

A Study of Financial Performance Evaluation of Banks in India

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CERTIFICATE

This is to certify that the dissertation work done on “A Study of Financial Performance Evaluation of Banks in India” is a bonafide work carried out by Mr. C. Vanlalzawna under my supervision and guidance. The dissertation is submitted towards the partial fulfillment of the Degree of Master of Philosophy in Management.

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DECLARATION

I, C. VANLALZAWNA, hereby declare that the subject matter of this dissertation is the record of work done by me, that the contents of this dissertation did not form basis of the award of any previous degree to me or to do the best of my knowledge to anybody else, and that the dissertation has not been submitted by me for any research degree in any other University/Institute.

This is being submitted to the Mizoram University for the degree of Master of Philosophy in Management.

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PREFACE

A sound financial system is indispensable for a healthy and vibrant economy. The banking sector constitutes important components of the financial services industry. Indian banking sector is an important constituent in the Indian financial system. The performance of Indian economy depends largely on the performance of Indian banking sector. The performance evaluation of Indian banking sector is important through performance measurement system that provides an opportunity to assess of Indian banks.

The studies of efficiencies of bank are very important for policy makers, industry leaders and many others who are reliant on the banking sector. The performance of banks has been an issue of major interest for various stakeholders such as regulators, customers, investors and general public. The performance analysis of banks is useful to the policy-makers to identify the success or failure of bank and to adopt good strategies for the success of the bank. Performance evaluation of bank is an essential tool to understand the financial status of the bank, and to take necessary measures to uplift the standard of financially weak bank to be a successful one. The knowledge of financial performance helps in predicting, comparing and evaluating the earning ability of the company. It also helps in investment and financial decisions. Company provides financial information through financial statement and reports.

Banking industry acts as a backbone of modern business and performs as a bridge to provide a specialized source of financial intermediation. Banks transfigure their multiple inputs in several financial goods. The macroeconomic stability of banks enables them to change their overall performances and plays a crucial role in the reinforcement of fiscal policy. Therefore the organized and proper allotment of banking encouraged the growth level of economy. Performance assessment is crucial in the background of an effective and successful financial sector. The efficiency of banking sector is very crucial for the firmness and stability of the economy in overall period of time.

CAMEL supervisory rating Model had been employed in the study for rating the four selected banks in India. CAMEL stands for Capital Adequacy, Assets quality,

Management efficiency, Earning ability and Liquidity. The main endeavor of CAMEL Model system is to detect problems they manifest themselves. The RBI has instituted this mechanism for critical analysis of the Balance Sheet and Profit and Loss account of bank by themselves and presentation of such analysis to provide for internal assessment of healthy position of bank. CAMEL is basically a ratio based model for evaluating the performance of bank. It is a model for ranking/rating of banks and in the present study, an attempt has been made to analyze the performance of selected public sector and private sector banks in India using CAMEL framework.

In the present study, the researcher has attempted to evaluate two major public and private sector banks in India SBI and PNB bank from public sector banks and HDFC and ICICI banks from private sector banks have been selected and put a comparative analysis of selected banks using accounting tools of ratio analysis and five key indicators of CAMEL Model.

Data for the study has been collected over a period of ten years from 2005-06 to 2014-15, from respective annual reports and RBI annual reports. In addition to that, various publications related to banking industry and journals had also been referred.

During the course of the study, hypotheses have been tested. The hypotheses are based on statistical test, F- test (One way ANOVA). The present study is divided into five chapters. The first chapter describes the introduction about the origin and definition of bank. Research methodology and review of related study has also been highlighted in this chapter. The second chapter describes the overview of Indian banking industry. Growth and progress of Indian banking industry has also been covered. Chapter three introduces the CAMEL Model and its conceptual framework; implementation of CAMEL Model by RBI has been highlighted. Chapter four comprises data analysis and interpretation. Chapter five includes summary, findings, suggestions and conclusions for the present study.

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LIST OF ABBREVIATIONS

ABBREVIATIONS	
RBI	Reserve Bank of India
SBI	State Bank of India
PNB	Punjab National Bank
HDFC	Housing Development and Financial Corporation
ICICI	Industrial Credit and Investment Corporation of India
KPI	Key Performance Indicator
IBA	Indian Banks Association
CGR	Compound Growth Rate
ROA	Return on Advance
ATM	Automated Teller Machine
NPA	Non Performing Assets
EVA	Economic Value Added
ROCE	Return on Capital Employed
RONW	Return on Net worth
EPS	Earnings per Share
MVA	Market Value Added
ANOVA	Analysis of Variance
DEA	Data Envelopment Analysis
IRDP	Integrated Rural Development Programme
DRI	Differential Rate of Interest
LPG	Liberalization Privatization Globalization
CRR	Cash Reserve Ratio
SLR	Statutory Reserve Ratio
NBFC	Non Banking Financial Corporation
CRM	Customer Relationship Management
WOS	Wholly owned Subsidiary
FDIC	Federal Deposits Insurance Corporation
CRAR	Capital to Risk Weighted Assets
BIS	Bank for International Settlement
FSF	Financial Stability Forum
RWA	Risk Weighted Assets

Chapter - 1

INTRODUCTION

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- 1.2 Origin of bank**
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1.1 Introduction

Banking is one of the oldest financial institutions and it is as old as human civilization. The origin can be traced in ancient times. Banking system occupies an important role in the economic development of a country. Banking institution is indispensable in modern society. It plays a vital role in the economic development of a country. The basic functions of a bank is to collect deposits as much as possible from customers and mobilize it into the most preferable and profitable sector (Dufera, 2010). Bank itself is an organization engaged in any or all the various functions of banking viz. receiving, collecting, transferring, paying, lending, investing, dealing, exchanging and servicing (safe deposits, trusteeship, agency, custodianship), etc.

Generally bank means an institution that provides fundamental banking services such as accepting deposits from the public and providing loans. It is a financial institution that accepts deposits from the public and provides loans from deposits. Banking institution deals in money, so they are money traders. But with the passage of time, functions of bank has been increasing and diversifying. So now, banks are not merely the traders of money only but they also create credit.

In the past several years, Indian banking system has achieved some good milestone and outstanding achievements to its credit. Indian banking has spread even to the remote area of the country that shows the extensive reach of it and for inclusive Indian growth story. Banks are the major and main participants of the financial system in India. In this modern age, banking sector offer various facilities and services to their customers and thereby improves the life of the citizens.

There are several popular modalities of banking. It may differ country to country. Commercial banking is one of them. Banking and financial institutions are also transmission channels of monetary policy, it is important for effective monetary policy management to ensure that their financial health is sound and overall financial sector is stable. Bank plays important role in the development of country economy and forms the core of money market for the country. The banking system which constitutes the core of

the financial sector plays a critical role in transmitting monetary policy impulses to the entire economic system.

The bank normally has three important functions: first, the operation of payment system; second, mobilizations of savings; and finally the allocation of savings to investment projects (Sharma, 2011). An efficient banking structure can promote greater amount of investment which can further help to achieve faster growth rate of economy. Worldwide experience confirms that countries with well developed and market oriented free banking system grow faster and more consistently. An efficient banking system is recognized as basic requirements for the economic development of any economy. Bank mobilizes the saving of community into productive channels.

1.2 Origin of bank

There is no common view regarding the origin of word “Bank”, because banking transactions were started in different periods in different countries. One opinion is that, the word “Bank” is derived from the French word ‘Banco’ or ‘Banque’ which means “Bench”. The early bankers, the Jews in Lombardy transacted their banking activities on benches. When a banker or their business failed his benches or ‘Banco’ was named ‘bankrupt’. Another view is that the word ‘Bank’ might be derived from the German word ‘Bank’ which means a Joint Stock Fund. Then it was Italianized into ‘Banco’, franchised into Banque and finally anglicized into bank (Gordon and Gupta, 2012). This view seems to be possible and prevalent even today.

The existence of banking in India can be traced back in the first decade of 18th century. The English business community that came to India in the 17th century could not use indigenous banking or bankers, due to language and other problems. The first bank in India called the General Bank of India was established in the year 1786. Then East India Company started the Bank of Bengal in Calcutta in 1809. Banking in India is as old as mountains according to Central Banking Enquiry Committee (1931). Money lending activity in India could be traced back to the Vedic period. Money was accepted on deposits and given in the form of advances. In the Second or Third Century A.D., ‘Manu’, The Hindu Jurist, dedicated apart of his work to deposits and advances and

established some rules regarding to the rate of interest to be charged or paid (Gadhia, 2015).

The banking industry in India has a huge canvas history, which covers the traditional banking practices from the time of British to the reform period, nationalization to privatization of banks and now increasing number of foreign banks in India. Therefore, banking in India has been a long journey. Banking industry in India has also achieved a new height with the changing times. The use of technology has brought a revolution in the working style of the bank (Suba, 2012).

1.3 Meaning of bank

The meaning of bank can be understood only by its functions just as a tree is known by its fruits. As any other subject, it has its own origin, growth and development. Banks are financial agencies that provide medium and long-term financial assistance and act as catalytic agents in promoting balanced development of the country. Bank accepts deposits, support the payment system and provide the largest sources of funds in the market. Safe and sound banking system is of crucial importance for the financial stability and sustainable development.

1.4 Definition of bank

Banking Regulation Act, 1949 and Reserve Bank of India (RBI) Act, 1934 are legislated in India to regulate all banking firms in India. The Act regulates the manner in which banks are to be run, the kind of business they should do, how they should be managed, the kind of business they may not do and the likes. Sec 5 (1) (b) of the Banking Regulation Act, 1949 has defined banking as: “Accepting for the purpose of the lending of investments of deposits of money from the public repayable on demand or otherwise and withdrawable by cheques, draft, and order or otherwise”.

Bank is an establishment for custody of money received from or on behalf of its customers. Its essential duty is to pay their drafts unit. Its profit arises from the use of the money left employed by them (Vasant, 2005).

Thus, bank means an institution which trades in money, accepting deposits money from the public and provides loans and advances to its customers, and also facilitating the transmission of remittances from one place to another.

1.5 Function of bank

The banking sector is considered as the lifeline of modern economy. It can be regarded as one of the important pillars of the financial system which plays a vital role in the success of an economy. Banks are one of the oldest financial intermediaries in the financial system. They play an important role in the mobilization of deposits and disbursement of credit to various sectors of the country's economy. The strength of economy of any country basically hinges on the strength and efficiency of the financial system, which, in turn, depends on the sound and solvent banking system.

Sec 5 (1) (c) of Banking regulation Act, 1949 defines banking company as “any company which transacts the business of banking in India”. From the definition given by Banking Regulation Act, 1949, the functions of commercial banks in India emerge. Hence, functions of commercial banks can be categorized into two major functions: Primary and Secondary functions.

1.5.1 Primary functions: Primary functions of banks are also known as banking functions. They are the main functions of the banks. Primary functions of banks are given below:

1.5.1 (a) Deposits: Deposits is the main source of funds for commercial banks. The amount mobilized as deposits is then lent in the form of advances. The higher the amount of deposits mobilized, the higher is the amount of funds lent. The growth of deposits depends on savings. For economic growth to take place, it is essential that these savings are mobilized and channelized for capital formation which, in turn, accelerates economic growth.

Banks collect deposits from the public. There are different types of deposits such as:

- 1) *Saving deposits*: This type of deposits encourages saving habit from the public. The interest is low. Withdrawal of deposits is allowed subject to certain restrictions. This account is suitable to salary and wage earners. This account can be open in single name or joint names.
- 2) *Fixed deposits*: In this type of deposit, lump sum amount is deposited at one time for specific period. Withdrawals are not allowed before the specific time period. Those who have surplus cash go for this type of deposits.
- 3) *Current deposits*: This type of account is operated by businessmen. Withdrawal is freely allowed. No interest is paid. In fact, there are services charged. The account holders can get the benefit of overdraft facility.
- 4) *Recurring deposits*: This type of account is maintained by salaried person and petty traders. A certain sum of money is periodically deposited in the bank. Withdrawal is allowed only after the expiry of certain period.

1.5.1 (b) Granting of loans and advances: Banks are special type of intermediaries which not only accepts and deploy amount of uncollateralised deposits in a fiduciary capacity, but also leverage funds through credit creation. Banks are creators of credit. The creation of credit is an important function of a bank and this function distinguishes bank from non-banking institutions. Different type of bank loan and advances are:

- 1) *Overdraft*: Overdraft is advanced to holders of current accounts. If borrower requires temporary finance, banker may allow him to overdraw on his account with or without security. No separate account is maintained. A certain amount is sanctioned as overdraft which can be withdrawn within a certain period of time. Interest is charged on actual amount withdrawn.
- 2) *Cash credit*: It is a financial arrangement through which bank allows borrower to borrow money up to a certain limit. The client is allowed cash credit up to a specific limit fixed in advance. It can be given to current account holder as well as to others who do not have an account with bank. It is given against the security of tangible assets and or guarantee.
- 3) *Loans*: Loan is an advance sanctioned by the bank to the customers with or without security. In respect of loan, banker makes lump-sum payment to the borrower or

credits his deposits account with the money advanced. It is normally a short term period of financing cash for reasonable purpose or lending cash to account holder for predetermined purpose. The amount is to be repaid within a fixed time period with interest.

- 4) *Discounting of bills of exchange*: Bank can give money in advance by discounting or by purchasing bills of exchange both domestic and foreign bills. The bank pays the bills amount to the drawer or beneficiary of the bill by deducting usual discount charges. On maturity, the bill is presented to the drawer or acceptor of the bill and the amount is collected.

1.5.2 *Secondary functions of banks*: Apart from the above primary functions, banks also perform secondary functions and it is also known as Non- banking functions. They are as follows:

1.5.2 (a) *Agency functions*: The bank acts as agents of its customers. Banks perform a number of agency functions which are as follows:

- 1) *Transfer of funds*: The banks transfer funds from one branch to another or from one place to another.
- 2) *Collection of cheques*: The banks collect the money of cheque through clearing sections of its customers. The banks also collect money of the bills of exchange.
- 3) *Periodic payments*: On standing instructions of the clients, the banks make periodic payments in respect of electricity bills, rent, etc.
- 4) *Portfolio management*: The bank also undertakes to purchase and sell the shares and debentures on behalf of the clients and accordingly debits or credits the account through their subsidiaries. This facility is called portfolio management.
- 5) *Periodic collections*: The banks collect salary, pension, dividend and such other periodic collections on behalf of the clients.

1.5.2 (b) *General utility functions*: The bank also performs general utility functions which are:

- 1) *Issue of drafts and letter of credit*: Banks issue drafts for transferring money from one place to another. Banks also issue letter of credit, especially in case of, import trade. It also issue travelers cheque.
- 2) *Locker facility*: The banks provide locker facility for the safe custody of valuable documents, gold ornaments and other valuables.
- 3) *Underwriting of shares*: The banks underwrite shares and debentures through its merchant banking division.
- 4) *Dealing in foreign exchange*: The commercial banks are also allowed by Reserve Bank of India to exchange foreign currency.

