
SBI	12.87	**2**	12.96	**2**	59.16	**7**	5.99	**2**	3.25	**1**
BOB	12.19	**3**	14.47	**4**	59.09	**8**	5.94	**3**	4.5	**4**
PNB	13.02	**1**	14.25	**3**	60.27	**6**	5.90	**4**	3.5	**2**
C. BANK	11.98	**5**	17.15	**6**	60.97	**5**	5.12	**6**	5.5	**6**
CBI	11.49	**10**	28.45	**10**	57.68	**10**	3.98	**10**	10	**10**
BOI	10.72	**9**	17.64	**7**	62.12	**3**	4.80	**7**	6.5	**8**
IDBI	11.80	**6**	11.76	**1**	61.31	**4**	5.60	**5**	4	**3**
UNION BANK	11.08	**7**	18.31	**8**	62.47	**2**	4.69	**8**	6.25	**7**

INDIAN BANK	12.11	**4**	14.55	**5**	58.46	**9**	6.39	**1**	4.75	**5**
SYNDICATE BANK	10.86	**8**	21.93	**9**	63.23	**1**	4.02	**9**	6.75	**9**

Author's own work

Interpretation:- Table 1 shows that Punjab National Bank rank has highest capital adequacy ratio. The least capital adequacy ratio is of Central Bank of India but still it is meeting the requirement of the minimum Basel II recommendations i.e. 8%. So all the banks under study meeting the minimum requirement as specified by the Basel II. In regard to Debt Equity ratio , which represents the degree of leverage of a bank and indicates the relative proportion of shareholders' equity and debt used to finance a company's assets, shows that IDBI bank is using minimum debt to run their business whereas CBI India is using maximum debt and their CAR ratio is also low. In regard to the ratio advances to total assets ,shows that Syndicate bank is very aggressive in lending. The next best performer in lending activities are Union bank(62.47) and Bank of India(62.12) followed by IDBI (61.31). The last ratio used under the parameter C is Equity to Total Assets, shows that Indian Bank has maximum assets to pay off their shareholder in case of winding up followed by SBI(5.99) ,Bank of Baroda (5.94),PNB (5.90). and the least equity to assets ratio is of Central Bank of India (3.98).

On the basis of group average of four sub-parameters of capital adequacy, SBI(3.25) ranked number 1 followed by PNB(3.5),Bank of Baroda(4.5), Indian Bank(4.75), Canara Bank (5.5),Union Bank (6.25),Bank of India(6.5), Syndicate (6.75) and CBI(10). Thus at last it can be concluded that CBI is the only bank which is not performing well either individually or as a composite.

*Table:-2Camel Rating :****A:- Asset Quality***

BANKS	N.NPA 2 T.A	R	G.NPA 2 T.A	R	G.NPA TO G.AD	R	N.NPA to N.AD	R	COMPOSITE A	R
SBI	1.146	**9**	2.34	**9**	3.92	**9**	1.692	**9**	9	**9**
BOB	0.454	**1**	1.53	**4**	2.66	**4**	0.621	**1**	2.5	**2**
PNB	0.624	**3**	2.05	**8**	3.40	**8**	0.731	**3**	5.5	**6**
C. BANK	0.830	**6**	1.21	**1**	2.03	**1**	1.167	**7**	3.75	**3**
CBI	1.200	**10**	2.58	**10**	4.65	**10**	1.729	**10**	10	**10**
BOI	0.841	**8**	1.79	**5**	2.90	**6**	1.195	**8**	6.75	**8**
IDBI	0.827	**5**	1.46	**3**	2.34	**3**	1.069	**5**	4	**4**

UNION BANK	0.830	**6**	1.92	**6**	3.06	**7**	1.098	**6**	6.25	**7**
INDIAN BANK	0.570	**2**	1.24	**2**	2.19	**2**	0.726	**2**	2	**1**
SYNDICATE BANK	0.761	**4**	2.01	**7**	2.85	**5**	0.871	**4**	5	**5**

Author's own work

Interpretation:- Table 2 shows that Bank of Baroda(.454) is having the lowest net non performing assets against total assets , the maximum net non performing assets against total assets is of CBI(1.2). It shows that quality of CBI advances is not very good. In regard to gross nonperforming assets to total assets Canara bank is having best quality of loans followed by Indian bank(1.24) and IDBI(1.46) and the maximum Gross NPA to total assets is of CBI. In regard to gross NPA to gross advances, Canara Bank is at good position followed by Indian Bank(2.14) and IDBI(2.34).

