

**Dissertation Report**  
**on**  
**Performance Comparison of SBI and its**  
**Associates with other PSBs using Balanced**  
**Scorecard**

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## CERTIFICATE

This is to certify that the Dissertation Report titled “**Performance Comparison of SBI and its Associates with other PSBs using Balanced Scorecard**”, is a bonafide work carried out by Mr. Sahil Sood of MBA 2014-16 and submitted to Delhi School of Management, Delhi Technological University (Formerly Delhi College of Engineering), Bawana Road, Delhi in partial fulfilment of the requirement for the award of the Degree of Master of Business Administration.

Signature of Guide

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Place:

Date:

## DECLARATION

I Sahil Sood, student of MBA 2014-16 of Delhi School of Management, Delhi Technological University (Formerly Delhi College of Engineering), Bawana Road, Delhi declare that Dissertation Report on “**Performance Comparison of SBI and its Associates with other PSBs using Balanced Scorecard**” submitted in partial fulfilment of Degree of Master of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

This Report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship.

Sahil Sood

Place:

Date:

## ACKNOWLEDGEMENT

It is a matter of great satisfaction and pleasure to present this report on **Performance Comparison of SBI and its Associates with other PSBs using Balanced Scorecard**. I take this opportunity to owe my thanks to all those involved in my work.

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## EXECUTIVE SUMMARY

The balanced scorecard revolutionized conventional thinking about performance metrics. When Kaplan and Norton first introduced the concept, in 1992, companies were busy transforming themselves to compete in the world of information; their ability to exploit intangible assets was becoming more decisive than their ability to manage physical assets. The scorecard allowed companies to track financial results while monitoring progress in building the capabilities needed for growth. The tool was not intended to be a replacement for financial measures but rather a complement—and that's just how most companies treated it.

Some companies went a step further, however, and discovered the scorecard's value as the cornerstone of a new strategic management system. In this article from 1996, the authors describe how the balanced scorecard can address a serious deficiency in traditional management systems: the inability to link a company's long-term strategy with its short-term financial goals. The scorecard lets managers introduce four new processes that help companies make that important link.

The first process—**translating the vision**—helps managers build a consensus concerning a company's strategy and express it in terms that can guide action at the local level. The second—**communicating and linking**—calls for communicating a strategy at all levels of the organization and linking it with unit and individual goals. The third—**business planning**—enables companies to integrate their business plans with their financial plans. The fourth—**feedback and learning**—gives companies the capacity for strategic learning, which consists of gathering feedback, testing the hypotheses on which a strategy is based, and making necessary adjustments.

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# **CHAPTER 1**

## **1.1 Introduction**

It is utterly essential to develop a performance assessment system that encompasses all aspects of an organisation, if an organisation aims at growth, development and long term survival. For the purpose of further improvement such a system should be capable enough of bringing out the strengths and weaknesses of the organisation. For covering all the aspects of an organisation many advanced computational tools, various performance measurement and assessment systems have evolved over a period of time that covers a single - aspect systems to more comprehensive systems.

Typically, various performance indicators for an organisation can be classified into four perspectives. These include financial, customer, internal business process and learning and growth. The approach which includes all these perspectives is known as “Balanced Scorecard Approach”.

## **1.2 Balanced Scorecard**

The balanced scorecard approach includes all the four perspectives; it can be an efficient technique for long term strategic planning. In the early 1992s, Robert Kaplan of the Harvard Business School, and David Norton, the president of a Massachusetts consulting firm, designed the balanced scorecard (BSC) and then expended and improved it. BSC includes both financial and non-financial indicators.

It indicates the future financial performance and helps the organisation in implementing the strategies. It is the one of the best-known and most famous model in performance evaluation. It is a strategic management system which helps organisation to identify the strategies and make it executable. Balanced Scorecard model is not only for analysing the performance of an organisation internally, but it also allows the shareholders and investors to monitor the result of an organisation. As per the recent balanced scorecard report, various surveys estimate that 40-50 percent of the large organisations have started implementing the concept of BSC.

According to the concept of BSC, these four perspectives will enable the companies to evaluate the financial results and monitor progress in building the capabilities which are necessary for acquiring the “intellectual capital” or “intangible assets” essential for the future business growth. This project work evaluates the significance of the intangible aspects which acts as a tool for performance measurement in the Public Sector Banks in the synchronous economic environment.

Factors such as employee knowledge, relationship with customers, innovative culture and change management defines the overall success of an organisation.

### **Balanced Scorecard**



Figure 1.1

#### **Four aspects of BSC are:**

- Financial Aspect
- Customer Aspect
- Internal Process Aspect
- Learning and Growth Aspect

#### **With these aspects the following four questions are answered:**

- Financial Aspect (How do we look to shareholders?)
- Customer Aspect (How do customers see us?)
- Internal Process Aspect (What must we excel at?)
- Learning and Growth Aspect (Can we continue to improve and create value?)

According to Kaplan and Norton knowing these aspects can resolve problems and increase build-up of information by restricting the use of indicators. Generally, managers are forced to focus on some limited crucial and critical indicators. But the use of several different aspects of performance restricts the focus on one subject only. An organisation's vision and strategy gives objective to the balanced scorecard. BSC can take many forms, including options and various operational parameters which are useful in effective decision making. They find new ways to measure the performance of their companies.

### **1.3 Balanced Scorecard Background**

In 1992, Balanced Scorecard was designed by Robert Kaplan (Harvard University) and David Norton, who was working as a consultant in Boston area. Robert Kaplan and David Norton worked as a consultant in more than 12 companies. According to Kaplan and Norton only analysing the financials to assess the performance of the organisation is not enough. Organisations should focus on the issues relating to internal process, customers, and commercial matters relating to staff and stakeholders so that the management can evaluate the actual performance of the organisation and Kaplan and Norton called this tool as "Balanced Scorecard".

After four years, a number of organisations which implemented the balanced scorecard tool achieved satisfactory results. In 1996, Kaplan and Norton wrote a book named "Balanced Scorecard" and explained balanced scorecard as a tool for implementing strategies and performance measurement. Since the completion and improvement of BSC in four generations many private and public companies are using this tool in performance evaluation as per their business type and size.

### **1.4 BSC Perspectives**

Balanced Scorecard includes four perspectives. These are explained as follows:

#### **1.4.1 Financial Perspective**

Kaplan and Norton do not disregard the traditional need for financial data. Timely and accurate funding data will always be a priority, and managers will do whatever necessary to provide it. In fact, often there is more than enough handling and processing of financial data. With the implementation of a corporate database, it is hoped that more of the processing can be centralized and automated. But the point is that the current emphasis on financials leads to the "unbalanced" situation with regard to other perspectives. There is perhaps a need to include additional financial-related data, such as risk assessment and cost-benefit data, in this category.

### **1.4.2 Customer Perspective**

Recent management philosophy has shown an increasing realization of the importance of customer focus and customer satisfaction in any business. These are leading indicators: if customers are not satisfied, they will eventually find other suppliers that will meet their needs. Poor performance from this perspective is thus a leading indicator of future decline, even though the current financial picture may look good.

In developing metrics for satisfaction, customers should be analysed in terms of kinds of customers and the kinds of processes for which we are providing a product or service to those customer groups.

### **1.4.3 Internal Business Perspective**

This perspective refers to internal business processes. Metrics based on this perspective allow the managers to know how well their business is running, and whether its products and services conform to customer requirements (the mission). These metrics have to be carefully designed by those who know these processes most intimately; with our unique missions these are not something that can be developed by outside consultants.

### **1.4.4 Learning and Growth Perspective**

This perspective includes employee training and corporate cultural attitudes related to both individual and corporate self-improvements. In a knowledge-worker organization, people -- the only repository of knowledge -- are the main resource. In the current climate of rapid technological change, it is becoming necessary for knowledge workers to be in a continuous learning mode. Metrics can be put into place to guide managers in focusing training funds where they can help the most. In any case, learning and growth constitute the essential foundation for success of any knowledge-worker organization.

Kaplan and Norton emphasize that 'learning' is more than 'training'; it also includes things like mentors and tutors within the organization, as well as that ease of communication among workers that allows them to readily get help on a problem when it is needed. It also includes technological tools; what the Baldrige criteria call "high performance work systems."

