

# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT

I  
J  
R  
C  
M



A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

*Indexed & Listed at:*

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A., Google Scholar,

Open J-Gate, India [link of the same is duly available at Inlibnet of University Grants Commission (U.G.C.)],

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 4945 Cities in 183 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

<http://ijrcm.org.in/>

**CONTENTS**

<b>Sr. No.</b>	<b>TITLE &amp; NAME OF THE AUTHOR (S)</b>	<b>Page No.</b>
1.	<b>PERCEIVED ROLE OF CORPORATE CULTURE IN PERFORMANCE OF COMMERCIAL STATE CORPORATIONS IN KENYA</b> <i>THOMAS C.O. MOSE, DR. MIKE IRAVO, DR. GEORGE O. ORWA &amp; DR. ENG. THOMAS SENAJI</i>	1
2.	<b>A STUDY ON PATIENTS' SATISFACTION TOWARDS SERVICES PROVIDED BY PRIVATE HOSPITALS IN ERODE TALUK, ERODE DISTRICT</b> <i>S. SASIKALA &amp; DR. C. VADIVEL</i>	8
3.	<b>A STUDY ON MARKET MOVEMENT IMPACT ON MUTUAL FUND SUBSCRIPTIONS AND REDEMPTIONS</b> <i>Y. JAYA RADHA SANKAR, DR. P. DIANA DAVID &amp; LEELA CHAKRAVARTHI AKULA</i>	14
4.	<b>EFFECTIVE CHANGE MANAGEMENT</b> <i>SINDHU S PANDYA</i>	19
5.	<b>SUPPLY CHAIN MANAGEMENT PRACTICES IN ORGANIZED RETAILING: A STUDY IN TRICHY REGION</b> <i>DR. S. SARAVANAN &amp; K. S. TAMIL SELVAN</i>	21
6.	<b>BANK CREDIT TO SMALL AND MEDIUM SPORTS GOODS MANUFACTURING ENTERPRISES OF MEERUT - OBSTACLES IN FINANCING AND RECOVERY OF THE LOAN</b> <i>KALI RAM GOLA, P. K. AGARWAL &amp; MRIDUL DHARWAL</i>	25
7.	<b>IMPACT OF CHANGES IN INTEREST RATE ON BANK PROFITABILITY: A RE-EXAMINATION</b> <i>DR. NAMRATA SANDHU &amp; HIMANI SHARMA</i>	30
8.	<b>IT &amp; ITES EMPLOYEES' OPINION ON THE PERSPECTIVES CONSIDERED IN THE BALANCED SCORECARD- A STUDY WITH SPECIAL REFERENCE TO COIMBATORE DISTRICT</b> <i>SHYAM UMASANKAR K K &amp; DR. V KRISHNAVENI</i>	33
9.	<b>IMPACT OF EXCHANGE RATE MOVEMENT AND WORLD OIL PRICE ON INDIAN AUTO STOCKS</b> <i>NISCHITH. S &amp; DR. MAHESH. R</i>	39
10.	<b>IMPACT OF NON PERFORMING ASSET ON PROFITABILITY OF PUBLIC AND PRIVATE SECTOR BANKS IN INDIA</b> <i>LAVEENA &amp; KAMAL KAKKAR</i>	46
11.	<b>POLITICAL EMPOWERMENT OF WOMEN IN PNACHAYATI RAJ INSTITUTIONS: AN OVER VIEW</b> <i>DR. M. GOPI</i>	51
12.	<b>CO-INTEGRATION OF INDIAN STOCK MARKET WITH US STOCK MARKET</b> <i>ABHAY KUMAR</i>	56
13.	<b>INDIAN VALUE ADDED TAX (VAT) SYSTEM: A PROTOTYPE FOR NIGERIA</b> <i>AHMED JINJIRI BALA &amp; DR. A. THILAGARAJ</i>	61
14.	<b>A STUDY OF COMMITMENT OF SCHOOL TEACHERS IN RELATION TO SOME BACKGROUND VARIABLES</b> <i>DR. KAMALPREET KAUR TOOR</i>	65
15.	<b>A STUDY ON EMPLOYEE JOB SATISFACTION IN WITH REFERENCE TO KERALA GARMIN BANK, THRISSUR DISTRICT</b> <i>MIRANDA PAUL</i>	71
16.	<b>JOB STRESS AND JOB SATISFACTION IN THE COMMUNICATION SERVICE INDUSTRY: EVIDENCE FROM TECH MAHINDRA GHANA LTD.</b> <i>PAUL APPIAH-KONADU &amp; HENRY KWADWO FRIMPOG</i>	75
17.	<b>THE EFFECTS OF ERP SYSTEM</b> <i>SAJID NEGINAL</i>	81
18.	<b>INTERNET BANKING: DEBATING CORE ISSUES AND BENEFITS</b> <i>LAVANYA K.N.</i>	83
19.	<b>IMPACT OF WORKING CAPITAL MANAGEMENT ON CORPORATE PERFORMANCE: A STUDY BASED ON SELECTED BANKS IN NIGERIA</b> <i>ALIYU SANI SHAWAI</i>	85
20.	<b>CARE FOR INDIA: TACKLING URBAN-RURAL DISPARITIES: URBAN VS. RURAL ACCESS TO HEALTHCARE SERVICES IN UTTAR PRADESH</b> <i>RHEA SHUKLA</i>	89
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	94

## CHIEF PATRON

**PROF. K. K. AGGARWAL**

Chairman, Malaviya National Institute of Technology, Jaipur

*(An institute of National Importance & fully funded by Ministry of Human Resource Development, Government of India)*

Chancellor, K. R. Mangalam University, Gurgaon

Chancellor, Lingaya's University, Faridabad

Founder Vice-Chancellor (1998-2008), Guru Gobind Singh Indraprastha University, Delhi

Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

## FOUNDER PATRON

**LATE SH. RAM BHAJAN AGGARWAL**

Former State Minister for Home & Tourism, Government of Haryana

Former Vice-President, Dadri Education Society, Charkhi Dadri

Former President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

## FORMER CO-ORDINATOR

**DR. S. GARG**

Faculty, Shree Ram Institute of Business & Management, Urjani

## ADVISORS

**PROF. M. S. SENAM RAJU**

Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi

**PROF. M. N. SHARMA**

Chairman, M.B.A., Haryana College of Technology & Management, Kaithal

**PROF. S. L. MAHANDRU**

Principal (Retd.), Maharaja Agrasen College, Jagadhri

## EDITOR

**PROF. R. K. SHARMA**

Professor, Bharti Vidyapeeth University Institute of Management & Research, New Delhi

## CO-EDITOR

**DR. BHAVET**

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

## EDITORIAL ADVISORY BOARD

**DR. RAJESH MODI**

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

**PROF. SANJIV MITTAL**

University School of Management Studies, Guru Gobind Singh I. P. University, Delhi

**PROF. ANIL K. SAINI**

Chairperson (CRC), Guru Gobind Singh I. P. University, Delhi

**DR. SAMBHAVNA**

Faculty, I.I.T.M., Delhi

**DR. MOHENDER KUMAR GUPTA**

Associate Professor, P. J. L. N. Government College, Faridabad

**DR. SHIVAKUMAR DEENE**

Asst. Professor, Dept. of Commerce, School of Business Studies, Central University of Karnataka, Gulbarga

***ASSOCIATE EDITORS***

**PROF. NAWAB ALI KHAN**

Department of Commerce, Aligarh Muslim University, Aligarh, U.P.

**PROF. ABHAY BANSAL**

Head, Department of I.T., Amity School of Engineering & Technology, Amity University, Noida

**PROF. A. SURYANARAYANA**

Department of Business Management, Osmania University, Hyderabad

**PROF. V. SELVAM**

SSL, VIT University, Vellore

**DR. PARDEEP AHLAWAT**

Associate Professor, Institute of Management Studies & Research, Maharshi Dayanand University, Rohtak

**DR. S. TABASSUM SULTANA**

Associate Professor, Department of Business Management, Matrusri Institute of P.G. Studies, Hyderabad

**SURJEET SINGH**

Asst. Professor, Department of Computer Science, G. M. N. (P.G.) College, Ambala Cantt.

***FORMER TECHNICAL ADVISOR***

**AMITA**

Faculty, Government M. S., Mohali

***FINANCIAL ADVISORS***

**DICKIN GOYAL**

Advocate & Tax Adviser, Panchkula

**NEENA**

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

***LEGAL ADVISORS***

**JITENDER S. CHAHAL**

Advocate, Punjab & Haryana High Court, Chandigarh U.T.

**CHANDER BHUSHAN SHARMA**

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

***SUPERINTENDENT***

**SURENDER KUMAR POONIA**

## **CALL FOR MANUSCRIPTS**

We invite unpublished novel, original, empirical and high quality research work pertaining to the recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography; Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript** **anytime** in **M.S. Word format** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com) or online by clicking the link **online submission** as given on our website ([FOR ONLINE SUBMISSION, CLICK HERE](#)).

## **GUIDELINES FOR SUBMISSION OF MANUSCRIPT**

1. **COVERING LETTER FOR SUBMISSION:**

DATED: \_\_\_\_\_

**THE EDITOR**

IJRCM

**Subject:** SUBMISSION OF MANUSCRIPT IN THE AREA OF \_\_\_\_\_.

**(e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)**

**DEAR SIR/MADAM**

Please find my submission of manuscript titled ' \_\_\_\_\_ ' for likely publication in one of your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published anywhere in any language fully or partly, nor it is under review for publication elsewhere.

I affirm that all the co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to inclusion of their names as co-authors.

Also, if my/our manuscript is accepted, I agree to comply with the formalities as given on the website of the journal. The Journal has discretion to publish our contribution in any of its journals.

<b>NAME OF CORRESPONDING AUTHOR</b>	:
Designation/Post*	:
Institution/College/University with full address & Pin Code	:
Residential address with Pin Code	:
Mobile Number (s) with country ISD code	:
Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No)	:
Landline Number (s) with country ISD code	:
E-mail Address	:
Alternate E-mail Address	:
Nationality	:

\* i.e. Alumnus (Male Alumni), Alumna (Female Alumni), Student, Research Scholar (M. Phil), Research Scholar (Ph. D.), JRF, Research Assistant, Assistant Lecturer, Lecturer, Senior Lecturer, Junior Assistant Professor, Assistant Professor, Senior Assistant Professor, Co-ordinator, Reader, Associate Professor, Professor, Head, Vice-Principal, Dy. Director, Principal, Director, Dean, President, Vice Chancellor, Industry Designation **etc.** **The qualification of author is not acceptable for the purpose.**

**NOTES:**

- a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. ***pdf. version is liable to be rejected without any consideration.***
  - b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail:**  
**New Manuscript for Review in the area of** (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)
  - c) There is no need to give any text in the body of the mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.
  - d) The total size of the file containing the manuscript is expected to be below **1000 KB**.
  - e) Only the **Abstract will not be considered for review** and the author is required to submit the **complete manuscript** in the first instance.
  - f) **The journal gives acknowledgement w.r.t. the receipt of every email within twenty-four hours** and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of the manuscript, within two days of its submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.
  - g) The author (s) name or details should not appear anywhere on the body of the manuscript, except on the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.
2. **MANUSCRIPT TITLE:** The title of the paper should be typed in **bold letters, centered and fully capitalised**.
  3. **AUTHOR NAME (S) & AFFILIATIONS:** Author (s) **name, designation, affiliation (s), address, mobile/landline number (s), and email/alternate email address** should be given underneath the title.
  4. **ACKNOWLEDGMENTS:** Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.
  5. **ABSTRACT:** Abstract should be in **fully Italic printing**, ranging between **150 to 300 words**. The abstract must be informative and elucidating the background, aims, methods, results & conclusion in a **SINGLE PARA. Abbreviations must be mentioned in full.**
  6. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations etc.
  7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at [www.aea-web.org/econlit/jelCodes.php](http://www.aea-web.org/econlit/jelCodes.php). However, mentioning of JEL Code is not mandatory.
  8. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER. It should be free from any errors i.e. grammatical, spelling or punctuation. It must be thoroughly edited at your end.**
  9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
  10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.
  11. **MAIN TEXT:**

**THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:****INTRODUCTION****REVIEW OF LITERATURE****NEED/IMPORTANCE OF THE STUDY****STATEMENT OF THE PROBLEM****OBJECTIVES****HYPOTHESIS (ES)****RESEARCH METHODOLOGY****RESULTS & DISCUSSION****FINDINGS****RECOMMENDATIONS/SUGGESTIONS****CONCLUSIONS****LIMITATIONS****SCOPE FOR FURTHER RESEARCH****REFERENCES****APPENDIX/ANNEXURE****The manuscript should preferably be in 2000 to 5000 WORDS, But the limits can vary depending on the nature of the manuscript.**

12. **FIGURES & TABLES:** These should be simple, crystal **CLEAR, centered, separately numbered** & self-explained, and the **titles must be above the table/figure. Sources of data should be mentioned below the table/figure. It should be ensured that the tables/figures are referred to from the main text.**
13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.
14. **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section e.g. Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.
15. **REFERENCES:** The list of all references should be alphabetically arranged. **The author (s) should mention only the actually utilised references in the preparation of manuscript** and they may follow Harvard Style of Referencing. **Also check to ensure that everything that you are including in the reference section is duly cited in the paper.** The author (s) are supposed to follow the references as per the following:
  - All works cited in the text (including sources for tables and figures) should be listed alphabetically.
  - Use (ed.) for one editor, and (ed.s) for multiple editors.
  - When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc., in chronologically ascending order.
  - Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
  - The title of books and journals should be in italic printing. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
  - For titles in a language other than English, provide an English translation in parenthesis.
  - **Headers, footers, endnotes and footnotes should not be used in the document.** However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders before the references.

**PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:**

**BOOKS**

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

**CONTRIBUTIONS TO BOOKS**

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

**JOURNAL AND OTHER ARTICLES**

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

**CONFERENCE PAPERS**

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

**UNPUBLISHED DISSERTATIONS**

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

**ONLINE RESOURCES**

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

**WEBSITES**

- Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 <http://epw.in/user/viewabstract.jsp>



## PERCEIVED ROLE OF CORPORATE CULTURE IN PERFORMANCE OF COMMERCIAL STATE CORPORATIONS IN KENYA

**THOMAS C.O. MOSE**  
**RESEARCH SCHOLAR**

**COLLEGE OF HUMAN RESOURCE DEVELOPMENT**  
**JOMO KENYATTA UNIVERSITY OF AGRICULTURE & TECHNOLOGY**  
**NAIROBI**

**DR. MIKE IRAVO**  
**PRINCIPAL**

**COLLEGE OF HUMAN RESOURCE DEVELOPMENT**  
**JOMO KENYATTA UNIVERSITY OF AGRICULTURE & TECHNOLOGY**  
**NAIROBI**

**DR. GEORGE O. ORWA**  
**HEAD**

**STATISTICAL & ACTUARIAL SCIENCES DEPARTMENT**  
**COLLEGE OF HUMAN RESOURCE DEVELOPMENT**  
**JOMO KENYATTA UNIVERSITY OF AGRICULTURE & TECHNOLOGY**  
**NAIROBI**

**DR. ENG. THOMAS SENAJI**  
**SR. LECTURER**

**COLLEGE OF HUMAN RESOURCE DEVELOPMENT**  
**JOMO KENYATTA UNIVERSITY OF AGRICULTURE & TECHNOLOGY**  
**NAIROBI**


### ABSTRACT

*The purpose of this study was to investigate the role of corporate culture in organisational performance of commercial state corporations in Kenya. The study adopted descriptive and explanatory research designs with a statistical sample of 103 employees responsible for key result areas in 36 commercial state corporations in Kenya. Data was collected using a structured questionnaire as well as various reports. Corporate culture was measured using culture traits of Denison's model while organizational performance was measured through Fisher's measures with some modifications. The moderating variable was measured using scale of personal values in the Social Value Survey developed by Schwartz. Data was analyzed using descriptive and inferential statistics with the aid of Statistical package for social sciences (SPSS) version 20 for descriptive statistics, factor analysis, hypotheses testing and regression analysis. Secondary data was analyzed through the use of R-program. Results of the study show a positive significant role of corporate culture in performance of state corporations ( $R^2 = 0.951$ ). The study recommends that state corporations embrace positive corporate culture that promotes entrepreneurship and productivity for them to become competitive and remain successful.*

### KEYWORDS

corporate culture, denison model, ceo values, organizational performance, commercial state corporations.

### INTRODUCTION

rganisations in many industries, such as service, energy, banking, electronics and agriculture have faced increasingly complex and changing environments brought about by deregulation, technological revolution, foreign competition and unpredictable markets. This has not spared state corporations (Liu, Kiley & Ballard, 2009). Besides, the fierce competition of the market economy and globalization trends are forcing businesses to constantly explore new things and boost creativity and adaptability to changes in order to survive and develop (Nguyen, 2015). This requires businesses to build and maintain culture-specific routines to promote the capacity and promote the contribution of everyone to achieve the overall objectives of the organization - which is Corporate Culture (CC). Development of a particular culture for the organisation is key to the success of these organisations (Philip & McKeown, 2004). This consists of fostering attitudes of flexibility, dynamism and responsiveness; seeking structures and cultures that are positive and organic; and developing the human resource to its maximum capacity (Pettinger, 2000).

### STATEMENT OF THE PROBLEM

Despite several efforts by the government to restructure the State Corporations to enhance performance, the corporations have over the years performed dismally due to a number of challenges notably bad governance, political interference and lack of corporate culture (Mwaura, 2007). Although empirical studies have been carried out globally on corporate culture and performance of organizations, there has been little evidence relating the effect of corporate culture to organizational performance (McKinon et al., 2003). This shows that the importance of corporate culture, as a factor in defining performance, has received considerably little attention (Tepeci & Bartlett, 2002).