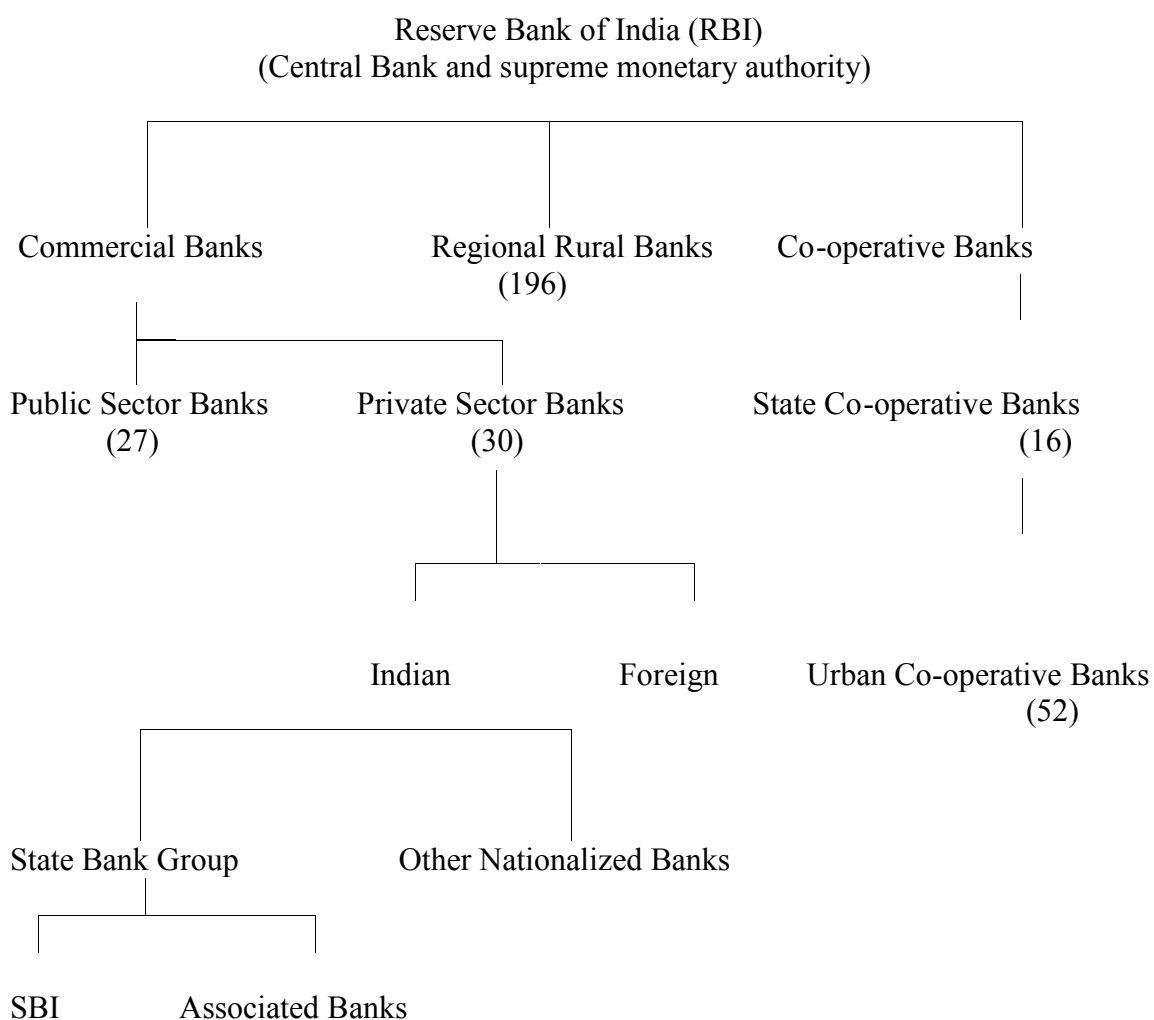
1.6 Banking structure in India

The banking sector in India comprises of banks, big and small, public and private, old and new, viable and non-viable. There are wide diversities in their sizes, organizational patterns, geographical presence and functional specialization. The Reserve Bank of India (RBI) is responsible for all sort of policy formulation and implementation of the banking industry in India. The main purpose of establishing Reserve Bank of India (RBI) is to circulate the currency in the economy apart from computation of currency reserves. It is having vital purpose as to control the subject of bank notes and their custody of treasure with a vision to protect financial consistency in India and usually act as functions to the credit system of the country (Mahboob, 2013).

Structure can be defined as the arrangement of and relations between the parts or elements of something complex. It is the way in which the part of the system or object are arranged or organized. Thus banking structure in India can be understood as the organized arrangement and the interrelationship between banks that exist in India. The exact date of existence of banks in India is unknown. But, it is certain that the old banking system has been functioning for centuries. Reserve Bank of India (RBI) is the supreme authority for regulation and supervisory of banks in India. Apart from regulating and supervising, RBI is also entrusted with the responsibility of issuing currency and coins in the country.

As noted earlier, RBI is the only supreme authority for regulating and supervising body of banks in India. The Indian banking system can be divided into three broad categories and they are Commercial Banks, Regional Rural Banks and Co-operative Banks. Commercial banks can be divided into Regional Rural Banks, Foreign Banks, Private Sector Banks and Public Sector Banks. At present, there are 27 Public Sector Banks that operate in India and other 19 nationalized banks. Under Private Sector Banks, there are 30 Private Banks and out of which, 22 are old Private Banks and 8 are new Private Banks. At present there are 196 Regional Rural Banks that operates in India. Under Co-operative Banks, there are 52 Urban Co-operative banks and 16 State Co-operative banks in India. The banking structure in India is shown in the chart 1.1

Chart 1.1: Banking structure in India



Source: Reserve Bank of India 2009 (Banking structure in India; RBI)

1.7 Meaning and concept of performance

The word performance is derived from the word 'perfourmen' which means 'to render' or 'to do'. It refers to the act of performing an activity. It means the act of accomplishment or execution. It refers to the level to which a task has been accomplished. From the view point of banks, it takes into account the way of their progress.

The word 'performance' is used to mean the efforts extended to achieve the targets efficiently and effectively. The achievements of target involve the integrated use of human, financial and natural resources (Albanese, 1978).

The performance is a general term applied to a part or to all of the conduct of activities of an organization over a period of time, often with reference to past or projected cost, efficiency, management responsibility or accountability or the like (Kohlar, 1979).

On the basis of the above meaning of two definitions, it can be concluded that performance means not only presentation, but also refers to a sense of quality and ultimate results, that has been achieved by the management of any business. It compares the present achievements with that of past in the context of whatever aims, goals or targets that were set by the management. Therefore, performance is the word that is used to exhibit business enterprises extent of success, failures, reasons, conditions and compliance etc. (Gadhia, 2015).

1.8 Meaning of financial statement

Financial statement are formal records of the financial activities of a business, persons or other entity and provide an overview of a business or person's financial conditions in both short and long term. They give a picture of a company's conditions and operating results in a condensed form. Financial statements are used as a management tool primarily by company executives and investors in assessing the overall

positions and operating results of a company. Analysis and interpretations of financial statements helps in determining the liquidity position, long term solvency, financial viability and profitability of a firm.

1.8.1 Meaning of financial performance

Financial performance represents the task of executing financial activity. It indicates the extent to which financial objectives or targets have been fulfilled. Company financial performance is measured in terms of monetary and is used for decision making purpose. Financial performance of a company indicates financial health of a company for a particular period of time. Thus financial performance analysis is a process of systematically making a proper, critical and comparative evaluation of profitability and financial health of a firm through the applications of financial statement analysis.

1.8.2 Concept of measurement

A performance indicator or a Key Performance Indicator (KPI) is a type of performance measurement. A business enterprise may use KPI to evaluate its success or to evaluate the success of a specific activity in which it is engaged. The measurement is the assignment of numerical to characteristics of objects, person, state or events according to rule. What is measured is not the object, person, state or event itself but some characteristics of it: when objects are counted, for example, we do not measure the object itself but also its characteristics of being presented (Tripathi, 1991).

In a business enterprise, specific goals and objectives are designed and to achieve or fulfill these goals and objectives, various groups or associations of people are formed or established. This group of people requires their performance measurement or analysis to decide as how much business has got through its activities towards its goals and objectives, which were designed well in advance.

The primary focus of financial reporting is information about an enterprises performances provided by measures of earnings and its components. The real purpose of preparing financial statement is to reveal the financial performance that has been achieved by the enterprise. A set of financial statement is a systematic collection of data

through logical and consistent accounting policies and procedures. Normally financial statements mean two key basic statements. One is the balance sheet and the other is profit and loss account statements (Hendriksen, 1984).

The balance sheet is a statement which shows financial position of the business on a particular date. It is a summarized statement of financial position of a particular year. The profit and loss account statement shows business firm's revenues and expenses for a particular time period. Analysis of financial statement is a good support and aid to financial performance analysis of business enterprise. Measurement of financial performance gives useful information about the financial strength and weakness of the enterprise and thus provides for decision making purpose (Gadhia, 2015).

1.8.3 Areas of performance

In a business enterprise, by making a comprehensive assessment, certainly the performance of different types of tasks and activities, various areas of business operations can be improved or modified. These areas of operations may be defined as the area of performance. Financial expert often considers or assess the following important areas for the performance or measurement analysis.

- 1) Performance of productivity
- 2) Performance of profitability
- 3) Performance of fund flow
- 4) Performance of liquidity
- 5) Performance of working capital
- 6) Performance of efficiency etc

1.8.4 Importance of performance analysis

There are various interest groups which is associated with the performance analysis of business enterprises. Therefore these groups are always interested in analyzing the financial performance of a firm and want to know the financial position for different purposes. The final results of financial position of a firm are used by different parties and some of them may be as noted below:

- (a) *From the view point of management:* Management is always interested in internal control, better financial position and performance. Management cannot only measure the outcome of its own plans and business policy by making performance analysis, but also should evaluate the effectiveness of its policies. This is very useful to determine the continuity of present policies or to adopt new policies.
- (b) *From the view point of creditors:* Creditors are always interested in the liquidity of the business enterprises. Therefore, their interest is in analysis of a firm's liquidity. Creditors can make performance analysis by applying various ratios and can avail the real information regarding liquidity and other aspects of business enterprise.
- (c) *From the view point of the Government and Reserve Bank of India (RBI):* Government and the Reserve Bank of India are always interested regarding the performance of banking sector as a whole, because it is directly related with growth of economy. On the bases of performance of banks, the Government and the RBI can have an idea and knowledge of the present country's economy and can also predict the future probable country's economy.
- (d) *From the view point of investors:* Investors are always interested in present and predicted future earnings as well as stability and improvements of their earnings. Therefore, their interest lies in business firm's profitability, productivity and financial conditions.
- (e) *From the view point of depositors and bondholders:* Depositors and bondholders are interested in cash flow, liquidity and profitability of banks or business firms. So they are interested in analyzing cash flow and liquidity, present and future profitability as well as capital structure. Depositors and bondholders can have all these aspects by making or referring financial conditions of different banks.
- (f) *From the viewpoint of employees and trade unions:* Employees are one of the most important stakeholders in any business enterprise. They are interested in the profits, cash flow and financial position of the bank. Therefore, employees can know all these things by referring financial position of banks. Trade unions are also interested in details of financial performance due to their demand for increase in their salaries, facilities and other benefits, etc.

(g) *From the view point of suppliers of long term finance:* Suppliers of long term debts or finance are interested in profitability and liquidity of business firms. This category of people will focus on solvency as well as survival of the business because they are giving finance for a bit longer period of time. They can know all these aspects by referring financial conditions of a business firm.

1.8.5 Performance analysis: Usefulness in management functions

The management of business enterprise needs many types of information for the management (operations) of the business. Especially there is managerial task or functions for which continuous flow of quantitative and qualitative information is inevitable. Examples can be managers may require data or information for planning, controlling, directing, budgeting, decision making, etc.

Planning is a process of deciding for the future course of action in advance. Planning is “a concept of executive actions that embodies the skill of anticipating, influencing and controlling the nature and directions of change”. Planning always needs information and performance analysis is very useful in terms of gathering quantitative data or information. It is also useful to management because flow of information will enable them to carry out control over daily operations with an object of achieving maximum efficiency. Effective control ultimately directs every activity towards achievements of predetermined goals of business. Sometimes management has to give directions to their employees according to situation and performance. Performance analysis provides the information for this task. Likewise, decision making for budget, business expansion, etc. Performance analysis becomes a base for sound information. Performance analysis provides vital information to management which is useful in the profitable operation of business and effective utilization of business resources (McFarland, 1974).

1.9 Significance and scope of the study

In the light of various changes taking places in the Indian banking system, it is important to keep an eye on the performance of the banking system. The studies on

efficiencies of bank are very important for policy makers, industry leaders and many other who are reliant on the banking sector. The performance of banks has been an issue of major interest for various stakeholders such as regulators, customers, investors and general public. The performance analysis of banks is useful to the policy-makers to identify the success or failure of bank and to adopt good strategies for the success of the bank. Performance evaluation of bank is an essential tool to understand the financial status of the bank, and to take necessary measures to uplift the standard of financially weak bank to be a successful one. It is also essential to know whether the efficiency and performance of the Indian banking sector are in accordance with the regulatory framework (Malhotra and Aspal, 2014).

The knowledge of financial performance helps in predicting, comparing and evaluating the earning ability of the company. It also helps in investment and financial decisions. Company provides financial information through financial statement and reports. A bank's financial performance can also be assessed by analyzing the data provided in its annual reports.

Banking industry acts as a backbone of modern business and performs as a bridge to provide a specialized source of financial intermediation. Banks transfigure their multiple inputs in several financial goods. The macroeconomic stability of banks enables them to change their overall preferences and plays a crucial role in the reinforcement of fiscal policy. Therefore the organized and proper allotment of banking encouraged the growth level of economy. Performance assessment is crucial in the background of an effective and successful financial sector. The efficiency of banking sector is very crucial for the firmness and stability of the economy in overall period of time (Walia and Kaur, 2013).

1.10 Literature Review

Ray and Mohan (2004) had empirically compared the performance of public and private sector banks. Their paper attempt to compare performance of three banks i.e. public, private and foreign banks using physical quantities of inputs and outputs and comparing the revenue maximization efficiency of banks. The study covers a period of

eight years 1992-2000. The study employed total 58 banks for achieving the objectives. The study covered 27 public sector, 20 private sector banks and 11 foreign banks. The findings shows that public sector banks performed significantly better than private sector banks but no differently from foreign banks.

Nimalathasan (2008) had done comparative financial performance of banking sector in Bangladesh. Secondary data were used from the annual reports of all banks during the financial year of 1999-2006. Samples of the study were drawn from all the branches of 48 scheduled banks operating in Bangladesh. Out of these, 4 are nationalized, 5 are development financial institutions, 30 are local private commercial and 9 are foreign commercial banks. Data were analyzed using CAMEL model. The study found that banks in Bangladesh need to maintain a minimum Capital Adequacy ratio of not less than 9.0 percent of their risk -weighted assets. The study had ranked different banks of Bangladesh according to NPLs ratio.

Webb and Kumbirai (2010) had undergone a financial ratio analysis of commercial bank performance in South Africa. The paper investigates the performance of South Africa commercial banking sector and covers a period of 2005-09. Financial ratios were employed to measure profitability, liquidity and credit quality performance of five large South African based commercial banks. The paper used descriptive financial ratios analysis to measure and additionally, t- test was also employed to test the hypothesis. The study found that overall bank performance increased considerable in the first two years of analysis. The study also found that global financial crisis in 2007 resulted in falling profitability, low liquidity and deteriorating credit quality in the South African banking sector.

Jamal (2011) had empirically done comparative financial performance of Islamic banks and conventional banks in Kenya. The objective of the study was to compare the financial performance of Islamic banks and conventional banks in Kenya and to establish if there is a significant difference in the financial performance of two banking categories. To achieve the objectives, secondary data mainly from audited annual reports of banks was employed. The study covered the period of 2010-2011. Data obtained was analyzed

using CAMEL model for evaluating the financial performance of banks. The study revealed that conventional banks performed better than Islamic banks in terms of capital adequacy, assets quality, earnings and liquidity position. However, except for capital adequacy, there were no significant difference between the two banking categories in terms of assets quality, management quality, earnings and liquidity position.

Brama (2012) had done financial performance evaluation of Regional Rural Banks of India. The objective of the study was to analyze the development prototype of Indian Regional Rural Banks. To meet the objectives, secondary data have been used and obtained from different books, journals, articles, publications and newspapers. Indian Banks Association (IBA), the annual reports of banks concerned and RBI. The study covers a period of ten years from 1990-2010. Various statistical techniques like percentage, compound annual growth rate, data envelopment analysis; standard deviation, etc and ranking has been used for data analysis. The study found that the number of Rural Banks has been increased year by year and the profits and number of branches have also increased.