## **1.5 Balanced Scorecard in Public Sector Banks**

In Today's competitive world, organisations which provides customer satisfaction, loyalty and attend to customer needs can compete and make the profit.

Banks and the financial institution are more focused to increase their competitive advantage so, to find a comprehensive assessment model for the performance that is a main key to be more competitive and to survive. Performance assessment and analysis of financial institution and banks require a particular framework. In the interim, we can build set or system it as a

contraption to assess the performance of the Bank's strategy that is fundamental requirements. There are so many different methods to analyse the performance of the banks such as "Delphi Analysis", "Ratio Analysis", "Balanced Scorecard", and "Regression Analysis" that Banks can choose as per their size and needs. But BSC is very assertive approach to evaluate the performance of the Public Sector Banks over the years. BSC implementation approach in banks from past to present gives the overall conclude result.

Since Banks are intercessor between the user of financial resources and owner, they can create money. So mistakes and failure in performance gives negative results on economic situation. Hence, emphasis on finding right system and method performance evaluation improve economic and banking system

Performance management which is reliable, correct and comprehensive is the powerful indicator of development of banks. Balanced Scorecard is the efficient tool that can cover this need. (At the end of 1999, a survey, answered by 140 managers of banks, insurance companies, and other financial institutions in the United States, showed that 20 percent of the organizations use the Balanced Scorecard. According to survey results, 11 percent of those answering the survey do the preparatory work to implement the Balanced Scorecard, 17 percent stated that they consider using the Balanced Scorecard. 51 percent of those answering the survey do not think of using the Balanced Scorecard. (Ittner, Larcker and Randall, 2003). A survey conducted in 1998 determined that nine out of 20 biggest banks in the UK use the BSC (Broadly-Preston & Preston, 1999).

### **1.6 Objectives of the Study:**

1. Comparing the performance of the SBI and its Associates with other Nationalised Public Sector Banks with respect to Financial Perspective.
2. Comparing the performance of the SBI and its Associates and other Nationalised Public Sector Banks with respect to Customer Perspective.
3. Comparing the performance of the SBI and its Associates and other Nationalised Public Sector Banks with respect to Internal Business and Process Perspective.
4. Comparing the performance of the SBI and its Associates and other Nationalised Public Sector Banks with respect to Learning and Growth Perspective.

## **CHAPTER 2**

### **2.1 Literature Review**

#### **2.1.1 Introduction**

The review of literature is likely to provide a bird's eye view of the study conducted on the subject matter. Review of literature is helpful in gaining background knowledge of the research topic and identifying the various issues related to it. In this way, it prepares the ground for justification of the research plan. In the early 1990s, for the concept of performance business world brought a universal approach. That is named as "Balanced Scorecard" it was a significant turning point for performance management. BSC is an accounting tool that is accepted worldwide. BSC recommended that non-financial performance measurements should be evaluate by the financial measurement so that performance of the banks or institutions can be measured in multi-dimensional way which reflects the institutional or banks strategies in a better way.

The BSC consider the value of along with the tangible one and enable performance management system to reach its aims. (Kaplan and Norton, 2004b). On the basics of BSC institutional strategies are adopted by other institutions which insure the internal integrity. BSC is such a tool which rolls the strategy in to clear, explicit and adjust the focus of strategy. Studies which has been done earlier focus on so many different pin points of performance measurements. Like, Bikker (2010) studied on how well financial institutions perform in providing their services to customers and businesses. Moneva et al, (2010). Basically these studies show the benefaction to the success. Results of these studies reflect, if the environmental rates of performance are higher, then there will be quite financial performance.

Additionally, in earlier studies service performance is quite essential performance management. As per so many researchers it came out that service performance plays an important role for performance measurement. Firdaus et al (2011) suggest the following three dimensions of service quality: systemization, reliable communication and responsiveness. Other than these studies there are so many studies which includes that size of the bank has major role to assess the performance management. Al-Tamimi (2011) finds out that large banks perform better than small banks, so the most important performance indicator of that study is the bank size.

Apart from these, there are different studies showing the way of performance assessment in public sector. The trend of BSC mainly popular for the performance assessment of the banks. This study is conceptually examined and performance assessment is covered up with the help of BSC. Usually managers control their functions by measuring the

performance targets, measuring performance, compare the actual performance with determined, and then remove the gap and make a move. Factors included in performance assessment should be according to the work that must matched be organisational structure and chain of activities. If performance measurement system gives positive result managers must include that piece of obligations. The main objective should be maximise the performance. (Parker, 2000) states that performance criteria should be clear, reliable and healthy, as well as easily understood by everyone. So, system has clear design and it should be simple so that it can be easily understand whether it reach out the target or not.

In a single report of BSC there must be two criteria: financial and non-financial and must be in a “balanced” way.

## **2.2 Studies on the Concept of Balanced Scorecard**

**Elif Öztürk & Ali Coskun (2014)** studied the Strategic Approach to Performance Management in Banks. The main objective of this study was to see to allow balanced scorecard practices in literature. This study contributes to the literature with specific examples from so many different regions of the world. The result show that to prepare the balanced scorecard for banks is more relevant as compared to just the financial performance in terms of assessment of performance with the help of holistic approach. For the effective implementation of BSC this study involves nine steps; first is evolution of mission and vision of the organisation. Secondly, companies assess strategies in favour of customer’s beneficial. After that, objectives of each and every strategic team are important to target the success. It is also essential to create worth for the customers with the help of well-designed strategic map. Additionally, performance measures and initiatives are also crucial steps that should be include to reach success for implementation of the Balanced Scorecard.

**Sagar R. Dave and Swati R. Dave (2012)** studied that intangible aspects act as a crucial tool for the measurement of performance in the Indian banking sector with largest, most widely spread and with the focus on old bank. The performance measurement is done by constructing a system that is balanced scorecard. Being a part of the service sector it is found that the strategy planning in banks, which is a long term process in nature needs to focus on such systems. In its findings it shows that implementation of a single BSC is not only difficult but complicated also. Still it emerges to be an effective and include all-inclusive tools, that emphasis the various aspects of banks. It helps in understanding the various complexity of indicator of which are responsible for measurement of performance of banks. That’s result to make the strategy implementation easy and that will ensure better performance in future.

## **2.3 Studies on the Implementation of Balanced Scorecard**

**Khawla H. Kalaf (2012)** the purpose of this study was to contribute to the understanding of how BSC is developed and applied in evaluating the performance of a Large Local Bank (LLB) in Iraq. The researcher used the concept of Kaplan and Norton, and used data made available by the bank. Due to lack of research work on BSC for performance analysis in the banking sector in Iraq, this study contributed to improve its performance by using the BSC and gave a signal that how banking sector in Iraq can be improved by using this tool. The findings revealed that the LLB's performance was weak in those three years and then it improved. This study has created BSC model having 20 measures which was used to analyse the LLB performance. Despite the fact that the results of the performance of LLB was not up to the mark.

**Malihe Rostami, Ahmad Goudarzi, Mahdi Madanchi Zaj (2015)** studied on Defining Balanced Scorecard Aspects in Banking Industry Using FAHP Approach. The main objective of this study was to define the BSC model as an efficient evaluation tool in bank. In this research work aspects of Balanced Scorecard and the relevancy of each aspect and linked indicators are examined. To achieve the objective of the research objective Fuzzy Analytical Hierarchy Process (FAHP) is used. In first step of research, 56 indicators found which were based on previous studies and literature which were analysed by expert opinions by oversees a questionnaire. At the most basic level 9 indicators were removed. In second step, the weight of each indicator is measured using pair comparison questionnaire which is based on FAHP approach. As per research analysis, the first priority is given to customer aspect, the second priority is given to the financial aspect, third priority is given to internal processes aspect and at the end, learning and growth aspect are on the fourth priority.

According to the findings of article are proved Customer aspect as first clump and financial aspect proved second, Internal processes aspect proved third and the end Learning and growth aspect comes at forth. Also, in every aspect, 9 indicators are selected and after are examined and given rank with FAHP technique.