Denison & Mishra (1995) found that organizations with higher levels of involvement, consistency, adaptability and mission sense were more effective in achieving their goals. This study investigated involvement, consistency, adaptability and mission as sub-constructs under corporate culture given that no study has linked them to performance of organisations in Kenya. This holds especially true for parastatals (which form the largest sector in the economy) in Kenya. It is surprising because human resource involvement is considered an inherent and integral characteristic of the state corporations (Bavik, 2014). The distinct characteristics of the SCs make corporate culture an important area of concern for this sector, particularly as corporate culture has the potential to affect employees' behaviours to a noticeable degree. It plays an important role in internal control, employees' behaviours, and the prevention of undesirable behaviours (Hosseini, 2004).



In a study of Hong Kong and Australian managers, Lok and Crawford (2004) found a positive effect of corporate culture on employee performance. In another study Zain *et al.* (2009) examined the effect of four dimensions of corporate culture namely teamwork, communication, reward and recognition, and training and development on organizational performance and found that all the four dimensions of corporate culture were important determinants of organizational performance. While Mahmudah (2012) report a significant relationship between corporate culture and organizational performance, research by Lahiry (1994) showed only a weak association between corporate culture and organizational performance.

Locally, there is scarce literature on the role of corporate culture in performance of state corporations (SCs). Several studies have been conducted on performance of SCs in Kenya, such as one in which Shitakwa (2008) undertook a study of the relationship between performance contracting and performance of state owned corporations. Muriithi (2008) also did a research on corporate governance and the financial performance of state corporations. Wario's (2012) study was on the role of HRM in operationalization of tacit knowledge in Kenyan state corporations. Ong'ong'e's (2012) study was on the effect of autonomy on financial performance of commercial state corporations in Kenya. Mwaura (2007) focussed on the failure of corporate governance in state owned enterprises in Kenya while Chumo's (2013) study was on effects of Chief Executive Officers' turnover and succession on the performance of state corporations in Kenya. Kibui (2014) conducted a study on role of talent management on employees of state corporations in Kenya. Empirical review among all these studies conducted shows no one has addressed role of corporate culture on performance of commercial state corporations in Kenya. Therefore, there is need to address corporate culture and its role in performance of commercial state corporations in Kenya as the knowledge gap necessitating this research study.

The purpose of the study was to examine this relationship with particular reference to four corporate culture dimensions, namely involvement, consistency, adaptability and mission, in State Corporations in Kenya. CEO's values were adopted as the moderating variable because previous studies examining top leaders' personal values found that values can function as a cognitive hierarchy (Behr, 1998; Ravlin & Meglino, 1987) and the hierarchy of values has been used to explain the differences in organizational outcomes (Meglino & Ravlin, 1998). It is important to analyse performance and conditions of parastatals under different aspects and changing environment and to use modern research methods in order to contribute to recommendations and improvement of performance of SCs. The research conducted by Denison is the most extensive quantitative study on organisational culture and organisational performance. Although a significant amount of research has been conducted on the Denison Organizational Culture Survey elsewhere, there have been no studies of this nature in Kenya. This study, thus, seeks to answer the question: what is the role of corporate culture in the performance of State Corporation in Kenya?

**OBJECTIVE OF THE STUDY**

The general objective of this study was to assess the role of corporate culture in organisational performance of State Corporations in Kenya.

**METHODOLOGY**

According to Cooper & Schindler (2006) a research design is the blue print for fulfilling research objectives and answering questions. It is the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them (Chumo, 2011). Selecting a design may be complicated by availability of a large variety of methods, techniques, procedures, protocols and sampling plans. This study was descriptive in nature, as the relationship between corporate culture and performance was described through the research. Christensen (1997) indicates that the primary characteristic of the descriptive research approach is that it represents an attempt to provide an accurate description or picture of a particular situation or phenomenon. It attempts to identify variables that exist in a given situation and describes the relationship that exists between those variables. This research meets these requirements as the characteristics and constructs of corporate culture and performance are clearly defined and will be analysed using quantitative techniques, and the aim of the research is to determine the nature of the relationship between the two variables.

Explanatory research goes further than merely indicating that relationships exist between variables (Mouton & Marais, 1994). It indicates the direction of the relationships in a causal relationship model. In this research, a particular organisational culture profile is hypothesised to have a role in the performance of the SCs. This research can thus also be described as being explanatory in nature.

Thus the study adopted a descriptive survey research with the SCs in Kenya as the unit of analysis because the design best serves to answer the questions and the purposes of the study. The survey research is one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group. In other words, only a part of the population is studied, and findings from this are expected to be generalized to the entire population (Nworgu, 1991).

The hypotheses that were put forth by the researcher were tested through statistical outcomes, and the choice of statistical tests were based upon the level of measurement of the data; the validity of the instrument utilized for measuring the variables of interest; the power of the statistical test selected; and the methodological limitations of the research (Teddie & Tashakkori, 2010 cited in Sang, 2015).

**RESULTS AND DISCUSSION**

**RESPONSE RATE**

Data was collected from 26 commercial state corporations while targeting 34 state corporations. A total of 70 out of 103 self administered questionnaires were filled and returned giving a response rate of 68 %. This was considered adequate as the recommended rate is 60% of respondents (Sekaran, 2009).

**ROLE OF INVOLVEMENT CULTURE IN PERFORMANCE**

In this study involvement culture was operationalized into empowerment, team orientation, and capability development. A five-point likert scale was used to measure each of the sub-variables and the results were presented in tables. Percentages were used to describe the results.

**EMPOWERMENT**

From the results in Table 1 below, 80% of the respondents were of the opinion that decisions are usually made at the level where the best information is available, 12.9% were neutral and 7.1% disagreed. It is deduced that decisions in the organizations are made where the best information is available. This facilitates quality of apt decisions at managerial level. On whether information is widely shared so that everyone can get the information he or she needs when it is needed, 68.6% agreed, 20% were neutral and 11.4% disagreed. This implies that information is widely shared in the organizations as and when required. It is a positive sign which facilitates employees to know all the details needed by them. Asked whether everyone believes that he or she can have a positive impact, 65.7% agreed, 21.4% were neutral and 12.9% disagreed. It is deduced that employees in their individual capacity consider their impact on performance of an organization. This can be attributed to their sense of positive contribution in the growth of the organization.

**TABLE 1: RESPONSE ON EMPOWERMENT**

Empowerment	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Summary		
						Mean	Median	Mode
Decisions are usually made at the level where the best information is available.	1.4%	5.7%	12.9%	54.3%	25.7%	4	4	4
Information is widely shared so that everyone can get the information he or she needs when it is needed.	0.0%	11.4%	20.0%	48.6%	20.0%	4	4	4
Everyone believes that he or she can have a positive impact.	2.9%	10.0%	21.4%	40.0%	25.7%	4	4	4

**TEAM ORIENTATION**

A modified five-point Likert scale was used to measure team orientation and the results were as tabulated in Table 2. Percentages were used to describe the results. It was found that 75.7% agreed with the opinion that working in the respective organization is like being part of a team, 14.3% were neutral and 10%

disagreed. It is deduced that employees believe working in the team instead of taking instructions in the hierarchy. This is an appropriate method of working in the organizations.

TABLE 2: RESPONSE ON TEAM ORIENTATION

Team orientation	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Summary		
						Mean	Median	Mode
Working in this organization is like being part of a team.	2.9%	7.1%	14.3%	47.1%	28.6%	4	4	4
This organization relies on horizontal control and coordination to get work done rather than hierarchy.	2.9%	28.6%	20.0%	35.7%	12.9%	3	3	4
Teams are the primary building blocks of this organization.	4.3%	5.7%	27.1%	45.7%	17.2%	4	4	4

On whether the organization relies on horizontal control and coordination to get work done rather than hierarchy, 48.6% agreed, 20% were neutral and 31.5% disagreed. Lastly, for the opinion that teams are the primary building blocks of the organization, 62.9% agreed, 27.1% were neutral and 10% disagreed. This reveals that to a large extent organization teams are their building blocks.

**CAPABILITY DEVELOPMENT**

A modified five-point Likert scale was used to measure capability development and the results were as tabulated in Table 3. Percentages were used to describe the results. From the findings, 60% agreed with the opinion that the organization is constantly improving its 'bench strength' in many dimensions, 34.3% were neutral and 5.7% disagreed. It is deduced that there is continuous investment in order to improve the skills of employees. On whether the organization continuously invests in the skill of employees, 68.6% agreed, 17.1% were neutral and 5.7% disagreed. This shows that to a great extent concerted efforts are made to develop and utilize the skill of employees. Lastly, 74.3% agreed with the opinion that the capability of people in the respective organization is viewed as an important source of competitive advantage, 14.3% were neutral and 11.4% disagreed. This shows that capability of employees is viewed as an important source of competitive advantage.

TABLE 3: RESPONSE ON CAPABILITY DEVELOPMENT

Capability Development	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Summary		
						Mean	Median	Mode
The organization is constantly improving its 'bench strength' in many dimensions.	1.4%	4.3%	34.3%	42.9%	17.1%	4	4	4
This organisation continuously invests in the skill of employees.	2.9%	11.4%	17.1%	32.9%	35.7%	4	4	5
The capability of people in this organisation is viewed as an important source of competitive advantage.	1.4%	10.0%	14.3%	47.1%	27.1%	4	4	4

**RELIABILITY**

Internal consistency refers to the degree to which responses are consistent across the items (variables) within a single measurement scale (Kline, 2005 cited in Nguyen, 2010). According to Cortina (1993), Cronbach's Alpha remains the most widely used measure of scale reliability. A low Cronbach's Alpha coefficient indicates that variables may be too heterogeneous, thus perform poorly in representing the measure (the construct). Accordingly, Cronbach's Alpha above 0.70 is considered an acceptable indicator of internal consistency, and the values of 0.60 to 0.70 are at the lower limit of acceptability as suggested in the literature (Hair, et al., 2006).

Since no factor was removed, reliability test results before and after factor analyses were the same as shown in Table 4.

TABLE 4: RELIABILITY MEASUREMENT RESULTS FOR INVOLVEMENT CULTURE

Variable	Number of Items	Cronbach's Alpha
Involvement culture	9	0.834

Cronbach's alpha result of 0.834 obtained in this variable shows good internal consistency. Davidson, et al (2007) obtained Cronbach's alpha of 0.84 while Muhammad (2007) obtained alpha of 0.889 in a similar study.

**FACTOR ANALYSIS**

Principal Factor Analysis was conducted to determine if all factors/questionnaire items had significant factor loadings. All the factor loading was either greater than, or close to the threshold of 0.50 suggested by Hair et al (2006), supporting the reliability of the variables. All items were therefore retained since they had factor loadings greater than 0.5.

**Normality Test**

The basic assumption in regression analysis is normality of the residuals in the dependent variable in order to generalize findings of the study beyond the sample collected (Field, cited in Kimutai, 2014). Kolmogorov-Smirnov test was used to test for normality of organisational performance. The results indicate that the dependent variable (organisational performance) is normally distributed as shown in Table 5 with a mean of 17.34 and standard deviation of 5.04.

TABLE 5: KOLMOGOROV-SMIRNOV TEST

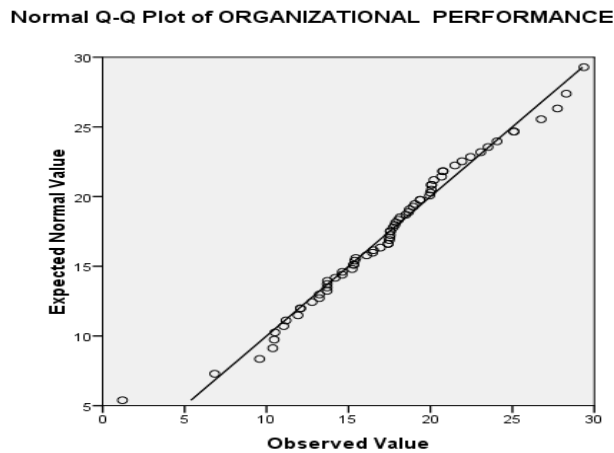
**One-Sample Kolmogorov-Smirnov Test**

Organizational Performance

	N	70
Normal Parameters <sup>a</sup>	Mean	17.337347
	Std. Deviation	5.0411655
Most Extreme Differences	Absolute	0.078
	Positive	0.077
	Negative	-0.078
Kolmogorov-Smirnov Z		0.649
	Asymp. Sig. (2-tailed)	0.794

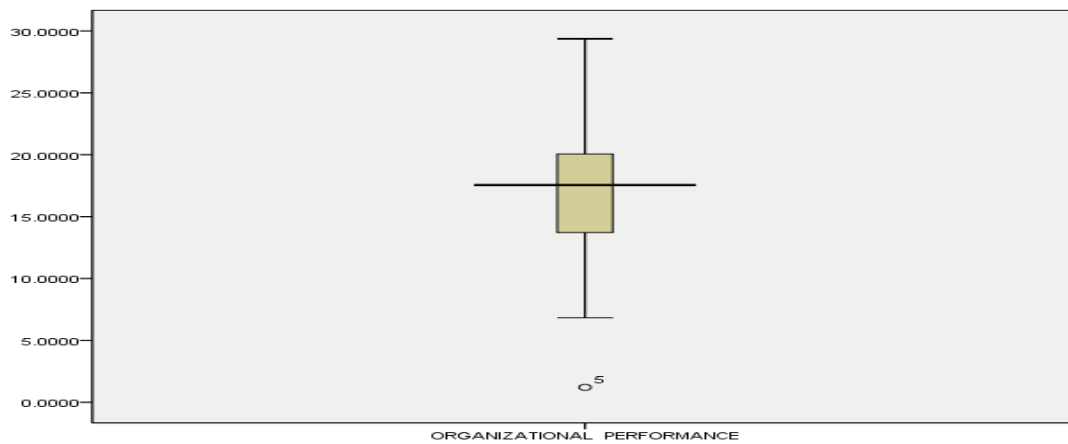
Graphical analysis (quantile-quantile plot) was used to assess the actual degree of departure from normality. The graphical analysis results in Figure 4.7 below shows that the line representing the actual data distribution closely follows the diagonal in the normal Q-Q plot, thus suggesting a normal distribution (Hair et al., cited in Kimutai, 2014).

FIGURE 1: NORMALITY PLOT OF ORGANISATIONAL PERFORMANCE (DEPENDENT VARIABLE)



It is important to validate the assumption that data of this sample was from a normal distribution, through visual inspection of data plots because this validates generalising of results from the sample to the entire population of state corporations in Kenya. When majority of the responses are closer to the normality line it shows that the data was effective and therefore it is suitable for all types of statistical analysis including parametric and regression analysis (Weru, 2014).

FIGURE 2: BOX PLOT OF ORGANISATIONAL PERFORMANCE (DEPENDENT VARIABLE)



The results of a box-plot also depicted that organisational performance lies between 14 and 20 units. However, there is one outlier at the bottom whose performance is low, as shown in Figure 2.

**Correlations between Involvement Culture and Performance**

Variables of this study were measured on likert scale (nominal scale) and were converted into weighted data using R-programme to gain atleast approximate interval characteristic (Nguyen, 2013). The extent of linear approximation between two variables was indexed by a statistic known as the Pearson correlation coefficient (*r*) (Jaccard & Becker, 1997), which can assume any value from -1.00 to +1.00 inclusive. The size of the absolute value provides an indication of the strength of the relationship. A correlation coefficient of -1.00 or +1.00 and -0.50 or +0.50 indicates perfect and moderate correlation respectively (Pallant, 2007). However, in behavioural science research, where complex behaviours are studied, significant correlation of 0.20 to 0.30 (and -0.20 to -0.30), are often considered important (Jaccard & Becker, 1997). The variable that was identified to have significant association with several other variables was further analysed through a stepwise regression process to reveal whether it (as a criterion) could be predicted or explained by those variables (as predictors). In this study, 43 factors which included 9 factors of involvement culture (IC), 9 of consistency culture (CC), 9 of adaptability culture (AC), 9 of mission culture (MC), and 7 of CEO values (CV) were used to test the hypotheses and answer the research questions. The correlation analysis was performed to identify aspects of the relationship among these dimensions. Table 6 shows the Pearson’s Bivariate correlation between organisational performance and involvement culture.