Khatri (2012) had empirically done comparative financial analysis of three banks of India. The objectives of the paper were to compare the financial position with the help of balance sheet and to compare the financial performance through ratio analysis. The study covers a period from 2008-2012 and three banks i.e. SBI, ICICI and PNB have been selected. To meet the objectives, data were employed purely from secondary data published by respective banks. The study found that operating efficiency of SBI is higher or better than PNB and ICICI banks. The study also found that profitability of PNB Bank is more than SBI and ICICI Bank.

Moniska and Singla (2012) have made an empirical study of performance evaluation of private banks in India. The study have been carried out to measure the performance of private banks in India and to suggest various measures for improving the performance of banks. For this purpose, data were collected from RBI reports on trends and progress of banking in India and covers a period from 2007-11. 18 private sector banks were selected for the study and out of which, 11 are old private banks and 7 are

new private banks. They used CAMEL model for measuring performance of banks. For measuring the efficiency of management, profit per employee and business per employee ratio were calculated. The study recommended that the banks need to improve its CAR, Assets quality and Liquidity. They suggested that development credit banks should take necessary steps to increase management efficiency and capacity.

Obia (2012) had done comparative financial performance evaluation of SBI and ICICI Banks. In the study, attempt was made to identify the comparative financial performance evaluation of the two banks. The major objectives of the study was to assess the impact of reforms measures on efficiency, profitability and overall performance of banks and the study covered a period of 2000-2001 to 2011-2012. The study was purely based on secondary data and data required for meeting objectives were collected from annual reports of respective banks, journal and reports, newspapers, magazines, progress of banking of India, government publications, books and websites. The study found that average of Total Assets of SBI is higher than that of ICICI bank, however Return on Assets of both the banks were same. The study also found that there is a significant difference in Cash deposits ratio of both the banks, etc.

Singh and Tandon (2012) had studied financial performance: A comparative analysis of SBI and ICICI banks. The objective of the paper was to study the financial performance of SBI and ICICI banks and to compare the financial performance of SBI and ICICI banks. In their study, attempt was made to measure, evaluate and compare financial performance of the two banks. The study was based on secondary data that have been collected from annual reports of respective banks, magazines, journals, documents and other published information's. The study covers a period of 5 years from 2007-08 to 2011-12. Ratio analysis was applied to analyze and compare the trend in banking business and financial performance. Mean and Compound growth rate have also been deployed to analyze the trends in banking business profitability. The study found that SBI is performing well and financially sound than ICICI banks but in context of deposits and expenditure, ICICI bank has better managing efficiency than SBI bank. The study also found that the mean of Credit Deposit Ratio of ICICI bank was higher than SBI bank.

This shows that ICICI bank has created more loan assets from its deposits as compared to SBI bank.

Ally (2013) had empirically done comparative analysis of financial performance of commercial banks in Tanzania. The objectives of the study was to evaluate the performance of commercial banks in Tanzania by making comparison among the peer group as large banks, medium banks and regional and small banks. Using ratio analysis the study aimed at providing an overall assessment of the current status and financial performance of banking sector in Tanzania. The study employed quantitative research approach and the period covers from 2006-12. Data were collected through secondary data source especially the financial reports. With respect to sample size, the study employed 28 commercial banks. The study found that overall financial performance increased considerable in the first two years of analysis. The study also observed that Tanzania banking sector remained stable, banks are adequately capitalized and profitable and remained in a sound position. The study also found that there is no significance difference of profitability among peer bank groups in terms of Return on Advance.

Selvakumar and Aruna (2013) attempted to analyze Regional Rural Bank performance in India. The objectives of the study include analyzing income and expenditure of RRB and analysis of profitability of RRBs in India. The study was based on secondary data which was obtained from the annual reports on trends and progress of banking in India covering a period of 10 years from 2001-02 to 2010-11. Statistical tools like percentage, growth rate, compound growth rate, Mann- Whitney test, Kruskal – Wallis test, Mann- Whitney Wilcoxon test were applied for analyzing data. The study found that modern technologies like core banking, ATM, anywhere banking and other services should be introduced to improve quality of services in all spheres of banking activities. They suggested that for improving operational efficiency, new technologies should be introduced.

Wallia and Kaur (2013) measures the performance of Indian banking sector in a study entitled “Performance evaluation of Indian banking sector: A study of selected commercial banks in India”. The study aimed at examining performance of selected

commercial banks in India and investigated the factors predominantly affecting the performance of selected commercial banks in India. For this purpose, two public sector banks (PNB and SBI) and two private sector banks (ICICI and HDFC) were selected and data were collected for the period of 2009-2014. In order to analyze the performance of each bank individually, ten variables were being used. The study found that net profit as a percentage of total assets on average is highest for HDFC bank followed by ICICI Bank and PNB. Net Non- performing assets ratio as a percentage of loans on average was found to be highest for SBI and lower to HDFC. Bank operating expenditure as percentage of total income on average is found to be lowest for HDFC. The study also found that profitability of banks is affected by a number of factors like deposits, advances, and operating expenses and spread etc.

Gupta (2014) analyzed the performance of banks in India for the period of 2003-08. The main objective of the study was to compare and contrast Economic Value Added with traditional performance measures as a predictor of financial health of banks under this study. The study employed multiple correlation and panel regression analysis to examine whether Economic Value Added is a predictor of financial health of banks or not as compared to other traditional performance measures. Secondary data have been collected to analyze the performance of banks and top 20 private sector banks were selected on the basis of market capitalization. She concluded that EVA measure is better than traditional performance in relation to financial health of banks. The result indicates that EVA has emerged to be the second most significant variance showing a high positive relationship about 45 percent of the total banks under study.

Gupta and Kaur (2014) had undergone a comparative study of the performance of selected Indian private and public sector banks. The paper analyzed the growth, performance and services provided by both public and private sector banks in terms of loans, cash credits, advances outside India, NPAs, net profit etc. To analyze the trend of performance, five banks each from public and private sector were selected for the period 2008-12. The public sector banks included were SBI, PNB, Oriental bank of commerce, Bank of Baroda and Bank of India, while private sector banks included were Axis Bank, Yes bank, HDFC bank, ICICI Bank and Kotak Mahindra bank. Tokey HSD test was used

to compare the performance of public and private sector banks. The study was based on secondary data collected from the RBI website and the annual reports of the selected banks. The results revealed that among all the public sector banks, SBI performed better during the study period and the performance of Oriental Bank of Commerce was low, except in case of NPAS'S's. In terms of NPAS'S's, the performance of Bank of Baroda was lowest among all the banks. In the private sector, HDFC Bank and ICICI Bank performed better than all other banks. Yes bank was the least performer.

Malhotra and Aspal (2014) measured the performance of new private sector banks in India. In order to analyze financial performance of the new Indian private sector banks they have adopted CAMEL model. They also applied ANOVA Model test to identify any differences among the bank. Out of Indian private sector banks, only new private sector banks like Axis bank, Development credit bank, HDFC bank, Kotak Mahindra bank and Yes bank have been selected for the purpose of the study. Data for a period of 5 years (2008-12) were collected from annual reports of banks and 18 financial ratios have been used to assess the performance of banks. The study found that Kotak Mahindra bank stand as a first bank having excellent performance followed by Axis bank.

Gupta, Vashisht and Sharma (2014) empirically examined the Economic Value Added vis-à-vis other performance measures for evaluating banks. The main objectives of their paper were to evaluate the effectiveness of EVA with ROCE, RONW, PBDIT and EPS as a predictor of maximization of shareholders wealth of public sector banks in India. The study included all Indian public sector banks for evaluating the effectiveness of EVA. Their study which was based on secondary data covered a period of ten years (2003-12). The study also employed multiple correlation and backward linear multiple regression analysis to examine whether EVA is more strongly associated with Market Value Added or not as compared to other traditional performance measures. The study found that the independent variables profit before depreciation, interest and taxes and earnings per share have been found to be significantly correlated with MVA/EC in almost all the banks under study. Among independent variables, EPS is positively correlated with RONW and PBDIT with ROCE at 5 percent level of significance. The regression

analysis has provided that EVA/EC and other traditional performance measures act as superior measures of performance and significantly correlated with the MVA/EC. The result also indicates that there is no strong evidence to support EVA as a better predictor of maximizing shareholders wealth as compared to ROCE, RONW, PBDIT and EPS. They concluded that EVA cannot be regarded as the only performance measure influencing MVA. It has to be used along with traditional performance measures.

Rao (2014) had done analysis on the performance of private and public sector banks. The purpose of the study was to examine the financial performance of SBI and HDFC Banks both public and private sector respectively and to make a comparison of profitability between SBI and HDFC Bank. The research which was descriptive and analytical in nature used data from secondary source. The study compared financial performance of SBI and HDFC Bank on the basis of ratios such as credit deposits, net profit margin etc. The study covered a period of 2008-09 and 2012-13. The study found that HDFC Bank is performing well and financially more sound than SBI Bank but in the context of deposits and expenditure SBI Bank has better managing efficiency. The study also found that overall financial performance of HDFC Bank is better than SBI Bank.

Ibrahim (2015) had empirically done comparative study of financial performance between Conventional and Islamic banking in United Arab Emirates. The purpose of the study was to compare the financial performance of two UAE based Islamic and Conventional banks. The study covers a period of five years 2002-2006 and quantitative analysis was undertaken by looking at various sets of financial ratios to measure bank performance. The study compared the performance of two leading private sector banks using five groups of financial ratios that indicate the performances. The study found that both banks are three financially viable as both banks have used the appropriate financial tools and policies to manage their organizations and to adapt to their dynamic environment, resulting in a modest maximization of their profits. The liquidity level in Dubai Islamic bank was found to be lower than that of its rival banks. The results also found that Bank of Sharjah possess high level of profitability.

Misra and Yadav (2015) had done a comparative study of financial performance of SBI and ICICI Banks in India. The study covers the period of 5 years i.e. from year 2008-09 to 2012-13. Ratio analysis was applied to analyze and compare the trends in banking business profitability. Six key financial ratios were used for comparative analysis of financial performance of SBI and ICICI Banks. These ratios are: Return on Average Assets, expenses to income, earning per share, capital adequacy ratio, net NPAS'Ss to Net Advances and profit per employee. The Mann-Whitney U-test has also been deployed to test the hypothesis. The study found that total number of branches of both banks is increasing year-by-year, but performance of SBI in terms of growth in total number of branches is diminishing as compared to ICICI banks. The percentage of rural branches of SBI is higher than ICICI banks, but this difference is decreasing year by year. It was also observed that the growth in percentage of rural branches for both banks is marginal. The study revealed that ICICI Bank has performed better than SBI bank.

Rustam and Rashid (2015) had done a comparative study of the performance of local and foreign banks in Pakistan. The study have been carried out to measure the performance of local and foreign banks operating in Pakistan and secondly, to investigate the causes of performance deficiencies. The data were collected from secondary sources for seven financial years from 2005 to 2011. A sample size of 23 banks, (17 local Pakistani banks and 6 foreign banks) was selected using sampling technique. The data were collected from secondary sources such as annual reports, research publications of local and foreign banks, statistical bulletin of State Bank of Pakistan, financial stability reviews of Central bank of Pakistan and websites of selected local commercial and foreign Pakistani banks. The performance of the sample banks were measured by using one-way Analysis of Variance (ANOVA). The study used three parameters and proxies to measure bank performance- profitability, financial structure and efficiency. The determinants used for estimation of these three parameters are ROA, ROE, and Net profit margin, Debt to equity ratio, Capital adequacy ratio and Operating expenses to assets ratio. Their finding indicates that foreign banks have a sound financial structure compared to local banks. They also found that the ROA and ROE of foreign banks are

comparatively higher than that of local banks. They also found that Pakistani banks are less cost-efficient than foreign banks operating in Pakistan.

Pandey and Singh (2015) had empirically evaluated the performance of commercial banks in India using Malmquist and Data Envelopment Analysis Approach. They attempted to find out bank productivity in India during the period of 2008-2013. This study was conducted using a panel data of 40 banks (26 public sector banks, 10 private banks and 4 foreign banks). Data were compiled from statistical tables relating to banks in India from the bank wise data published by RBI on an annual basis. The principal data sources also included the trends and progress of banking in India published by RBI on a yearly basis. In their paper, banks were treated as intermediaries that transform the inputs into outputs. To evaluate the productivity performance, two output and three input variables were used. They also used DEA Model to measure the technical efficiency and later, decompose the technical efficiency into pure technical efficiency and scale efficiency through the VRS Model. The study found that the TFP growth of the bank is very much affected by internet technology. They also found that IDBI Bank, ICICI Bank, Kotak Mahindra Bank, Citibank and Standard Charter bank are consistently efficient, both under the VRS and CRS models. In addition, State Bank of India and Royal Bank of Scotland were found to be consistently efficient under VRS. They suggested that public sector banks should enlarge the scale of their operations to expand their customer base. They also suggested that banks should further innovate by utilizing the internet technology to expand and enlarge their scale of operations.

1.11 Research gap

The banking sector occupies an important place in a nation's economy. The financial performance appraisal gives a direction to banking institutions ups and downs of financial performances. After a critical review of the above literature, it is found that there have already been many studies on bank performances especially using CAMEL model. However, no study was done on performances of banks for a period of recent ten years. Studying larger period will reveal broader past and future trends in the Indian banking sector. Hence, there is still necessity to undergo further studies on the

performance of banks as it shall reveal new trends in how they are functioning. There are various methods which have been utilized for measuring the performance of banks in world wide. CAMEL rating system has become important means of measuring the overall soundness and safety of banks in the light of global financial crisis and bank failures. The system analyzes capital adequacy, asset quality, management quality, earnings, and liquidity of Banks incorporating relevant financial ratios. "CAMEL" model as a tool is very effective, efficient and accurate to be used as a performance evaluate in banking industries and to anticipate the future and relative risk. "CAMEL" ratios are calculated in order to focus on financial performance.

1.12 Statement of the problem

There are various studies done on the performances of banks in India and abroad. However, recent changes and trends happening in the Indian banking industry especially the bad loans stressed on PSUS's have made the performance evaluation of banks lot more significant. Hence, there is still a necessity to undergo further studies on the performances of banks as it shall reveal the new trends in how they are functioning. The present study shall fill the research gap on the most recent performances of the banks. The study shall be focused to make a comparative study, on the basis of financial performances between public and private sector banks in India. The study shall reveal the financial performance of banks. The financial performance defines potential of business, economic interest of the company management and reliability of present or future contractors. Therefore, financial performance analysis and identification of their weakness and strength using financial performance indicators can contribute to management, shareholders, the public and the regulator as a whole. Furthermore, the rationale of financial analysis is to diagnose the information contained in the financial statement so as to judge the future earning, ability to pay interest, profitability and dividend of the banks.

1.13 Objectives of the study

The study has undertaken with the following objectives:

1. To examine the financial performance of the selected banks from the view point of CAMEL Model
2. To determine the ranks of the selected banks as per CAMEL rating model.

1.14 Hypotheses

The following hypotheses have been framed to give direction to the study.

Hypothesis 1

H0: There is no significant difference in Capital Adequacy ratio in selected public sector and private sector banks.

H1: There is a significant difference in Capital Adequacy ratio in selected public sector and private sector banks.

Hypothesis 2

H0: There is no significant difference in Total Advance to Total Asset ratio in selected public sector and private sector banks.

H1: There is a significant difference in Total Advance to Total Asset ratio in selected public sector and private sector banks.

Hypothesis 3

H0: There is no significant difference in Debt- Equity ratio in selected public sector and private sector banks.

