

Factors Affecting Operational Efficiency Of Selected Banks In India: A General Review

^[1] V. Mouneswari, ^[2] Dr. Rajesh Mamilla, ^[3] Dr. T. Narayana Reddy

^[1] Research scholar, JNTUA and Assistant Professor

AITS, Rajampeta, Kadapa, AP-516126

^[2] Associate Professor,

Vellore Institute of Business School,

VIT, Vellore, Tamilnadu-632014, India

^[3] Associate Professor

Department of Humanities

Jawaharlal Nehru Technological University,

Ananthapuramu, Andhra Pradesh, India

^[1]mouni.vangimalla@gmail.com ^[2]rajesh.mamilla@vit.ac.in ^[3]tnreddyjntua@gmail.com

ABSTRACT

Over the past several years, substantial research efforts have gone into measuring the efficiency of commercial banks. After nationalization of banks, there was a growing concern on the deteriorating of banking sector's efficiency in several spheres. An academic study on the performance of the nationalized banking sector in India is very important and pertinent in the context of its structural existence. Before taking up such an exercise, an attempt is made in this section to present a review of the available studies in the relevant area of banking. The research studies conducted in the field of banking in India and abroad relate mostly to institutional, functional and developmental activities of banks.

Key words: Efficiency, Nationalization, Structural, exercise, substantial, commercial, pertinent.

1. INTRODUCTION

Finance and banking is the life blood of trade, commerce and industry. Now-a days, banking sector acts as the backbone of modern business. Development of any country mainly depends upon the banking system. A bank is a financial institution which deals with deposits and advances and other related services. It receives money from those who want to save in the form of deposits and it lends money to those who need it. The banking is one of the most

essential and important parts of the human life. In current faster lifestyle peoples may not do proper transitions without developing the proper bank network. The banking System in India is dominated by nationalized banks. The performance of the banking sector is more closely linked to the economy than perhaps that of any other sector. The growth of the Indian economy is estimated to have slowed down significantly. The economic slowdown and global developments have affected the banking sectors' performance in India in the year 2012 resulting in moderate business growth. It has forced banks to consolidate their operations, re-adjust their focus and strive to strengthen their balance sheets. Here researcher's objective is to study the Indian banking sector as well as productivity and performance of Indian banks.

LITERATURE REVIEW

A. PRODUCTIVITY

Aki Pekuri, Harri Haapasalo, Maila Herrala (2011) said that Productivity is more important and influential basic variable governing economic production activities. While high productivity can be a significant source of competitive advantage for companies. It also contributes to the general well-being of a society. Further **Ahuja, (2006)** said that productivity is the output produced per unit of input. It refers to the technical efficiency of production relating to the resources allocation. **Monga, (1992)** in his study Dynamics of Productivity Management said that Productivity is an organization's effectiveness in usage of its resources such as manpower, financial resources, machinery, and material and so on. It shows the association between input and output expended. In this respect, **Drucker (1980)** opined that the organization will go in a right direction whenever it has productivity goal. Productivity is an efficiency measures to the rate of output per unit of input. Further **Choudhary, (1998)** gave his view regarding to productivity is that it is very important for the growth and economic development of banks which means that maximum productivity will be achieved when there is a right combination of and balance between inputs.

B. PERFORMANCE

Suriyamurthi, S., Karthik, R. and Mahalakshmi, V. (2012) viewed that banking sector in India has become as important drivers for economic growth of India. **Bhatia and Mahendru (2015)** have examined the Indian public sector banks efficiency. They have identified a significant difference in the pre and post reformatory era performance of banks. **Dwivedi, Amit and Charyulu, Kumara, D. (2011)** have expressed that the banking system in India is

one of the good performers in the world, when compared with top three banks in total assets and in terms of return on assets. According to **Pandey, I.M., (2005)** have used Return on assets and return on equity for evaluation of performance of banks. However, present days researchers found that this evaluation method and results are insufficient in evaluating the financial performance of an organization and to provide an effective feedback.

C. MEASUREMENT OF BANKS PRODUCTIVITY

Bhattacharjee (1990; 1991) had conducted a multivariate analysis related to the productivity measurement of commercial banks in Bangladesh. The study has not focused on finding out the variations in growth rates in measures of productivity was related with variations in policies regarding structure, process as well as leadership related variables, and differences in deposit mix, credit mix and services offered by Banks.

