LITERATURE REVIEW:

Several literatures have been reviewed for this study, among them few are as follows:

Agarwal Pankaj K et al (2011) made an attempt to compare the performance of PSBs with their Private sector counterparts on globally accepted CAMEL model. The study discovered that PSBs have lower capital adequacy than private sector banks, while the asset quality of PSBs is superior to private sector banks which reflected in their gross NPAs and there is no significant difference in the net NPA performance of these Banks. It is further discovered that the management efficiency and the earnings performance of PSBs is similar to that of private sector banks, while on liquidity yardstick, the private sector banks have outperformed the PSBs.

Arora et al (2005) studied the performance evaluation of PSBs in the post reforms period on the basis of four parameters i.e. Financial parameters, Operational parameters, Profitability parameters and Productivity parameters and found the performance of PSBs quite satisfactory during the study period.

Ballabh (2002) examined the various techniques to increase the employees’ productivity. The changing economic environment required many changes in the banking sector. The study stressed the importance of aspects such as technology support for enhancing customer service, emerging e-contact and eye-contact, strategies for redeployment and strategies to make employees more productive. It was further suggested that parameters need to be expanded to reflect the contribution of non-fund based activities.

Bhinde et al (2002) in their paper, took the critical view of on-going banking sector reforms. They found that traditional face of banking has undergone a change from one of the intermediator to that of provider of quick and cost effective and efficient services and that the Indian banking sector is currently facing challenges of consolidation, re-capitalisation, implementation of Prudential norms, legal framework, corporate governance, Basel- II norms etc.
**Brinda J et al** (2007) made an econometric analysis on the performance of Public Sector Banks in India. For evaluating a Bank’s performance, they have used two Profitability measures: Return on Assets (ROA), Operating Profit Ratio (OPR), They concluded that Private sector banks and foreign banks are not found to be superior to the Public Sector Banks (PSBs) in any of the performance indicators, while PSBs scored well against benchmarks in the area of ROA, NPAs, Operating costs as proportion of total Assets, Capital Adequacy requirements etc.

**Bisht et al** (2002) studied the impact of liberalisation on the Indian banking sector. They established the fact that the present banking structure is the outcome of a process of expansion, re-organization and consolidation which have been going on for many years and passed through three important phases - Pre – nationalisation, Post nationalization and Post liberalization. With the advent of internet, one can distinctly perceive the arrival of fourth phase which led to mass structural changes in banking by replacing brick and mortar branches with the electronic delivery channels to provide more options to the customers. Traditional banking has become a thing of the past; and technology has changed the rule of the game.

**Das M R** (2001) made an analysis of performance of the Private Sector Banks for the year 1999-00 vis-a-vis the preceding year. For this purpose, data was mainly collected from the RBI Report on Trend & Progress of Banking in India, 1999-2000. The analysis revealed that overall performance of Private Banks during 1999-2000 looked up compared to that in the previous year. New Private Bank which were equipped with latest technology was ahead of most of the old Private Banks.

**Das Uday** (2002) made a study which was the critical evaluation of the Lead Bank Scheme in the light of Banking Sector reforms. Das observed that high level of NPAs, large no. of un - remunerative branches, low productivity, over staff and archaic methods of operations have affected the profitability of Public Sector Banks.
Gupta S et al (2008) studied the changing paradigm in Indian Banking and revealed that the banking sector has been serving the crucial needs of the society even after undergoing various changes. The authors said that there are six principal drivers leading to paradigm shift in Indian Banking: Technology, Global competition, Customers (population), Policies (politics), Governance and Economic conditions. They concluded that Indian Banking Industry is recognized as one of the important pillars of the economy.

Ketkar Kusum W et al (2008) have investigated the efficiency of Indian Banks since systemic reforms began in 1990s using DEA technique and bank – specific data from 1997 – 2004. The results showed that the relative efficiency of banks by ownership does not critically depend upon whether deposits are treated as an input (intermediation approach) or output (production approach). The study found that foreign banks are most efficient followed by new private sector banks. The study further emphasizes efficiency differences among banks showing that the mandates on priority sector lending have hurt the efficiency of state owned and nationalized banks but bank branch expansion mandates have not hurt their efficiency.