**Marvin Soderberg, Suresh Kalagnanam , Norman T. Sheehan, Ganesh Vaidyanathan, (2011)** Research has revealed that the BSC tool may be understood differently by managers both within the organizations and outside the organisation. This reflecting that the performance analysis systems implemented in organizations may not be as to the construct visualized by Kaplan and Norton. By using Kaplan and Norton's BSC construct as a footing, the paper objective to develop and test five-level pathology to

classify firms' performance analysis systems. The five-level pathology is used to categorize the performance evaluation systems of 149 organizations. It is found that 111 organizations' (74.5 percent) performance evaluation systems met the norms to be classified as a normal Level 1 BSC, and 61 (40.9 percent) organizations have structurally meet Level 3 BSCs, and 36 (24.2 percent) organizations have fully evolve Level 5 BSCs. The paper also emphasis gap between Level 1 and Level 5 BSC organizations. The study's results show some clustering with the five levels of BSC implementation, with the about a third of the sample firms with a BSC reporting a Level 5 BSC implementation. The study's primary contribution for learner is its description of current performance evaluation system practices in Canadian organizations, which allows managers to guide and gauge measure their organization's BSC implementation progress than BSC pathology.

**Mohi-ud-Din Sangmi; Nazir, Tabassum, (2010)** studied on financial performance of the Indian commercial bank with the help of application of CAMEL model. According this significant financial health of a bank gives guarantee not only to its depositors but also equally significant for the shareholders, employees and whole economy. As a continuation to this maxim, efforts have been made regular basis, to measure the financial position of each bank and manage it efficiently and effectively. In this paper, an effort has been made to assess the financial performance of the two major banks operating in northern India. This evaluation has been done by using CAMEL Parameters, that is the latest model of financial analysis. Through this model, it is reflected that the position of the banks under study is significant and satisfactory so far as their capital adequacy, asset quality, Management capability and liquidity is considered.

**Driscillah Wughanga Mghanga, (2010)** studied on application of the balanced scorecard in strategy implementation at the Kenya Commercial Bank. The Kenya Commercial Bank adopted BSC as a tool for the management of performance and executes this strategy in the year 2005. The aims of this study are to find the application of BSC to this end and if there are any difficulties that have been faced in the process. To achieve this target, a case study was come in focus. In which 9 out of the 10 members of staff were interviewed. The results reflect that the BSC has been a useful tool to achieve the mission of the Bank. As per the capability of this tool to bring consensus around the objective and therefore chart the way for its implementation. Some difficulties have been faced including restricted to change, lack of relevant and enough knowledge of the staff, aspects of operation that are not easy to measure and lack in aims appraisal of staff. Due to this, the tasks of the employees have become more concentrated on what is important, namely the objective of the bank and how to implement it.

## **2.4 Studies on Evaluation of Performance with Balanced Scorecard**

**Presecan Marcela, (2015)** According to this study analysing performance particularly on financial indicators has brought growing criticism. Although very important in measuring past performance, financial indicators mostly reflect past achievements, focusing on short term goals and tangible assets. These type of indicators are all lagging indicators, which means they have no perspective over the future alignment with a constantly changing business environment. What the BSC does, is, it complements financial indicators such as Liquidity ratio, % Operating costs, % Adjusted return on assets (AROA) or % Capital adequacy ratio (CAR), with leading, non-financial indicators, real value drivers for long-term competitive performance. It may be that the branch of a certain bank has a great % Customer retention rate, and that is part of the vision and strategy of the bank as a whole, but it may not be so satisfying that the same branch has poor % ATM approval rate and, thus does not achieve % Customer acquisition. A balanced scorecard would emphasize the need for a higher % ATM approval rate, which is an internal processes indicator, as a means of attracting more customers. More ATM's mean satisfied customers with bank territory coverage, which means customer advocacy. On the other hand, ATM approval is based on choosing the right location, maximizing location potential and cost effective deals with the ATM acquirer.

**Magu (2013)** oversees a study on BSC like performance analysing tool in the insurance companies in Kenya explored that the BSC as a tool for calculating performance was used at a wide extent by the insurance firms and is a crucial tool for calculating performance in the organizations.

**Abu Yahaya, (2009)** the purpose of this study is to create a model to be able to evaluate the performance of banks in several angles and calculating using the BSC framework. The evaluated banks showed only marginally the effect of non-financial perspectives on financial performance. Analysis also showed that in evaluating performance of banks some crucial non-financial factors that are customer satisfaction, efficient internal processes and quality of the staff play a crucial role. Of specific interest is turn-around time on the loan processing and the disbursement which is one of the core function of the banks and for which all the selected banks failed to correctly address. But the study also results that the BSC structure indeed provides some more information when used to evaluate the performance of the banks in Ghana.

**Nyangayo Sarah Adhiambo, (2014)** the study is to analyse the use of BSC as a performance measurement tool for the Co-operative Bank. The specific aims of the study were to emphasis the factors which affecting implementation of BSC as a performance

measurement tool and to determine impact of BSC on performance at the cooperative bank of Kenya. The analysis reveal that a fifth of the respondents that BSC has activate help in increase the profits, a fifth shows that it has fuelled Increased customer base, a sixth shows that the BSC lead to advanced technology, a sixth shows that it has lead Professionalism, while a few shows that it has been a way to economic growth a tenth of the population reflect that it increases Competitive edge. The study results from half of the respondent that there are so many factors that has impact on balanced scorecard at cooperative bank of Kenya. The study explored that balanced scorecard is very crucial on performances measurement of cooperative bank. The study suggested that: Cooperative bank should integrate structure for describing and execute strategy using linked performance measures in four perspectives: Customer, Internal Processes, Learning and Growth, and Financial. It was suggested that the Co-operative Bank of Kenya should apply balanced scorecard as a primary performances calculating tool a factor that will increase their performance, increase their competitive aspect and enhance the customer satisfaction.

**Deville at al, (2014)** explored on performance measurement in the hierarchical organizations. Differently, there are studies reflecting how to execute performance measurement systems in the public sector. They also present how managers apply the contractibility system. In the earlier years, a lot of industry, commerce and business service sectors started to apply the BSC in so many different countries. Earlier studies show that there are interests on implementation of Balanced Scorecard in companies.

## **2.5 Studies on the Effects on Performance of Balanced Scorecard**

**Lenah Kaya Kimanzi, (2007)** studied on the effects of the BSC model on the performance that is related to employees' performance in the banking sector. It is one of the Kenya Commercial Bank. Only very few researchers have focused on their studies on the individual employee progress. This study was therefore aimed at evaluating the effect of the BSC on employee progress in Kenya Commercial Bank. The study was carried out to examined the four pillars on which the BSC is built; these are as follows, the Financial Pillar, second is customer service pillar, third is learning and growth and final one is internal business processes pillar, and then again establish whether the perspectives have any effect on employee performance in Kenya Commercial Bank. This study was emphasised on 20 branches in Central and Nairobi Regions of the bank. In which 54 respondents which were sampled randomly though stratified random sampling. Data collection was from both primary and secondary sources. For data collection questionnaires act as a tool data. The tool was operated by way of "drop and pick" method. Some questionnaires were managed by use of emails. Quantitative data was

examined by using descriptive statistics and inferential statistics. The various interdependent variables were examined with the help of the data that was found in this study by arranging them in same themes and then matching the number of same responses. The Statistical Package for Social Sciences (SPSS) helped in the analysis. SPSS version 12.0 performed the exploratory data analysis and also descriptive statistics. Inferential statistics was used in making inferences about a population with the help of observations and then analyses of samples. Linear regression analysis was used. The tool was pre-tested in order to examine its validity and soundness. Findings of the study reflects that employee performance is greatly influenced by the four aspects of the balanced Scorecard; the financial perspective affects employee performance to a large extent, regularly and timely employee training enables them perform well, flexible and friendly internal business processes lead to improved employee performance and improved customer service highly motivates the employees. However, the researcher concludes that for improved employee performance, it is very crucial to give training to employees to make them perform up to mark and hence increase their output and to continuously update employees on the financial aspects of the bank since the financial factor has a great influence on employee growth.

The researcher suggests that there is requirement to ensure efficient follow through and review of the data to give assurance that all KCB employees are comfortable that the tool assess their performance effectively.