H1: There is a significant difference in Debt-Equity ratio in selected public sector and private sector banks.

Hypothesis 4

H0: There is no significant difference in Capital Adequacy Test in selected public sector and private sector banks.

H1: There is a significant difference in Capital Adequacy Test in selected public sector and private sector banks.

Hypothesis 5

H0: There is no significant difference in Net NPAS'S to Net Advance ratio in selected public sector and private sector banks.

H1: There is a significant difference in Net NPAS'S to Net Advance ratio in selected public sector and private sector banks.

Hypothesis 6

H0: There is no significant difference in Priority sector Advance to Total Advance ratio in selected public sector and private sector banks.

H1: There is a significant difference in Priority sector Advance to Total Advance ratio in selected public sector and private sector banks.

Hypothesis 7

H0: There is no significant difference in Total Investment to Total Assets ratio in selected public sector and private sector banks.

H1: There is a significant difference in Total Investment to Total Assets ratio in selected public sector and private sector banks.

Hypothesis 8

H0: There is no significant difference in Assets Quality Test ratio in selected public sector and private sector banks.

H1: There is a significant difference in Assets Quality Test ratio in selected public sector and private sector banks.

Hypothesis 9

H0: There is no significant difference in Business per employee in selected public sector and private sector banks.

H1: There is a significant difference in Business per employee in selected public sector and private sector banks.

Hypothesis 10

H0: There is no significant difference in Profit per employee in selected public sector and private sector banks.

H1: There is a significant difference in Profit per employee in selected public sector and private sector banks.

Hypothesis 11

H0: There is no significant difference in Total Advance to Total Deposits ratio in selected public sector and private sector banks.

H1: There is a significant difference in Total Advance to Total Deposits ratio in selected public sector and private sector banks.

Hypothesis 12

H0: There is no significant difference in Management Efficiency Test ratio in selected public sector and private sector banks.

H1: There is a significant difference in Management Efficiency Test ratio in selected public sector and private sector banks.

Hypothesis 13

H0: There is no significant difference in Other Income to Total Income ratio in selected public sector and private sector banks.

H1: There is a significant difference in Other Income to Total Income ratio in selected public sector and private sector banks.

Hypothesis 14

H0: There is no significant difference in Interest Income to Total Income ratio in selected public sector and private sector banks.

H1: There is a significant difference in Interest Income to Total Income ratio in selected public sector and private sector banks.

Hypothesis 15

H0: There is no significant difference in Interest Income to Total Assets ratio in selected public sector and private sector banks.

H1: There is a significant difference in Interest Income to Total Assets ratio in selected public sector and private sector banks.

Hypothesis 16

H0: There is no significant difference in Earning Ability Test ratio in selected public sector and private sector banks.

H1: There is a significant difference in Earning Ability Test ratio in selected public sector and private sector banks.

Hypothesis 17

H0: There is no significant difference in Liquid Assets to Total Assets ratio in selected public sector and private sector banks.

H1: There is a significant difference in Liquid Assets to Total Assets ratio in selected public sector and private sector banks.

Hypothesis 18

H0: There is no significant difference in Cash deposits ratio in selected public sector and private sector banks.

H1: There is a significant difference in Cash deposits ratio in selected public sector and private sector banks.

Hypothesis 19

H0: There is no significant difference in Liquid Assets to Total Deposits ratio in selected public sector and private sector banks.

H1: There is a significant difference in Liquid Assets to Total Deposits ratio in selected public sector and private sector banks.

Hypothesis 20

H0: There is no significant difference in Liquidity Management Test in selected public sector and private sector banks.

H1: There is a significant difference in Liquidity Management Test ratio in selected public sector and private sector banks.

1.15 Research Methodology

(a) Source of Data

Data is collected from secondary source published by RBI and respective banks annual reports, magazines, journals, documents and other published documents.

(b) Sampling unit

At present, there are 22 (15 old and 7 new) private sector banks and 27 (21 nationalized and 6 SBI and its associated banks) public sector banks that operate in India. Among public sector banks, SBI and PNB were selected as these banks are the two largest public sector commercial banks in India in terms of assets, deposits, profits, number of branches, customers and employees. Among private sector banks, ICICI and HDFC were selected as these banks have large market share, total assets worth, more number of employees and management efficiency than any other private banks in India.

(c) Period of study

The study covers a period of 10 years i.e., 2005-06 to 2014-15.

(d) Analysis of data

Data have been analyzed using accounting ratios. The accounting tool used in the present study is ratio analysis. Ratio analysis containing the component under the CAMEL was being used. The ratio used in the Model is as follows:

1) Capital Adequacy Test (C)

- (a) Capital Adequacy Ratio (CAR)
- (b) Total Advance to Total Assets ratio
- (c) Debt- Equity ratio

2) Assets Quality Test (A)

- (a) Net NPAS'S to Net Advance ratio
 - (b) Priority Sector Advance to Total Advance ratio
 - (c) Total Investment to Total Assets ratio
- 3) Management Efficiency Test (M)**
- (a) Business per employee
 - (b) Profit per employee
 - (c) Total Advance to Total deposits ratio
- 4) Earning Ability Test (E)**
- (a) Other Income to Total Income ratio
 - (b) Interest Income to Total Income ratio
 - (c) Interest Income to Total Assets ratio
- 5) Liquidity Test (L)**
- (a) Liquid Assets to Total Assets ratio
 - (b) Cash deposits ratio
 - (c) Liquid Assets to Total Deposits ratio

For statistical analysis, data has been analyzed with the help of various statistical tools like average (mean), rank order and ANOVA to meet the objectives.

1.16 Limitation of the study

There were some limitations inherent in the study. The study was completely done on the basis of ratios calculated from the Balance sheet and Profit and Loss Account. There are many other ratios that could have been used to assess the performances of the Banks; however, selective ratios have been taken to analyze the performance under the CAMEL Model. No standard norms or rules of thumb for the ratios selected are there to compare with the calculated ratios.

1.18 Chapters Design

The study is divided into five chapters

Chapter 1: Introduction

Chapter 1 introduces the definition of banking. It highlighted the importance of banking industry in the Indian economy. A discussion has been done on structure of Indian banking Industry, role and importance of RBI in regulating banking industry in India. It also mentioned the concept and importance of performance evaluation and the need of performance evaluation in the Indian banking Industry. Review of literature on different studies in banking sector, objectives of the study, research hypotheses, research methodology used, and selected sample and size are the other components of this chapter.

Chapter 2: Overview of banking development and profile in India

In chapter 2, an overview of banking profile and development has been discussed. History of banks in India, problems and prospects of Indian banking industry, challenge of Indian banking sector and Government policy on Indian banking industry has been briefly discussed and the different phase of Indian banking development in India have been overviewed.

Chapter 3: CAMEL Model: Conceptual framework

Chapter 3 introduces the CAMEL Model theoretical framework. Concept, importance of banking supervision and implementation of CAMEL Model in India has been discussed. Basel norms and its implementation in India by RBI have also been covered in this chapter.

Chapter 4: Data analysis

Appraisal of selected public and private sector banks is done in chapter four by analyzing data obtained from respective annual reports. The analysis of data is carried into three different phase of major components on CAMEL Model. In the first phase, data have been analyzed by different ratio under CAMEL. In the second, the group means and rank of each different groups of CAMEL has been found out. In the third phase, the group mean and rank of each different have been analyzed.

Chapter 5: Conclusion and suggestions

In chapter 5, research findings on the CAMEL Model of the analysis of selected banks, conclusions relating to ranking of different selected banks are made. Suggestions to the banks in respect of CAMEL and suggestions to the Government are finally presented in this chapter.

Chapter - 2

INDIAN BANKING INDUSTRY: AN OVERVIEW

- 2.1 History of Banks in India**
 - 2.1.1 First Phase: 1947 (Early phase)**
 - 2.1.2 Second Phase: 1948- 1968 (Post Independence)**
 - 2.1.3 Third Phase: 1969-1991 (Nationalization)**
 - 2.1.4 Fourth Phase: 1991- 2012 (Reformatory phase)**
- 2.2 Growth and trends of banking industry in India**
- 2.3 Problems and prospects of banking sector in India**
- 2.4 Challenge of Indian banking sector**
- 2.5 Government policy on Indian banking Industry**

2.1 History of banks in India

Banking in India started in the last decade of 18th century. The English business community that came to India in 17th century could not use indigenous banking or bankers, due to language and other problems. The first bank in India called the General Bank of India was established in the year 1786. The East India Company started the Bank of Bengal in Calcutta in 1809. Banking in India existence is as old as human civilization according to Central Banking Enquiry Committee (1931). Money lending activity in India could be traced back to the Vedic period. Money was accepted on deposits and given out in the form of advances. In the second or third century A.D., *Manu* the Hindu Jurist dedicated apart of his work to deposits and advances and establish some rules regarding to the rate of interest to be charged or paid (Central Banking Enquiry report, 1931).

The existence of professional banking in India could be traced to the 500 B.C. *Kautilya's Arthashastra*, dating back to 400 B.C reveals related with creditors, lenders and lending rate. Banking was fairly varied and catered to credit requirement of agriculture, trade, commerce and individual in the country. During Moghul time, the indigenous bankers played an important role in money lending and financing of trade. They were also doing money changing activity, which was a profitable business. Every city, town and village had a '*Sheth*' known as 'shah' or '*Shroff*' who were performing a number of banking task or functions. These people were respected by all the people in the society and they act as Royal treasurers. In big towns, there was '*Nagar Sheth*'. These people were very instrumental in fund transfer from one place to another and doing collections mainly through '*Hundis*'. The '*Hundis*' were accepted mode of transfer of money for commercial transactions. Banking practices that was prevailing then were vastly different from the European counterparts. The dishonoring of '*Hundis*' were few and rare occurrences. Most banking worked on mutual trust, confidence and without having securities that were considered important and essential by British and European bankers. Banking regulations also had rich traditions and evolved along with banking in India. In fact the classic '*Arthashastra*' also had norms for banking going into liquidation. If anyone becomes bankrupt, debt owed to the state had priority over the creditors (Desai, 1987).

In the above mentioned backdrop, history of Indian banking can be divided into four parts or phase as given below:

2.1.1 First Phase: 1947 (Early phase)

The Pre- independence period was mainly recognized by the existence of localized or small and private banks, organized as joint stock companies having private share holdings. The indigenous bankers, money lenders and '*Shroff*' remained isolated from the institutional part of the system. They came under the purview of Reserve Bank of India that was established as a central bank in 1935 (RBI publication, 2008).

The seventh century witnessed the coming of English traders in India. The first joint stock bank established in the country was Bank of Bombay in 1720 at Bombay, followed by Bank of Hindustan in 1770 by the English agency house M/S Alexander and company. Unfortunately, the bank closed down in 1832. The East India Company established three banks. First Presidency bank-the Bank of Bengal, established in Calcutta in 1806 with a capital of 50 Lakhs. Then this bank was renamed in 1809 as Bank of Bengal. Second presidency bank was the Bank of Bombay set up in 1840 with a capital of 52 Lakhs and the third was the Bank of Madras established in 1843 with a capital of 30 Lakhs. These three banks were known as Presidency banks and governed by Royal Charters. These banks were also empowered to issue currency notes. However, after the enactment of Paper Currency Act 1861, this right to issue currency notes was abolished and handed over to the Government (Central Banking Enquiry Committee report, 1931).

Among the three Presidency banks, Bank of Bombay suffered big loss and collapsed in 1868 and to replace it, a new Bank of Bombay was established. The Presidency Bank Act, 1876 came into existence and imposed some restrictions on the business functions of these banks. These three banks were independent units and had branches in important towns and cities of India. However, it was felt that it would be advisable to have a single presidency bank in the interest of these three banks as well for the country also and merged into a single bank under the name of Imperial Bank of India in 1921. It was mainly a commercial bank giving competition to other banks. After

independence, this bank was nationalized and become the State Bank of India in 1955 by SBI Act (RBI publications, 2008).

The '*Swadeshi movement*' motivated local businessmen and politicians to find and form banks for the Indian people. A number of banks with the Indian Management were established in the country. The first Indian owned Indian Bank was Allahabad Bank established in 1865. The second, Punjab National Bank in 1895 and the third was Bank of India established in 1906. Between 1906 and 1913, more Indian banks such as Central Bank of India, Bank of Baroda, Canara Bank, Indian Bank and Bank of Mysore were established. All these banks were set up as a limited liability company.

During the first phase, there have been a number of setbacks in the form of banks failures that gave a rude shock to banking development. The world economy was gripped by series of events like World War-1 (1913-1918), Great Depression (1928-1934), World War- 2 (1939-1945). These events had bad impacts in the Indian banking sector. Many weak businesses were wiped out completely. Loss in business affected credit and solvency of banks. Number of banks got failed due to bad loans. One of the most important crises that affected the Indian banking was the partitioned of the country into India and Pakistan. During the period of 1948-1953, many banks failed because majority of Hindu depositor's migrated Pakistan from India and most of the bank assets failed because of bad loans.

During the period of World War-1 (1913-1918), 98 banks failed and during 1919-1934, 208 banks failed. Between 1935- 1945, approximately 759 banks failed and *between*1946-1955, 388 banks failed (Khanna and Roa, 2011). From time to time, there have been suggestions and demands that India ought to have a Central bank. The setting up of Central Bank for India was recommended by a number of committees that went into reasons of banks failures. In pursuance of these recommendations, Reserve Bank of India Act, 1934 was enacted and RBI was established in April 1935. There were two main reasons for the establishment of Reserve Bank of India. First was the issue of banks failures and second was the need for providing to the requirement of agriculture. Government of India came up with Banking Companies Act, 1949 which was later changed to Banking Regulation Act, 1949 which was passed in 1949 (Mahboob, 2013).

2.1.2 Second Phase: 1948 to 1968 (Post Independence): Before Nationalization

During this phase, some important development took place and it is interesting to verify Indian banking situation at the time of independence of the country in 1947. The country was inherited a banking system that was designed on the British banking system. When the country got independence, Indian banking was entirely in the hands of the private sector. The Reserve Bank of India was created with the purpose of a sound legislative framework for banking in a newly independent nation. In 1949, The Banking Regulation Act was passed to empower RBI to regulate, control and inspect the banking in India. It also gave wide powers to supervise and develop the banking system. As a result, a common platform having some uniform parameters was being build up for the first time. The Act was the first important regulatory steps taken by the Government of India, enacted with a broad view for streamlining the functions of banks in India. One of the important features of this Act was to describe banking as distinct from other commercial operations.

(a) Post Independence

After independence, with the enactment of Banking Regulation Act, bank failures continued. The RBI started collecting data from 1949 on different aspects of banking. The biggest bank was the Imperial Bank of India having 433 branches. There were 620 banking companies in total mostly operating in cities and urban towns. The total number of branches were 4263, while total deposits and advances were Rs. 997 crore and Rs. 508 crore respectively. There were 15 Exchange banks having a focus on international banking (RBI bulletins' and statistical tables).

At the time of Independence, Indian banking system was passed through so many deficiencies. Banking had not spread into rural and semi- urban Centers. A major part of rural population was dependent on money lenders for their credit requirements. Credit was not available to agriculture and small industries as rural penetration was very low and agriculture was not considered a good economic activity by banks. During this, major part of bank credit goes to commerce and industry and very little part to agriculture thus agriculture banking was not their focus or interest area. Banks were mainly concerned on short term credit, thus long- term credit or finance was big problem at that time.