Bhuvan J. Vyas and Dr.Vijay Pithadia (2012) presented a study on productivity in service sector: SBI & IDBI bank. From the analysis, it is evident that there is significant difference between SBI and IDBI for Income per employee expenditure per employee.

Brajesh Kumar (2016) evaluated the employee's productivity of public sector commercial banks in two countries i.e. India and Nepal for two economic parameters i.e. PPE (profit per employee) and BPE (Business per employee). The study reveals that Compare to the Nepal banks BPE and Indian banks growth rate is high, but PPE is lower in Indian banks. Correlation between two parameters in Indian banks indicates the moderate whereas as in Nepal Banks shows higher degree.

Chatzoglou et al. (2010) have focused on measuring the productivity of Greek banks. They found in their study is that during the study period it shows a consistent performance of banks. Along with that they also observed that the relation between size and banks performance was positive. The study is evident that when two or more small banks were merged together then it will make banks productive and more efficient.

D.Mahila Vasanthi Thangam & Ms.Thoushifa.T (2016) analyzes the productivity and its components and examine the compounded annual growth rate of productivity of selected commercial banks. The study concluded that number of branches and number of employees of banks are highly influencing the Productivity of banks. The big banks with huge number of branches have the lowest Productivity and vice versa. In India the Public Sector Banks has the lowest productivity but have highest number of branches and number of Employees also high. The Banks must concentrate on per branch Productivity as well as per employee productivity.

Hawa Singh and Kamlesh (2013) studied on productivity of employees in private sector banks in India. In this study it is observed that the performance of private banks has increased trend during 2004-05 to 2011-2012 and also observed that compare to new private sector banks compete better than old ones.

Jyotindra .M. Jani and Manish B. Raval (2012) presented a paper on employee's productivity in terms of business and profit by using the financial ratios like BPE and PPE in four selected Nationalized Banks of India during 2006-2007 to 2010-2011. F-Test, two way ANOVA table has been selected for analyzing data. It expresses that there is sign difference in BPE and PPE among the banks and there is significant difference in Business per Employee within the banks and there is no significant difference in profit per employee within the banks over the period of study.

J.U. Ahmed (2014), advocated the Productivity Analysis of Rural Banks in India. The study specifically focused on Meghalaya Rural Bank. In this he had tested the banks business volume. It is found that the Meghalaya Rural Bank is utilizing and mobilizing its resources effectively and showing better performance than the Regional Rural Banks.

K.M Anwarul Islam, Mahbuba Zaman (2013) explores the factors which impact more on productivity performance of selected banks. in this study the selected productivity measures should have great impact on bank management because they are showing positive effect on profitability of banks.

Nitleen Kaur (2017), made a modest attempt to the State Bank of India (SBI) Group's productivity. The study reveals that the productivity in terms of branch is not up to the satisfactory level. The growth in the productivity and profitability were decreased.

P. K. Dhiman, Rupani (2016), measured the productivity of foreign banks. Among foreign banks, the performance of American Chartered Bank was found to be the poorest further the CITI Bank performance was best among foreign sector banks.

Rina V., Sommanek (2014) discussed and identified Employees Productivity among various banks. They concluded that there is no significant difference in Business per Employee and Profit per Employee among the Private Sector Banks.

Roshan Lal, Dr. Rajni Saluja (2013), attempts to measure productivity trends of SBI and its Associate Banks. The paper concludes that in terms of labor and branch productivity State Bank of Patiala performed well.

Vivek Singla (2013), analyzed that the Productivity of select Indian private sector banks. This Study shows that the ICICI banks productivity in terms of employee is good compare to other select private sector banks but less in terms of branch productivity.

D. MEASUREMENT OF BANKS PERFORMANCE

Afroza Parvin and Mirza Arifur Rahman (2014) have evaluated the performance of conventional banks of Bangladesh. In this study the financial performance of private banks in Bangladesh is satisfactory and with some expectations. The study describes that there is no significant effect of selected variables on ROA and ROE.

Almazari (2011) conducted a study on identifying the financial performance of selected Jordanian commercial banks. The researcher has concluded that there is existence of a high positive association between asset size, asset utilization and operational efficiency with financial performance.