The worst gross NPA to gross advances ratio is of CBI(4.65). The next ratio under the parameter A is net NPA TO net advances ratio. This ratio shows that Bank of Baroda is least NPA against the net advances followed by Indian bank(0.726), PNB(0.731),Syndicate bank(871). The study also showed that NPA's of all the banks reduce during the period 2007-2011. After 2011 it again started the increasing trend.

On the basis of group of averages of four sub-parameters of asset quality, the Indian Bank(2) is at the top position followed by Bank of Baroda(2.5),Canara Bank(3.75), IDBI(4),Syndicate(5),PNB(5.5) ,Union bank(6.25), Bank of India(6.75), SBI(9) &CBI(10).

Table:-3 Camel Rating :M :- ***Management Efficiency***

BANKS	B.P.E	**R**	P.P.E	**R**	ROA %	**R**	ROE %	**R**	COMPOSITE M	**R**
SBI	49.94	**10**	0.348	**8**	0.815	**6**	14.42	**8**	8	**9**
BOB	82.56	**2**	0.574	**2**	0.900	**5**	15.15	**6**	3.75	**1**
PNB	62.97	**7**	0.490	**5**	1.080	**2**	17.65	**1**	3.75	**1**
C. BANK	77.07	**4**	0.496	**4**	0.942	**4**	16.25	**4**	4	**3**
CBI	50.94	**9**	0.178	**10**	0.457	**10**	9.38	**9**	9.5	**10**
BOI	79.21	**3**	0.410	**7**	0.757	**8**	14.75	**7**	6.25	**8**
IDBI	185.11	**1**	0.932	**1**	0.604	**9**	8.97	**10**	5.25	**6**
UNION BANK	68.62	**5**	0.489	**6**	0.979	**3**	16.51	**3**	4.25	**4**
INDIAN BANK	61.16	**8**	0.535	**3**	1.249	**1**	15.62	**5**	4.25	**4**
SYNDICATE BANK	64.08	**6**	0.337	**9**	0.759	**7**	17.28	**2**	6	**7**

Author's own work

Interpretation:-Table 3 shows the sub parameters of management efficiency. The parameter is business per employee and the IDBI bank is able to secure maximum business per employee. In fact no any other bank is able to have such good business followed by the Bank of Baroda, Bank of India. The least business per employee is of SBI bank. That is SBI may have more employees as compared to the business. The other ratio is profit per employee . This ratio indicates the contribution of each employee in the profitability of the banks . Again the maximum contribution is made by the employees of IDBI bank (.932) followed by the Bank of Baroda(.574), Indian Bank (.535). The least contribution in the profitability is made by the employees of Central Bank of India. In regard to the return on assets, Indian Bank is the most profitable bank in relation to its assets followed by PNB and Union Bank. The last ratio calculated under this parameter is return on equity, the PNB is the best performer followed by Syndicate bank(17.28) & Union Bank(16.51). The minimum return on equity calculated of IDBI though showing good result in regard to B.P.E & P.P.E.

On the basis of group average of this parameter, management of Bank of Baroda & PNB are the best followed by Canara Bank. Then again Union bank and Indian bank have the same rank followed by IDBI, Syndicate, Bank of India, SBI & CBI.

