CHAPTER-I
INTRODUCTION

Economic development is a function of capital, technology and labour. In the emerging knowledge oriented service intensive economies, the highest form of labour is intellectual capital. Intellectual capital is the currency of the future and is an organization’s most important asset. Those who learn how to manage it effectively will realize accelerated performance and achieve the ultimate competitive advantage (Bontis, 2000). Intellectual capital is a package of useful knowledge which includes organization processes, technological patents, employees' skills and information about customer, suppliers and stakeholders. Intellectual capital deals with particular, reasonable, knowledgeable and substantial fruits of the mind (Kok, 2007). Intellectual capital is defined as intangible assets that comprise of technology, customer information, brand image, reputation and corporate culture that are invaluable to a firm’s competitive power (Low and Kalafut, 2002).

It comprises of three basic components: human capital, structural capital and customer capital. A great emphasize on information technology, customer relationship and personal skills is required to generate intellectual capital than on manual skills (Gray, 2001). Human capital includes experience, know-how, capabilities, skills and expertise of the human members of the organization. Structural capital is the supportive infrastructure that enables human capital to function and includes the systems, networks, policies, culture, distribution channels. Customer capital is the strength and loyalty of customer relations and includes customer satisfaction, repeat business, financial wellbeing and price sensitivity, market share and so on.

Intellectual capital has contributed to the creation of whole new types of business and ways of doing business. Intellectual capital is positively and significantly associated with organizational performance. Intellectual capital is not simply available as a free-floating human brain power. Intellectual capital assets are strategically now more important to wealth creation than they were in the past (Waterhouse, 1998). Therefore, the importance of intellectual
capital in today’s economy indicates a need for high performance systems to manage them (Luthy, 2000). Given the tremendous power of intellectual capital assets to influence the valuation of an enterprise, it is critical that executives learn to employ these assets to improve profitability and increase shareholder value (Muhammad et al., 1998). As far as the measurement of intellectual capital assets is concerned, good measurement systems should satisfy two key areas of performance: effectiveness and efficiency. Effectiveness can be measured as the change in intellectual stocks and effects on business performance. In terms of efficiency, intellectual resource measure can include operating performance measures such as lead times, customer satisfaction, employee productivity etc (Gray, 2001).

Banking system is one of the many institutions that impinge on any economy and affects its performance. The contribution of banking system to the economic development depends upon the governing policy. Banks are considered to be one of the most important of all the financial intermediaries in the financial system of the country. Banks have been playing a crucial and pivotal role in financial system of developed countries and most of the emerging economies. In the developing countries, even banks are not only playing an important role in economic development, but banks help to maintain the financial stability of India. In India, banking sector performs three primary functions: the operation of the payment system, the mobilization of savings and the allocation of savings to investment projects. By allocating capital to the highest value use while limiting the risks and costs involved, the banking sector can exert a positive influence on the overall economy, and is thus of broad macroeconomic importance. The monetary and banking policies and external situation have influenced the evolution of Indian banking in diverse ways.

The industrialized world is rapidly moving into an era where economic growth depends highly on knowledge. More of what is produced and consumed today is intangible. A greater emphasis is now placed on information technology skills, customer relationship skills and personal skills
than on manual skills. As the world has undergone this metamorphosis, practitioners, accountants and academics alike have identified a perceived need to manage, measure and report on the intellectual value of companies (Gray, 2001). In this context, the study is an attempt to quantify and analyze the relationship between intellectual capital and performance of banking sector in India.

Relevance and Significance of the Study

There has been a wide use of the term ‘Intellectual Capital’ (IC) in recent times. However, there have been only a limited number of research studies which have used emerging economies as a case for evaluating the implications of IC for specific industries. As developing economies are moving towards more liberalization and globalization, service sector is playing a dominant role in the growth of these economies. Banking is a core sector of Indian economy. In India, banking sector is one among other sectors of the economy that has experienced a rapid change. Implementation of economic reforms in Indian economy as a whole and particularly in banking sector brought out many fundamental changes. Performance and profitability of Indian banking sector has been influenced positively by the implementation of financial sector reforms. Many other developments have also taken place in this sector. Banking sector is one which constitutes bulk of intellectual capital. There are very few studies available on the intellectual capital and performance in service sector. Therefore there is a need to assess role of intellectual capital in Indian banking sector. The study is an attempt to analyze the relation of intellectual capital and performance in Indian banking.