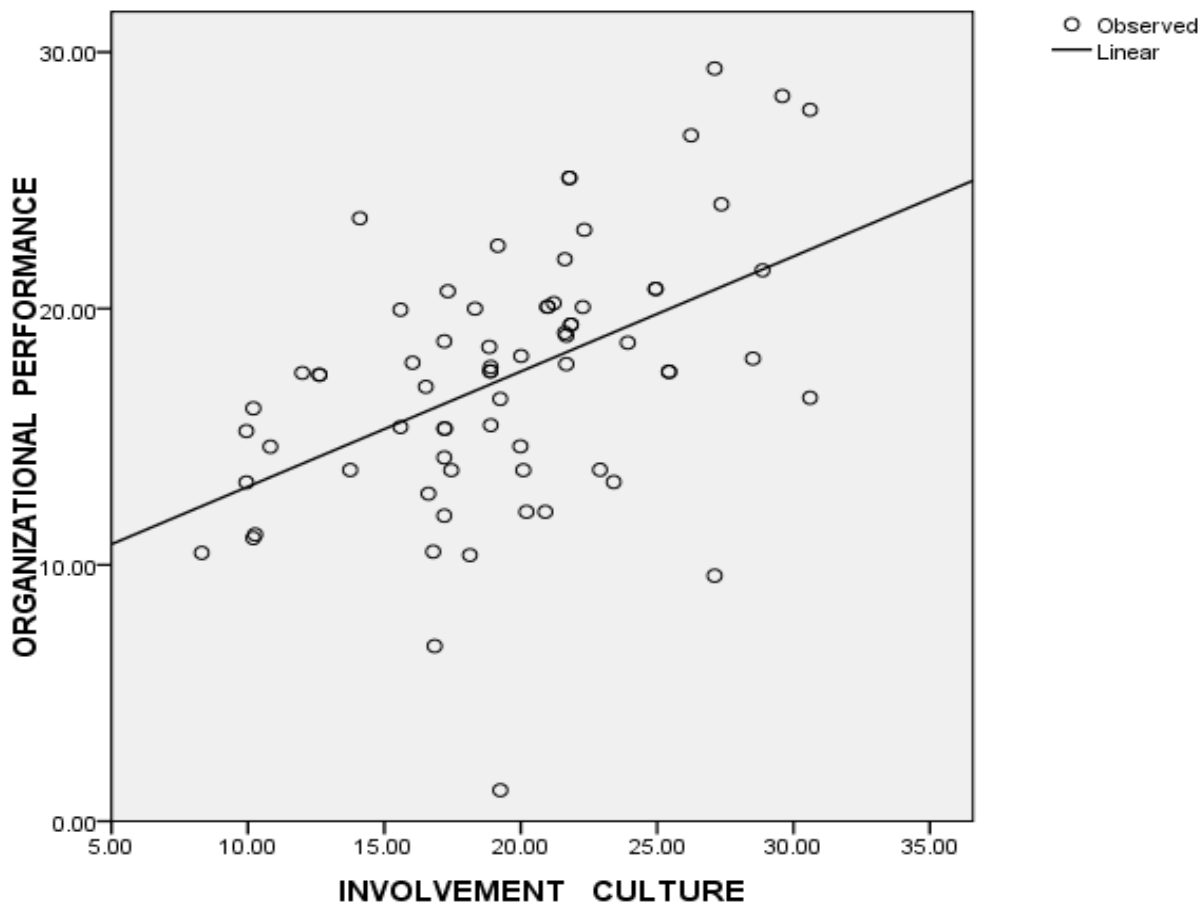
TABLE 6: CORRELATION BETWEEN ORGANISATIONAL PERFORMANCE AND INVOLVEMENT CULTURE

Variable		Organizational Performance	Involvement Culture
Organizational Performance	Pearson Correlation	1	0.474**
	Sig. (2-tailed)		0.000
Involvement Culture	Pearson Correlation	0.474**	1
	Sig. (2-tailed)	0.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The result shows that involvement culture is positively and significantly associated ( $r = 0.474$ ,  $p\text{-value}=0.000$ ) to organisational performance. This is further supported by the scatter plot diagram in Figure 3.

FIGURE 3: SCATTER PLOT ON RELATIONSHIP BETWEEN INVOLVEMENT CULTURE AND ORGANISATIONAL PERFORMANCE



A scatter diagram is a type of mathematical diagram using Cartesian Coordinates to display values for two variables for a set of data. The data are displayed as a collection of points on the horizontal and vertical axes (Kimutai, 2014). The results show that as magnitude of involvement culture increases organisational performance increases in the same positive direction and therefore the two variables are correlated positively. Since the two variables are associated with each other, a hypothesis that postulates a significant relationship between the two variables can be tested by examining the correlation between the two (Sekaran & Bourgie, 2010).

**Regression Analysis of Organisational Performance on Involvement Culture**

Table 7 shows that R<sup>2</sup> is 0.225, that is, 22.5% of the variation in organizational performance is explained by the model:

$$Y = b_0 + b_1X_1 + \epsilon \dots \dots \dots \text{Equation 1}$$

Where Y is Organisational Performance, b<sub>0</sub> is the Y intercept, b<sub>1</sub> is the gradient of the regression line, X<sub>1</sub> is Involvement Culture and ε is the error term. This result shows that involvement culture can only explain 22.5% of change in organizational performance and other factors explain 77.5% of variation in organizational performance (Sekaran & Borgie, 2010).

**TABLE 7: VARIATION OF THE REGRESSION MODEL FOR INVOLVEMENT CULTURE**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.474	0.225	0.213	4.4715642

Analysis of variance (ANOVA) determines whether the regression model results in significantly better prediction using the ‘F’ values. The value determines how much variability the model can explain relative to how much it cannot explain. It is the ratio of how good the model is compared with how bad it is (Field, 2009 cited in Kimutai, 2014). The results of ANOVA in Table 8 give a p-value of the above fitted model as 0.000 which is less than the level of significance of 0.05.

**TABLE 8: SIGNIFICANCE OF THE REGRESSION MODEL IN PREDICTION OF ORGANIZATIONAL PERFORMANCE**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	393.869	1	393.869	19.698	0.000
	Residual	1359.652	68	19.995		
	Total	1753.521	69			

This implies a highly significant overall model at 0.000. It can, therefore be concluded that the regression model results in significantly better prediction of organizational performance than if we used the mean value of organizational performance.

In equation 1, b<sub>0</sub> is the Y intercept and this corresponds with value of B in the Table 9 for the constant. From the table the value of b<sub>0</sub> is 8.560 units and this can be interpreted to mean that when involvement culture is not present or embraced by the organizations (X<sub>1</sub> = 0), the model predicts that organizational performance will be 8.560 units.

**TABLE 9: REGRESSION COEFFICIENTS OF INVOLVEMENT CULTURE**

Model	Coefficients			
	B	Std. Error	t	Sig.
1 (Constant)	8.560	2.049	4.178	0.000
(1) INVOLVEMENT CULTURE	0.449	0.101	4.438	0.000

In equation 1, b<sub>1</sub> represents the gradient of the regression line. This line represents change in the outcome associated with a unit change in the predictor. Therefore, the b-value tells about the relationship between organizational performance and involvement culture. If b-value is positive, then the relationship between organizational performance and involvement culture is positive; otherwise it is negative. For data in this study involvement culture had a positive b-value (0.449) indicating a positive relationship, and therefore, as involvement culture improves, organizational performance increases. In addition, the b-value tells to what degree

each predictor affects the outcome. Given  $b$ -value = 0.449, it implies that as involvement culture improves by one unit, organizational performance increases by 0.449 units. When the  $b$ -values are substituted in equation 1, the model can be defined as follows:

$$Y = 8.56 + 0.449 (\text{Involvement Culture}).$$

## HYPOTHESIS TESTING

The hypothesis of the study was as follows:

$H_0$ : Involvement culture has no influence on performance of commercial state corporations in Kenya.

To test this hypothesis, linear regression was performed to determine the level of significance of the relationship between mission culture and organizational performance of commercial state corporations in Kenya. As shown in Table 4.15,  $b_1 = 0.449$ ,  $p = 0.000$ . Since  $p$ -value is less than 0.01, the null hypothesis is rejected and therefore it can be declared that there is a highly significant relationship between mission culture and organizational performance in Kenya's commercial state corporations.

To test whether the regression relationship was not positive, the  $b$ -value was subjected to further analysis using  $t$ -test. Calculated  $t$ -value was compared with the critical  $t$ -value. For involvement culture  $t_{\text{calc}}(69) = 4.438$  while  $t_{0.95}(69) = 1.6672$  at 0.05 level of significance. The null hypothesis was rejected because the calculated  $t$ -value was found to be greater than the critical  $t$ -value and therefore the alternative hypothesis that there was a significant positive relationship between involvement culture and performance of commercial state corporations in Kenya was adopted.

In relation to hypothesis one, there is significant positive relationship between involvement culture and organisational performance. This implies that increase in employee involvement is associated with increase in organisational performance. This finding supports earlier reports by Denison (1984) and Denison and Mishra (1995) that involvement culture is significantly correlated with return on assets. There are several reasons why employee involvement is related to performance. Organizations that have participative corporate cultures and well-organized workplaces have better performance records than those that do not have (Denison 1984). Receiving input from organization members tend to increase the quality of decision and improve their implementation. Profitability goals set by organizations are easily achieved when employees are involved in decision-making. Involvement empowers, and empowerment increases motivation. Superior performance capabilities are created by employee empowerment. Organizations in which employees are involved in decision making will achieve their goals better than those that do not involve employees in decision-making (Amah, 2012). Parastatals that set unattainable targets without inputs from their employees have witnessed high employee turnover.

Other studies have shown that employee involvement is positively related to productivity (Rossler & Koelling, 1993). There are several possible explanations for this significant relationship. Employees reduce cost through recommendations to senior executives and this result in higher productivity. Involvement creates a sense of ownership and responsibility amongst employees and this motivates them to be more productive. Involvement increases commitment to the organization amongst employees. Committed employees are more productive than uncommitted employees. Empowerment enhances creativity in employees and this could lead to increased productivity. The finding suggests that organizations in which employees are involved will be more productive than those in which they are not involved. Parastatals in Kenya need to involve employees as much as possible to improve both the organizational processes and the individuals themselves. Denison (1990) stated that effective organizations require a high level of involvement. The finding that employee involvement is positively related to productivity is also supported by Kelleher (1995) in (McShane & Von Glinow 2006) who stated that the strength of Southwest comes not from products or services but from a unique culture and management philosophy that emphasizes employee involvement and empowerment. Based on the results one can say that involvement and organisational performance are positively related.

## CONCLUSIONS

This study confirms the work of Denison (1990) and from the findings, it can be concluded that involvement culture had a positive and significant role in performance of commercial state corporations in Kenya. This is consistent with empirical literature.

## RECOMMENDATIONS

Boards of Directors of Commercial State Corporations in Kenya need to consider corporate culture as an important ingredient in the performance of the corporations. To turn around the corporations and achieve high performance they need to build and sustain a culture of involvement.

## REFERENCES

1. Amah Edwinah, (2012). Corporate culture and organisational effectiveness: a case study of the Nigerian banking industry. *European Journal of Business and Management*, 4 (8) 212-229
2. Bavik, A. (2014). Developing the hospitality industry organizational culture scale: A New Zealand case study. Doctor of Philosophy Thesis University of Otago, New Zealand.
3. Behr, E. T. (1998). Acting from the center. *Management Review*, 87(3), 51-55.
4. Christensen, L.B. (1997). *Experimental methodology*, (7th ed.). Boston: Allyn & Bacon.
5. Chumo, B. (2013). *Effects of Chief Executive Officers' turnover and succession on the performance of state corporations in Kenya*. PhD Thesis, Jomo Kenyatta University of Agriculture and Technology.
6. Cooper, D.R & P.S. Schindler, (2014). *Business research methods*. New York, McGraw-Hill/Irwin series.
7. Cortina, J.M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78, 98-104.
8. Denison, D. R. (1984). Bringing corporate culture to the bottom line. *Organizational Dynamics*, 13 (2) 4-22.
9. Denison, D. R. (1990). *Corporate culture and organizational effectiveness*. New York: Wiley.
10. Denison, D.R. and Mishra, A.K. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science*, 6 (2), 204-223.
11. Hair, J. et al. (2006). *Multivariate data analysis* (6<sup>th</sup> edition). Uppersaddle River, N.J.: Pearson Prentice Hall
12. Hosseini, S.A. (2014). Components of organizational culture based on Denison model. *Arabian Journal of Business and Management Review*, 3(12a),31-42.
13. Jaccard, J., & Becker, M. A. (1997). *Statistics for the behavioral sciences* (3rd ed.). Pacific Grove, CA, USA: Brooks/Cole Pub. Co.
14. Kelleher, D. (1996). A defence of the use of the term ethnicity and culture. In Kelleher, D. & Hillier, S. (Eds) *Researching cultural differences in health*. London. Routledge.
15. Kibui, A. W. et al. (2014). Role of talent management on employees retention in Kenya: a survey of state corporations in Kenya: Empirical review. *International Journal of Science and Research (IJSR)* 3 (2) ISSN (Online): 2319-7064
16. Kimutai, G. (2014) Role of quality management system certification factors on health workforce performance in Kenyan referral hospitals. PhD thesis, JKUAT.
17. Lahiry, S. (1994). Building commitment through organizational culture. *Training and Development*, 3, 50-52.
18. Liu, Kiley & Ballard (2009). The relationship between organisational culture and effectiveness in the Western Cape banking industry. *Journal of Business and Management Dynamics*, 3(1), 1-17.
19. Lok, P., & Crawford, J. (2004). The effects of organizational culture and leadership style on job satisfaction and organizational commitment. *Journal of Management Development*, 23(4), 321-338.
20. Mahmudah, E. W., (2012). Effects of organizational culture and ability on organizational commitment and performance in Ibnu Sina hospital, Gresik. *Academic Research International*, 2(1), 349-355.
21. Mckinnon, J. L., Harrison, G. L., Chow, C. W., & Wu, A. (2003). Organizational culture: Association with commitment job satisfaction, propensity to remain, and information sharing in Taiwan. *International Journal of Business Studies*, 11(1), 25-44.

22. McShane, S & von Glinow. (2006). *Organisational behaviour*. McGraw-Hill Higher Education.
23. Mouton, S. & Marais, H.C. (1994). *Basic concepts in the methodology of the social sciences*. Pretoria: HSRC.
24. Muhammad, A.K., (2008). *Organizational culture and its impact on organizational performance*. PhD thesis, National University of Modern Languages, Islamabad.
25. Mwaura, K. (2007). The failure of corporate governance in state owned enterprises and the need for restructured governance in fully and partially privatized enterprises: The case of Kenya. *Fordham International Law Journal*, 33(1).
26. Nguyen, H. N. (2009). *The impact of leadership behaviours and organisational culture on knowledge management practices in small and medium enterprises*. PhD thesis, Griffith University.
27. Nguyen, T. P., (2015). The Corporate Culture and its Effect on Managerial Effectiveness in Vietnamese Companies; *Proceedings of the Second Asia-Pacific Conference on Global Business, Economics, Finance and Social Sciences (AP15Vietnam Conference) ISBN: 978-1-63415-833-6 Danang-Vietnam, 10-12 July, 2015 Paper ID: VL531*
28. Nworgu, B.G. (1991). *Educational research: basic issues and methodology*, Ibadan: Wisdom Publishers Ltd
29. Ong'ong'e, M. (2012) The effect of autonomy on financial performance of commercial state corporations in Kenya. MBA Project Report, University of Nairobi.
30. Pallant, J. (2007). *SPSS survival manual: a step-by-step guide to data analysis using SPSS for Windows (Version 15) / Julie Pallant (3rd ed.)*. Crows Nest, N.S.W.: Allen & Unwin.
31. Pettinger, R. (2000). *Mastering organisational behavior*. New York: Palgrave.
32. Philip, G. & McKeown, I. (2004). Business transformation and organisational culture: The role of competency, IS and TQM. *European Management Journal*, 22(6):624–636.
33. Ravlin, E. C. & Meglino, B. M. (1987). Effect of values on perception and decision making: A study of alternative work values measures. *Journal of Applied Psychology*, 72(4), 666-673.
34. Rossler, P.E. and Koelling, C.P. (1993). The effect of gain sharing on business performance at a paper mill. *National Productivity Review*, 12, 365-82.
35. Sang, H.W. (2015). *The relationship between human resource management practices and labour productivity in state corporations in Kenya*. PhD thesis, JKUAT.
36. Sekaran, U. (2006). *Research methods for Business: A skill building approach* (4<sup>th</sup> ed.). New Delhi: John Wiley & Sons.
37. Sekeran, U & Bougie, R. (2010). *Research methods for business: A skill building approach* (4<sup>th</sup> ed.). London: John Willey & Sons.
38. Shitakwa, M. (2008). *A Study of the relationship between performance contracting and performance of State – Owned Enterprises: The case of Agricultural Finance Corporation (AFC)*, Unpublished MBA thesis. Nairobi: University of Nairobi.
39. Tashakkori, A, & Teddie, C. (2010). *Handbook of mixed methods in social and behavioural research* (2<sup>nd</sup> edition). Thousand Oaks, CA: Sage
40. Tepeci, M., & Bartlett, A. (2002). The hospitality industry culture profile: a measure of individual values, organizational culture, and person-organization fit as predictors of job satisfaction and behavioral intentions. *International journal of hospitality management*, 21(2), 151-170.
41. Wario, G. (2012) *The role of HRM in intra-firm operationalization of tacit knowledge in Kenyan state corporation*. PhD thesis, JKUAT.
42. Weru, J.M., (2014). *Role of human resource management in adoption of quality management systems among state corporations in Kenya*. PhD thesis, JKUAT.
43. Zain, Z.M. et al (2009). The influence of corporate culture on organisational commitment: a study of Malaysian listed company. *European Journal of Administrative Sciences*, 17: 17-25



## A STUDY ON PATIENTS' SATISFACTION TOWARDS SERVICES PROVIDED BY PRIVATE HOSPITALS IN ERODE TALUK, ERODE DISTRICT

**S. SASIKALA**  
**ASST. PROFESSOR**  
**NAVARASAM ARTS & SCIENCE COLLEGE FOR WOMEN**  
**ERODE**

**DR. C. VADIVEL**  
**PRINCIPAL**  
**BHARATHIAR UNIVERSITY ARTS & SCIENCE COLLEGE**  
**ERODE**


### ABSTRACT

*Healthcare service quality is even more difficult to define and measure than in other sectors. A critical challenge for health services in developing countries is to find ways to make them more client-oriented. The present study aims at analyzing the satisfaction of the patients in private general hospital services. In the present study 150 patients were selected from 21 private hospitals in Erode taluk. Data were collected with validity and reliability questionnaire which were analyzed using chi-square test and weighted score ranking analysis. In this study, 56 % of participants were female. 64% of the respondents were married and they are under the age group of above 45 years. There was a statistically significant relationship between educational qualification of the respondents and patient's satisfaction on expert in diagnosing the diseases and also between monthly family income and level of satisfaction on fees charged. Majority of the respondents are satisfied with Doctors Experience, Doctors punctuality at all times and Expert in diagnosing diseases. From the study it was observed that patient's recommendations regarding Limited time spent for each patient, Intensive care unit (ICU) & lab facilities and Heavy dosage has strongest effect on the satisfaction level of the patients.*

### KEYWORDS

patients satisfaction, private hospitals, Erode district.