The study established a number of factors that would need to be examine in the application of balanced scorecard as an appraisal tool for measuring employees' performance. First, it shows the relationship between the customer focus in the balanced scorecard and the employees' performance in the banking sector especially at KCB. The study findings emphasize the requirement for the bank not to only work towards gives assurance that the Balanced Scorecard aim at fulfilling organizational objective, but also they should not neglect their customers who are the staff who play a crucial role in revenue generation.

The study's findings also explore that it is very necessary to train employees in regular order to enable them perform effectively and hence increase their output. Employees were satisfied with the training they received and reflect satisfaction with the effectiveness with which the training is delivered to employees. They accepted that the training played a major role to increase their output.

**Roselyn Kathambi Gitonga, (2014)** worked on Balanced Scorecard and Performance of Consolidated Bank of Kenya. This aims of this study is to evaluate the position of BSC as a performance control tool, at the Consolidated Bank of Kenya and points out the difficulties faced by the bank for relying independently on the traditional single

practice of financial indicators only which control performance. It invites to understand how the BSC increase the value of performance management consideration system based on the introduction of customer factors, internal business processes, employee learning and growth and financial factors of the bank. To achieve this target, a case study came into focus. Top management were interviewed like Head of Human Resources and the General Manager were interviewed. The study reflect that the BSC has been a crucial tool for meeting the target of the Bank. This is explored by the ability of BSC to bring agreement around the target and therefore chart the way for its execution. Some challenges have been faced like resistance to change, no sufficient knowledge to the staff, aspects of operation that are difficult to assess and lack of clarity in appraisal of staff. The results of this study have some involvement theory and practice. The result reflect Consolidated Bank of Kenya has been implementing BSC as a method to assess the performance and then adds it to the growing body knowledge of BSC practices in the banking sector. This study facilitates as a blue print to policy makers, mainly in the public sector for the framing of policies and procedures that increases performance of organizations. The following recommendations are made following the study results. First, the study suggests that some of the internal policies and procedures which are not valuing be revised and make improvement so as to make the BSC concept more in progress with today's practices. The results in this study have implications for both theory and practice. The results implemented Consolidated Bank of Kenya has been using BSC as a method to assess performance and adds to the increasing body knowledge of BSC practices in the banking sector.

Such as balanced scorecard which measure both their internal processes as well as the customer aspect of performance. The study will helpful to make policies like the in the banking industry so that it can help the banking industry to be more effective, leading and competitive. The results of this study supplement the Theory of the BSC as a performance assessment tool by providing focus on the underlying principles examined by an industry in practices. In addition to obtaining focus on the four perspectives of the BSC the concepts providing a theoretical base for this research was also examined and the vision obtained improved the theories of Resource Based View and Dynamic Capability Theory. This study found the relevance of resource-based view of strategy to how a joint BSC and the banking industry approach act as a high dynamic capability (which includes core capabilities and the core competences, the cross-functional management, and top executive audits, which, when managed properly, explore a new view of strategic fit,) as in the form of nested hierarchies of dynamic efficiency.

The outcome of this study provides a framework and important application of Balanced Scorecard in the Banking Industry. The other Industry can also take benefit or many advantages of this study. These findings have so many implications in the implementation of the BSC in CBKL. They will provide concentrate and clear lines and way of accountability, providing the ability to control the achievement of agreed result, facilitate communication across the organization and increase understanding of vision, mission and last one is strategy. The practices of these findings in the bank will assists the linkage between the vision, mission and strategy to objective and goals of individuals and departments also.

**R. Satish and S.S Rao, (2010)** studied on Performance Measurement of Banks: A practices of Economic Value Added & Balanced Scorecard. The new millennium has brought this with a sea phase improvement in the areas of economic activities with the banking sector focusing up for survival, productivity and attracts the customer base. Performance of Financial institutions is a control by applying quantitative techniques. It is a post-mortem examination technique of achievement of the target of a bank. Changes in calculated efficiency of banking institutions come in focus of different efficiency concepts used different measurement methods applied to major the effectiveness and a host of other unfamiliar and androgenic factors. Nevertheless, to know about the existence of performance operator in an institution, both quantitative and qualitative aspects of performance assessment are to be considered. CAMEL rating system, basically a quantitative technique is widely used for measuring performance of banks. Concepts of BSC which includes both quantitative and qualitative aspects of performance assessment, may be used to know the long term prospect of performance was suggested. This paper also tests the awareness and acceptance of Economic Value Added and valid suggestions were drawn.

**Hamzah Hussein Al-mawali, Yuserrie Zainuddin, Noor Nasir Kader Ali, (2010)** studied on BSC fulfilment of branches in the Jordanian Banking Industry. The objective of this paper is to present to the body of awareness in the area of management accounting, mainly performance measurement systems in the BSC structure, by analysing empirically the range of different achievement measures usage and its effects on the financial performance of Jordanian banks in the branches level. The result of this study reflects that the non-financial measures usages, notably, customer focused index and product or service oriented index, appears to be necessary as it increase firm performance. The findings explore that there is positive relationship between the usages of different progress measures via overall BSC measures and financial progress at the branches level.

**Paola Vola, Elisa Broccardo, Elisa Truant, (2009)** This paper objective is to study the execution of a management control system in the Piedmont Cooperative Bank, the system is based on Balanced Scorecard model that suggested by Kaplan and Norton. (North of Italy), compared with the other main Cooperative Banks in Italy. The results obtained make sure that the requirement of a control system based on a comprehensive structure that translates company's approach into a coherent set of performance calculates for the bank consequence, as well bank branches. The paper ends with the conclusions, mainly regarding the care need in choosing the effective operative tools to convert BSC into application, association and suggestions for coming researches.

## **2.6 Studies on the Role of Balanced Scorecard**

**Weng, (2014)** the initial purpose of this study is to gain further understanding of BSC and its role as a performance management tool in an organization. Many studies by Gates (1999), Lingle and Schiemann (1996) suggested that organizations managed through 'Balanced' performance measurement systems perform better than those that are not. Therefore, the research can help figure out positive results on a specific organization using the scorecard to support those ideas.

Besides, it will serve as a guide to business strategy planning. According to Davis and Albright (2004) and Littler et al. (2000), banks can save an enormous amount of time and money if they understand which measures, financial or non-financial, are best suited to their needs. As such, it is expected that the study can indicate whether the current BSC applied in HSBC is ideal in a way that an appropriate mix of performance drivers and outcome measures has been tailored to the business unit's strategy (Frigo et al., 2000)., the research is to identify good points related to BSC in both academic publications and real-world experiences of an organization. Furthermore, the research will reveal HSBC employees' satisfaction level and specific feedback on the bank's BSC system and increase understanding of its strategic link and potential relationships between BSC measures in practice.

**Ayesha Farooq, Zareen Hussai (2011)** the objective of this study is to find out the role of BSC and change management play in effective performance of organizations. For the Objective, a questionnaire is developed and responses were collected from organizations which were selected on the footing of public and private sector and also manufacturing and the service industry. Statistical tools such as t- test and Correlation were applied to achieve the purpose.

**Souad Moufty, (2009)** the objective of this paper is to explore the role and the current stage of Balanced Scorecard in UK banks like a performance measurement. This research in value is quantitative and is valued a multi-method in focus, as three different research technique have been chosen to be managing the survey, interviews and the statistical analysis. These different methods were chosen to secure in depth knowledge of the event in the question. The survey will allow for a comprehensive view of UK banks practice and will obtain empirical evidence of UK banks usage of BSC, in particular to identify the advantages and weaknesses of the BSC, and then a complete analysis of firm responses will be taken out using the SPSS software.

**Mohammed Ibrahim & Sirajo Murtala, (2015).** This study aimed at examining the relevance of BSC as a technique for assessing performance in the Nigerian banking industry. The data of the study includes the 21 banks operating in the Gombe State, Nigeria. A sampling technique was applied to come at the sample of eleven banks. A total of fifty-five copies of questionnaire were distributed to executive employees of the sampled banks out of which forty-three copies were fully completed and returned. Descriptive statistics and the Kruskal Wallis ANOVA was used as a technique for the data analysis. The study suggested that there is insight of the importance of using BSC by the management of Nigerian banks for evaluating performance, and the use of the full structure of BSC comprising these four perspectives cannot be seen. The paper suggested that there is the requirement for more insight of Nigerian bank managers by the academics and practitioners like on the value of BSC in evaluating performance of banks in the Nigeria.