(b) Era of economic planning

During this period, some important development took place. Concept of economic planning was begun in 1951, during this time, branch expansion in rural areas and increase in rural credit were become imperative. In 1951, the All India Rural Survey Committee was set up to examine the issue of rural credit scheme and its survey results were submitted in August 1954 and published in December 1954. Based on the committee recommendations, the State Bank of India Act, 1955 passed and RBI took control over the Imperial Bank of India and renamed as State Bank of India from July, 1955. The bank was mandated with the responsibility of expanding its rural network within a time frame. In 1959, the State Bank of India Act was passed and its associated banks as their subsidiaries. There were seven in numbers, Sate Bank of Hyderabad, State Bank of Travancore, State Bank of Indore, State Bank of Mysore, State Bank of Patiala, State Bank of Saurashtra and State Bank of Bikaner & Jaipur. These banks were converted into subsidiaries of State Bank of India in 1960 and known as associate banks of SBI.

During this phase, though Indian banking makes certain progress still there were many rural and towns which were not covered by banking services. The flow of financing or credit towards agriculture, small scale industries and weaker sections of the society were low, while big and well established business house were getting big flow of credit facilities, in order to address all these concern, the concept of social control over banking was imposed or introduced by the Government of India in 1968. The main objectives was to achieve wider spread and efficient distribution of credit, prevent its misuse and direct a major part of the credit flow towards priority sector as well as conform with the requirement of economy and to make it more effective instruments of economic development to serve socio-economic objectives (Khanna and Subba, 2011).

2.1.3 Third Phase: 1969 to 1991 (Nationalization)

After Independence, banking system had made good progress especially in 1950s and 1960s, but social objective was not satisfactory. The need of nationalization was looming large on the horizon because private banks were not catering the social need of the banking. Private commercial banks had opened number of new branches but their lending activities were not meeting the credit need priority of other needy and weaker

sectors of the society. Moreover, they were reluctant to open new branches in rural areas. The total deposits of all banks in December 1968 were Rs. 2750 crore, whereas the paid up capital was only Rs. 28.5 crore. Moreover, these private banks did not have any social or economic responsibility to the big general public (Khanna and Roa, 2011).

Banking Commission was set up in 1969. Prior to 19th July 1969, State bank of India and its associated banks were the only public sector banks. On July 19, 1969, 14 banks having demand and time liabilities of Rs. 50 crore and more were nationalized. These banks were as follows:

- a) The Central Bank of India Ltd.
- b) The Bank of India Ltd.
- c) The Punjab National Bank Ltd.
- d) The Bank of Baroda Ltd.
- e) The United Commercial Bank Ltd.
- f) The Canara Bank Ltd.
- g) The United Bank of India Ltd.
- h) The Dena Bank Ltd.
- i) The Syndicate Bank Ltd.
- j) The Union Bank of India Ltd.
- k) The Allahabad Bank Ltd.
- l) The Indian Bank Ltd.
- m) The Bank of Maharashtra Ltd.
- n) The Indian Overseas Bank Ltd.

On April 15, 1980, another six more private banks having demand and time liabilities not less than Rs. 200 crore were nationalized. These banks were:

- a) The Andhra Bank Ltd.
- b) The Corporation Bank Ltd.
- c) The New Bank of India Ltd.
- d) The Orient Bank of Commerce Ltd.
- e) The Punjab and Sind Bank Ltd.

f) The Vijaya Bank Ltd.

After nationalization, the prefix 'The' and suffix 'Ltd' were removed from the name of these banks. With nationalization of these six banks by the Government, the number of public sector banks including State Bank of India (SBI) and its associated banks rose to 28 banks in April 1980 (Pathak, 2012).

These steps of nationalization were seen as a big step to ensure sufficient credit flow into needy and genuine productive areas in conformity with plans priorities. The key objectives of nationalization were to bring large rural area and economic activity under the organized banking system to reduce regional imbalance of economic activity.

There were some effects and achievements of nationalization of banks. The two significant aspects were rapid branch expansion and alignment of credit with that of priorities. In this era of nationalization, development of the banking system was such that it may be explained or described as banking explosion. Some of the aspects of growth are branch expansion, deposit (resource) mobilization, credit operation, etc.

i. *Branch expansion*

Indian banking system underwent major structural transformation after the nationalization in 1969. To reduce inter-regional disparities and making banking facilities available in rural and other unbanked areas, RBI laid down branch licensing policy and certain steps have been taken for the growth and expansion of banking facilities in the backward areas. Evidence shows that bank branches were increased more than seven times between 1969 to 1990, of which major or bulk increase was on account of rural branches, which was increased from less than fifteen hundred in 1969 to around thirty five thousands in 1990. The percentage share in total number of branches of rural areas branches increased from 17 percent in 1969 to 46 percent in 1980 and 58 percent in 1990. While the share of other centers like urban and metropolitan centre's reduced from 23 percent and 18 percent respectively in 1969 to 13 percent and 9 per cent in 1990. A notable part of increase in rural branch expansion took place in the first decade after nationalization. It increased from 17 percent in June, 1969 to 46 percent in December 1980 (RBI bulletins and statistical issues).

ii. *Deposit (Resource) mobilization*

One of the important and key aims of branch expansion in unbanked rural and semi-rural area was to raise national savings and directing them into investments or financing as plan priorities. Evidence clearly shows that total deposits increase more than seven times between 1969 and 1980 and six times between 1980 and 1991. This big rise in total deposits became possible due to increases in terms of savings and deposits which represents community deposits and savings. These two categories of deposits rose more or less six times in each of the periods, i.e. 1969-1980 and 1981-1991. Other type of deposits also increased substantially during this period.

iii. *Credit operation*

One of the objectives of nationalization was to divert credit flow to needy and productive sectors of economy in conformity with plan priorities. Banks were expected to play a more active role in aiding sector such as agriculture, small scale industries and other necessary area of economy. Because once the main constraint or limiting factor of credit was resolved, these sectors were extended to do better. After nationalization, Reserve Bank of India (RBI) credit policy over the year was used to divert bank to preferred and genuine factors. For priority sectors and other needy sections of economy annual targets were decided. RBI annual report mentioned that the bank credit rose seven times between 1969 and 1980, and portion of bank credit for priority sector in total bank credit rose from 17.67 percent in 1969 to 33.51 percent in 1980 and 36.17 percent in 1991. Agriculture which was 39.15 percent in 1969 went up to 42.16 percent in 1980 and declined marginally to 39.97 percent in 1991. The share of small scale industries sector in total bank credit which was 52.66 percent in 1969 went down to 37.98 percent in 1980 and 39.96 percent in 1991 (RBI bulletins and statistical issue).

After nationalization, a new concept was emerged for banking sector and that can be used for promotion of socio-economic objectives of development. Government of India and Reserve Bank of India took number of steps and number of different schemes to attain objectives; some of them are as follows:

- a) Credit Guarantee Corporation which was established in 1971 with objectives to cover the default risk by providing guarantees for loan given to small borrowers.

- b) Integrated Rural Development Programme (IRDP) and scheme for self-employment for educated unemployed youth.
- c) Special programmed for small farmers development.
- d) The Differential Rate of Interest (DRI) scheme was instituted in 1972 for weaker sections of the society.
- e) Rural Banks were set up in 1975 with a view to develop rural economy by providing credit to various small and marginal categories of people (Gadhia, 2015).

Though in the mid 1980s, some efforts were made to improve and increase the health, profitability and soundness of the banking sector, but it was insufficient attempt considering the levels of control that was prevailing during that time. Even though certain steps have been taken, still there were many necessities that drives banking sector to look forward in the present and future conditions.

2.1.4 Fourth Phase: 1991 to 2012 (Reformatory Phase)

Liberalization, Privatization and Globalization policy was implemented by India in 1991. In the backdrop of serious balance of payments crisis that arose in 1991, Government of India initiated economic reforms programme. In order to realize the full potential reforms in the real economy, the need was felt for a vibrant and competitive financial sector in general and banking sector.

In August 1991, Government of India appointed a high power committee under the chairmanship of Shri M. Narasimham, to examine all aspects relating to the structure, organizations, functions and procedure of the financial system. The committee which submitted its report in November 1991, made wide ranging recommendations on the banking sector was such that it has transformed the banking sector from a highly regulated to a market-oriented system. Some of the recommendations of the committee are as follows (Pandey, 2011)

i. Narasimham Committee 1991 recommendations

- a) Progressive reductions in Pre-emptive (CRR, SLR) reserve.
- b) De-regulations of Administered Interest rate Structure.
- c) Changes in Government security market.
- d) Introductions of prudential norms and regulations.

- e) Guidelines entries of new private sector banks and to adopt liberal policy for foreign banks.
- f) To bring financial Institutions and Non- Banking Financial Institutions (NBFC) under the regulatory framework of Reserve Bank of India.
- g) Abolition of Branch Licensing Policy.

ii. Narasimham Committee 1998

One more (second) high level committee, “Committee on banking sector reforms (CBSR)” was set up by the Government of India under the chairmanship of Shri M. Narasimham. The major aim of this committee was to review the progress of the implementation of the banking reforms since 1992 and to point out necessary reforms to make Indian banking sector well equipped in the fast changing local as well as global environment. The committee submitted its report in April, 1998 and made wide and far reaching recommendations of the Indian banking sector (Pandey, 2011).

The committee covered various aspects of banking like Capital Adequacy norms, Assets Quality, system and methods, regulations and supervisions, structure of banking, earning and profitability etc. Some of the main recommendations of this committee were as under:

iii. Narasimham Committee 1998 recommendations

- a) Reductions of Government stake in public sector banks to 33 percent.
- b) Introductions of Capital Adequacy norms.
- c) Technological upgradations of banks.
- d) Public sector banks to start a system of recruitment from the open market and to be given flexibility and freedom in remunerations structure.
- e) Encouragement of banks merger, not to merge with banks into strong banks, but to be driven by market and business considerations.
- f) Stepping up of legal reforms.
- g) To separate regulatory and supervisory function of Reserve Bank of India (RBI).
- h) Setting up of Assets Reconstruction Fund.
- i) To rationalize staff strength, an appropriate VRS must be introduced.

- j) Norms regarding Assets Quality.
- k) Banks should avoid ever greening of their advances.

Khanna and Roa (2011) have observed that these recommendations were being progressively implemented. Verma Committee was established in 1999 with a specific task of examining the problems and suggesting strategies for weak public sector banks. Committee's main recommendations were as follows:

- a) Greater use of Information Technology (IT) in public sector banks.
- b) Introductions of VRS of atleast 25% of the banks staffs.
- c) Restructuring of banks staff, etc.

iv. Response to Reformatory Phase (1991-2002)

A considerable progress was made in the first decade (1991-2002) of the banking sector reforms. Some of them were as follows:

- a) Statutory Liquidity Ratio (SLR) brought down to 25 per cent in 2011 from 37.4 percent in 1992.
- b) Cash Reserve Ratio (CRR) came down to 5.5 percent in December 2001 from 15 percent in January 1992.
- c) Introductions of Capital Adequacy ratio in 1992, supported with recapitalization of banks by Government of India.
- d) Bank rate which was 12 percent in October 1991 reduced to 6.5 percent in October 2001.
- e) Deregulation of interest rate came in 2001 and accordingly, autonomy and flexibility to bank's boards.
- f) To improve the supervisory system for banks, a three- Tier supervisory model having on-site inspections, off-site monitoring and external auditing based on 'CAMELS' introduced.

2.2 Growth and Trends of Banking Industry in India

Table 2.1: Growth and Trends of Public sector banks in India (Amt. in Millions Rs.)

Years	No. of Banks	No. of Office	No. of employees	Deposits	Investments	Advance	Interest Income	Operating expense
2008-09	27	57979	731524	31127471	10126658	22592117	2730882	555036
2009-10	27	62080	739646	36920194	12155981	27010186	3059826	660749
2010-11	27	65800	755102	43724487	13360764	33044329	3661345	829652
2011-12	27	70969	774329	50020134	15072700	38773075	4847318	902052
2012-13	27	75779	801659	57456972	17591058	44727740	5548765	1018122

Source: Compiled from RBI Annual reports

The table 2.1 shows the growth and trends of public sector banks in India for a period of 2008-09 to 2012-13. As revealed by the above table, Number of office, Employees, Deposits, Investment, Advance and Interest Income shows a positive growth in different parameters except the number of banks remained constant. The number of employees registered increased to 801695 employees in the year 2012-13 from 731524 in the year 2008-09. The increase in the deposits from 2008-09 to 2012-13 is 54.17 percent. There is also a positive growth in Interest Income by 49.24 percent.

Table 2.2: Growth and trends of Private sector banks in India (Amt. in MillionsRs.)

Years	No. of Banks	No. of Office	No. of employees	Deposits	Investments	Advance	Interest Income	Operating expense
2008-09	22	9288	193578	7363776	3065312	5753276	850714	217793
2009-10	22	10516	188332	8228007	3541169	6324409	828064	228510
2010-11	22	12097	217953	10027588	4220576	7975440	967130	276064
2011-12	22	13970	248284	11745874	5259822	9664030	1345555	340301
2012-13	22	16001	269941	13958355	6261063	11432486	1664864	404851

Source: Compiled from RBI Annual reports

The table 2.2 shows the growth and trends of Private sector banks in India for a period of 2008-09 to 2012-13. As can be seen from table 2.2, there is a growth trend in each parameter. Number of Office, Employees, Deposits, Investment, Advance and Interest Income shows a positive growth and trend in private sector banks. The number of employees registered from 193578 in 2008-09 increased to 269941 employees in the year 2012-13. The increase in the

deposits from 2008-13 is 52.75 percent. The average growth rate of Investment and Interest income from 2008-13 to 2012-13 is 51.09 percent.

Table 2.3: Growth and Trends of Foreign Banks in India.(Amt. in Millions Rs)

Years	No. of Office	No. of employees	Deposits	Investments	Advance	Interest Income	Operating expense
2008-09	295	29582	2140764	1303537	1653846	303220	122984
2009-10	310	28012	2320995	1592909	1632604	263897	111019
2010-11	318	28041	2406668	1654993	1955106	284931	125686
2011-12	323	25907	2769477	2006511	2298488	359966	133367
2012-13	334	25384	2879997	2280631	2636799	422486	142882

Source: Compiled from RBI Annual reports

The table 2.3 shows the growth and trend of foreign banks operated in India for the period of 2008-09 to 2012-13. As revealed by the table 2.3, the number of office also rose from 295 in 2008-09 to 344 offices in 2012-13. There are also positive growth trends in terms of number of Employees, Deposits, Investment, Advance and Interest Incomes shows from 2008-09 to 2012-13. The growth percentage of Deposits from 2008-13 is 74.33 percent. The percentage of Investments from 2008-13 is 57.15 percent.

2.3 Problems and prospects of banking sector in India

India had opened its economy in 1991. A concept of LPG (Liberalization, Privatization, and Globalization) was introduced. Indian banking sector especially public sector banks still struggles facing some of the problems of this LPG's outcomes. Some of the problems faced by Indian banks are as under:

- a) Lack of professional attitude and behaviour.
- b) Managing workforce.
- c) High level of NPAs.
- d) Efficiency and productivity.
- e) Poor corporate governance practices.
- f) Questions of customer satisfactions etc.

2.4 Challenge of Indian banking sector

Indian banking sector faces various difficult challenges, some of the challenges are internal while some are external. The role and importance of banking sector in the economy, increasing deregulation and rapid changes that are taking place at National and International level in the field of finance and banking development affects and create challenges for Indian banking sector. In the context of this development, it is necessary for the banking sector to plan out strategies for effective and competitive banking in the present era of competition. The Indian banking sector is exposed to several challenges that need to be addressed and some of them are as follows:

(a) Non Performing Assets (NPAs)

One of the biggest challenges for Indian banking sector is management of Non Performing Assets. The level of Non Performing Assets is continued to be a big problem for banking sector in general and for the public sector banks in particular. High level of NPAs affects banks performance and profitability. Profitability of banking sector can be increased by reducing the level of NPAs that prevails in the banking sector today. The deterioration in Assets Quality was higher in case of public sector banks during 2011-12, the gross NPAs of public sector banks increased at a higher rate than that of a system level. In terms of gross NPAs as percent of Gross advance, Gross NPAs of public sector banks deteriorated more than other banks, it was increased from 2.4 percent in 2010-11 to 3.3 percent in 2011-12. While in terms of Net NPAs, Net NPAs of public sector banks increased from Rs. 300 billion in 2010-11 to Rs. 591 billion in 2011-12 (RBI trends and progress report, 2011).