Amanjot Kaur Sodhi & Simran Waraie(2016) examined the performance of selected public and private sector banks in India. He examines and compares various aspects of performance. Hence the results shows that in terms of growth and profitability most of the private banks are performing better than public sector banks

Arora and Verma (2005) have measured the performance of public sector banks. They concluded that to reduce subjectivity in banking sector banks has to take some measures like wise decision making, income sources identification and so on. In this regard the researcher has suggested to correct the influence of directed investments on profitability should be reduce reserve requirements.

Choong et. al. (2012) had conducted an empirical study on commercial banks performance in Malaysia. The researcher found through the regression model that it is showing that the most impact factor of the performance of local banks in Malaysia is credit risk. But liquidity and concentration are also important factors.

Chowdhury & Ahmed (2009) evaluated the performance of Selected Private Commercial Banks in Bangladesh. Here the researcher used statistical techniques and found that the selected banks were in a position to achieve stability in growth in terms of branch, deposits of employee, loans & advances, net income, earnings per share.

Dangwal and Kapoor (2010) investigated to know the financial performance of nationalized banks in India. The results of the study reveals that among all selected banks four banks were

showing excellent performance, five reached good performance, four represent fair performance, and six were resulting poor performance.

Dhanabhakya & M. Kavitha (2012) identified the selected Indian public sector banks financial performance. The study results depict that the selected public sector banks have performance is satisfactory in terms of growth rate and financial efficiency.

Hirindu Kawshala M., Kushani Panditharathna (2017), observed the effect of specific factors of bank profitability of commercial banks in Sri Lanka. The study reveals that the bank's profitability can be increased by increasing the different bank specific factors.

Hussein A. Hassan Al-Tamimi (2010), investigated the factors most influence the performance of the UAE Islamic banks and Conventional National Banks. The results depicts that the conventional national banks' performance mostly influenced by liquidity and concentration and Islamic banks' performance depends on cost and number of branches.

Jha and Sarangi (2011) have focused on analysis of performance of the select banks that is public and private sector banks. This study results shows that among all selected banks Axis bank had shown high performance.

Kajal Mr. Adwaita Maiti, Dr. Sebak Kumar Jana (2017) conducted an empirical study to find the most influencing determinants which affecting total performance of the banks in India. From the analysis it is found that the most of the factors of profitability for selected bank groups were differ from one to another. The empirical results have found strong evidence that the most commonly influencing four factors profit per employee, net interest margin, net non-performing assets ratio and non-interest income were showing significant impact on profitability of all bank groups.

Minh To and Tripe (2002) has investigated the factors which influence the performance of foreign banks in Newzealand. For this they have used time series data and various econometrics. The outcome of the study reveals that the length of time and return on assets were most influencing factors to make profits and to show high performance.

Nutan N. Thoke and Parikshit K. Pachorkar (2012), advocated different financial performance indicators and their association of select Indian banks. from the analysis of the study it can observed that there is a high degree of positive association between independent variables and Interest Income in Public Sector Banks when compare to private sector banks. In terms of percentage of other income it is evident that less percentage was generated in public sector than private sector banks.

Rakesh Kumar, Bimal Anjum (2014), has discussed on various selected Indian banks performance before and after Financial Crisis. The study reveals that after the financial crisis period most of the public sector banks performance was affected more compare to both private and foreign sector banks. This was due to the adopting suitable and appropriate policies related to various aspects of activities.

Rashed Al Karim, Tamima Alam (2013), evaluated the Performance of Commercial Banks in Bangladesh. The study reveals that some of the variables like Bank size, credit risk, operational efficiency and asset management have significant impact on financial performance of private commercial banks at Bangladesh.

Singla HK (2008) conducted a study on finding financial performance of banks in India. The study reveals that the profitability position was reasonable during the period of study when compared with the previous years. Strong capital position and balance sheet place, Banks in better position to deal with and absorb the economic constant over a period of time.

Virender Koundal (2012) measured the performance of Banks in India. In this study he has used all types of commercial banks. Here foreign sector banks are showing average then new private sector banks followed by old ones. The public sector banks are less profitable compare to other sector banks in terms of its size.

Zawadi Ally (2013), viewed in his study the financial performance of commercial banking sector in Tanzania. Tanzania banking sector remained stable, banks are adequately capitalized and profitable and remained in a sound position. The study found that, there is no significant means of difference of profitability among peer banks groups in terms of return on assets, however, a significance differences among banks group is existed in term of return on equity and net interest margin.