**Sayed M. Elkhoully, Mohamed M. Ibrahim, Mohamed M. El Fragy & Amal S. Kotb, (2015)** The objective of this study is to subscribe to the structure of the knowledge in the area of risk BSC, mainly in the banking sector which faces variety types of risk. The authors can create a logical structure for measuring the effectiveness of Banking Risk Balanced Scorecard across. We have revealed that banking risk BSC has a positive effect on both the economic value added & the Tobin's Q, so the results assist the notion that BRBS has a crucial role to increase shareholders value and intelligent capital, in the meantime of findings assumed that banks successful BRBS applications demonstrates their superior market share, hence it has had an important effect on a reasonable advantage. The results show that Banking Risk Balanced Scorecard increases the effectiveness of the Bank value.

**Mary A. Malina, Frank H Selto, (2001)** this paper states the evidences of the importance of the (BSC) like strategy communication and managing-control device. The study then presents the empirical interview and effective data to model the use and evaluate the communication and control management of the BSC. The study also includes the data

from so many divisions of the large extent and the international manufacturing company. The study includes verification regarding difficulties of the designing and implementation of the BSC faced by even a great extent and the well-funded company. These findings can be generalizable to the other companies adopting or adopting the BSC as a strategic and managing control device.

Results also show variances and tension between top and the middle management regarding the correct of specific aspects of the BSC as a communication, control and evaluation mechanism. Specific results include the evidence of causal relations between the effective management control, motivation, strategic alignment and important effects of the BSC. These important effects include the changes in processes and changes in both the BSC and customer-related services. In contrast to the inefficiency communication and running control cause poor motivation and conflict over the use of the BSC as an evaluation device. This concept uses in the banking industry to increase performance of the employees having effect on the performances running of the banking industry.

## **2.7 Studies on Importance of Balanced Scorecard**

**Malina and Selto (2001)** explored the importance of the BSC in making strategies, aims and serving as a management measurement device. They revealed evidence of not a direct relationship between BSC's management measurement function and better performance on BSC measures. Managers in this study find improved performance on the BSC that would give a direction to improved efficiency and profitability.

**Stephen and Gabriel (2013)** explored the practices of BSC in performance measurement at Essar Telecom Kenya Limited and revealed out that advantages of BSC greater the costs if executed fully, effectively and efficiently and that it supplements the financial measures of past performance with operational calculations that were likely to drive coming performance and growth.

**Opiyo (2010)** in her study on the practices of the BSC on employee job inner satisfaction at Cooperative Bank of Kenya Ltd concentrated on the advantages of BSC aligning operations to the strategy by effecting performance calculations. The importance was strategic sight the part of performance measurement was focused, as a key regulator of the alignment.

**Lenah (2013)** explore out an investigation on the impact of the BSC model on employees' growth within the banking sector that is a case of Kenya Commercial Bank. The results showed that the employee performance was very much affected by the four feature of the BSC; the financial perspective affected employee performance to a

great range, continuously and timely employee training make capable them perform up to the mark, flexible and amicable internal business processes led to upgrade employee performance and customer service highly prompt the employees.

**Velnampy and Nimalathan (2007)** explored a Comparative Study that is related to State and Private Sector Banks in North and Eastern Provinces of Sri Lanka to reveal the effect of BSC and Organizational accomplishment. The outcomes from the operational assumptions shows that four perspectives of BSC have an important relationship with organizational fulfilment which shows, as the total perspectives increase organizational fulfilment increases in state banks, where learning growth perspectives important contributes to total perspectives in both banks are necessary contributors to positive organizational fulfilment, Specially learning growth and financial perspectives are significant handout in the organizational performance in private banks.

## **CHAPTER 3**

### **3.1 Research Methodology:**

**3.1.1 Introduction:** The present study is an attempt to compare the performance of SBI and its Associates with other nationalised Public Sector Banks using the concept of Balanced Scorecard. This chapter focuses on the statement of the research problem and research objectives of the present study. Finally, this chapter outlines the research methodology employed, the way the data for the study has been collected and the statistical tools used for data analyzation.

### **3.2 Statement of the Research Problem:**

In order to realise the strategy, there is a requirement for a clear insight and synergy between all the factors and the parameters that assist in making up an organization i.e. Customers, Processes, Employees and the Capital or Financials. Today's organizations focus that competitive advantage comes through non-tangible assets such as knowledge, strength and relationships created by employees, and not from physical assets and access to capital. Leading organizations have agreed on the need to have a structured methodology for using performance measurement, information to design aims, allocate and then prioritize resources and communicate business targets as well as change policies to suit the organization's targeted direction and the strategy.

#### **Objectives of the Study:**

1. Comparing the performance of the SBI and its Associates with other Nationalised Public Sector Banks with respect to Financial Perspective.
2. Comparing the performance of the SBI and its Associates with other Nationalised Public Sector Banks with respect to Customer Perspective.
3. Comparing the performance of the SBI and its Associates with other Nationalised Public Sector Banks with respect to Internal Business and Process Perspective.
4. Comparing the performance of the SBI and its Associates with other Nationalised Public Sector Banks with respect to Learning and Growth Perspective.

### **3.3 Research Design**

A research design is the specification of methods and procedures for acquiring the needed information.

Research Design adopted here is “Descriptive Research”. It basically seeks to extract relevant information about SBI and its Associates and other Nationalised Public Sector Banks). SBI and its Associates are put in one group and other Nationalised Public Sector Banks in the other. These two groups are then compared on the basis of Balanced Scorecard. For this purpose, t-test and z-test are applied with the help of SPSS (Statistical Package for the Social Sciences) software after checking the normality of collected data.

### 3.4 Data Collection

The present research is based on Secondary Data. Data is collected from various sources including individual websites of the Banks, Annual Reports and Website of RBI. The collected data is then fed into MS Excel Sheet for further analysis i.e. calculating the different ratios as per the requirements.

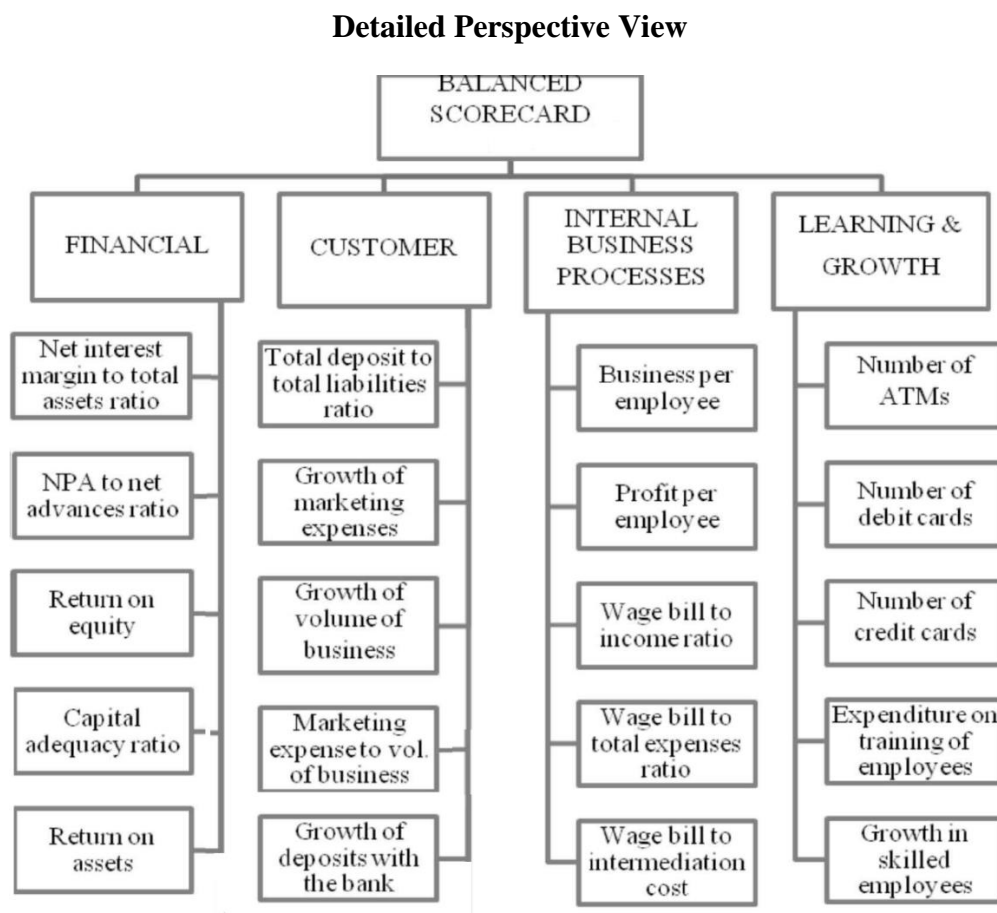


Figure 3.1

### 3.5 Ratios Calculated:

#### Financial Perspective

1. **Net NPA to Net Advances** = Net NPA / Net Advances.