(b) Branch banking

Banks have been looking forward for expansion of their branch network to increase their business. In spite of public sector banks increase in terms of branch expansion, private banks too are also taking certain steps to increase. The growths of branch expansion of private banks were more than the increase in public sector banks. The total number of branches opened by large public sector banks excluding SBI is less than the number of those opened by ICICI banks and HDFC Banks. HDFC Banks opened 2301 branches, while ICICI Bank opened 1838 branches. Among public sector banks,

only SBI opened more branches than any other banks, it has opened 4630 branch in the same period (Respective annual report, 2013).

(c) Capital requirements for public sector banks

The assets quality of banks has deteriorated significantly due to slow down in the economy. The ratio of Gross NPA to Gross Advance for scheduled commercial banks increased from 2.36 percent in 2011 to 3.92 percent in 2013. Public sector banks hold a disproportionate share of this increase, while private sector banks managing to lower their NPAs ratio in this difficult time. Estimate suggest that for public sector banks, capital will be needed to expand the loan book and provide for NPAs, which rose to 5.17 percent of their advance in 2013 against 4.18 percent a year before. Expert says that capital infusion by the government is grossly inadequate in public sector banks (RBI annual report, 2013).

(d) Technology Advancement

Managing technology is one of the key challenges which are being faced by Indian banking sector. With the implementation of CBS (Core Banking Solution) the banking system is now partially integrated. Now there is a need to move from a transaction processing system into an information processing system. Adoption of CBS in banks almost reaching the final stage of completion, the focus has now shifted from adoption of more advance technologies in the banking sector. The high use of ATM channel and increasing usage of mobile banking and internet is evident. Though it is hard time to convert the Indian banking system into the new era, many banks tried to replicate a branch based model into internet channel but few banks were successful. Therefore, the adoption of more advance technology in banking sector would enhance their CRM (Customer Relationship Management) by using appropriate tools, internal effectiveness including MIS and managing big risk that arising out of technology implementation (KPMG Report, 2013).

(e) Competition

Going forward to the systematic opening up of Indian banking system to national and international competition, banking sector is needed to equip itself to operate in a

highly competitive environment. Foreign banks are also providing competition and converting Indian banks in to Wholly- owned subsidiary thereby creating more new branches and this makes competition intense among the domestic banks in the country. The winner will be the players who can fulfill customer needs and provides high level of customer satisfaction, leveraging technology, knowledge and human resource to make available quality and innovative products and services.

(f) Customer service

There are two types of customers: one who use multi-channel of banking services and the other who still use only branch as the anchor channel for banking services. The challenge is to provide consistent banking services to all customers irrespective of the kind of channel they like to use. A customer who use branch only as the anchor selects based on the convenience and relationship and would prefer to continue with a particular bank. While those customers who are multi-channel, users insist consistent latest information across all channels and this are the key requirements of these types of customers. Banks are expected to provide banking services to all segments of the customers on prompt and equitable basis. Thus this becomes one of the key challenges in the Indian banking sector (Kohlar, 2011).

(g) Corporate governance

Banks not only accepts deploying large amount of money of uncollateralized public funds in fiduciary capacity, but also leverages the amount through credit creation. Due to unhealthy events and developments in recent times, corporate governance has assumed greater importance in the banking sector today. The major ingredients of good corporate governance should be accountability, transparency and enhancing image of the banks in society. Ethics must be part of good governance. Corporate governance of the banks in India is very poor. Therefore, they need to give attention to corporate governance practices. As part of the ongoing reform process and global practices, today banks have been given greater autonomy in their functioning and management. So it is the responsibility of banks management to adhere good corporate governance practices. Only by doing that, Indian banking sector can raise its level to international standard.

Therefore, the focus should be on enhancing and fortifying operations of good corporate governance principles and practices.

2.5 Government policy on Indian banking Industry

Bank operating in most of the countries must content with regulations, rules enforced by concerned regulators to govern their operations, service offerings, and the manner in which they grow and expand their facilities to better serve the public. A bank works within the financial system to provide loan, accept deposit and provide other service to the customers (Suba, 2015).

There are certain reasons why banks were being regulated; some of the important points are as follows:

- a) To protect the safety of the public deposits.
- b) To control the supply of money and credit in order to a achieve nation's broad economic goal.
- c) To ensure equal opportunity and fairness in the public access to credit and other vital financial services.
- d) To promote public confidence in the financial system so that savings are made speedily and efficiently.
- e) To avoid concentrations of financial power in the hands of few individual and institutions.
- f) Provide the Government with credits, tax revenues and other services.
- g) To help sectors of the economy that they have special credit needs, etc. (Federal Reserve Act, 1913 and The Banking Act 1933).

Chapter - 3

CAMEL MODEL: CONCEPTUAL FRAMEWORK

- 3.1 Introduction**
- 3.2 CAMEL Model in India**
- 3.3 Importance of CAMEL rating in banking supervision**
- 3.4 The Basel Accord**
- 3.5 Implementation of Basel Norms in India**

3.1 Introduction

A CAMEL is basically a ratio based model for evaluating the performance of banks. CAMEL Model of rating was first developed in 1970 by the three Federal banking supervisors of the US- the Federal Reserve, Federal Deposits Insurance Corporation (FDIC) and Office of the Comptroller of the Currency (OCC) to classify a bank overall positions. The rating is assigned based on ratio analysis of the financial statements, combined with onsite- examinations made by designated supervisory regulators.

The uniform financial institution rating system commonly termed to the acronym CAMEL Rating was accepted by the Federal financial institutions examination council on 13th November, 1979 and then afterwards by the National Credit Union Administration Act 1987. The rating is given based on the ratio analysis of financial statement. The bank received a score of 1 to 5 for each component of CAMEL and a final CAMEL rating representing the composite total of the components CAMEL scores as a measure of the banks overall conditions. The system of CAMEL was revised in 1996 when the agencies added an additional parameter “S” for assessing “Sensitivity to market risk” thus makes it CAMELS that is in vogue today.

C - Capital Adequacy

A - Assets quality

M -Management efficiency

E - Earning ability

L –Liquidity

3.2 CAMEL Model in India

Indian banking sector have been passing through a complex but comprehensive phase of reforms and restructuring since 1991. The whole banking scenario has changed a lot in the recent past on the base of implementation of Narasimham Committee Report and other reforms. Further, Base- III norms also introduced. Entire reform process has been implemented with a view to make the banking system very sound, efficient, internationally competitive and joining its links with economy for promotion of savings,

investment and overall inclusive growth. Though, complete turnaround in Indian banking sector performance is not expected in a hurry till the economy turn around and growth of economy rebound. In spite of this, some sign of slow and gradual improvement are there looking in the horizon in some aspects or indicators under the 'CAMEL' framework.

The Banking Regulation Act, 1949 empowers the Reserve Bank of India (RBI) to inspect and supervises commercial banks. These powers are vested through on-site inspection and off site surveillance. In November 1994, RBI set up the Board of Financial Supervision (BFS) for integrated supervision. The whole mechanism of supervisory system was realigned to suit the changing requirement of a sound and stable financial system. In January 1995, the Board of Financial Supervision (BFS) established an audit Committee, the main functions or focus of which is on upgradation of various auditing functions and practices.

In 1995, RBI established a working group under the chairmanship of Shri S. Padmanabhan to review the entire supervision system of banking sector. On the basis of recommendations and suggestions given by this committee, a rating system namely (Based on international adopted model) "CAMEL" Model was introduced for banks, commencing from July, 1998 audit and inspection cycle. Committee recommended that the bank should be rated on five points scale (1 to 5) based on the guideline of the international "CAMEL" rating model (Gadhia, 2015).

The five parameters included in the "CAMEL" Model are discussed below:

(a) C- Capital adequacy

Capital adequacy is the capital expected to maintain balance with the risks exposure of the banks. The capital adequacy represents the overall financial conditions of the bank and its ability to meet the needs for additional capital. Capital adequacy of a bank is measured by the ratio of Capital to Risk- weighted Assets Ratio (CRAR). Capital adequacy determines how well financial institutions can cope with shocks to their balance sheet. This ratio is used to protect the depositors and promote the stability and efficiency of financial system around the world. According to Bank Supervision Regulation Committee (BASEL committee) of banks for International settlements, a minimum of 9

percent of CRWA (Capital to Risk-weighted Assets) is required. It is calculated by dividing Capital to Total risk weighed credit exposure. The most commonly available tool used for calculating capital adequacy includes Capital adequacy risk ratio, Debt equity ratio, Total advances to total assets ratio and Governments securities to Total investments, etc.

(b) A- Assets quality

Assets quality determines the healthiness of financial institutions against loss of value in the assets. The weakening value of assets is the prime source of banking problem. The main or prime reason behind determining the assets quality is to ascertain the ingredients of Non-Performing Assets (NPAs) as a percentage of total assets. It also measures the movements of NPAs. The gross Non- performing loans to gross advances ratio is an indications towards the quality of credit decisions of the banks management. Higher NPAs mean that a loan given by the bank are of lower quality and indicates poor credit decision making. Net NPA to Net Advances, Priority sector advance to Total advance, Total investment to total assets ratio, Gross NPAs ratio, Net NPAs ratio are commonly used for obtaining assets quality of bank's assets.

(c) M- Management Soundness

Management of financial institutions is generally evaluated in terms of capital adequacy, assets quality, earning and profitability, liquidity and risk sensitivity ratings. In addition, performance evaluation includes compliance with set norms, ability to plan and react to changing circumstances, technical competence, leadership and administrative ability etc. Sound management is one of the most important factors behind financial institutions performance. It indicates a subjective analysis for measuring the performance of management. There are many ratios that indicate the performance of management, e.g. Business per employee, Profit per employee, Business per branch, Net profit per employee, etc. Higher non interest expenditure ratio implies that banks management is not able to control some needless expense.

(d) E- Earning ability

Earning ability ratio reveals not only the quantity and trends in earning, but also the factors that may affect the sustainability of earnings. It refers to the net profit made by banks after taking into account all the factors. Strong earnings and profitability of banks reflects the ability to support present and future operations. More specifically, this determines the capacity to absorb losses, financing its expansion, pay dividend to its shareholders, and build up an adequate level of capital. Higher earnings show the banks performance is healthy and vice versa. The single best indicator used to gauge earning is the Return on Assets (ROA), which is calculated by dividing net income after tax to total assets ratio. Other Income to Total Income, Interest Income to Total Income, Interest Income to Total Assets ratio, Dividend payout ratio, Return on assets, etc. are frequently used for obtaining the earning ability of banks.

(e) L- Liquidity

Liquidity is one of the important measures to evaluate the performance of banks. These parameters ascertain the ability of banks to pay its liabilities as and when they required or matured. Higher liquidity implies that the bank will be able to meet any ultimately withdrawals by the depositors. Not only that but sometime in a liquidity crunch situation in the market, bank can earn interest income in call money market also. There must be sufficient liquidity sources for present and future requirements and also availability of assets that can be readily convertible into cash without undue loss. Liquidity of a bank can be measured by various ratios. Various tools that are available for calculations of liquidity position of a firm are Liquid assets to total assets, Cash deposits ratio, Liquid assets to total deposits, Government securities to total assets, Liquidity assets to demand deposits, etc.

3.3 Importance of CAMEL rating in banking supervision

The main objectives of CAMEL model are to provide a good, accurate and consistent assessment of banks financial position in various keys like Capital adequacy, Assets quality, Management Soundness, Earning ability and Liquidity. Therefore these parameters will measure the overall strength of the bank and furthermore, it will also measure the inner strength of how far it can take care of itself against the market risk. In

addition from the above, in a situation where financial markets are increasingly becoming more and more integrated, providing a model for measurement or assessment of overall financial performance of a banks is of a big importance for financial markets in general and banking sector in particular (Gadhia,2015).

CAMEL Model rating also provides significant compliance data or information that is needed for regulators. This information helps to ensure the extent of supervisory concern and response to issue timely warnings to reduce the negative effects on the banks. Decision relating to invest in the securities of a banks or not to invest can also be made from the view point of investors. Thus CAMEL model rating system provides relevant and reliable information to all parties involved.

3.4 The Basel Capital Accord

The Bank for International Settlement (BIS) is an international organization which fosters international monetary and financial cooperation and serves as a bank for Central banks. The Basel committee was established by the Central bank's Governors of the group countries at the end of 1974 and they meet regularly four times a year. It also has about 30 technical working groups and task forces which also meet regularly. India is a member of the group of 20 (G-20) countries that advices Financial Stability Forum (FSF). The core principles set up the Basel committee on banking supervision (BCBS) to promote and monitors principles of banking supervision and the working groups on capital, which discusses proposals for revising the capital adequacy framework. India is also an early subscriber to the Special Data Dissemination Standard (SDDS) and one of the first countries to accept financial sector assessment programme of the IMF and the World Bank (Pathak, 2012).

The Basel Committee on Banking Supervision (BCBS) prepared a framework through a consultative process to secure international convergence of supervisory regulations governing the capital adequacy of international banks. This framework was finalized in 1988 and is known as Basel Accord or Basel 1. The objectives of this were-serve to strengthen the soundness and stability of the international banking system and to diminish an existing source of competitive inequality among international banks. The

three main components of Basel 1 framework was credit risk, operational risk and country transfer risk. Basel 1 prescribed two tiers of capital for the banks: Tier 1 capital which can absorb losses without a bank being required to cease trading and tier 2 capitals which can absorb losses in the event of winding up. Tier 1 capital or core capital include: Paid-up capital, statutory reserve, share premium and Tier 2 capital include: Undisclosed and reserve and fully paid-up cumulative perpetual preference shares, General provisions and loss reserves, not attributable to the actual diminution in value or identifiable potential loss in any specific assets are available to meet unexpected losses.

The Basel Accord (1988) suggested the following principles on capital adequacy:

- (a) A risk weighted assets ratio method to be adopted by banks in which capital was related to different categories of assets or off- balance sheet exposure, weighted according to broad categories of relative riskiness. There were only five weights recommended for on balance sheet items, i.e, 0,10,20,50 and 100 percent.
- (b) A bank must hold equity capital at least 8 per cent of its assets when multiplied by appropriate risk weighted.
- (c) When capital falls below these minimum requirements, shareholders may be permitted to retain control provided they agree to recapitalize the bank.
- (d) When this is not done, the regulatory authority, as its discretion, sell or liquidate the bank.

The Basel 1 capital adequacy norms were criticized as several deficiencies surfaced. These deficiencies were as follows:

- (a) It recommended a 'one size- fits all' approach that did not adequately differentiate between assets that have different risk levels. This standard encouraged capital arbitrage through securitization and off- balance sheet exposures.
- (b) It assumes that the aggregate risk of a bank was equal to the sum of its individual risks. It failed to take into consideration diversification of bank's credit risk portfolio in the computation of capital ratios.

- (c) These baseline capital adequacy norms were found to be inadequate as they almost entirely addressed credit risk. Basel 1 did not explicitly address all the risk faced by banks such as liquidity risk, and operational risk.

In response to the critics, the BCBS brought out their consultative paper on New Capital Adequacy framework in June 1999 and a second revision in January 2001 was published and the new rules have been made effective from 2005. The new Basel Capital Accord is based on three mutually reinforcing pillars that allow banks and supervisors to evaluate properly the various risks that the bank's face. The New Basel Capital Accord focuses on the following:

- (a) Minimum capital requirements, which seek to refine the measurement framework, set out in the 1988 accord.
- (b) Supervisory review of an institution's capital adequacy and internal assessment process.
- (c) Market discipline through effective disclosure to encourage safe and sound banking practices.