E. MEASUREMENT OF BANKS PRODUCTIVITY AND PROFITABILITY

Alam and Riyadh (2003) have done a research to measure Productivity and Profitability of Banks in Bangladesh and analyzed the financial health along with productivity of each bank, each category of banks and the banking sector as a whole. The result shows that foreign commercial banks do the best performance due to on line banking, efficient and well paid employees, good handling of client. On the other hand, nationalized commercial banks are lagging behind due to overstaffing, inefficient management and employees, interferences of the trade union.

Chantapong (2005) studied the profitability of Thailand banks during crisis period and observed that foreign banks were more profitable than domestic banks.

Chandan and Rajput (2002) on the basis of profitability analysis evaluated the performance of banks. The researchers analyzed the factors determining the profitability of banks in India with the help of multiple regression technique. They found that spread i.e. net interest income is the major source of income for banks. The study found public sector banks at weaker position in relation to foreign banks and public sector banks. The authors suggested that public sector banks should concentrate on non-performing asset management and also make investment in technology up gradation for better data management and quicker flow of information.

De Young and Rice (2004) in their study on U.S. commercial banks profitability found that increased non-interest income led increased profitability of banks but did not help in reducing the risk level of U.S. banks.

Goddard et al. (2004) investigated the profitability of European market banks. The results of the empirical analysis suggested that, despite the growth in competition in European financial markets, there was still significant persistence of profit from one year to the next. Further, unconvincing result between size and profitability was found but a positive relationship between capital adequacy ratio and profitability was observed during the study period.

Guru et al. (2002) examined the determinants of profitability of Malaysian banks during 1986-1995 and revealed a significant positive association between efficient expenses management and profitability but high interest ratio was negatively associated with the profitability of banks.

Karam Pal Narwal, Shweta Pathneja (2015), in their paper discussed the different determinants of productivity and profitability of banks functioning in India. The results of the study disclose that private sector banks are more productive than public sector banks over the whole study period. But no significant difference exists in the profitability of two bank groups.

Md. Imtiaz Rahman (2014) has tried to find the productivity and profitability of Nationalized Commercial Banks in Bangladesh. Analyzing from the view point of the profitability ratios sample Nationalized Commercial Banks witnessed the lack of efficiency on the part of utilization of funds, net profit in absolute terms was being fluctuated for all sample Nationalized Commercial Banks and Interest income constitutes the major portion of

the total income which is earned by providing loans. Loans are risky assets on the part of the banks.

Neha Saini (2014), has evaluated the productivity and profitability of four major banks in India majorly, SBI, PNB, ICICI and HDFC. SBI and PNB are the giant in public sector banks and similarly, ICICI and HDFC, are holding top positions in private sector banks in India. The result of the study shows that there is significant difference in profitability of the public and private sector banks, but no significant difference in productivity of public and private sector banks.

Sufian and Chong (2008) investigated the profitability determinants of Philippines banks during 1990-2005. The empirical findings suggested that size, credit risk, and expense preference behavior were negatively related to banks' profitability, while non-interest income and capitalization had a positive impact.

Thaigarajan et. al. (2011) have carried out an analysis to empirically evaluate the determinants of profitability in the public and private sector banks in India using statistical tools such as correlation analysis, Multiple Regression Analysis and Factor analysis. They have used ROA as the measure of profitability of the banks.

Wasiuzzaman & Tarmizi (2010) have done research on Profitability of Islamic Banks in Malaysia. Empirical Analysis of their study has shown that capital and asset qualities have a negative relationship with bank profitability while liquidity and operational efficiency have a positive relationship. Here, the macroeconomic variables show that both inflation and growth of domestic product have positively influenced the bank profitability.

F. MEASUREMENT OF BANKS PRODUCTIVITY AND PERFORMANCE

Geetu Gupta and Amandeep kaur (2013) conducted a study on productivity and performance of public sector banks in India. The study suggested that banks need to improve their productivity apart to this improvements in profitability, maintain efficiency level and technology and exploring available cost-effective solutions.

T. Velnampy (2011), analyses the Value Added, Productivity and Performance of few Selected Companies in Sri Lanka. The study finds that profit before tax per employee and value added per rupee of fixed asset is positively correlated and Labor cost to sales and gross profit is also positively correlated. Further the labour cost to value added is correlated with gross profit (GP) and value added per rupee of fixed asset and no relationship between the rest of the productivity and performance measures.