*Table:-4 Camel Rating :**E:-Earnings***

BANKS	OP/T.A	R	D.P.O.RATIO	R	N.INT/T.I	R	N.P/T.A	R	COMPOSITE E	R
SBI	2.15	**3**	19.85	**4**	32.38	**4**	0.84	**6**	4.25	**4**
BOB	2.00	**5**	20.29	**1**	32.40	**3**	0.88	**4**	3.25	**1**
PNB	2.38	**2**	17.22	**8**	36.12	**1**	1.05	**2**	3.25	**1**
C. BANK	1.91	**6**	18.11	**7**	26.74	**9**	0.92	**3**	6.25	**7**
CBI	1.41	**9**	17.20	**9**	28.44	**8**	0.45	**10**	9	**10**
BOI	1.81	**7**	19.57	**6**	29.00	**7**	0.74	**8**	7	**8**
IDBI	1.33	**10**	20.09	**3**	14.23	**10**	0.56	**9**	8	**9**
UNION BANK	2.06	**4**	19.35	**5**	30.47	**6**	0.86	**5**	5	**5**
INDIAN BANK	2.44	**1**	16.20	**10**	34.22	**2**	1.22	**1**	3.5	**3**
SYNDICATE BANK	1.71	**8**	20.12	**2**	30.84	**5**	0.76	**7**	5.5	**6**

Author's own work

Interpretation:- Table 4 shows that parameter E of the camel rating . under this parameter operating profits to total assets ratio(OP/T.A) is taken. This ratio shows that maximum operating profits are earned by Indian Bank(2.44) followed by PNB(2.38),SBI(2.15). The bank which is earning least operating profits is IDB (1.33). The next ratio is dividend payout ratio(DPO) that shows Bank of Baroda is paying maximum dividend to its shareholders followed by Syndicate Bank(20.12), IDBI(20.9) & SBI(19.85). The lowest dividend payout ratiois of Indian Bank(16.20). it can be concluded that they have high % of retained earnings as they have highest profits but lowest D.P.O ratio. In regard to Net Interest to total income ratio (NET INT/T.I), the maximum interest income is earned by PNB (36.12) followed by Indian Bank(34.22), Bank of Baroda (32.40).

The least interest income of selected banks is IDBI bank(14.23). thus concluded that this bank is earning profits through investments rather than its main source of income (interest).The Net profits to total assets (N.P/T.A) ratio shows that Indian bank is earning maximum net profits as operating profits followed by PNB &Canara bank. The least net profits against total assets are earned by the Central Bank.

On the basis of composite E, PNB and Bank of Baroda (3.25)are best in regard to the earnings followed by Indian bank(3.5), SBI(4.25), Union bank(5), Syndicate bank(5.5), Canara bank(6.25), Bank of India(7), IDBI(8) and CBI(9).

Table 5:- Camel Analysis :**L:- Liquidity**

BANKS	L.A/T.A	R	L.A/T.D	R	CURRENT RATIO	R	CDR	R	COMPOSITE L	
SBI	8.81	**4**	11.45	**3**	0.045	**2**	76.85	**2**	2.75	1
BOB	13.39	**1**	15.63	**1**	0.029	**4**	69.01	**8**	3.5	3
PNB	8.99	**3**	10.76	**5**	0.024	**6**	72.14	**6**	5	5
C. BANK	8.71	**5**	9.98	**6**	0.022	**9**	69.80	**7**	6.75	7
CBI	7.91	**7**	8.94	**9**	0.036	**3**	65.76	**10**	7.25	9
BOI	10.41	**2**	12.37	**2**	0.029	**4**	73.81	**3**	2.75	1
IDBI	6.42	**10**	11.37	**4**	0.051	**1**	108.60	**1**	4	4
UNION BANK	7.74	**9**	9.05	**8**	0.024	**6**	73.17	**4**	6.75	7
INDIAN BANK	7.60	**8**	8.75	**10**	0.021	**10**	67.17	**9**	9.25	10
SYNDICATE BANK	8.54	**6**	9.76	**7**	0.023	**8**	72.49	**5**	6.5	6