Kohli (1999) made an attempt to evaluate the effectiveness of Bank branch licensing in the backdrop of Financial Sector reforms. In view of changes in banking perspective in India, performance evaluation parameters have also changed. Earlier performance indicators like deposits, Priority Sector lending and branch expansion, have yielded to new ones like efficiency and profitability.

Kumar Lakshmi et al (2011) have made an attempt to understand technology diffusion in the banking sector in India by analyzing ATM technology as a proxy for capital and teller as a proxy for labour by using CES Production function model and found that the degree of substitutability of the Teller by the ATM is high, while the ATM is not the perfect substitute.

Kumar Sunil et al (2009) have appraised the efficiency, effectiveness and performance of 27 PSBs operating in India by using a two-stage performance evaluation model. The
empirical results of the study revealed that high efficiency does not stand for high effectiveness for PSBs and that a positive and strong correlation between effectiveness and performance measures has been noted.

Malhotra P et al (2010) focused their attention to present the implications of internet banking for Indian banking industry. It was found that in almost all cases, there existed higher profitability for experienced internet banks in comparison to inexperienced internet banks. The results also suggest that although banks that have only recently begun to offer internet banking have relatively higher expenses. However, these banks are able to maintain sufficient overall profitability in comparison to non internet banks.

Manjula Kumara Wanniarachchige et al (2011) have analysed as to how state owned, nationalized and domestic private banks are behind foreign banks, using DEA technique together with 3 supplementary measures of performance. The findings suggest that the performance of domestic banks has not yet reached the level of foreign banks in terms of both cost and revenue efficiencies. The study further elaborates that domestic private banks are the least efficient in the market, while foreign banks outperform their domestic counterparts in multiple aspects; their contribution for spreading banking services beyond metropolitan cities is trivial.

Mukherjee Avinandan et al (2002) in their research have not measured marketing performance directly but rather overall business performance of banks, linking of performance with the strategic issue of managing resources to be cost competitive. The researchers had used the modified DEA methodology to understand issues of performance benchmarking and strategic homogeneity through application of output oriented CCR model on the banking sector over a period of 4 years. It is further revealed that publicly owned banks are more efficient and the foreign banks to be the most vulnerable lot and that business policies were not adequately planned to withstand the nature of competition in the market. The study also revealed that PSBs were rated uniformly in terms of self-appraisal as well as peer group appraisal.
Padwal (2004) laid more emphasis on technology in banks. Technology has been the main facilitator in the process of transformation. The use of new technology means revolutionary innovation products and services and delivering them to customers covering aspects such as how, where, when and at what price they want. The banks and customers are now receptive to new ways and types of approaches to delivering services and facilities. The study concluded that the future of banking depends on technology.

Pathak (2003) while comparing the financial performance of private sector banks since 1994 – 95, explained that the private sector banks have delivered a new banking experience. Looking to the growing popularity of services provided by them, their public sector counterparts have started emulating them. He studied the performance of these banks in terms of financial parameters like deposits, advances, profits, return on assets and productivity.

Prasuna (2004) analysed the performance of Indian banks by adopting the CAMEL model. The performance of 65 banks was studied for the period 2003 – 04. The author concluded that the competition was tough and consumers benefited from it. Better service quality, innovative products, better bargains are greeting the Indian customers.

Raju M Thiripal et al (2010) in their work examined the cost of equity for major banks in India in the wake of financial crisis. Cost of equity is estimated based on single factor CAPM. The study revealed that the cost of equity has increased for almost all Banks especially in 2008 and a marginal decline in 2009. However, the rise in cost of equity is mainly associated with a rise in the risk free rate and partly due to increase in the sensitivity of Bank stock returns to market risks.

Ramachandra Reddy et al (2001) focused their attention on the seriousness of NPAs in PSBs. They argued that with the introduction of international norms of Income recognition, Asset classification, provisioning norms and managing NPAs in the Banking Sector, have emerged as one of the major challenges facing the PSBs. They further felt that total
elimination of NPAs is not possible in banking business due to several externalities, but their incidences can be minimised.