2. **Return on Assets** = Total Income / Total Assets

3. **Return on Equity** = Net Income / Shareholder's Equity

The return on equity ratio or ROE is a profitability ratio that measures the ability of a firm to generate profits from its shareholder's investments in the company. In other words, the return on equity ratio shows how much profit each dollar of common stockholders' equity generates.

4. **Net Interest Margin to Total Assets** = Net Interest Margin/Total assets

Net Interest Margin = (Investment Returns – Interest Expenses) / Average Earning Assets.

5. **Capital Adequacy Ratio** = (Tier I capital + Tier II capital) / Risk weighted assets

Tier I Capital funds include paid-up equity capital, statutory and capital reserves, and perpetual debt instruments eligible for inclusion in Tier I capital. Tier II capital is the secondary bank capital which includes items such as undisclosed reserves, general loss reserves, subordinated term debt, amongst others. (Tier 1 Capital = (Stockholder Equity/ Risk-Adjusted Assets))

#### Customer Perspective

1. **Deposits to Total Liabilities** = Total Deposit / Total Liabilities.

2. **Growth in Volume of Business**

3. **Growth of Marketing Expenses**

4. **Growth in Total Deposits**

5. **Marketing Expenses to Volume of Business** = Total Marketing Spending / Total Revenue from Sales.

Exclude any revenue that's not from sales activity, such as royalty earnings or interest on savings. Marketing spending includes all costs of sales and marketing, including advertising, sales staff, marketing materials including your website, branding consultants and so on.

### **Internal Business Process Perspective**

1. **Wages Bills to Intermediation Costs (Operating Expenses)** = PPE / Operating Expenses.

Wages Bills are defined as payments to and provisions for employees.

Intermediation Cost as Total Operating expenses.

2. **Wages Bills to Total Expenses** = PPE/Total Expenses.

3. **Wages Bills to Total Income** = PPE/Total Income.

4. **Business per Employee**

$$\text{Sales/Revenue Per Employee} = \frac{\text{Revenue}}{\text{Number of Employees (Average)}}$$

5. **Profit per Employee** = Profit (or Loss) is calculated by taking Total Revenue and subtracting out all operational expenses (Direct and Non-direct non-personnel costs) and human cost expenses (Direct Personnel Costs) This is divided by the number of Full Time Equivalents.

## CHAPTER 4

### 4.1 Data Analysis

This chapter shows the data analysis done to compare the performance of SBI and its Associates with other Nationalised Public Sector Banks. A detailed study of all the results is shown as follows.

**4.1.1 Objective 1:** Comparing the performance of the SBI and its Associates with other Nationalised Public Sector Banks with respect to Financial Perspective.

<b>Financial Perspective Analysis of Public Sector Banks</b>						
	<b>Bank Name</b>	<b>Net Interest Margin to Total Asset Ratio</b>	<b>NPA to Net Advances Ratio</b>	<b>Return on Assets</b>	<b>Capital Adequacy Ratio (%)</b>	<b>Return on Equity (%)</b>
1	State Bank of India	7.56	2.33	0.72	12.66	11.46
2	State Bank of Bikaner and Jaipur	8.97	2.66	0.82	12	13.97
3	State Bank of Mysore	11.88	2.71	0.68	12	9.09
4	State Bank of Travancore	2.17	2.09	0.4	10.33	9.64
5	State Bank of Hyderabad	6.35	2.32	0.6	11.42	15.1
6	Punjab National Bank	8.1	3.07	0.7	13.16	10.26
7	Allahabad Bank	8.57	3.77	0.46	10.33	10.6
8	UCO Bank	7.98	3.28	0.47	13	7.44
9	Bank of Maharashtra	8.55	2.34	0.41	12	8.4
10	Corporation Bank	8.22	2.2	0.42	11.66	8.66
11	Central Bank of India	8.35	3.42	0.05	11.33	11.33
12	Indian Bank	8.3	2.34	0.7	13	9.76
13	Oriental Bank of Commerce	8.7	2.79	0.51	11.66	7.5
14	IDBI	7.92	2.31	0.39	12.33	8.46
15	VIJYA Bank	8.19	1.59	0.38	11	9.2
16	Syndicate Bank	7.49	1.41	0.7	11.66	13.6
17	Andhra Bank	8.74	2.83	0.5	11.33	8.33
18	Canara Bank	8.1	0.02	0.56	11.33	9.76
19	Union Bank of India	8.25	2.22	0.55	10.33	10.03
20	United Bank of India	8.27	5.36	-0.14	11.33	-5
21	Bank of India	6.89	2.47	0.45	10.66	9.13
22	Bank of Baroda	6.12	1.56	0.66	12.66	12.3
23	Dena Bank	8.04	1.83	0.45	11	8.46
24	Punjab and Sind Bank	8.78	3.02	0.29	11.66	5.3
25	IOB	8.36	3.81	0.1	11	1.96

Table 4.1

<b>Ratio</b>	<b>t-value</b>	<b>p-value</b>	<b>z-value</b>	<b>p-value</b>
Net Interest Margin to Total Asset Ratio			(.408)	.683
Net NPA to Net Advances			(.476)	(.634)
Return on Assets			(1.972)	.049
Capital Adequacy Ratio	.142	.888		
Return on Equity			(2.039)	0.041

#### **Results of Statistical Hypothesis Testing**

Table 4.2

#### **Interpretation: -**

In Financial Perspective, t-test and the z-test were applied with the help of SPSS.

For Net Interest Margin to Total Asset Ratio, z-test was applied because there is no normality in distribution. The findings reflect that there is no significant difference between the two groups.

For Net NPA to Net Advances Ratio z-test was applied because there is no normality in distribution. The findings reflect that there is no significant between the two groups.

For Return on Assets, z-test was applied because there is no normality in distribution. The findings reflect that there is a significant difference between the two groups. SBI and its associates outperform other Nationalised Public Sector Banks.

For Capital Adequacy Ratio, t-test was applied. The findings reflect that there is no significant difference between the two groups.

For Return on Equity, z-test was applied because there is no normality in distribution. The findings reflect that there is a significant difference between the two groups. SBI and its associates outperform other Nationalised Public Sector Banks.

**4.1.2 Objective 2:** Comparing the performance of the SBI and its Associates with other Nationalised Public Sector Banks with respect to Customer Perspective.