Author's own work

Interpretation:-Table 5 show the ratio liquid assets to total assets (L.A/T.A). It indicates that maximum liquid assets are available with Bank of Baroda (13.39) followed by Bank of India(10.41) and PNB(8.99). The least liquidity is maintained by the IDBI(6.42). It may bethe reason for having maximum B.P.E & P.P.E. The liquid assets to total deposits (L.A/T.D) indicates the again BOB is having maximum liquid assets against total deposits .The least liquidity is maintained by the Indian bank(8.75). Then there is the Current ratio which shows the relationship between current assets and current liabilities. This ratio should varies somewhere between 1-2. All the banks have this ratio below 1 . It indicates that all the banks are maintaining their current ratio. But the best bank is IDBI and the least ratio is of Indian bank. The last ratio is Credit Deposit

Ratio(CDR) . This ratio indicates that IDBI followed by SBI rely on deposits for their lending activities followed by Bank of India. The bank which is not adequately using its deposits is CBI..On the basis of composite L it has been observed that maximum liquidity to meet their short term debts are maintained by the SBI & Bank of India(2.75) followed by Bank of Baroda (3.5), IDBI(4), PNB(5), Syndicate bank(6.5), Canara bank & union bank(6.75), CBI and Indian Bank .

Table :-6:-Composite Performance (Overall Ranking

BANKS	C	A	M	E	L	AVG	RANK
SBI	3.25	9.00	8.00	4.25	2.75	5.5	**6**
BANK OF BARODA	4.50	2.50	3.75	3.25	3.50	3.5	**1**
PNB	3.50	5.50	3.75	3.25	5.00	4.2	**2**
CANARA BANK	5.50	3.75	4.00	6.25	6.75	5.3	**5**
CENTRAL BANK	10.00	10.00	9.50	9.00	7.25	9.2	**10**
BANK OF INDIA	6.50	6.75	6.25	7.00	2.75	5.9	**8**
IDBI	4.00	4.00	5.25	8.00	4.00	5.1	**4**
UNION BANK	6.25	6.25	4.25	5.00	6.75	5.7	**7**
INDIAN BANK	4.75	2.00	4.25	3.50	9.25	4.8	**3**
SYNDICATE BANK	6.75	5.00	6.00	5.50	6.50	6.0	**9**

Author's own work

Interpretation:-Table 6 shows the composite ranking that has been calculated from the group ranking of the public sector banks in India for the period of 2005-2014and results show that Bank of Baroda is at the top position followed by the PNB, Indian Bank, IDBI Bank, Canara Bank**.** Central Bank of India secured the least position.

On the basis of Camel rating , Bank of Baroda and PNB are considered the most stable banks; Indian Bank and IDBI banks, Canara Bank & SBI are considered average, and the Union Bank , Bank of India, Syndicate Bank & CBI are considered below average, and are closely monitored to ensure their viability

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Abbreviation used:

1. **SBI :- State Bank Of India**
2. **BOB :- Bank of Baroda**
3. **PNB :- Punjab National Bank**
4. **C. Bank :- Canara Bank**
5. **CBI :- Central Bank of India**
6. **BOI :- Bank of India**
7. **IDBI :- Industrial Development Bank of India**
8. **CAR :- capital adequacy ratio**
9. **D/E Ratio :- debt equity ratio**
10. **AD 2 T.A :- advances to total assets**
11. **EQUITY 2 T.A :- equity to total assets**
12. **R :- rank**
13. **N.NPA 2 T.A :- net non - performing assets to total assets**
14. **G.NPA 2 T.A :- gross non - performing assets to total assets**
15. **G.NPA TO G.AD :- gross non-performing assets to gross advances**
16. **N.NPA to N.AD :- net non-performing assets to net advances**
17. **Composite A :- composite assets quality**
18. **B.P.E :- business per employee**
19. **P.P.E :- profit per employee**

20. ROA :- return on assets

21. ROE :- return on equity

22. COMPOSITEM:-composite management efficiency

23. OP/T.A :- operating profits/ total assets

24. D.P.O ratio :- dividend payout ratio

25. N.INT/T.I :- net interest/ total interest

26. N.P / T.A :- net profit total assets

27. COMPOSITE E :- composite earning efficiency

28. L.A/T.A :- liquid assets/ total assets

29. L.A/ T.D :- liquid assets/ total deposits

30. CDR :- credit deposit ratio

31. COMPOSITE L :- composite liquidity ratios