### INTRODUCTION

ervice industry has played increasingly important role in the economy. In emerging countries, it has become one of the fastest growing sectors. The rapid growth of this sector has been accompanied by dramatic changes in the environment, challenging health care managers and administrators to find alternative ways of remaining viable.

Healthcare service quality is even more difficult to define and measure than in other sectors. Distinct healthcare industry characteristics such as intangibility, heterogeneity and simultaneity make it difficult to define and measure quality. Healthcare service is an intangible product and cannot physically be touched, felt, viewed, counted, or measured like manufactured goods. Producing tangible goods allows quantitative measures of quality, since they can be sampled and tested for quality throughout the production process and in later use. However, healthcare service quality depends on service process and customer and service provide interactions.

Healthcare services can differ between producers, customers, places, and daily. Healthcare outcomes cannot be guaranteed. Quality healthcare is a subjective, complex, and multi-dimensional concept. Issues related to healthcare quality are crucial to any health system anywhere in the world. Therefore, a survey of patients' opinions regarding the provided service is one of the main tools to measure the quality of healthcare services. There is a general agreement that patient satisfaction is an essential component of service.

Measuring the value of any healthcare resources level refers to healthcare quality. The main aim of healthcare is to provide medical resources of high quality to all. Most people would define healthcare quality as receiving best care possible for one's illness or condition, and for many, it also includes the entire experience of receiving care-including the avoidance of errors or mistakes.

Services can be regarded or disregarded by patients depending on the ratings they base on. Patients' satisfaction is basic. Dissatisfied patients tend to launch complaints to the establishment or seek redress from it more often and dis-suade others from seeking health care services from the system if the systems do not favour them. All healthcare providers should realize the fact, that the main beneficiary of healthcare- system is clearly the patient.

A critical challenge for health services in developing countries is to find ways to make them more client-oriented. Indifferent treatment of patients, unofficial payments to providers, lack of patient privacy, and inadequate provision of medicines and supplies are common, yet are rarely acknowledged by traditional quality assessment methods. Hospitals have expanded in terms of availability of specialties, improved technologies, facilities and increased competition and the expectations of patients and their relatives have increased many fold. Consumer expectation in any medical experience influences whether how soon and how often they seek care from which medical facility. Previously, there were very few government hospitals with no charge to the patients. Hence, the expectations were also very minimal. But now, the scenario has changed. The hospitals (even Govt.) have started charging the patient in the name of user charges. Private hospital care cost has gone very high. With the advent of Consumer Protection Act (1986), the patient's expectation has also gone very high. Now hospitals have to be very careful about patient dissatisfaction to avoid any unnecessary litigation.

### LITERATURE REVIEW

**Mst. JoynabSiddiqua, Md. Ariful HaqueChoudhury (2014)** Service quality has been viewed as a determinant of patient satisfaction. Different dimensions of service quality have been considered by various researchers. This study identifies components of service quality of private Hospitals in Dhaka city. Data are collected from seventeen private hospitals. For gathering data, a questionnaire is designed by closed ended 29 questions and the respondents were 110 patients of different hospitals. The study is exploratory in nature and uses chi –square test to find out the relationship between different variables to identify the most important factors of customer satisfaction with service quality. The research methodology is empirical and a survey of patients (customers) was conducted. The findings reveal that the overall service quality regarding private hospitals are providing satisfactory service to the patients without discriminating by income or occupation. It requires government attention to formulate regulation regarding private midicare system to ensure providing better quality services.

**Dhyana Sharon Ross, Dr. R. Venkatesh (2015)** Patient satisfaction on healthcare quality plays a vital part on the assessment of healthcare frequently. Measuring the value of any healthcare resources level refers to healthcare quality. The main objectives are 1.To analyze factors influencing quality in healthcare and patient satisfaction,2.To study patient perception towards factors influencing quality, and 3.To assess the role of hospital administrators towards quality and patient satisfaction. The study adopted a questionnaire survey amongst patient/attendants and administrators. The hospital chosen for study were all corporate hospitals in the capital city of Tamil Nadu, India. Totally 272 samples were collected, 208 from patients/ attendants and 64 from hospital administrators using simple random sampling technique. Friedman test and chi-square test were used for statistical analysis. The study concludes that physical facilities is the most important factor on healthcare quality, followed by food and behavior of staff and admission procedure from patient perspective. Based on the years of experience of staff the level of understanding on healthcare quality differs widely with high experienced staff with more knowledge on healthcare quality.



## STATEMENT OF THE PROBLEM

Health care sector, like other service organizations has become a highly competitive and rapidly growing service industry around the world. Not only the diseased, even the healthy people visit doctor for a checkup, since prevention is better than cure. It's because of people move far away from natural life, changing food habit, mechanical life, pollution, and western culture. In health care, patients' attitude and satisfaction are considered to be the major indicator to assess the performance of health care organization. The real progress of health care organization lies in how best it can deliver service with respect to health care consumer's needs and wishes.

The private hospitals, on the other hand, enter the health industry for both profit and social enterprises. It already plays and will continue to play a pivotal role in improving the health of the people. This service encourages the customers to visit the hospital repeatedly. Dissatisfaction with public health care sector is also shifting demand toward private health care sector. Hence research is made to conduct the study on patients satisfaction towards services provided by private general hospitals in Erode Taluk.

## OBJECTIVES OF THE STUDY

### MAIN OBJECTIVE

A study on patients' satisfaction towards services provided by private general hospitals in Erode Taluk, Erode district. Tamilnadu, India.

### SECONDARY OBJECTIVES

- To know the socio-economic profile of the respondents.
- To identify the factors that influence the patients to select the hospital.
- To analyze the level of Satisfaction regarding the services offered by the private general hospitals.
- To ascertain the grievances faced by the respondents.
- To offer suggestions to improve the services rendered in the hospitals.

### HYPOTHESES

- Ho: There is a no significant relationship between independent and dependent variable.
- Ha: There is a significant relationship between independent and dependent variable.

Independent variable taken for the study includes Age group, Occupational status, Educational qualification and Monthly income of the respondents. Patients satisfaction was taken as Dependent variable.

## RESEARCH METHODOLOGY

Methodology is the way to solve the research problems systematically. It may be understood as a science of studying how research is done scientifically. The researcher has selected a particular place randomly for survey. The researcher obtained information on the patient (outpatient) Attitude and satisfaction with the services offered by private general hospitals in Erode Taluk, Tamilnadu, India.

**SAMPLING METHOD:** The study samples were collected from private General hospitals in Erode taluk. Erode taluk comprises of only one block named Erode town. There are 21 private general hospitals in Erode taluk. All the hospitals were taken for the study purpose.

**DATA COLLECTION PROCEDURES:** The researcher used a self-administered questionnaire to collect data for the research. Self-administered questionnaire is the survey in which respondents take responsibility for reading and answering the questions. It is considered as a superior mode for minimizing bias and improving response rates. The effects of independent variables on the dependable variable are assessed by the 3-point Likert attitude scale.

Secondary information was gathered from different secondary sources such as books, magazines, journals, newspapers and online databases via internet etc. These data are usually available, can be obtained quickly and inexpensive. Sample survey or cross-sectional survey was the main method to explore attitudes of patients' and satisfaction with private general hospitals in Erode Taluk. This is a method of primary data collection in which information is based on communication with a representative sample of target population at a point in time. In this research, a total of 160 questionnaires were distributed to the patients visiting private hospitals, who met the sampling requirements. A total of 150 questionnaires were returned to the researcher so the response rate is approximately 93.75%. Data collection took nearly 2 weeks from May 20th to May30th, 2016.

**TOOLS FOR ANALYSIS:** Data collected through questionnaire were presented in a master table. From the master table, sub-tables were prepared. In order to analyze and interpret the data simple statistical tools were followed like,

- Simple Percentage analysis.
- Chi-Square analysis.
- Weighted score ranking analysis.

## RESULTS AND RECOMMENDATIONS

TABLE 1: PERCENTAGE ANALYSIS (N=150)

s. no	variables	No. of respondents	Percentage(%)
Gender	Male	84	56
	Female	66	44
Age group	Below 25 years	42	28
	25to 35 years	34	22
	36 to 45 years	26	17
	Above 45 years	48	30
Marital status	Married	96	64
	Unmarried	54	36
Educational qualification	Illiterate	28	18
	Primary level	38	25
	Secondary level	48	32
	College level	36	24
Occupational status	Agriculture	32	21
	Student	19	12
	Employed	33	22
	Business	40	26
	Housewife	26	17
Monthly family income	Rs.10,001 to Rs.20,000	34	22
	Rs.20,001 to Rs.30,000	41	27
	Rs.30001 to Rs.40000	50	33
	Above Rs.40,000	25	16

Source: Primary data

Among the Demographic and socio-economic factors, 56% were males as against 44% females. 64% of the respondents were married, 30% of respondents were comes under the age group of above 45 years. and 32% of the respondents have secondary level of education. 26% were doing business and their monthly family income is between Rs.30001 to Rs.40000.

**TABLE 2: LEVEL OF SATISFACTION WITH REGARD TO DIFFERENT TYPE OF SERVICES RENDERED IN PRIVATE HOSPITAS**

s.no	Factors	Level of satisfaction			
		Highly satisfied	Satisfied	Dissatisfied	Total
1	Experience Doctors	26 (17%)	90 (60%)	34 (23%)	150
2	Doctors are punctual at all times,	19 (13%)	104 (69%)	27 (18%)	150
3	Expert in diagnosing diseases.	46 (31%)	72 (48%)	32 (21%)	150
4	Immediate cure	38 (25%)	82 (55%)	30 (20%)	150
5	Providing proper treatment	51 (34%)	78 (52%)	21 (14%)	150
6	Waiting time of patients.	18 (12%)	76 (51%)	56 (37%)	150
7	ICU & lab facilities.	31 (21%)	39 (26%)	80 (53%)	150
8	Fees charged	15 (10%)	72 (48%)	63 (42%)	150
9	Prescribing more medicine	11 (7%)	63 (42%)	76 (51%)	150
10	Efficiently respond to the patients.	50 (33%)	57 (38%)	43 (29%)	150

Source: Primary data

The above table reveals that, respondents are satisfied with Doctors Experience, Doctors punctuality at all times, Expert in diagnosing diseases. Immediate cure, proper treatment, waiting time. But still some of the factors like ICU & lab facilities., fees charged by the doctors Prescribing more medicine provide dissatisfaction to the respondents for which they need some modifications.

**CHI-SQUARE ANALYSIS**

**TABLE 3.1: AGE GROUP OF THE RESPONDENTS AND OVERALL SATISFACTION (Two-way table)**

S.No	Age group	Level of satisfaction			Total
		Highly satisfied	Satisfied	Dissatisfied	
1	Below 25 years	8 (22%)	14 (19%)	12 (29%)	34
2	25-35years	10 (27%)	22 (30%)	10 (24%)	42
3	36-45 years	7 (19%)	13 (18%)	6 (15%)	26
4	Above 45 years	12 (32%)	23 (32%)	13 (32%)	48
	<b>Total</b>	<b>37</b>	<b>72</b>	<b>41</b>	<b>150</b>

Source: Primary data

**TABLE 3.2: AGE GROUP OF THE RESPONDENTS AND OVERALL SATISFACTION (Chi-Square test)**

Factors	Calculated value (X <sup>2</sup> )	Table value	Degree of freedom	Significant level
Age group	5.00	12.592	6	5%

The above table shows that the calculated chi-square value (5.00) is less than the table value (12.592). So null hypothesis is accepted. Hence there is a no relationship between age group of the respondents and overall satisfaction.

**TABLE 4.1: EDUCATIONAL QUALIFICATION AND LEVEL OF SATISFACTION ON EXPERT IN DIAGNOSING DISEASES (Two-way table)**

S.No	Educational Qualification	Level of satisfaction			Total
		Highly satisfied	Satisfied	Dissatisfied	
1	Illiterate	10 (22%)	8 (11%)	10 (31%)	28
2	Primary level	14 (30%)	18 (25%)	6 (19%)	38
3	Secondary level	12 (26%)	26 (36%)	10 (31%)	48
4	College level	10 (22%)	20 (28%)	6 (19%)	36
	<b>Total</b>	<b>46</b>	<b>72</b>	<b>32</b>	<b>150</b>

Source: Primary data

**TABLE 4.2: EDUCATIONAL QUALIFICATION AND LEVEL OF SATISFACTION ON EXPERT IN DIAGNOSING DISEASES (Chi-Square test)**

Factors	Calculated value (X <sup>2</sup> )	Table value	Degree of freedom	Significant level
Educational qualification	16.73	12.592	6	5%

The above table shows that the calculated chi-square value (16.73) is greater than the table value (12.592). So null hypothesis is rejected. Hence there is a close relationship between educational qualification of the respondents and level of satisfaction on expert in diagnosing the diseases.

**TABLE 5.1: OCCUPATIONAL STATUS OF THE RESPONDENTS AND OVER ALL SATISFACTION** (Two-way table)

S.No	Occupational Status	Level of satisfaction			Total
		Highly satisfied	Satisfied	Dissatisfied	
1	Agriculture	8 (22%)	14 (19%)	10 (24%)	32
2	Student	6 (16%)	8 (11%)	5 (12%)	19
3	Employed	7 (19%)	17 (24%)	9 (22%)	33
4	Business	11 (30%)	19 (26%)	10 (24%)	40
5	Home maker	5 (13%)	14 (19%)	7 (17%)	26
	<b>Total</b>	<b>37</b>	<b>72</b>	<b>41</b>	<b>150</b>

Source: Primary data

**TABLE 5.2: OCCUPATIONAL STATUS AND OVERALL SATISFACTION** (Chi-Square test)

Factors	Calculated value (X <sup>2</sup> )	Table value	Degree of freedom	Significant level
Occupational status	29.99	15.507	8	5%

The above table shows that the calculated chi-square value (29.99) is greater than the table value (15.507). So null hypothesis is rejected. Hence there is a close relationship between the Occupational status of the respondents and overall satisfaction.

**TABLE 6.1: MONTHLY FAMILY INCOME AND LEVEL OF SATISFACTION ON FEES CHARGED** (Two-way table)

S.No	Monthly income	Level of satisfaction			Total
		Highly satisfied	Satisfied	Dissatisfied	
1	Rs.10000-Rs.20000	12 (27%)	14 (19%)	8 (25%)	34
2	Rs.20001-Rs.30000	10 (23%)	25 (34%)	6 (19%)	41
3	Rs.30002-Rs.40000	10 (23%)	30 (40%)	10 (31%)	50
4	Above Rs.40000	12 (27%)	5 (7%)	8 (25%)	25
	<b>Total</b>	<b>44</b>	<b>74</b>	<b>32</b>	<b>150</b>

Source: Primary data

**TABLE 6.2: MONTHLY FAMILY INCOME AND LEVEL OF SATISFACTION ON FEES CHARGED** (Chi-Square test)

Factors	Calculated value (X <sup>2</sup> )	Table value	Degree of freedom	Significant level
Monthly income	20.15	12.592	6	5%

The above table shows that the calculated chi-square value (20.15) is greater than the table value (12.592). So null hypothesis is rejected. Hence there is a close relationship between monthly family income and level of satisfaction on fees charged.

**TABLE 7.1: EDUCATIONAL QUALIFICATION AND OVER ALL SATISFACTION** (Two-way table)

S.No	Educational Qualification	Level of satisfaction			Total
		Highly satisfied	satisfied	Dissatisfied	
1	Illiterate	10 (27%)	12 (17%)	6 (15%)	28
2	Primary level	10 (27%)	22 (30%)	6 (14%)	38
3	Secondary level	8 (23%)	25 (35%)	15 (37%)	48
4	College	9 (24%)	13 (18%)	14 (34%)	36
	<b>Total</b>	<b>37</b>	<b>72</b>	<b>41</b>	<b>150</b>

Source: Primary data

**TABLE 7.2: EDUCATIONAL QUALIFICATION AND OVERALL SATISFACTION** (Chi-Square test)

Factors	Calculated value (X <sup>2</sup> )	Table value	Degree of freedom	Significant level
Educational qualification	10.68	12.5	6	5%

The above table shows that the calculated chi-square value (10.68) is less than the table value (12.5). So null hypothesis is accepted. Hence there is no significant relationship between educational qualification of the respondents and overall satisfactions.

**WEIGHTED SCORE RANKING ANALYSIS**

**TABLE 8: REASONS TO CHOOSE THE HOSPITAL**

s.no	Reason	Score	Rank
1	Nearby residence /location.	431	V
2	Hospital reputation.	482	IV
3	Guidance given by the doctors regarding treatment.	513	III
4	Good treatment.	577	I
5	Experienced doctors.	538	II
6	Lower fees charged.	412	VI
7	Lab facilities.	389	VII

Source: Primary data

In this study, the respondents were asked to rank the various attributes which induces them to visit the hospitals for getting treatment. The factors were given 1 to 7 ranks in which the respondents rank 1 for the most important factor and 7 for the least important factor. In our study the respondents ranked Good treatment, Experienced doctors. Guidance given by the doctors regarding treatment are the most important factors with the highest score. The other factors such as fees charged and lab facilities with least score resist the patients to visit the hospitals.

TABLE 9: GRIEVANCES REGARDING THE SERVICES

s.no	Grievances	Score	Rank
1	High fees charged.	500	VI
2	Limited time spent for each patients	625	I
3	ICU & lab facilities	608	II
4	To intake more medicine.	532	IV
5	No proper treatment	375	IX
6	Heavy dosage	553	III
7	Side effects	514	V
8	Waiting time	414	VII
9	No politeness	392	VIII

Source: Primary data

It is highlighted from the above table that maximum of the respondents feel that doctors are spending only Limited time for each patient. The second problem ranked by the respondents is un satisfactory ICU & lab facilities with the score of 608 points, Heavy dosage is the Third problem ranked by the respondents with the score of 553 points, The fourth problem ranked by the respondents is Doctors advice to intake more medicine with the score of 532 points, The fifth problem ranked by the respondents is "Side effects" with the score of 514 points and the sixth problem ranked by the respondents is "High fees charged" with the score of 500 points. The factor "waiting time occupies seventh place with the score of 414 points, "No politeness" occupies eighth place with the score of 392 points, and the last factor which does not affect the respondents is "No proper treatment" with the score of 375 points.