Scope and Area of the Study

The present research work titled, “Intellectual Capital and Performance in Indian Banking”, studies in detail the various aspects of intellectual capital and its impact on performance in the Indian banking sector. The study mainly focuses on the review of the theory and empirics on intellectual capital and performance evaluation. The study examines the structure and structural change in the Indian banking. It undertakes an in-depth analysis of three
elements of intellectual capital: the human capital, the structural capital and the customer capital and their inter-relationship within banking sector. The research reveals the relationships between intellectual capital components and performance of banking sector; and provides a method to evaluate the current situation. Such a wide coverage makes this study unique in itself. It will prove to be highly useful for banking sector, corporate sector, policy-makers and researchers.

**Review of Theory and Empirics**

The research and published literature on measuring and reporting intellectual capital (IC) is growing rapidly. It was in the 1990s when the topic of IC attracted the attention of researchers. It mainly focused on raising awareness about the existence and value of intangible assets within organizations and developing classification models for IC. Later on, the researchers started to carry out research into intellectual assets and formulated the concept of the knowledge-based organization. The specific studies on the measurement of IC are concerned with the creation of frameworks, indices and guidelines which support the initial concepts. The literature in the area of IC measurement and the number of measurement frameworks is continuously growing in the form of implementation, improved disclosures, benchmarking of performance, and prediction of future business performance.

Many studies have developed a working definition of intellectual capital and a framework for identifying and classifying the three components of intellectual capital: human capital, structural capital and customer capital. Some studies have explored the relationship between intellectual capital and the economic performance of firms/industries. Intellectual capital has a positive association with business performance, the misalignment of knowledge stocks with knowledge flows acted as a detriment to the overall efficiency of the organization’s learning system.

In the reviewed literature, large numbers of studies are based on the various methods of the measurement of intellectual capital such as component by component, financial basis measurement, human resource cost accounting,
human asset accounting, human capital accounting components of human resources, Value Added Intellectual Capital (VAIC) etc. In most of the studies, VAIC has been used as a relevant method to measure intellectual capital. The difficulty in measuring and evaluating the intellectual capital and its components has generated an extensive literature, both on quantitative and qualitative plane.

But on the other hand, there are a few studies which are connecting the intellectual capital with performance in the Indian banking sector. So there is a need to fill this gap in literature. The present study is an attempt in this direction and tries to fill this research gap by investigating the relationship between intellectual capital and performance in the Indian banking sector.

**Objectives of the Study**

It is broadly hypothesized that since there is no dearth of capital, technology and labour; thus a major part of performance of a bank is determined by intellectual capital. In this context, the broad objectives of the proposed work are:

a) Review the theory and empirics on intellectual capital and performance evaluation;

b) Analyze the structure and structural change in the Indian banking with special reference to intellectual capital and performance;

c) To investigate the three elements of intellectual capital: the human capital, the structural capital and the customer capital and their inter-relationships within banking sector;

d) To examine relationships between intellectual capital components and performance of banking sector; and

e) To prescribe the policy framework for better functioning of the system.

**Data and Methodology**

The present study is based on both secondary and primary data. The time-series data covers the period from 1990-91 to 2012-13. The time period has been deliberately selected because liberalization, privatization and globalization policy has been introduced only during this time period and many private sector banks have got their licenses from RBI only during this
period. The secondary data and information have been collected from the publications of ‘Indian Banks' Association’ like special issues, annual publications on ‘Performance Highlights of Public Banks’, ‘Private Banks and Foreign Banks’. Apart from this, the data have been obtained from the publications of the Reserve Bank of India: ‘Report on Trend and Progress of Banking in India’, annual reports of respective banks and other valuable publications of public sector banks, private banks and foreign banks. Various websites have also been used for the data mining. For present research work, various journals, magazines and newspapers like ‘Indian Journal of Commerce’, ‘The Journal of Intellectual Capital ’, ‘Economic and Political Weekly’, and ‘Financial Express’ have also been considered.