_Rammohan_ (2002) made an attempt to evaluate the performance of the PSBs since deregulation in absolute and in relative terms and attempts to understand the factors underlying their improved performance. The performance of PSBs has improved both in absolute and in relative terms.

_Saha et al_ (2000) rated 25 PSBs using Data Envelopment Analysis for the period 1991-92 to 1994-95 and found that barring a few exceptions, PSBs have in general, improved their efficiency over the study period. UBI, UCo Bank, Syndicate Bank and Central Bank of India were found to be at the lower end of the relative efficiency scale, while Corporation Bank, OBC, SBI, Canara Bank, SBH, Bank of Baroda and Dena Bank were found to be consistently efficient banks.

_Satish et al._ (2005) adopted CAMEL Model to assess the performance of Indian Banks. The authors analysed the performance of 55 banks for the year 2004 – 05 using the CAMEL Model. They concluded that the Indian Banking System looks sound and Information Technology will help the banking system grow in strength in future.

_Shannugam et al_ (2001) applied three approaches viz. Non parametric approach, stochastic frontier function and random coefficient approach to measure efficiency and assessed robustness of the efficiency measures using data on domestic banks in India for the year 1999. It was found that the overall mean technical efficiency ranges between 52% and 80% in different approaches. The high rank correlation among efficiency values computed in different approaches has also been observed and the results indicated that deposits were the dominant factor in determining output of the banks in all the models.
Sheeba Kapil et al (2003) papers objective was to review and analyse the current financial health of the Indian Public Sector Banks in the light of banking reforms and predict the future & scope of the same. The viability of the 27 PSBs has been analysed on the basis of off-site supervisory model CAMEL.

Shrivastava Urvashi et al (2011) have examined the financial strength and soundness of AXIS bank in terms of capital adequacy as well as the effectiveness of the financial ratios used to assess the performance by applying correlation and T - test and observed that raising of non equity capital has helped the bank continue its growth strategy and has strengthened its capital adequacy ratio. It is further observed that by proper mapping of credit, operational and market risk to projected business growth enables assignment of capital that not only adequately covers the minimum capital requirement but also provides headroom for growth.

Siraj K K et al (2011) have investigated the performance of Indian Scheduled Commercial Banks before and after global financial crisis (2007 -09) by using the data available for the period 1999 – 00 to 2010 – 11. The study indicated the vulnerability of Scheduled Commercial Banks to the financial crisis, stating that various indicators that reflect efficiency of banks were affected during the financial crisis. A notable finding was the financial stability of Public Sector Banks and increased susceptibility of private sector and foreign banks during the financial crisis.

Sooden et al (2004) have analysed the profitability of PSBs in the pre and post reform periods. Their study used correlation matrix and also regression analysis. The study concluded that in the post-reforms period, profitability of many PSBs improved, but at the same time, the declining priority sector lending has eroded the social profitability linked with the PSBs.

Srivastava (2006) concluded that the post – nationalization period witnessed an unprecedented expansion of Banking industry in India. However, to overcome the problems of inefficiency and poor financial health and also to improve the efficiency of
banks, various tech-tonic measures had been taken since 1991. This has resulted in improvement in productivity, profitability and strengthening of financial position of the banks so much that they are outperformed those of advanced nations.

Subrahmanien et al (2001) analysed and compared the efficiency in 6 Public Sector Banks, 4 Private Sector and 3 Foreign Banks for the year 1996-97. Operational efficiency is calculated in term of total business and salary expenditure per employee. The analysis revealed that higher per employee salary level need not result in poor efficiency.

Uppal R K (2010) has attempted to study the efficiency of Indian Commercial Banks during the period 1997-98 to 2007–08 and concluded that profitability and productivity were much higher in the case of new private sector banks and foreign banks as compared to Indian PSBs, while the liquidity position of new private sector and foreign banks were also sound as compared to their counterparts.

Veni (2004) studied the capital adequacy requirements of the banks and the measures adopted by them to strengthen their capital ratios. The author highlighted that the rating agencies give prominence to Capital Adequacy Ratios of banks while rating the bank’s Certificate of Deposits, Bonds etc. They normally adopt CAMEL Model for rating banks. Capital Adequacy is considered the key element of bank rating.