Pillar 1: Capital Adequacy

The new framework maintains both the current definition of capital and the minimum requirement of 8 per cent of capital to risk-weighted assets. The revised accord will be extended on consolidation basis to holding companies of banking groups. The accord stresses upon the improvement in the measurement of risks. Under Pillar 1, commercial banks are required to compute individual capital adequacy for three categories of risks: credit risk, market risk and operational risk.

The new accord has elaborated the credit risk measurement methods and proposed a range of approaches to credit risk. The Basel 2 has recommended two approaches: the standardized approaches and the advanced internal risk based (AIRB) approach for estimating capital for credit risk. One of the most noteworthy features of Basel 2 is assigning capital charge for operational risk. The BCBS has defined operational risk as "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events".

Pillar 2: Supervisory Review

This process emphasizes the need for banks to develop sound internal processes to assess the adequacy of capital based on thorough evaluation of its risk and set commensurate targets for capital. The supervisory would be responsible for evaluating the way the banks are measuring risks and robustness of the systems and processes. The four basic and complementary principles on which pillar 2 rests are (a) a bank should have a process for assessing its overall capital adequacy in relation to its risks profile as well as strategy for maintaining capital levels. (b) Supervisors should review and evaluate a banks internal capital adequacy assessment and strategy as well as its compliance with regulatory capital ratios. (c) Supervisors expect banks to operate above minimum regulatory capital ratios and should have the ability to hold capital in excess of the minimum and, d) supervisors seeks to intervene at early stage to prevent capital from dipping below prudential levels (RBI, Occasional publications).

Implementation of Basel 2 requires that a comprehensive assessment of risks be carried out by both the banks and supervisors.

Pillar 3: Market discipline

The new framework set out disclosure requirements in several areas, including the way in which banks calculate their capital adequacy and their risks assessment methods. The transparency and disclosure standards will allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, and hence the capital adequacy of the banks.

3.5 Implementation of Basel Norms in India

The RBI adopted a Phase approach to implementation of Basel norms in April 1992. Initially the RBI directed the banks to maintain a minimum capital of 8 percent on the risk weighted assets. Banks with branches abroad were required to comply with minimum capital to risk weighted assets requirements of 8 percent by end March 1994, while other banks were required to comply by end March 1996. The committee on Banking Sector Reforms (1998) suggested further tightening of the capital adequacy norms. Subsequently the capital to risk weighted assets ratio (CRAR) norms was revised

upward to 9 per cent to be attained by March 2000. Moreover, with effect from the year ended March 2006, banks in India are required to maintain capital charge for market risk also on their 'available for sale' portfolio, and 'held for trading' categories (Pathak, 2012)

The RBI set up Steering Committee comprising senior officials from 14 banks (public, private and foreign) and representatives of RBI and the Indian Bank's Association (IBA). On the basis of the recommendations of the Steering Committee the RBI issued detailed draft guidelines for implementation of the new accord in February 2005. The draft guidelines were revised and released on March 20, 2007 for comments/feedback and were then finalized on April 27, 2007 for implementation. The trial run on selected banks on Basel 2 norms was carried out in April 2006 and all the banks were expected to adopt the norms by 2007.

The RBI gave more time to banks to put in place appropriate systems so as to ensure full compliance with Basel 2. Foreign banks operating in India and Indian banks having presence outside India migrated to the standardized approach for credit risk and the basic indicator approach for operational risk under Basel 2 with effect from March 31, 2008. All other scheduled commercial banks are to migrate to these approaches under Basel 2 in alignment with them but in any case not later than March 31, 2009. The commercial banks which account for about 78 percent of the total assets of the banking sector are required to maintain capital for both credit and market risks as per Basel 2 framework; while the cooperative banks are required to maintain capital for credit risk as per Basel 1 framework and the regional rural banks undergoing restructuring are not subject to Basel norms (RBI Committee Report).

Pillar 1

Pillar 1 prescribes capital charge for three types of risks, viz. capital risk, market risk and operational risk. The RBI has directed banks to adopt the standardized approach for credit risk wherein the rating assigned by the eligible external credit rating would largely support the measure of credit risk capital. Four domestic credit rating agencies; Credit Analysis and Research Ltd, CRISIL, Fitch India, and ICRA Ltd, and three

international credit rating agencies Fitch, Moody's and Standard and Poor's have been accredited by RBI.

Pillar 2

The two important components of Pillar 2 are internal capital adequacy assessment process (ICAAP) and supervisory review and evaluation process (SREP). The ICAAP comprises a bank's procedures and measures designed to ensure (a) an appropriate identification and measurement of risks; (b) an appropriate level of internal capital in relation to the bank's risk profile; and (c) application and further development of suitable risk management systems in the banks. The ultimate responsibility for designing and implementation of the ICAAP lies with the bank's Board of Directors and with the Chief Executive Officer in the case of foreign banks with branches present in India. The ICAAP document has to be submitted every year by the banks to the RBI.

Pillar 3

The RBI has set out disclosure standards for banks. Banks are required to ensure that there are no qualifications by the auditors in their financial statements for non-compliance with any of the accounting standards. Banks are now required to disclose maturity pattern of deposits, borrowings, investments, advances, foreign currency assets and liabilities, movement in NPAs, lending to sensitive sectors, total advances against shares, total investment made in equity shares, convertible debentures and equity oriented mutual funds, and movements of provisions held towards depreciation of investments. Banks are also required to comply with Accounting Standard (AS 1) on Disclosure of Accounting Policies issued by the Institute of Chartered Accountants of India (ICAI).

The scope of disclosures to be made in notes on accounts has been enlarged. Banks with capital funds of Rs. 100 crore or more are required to make interim disclosures on the quantitative aspects, on a standalone basis, on their respective websites at September each year. Qualitative disclosures that provide a general summary of a bank's risk management objectives and policies, reporting system and definitions are required to be published only on a mutual basis. All banks with capital of Rs. 500 or more, and their significant bank subsidiaries, must disclose their Tier 1 capital, total

capital, total required capital and tier 1 ratio and total capital adequacy ratio, on a quarterly basis on their respective websites.

Capital Adequacy Norms

Bank's capital is vital as it is the lifeblood that keeps the banks alive. It also gives Bank the ability to absorb shocks and thereby, avoid the likelihood of bankruptcy. Capital Adequacy ratio is a measure of the amount of a bank's capital expressed as a percentage of its risk weighted credit exposures.

The concept of capital adequacy ratio relates to risk weighted assigned to an assets raised by the banks in the process of conducting business and to the proportion of capital to be maintained on such aggregate risk- weighted assets. It is calculated on the basis of risk weightage on assets in the book of banks. Each business transaction carries a specific risk and a portion of capital has to be earmarked for this risk. Higher capital adequacy will drive banks towards greater banks efficiency and this could force banks to bring down operating costs. Capital adequacy enables banks to expand their balance sheet and strengthen their fundamentals which, in turn, help the banks to mobilize capital at reasonable cost. The RBI stipulates capital adequacy ratio of 9 percent for all banks and capital adequacy ratio below this stipulation indicates the inadequacy of a bank's capital, compared to its assets weighted against the risk they carry. Banks are required to maintain a Tier 1 CRAR of at least 6 percent. Banks which are below this level must achieve this ratio on or before March 31, 2010 (RBI, occasional publication).

RBI Guidelines on Capital Adequacy

A bank should compute its Tier 1 CRAR and Total CRAR in the following manner.

$$\textit{Tier 1 CRAR} = \frac{\textit{Eligible Tier 1 capital funds}}{\textit{Credit Risk RWA} + \textit{Market Risk RWA} + \textit{Operational Risk RWA}}$$

Where, RWA = Risk Weighted Assets

$$\textit{Total CRAR} = \frac{\textit{Eligible Total Capital funds}}{\textit{CreditRiskRWA} + \textit{MarketRiskRWA} + \textit{OperationalRiskRWA}}$$

Capital funds are broadly classified as Tier 1 and Tier 2 capital. Elements of Tier 2 capital will be reckoned as capital funds up to a maximum of 100 per cent of Tier 1 capital, after making deductions/ adjustments referred to under the subtitle called Deductions from Capital.

Elements of Tier 1 capital

For Indian banks, Tier 1 capital would include the following elements:

- (a) Paid-up capital, statutory reserves, and other disclosed free reserves if any.
- (b) Capital reserve representing surplus arising out of sale proceeds of assets.
- (c) Innovative perpetual debt instruments eligible for inclusion in Tier 1 capital, which comply with the regulatory requirements.
- (d) Perpetual non- cumulative preference shares (PNCs), which comply with regulatory requirements, and
- (e) Any other type of instruments generally notified by the RBI from time to time for inclusion in Tier 1 capital.

For foreign banks in India, Tier 1 capital would include the following elements:

- (a) Interest free funds from Head office kept in a separate account in Indian books specifically for the purpose of meeting the capital adequacy norms.
- (b) Statutory reserves kept in Indian books.
- (c) Remittable surplus retained in Indian books which is not repatriable so long as the bank functions in India.
- (d) Capital reserve representing surplus arising out of sale of assets in India in a separate account and which is not eligible for repatriation so long as the bank functions in India.
- (e) Interest free funds remitted from abroad for the purpose of acquisition of property and held in a separate account in Indian books.
- (f) Head office borrowings in foreign currency by foreign banks operating in India for inclusion in Tier 1 capital which comply with the regulatory requirements.
- (g) Any other item specifically allowed by the RBI from time to time for inclusion in Tier 1 capital.

Elements of Tier 2 capital

(a) Revaluation reserves

These reserves often serve as cushion against unexpected losses, but they are less permanent in nature and cannot be considered as core capital. Revaluation reserves arise from revaluation of assets that are undervalued on the bank's book, typically bank premises. The extent to which revaluation reserves can be relied upon as a cushion for unexpected losses depends mainly upon the level of certainty that can be replaced on estimates of the market values of the relevant assets, the subsequent deterioration in values under difficult market conditions or in a forced sale, potential for actual liquidation at those values, tax consequences of revaluation etc.

(b) General provisions and Loss Reserves

Those reserves, which are not attributable to the actual diminution in value or identifiable potential loss in any specific assets and are available to meet unexpected losses, it can be included in Tier 2 capital. Adequate care must be taken to see that sufficient provisions have been made to meet all known losses and foreseeable potential losses before considering general provisions and loss reserves to be part of Tier 2 capital.

(c) Hybrid Debt Capital Instruments

Fall in this category, a number of debt capital instruments, which combine certain characteristics of equity and certain characteristics of debts. Each has a particular feature, which can be considered to affect its quality as capital. Where these instruments have close similarities to equity, in particular when they are able to support losses on an ongoing basis without triggering liquidation, they may be included in Tier 2 capital. Banks in India are allowed to recognize funds raised through debt capital instrument which has a combination of characteristics of both equity and debt, as Upper Tier 2 capital provided the instrument comply with the regulatory requirements.

(d) Subordinated Debt

To be eligible for inclusion in Tier 2 capital, the instrument should be fully paid-up, unsecured, subordinated to the claims of other creditors, free of restrictive clauses, and should not be redeemable at the initiative of the holder or without the consent of the RBI. They often carry a mixed maturity, and as they approach maturity, they should be subjected to progressive discount, for inclusion in Tier 2 capital. Instruments with an initial maturity of less than 5 years or with a remaining maturity of one year should not be included as part of Tier 2 capital. Subordinated debt instruments eligible to be reckoned as Tier 2 capital shall comply with the regulatory requirements.

(e) Innovative Perpetual Debt Instruments (IPDI) and Perpetual Non cumulative Preference Shares (PNCPS)

IPDI in excess of 15 per cent of Tier 1 capital may be included in Tier 2 capital and PNCPS in excess of the overall ceiling of 40 per cent ceiling may be included under Upper Tier 2 capital subject to the limits prescribed for Tier 2 capital.

Any other type of instrument generally notified by the Reserve Bank of India (RBI) from time to time for inclusion in Tier 2 capital.

Chapter –5

CONCLUSIONS AND SUGGESTIONS

- 5.1 Introduction**
- 5.2 Findings**
 - 5.2.1 Capital Adequacy Test (C)**
 - 5.2.2 Assets Quality Test (A)**
 - 5.2.3 Management Efficiency Test (M)**
 - 5.2.4 Earning Ability Test (E)**
 - 5.2.5 Liquidity Management Test (L)**
 - 5.2.6 Overall “CAMEL” Ranking test**
- 5.3 Suggestions**
- 5.4 Scope for the future research**
- 5.5 Conclusions**

5.1 Introduction

The summary of findings, conclusions and suggestions of the study are as follows:

Banking in India have come a long journey from nationalization to privatization of banks and now to foreign banks in India. A bank is the centre of country's economy and plays a vital role in the growth and development of country's economy. Today bank provides wide varieties of products and financial services through its branches and use of technology to all types of customers. The use of technology in the banking sector in India has brought a revolution in the working style of the banks and achieved a new height with the changing times. Financial analysis is the process of identifying the financial strength and weakness of a firm by properly establishing relationship between the items of the balance sheet and profit and loss account. There are various methods used in financial statement analysis such as comparative balance sheet statement, trend analysis, common size statement, fund flow and cash flow analysis, etc. The performance of any economy to a large extent is dependent on the performance of banking sector. The banking sector performance is considers as one of the economic activities of a country and a healthy banking system act as a bedrock of social, economic and industrial growth of a nation.

5.2 Findings of the study

The primary findings are given as under.

5.2.1 Capital Adequacy Test (C)

Three parameters have been taken for Capital Adequacy Test and characteristics of each parameter have been analyzed accordingly. The combined rank is also found out for Capital Adequacy Test.

- 1.) Capital Adequacy Ratio (CAR)
- 2.) Total Advance to Total Assets ratio
- 3.) Debt- Equity ratio

- 1). The present study reveals that in terms of CAR, ICICI bank has the highest mean score of 16.54 followed by HDFC with 15.36. The mean score of SBI and PNB are 12.85 and 12.73 respectively during the study period. Thus as per CAR criteria, ICICI stands rank 1 followed by HDFC, SBI and PNB with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on Capital Adequacy ratio was found. There is a significant difference in the CAR between SBI & HDFC; between SBI and ICICI; PNB and HDFC; PNB and ICICI; however, there is no significant difference between SBI and PNB as well as HDFC and ICICI.
- 2). In terms of TATA, PNB has the highest mean score of 61.55 followed by SBI with 61.10. The mean score of ICICI and HDFC are 55.66 and 55.63 respectively. Thus as per Total Advance to Total Assets ratio criteria, PNB stands rank 1 followed by SBI, ICICI and HDFC with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on Total Advance to Total Assets ratio was found. There is a significant difference in TATA between SBI & HDFC; between SBI and ICICI; PNB and HDFC; PNB and ICICI; however, there is no significant difference between SBI and PNB; HDFC and ICICI.
- 3). In terms of DER, HDFC has the lowest mean score of 0.61 followed by PNB with 0.98. The mean score of SBI and ICICI are 1.46 and 1.91 respectively. Thus as per Debt-Equity ratio criteria, HDFC stands rank 1 followed by PNB, SBI and ICICI with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on Debt- Equity ratio was found. There is a significant difference in DER between SBI & PNB; SBI and HDFC; between SBI and ICICI; PNB and ICICI; however, there is no significant difference between PNB and HDFC.
- 4). On the bases of average of ratio as a rank of parameter for Capital Adequacy test (CAT) viz. CAR, TATA and DER, SBI stood first with composite mean of 25.14 which is followed by PNB bank with the composite mean score of 25.09. ICICI bank and HDFC bank became third and fourth rank with composite mean of 24.70 and 23.86 respectively.