## RECOMMENDATIONS

- From the study it was seen that with regards to the time spent by the doctors during consultation, patients were not satisfied and they were rated as the first grievance. Hence the doctors are asked to spend more time to discuss with the patients and there by the doctors could know the details of the patients which in turn create trust among them.
- As regards to ICU & lab facilities, 53% of the patients are not having any good opinion. This shows that general hospitals are not possessing well equipped ICU and lab facilities. patients feel inconvenient if they are asked to get their lab test from outside laboratories. So it is recommended to maintain well versed ICU & laboratories in the hospital campus itself.
- According to the respondents, medicines provided by the doctors should cure the patients from the disease. It seems that patients are instructed to more medicine and heavy dosage cause side effects to the patients. The doctors are suggested to give guidelines to the patients regarding the reasons for in taking the medicine, food habits to be followed, preventive measures to safeguard themselves etc. while prescribing the medicine.
- The study results showed that there is a close relationship between monthly family income of the respondents and the fees charged by the doctors. Income is the most hesitating factor which restricts majority of the respondents to take treatment in multi -speciality hospitals and the like. Doctors foremost aim is to render service to the society and considering the income level of the patients, the fees is to be charged to the patients.

## CONCLUSION

From the study findings, it was concluded that patients were generally satisfied with good treatment, experienced doctors guidance given by the doctors to the patients, but with some factors like ICU and lab facilities, time spent for patients they were not satisfied. Dissatisfied patient never visits further and also not recommend others to get treatment. Now a day's hospitals are emerging with latest technologies in order to meet out the needs of the patients, and also to become leading hospitals in the surroundings. It is known to the general hospitals that they should also update the infrastructure as well as technological forces for the benefit of both. Hence more concentration is to be made by the doctors regarding the above factors in order to win the confidence of the respondents.

## LIMITATIONS OF THE STUDY

- Due to time constraints sample size has been restricted to 150 respondents only.
- As this study contained the respondents at Erode taluk alone, this findings and suggestions are applicable only to Erode taluk, Erode District.

## SCOPE FOR FUTURE REFERENCE

This study used the sample of patients in 21 private hospitals in Erode taluk. A study using a more representative sample including hospitals in other parts of Erode District would be useful to further verify and compare the findings across regions. The current research, however, presents some limitations that future studies could address, and also suggests several areas in which this research could be further extended.

## REFERENCES

1. Andaleeb, S., (2001). Service quality perceptions and patient satisfaction: a study of hospitals in a developing country. *Journal of Social Science & Medicine* vol.52(9): 1359-1370.
2. Dhyana Sharon Ross, Dr. R. Venkatesh (2015). An Empirical Study of the Factors of Healthcare and Its Effects on Patient Satisfaction, *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 4, Issue 2.
3. Donabedian A (1980). *The definition of quality and approaches to its assessment*. Ann Arbor: Michigan Health Administration Press; 1980.
4. HEU (2003) Bangladesh National Health Accounts 1999- 2000. Dhaka: Health economics unit, ministry of health and family welfare, government of Bangladesh, pp. 63-71.
5. McLaughlin CP, Kaluzny AD (2006). *Continuous quality improvement in health care*. 3rd Ed. Sudbury, MA: Jones & Bartlett Publishers;
6. Mosadeghrad AM. A conceptual framework for quality of care. *Mat Soc Med* 2012; 24: 251-61. doi: 10.5455/msm.2012.24.251-261
7. Mosadeghrad AM. (2012). Towards a theory of quality management: an integration of strategic management, quality management and project management, *International Journal of Modelling in Operations Management*; vol.2, pp. 89-118.
8. Mst. JoynabSiddiqua Md. ArifulHaqueChoudhury, (2014). Service Quality: An Empirical Study of Private Hospitals in Dhaka City, *ASA University Review*, Vol. 8 No. 1, pp.15-27.
9. Nyer, P. (1999). Cathartic complaining as a means of reducing consumer dissatisfaction. *Journal of Consumer Dissatisfaction, Dissatisfied and Complaining Behavior*, vol.12, pp. 15-25.
10. Param Hans Mishra, Tripti Mishra (2014). Study of Patient Satisfaction at a Super specialty Tertiary Care Hospital, *Indian Journal of Clinical Practice*, Vol. 25, No. 7.

11. Pooja Devija, Santosh Bhandari, Sanjay Agal (2012). Factors Influencing the Patients in Attaining Satisfaction by the Services Provided in the Hospital, *International Journal of Management & Business Studies*, Vol. 2, Issue 3.
12. Säilä, T. M. E. K. M. A. P. K. M., (2008). Measuring patient assessments of the quality of outpatient care: a systematic review, *Journal of Evaluation in Clinical Practice*, vol.14, pp. 148-154.
13. SRuyter, K. B. J. P. P., (1997). Merging service quality and service satisfaction. An empirical test of an integrative model, *Journal of Economic Psychology*, vol.18, pp. 387-406.
14. World Health Organization. *The World Health Report 2000 –Health Systems: Improving Performance*. Geneva: WHO, 2000
15. Zaim, H., Bayyurt, N., & Zaim, S. (2010). Service quality and determinants of customer satisfaction in hospitals: Turkish experience, *International Business & Economics Research Journal*, vol.9 (5), pp.51-58.

**A STUDY ON MARKET MOVEMENT IMPACT ON MUTUAL FUND SUBSCRIPTIONS AND REDEMPTIONS**

**Y. JAYA RADHA SANKAR**  
**ASSOCIATE PROFESSOR**  
**ST MARTIN'S INSTITUTE OF BUSINESS MANAGEMENT**  
**SECUNDERABAD**

**DR. P. DIANA DAVID**  
**PRINCIPAL**  
**ST MARTIN'S INSTITUTE OF BUSINESS MANAGEMENT**  
**SECUNDERABAD**

**LEELA CHAKRAVARTHI AKULA**  
**STUDENT**  
**ST. MARTINS INSTITUTE OF BUSINESS MANAGEMENT**  
**SECUNDRABAD**

**ABSTRACT**

*Mutual funds in India are playing key role in capital market after liberalization of financial markets. Investment community of mutual funds normally observes the capital market growth and will take the advantage by mobilizing their funds in mutual funds. My study has been emphasized how Equity market bench mark is influencing the mutual fund subscription and redemption decision. Granger causality test has been on Johansen co integration data and fund that equity market capital is influenced by nifty but it had failed to influence the mutual fund market capitalization. Vector auto regression model results unveils that the redemption of mutual fund are more influenced by Nifty movement then the subscription of mutual fund. This paper is useful to Asset Management Companies, Fund managers, regulators, and Investment community.*

**KEYWORDS**

Nifty data, FII and DII, NFO's each year, Indian equity market capitalization, mutual fund purchase and sales data.

**INTRODUCTION**

These days we are getting wind more and more about mutual funds as a means of investment. If you are in the manner of most people, you probably have most of your money in a bank savings account and your biggest investment may be your home. Apart from that, investing is perhaps something you simply do not have the time or knowledge to get involved in. This is why investing through mutual funds has become such a widespread way of investing. Asset management companies are helping the Investors who are not having knowledge of equities by providing professional investment assistance through fund manager. In financial markets mutual funds are becoming forefront option to the investors. Equity markets taking countable turn towards mutual funds. Investors observe equities to take investment decisions in mutual funds. In this study we observed, when equities are moving upwards how mutual fund investors are behaving. We also examined, when equity market is performing in positive manner whether the investors are subscribing or withdrawing their holdings from mutual fund segment. Also observed how markets are influencing in terms of percentage and the percentage of amount getting influenced by equities market.

**REVIEW OF LITERATURE**

**Dr. Binod Kumar Singh:** In this paper, structure of mutual fund, operations of mutual fund, comparison between investment in mutual fund and bank and calculation of NAV etc. have been considered. In this paper, the impacts of various demographic factors on investors' attitude towards mutual fund have been studied. For measuring various phenomena and analyzing the collected data effectively and efficiently for drawing sound conclusions, Chi-square ( $\chi^2$ ) test has been used and for analyzing the various factors responsible for investment in mutual funds, ranking was done on the basis of weighted scores and scoring was also done on the basis of scale.

**Dr. Sarita bahl\*; meenakshi rani\*\*:** The present paper investigates the performance of 29 open-ended, growth-oriented equity schemes for the period from April 2005 to March 2011 (six years) of transition economy. Monthly NAV of different schemes have been used to calculate the returns from the fund schemes. BSE-sensex has been used for market portfolio. The historical performance of the selected schemes was evaluated on the basis of Sharpe, Treynor, and Jensen's measure whose results will be useful for investors for taking better investment decisions. The study revealed that 14 out of 29 (48.28 percent) sample mutual fund schemes had outperformed the benchmark return. The results also showed that some of the schemes had underperformed; these schemes were facing the diversification problem. In the study, the Sharpe ratio was positive for all schemes which showed that funds were providing returns greater than risk free rate. Results of Jensen measure revealed that 19 out of 29 (65.52 percent) schemes were showed positive alpha which indicated superior performance of the schemes.

**Mohamed.zaheeruddin\*Pinninti Sivakumar\*\*K. Srinivas Reddy\*\*\*:** This article on mutual funds tries to find Mutual Fund companies are financial intermediaries providing financial services to small investors through mobilization of funds, when the investors invest in a mutual fund they are buying shares or units of the mutual fund and become a shareholder of the fund. Mutual funds are one of the best investments ever created because they are very cost efficient and very easy to invest in. Thus the Rupee is generated in the form of big returns to promote financial excellence. The financial reforms and cut throat competition in the economic environment the mutual fund industry has opened new vistas to interested investors and imparted much needed liquidity to the Indian financial system. In a jungle evolution of financial service sector in India investors are unable to recognize and select the benchmarking companies. The study examines the performance of mutual funds based on their fund return, risk and performance ratios.

**NEED OF THE STUDY**

The need of this study "A STUDY OF MARKET MOVEMENT IMPACT ON MUTUAL FUND SUBSCRIPTIONS AND REDEMPTIONS" is intended to know the performance of mutual funds segment based on behaviour of the equity markets. Equity markets fluctuations are influencing the mutual fund investors subscriptions and redemptions decision making. There is a need to know how asset management companies new fund offerings are effecting by the secondary market fluctuations and Investors sentiment is influencing the investments of mutual funds, based on that how equity market bench mark will behave.

**OBJECTIVES OF THE STUDY**

1. To study the relationship between mutual fund NFO's, nifty with FII and DII.
2. To measure the impact of nifty on market capitalization of equity and mutual fund investments.

- To examine the impact of stock market bench mark on mutual fund subscription and redemption.
- To analyze the influence of mutual fund subscriptions and redemptions on equity market capital growth rate.

**SCOPE OF THE STUDY**

In this analysis 46 AMC's data have been considered from the period 2000-2015. Mutual fund ETFs has been considered as bench marking for mutual funds which is traded in National stock exchange. Asset management companies which issued New Fund offerings (NFO's) in primary market were considered. Equity market capitalization of Bombay Stock exchange considered as.

**EMPERICAL STUDY**

- NIFTY data : NSE India
- FII and DII : Money control
- NFOs each year : SEBI
- Indian Equity market capitalization : BSE India
- Mutual fund purchase and sales data. : SEBI

**RESEARCH METHODOLOGY**

This paper has been done based on secondary data by using descriptive statistical tools. The following formula's were applied on 4 objectives.

- Eviews software
- SPSS software
- Bi-variate correlation:** Bi-variate correlation is a measure of the relationship between the two variables; it measures the strength of their relationship, which can range from absolute value 1 to 0. The stronger the relationship, the closer the value is to 1. The relationship can be positive or negative; in positive relationship, as one value increases, another value increases with it. In the negative relationship, as one value increases, the other one decreases.

$$r = \frac{\sum XY - \frac{\sum X \sum Y}{N}}{\sqrt{(\sum X^2 - \frac{(\sum X)^2}{N})(\sum Y^2 - \frac{(\sum Y)^2}{N})}}$$

- Johansson Co-Integration Test:** Co- integration is a statistical property of time series variables. Two or more-time series are co-integrated if they share a common stochastic drift. If two-time series x and y are co-integrated, a liner combination of them must be stationary.  $Y - \beta x = u$  Where u is stationary.
- Granger causality test:** Granger causality test is a statistical hypothesis test for determining whether one-time series is useful in forecasting another. A time series X is said to Granger-cause Y if it can be shown, usually through a series of t-tests and F-tests on lagged values of X (and with lagged values of Y also included), that those X values provide statistically significant information about future values of Y.
- Regression curve estimation:** In statistical modeling, regression analysis is a statistical process for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables.
- Augmented Dickey-Fuller Test:** Augmented Dickey-Fuller Test is a test for a unit root in a time series sample. It is an augmented version of the Dickey-Filler test for a larger and more complicated set of time series models.
- Skewness & Kurtosis:** Skewness is a measure of symmetry, or more precisely, the lack of symmetry. A distribution, or data set, is symmetric if it looks the same to the left and right of the center point. Kurtosis is a measure of whether the data are heavy-tailed or light-tailed relative to a normal distribution.

$$Skewness = \frac{\sum(y_i - \bar{y})^3}{(n - 1)^3}$$

- Jarque-Bera test :** The Jarque-Bera test is used to check hypothesis about the fact that a given sample  $x_s$  is a sample of normal random variable with unknown mean and dispersion. As a rule, this test is applied before using methods of parametric statistics which require distribution normality.

The Jarque-Bera test statistic is defined as

$$\frac{N}{6} \left( S^2 + \frac{(K - 3)^2}{4} \right)$$

**DATA ANALYSIS**

- To study the relationship between mutual fund NFO's, nifty with FII and DII

Bi-variant co-relation between mutual fund NFO's, nifty with FII and DII.

TABLE 1

		Correlations			
		MFnfo	Nifty	FII	DII
MFnfo	Pearson Correlation	1	0.115	0.503	0.052
	Sig. (2-tailed)		0.694	0.067	0.859
	N	14	14	14	14
Nifty	Pearson Correlation	0.115	1	0.459	0.29
	Sig. (2-tailed)	0.694		0.085	0.295
	N	14	15	15	15
FII	Pearson Correlation	0.503	0.459	1	0.082
	Sig. (2-tailed)	0.067	0.085		0.771
	N	14	15	15	15
DII	Pearson Correlation	0.052	0.29	0.082	1
	Sig. (2-tailed)	0.859	0.295	0.771	
	N	14	15	15	15

**INTERPRETATION:** The above analysis of Bi-variant co-relation indicates that mutual fund NFO's were having positive co-relation during the study period. Mutual fund NFO's were having moderate co-relation with FII.

- To measure the impact of nifty on market capitalization of equity and mutual fund investments

Johansen co-integration test of Nifty on Market capitalization of equity and mutual fund investments.



TABLE 2

Information Criteria by Rank and Model							
Data Trend:	None	None	Linear	Linear	Quadratic		
Rank or	No Intercept	Intercept	Intercept	Intercept	Intercept		
No. of CEs	No Trend	No Trend	No Trend	Trend	Trend	AIC	SIC
0	-414.5634	-414.563	-410.882	-410.882	-409.326	70.59391	70.95759
1	-409.5463	-402.272	-399.34	-391.246	-389.754	70.75772	71.36385
2	-407.3339	-398.804	-396.87	-382.323	-381.148	71.38898	72.23757
3	-407.1201	-396.628	-396.628	-380.013	-380.013	72.35335	73.44439

**INTERPRETATION:** The above Johansen co-integration test reveals that the log likelihood rank values in between nifty market capital, mutual fund investment is stated to be co-integrated in both non linear and quadratic intercept trend models are observed in decreasing mode along with alpha level. Hence further test can be applied.

**Granger causality test of Nifty and Equity market capital.**

TABLE 3

Null Hypothesis:	Obs	F-Statistic	Prob.
DDEMCAP does not Granger Cause NIFTY	13	1.25534	0.3356
NIFTY does not Granger Cause DDEMCAP		0.50438	0.6219
DMFTEQUITY does not Granger Cause NIFTY	12	0.47995	0.6378
NIFTY does not Granger Cause DMFTEQUITY		1.56704	0.2739

**INTERPRETATION:** The Granger causality test null hypothesis  $H_0$  results indicate that nifty had influenced the equity market capital because null hypothesis  $H_0$  has been rejected and alter negative hypothesis  $H_1$  has been accepted.

Mutual fund investments are not influenced by Nifty fluctuations granger causality probability value is observed significant that is **0.2739**.

The null hypothesis  $H_0$  has been accepted and rejected the alternative hypothesis  $H_1$ .

**3. To examine the impact of stock market bench mark on mutual fund subscription and redemption.**

TABLE 4: VARIABLE PROCESSING SUMMARY

	Variables		
	Dependent		Independent
	Mfsubscription	Mfredumption	Nifty
Number of Positive Values	6	14	15
Number of Zeros	1 <sup>a</sup>	1 <sup>a</sup>	0
Number of Negative Values	8 <sup>b</sup>	0	0
Number of Missing Values	User-Missing	0	0
	System-Missing	14	14

a. The Compound, Power, S, Growth, Exponential, or Logistic model cannot be calculated.

b. The Compound, Power, S, Growth, Exponential, or Logistic model cannot be calculated. The minimum value is \*\*\*\*\*.

TABLE 5: MODEL SUMMARY AND PARAMETER ESTIMATES (Dependent Variable: Mfsubscription)

Equation	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Linear	.093	1.326	1	13	.270	3.954E3	-1.596
Growth <sup>a</sup>	.	.	.	.	.	.	.