<b>Customer Perspective Analysis of Public Sector Banks</b>						
	<b>Bank Name</b>	<b>Total Deposit to Total Liabilities</b>	<b>Growth of Deposit with the Bank</b>	<b>Growth of Volume of Business</b>	<b>Growth of Marketing Expenses</b>	<b>Marketing Expenses to Volume of Business</b>
1	State Bank of India	77.19	14.75	9.13	20.23	0.001
2	State Bank of Bikaner and Jaipur	86.42	11.2	11.76	22.16	0.001
3	State Bank of Mysore	86.53	9.63	9.86	14.11	0.005
4	State Bank of Travancore	84.8	9	8.58	10.24	0.006
5	State Bank of Hyderabad	58.66	9.72	9.55	-2.03	0.009
6	Punjab National Bank	88.0	9.84	9.49	0.51	0.004
7	Allahabad Bank	86.4	6.71	8.5	1.95	0.009
8	UCO Bank	85.97	12	8.83	13	0.001
9	Bank of Maharashtra	83.33	17.21	19	-12.57	0.008
10	Corporation Bank	87.04	13.84	13.43	-31.68	0.009
11	Central Bank of India	83.05	9.3	9.21	-10.06	0.006
12	Indian Bank	87.19	12.04	12.19	-2.54	0.003
13	Oriental Bank of Commerce	87.99	9.41	9.23	-22.32	0.008
14	IDBI	71.67	7.3	6.22	29.45	0.008
15	Vijaya Bank	88.83	15.52	15.08	13.1	0.005
16	Syndicate	84.91	17.4	17.61	21.82	0.006
17	Andhra Bank	84.37	13.61	14.33	60.81	0.009
18	Canara Bank	86.1	13.22	14.38	29.59	0.044
19	Union Bank of India	83.92	12.55	12.85	-0.75	0.012
20	United Bank of India	88.47	7.11	5.27	9.98	0.006
21	Bank of India	84.52	18.81	18.85	21.17	0.021
22	Bank of Baroda	86.42	17.24	15.99	7.35	0.007
23	Dena Bank	87.68	14.84	13.77	36.28	0.022
24	Punjab and Sind Bank	88.71	11.4	11.51	-17.46	0.003
25	IOB	83.9	11.33	9.82	-31.48	0.006

Table 4.3

### Customer Perspective Analysis of Public Sector Banks

Ratio	t-test	p-value	z-test	p-value
Total Deposit to Total Liabilities			(1.257)	.209
Growth of Deposits with the Bank	.987	.337		
Growth of Volume of Business	(1.381)	.180		
Growth of Marketing Expenses	.654	.519		

#### Results of Statistical Hypothesis Testing

Table 4.4

#### Interpretation: -

In Customer Perspective, t-test and the z-test were applied with the help of SPSS.

For Total Deposit to Total Liabilities, z-test was applied because there is no normality in distribution. The findings reflect that there is no significant difference between the two groups.

For Growth of Deposits, Growth of Volume of Business, Growth of Marketing Expenses and Marketing Expenses to Volume of Business, t-test was applied. The findings reflect that there is no significant difference between the two groups.

**4.1.3 Objective 3:** Comparing the performance of the SBI and its Associates with other Nationalised Public Sector Banks with respect to Internal Business Process.

<b>Internal Business Process Perspective Analysis of Public Sector Banks</b>						
	<b>Bank Name</b>	<b>Business per Employee (In Crores)</b>	<b>Profit per Employee (In Crores)</b>	<b>Wages Bill to Income Ratio (In Crores)</b>	<b>Wages Bill to Intermediation Cost (In Crores)</b>	<b>Wages Bill to Total Expenses (In Crores)</b>
1	State Bank of India	10.81	0.05	13.84	62.2	15.09
2	State Bank of Bikaner and Jaipur	9.9	0.06	12.18	61.52	38.86
3	State Bank of Mysore	10.55	0.02	10.94	58.54	35.43
4	State Bank of Travancore	12.12	0.03	10.7	62.61	11.16
5	State Bank of Hyderabad	13.84	0.03	10.86	65.51	11.86
6	Punjab National Bank	12.57	0.06	13.33	69.72	14.43
7	Allahabad Bank	13.84	0.03	10.62	64.73	11.17
8	UCO Bank	13.09	0.04	7.82	63.09	8.28
9	Bank of Maharashtra	14.23	0.03	11.88	65.78	12.44
10	Corporation Bank	19.22	0.05	5.85	48.72	6.14
11	Central Bank of India	10.45	0.02	13.08	68.32	13.15
12	Indian Bank	13.99	0.06	11.57	67.05	14.2
13	Oriental Bank of Commerce	16.91	0.03	7.85	57.2	8.29
14	IDBI	25.5	0.07	5.49	47.29	5.74
15	Vijaya Bank	15.72	0.03	8.92	61.59	9.32
16	Syndicate Bank	14.08	0.06	10.83	65.86	11.88
17	Andhra Bank	12.72	0.04	9.19	61.67	9.7
18	Canara Bank	14.32	0.05	8.68	60.84	9.26
19	Union Bank of India	13.45	0.05	10.29	61	10.95
20	United Bank of India	11	0.01	8.78	59.18	8.69
21	Bank of India	18.71	0.05	9.56	59.98	10.16
22	Bank of Baroda	18.14	0.09	9.14	57.18	10.13
23	Dena Bank	14.4	0.04	9.08	60.88	9.57
24	Punjab and Sind Bank	14.98	0.03	9.95	67.79	10.28
25	IOB	13.26	0.02	9.86	64.03	9.97

Table 4.5

### Internal Business Process Perspective Analysis of Public Sector Banks

Ratio	t-test	p-value	z-test	p-value
Business per Employee (In Crores)			(2.616)	0.009
Profit per Employee (In Crores)	(.533)	.599		
Wages Bill to Income Ratio (In Crores)	2.198	.038		
Wages Bill to Intermediation Cost (In Crores)			(.068)	0.946
Wages Bill to Total Expenses (In Crores)			(2.650)	0.008

#### Results of Statistical Hypothesis Testing

Table 4.6

#### Interpretation: -

In Internal Business Process Perspective, t-test and the z-test were applied with the help of SPSS.

For Business per Employee, z-test was applied because there is no normality in distribution. The findings reflect that there is a significant difference between the two groups. SBI and its associates are lagging behind as compared to other Nationalised Public Sector Banks.

For Profit per Employee, t-test was applied. The findings reflect that there is no significant difference between the two groups.

For Wages Bill to Income Ratio, t-test was applied. The findings reflect that there is a significant difference in performances of these two groups. SBI and its associates are lagging behind as compared to other Nationalised Public Sector Banks.

For Wages Bill to Intermediation Cost, z-test was applied because there is no normality in distribution. The findings reflect that there is no significant difference between the two groups.

For Wages Bill to Total Expenses, z-test was applied because there is no normality in distribution. The findings reflect that there is a significant difference between the two groups. SBI and its associates are lagging behind as compared to other Nationalised Public Sector Banks.

**4.1.4 Objective 4:** Analysing the performance of the SBI and its Associates and other Nationalised Public Sector Banks with respect to Learning and Growth Perspective.

<b>Learning and Growth Perspective Analysis of Public Sector Banks</b>						
	<b>Bank Name</b>	<b>Number of ATMs</b>	<b>Number of Debit Cards</b>	<b>Number of Credit Cards</b>	<b>Number of Complaints</b>	<b>Growth in Skilled Employee</b>
1	State Bank of India	38732	3725527	2876631	1674643	79697
2	State Bank of Bikaner and Jaipur	1493	6921199	0	6668	5352
3	State Bank of Mysore	1098	5354054	0	15271	4071
4	State Bank of Travancore	1306	9136615	0	2006	5028
5	State Bank of Hyderabad	2103	10293255	0	1499	6579
6	Punjab National Bank	7209	26958950	128944	41058	24041
7	Allahabad Bank	836	3818719	0	4280	12149
8	UCO Bank	1928	4392903	0	5574	11551
9	Bank of Maharashtra	1456	4441033	27935	3251	5459
10	Corporation Bank	2208	6186814	66526	1604	6560
11	Central Bank of India	3664	8917339	71865	8342	15490
12	Indian Bank	1941	12105609	61272	6740	9135
13	Oriental Bank of Commerce	2025	5807055	0	11916	10132
14	IDBI	2334	6762501	0	59113	12938
15	Vijaya Bank	1262	3282382	44333	6957	5705
16	Syndicate	2226	7488377	69589	8370	11496
17	Andhra Bank	1769	10617494	133359	76981	9758
18	Canara Bank	6124	16718138	85038	68066	20695
19	Union Bank of India	6017	13745173	63639	104575	17618
20	United Bank of India	1478	3347314	0	13528	7117
21	Bank of India	4432	19540058	127669	5195	17968
22	Bank of Baroda	5638	16713116	79430	19149	19966
23	Dena Bank	1300	3409345	0	26313	5453
24	Punjab and Sind Bank	818	848985	0	1603	6134
25	IOB	2662	6257189	47001	5458	13760

Table 4.7

### Learning and Growth Perspective Analysis of Public Sector Banks

Ratio	t-test	p-value	z-test	p-value
Numbers of ATMs			(.543)	.587
Number of Debit Cards			(.136)	.892
Number of Credit Cards			(1.136)	.256
Number of Complaints			(.543)	.587
Growth in Skilled Employee			(1.698)	.089

#### Results of Statistical Hypothesis Testing

Table 4.8

#### Interpretation: -

In Learning and Growth Perspective, t-test and the z-test were applied with the help of SPSS.