The data obtained from secondary sources have been used to derive value added intellectual coefficient (VAIC). VAIC measures the intellectual capability and performance of the organization. Elaborate role of intellectual capital in determining the performance has been also analyzed by using primary data obtained from 166 branch managers of different types of banks. The sample represents all categories of banks: state bank of India and its associates; nationalized banks; old private banks, new private banks and foreign banks. Structural change in banking has been analyzed by using the tabular technique of analysis along with growth rates. The raw data obtained have been standardized using a weighting scheme. The standardized data have been used to get four indices: human capital index; structural capital index, customer capital index and the performance index. First three indices have been used to arrive at the IC index. The relationship among the variables has been analyzed using the correlation and regression techniques.

1.6: Main Contours of the Study Report

In the light of given objectives, the study is divided into eight chapters. The first chapter describes briefly the theme of the study, need of the study, specific objectives of the study and limitations. The second chapter spells out the reviews the theory and empirics on earlier research work on the topic both in India and abroad. The third chapter devoted to the model and methodology
of the study which is the most important stage of scientific research and has a
great impact on the validity and accuracy of the results. Chapter four
elaborates the structure and structural changes in Indian banking with special
reference to human capital. The structural change has been analyzed with
reference to bank group-wise share in branches, business structure,
employment structure, input structure and some other key elements of
structure. The fifth chapter focuses on parameterization of human capital and
performance. Sixth chapter shows the performance evaluation and intellectual
capital, at macro level, in terms of efficiency and profitability indices. Chapter
seven delineates the underlying dynamics using the micro level evidence. Last
chapter summarizes the findings of the study and provides suggestions that
emanate from the study to improve the performance of commercial banks in
India.

Main Conclusion of the Study

Overall thesis that emerges from the study is that in Indian banking
industry, the performance is a positive function of intellectual capital. Out of
intellectual capital the structural capital and customer capital are statistically
significant predictors of performance and human capital is the insignificant
one. Further, with regard to cost, output and income related efficiency metrics,
traditionally the foreign and new private banks were at a higher pedestal but
now the process of convergence is in progress and almost all the banking
groups are approaching to the national benchmark with passage of time.

Main Recommendation of the Study

Intellectual capital, the significant predictor of performance, needs to
be strengthened by improving its underlying constituents. To translate the
investment inputs into higher performance, banks need to go beyond the
traditional human resources jargon. Banks should evolve appropriate policies
to make the best use of their primary asset, i.e., human resources. Adopting
efficient and productive methodologies that will foster innovations is need of
the time. In service sector, to translate intellectual capital in to higher
performance, a package of other factors and conditions is required.
Main Limitations of the Study

The study has been undertaken objectively and every effort has been made to make the study effective, strong and up to the mark. Also efforts have been made to remain in the four walls of the objectives framed for the study so as to avoid irrelevant discussion and to concentrate on the nucleus of the subject matter of the study. Brevity thus has been given the importance. However, the study suffers from following general and specific limitations;

a) The relevant data and information for the study have been collected from the primary and secondary sources. Hence, the study carries all the limitations inherent with the primary and secondary data and information.

b) There was non-availability of some requisite data. Although plethora of information and data are available with the bank, most of the banks even today are very conservative and are reluctant to part with the information treating it as confidential. This non-response further narrowed the coverage of the study.

c) In addition to the parameters covered by the study, some other parameters may exist which may not have been included in the study.

Last but not the least, there is non-inclusion of some qualitative aspect in banking sector which could have a bearing on the performance of banking activities.