The literature review classified the analyzed papers according to themes, namely

Table-1: Summary of literature review findings

S.No.	Research Work Focus on	No. of Papers	% out of Total
A	Concept of Productivity	05	9
B	Concept of Performance	04	7
C	Measurement of Banks Productivity	14	25
D	Measurement of Banks Performance	19	34
E	Measurement of Banks Productivity and Profitability	12	21
F	Measurement of Banks Productivity and Performance	02	4
Total		56	100

Discussion: More than 30% of the literature was focused on concept and measurement of productivity of the banks. 40% of the papers were concentrated on concept and calculating the performance of the banks. Few were i.e., 21% stressed on comparing the banks productivity and Profitability of banks. But very few studies i.e.2% had concentrated on measurement of Banks Productivity and Performance. This depicts that the importance of measuring the productivity and performance of banks. It is essential to know the impact of productivity on performance of banks.

CONCLUSION

From the review of literature related to the banking industry in India, It is evident that although huge work has been done since the inception of Indian Banking System on the topics like the productivity and performance of various banks individually together with other bank. Here we can conclude that most of the studies have only focused on finding out either productivity or performance but very few studies have focused on impact of productivity measures on performance measures of banks. Here in the present study concludes that more importance should be given to productivity and performance evaluation, factors affecting productivity and performance, its comparison, relationship etc.

REFERENCES

[1] Aki Pekuri, Harri Haapasalo, Maila Herrala, Productivity and Performance Management – Managerial Practices in the Construction Industry, International Journal of Performance Measurement, vol. 1, pp 39-58, 2011.

- [2] Ahuja H.L, *Advanced Economic Theory: Microeconomic Analysis*, S. Chand & Co Ltd, New Delhi, India; (14th Edn.), 2006.
- [3] Monga, R. C, *Dynamics of Productivity Management*, Productivity, National Productivity Council, 33 (1), 1992.
- [4] Drucker, P.F, *Managing in Turbulent Times*, Harper –Row, New York, 1980.
- [5] Choudhary, A.K, *Bank Management*, Rajat Publication, New Delhi, pp. 172-173, 1998.
- [6] Suriy amurthi, S., Karthik, R. and Mahalakshmi, V., *Global Practices of Financial Services with Reference to Banking in India*, *Advances in Management*, vol.5(2), pp. 24- 28,2012.
- [7] Bhatia, A., & Mahendru, M, *Assessment of Technical Efficiency of Public Sector Banks in India Using Data Envelopment Analysis*, *Eurasian Journal of Business and Economics*, 8(15), pp 115-140, 2015.
- [8] Dwivedi, Amit and Charyulu, Kumara, D., *Efficiency of Indian Banking Industry in the Post-Reform Era*, *Indian Institute of Management*, Ahmedabad, pp 1-15, 2011.
- [9] Pandey, I.M., *Balanced Scorecard: Myth and Reality*, Vikalpa, Vol 30, no.1, pp. 51-66, 2005.
- [10] Bhattacharjee, D. *Productivity measurement in the nationalized commercial banks of bangladesh: A Multivariate Analysis*, *The Dhaka University Studies*, Vol 12 (1), pp 25–43,1991.
- [11] Bhuvan Vyas and Dr. Vijay Pithadia, *Productivity in Service Sector: SBI and IDBI Bank*, *Indian Journal of Applied Research*, Volume 2(2), pp 107-108, 2012.
- [12] Brajesh Kumar, *A study of Productivity of Employees in Public sector Banks of India and Nepal*, *Effulgence*, Volume 14(2), pp 12-18, 2016.
- [13] Chatzoglou, P.D. et. al., *Banking productivity: an overview of the Greek banking system*, *Managerial Finance*, 36(12), pp 1007-1027, 2010.
- [14] D.Mahila Vasanthi Thangam, Salini. K. T, *Profitability Analysis of Selected Public and Private Banks in India*, *International Journal of Scientific Engineering and Applied Science*, Volume 2(2), Pg 393-403, 2016.
- [15] Hawa Singh and Kamlesh, *Employee Productivity of Private Sector Banks in India*, *International Journal of Management and Social Science Research*, 2(10), pp 64-79, 2013.
- [16] Jyotindra M. Jani and Manish B. Raval, *An Analytical Study of Employees Productivity in Some Selected Nationalized Banks in India*, *IJAR*, 1(9), pp 19-20, 2012.
- [17] J.U.Ahmed, *Productivity Analysis of Rural Banks in India: A Case of Meghalaya Rural Bank*, *the NEHU Journal*, , Volume 12(1), pp 53-76, 2014.