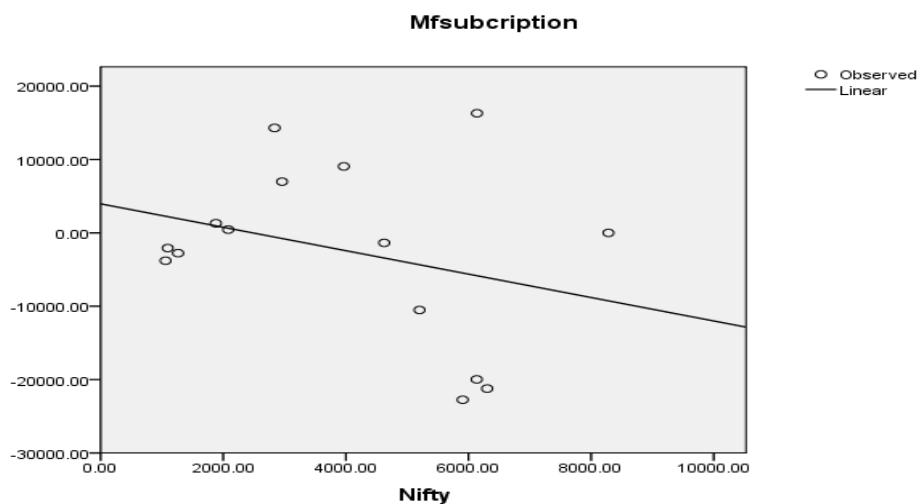
The independent variable is Nifty.

The dependent variable (Mfsubscription) contains non-positive values. The minimum value is -22749.00. Log transform cannot be applied. The Compound, Power, S, Growth, Exponential, and Logistic models cannot be calculated for this variable.

**INTERPRETATION:** The regression curve estimation has been applied with nifty on mutual fund subscription and redemption.

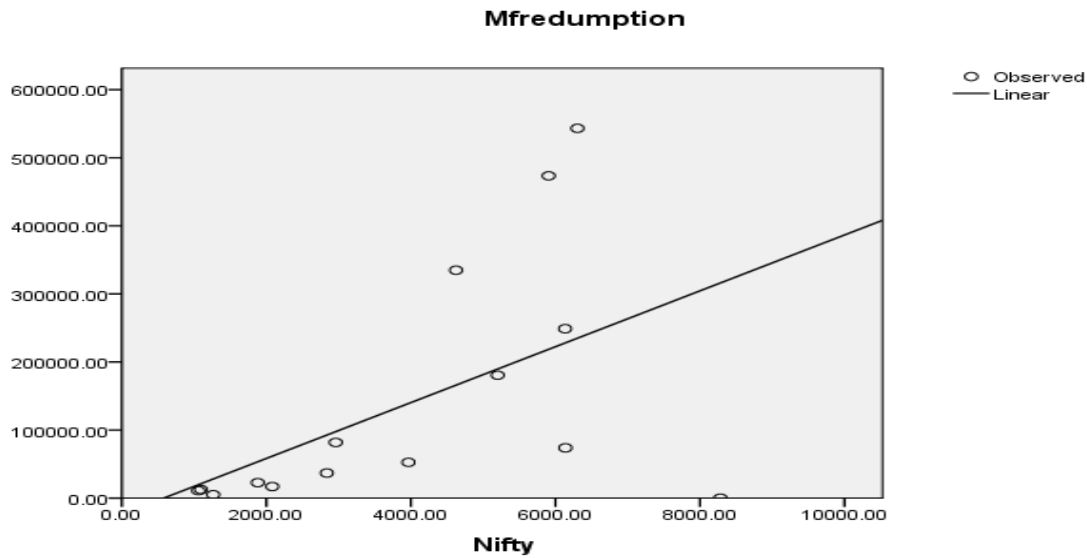
The linear growth probability value is observed significant that is 0.270 which indicates that both buying and selling of mutual funds are influenced the Nifty movement.

GRAPH 1: REGRESSION CURVE ESTIMATION OF MUTUAL FUND SUBSCRIPTIONS WITH NIFTY



**INTERPRETATION:** In the above curve estimation graph indicates that trend line is moving downwards from left to right which means that Nifty is having negative influence on mutual fund subscription.

**GRAPH 2: REGRESSION CURVE ESTIMATION OF MUTUAL FUND REDEMPTIONS WITH NIFTY**



**INTERPRETATION:** In the above graph regression trend line is moving upwards from left to right which indicates that Nifty is having influence on mutual fund redemptions.

**4. To analyze the influence of mutual fund subscriptions and redemptions on equity market capital growth rate.**

**TABLE 6: DATA SIGNIFICANT TEST AMONG NIFTY, MF SUBSCRIPTIONS & REDEMPTIONS**

	Component	Skewness	Kurtosis	Jarque-Bera
Nifty	1	0.084243	0.578566	0.2293
Mfsubscription	2	0.191269	0.53952	0.2122
MfRedemption	3	0.240252	0.641654	0.235

**INTERPRETATION:** The above table results indicate that the data is normally distributed among Nifty, mutual fund subscription and redemption. The probability values of skewness kurtosis and jarque-bera are observed in significant.

**TABLE 7: VECTOR AUTO-REGRESSION TEST**

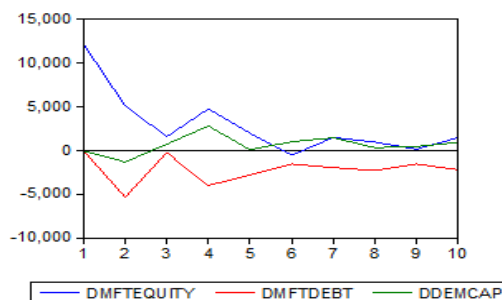
	NIFTY	DMFSUBSCRIPTION	DMFREDEMPTION
<b>NIFTY(-1)</b>	-0.170138	6.189063	-12.18327
	-0.39032	-2.01158	-4.1812
	[-0.43590]	[ 3.07671]	[-2.91382]
<b>NIFTY(-2)</b>	0.457724	-5.948093	30.62322
	-0.41366	-2.13187	-4.43124
	[ 1.10653]	[-2.79008]	[ 6.91076]

**INTERPRETATION:** The above analysis of vector auto regression has been applied to forecast the future movement of mutual fund subscription and redemption based on nifty.

The analysis reveals that mutual fund redemption are increasing when nifty moving down wards. But when Nifty is moving upwards redemption are staying in positive way. Which indicate the investors of mutual fund are observing Nifty to take redemption decision in mutual fund.

**GRAPH 3: POLYNOMIAL GRAPH OF NIFTY FORECAST**

Response of DMFTEQUITY to Cholesky One S.D. Innovations



**INTERPRETATION:** The above graph indicates that subscription trend line is moving above ase line irrespective movement of Nifty but redemption trend line downwards along with the nifty. Hence Nifty fluctuations are having influence on mutual fund redemption.

### FINDINGS

1. This study has focused relationship between mutual fund NFO's, Nifty with FII and DII depicts that mutual fund NFO's were having positive correlation during observed period.
2. This study reveals that Nifty is influencing Equity market capital but mutual fund investments are not influenced by Nifty.
3. Mutual fund subscriptions are not being influenced by Nifty, where as redemption are influencing.
4. It is observed that Nifty is causing Mutual Fund Redemption along with Nifty movement.

### SUGGESTIONS

1. Investors of mutual funds should consider nifty movement before they take redemption decision from the mutual fund investment.
2. Fund manager's strategies will be affected because of huge fluctuations of in & out flow of funds, closed end mutual funds' performance will not be affected as its impact the open ended funds. Investors and fund manager's investments plan will have implemented properly.
3. Though FII's are dominating Indian equity markets but they don't have much influence on mutual funds, mutual fund investors need not to concentrate FII flows to take decision of investment.
4. Mutual funds are dominating the DII's in India, but there is a greater need to make the awareness to investments that are unable to investments directly.
5. Retail investors can also take the advantage of the growth of the economy by taking the investment decision through mutual funds.

### CONCLUSION

We conclude the analysis on mutual fund titled "A STUDYON MARKET MOVEMENT IMPACT ON MUTUAL FUND SUBSCRIPTIONS AND REDEMPTIONS" For the period 2000-2015. This study observed that Nifty movements is influencing the Equity market capital but it is not effecting the mutual fund market capital and subscription of mutual fund. Investors of mutual fund are influenced by the nifty to take a redemption decision. The study reveals that investments into mutual fund are not based on Nifty movements but exit of investment in mutual fund are based on nifty movements.

Hence there is a further scope to do research in this area by considering various factors which may influence investment decision. So that this segment investor can take inform decision.

### LIMITATIONS OF THE STUDY

1. Mutual fund purchase & sales data is not considered for the year 2015.
2. FII, DII & INDIAN BOND INDEX is not considered for the period of 2000-2006.
3. DII data is not considered for the period of 2000-2006.

### REFERENCES

1. [www.bseindia.com/markets/keystatics/Keystat\\_maktcap.aspx?expandable=0](http://www.bseindia.com/markets/keystatics/Keystat_maktcap.aspx?expandable=0)
2. [www.moneycontrol.com/stocks/marketstats/fii\\_dii\\_activity](http://www.moneycontrol.com/stocks/marketstats/fii_dii_activity)
3. [www.nseindia.com/products/content/equities/indices/historical\\_index\\_data.htm](http://www.nseindia.com/products/content/equities/indices/historical_index_data.htm)
4. [www.sebi.gov.in/sebiweb/home/list/4/32/0/0/Handbook%20of%20Statistics](http://www.sebi.gov.in/sebiweb/home/list/4/32/0/0/Handbook%20of%20Statistics)

## EFFECTIVE CHANGE MANAGEMENT

**SINDHU S PANDYA**  
**INCHARGE PRINCIPAL**  
**LAXMI INSTITUTE OF COMMERCE & COMPUTER APPLICATION**  
**SARIGAM**

**ABSTRACT**

Today change is constant and organizational leaders who anticipate change and react rapidly and responsibly are successful. Winners respond to the pace and complexity of change. They adapt, learn and act quickly. Losers try to control and master change in the environment. It is important for the organizational leaders to identify and use a model for transformation that will help their organizations survive and flourish in the next century and beyond. Change is about continually improving the quality of our current practices, while undergoing renewal through innovation and setting a new strategic direction. Change is essential for the development of more flexible structures, and a culture responsive to organizational change. The effective management of change is about taking a proactive approach through making changes in a planned and systematic way using a mix of top-down and bottom-up strategies, listening and leading, concentrating on the core and support components of change, emphasizing the stability of change and improvements in processes as well as the importance of the new strategic direction. All organizations face internal and external challenges that require them to adopt to new circumstances and change aspects what they are and what they do. Change is a constant for all organizations, based on changes to the economy, people entering and leaving organizations, growth and contraction, changes in laws and society, and other internal and external factors. This paper discusses to develop a change management strategy for the organization, manage the people side of change, not just the business side and actively manage resistance to change. Competition has heated up across the board. To succeed, the organization of the future must serve customers better, create new advantages and survive in bitterly contested markets. To stay competitive, companies must do away with work and processes that don't add value.

**KEYWORDS**

change management, skill management uncertainty, insecurity.

**1. INTRODUCTION**

The meaning of managing change – the response to changes over which an organization exercises little or no control. Change management is a set of processes employed to ensure that significant changes are implemented in a controlled and systematic manner. One of the goals of change management is the alignment of people and culture with strategic shifts in the organization. This paper identifies as to why change management fail and focuses on the various types of resistances posed by individuals, groups and organization. The most significant aspect of change is, understanding people's side of change, not only business side.

**2. MANAGING ORGANIZATIONAL CHANGE**

Organizational change is the implementation of new procedures or technologies intended to realign an organization with the changing demands of its business environment, or to capitalize on business opportunities. Organizational change management is the process of recognizing, guiding, and managing these human emotions and reactions in a way that minimizes the inevitable drop in productivity that accompanies change.

Organizations have to deal with new technology, and with upgrades for existing technology. They have to cope with reorganizations, process improvement initiatives, and mergers and acquisitions. The employee who continues to resist, remains angry and is labelled as "difficult" is feeling more threatened and may need some one-to-one time with the manager to discuss the changes or at some point, may need clarification from the manager about performance expectations in light of the changes. There are external and internal triggers for organizational change. External trigger includes: developments in technology, changes in customers' requirements, innovations of competitors, new legislation and government policies, changing domestic and global economy and trading conditions. Internal triggers include: new product service design innovations, appointment of a new senior manager, inadequate skills and knowledge base, office and factory relocation, recognition of problem, new ideas about how to deliver services to customers.

The challenge we face is to learn to move through this wave of transition as easily and creatively as possible. The organizations that succeed at change do so by considering the people who are affected by, will have to live with, and are often crucial to effecting the change. As organizations seek to implement new technology and take other actions to keep themselves competitive in their chosen markets, they must ensure that the changes they implement achieve the full scope of their technical, financial, and human objectives. This is the ultimate objective of the organizational change management process: to ensure that tactics for addressing human reactions to change are fully integrated with other aspects of the implementation in order to achieve the full scope of objectives intended by the initiative.

**3. REASONS OF FAILURE**

- a) **Misunderstanding:** The issue of organizational change is accorded relatively light treatment in practical development situations. Insufficient understanding of the development context, in particular, the constraints embedded in bureaucratic systems, organizational culture and the structure of human interactions can be a stumbling block to change management process.
- b) **Unguided:** Organizational leaders tasked with managing change are engaged in 'a great venture of exploration, risk, discovery and change, without any comprehensive maps for guidance'. A mapping of change management process steps, and ensuring it is consulted on, is the key to its relevance effectiveness.
- c) **Lack of support:** Failure to motivate or convince leadership and middle management of the need for change often leads to the unravelling of a change process, and certainly does not enable the sustainability of even early results.

**4. RESISTANCE TO CHANGE**

Change is a common occurrence within organizations, and resistance to change is just as common. The top obstacle to successful change is employee resistance at all levels: front-line, middle managers, and senior managers. Resistance to change can be broken down into three groups: Organizational-level resistance, Group-level resistance, and individual-level resistance.

**A) ORGANIZATION-LEVEL RESISTANCE**

- i. **Power and conflict:** Resistance to change due to power and conflict occurs when a change may benefit one department within the organization while harming another department within the organization.
- ii. **Organizational Culture:** Resistance due to organizational culture occurs when organizational change disrupts the values and norms within the organizational culture.

**b) GROUP-LEVEL RESISTANCE**

- i. **Group Norms:** Resistance due to group norms occurs when group alters interactions between group members due to changes in task and role relationships within a group.

- ii. **Group Cohesiveness:** Resistance due to group cohesiveness occurs because members of a cohesive group wish to keep things, such as members or tasks, the same within the group.

### C) INDIVIDUAL-LEVEL RESISTANCE

- i. **Uncertainty and insecurity:** Resistance due to uncertainty and insecurity occurs because employees do not know what the outcome of the change will be. Uncertainty is the lack of information out future events. People with a high need for security are also likely to resist change because it threatens their feelings of safety.
- ii. **Habit:** Resistance due to habit occurs when employees are comfortable in their daily habits and do not want to alter them due to change. Habits are hard to break.

## 5. EXHIBITING RESISTANCE TO CHANGE

Employees may exhibit resistance to change:

- a) **Passive Resistance:** it refers to negative feelings and opinions regarding the change. Signs of passive resistance may include “agreeing verbally but not following through, feigning ignorance and withholding information.
- b) **Active Resistance:** it refers to actively opposing the change. Signs of active resistance may include strikes or increased absenteeism.
- c) **Aggressive Resistance:** it refers to behaviour that actually blocks the change. Signs of aggressive resistance may include sabotage. Aggressive resistance is rare and can become dangerous, therefore it should never be allowed.

## 6. DEALING WITH PEOPLE’S SIDE OF CHANGE

The people are the assets of organization. To be effective, we must be able to listen actively, to restate, to reflect, to clarify without interrogating, to draw out the speaker, to lead a discussion, to plant new ideas and to develop them. We have to learn to see things through the eyes of these other inhabitants of the organizational world. The behaviour of organizational workers at all levels determines what organizational changes can be made and what real benefits will be drawn from them. People must therefore understand change and be willing and able to embrace it. The people do not strongly express resistance when the proposed changes are initially unveiled because there is widespread denial that the changes will be pushed through, but it follows denial, anger and bargaining. Depression is the critical period that must be made as brief as possible to allow the targets of change to at least conditionally accept the changes and begin testing new behaviours. During the denial period, any thoughts that the organization might abandon the proposed changes should not be reinforced. The bargaining phase is a good time to express some flexibility in the details of implementation and invite change makers to participate in refining implementation plans. In times of change, large scale organizational change, executives and managers alike make the mistake of thinking that if people are ordered to change, they will. This is a tragic misunderstanding of human behaviour and often leads managers and executives to respond. Transformation happens over time. Change requires the time that it requires, but managing the processes helps acceptance of change come about more quickly, building on your momentum.

## 7. PROPOSED ACTION PLAN FOR MANAGING CHANGE

Best practice recommendations that can help ensure successful results in change management:

- a) **Create a sense of urgency:** The first step in successful change management is to clearly and concisely define the problem statement as the foundation and input into creating the change management vision. The sense of urgency should be real. Effective change requires an open and honest dialogue between leadership, management and employees so that each person in the organization understands the change imperative.
- b) **Develop team leadership:** Senior management must work on developing a leadership team that will help carry out the vision for the change. These agents of change control power centres within the organization and possess the capacity to generate and use power in the changing process.
- c) **Create and communicate a vision for the change:** The change management team must work diligently to guide the organization’s destiny in the desired direction based on realistic planning, transparency, strong leadership and action. To help keep the message at the forefront, frequently and powerfully communicate the vision.
- d) **Remove Hurdles:** As a leader you should recognize the natural barriers to change that exist and planning the appropriate actions to help remove obstacles that will prevent employees from achieving the goals set out for them.
- e) **Continuous Efforts:** it may be easy to rest after seeing initial projects and goals being met. Don’t fall into the trap of taking off the pressure and losing sight of your vision. The real change is a long process that takes continual effort and motivation.