For Number of Employees, Number of Debit Cards, Number of Credit Cards and Number of Complaints and Growth in Skilled Employees, z-test was applied because there is no normality in distribution. The findings reflect that there is a significant difference between the two groups in case of Number of Employees, Number of Debit Cards, Number of Credit Cards and Number of Complaints.

But in case of Growth in Skilled Employees there is a significant difference between the two groups.

## 4.2 Findings and Conclusions

In India there is a lack of awareness about using Balanced Scorecard as a tool for performance management, especially in Public Sector Banks. This analysis reflects that banks should prepare a performance management report in addition to Financial Reports.

- In Financial Perspective of Balanced Scorecard, SBI and its Associates are performing better as compared to the other Nationalised Public Sector Banks.
- In Customer Perspective of Balanced Scorecard, there is no significant difference between the performances of two groups. Both the groups i.e. SBI and its Associates and the other Nationalised Public Sector Banks are having almost similar performance.

- In Internal Business Process Perspective of Balanced Scorecard, SBI and its Associates are lagging behind as compared to the other Nationalised Public Sector Banks.
- In Learning and Growth of Balanced Scorecard, there is no significant difference between the performances of two groups. Both the groups i.e. SBI and its Associates and the other Nationalised Public Sector Banks are having almost similar performance.

### **4.3 Recommendations**

Framing a Balanced Scorecard for any type of organisation is not an easy task. As bank is a financial institution so the implementation of Balanced Scorecard is a quite difficult and a complicated process. Still it comes out to be an efficient tool encompassing various facet of a Bank's Performance. With the implementation of Balanced Scorecard, it becomes very easy to compare the performance of banks from a multidirectional point of view. This analysis gives a true picture of the actual performance. It can help the banks to compare and reduce the gap between the desired performance levels to take competitive advantage against other banks in banking industry.

The following recommendations are based on the study conducted.

- Banks should use Balanced Scorecard as a performance management tool to be able to analyse the business from multidimensional aspect.
- Banks should prepare a Performance Management Report in addition to the Financial Report so that a true picture of the Performance of the banks can be revealed.
- Public Sector Banks (other than SBI and its Associates) should focus on the proper utilisation of the resources so as to improve there Return on Assets and Return on Equity to reduce the performance gap between the two groups.
- SBI and its Associates as well as other Nationalised Public Sector Banks can work on to improve in Customer Perspective of Balanced Scorecard to gain a complete edge.
- SBI and its Associates need to reduce their wages bill in order to remain competitive with other Nationalised Public Sector Banks.
- All the Public Sector Banks must focus on improving on Learning and Growth in the organisation so that the Performance Scorecard of the Banks looks good.

## **4.5 Limitations of the Study**

Despite my best efforts, the study was subjected to the following limitations:

- Due to the shortage of time, smaller sample size has been taken which may not give the true representative of the actual scenario.
- Due to time constraint, it was not possible to observe every aspect of the Balanced Scorecard in Public Sector Banks.
- As the research work is entirely based on secondary data, so study is expected to be restrained from practical aspects.
- Data collection was not an easy task, as each and every bank does not reveal every fact and information.
- In Indian Banking Sector, the concept of using Balanced Scorecard as a performance management tool is not much popular which led to extra efforts in review of literature.

## **BIBLIOGRAPHY**

1. Elif Öztürk & Ali Coskun (2014) - Strategic Approach to Performance Management in Banks
2. Sagar R. Dave and Swati R. Dave (2012) - Apply Balanced Scorecard in Indian Banking Sector: An Empirical Study of State Bank of India
3. Khawla H. Kalaf (2012) - Designing a Balanced Scorecard to Measure a Bank's Performance: A Case Study
4. Malihe Rostami, Ahmad Goudarzi, Mahdi Madanchi Zaj (2015) - Defining Balanced Scorecard Aspects in Banking Industry Using FAHP Approach
5. Marvin Soderberg, Suresh Kalagnanam, Norman T. Sheehan, Ganesh Vaidyanathan, (2011) - When is a Balanced Scorecard is a Balanced Scorecard.
6. Mohi-ud-Din Sangmi; Nazir, Tabassum, (2010) - A Study on Financial Performance of the Indian Commercial Bank with the Help of Application of CAMEL Model
7. Driscillah Wughanga Mghanga, (2010) - A Study on Application of the Balanced Scorecard in Strategy Implementation at the Kenya Commercial Bank.
8. Lenah Kaya Kimanzi, (2007) - Impact F Balanced Scorecard on the Employees Performance with in the Banking: A Case Study of Kenya Commercial Bank.
9. Roselyn Kathambi Gitonga, (2014) - Balanced Scorecard and Performance of Consolidated Bank of Kenya
10. R. Satish and S.S Rao, (2010) - Performance Measurement of Banks: An Application of Economic Value Added & Balanced Scorecard
11. Hamzah Hussein Al-mawali, Yuserrie Zainuddin, Noor Nasir Kader Ali, (2010)-BSC Usage and Financial Performance of branches in the Jordanian Banking Industry
12. Paola Vola, Elisa Broccardo, Elisa Truant, (2009) – A Study of Implementation of a Management Control System in the Piedmont Cooperative Bank
13. Weng, (2014) - Knowledge of BSC and its Role as a Performance Management Tool in an Organization.
14. Presecan Marcela (2015) - Managing Performance with Balanced Scorecard
15. Souad Moufty, (2009) - The Role of Balanced Scorecard in UK Banks as a Performance Measurement

16. Mohammed Ibrahim & Sirajo Murtala, (2015) - Importance of BSC as a Technique for Measuring Performance in the Nigerian Banking
17. Sayed M. Elkhoully, Mohamed M. Ibrahim, Mohamed M. El Frargy & Amal S. Kotb, (2015) - Measuring the Effectiveness of Banking Risk Balanced Scorecard in Enhancing Bank Value
18. Mary A. Malina, Frank H Selto, (2001)-Communicating and controlling Strategy: An Empirical Study on Effectiveness of the Balanced Scorecard
19. Abu Yahaya, (2009)-Using Balanced Scorecard Assessing the Performance of Banks of Ghana.
20. Ayesha Farooq, Zareen Hussai (2011)-Balanced Scorecard Perspective on Change and Performance.
21. Nyangayo Sarah Adhiambo, (2014) - Balanced Scorecard and Performance: A Case Study of Cooperative Bank of Kenya
22. Deville at al, (2014) - Balanced Scorecard a Performance Management System
23. Malina and Selto (2001) - The Balanced Scorecard a strategic evaluation Tool
24. Stephen and Gabriel (2013) - Application of Balanced Scorecard in Performance Measurement at Essar Telecom Kenya Limited
25. Opiyo (2010) - Balanced Scorecard as a Performance Tool
26. Magu (2013) - Balanced Scorecard and Organizational Performance
27. Lenah (2013) - Conceptual Foundation of Balanced Scorecard
28. Velnampy and Nimalathasan (2007) - An Association Between Organizational Growth and Profitability: A Study of Commercial Bank of Ceylon Ltd, Sri Lanka
29. Aranda and Arellano, (2010) - Strategic Performance Measurement Systems and Managers Understanding of the Strategy: A Field Research in a Financial Institution
30. Zhang et al, (2009) - Performance of Balanced Scorecard in the Commercial Banks.
31. Wua et al (2009) - Study on Balanced Scorecard of Commercial Bank in Performance Management System
32. Ben K. Agyei-Mensah, (2012) - A Study on Impact of Contingent Factors on Performance Measures on Rural Banks of Ashanti Bank of Ghana
33. Meena Chava, (2009) - The Balanced Scorecard: New Challenge