- [18] K. M. Anwarul Islam & Mahbuba Zaman, An Empirical Study on Effect of Productivity on Profitability in Some Selected Private Commercial Banks (PCBs) in Bangladesh, *International Journal of Economics and Finance*, Volume 5(12), pp151-162, 2013.
- [19] Nitleen Kaur, Productivity in Indian Banking Sector- A Study of SBI Group, *Scholarly Research Journal for Interdisciplinary Studies*, Vol- 4, pp 37, 2017.
- [20] P. K. Dhiman, Rupani, Productivity Analysis of Foreign Sector Banks, *International Journal of Management*, Volume 7(7), pp 250–256, 2016.
- [21] Rina V., Sommanek, A Study on Employee's Productivity in Some Selected Private Sector Banks in India: An Analysis, *Paripex - Indian Journal of Research*, Vol 3(12), pp 95-97, 2014.
- [22] Roshan Lal, Dr. Rajni Saluja, Productivity Analysis of Banks- A Comparative Study of SBI & its Associate Banks, *GALAXY International Interdisciplinary Research Journal*, Vol.1 (1), pp 65-81, 2013.
- [23] Vivek Singla, Analysis of Productivity of Indian Banks: A Comparative Study of Selected Private Banks, *International Journal of Computing and Business Research*, Volume 4, Issue 2, pp1-18, 2013.
- [24] Afroza Parvin and Mirza Arifur Rahman, Financial Performance Analysis of Selected Private Conventional Commercial Banks of Bangladesh, *The International Journal Of Business & Management*, Volume 2(9), pp 284-291, 2014.
- [25] Almazari, A., financial performance evaluation of some selected Jordanian commercial banks, *International Research Journal of Finance & Economics*, 68(8), pp 50-63, 2011.
- [26] Amanjot Kaur Sodhi & Simran Waraich, Fundamental Analysis of Selected Public and Private Sector Banks in India, *NMIMS Management Review*, Volume 28, pp 32-48, 2016.
- [27] Arora, S. and Kaur, S., Financial Performance of Indian Banking Sector in Post-Reforms Era, *The Indian Journal of Commerce*, Volume 59(1), 2006.
- [28] Choong, Y. V., Thim, C. K., & Kyzy, B. T., Performance of Islamic Commercial Banks in Malaysia: An Empirical study, *Journal of Islamic Economics, Banking and Finance*, 8(2), pp 67-79, 2012.
- [29] Chowdhury, T. A., & Ahmed, K., Performance evaluation of selected private commercial banks in Bangladesh, *International Journal of Business and Management*, Vol 4(4), pg 86, 2009.
- [30] Dangwal, R.C., & Reetu Kapoor, Financial Performance of nationalised Banks, *NICE Journal of Business*, Vol 5(2), pp 67-79, 2010.