## 8. CONCLUSION

At the end it can be concluded that we should further recognize that we are living in the globalization era, or the Global Age. According to this statement it must be clear that the new economy sets new standards of success and opportunities for small businesses which are related to forming strategic alliance, new technology use, experiences and knowledge exchange among entrepreneurs and leaderships.

This era is one of rapid change, sophisticated communication and technological systems and variables that make preparation for the future complex and fast-paced. In order to be able to be a winner in this type of environment, processes and relationships must be streamlined, non value added activities must be eliminated and people at all levels in organizations must be empowered to rapidly make decisions and held accountable for those decisions. The organizations that do not survive are those that are led by people who fail to invent the future or even adapt to change. This paper identifies the various problems of change and discusses to develop a change management strategy for the organization, manage the people side of change, not just the business side. This paper also proposed action plan to manage change more efficiently and effectively.

## REFERENCES

1. Gotsill, Gina & Meryl Natchez, “From Resistance to Acceptance: How to implement Change Management”, Training and Development, November 2007
2. Hughes, Mark, “The Tools and Techniques of Change Management” Journal of Change Management Vol 7, 2007
3. International Journal of strategic Change Management
4. Journal of Change Management, Emeraldinsight.com
5. Journal of Change Management, Taylor & Francis online
6. Kotter, John P., Leading Change, Boston: Harvard Business School Press
7. Price, A. D. F. & Chahal K., “A Strategic Framework for change Management”, Construction Management and Economics, March 2006

**SUPPLY CHAIN MANAGEMENT PRACTICES IN ORGANIZED RETAILING: A STUDY IN TRICHY REGION****DR. S. SARAVANAN****HEAD****DEPARTMENT OF MANAGEMENT STUDIES****ANNA UNIVERSITY (BIT CAMPUS)****TIRUCHIRAPPALLI****K. S. TAMIL SELVAN****STUDENT****DEPARTMENT OF MANAGEMENT STUDIES****ANNA UNIVERSITY (BIT CAMPUS)****TIRUCHIRAPPALLI****ABSTRACT**

Retailing is one of the fastest growing sectors and in the Western world it is mature and subjected to intense competition. Enlargement and endurance in today's retail world totally depends on sustainable competitive advantage and it requires serious commitment and a customer orientation attitude. Retailers need to distribute information with their suppliers relating to customer buying behaviours. Sharing of information leads to the mutual trust and long terms partnership and involves in fulfilling the customers' needs at low cost. Supply chain management is a set-up of amenities and sharing options that perform the function of procurement of material transformation of these materials into intermediate and finished good and finally the distribution of these goods to the end user. A well supply chain management in organized retailing becomes important for the survival of organized retailers. SCM cut down costs and sustains profits. Today government of India has allowed FDI in retail sector also. This attracts many foreign retail industries to invest in country. The main purpose of this paper is to find the importance of supply chain management in organized retail format and consumer perception towards supply chain management in organized retail format

**KEYWORDS**

supply chain management, foreign direct investment, organized retailing.

**INTRODUCTION**

Rajeev Kumar (2012) defined Supply chain management practices may be defined as a set of actions undertaken to promote effectual and efficient management of supply chains. These include supplier partnership, physical movement of goods, meeting customer demands and information distribution throughout the supply chain. The High Court of Delhi (2004) defined the term 'Retail' as a sale for last utilization in contrast to a sale for further sale or processing (i.e. wholesale), a sale to the final consumer. (High Court of Delhi). Organized Retailing refers to trading activities undertaken by licensed retailers, that those who are registered for sales tax, income tax, etc. It means to have a formal organization to direct and perform activities. These are usually owned by corporate entities. (Dr. A. Murugan, R. Sendamizhi, 2010) Organized retailing in India is on constant increase of its market share from the earlier period. Retailing can be categorized as of different sectors like food and grocery, clothing and textiles, consumer durables, footwear, furniture and furnishing, catering services, jeweler and watches, books, music and gifts, mobile handsets and others. (Dr. Shahid Akhter, Iftekhar Equbal). In this paper I have analyzed different research papers and analyzed supply chain practices in different retail stores and in various regions in India as well as foreign countries. In this paper I have try to analyze the consumer perception towards supply chain practices in organized retail stores with respect to the trichy region

**SUPPLY CHAIN MANAGEMENT**

<b>MR. RAJEEV KUMAR (2012)</b>	Supply chain management practices may be defined as a set of activities undertaken to Promote effective and efficient management of supply chains. These include supplier partnership, physical movement of goods, meeting customer demands and information sharing throughout the supply chain
<b>CHRISTOPHER (2007)</b>	The management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole
<b>DOUGLAS LAMBERT (1997)</b>	supply chain management as the integration of business process from the end user through original suppliers who provide products, services, and information that add value for the customer
<b>CHRISTOPHER (2006)</b>	The process of strategically managing the product procurement, movement, storage and the inventory (and the related information flows) through the organization and its marketing channels in such a way that current and future profitability are maximized through the cost effective fulfillment of orders
<b>JITENDRA SINGH (2010)</b>	Supply chain management deals with the management of materials, information and financial flows in a network consisting of suppliers, manufactures, distributes and customers
<b>LEE AND BILLINGTON (1995)</b>	Supply chain management is often referred to as efficient management of the end-to-end process, which starts with the design of the product or service and ends with the time when it has been sold, consumed, and finally, discarded by consumer
<b>CHAUHAN (2006)</b>	Supply chain management can be explained as the flow of plans, materials and services from the supplier to the consumer including the close cooperation between the various entities in supply chain
<b>INSTITUTE FOR SUPPLY MANAGEMENT</b>	Supply Chain Management is design and management of seamless, value- added processes across organizational boundaries to meet the real needs of end customer
<b>ROGERS (1998)</b>	A supply chain is that network of organizations that are involved, through upstream and downstream linkages, in the different processes and activities that produce value in the form of products and services in the hands of the ultimate customer or consumer
<b>COUNCIL OF SCM PROFESSIONALS</b>	SCM is the delivery of economic value to customers through the management of flow of physical goods and associated information from vendors to customers

**RETAILING**

It can also be defined as the well-timed delivery of goods and services demanded by consumers at prices that are competitive and reasonable. (Ms. Vidushi Handa, Mr. Navneet Grover). In 2004, The High Court of Delhi defined the term 'Retail' as a sale for last consumption in contrast to a sale for further sale or processing (i.e. wholesaler), a sale to the final consumer. (High Court of Delhi). Retailing can be said to be the interface between the producer and the individual consumer buying for personal utilization. This excludes direct interface between the manufacturers and institutional buyers such as the government and other bulk customers



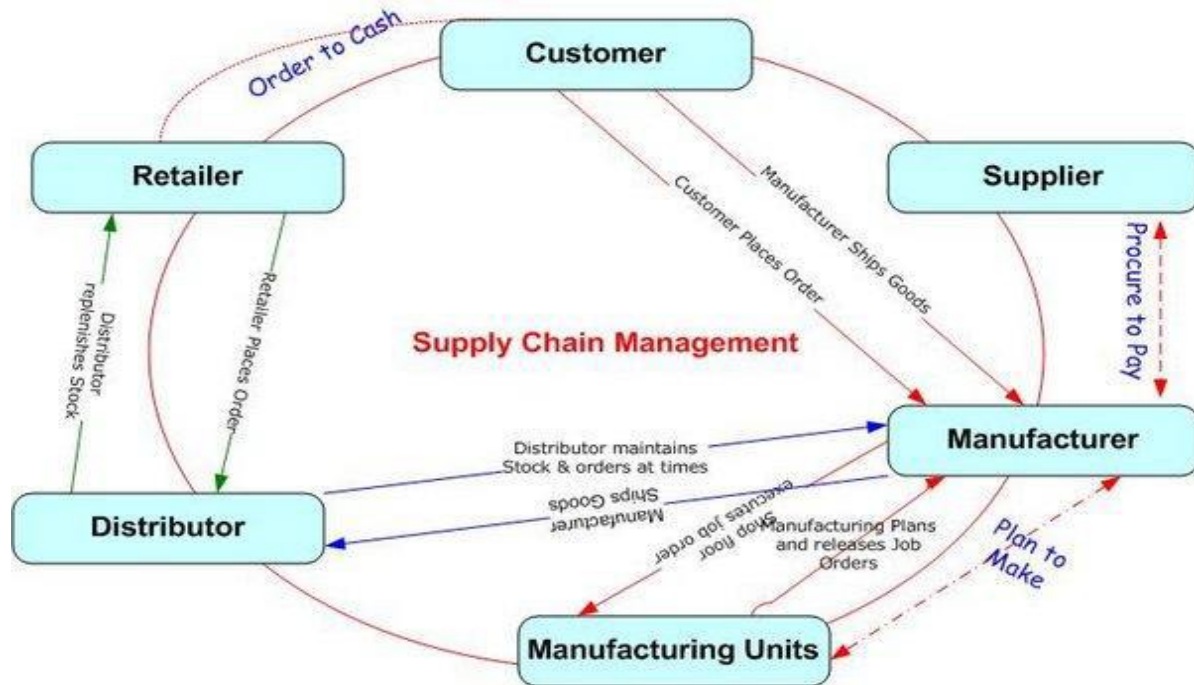
(Ms. Sonia). Retailing consists of all those activities involved in selling directly to ultimate consumers (Cundiff and Still). Retailing is selling to final consumer products to households (McCarthy). Retail is the last step in the distribution process from manufacturer to consumer (Shilpa Raghuvanshi)

**ORGANIZED RETAILING IN INDIA**

Organized retailing refers to the trading practices undertaken by certified retailers those who are registered for sales tax, income tax etc. These include the publicly traded supermarkets, corporate-backed hypermarkets and retail chains, and also the privately owned large retail business (Munjal, Kumar and Narwal, 2011). The retailing has occupied a great position in the market. There are multiple chains running by powerful organizations like Easy Day, More Mega Store, Big Bazaar, Vishal Mega Mart, Reliance Fresh, and Spencer etc. Though the arrival of super markets was a bit late but then too it has fast become the rage of enthusiasts. Indian retail industry is witnessing a paradigm shift as the sector is getting organized and consumers are looking for a one-stop shopping place with convenience and entertainment. Professionally managed and independently owned retail organizations are the face of today’s retail sector (KSA Techno park, 2006)

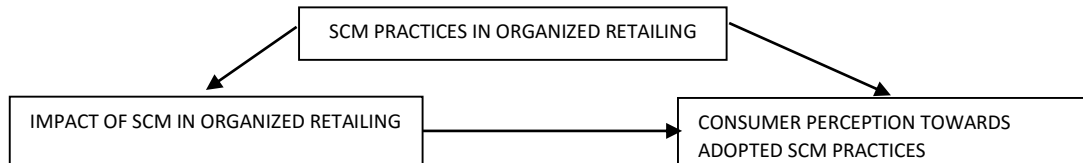
**SUPPLY CHAIN PRACTICES IN ORGANIZED RETAIL SECTOR**

FIG. 1



**FRAMEWORK**

FIG. 2



Supply chain management (SCM) practices may be defined as a set of activities undertaken to promote effective and efficient management of supply chains. These include supplier partnership, physical movement of goods, meeting customer demands and information sharing throughout the supply chain. Some of the key SCM practices that impact performance is related to estimation of customer needs, efficient and effective delivery, integration and collaboration throughout the supply chain, sharing of information etc. (Rajeev kumar 2012) The process of strategically managing the product procurement, movement, storage and the inventory (and the related information flows) through the organization and its marketing channels in such a way that current and future profitability are maximized through the cost effective fulfillment of orders. (Christopher, 1998).

**LITERATURE REVIEW**

**Ivana Plazibat, Sladana Brajevic, (2002)** discussed how the retailers understand the supply chain management functions and utilize the supply chain and tend to be more efficient and profitable. It concludes that retailers are reorganizing their business models and searching for the ways to become more agile responsive and efficient. **Paloviita, (2010)** studied on qualitative focus group regarding consumer perceptions about the sustainability of locally produced food supply chains Sustainability. It concludes that socio cultural dimensions of sustainability should receive more attention in the academic studies of locally produced food because it seems very important dimension for customers. **Selvam.S, (2011)** highlighted the food retail and the retail supply chain in India. The author compares the organized and unorganized food retail industry and their role in the Indian economy. It concludes that increasing scale of organized retail distribution network and increasing competition are forcing the players to focus on restructuring the whole supply chain to improve productivity and provide a better deal to customers. **Kumar, (2012)** analysed consumer perception on adopted SCM in retailing sector and to study consumer perception on adopted SCM benefits in organized retailing and in unorganized retailing sectors. **Bhatnagar, (2012)** discussed the strategies for improving the supply chain efficiency and role of IT in maintaining the inefficiency problems. It concludes that organization should become aware of importance of technology to improve the efficiencies of supply chain. The improvement in efficiency will cut stock outs and backorder costs both for wholesalers as well as suppliers **Dr. S. John Manohar, Susheela Devi B, Arundathi S, (2012)** Studied consumer perception towards organic food products. It concludes by helping consumers and producers of organic food products to understand the importance of various factors on overall satisfaction towards organic food products. It leads to the creation of better marketing strategies. **Meenakshi Saxena, Upendra Garg, Dr. Sachindra Kumar Gupta, (2012)** Conducted a study in malls to find out the behaviour of consumer towards the mall. It helps the retailers to know the preferences of consumers and adapt changes for achieving success instead of changing habit of consumers. It concludes that the factor that influences the customer decision to purchase from malls is variety of products available. **Hena Imtiyaz and Peeyash**



**Soni, (2013)** determined the existing marketing supply chains of fresh tomato, cabbage and cauliflower. Marketing efficiency and producer share in consumer price for these vegetables were significantly higher in marketing supply chains. Single window marketing systems are used to provide better facilities for storage, transportation and marketing. It concludes that in order to develop efficient and sustainable marketing system it is important to provide the accurate market information regarding supply and demand, proper storage and packaging facilities. **Taufiq Ahamad, Abhishek, Dr. Rajesh Kumar shastri, (2014)** studied the supply chain management of big bazaar and role of information technology in supply chain management in big bazaar in an internet age and found that most of the employees feel that use of IT in SCM will definitely get benefit to the organization. **Zdenko Segetlija, Davor Dujak, (2014)** projected a new indicator of retail trade efficiency for an individual national economy. In this study to evaluate the retail trade efficiency for total economy in particular country. GDP and retail turnover ratio is used and the developed economies were compared. The result shows that there is a difference between the transitional and market developed countries. **Raghu ram Naga venkata J, Ravilochanan P, (2014)** explore that Indian grocery retail market and its latest trends and also the SCM model to improve the retailer performance. It concludes that with the perfect SCM the organized retailers are gaining the competitive advantage over the unorganized retail sector. **Jitendra Singh and Dr. Rinka Raghuvanshi, (2014)** find out the importance of supply chain management in organized retail markets and also problems in areas of supply chain management in organized retail sector. It concludes that growth of Indian retail industry largely depends upon the supply chain and the proper effort should be taken by the Indian retailers to maintain it properly. **Mr. Nilesh Vitthal Limbore and Mr. Ajit Ashokrao Chandgude, (2014)** analysed the importance of supply chain management in organized retailing. This paper concludes by providing different suggestions such as flow of material should be continuous, increase efficiency and effectiveness of services in retail etc. **George Maina Mbuthia, Gladys Rotich, (2014)** explored the impact of SCM practices on competitive advantage and also focused on casual relationship between SCM practices. Nakumatt market holding retail industry has been used to collect the data. The study reveals that customer relationship in that market was good and reveals the business information was reliable. **Dennis Omondi, Gregory Namusonge, (2015)** assessed the effect of supply chain leadership on performance of retail institutions. This study was based on nakumatt holdings limited a leading outlet in Kenya the variables used here are response rate, employees perception on buying process, retail outlet performance etc. It concludes that retailers must closely manage the total cost of procurement and keep transportation expenses in check without affecting product availability. **Albana Berisha Qehja, Justina Shiroka Pula, (2015)** discussed on factors that influence store selection for supply chain with fast moving consumer goods. It also highlights the factors that consumers consider in order to improve the performance of the business. It concludes that rich offering of the stores is important and very influential factor in customers to select and decide to purchase. **Anika Berning, Chanel Venter, (2015)** studies sustainable supply chain engagement in a retail environment. It concludes that retailer only focused on environmental aspect of sustainability. Researchers can determine whether small organizations are more inclined to build strong and healthy stakeholder relationship with large retailers. **Jeszka, (2015)** studied the supply chain collaboration and cost saving as a result of returns handling programmes in retail corporations. The integration of IT systems with suppliers and customers also influences the cost saving. It concludes by contributing the growing trend of research into reverse logistics and emphasizes the role of retailers and cooperation in the supply chain. **Alberta Ha, Weixin Shang, Yunjie Wang, (2016)** studied manufacturer rebate competition in a supply chain with a common retailer. A model is developed with two competing manufacturers selling substitutable products through a common retailer. Many of the models are used to calculate the rebate and identify rebate decisions.