5). On the bases of rank of ratio as a rank of parameter for Capital Adequacy test (CAT) viz. CAR, TATA and DER; PNB and HDFC have the lowest mean score of 2.33 each, followed by SBI and ICICI with average score of 2.67. Thus as per rank of ratio as a rank of parameter for Capital Adequacy Test (CAT) criteria, HDFC and PNB stands rank 1.5 each, SBI and ICICI with ranks 3.5 respectively.

5.2.2 Assets Quality Test (A)

For calculating the Assets quality of a bank, three parameters have been utilized and characteristics of each parameter have been analyzed accordingly. The combined rank is also found out for Asset quality test.

- 1) Net NPA to Net Advance ratio
- 2) Priority Sector Advance to Total Advance ratio
- 3) Total Investments to Total Assets ratio

1). In terms of NPNA, HDFC has the lowest mean score of 0.25 followed by ICICI with 1.26. The mean score of PNB and SBI are 1.39 and 1.89 respectively. Thus as per Net NPA to Net Advance ratio criteria, HDFC stands rank 1 followed by ICICI, PNB and SBI with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on NPNA ratio was found. There is a significant difference in the NPNA ratio between SBI & HDFC; between PNB and HDFC; HDFC and ICICI; however, there is no significant difference between SBI and PNB; SBI and ICICI; PNB and ICICI.

2). In terms of PATA, PNB has the highest mean score of 35.29 followed by HDFC with 31.88. The mean score of SBI and ICICI are 27.30 and 24.94 respectively. Thus as per Priority sector Advance to Total Advance ratio criteria, PNB stands rank 1 followed by HDFC, SBI and ICICI with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on PATA ratio was found. There is a significant difference in between SBI & PNB; PNB and ICICI; HDFC and ICICI; however, there is no significant difference between SBI and ICICI; PNB and HDFC.

3). In terms of TITA, SBI has the lowest mean score of 25.75 followed by PNB with 26.52. The mean score of ICICI and HDFC are 30.06 and 30.27 respectively. Thus as per

Total Investment to Total Assets ratio criteria, SBI stands rank 1 followed by PNB, ICICI and HDFC with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on Total Investment to Total Assets ratio was found. There is a significant difference in between SBI & HDFC; SBI and ICICI; however, there is no significant difference between SBI and PNB; PNB and HDFC; HDFC and ICICI; and PNB and ICICI.

4). On the bases of average of ratio as a rank of parameter for Assets Quality Test (AQT) ratios viz. NPNA, PATA and TITA, PNB bank has the highest Assets Quality Test ratio with composite mean score of 21.07 which is followed by HDFC bank with the composite mean score of 20.80. ICICI bank and SBI bank became third and fourth rank with mean of 18.76 and 18.32 respectively.

5). On the bases of rank of ratio as a rank of parameter for Assets Quality Test (AQT) ratios viz. NPNA, PATA and TITA, PNB has the lowest mean score of 2.00, followed by HDFC with a mean score of 2.33. SBI and ICICI became third with a mean score of 2.67 and 3.00. Thus as per rank of ratio as a rank of parameter for Assets Quality Test (AQT) criteria, PNB stood at 1st, HDFC 2nd, SBI 3rd and ICICI bank 4th rank.

5.2.3 Management Efficiency Test (M)

Three parameters have been taken for Management Efficiency Test and characteristics of each parameter have been analyzed accordingly. The combined rank is also found out for Management Efficiency Test.

- 1) Business per Employee
- 2) Profit per employee
- 3) Total Advance to Total Deposits ratio

1). In terms of BPE, ICICI has the highest mean score of 88.80 followed by PNB with 86.24. The mean score of SBI and HDFC are 70.49 and 68.60 respectively. Thus as per BPE criteria, ICICI stands rank 1 followed by PNB, SBI and HDFC with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on BPE ratio was found. There is a significant difference in the BPE between SBI & HDFC;

between SBI and ICICI; PNB and HDFC; PNB and ICICI; however, there is no significant difference between SBI and PNB.

2). In terms of PPE, ICICI has the highest mean score of 1.76 followed by HDFC with 0.76. The mean score of PNB and SBI are 0.56 and 0.44 respectively. Thus as per Profit per employee criteria, ICICI stands rank 1 followed by HDFC, PNB and SBI with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on PPE ratio was found. There is a significant difference in between SBI & HDFC; between SBI and ICICI; PNB and ICICI; HDFC and ICICI; however, there is no significant difference between SBI and PNB; PNB and HDFC.

3). In terms of TATD, ICICI has the highest mean score of 95.91 followed by SBI with 79.58. The mean score of HDFC and PNB are 73.94 and 73.87 respectively. Thus as per Total Advance to Total Deposits ratio criteria, ICICI stands rank 1 followed by SBI, HDFC and PNB with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on TATD ratio was found. There is a significant difference in the TATD ratio between SBI & ICICI; between PNB and ICICI; HDFC and ICICI; however, there is no significant difference between SBI and PNB; SBI and HDFC; PNB and HDFC.

4). On the bases of average of ratio as a rank of parameter for Management Efficiency Test (MET) ratios viz. BPE, PPE and TATD, ICICI bank is highest with composite mean of 61.95 followed by PNB Bank with the composite mean score of 53.55. SBI bank and HDFC bank became third and fourth rank with mean of 50.16 and 47.76 respectively.

5). On the bases of rank of ratio as a rank of parameter for Management Efficiency Test (MET) ratios viz. BPE, PPE and TATD, ICICI has the lowest mean score of 1, followed by HDFC, PNB and SBI with equal mean score of 3 each. Thus as per rank of ratio as a rank of parameter for Management Efficiency Test (MET) criteria, ICICI stood at rank 1st, HDFC, PNB and SBI at equal rank of 2.5 each.

5.2.4 Earning Ability Test (E)

Three parameters have been taken for Earning Ability Test and characteristics of each parameter have been analyzed accordingly. The combined rank is also found out for Earning Ability Test.

- 1) Other Income to Total Income ratio
- 2) Interest Income to Total Income ratio
- 3) Interest Income to Total Assets ratio

1). In terms of OITI, ICICI has the highest mean score of 20.63 followed by HDFC with 17.60. The mean score of SBI and PNB are 14.37 and 11.75 respectively. Thus as per Other Income to Total Income ratio criteria, ICICI stands rank 1 followed by HDFC, SBI and PNB with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on Other Income to Total Income ratio was found. There is a significant difference in OITI ratio between SBI & PNB; between SBI and HDFC; SBI and ICICI; PNB and HDFC; PNB and ICICI.

2). In terms of IITI, PNB has the highest mean score of 88.24 followed by SBI with 85.62. The mean score of HDFC and ICICI are 82.39 and 79.36 respectively. Thus as per Interest Income to Total Income ratio criteria, PNB stands rank 1 followed by SBI, HDFC and ICICI with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on Interest Income to Total Income ratio was found. There is a significant difference in IITI ratio between SBI & PNB; between SBI and HDFC; SBI and ICICI; PNB and HDFC; PNB and ICICI; HDFC and ICICI.

3). In terms of IITA, HDFC has the highest mean score of 7.79 followed by PNB with 7.52. The mean score of SBI and ICICI are 7.14 and 7.11 respectively. Thus as per Interest Income to Total Assets ratio criteria, HDFC stands rank 1 followed by PNB, SBI and ICICI with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on Interest Income to Total Assets ratio was found. There is a significant difference in the IITA ratio between SBI & HDFC; between SBI and ICICI; PNB and HDFC; PNB and ICICI; however, there is no significant difference between SBI and PNB; HDFC and ICICI.

4). On the bases of average of ratio as a rank of parameter for Earning Ability Test (EAT) ratios viz. OITI, IITI and IITA, HDFC bank has highest composite mean of 35.93 which is followed by PNB bank with the composite mean score of 35.84. SBI bank and ICICI bank became third and fourth rank with mean of 35.71 and 35.70 respectively.

5). On the bases of rank of ratio as a rank of parameter for Earning Ability Test (ABT) viz. OITI, IITI and IITA, HDFC has the lowest mean score of 2.00, followed by PNB with a mean score of 2.33. SBI and ICICI became third with a mean score of 2.67 and 3.00. Thus as per rank of ratio as a rank of parameter for Earning Ability Test (EAT) criteria, HDFC stood at 1st, PNB 2nd, SBI 3rd and ICICI Bank 4th rank.

5.2.5 Liquidity Management Test (L)

Three parameters have been taken for Liquidity Management Test and characteristics of each parameter have been analyzed accordingly. The combined rank is also found out for Liquidity Management Test.

- 1) Liquid Assets to Total Assets ratio
- 2) Cash deposits ratio
- 3) Liquid Assets to Total Deposits ratio

1). In terms of LATA, HDFC has the highest mean score of 9.13 followed by SBI with 8.81. The mean score of ICICI and PNB are 8.29 and 7.59 respectively. Thus as per Liquid Assets to Total Assets ratio criteria, HDFC stands rank 1 followed by SBI, ICICI and PNB with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on Liquid Assets to Total Assets ratio was found. There is a significant difference in LATA ratio between SBI & HDFC; between SBI and ICICI; PNB and HDFC; PNB and ICICI; however, there is no significant difference between SBI and PNB; HDFC and ICICI.

2). The present study found that in terms of CDR, ICICI has the highest mean score of 8.46 followed by HDFC with 8.05. The mean score of SBI and PNB are 7.12 and 6.98 respectively. Thus as per Cash deposits ratio criteria, ICICI stands rank 1 followed by HDFC, SBI and PNB with ranks 2nd, 3rd and 4th respectively. Significant difference

among the selected four banks on Cash deposits ratio was found. There is a significant difference in the CDR between SBI & HDFC; between SBI and ICICI; PNB and HDFC; PNB and ICICI; however, there is no significant difference between SBI and PNB; HDFC and ICICI.

3). In terms of LATD, ICICI has the highest mean score of 14.26 followed by HDFC with 12.12. The mean score of SBI and PNB are 11.48 and 10.30 respectively. Thus as per Liquid Assets to Total Deposits ratio criteria, ICICI stands rank 1 followed by HDFC, SBI and PNB with ranks 2nd, 3rd and 4th respectively. Significant difference among the selected four banks on Liquid Assets to total deposits ratio was found. There is a significant difference in between PNB and ICICI; however, there is no significant difference between SBI and PNB; SBI and HDFC; SBI and ICICI; PNB and HDFC; HDFC and ICICI.

4). On the bases of average of ratio as a rank of parameter for Liquidity Management Test (LMT) ratios viz. LATA, CDR and LATD, ICICI bank stood at first with composite mean of 10.34 which is followed by HDFC bank with the composite mean score of 9.77. SBI bank and PNB bank became third and fourth rank with mean of 9.14 and 8.29 respectively.

5). On the bases of rank of ratio as a rank of parameter for Liquidity Management Test (LMT) ratios viz. LATA, CDR and LATD, HDFC and ICICI has the lowest mean score of 1.67 each, followed by SBI with a mean score of 2.67. PNB became fourth with a mean score of 3.00. Thus as per rank of ratio as a rank of parameter for Liquidity Management Test (LMT) criteria, HDFC and ICICI stood at 1st, SBI 3rd and PNB Bank 4th rank.

5.2.6 Overall “CAMEL” Ranking Test

- 1) Capital Adequacy Test
- 2) Assets Quality Test
- 3) Management Efficiency Test
- 4) Earning Ability Test

5) Liquidity Management Test

On the bases of average of ratio as a rank of parameter

On the bases of average of ratio as a rank of parameter for overall CAMEL rank test, highest average rank of ratio is ICICI bank with a mean score of 30.29 followed by PNB bank with a mean score of 28.77. SBI bank and HDFC bank became third and fourth rank with the composite mean score of 27.69 and 27.62 respectively.

On the bases of rank of ratio as a rank of parameter:

On the bases of rank of ratio as a rank of parameter for overall CAMEL rank test, lowest rank of ratio is HDFC bank which has the lowest composite mean score of 1.7 followed by PNB bank with a mean score of 2.2. ICICI bank and SBI bank became third and fourth rank with the composite mean score of 2.8 and 3.0 respectively.

5.3 Suggestions

For improvement of financial performance of selected public and private sector banks viz. SBI and PNB, HDFC and ICICI banks, the following suggestions emerges for consideration and attention.

In the context of CAMEL MODEL, the following suggestions have been emerged.

1. Though Capital Adequacy ratio seems adequate at present, but considering the Basel- III requirements of CAR and present levels of NPAs, the following measures need to be taken care of to raise capital and improve its Capital Adequacy ratio.
 - a) Augmenting capital through Equity and Debt route.
 - b) Augmenting capital through Government / Budgetary support.
 - c) Retaining earning of profits.
 - d) Improve Assets Quality.
2. In the context of Assets Quality, the NPA of public sector banks is higher than public sector banks. There is a need to fixed special norms by RBI in order to reduce the

high level of NPA. Public sector banks need to reduce their high level of NPA by charging price for their services in a remarkable manner and should plug all leakage of income. A part from service charges income from letter of credit; guarantee should be tapped within prudential limits.

3. For management efficiency, it was observed that public sector banks were not utilizing their resources optimally than private sector banks. The business per employee and profit per employee are too low at public sector banks and therefore, it is necessary for public sector banks to improve the productivity/ efficiency of branches, either by increasing business through incentives or training to employees.

4. The study observed that earning ability of both public and private sector banks were poor. Both public and private sector banks, income from interest is better but their income from operating profit is low. Thus, the public sector banks have to work on this area in order to improve their overall profitability and financial performance.

5. The public sector banks have excess liquid assets against their deposits or total advances. Therefore, public sector banks need to utilize their liquidity in such a manner which will enable them to gather higher profits.

A part from the above CAMEL framework, the following suggestions have also put in to consideration:

- 1) Banks should try to sustain their competitiveness and they must also focus on their performance. The study observed that banks are not utilizing their assets in the best possible way hence; they need to concentrate on the better and more utilization of assets which will increase their profitability.
- 2) Banks financial performance can also be improved by having proper/ better portfolio management. Therefore, better portfolio management is needed to increase the earnings to reach an optimal balance between return and risk.
- 3) Technology has affected all the sectors around the world. Banking sector is also affected in a big way by it. It not only improves the efficiency of services, but also reduced cost. There is a need for public sector banks and private sector banks

were slow in adopting technology and cost reductions. Thus, there is a need for both the sector to adapt technology which will improve overall performance of banks and employees productivity.

- 4) Banks should reduce their NPA by adopting various measures within the constraints of RBI guidelines. The banks should declare the trust area for loans and advances.
- 5) Banks should also try to make the best use of their branch network.

5.4 Scope of future research

There is a wide scope for the future research in this area. The present study can be enriched by using or adding 'S' acronym of 'CAMEL', which was later added and 'CAMEL' expanded to 'CAMELS'. 'S' represents the sensitivity to market risk or system and control. Study can also be enriched by applying the extended parametric test or other statistical tools and techniques. The present study has covered limited size and time only. It has covered two public sector banks and two private sector banks for a period of ten years. So the same may be extended by covering larger sample size.

This study was limited only to the study of financial performance of selected public and private sector banks in India, but further research can be made on:

- 1) Comparative financial performance evaluation of public sector banks, private sector banks and foreign banks operating in India.
- 2) Comparative financial performance evaluation of banks using other financial tools like EVA and MVA.
- 3) Comparative study of branch productivity and employee productivity of selected public and private sector banks in India, etc.

5.5 Conclusions

The present study has obtained ranking of selected two public and two private sector banks in terms of CAMEL variables. Ranking of commercial banks is difficult to the extent that any type of ranking is subject to certain criticism as the ratio used for the purpose of ranking can be interpreted in the way one likes. This method of analysis

provides simplicity, reader friendly version of presenting complex data regarding performance of players in the banking industry. The ranking system makes judging and analyzing the financial data of banks much simpler for the common man. Thus through this particular data set, it can be established that private sector banks are at the top of the list with their performances in terms of different parameters compared to public sector banks.

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