- [31] M. Dhanabhakyaam, M. Kavitha, Financial performance of selected public sector banks in India, *Zenith International Journal of Multidisciplinary Research*, Vol 2(1), pp 255-269, 2012.
- [32] HirinduKawshala, KushaniPanditharath, The Factors Effecting on Bank Profitability, *International Journal of Scientific and Research Publications*, Volume 7(2), pp 212-216, 2017.
- [33] Hussein A. Hassan Al-Tamimi, Factors influencing performance of the UAE Islamic and conventional national Banks, *Global journal of business research*, Volume 4 (2), pp 1-9, 2010.
- [34] Jha, D.K., and D.S. Sarangi, Performance of New Generation Banks in India: A Comparative Study, *International Journal of Research in Commerce and Management*, Vol. 2(1), pp 85-89, 2011.
- [35] Kajal Chaudhary and Monika Sharma, Performance of Indian Public Sector Banks and Private Sector Banks A Comparative Study, *International Journal of Innovation, Management and Technology*, Volume 2(3), pp 249-256, 2011.
- [36] Minh To, H., & Tripe, D., Factors influencing the performance of foreign-owned banks in New Zealand, *Journal of International Financial Markets, Institutions and Money*, Volume 12(4), pp 341-357, 2002.
- [37] Nutan N. Thoke and Parikshit K. Pachorkar, Correlation Study Of Financial Performance Indicators In Indian Public Sector Banks & Private Sector Banks, *IBMRD's Journal of Management and Research*, Volume-1, pp 76-79, 2012.
- [38] Rakesh Kumar, Bimal Anjum, Performance of Indian Banks in and after Financial Crisis - A Comparative study of selected Banks, *GALAXY International Interdisciplinary Research Journal*, Volume 2(3), pp 147-153, 2014.
- [39] Rashed Al Karim ,Tamima Alam, An Evaluation of Financial Performance of Private Commercial Banks in Bangladesh: Ratio Analysis, *Journal of Business Studies Quarterly*, Volume 5(2), pp 65-77, 2013.
- [40] Singla HK, financial performance of banks in India, 2008.
- [41] Virender Koundal, Performance of Indian banks in Indian Financial System, *International Journal of social Science and Interdisciplinary Research*, Volume 1(9), pp 204-213, 2012.
- [42] Zawadi Ally, Comparative Analysis of Financial Performance of Commercial Banks in Tanzania, *Research Journal of Finance and Accounting*, Volume 4(19), pp 133-143, 2013.

- [43] Alam, J., & Riyadh, A. N., *Measuring Productivity and Profitability of Banking in Bangladesh*, Cost and Management, 2003.
- [44] Chantapong, S., *Comparative Study of Domestic and Foreign Bank Performance in Thailand: The Regression Analysis*. *Economic Change and Restructuring*, 38, 63–83, 2005.
- [45] Chandan, C.; and Rajput, P. K., *Profitability Analysis of Banks in India – A Multiple Regression Approach*, *Indian Management Studies Journal*, 119-129, 2002.
- [46] De Young, R., & Rice, T., *Non-interest income and financial performance at US commercial banks*, *Financial Review*, Vol 39 (1), pp 101–127, 2004.
- [47] Goddard, J., Molyneux, P., & Wilson, J., *The profitability of European banks: A cross sectional and dynamic panel analysis*. *The Manchester School*, Vol 72 (3), pp 363-381, 2004.
- [48] Guru, B. K., Staunton, J., & Balashanmugam B., *Determinants of commercial bank profitability in Malaysia*, Working Paper, Multimedia University, 2002.
- [49] Karam Pal Narwal, Shweta Pathneja, *Determinants of Productivity and Profitability of Indian Banking Sector: A Comparative Study*, *Eurasian Journal of Business and Economics*, Volume 8(16), pp 35-58, 2005.
- [50] Md. Imtiaj Rahman, Debasish Adhikary, Salahuddin Yousuf, *Productivity and profitability analysis of Nationalized Commercial Banks in Bangladesh*, *International Journal of Economics, Finance and Management Sciences*, Volume 2(2), Pg 197-205, 2014.
- [51] Neha Saini, *Measuring The Profitability and Productivity of Banking Industry: A Case Study of Selected Commercial Banks in India*, *Prestige International Journal of Management & IT- Sanchayan*, Vol. 3(1), pp. 1-14, 2014.
- [52] Sufian F, *Malmquist Indices of Productivity Change in Malaysian Islamic Banking Industry: Foreign vs. Domestic Banks*, *Journal of economic Cooperation*, 28(1), 115-150, 2007.
- [53] Thiagarajan S., Ayyappan S., Ramachandran A. & Sakthivadivel M, *An Analysis of Determinants of Profitability in Public and Private Sector Banks in India*, *Research Journal of Social Science & Management*, Vol 1(6), October 2011.
- [54] Wasiuzzaman, S., & Tarmizi, H. A., *Profitability of Islamic banks in Malaysia: an empirical analysis*. *Journal of Islamic Economics, Banking and Finance*, Vol 6(4), pp 53-68, 2010.
- [55] Geetu Gupta and Amandeep Kaur, *A Study on Productivity and Performance of Public Sector Banks in India*, *Universal Journal of International and business Management*, Vol 1(4), pp 117-136, 2013.

[56] T. Velnampy (2011), Value Added, Productivity & Performance of few selected companies in Sri Lanka, Indian Journal of Commerce & Management Studies, Vol 2(6), pp 49-55.