## VARIABLES FOUND

1. Supply chain management practices on smooth flow of Products
2. Inventory level due to Supply Chain Management
3. overall cost of material procurement
4. efficiencies and effectiveness of services of retails
5. frequently space planning
6. Customer satisfaction level
7. Quality of Product / Services
8. availability of wide range of Products
9. profitability of members of Value chain
10. Availability of wider range product
11. choice of more variants
12. Better product quality
13. Choice of more brands
14. Certainty for availability
15. Best Price availability
16. Better Customer Service

## DISCUSSION

This paper presents a review of literature in supply chain management. The review has been made on different journal papers regarding supply chain management practices in retailing sector and consumer perception towards retailing sector. Supply chain management plays an important role in organized retail stores. Today in India growth of organized retail stores is becoming higher due to foreign direct investment. In order to provide efficient service to customers its important to have a good supply chain management practices. In some papers foreign authors discussed various supply chain practices in different countries. In India only few regions a specific study has been conducted about supply chain practices. In this paper an attempt has been made to study the consumer perception towards supply chain practices in organized retail stores with respect to trichy region.

## REFERENCES

1. Albana Berisha Qehja, Justina Shiroka Pula. (2015). "FACTORS INFLUENCING STORE SELECTION FOR SUPPLY WITH FAST MOVING CONSUMER GOODS". journal of retailing and consumer services, 10, 315-333.
2. Albert Ha, Weixin Shang, Yunjie wang. (2016, january). "MANUFACTURER REBATE COMPETITION IN A SUPPLY CHAIN WITH A COMMON RETAILER". Journal School of Business and Management.
3. Anika Berning, Chanel Venter. (2015, may). "SUSTAINABLE SUPPLY CHAIN ENGAGEMENT IN A RETAIL ENVIRONMENT". mdpi journal of sustainability, 6246-6263.
4. Bhatnagar, D. (2012). "SUPPLY CHAIN CHALLENGES FOR ORGANISED RETAILING IN INDIA". International Journal of Management Research and Review, 2 (9), 1590-1598.
5. Dennis Omondi, Gregory Namusonge. (2015). "THE ROLE OF SUPPLY CHAIN LEADERSHIP IN RETAIL INSTITUTIONS PERFORMANCE: THE CASE OF NAKUMATT HOLDINGS LIMITED, KENYA". International journal of Humanities and social sciences, 5 (2).
6. Dr. S. John Manohar, Susheela Devi B, Arundathi.S. (2012). "CONSUMER PERCEPTION TOWARDS ORGANIC FOOD PRODUCTS:AN EXPLORATORY STUDY IN BANGLORE USING FACTOR ANALYSIS". International Journal of Management Research and Review, 2 (10).
7. George Maina Mbuthia, Gladys Rotich. (2014). "EFFECTS OF SUPPLY CHAIN MANAGEMENT PRACTICES ON COMPETITIVE ADVANTAGE IN RETAIL CHAIN STORES IN KENYA, A CASE STUDY OF NAKUMATT HOLDING LIMITED". European journal of business management, 2 (1), 336-349.
8. Hena Imtiyaz & Peeyush Soni. (2013). "EVALUATION OF MARKETING SUPPLY CHAIN PERFORMANCE OF FRESH VEGETABLES IN ALLAHABAD DISTRICT, INDIA". International Journal of Management Sciences and Business Research, 3 (1).
9. Ivana Plazibat, Sladana Brajevic. (n.d.). "SUPPLY CHAIN MANAGEMENT IN RETAIL INDUSTRY". journal of operation management.

10. Jeszka, A. M. (2015). "SUPPLY CHAIN COLLABORATION AND COST SAVING AS A RESULT OF RETURNS HANDLING PROGRAMMES IN RETAIL CORPORATIONS IN POLAND". *Scientific Journal of Logistics*, 227-336.
11. Jitendra Singh & Dr. Rinku Raghuvanshi. (2014). "ROLE OF SUPPLY CHAIN MANAGEMENT IN RETAIL SECTOR". *International Journal of Management Research & Review*, 4 (11), 1091-1103.
12. Kumar, M. (2012). "SUPPLY CHAIN MANAGEMENT PRACTICES IN RETAILING: A CONSUMER PERCEPTION STUDY IN VARANASI REGION". *International Journal of Marketing, Financial Services & Management Research*, 1 (12).
13. Meenakshi Saxena, Upendra Garg, Dr. Sachindra kumar Gupta. (2012). "PREDICTING CONSUMER BEHAVIOUR IN RETAIL INDUSTRY WITH SPECIAL REFERENCE TO MEERUT". *International Journal of Management Research and Review*, 2 (4), 539-545.
14. Mr. Nilesh Vitthal Limbore & Mr. Ajit Ashokrao chandgude. (2014, october). "A STUDY OF ROLE AND IMPORTANCE OF SUPPLY CHAIN MANAGEMENT IN ORGANIZED RETAILING WITH SPECIAL REFERENCE TO PUNE REGION". *IUP journal of supply chain management*.
15. Paloviita, A. (2010, april). "CONSUMERS SUSTAINABILITY PERCEPTIONS OF SUPPLY CHAIN OF LOCALLY PRODUCED FOOD". *mdpi journal of sustainability*, 1492-1509.
16. Raghuram Naga Venkata J. & Ravilochanan P. (2014). "THE ROLE OF SUPPLY CHAIN MANAGEMENT IN ORGANIZED AND UN ORGANIZED GROCERY RETAILERS- A REVIEW ON INDIAN PERSPECTIVE". *Asian Social Science*, 10.
17. Selvam. S, P. "FOOD RETAIL AND RETAIL SUPPLY CHAIN IN INDIA". *International journal of Research in IT, Management and Engineering*, 2 (3).
18. Tauffiqu Ahamad, Abhishek, Dr. Rajesh Kumar Shastri. (2014). "SUPPLY CHAIN MANAGEMENT IN RETAIL SECTOR: WITH SPECIAL REFERENCE TO BIG BAZAR". *Disseminate Knowledge-International journal of research in management science and technology*, 2 (2).
19. Zdenko Segetlija, Davor Dujak. (2014). "RETAIL SUPPLY CHAINS AND EFFICIENCY OF RETAIL TRADE". *Scientific Journal of logistics*, 319-330.

## BANK CREDIT TO SMALL AND MEDIUM SPORTS GOODS MANUFACTURING ENTERPRISES OF MEERUT - OBSTACLES IN FINANCING AND RECOVERY OF THE LOAN

**KALI RAM GOLA**  
**ASST. PROFESSOR**  
**SHARDA UNIVERSITY**  
**GREATER NOIDA**

**P. K. AGARWAL**  
**PROFESSOR**  
**SHARDA UNIVERSITY**  
**GREATER NOIDA**

**MRIDUL DHARWAL**  
**ASST. PROFESSOR**  
**SHARDA UNIVERSITY**  
**GREATER NOIDA**


### ABSTRACT

*Commercial Banks are the main source of external finance for SMEs. A number of obstacles are being faced by banks in financing and recovery of the loans. The financing of SME's has been a subject of great interest both to policy-makers and researchers because of the significance of SMEs in the private sector. The objective of the study is to identify major decision factors and recovery factors faced by commercial banks for financing SME's. The study found the following main factors which act as the driver for the financing and recovery decisions, with the help of Chi-square test. They are lack of collateral, NPA, number of defaults made by the firm with reference to previous loans, track record of the firm or owner, bad credit record, unaudited statements and lack of information about the profit earned by SME. The influence of these factors decides the risk associated with the SME lending.*

### KEYWORDS

bank finance, collateral, npa, financial constraints, small and medium enterprises.

### INTRODUCTION

 ME is the abbreviation for Small and Medium Enterprises. The critical role of the MSME sector in the social and economic development of our country is well known in terms of employment generation, exports and contribution to Gross Domestic Product. These enterprises can be called as the backbone of the GDP of India. In recent years the SME sector has consistently registered higher growth rate compared to the overall industrial sector. The major advantage of the sector is its employment potential at low capital cost. The labour intensity in the SME sector is estimated to be almost four times higher than the large enterprises. The major advantage of the sector is its employment potential at low capital cost for which, three critical enablers are required. Firstly, better infrastructure, second- the increased access to risk capital and the third - creating a culture of innovation. MSMEs are important for the national objectives of inclusive growth i.e. growth with equity and inclusion.

Post globalizations, SMEs are exposed to greater opportunities than ever for expansion and diversification across the sectors. Indian market is growing rapidly and Indian entrepreneurs are making remarkable progress in various sectors like Manufacturing, Food Processing, Textile & Garments, Retail, IT and Service sector. The small enterprise sector has continued to contribute immensely in creating large scale job opportunities across the space and in the process, helped reduce inter-regional rural-urban disparities in growth. Certain products belonging to this sector have also been consistently figuring in the export basket during the recent decades, although the export performance in the global market has been unimpressive and the level of threat has also enlarged.

### MSME ACT-2006 WITH THE PROPOSED AMENDMENTS

Particular	Manufacturing enterprise (investment in P&M)	Proposed (2014)	Services enterprise (investment in equipment)	Proposed (2014)
Micro enterprise	Up to Rs. 25 Lakh	Rs. 50 Lakh	Up to Rs.10 Lakh	Rs. 20 Lakh
Small enterprise	Above Rs.25 Lakh & up to Rs.5 Crore	Rs.10 crore	Above Rs.25 Lakh & up to 2 crore	Rs.5 crore
Medium enterprise	Above Rs.5 Crore up to Rs.10 Crore	Rs.30 crore	Above Rs.2 Crore & up to Rs.5 Crore	Rs.15 crore

Source: <http://dcmsme.gov.in>

### INDIAN SPORTS GOODS INDUSTRY- AN OVERVIEW

The Sports Goods industry in India, exports almost 60 percent of its total production to the sports loving enthusiasts all over the world thus has emerged as a major global competitive and creative entity. Right from a cricket bat or a hockey stick or a football, the Indian sports goods industry has contributed a lot to the international sports goods market. In recent times Indian sports goods industry has emerged as an important supplier of quality sports goods and children toys to the international markets. The sports goods industry has been able to adopt new technology thus enabling it to produce sports goods which matchup to the fast changing international standards (sources: India brand equity foundation, [www.ibef.org](http://www.ibef.org))

Meerut is one of the main industrial districts of the western Uttar Pradesh. It is located about 85 kms from Delhi. Sports goods manufacturing units are largely located in or in the vicinity of Meerut & Jalandhar. Meerut is known for many types of industries. It is the second largest supplier of sports goods in India. Based on a recent Census of India- 2011, conducted by the District Industry Centre (DIC) Meerut, there are about 1150 registered and approximately 2000 non registered sports goods SME's units, resulting in direct and indirect employment opportunities to approximately 1.5 lakhs people. Ancillary units have also grown to provide sufficient quantity of raw material to the sports goods industry and also provide adequate skills to the workers.

### BANKING SECTOR FINANCING

Among the banking sector in the organised institutions, the commercial banks are the most established foundations having an extensive system of branches, charging most extreme open certainty and having the huge offer in the aggregate saving money operation. At first, they were set up as corporate bodies with

offer property by private people, yet along these lines there has been a move towards state possession and control. Till seventies Commercial banks were fundamentally occupied with financing sorted out exchange, trade and industry, now they are effectively partaking in financing horticultures, small business and small borrowers. Moreover, the business banks working in India fall under various sub – classifications on the premise of proprietorship and control of administration.

## STRUCTURES OF SME FINANCING

Financing by banking institutions form the most important source of external financing for SMEs. This is due to the dominance of the banking sector as the main intermediary in the financial systems. The banking sector has a wide range of financing generic short, medium and to a lesser extent, long term credit and various supplementary financing instruments including trade credit, export financing, factoring and discounting. Some banks also provide special loans targeted at priority sectors and key segments of the population as identified by the Government. There are also several credit cooperatives/credit funds, microfinance institutions and financing companies. Letters of credit are offered by some commercial banks to facilitate trade financing but the SME's are unlikely to be the main beneficiaries.

## SOURCES OF SME FINANCING

SMEs draw financing from a variety of sources. Around 30- 40% of SMEs in India rely on internal savings, retained earnings and borrowings from family, friends and money lenders (collectively known as 'informal sector') as opposed to the 60-70% which have access to formal sector finance (banks, capital markets, venture capitalists etc.) Banks' lending to the Micro and Small enterprises engaged in the manufacturing or production of goods specified in the first schedule to the Industries (Development and regulation) Act, 1951 and notified by the Government from time to time is reckoned for priority sector advances. However, bank loans up to Rs.5 crore per borrower / unit to Micro and Small Enterprises engaged in providing or rendering of services and defined in terms of investment in equipment under MSMED Act, 2006 are eligible to be reckoned for priority sector advances. Lending to Medium enterprises is not eligible to be included for the purpose of computation of priority sector lending.

## LITERATURE REVIEW

**Arito Onoiichiro and Uesugi (2006)** Role of Collateral and Personal Guarantees in Relationship Lending: "Evidence from Japan's SME Loan Market to find determinants of the use of collateral and personal guarantees in Japan's SME loan market". And concluded that dependable with the hypothesis used of collateral is efficient in emerging the bank's superiority and improve its monitoring and showing. This motivation result for the bank happens to more difficult for private assurance.

**Bjorn Berggren, Lars Silver (2011)** on "Financing entrepreneurship in different regions: The failure to decentralise financing to regional centres in Sweden. The purpose of the paper is to analyse the financial search behaviour of small and medium-sized enterprises (SMEs) in different regions and the perceived importance of different external financiers for these firms. The findings show that large differences exist in the financial search behaviour exhibited by firms in the four different types of regions. In the metropolitan areas, firms are more active in searching for new owners, especially professional investors. In smaller municipalities, banks dominate as the most important financier. The paper fulfils an important role in elaborating on the use and importance of different types of financing in various regions.

**Coluzzi et al., (2008)**, studied the indicator of financing constraints for five euro area countries (Germany, Spain, France, Italy and Portugal). They found that young and/or small firms in principle grow faster than larger and older firms. At the same time, they also face considerably more severe financing restrictions than other firms. Also, firms of the manufacturing and construction sectors are more likely to feel financing constraints, which may be attributable to the high capital intensity of these sectors. As could be expected, increased sales – which reflect better success of the chosen business model – lessen financing constraints. Regarding the impact of financing constraints on growth, the authors found that more cash flow fosters growth. The probability of financial obstacles (proxied by age, size and other firm features) is found to affect growth for all countries except for Germany. The effect of higher leverage is ambiguous: it fosters growth in some countries (Spain, France and Italy) while it hampers growth in Germany and Portugal

**Dietsch and Petey (2008)** investigated a specific issue relating to capital requirements for bank's SME loan portfolios, namely the diversification potential within large portfolios of SMEs. Extending the standard one-factor credit default model to multiple factors, which takes into account size, sector and location, they computed economic capital allocations for large portfolios of French SME loans. They found that two opposing effects are at play when estimating aggregate credit risk for an SME loan portfolio: on the one hand, diversification decreases economic capital; on the other hand, a more complete representation of default rate dynamics in such a framework increases economic capital.

**David P. Ely Kenneth J and Robinson (2001)** Entrepreneurships and Bank credit accessibility Consolidation, technology and the changing structure of banks small business loaning. The US keeping banking industry supplies to merge with vast, complex financial institutions turning out to be more critical customarily, their organizations have not accentuated small business loaning. Then again, innovative advances, especially credit scoring models, make it simpler for banks to amplify small business loan.

**Hernandez-Canovas, G.K, Johanna (2011) SME financing in Europe:** Cross-nation determinants of bank credit. This article looks at the impact of cross-country contrasts on bank advance development for small and medium-sized undertakings (SMEs) and inferred that SMEs in nations that secure its loan bosses and authorize existing laws will probably acquire long haul bank obligation. Banks appear to depend more on the institutional environment when deciding advance development for small scale firms than for medium-sized firms

**Pietro Calice, Victor M. Chando and Sofiane Sekioua (2012)** found in a research paper on 'Bank Financing to Small and Medium Enterprises in East Africa: Findings of a Survey in Kenya, Tanzania, Uganda and Zambia' We find that the SME segment is a strategic priority for the banks in the region. SMEs are considered a profitable business prospect and provide an important opportunity for cross-selling. Banks consider that the SME lending market is large, not saturated and with a very positive outlook. A number of obstacles are, however, constraining banks' further engagement with the SME segment, including SME-related factors, macroeconomic factors, business regulation, the legal and contractual environment, the lack of a more proactive government attitude towards the segment, some areas of prudential regulation and some bank-specific factors.

**S.K. Chhabra, (2009)** - has conducted a study on Role of scheduled commercial banks in socio-economic development of Nagaland. The paper also evaluates the performance of commercial banks in terms of various parameters, in which SMEs play a part. Nagaland is an industrially backward state. Till date the state is industrially represented by 10 medium and large industries, 1900 SSI units, the government of the state is desperately trying for the development of SME's in the state. Commercial banks are expected to provide adequate and timely assistance in view of the backwardness of the state; both commercial banks and financial institutions are also expected to make adequate concessions through the various conditions and norms, for commercial banks and term loan. The findings show that banks have to ensure increased credit flow.

**Vasilescu, Laura (2014)** finance for innovative EU SME's - key drivers and challenges. The paper investigates that access to fund is a key determinant for business start-up, advancement and development for SMEs, including the imaginative ones, and they have diverse needs and face distinctive difficulties. The constrained business sector force, absence of administration abilities, nonappearance of satisfactory bookkeeping records and inadequate resources, exchange expenses and absence of insurance, each of the tend to expand the danger profile of SMEs. Besides, vulnerability and educational asymmetries that portray SMEs are intensified for inventive SMEs making it more troublesome for them to get to fund through conventional means. Keeping in mind the end goal to enhance the entrance to fund for SMEs, the endeavours ought to be engaged at the European and national levels on tackling the issues in regards to working capital, enhancing business enterprise and money related environment in the long haul, pulling in new budgetary assets, encouraging dialog and counsel between governments, SMEs and monetary establishments.

**OBJECTIVES**

The present study has been undertaken with the following objectives:

1. To identify the kinds of problems being faced by banks in financing MSME's.
2. To identify the problems faced by banking sectors in term of recovery of loan from SME's.
3. Decision factors considered by commercial banks for financing SME's.

**RESEARCH METHODOLOGY & SAMPLING PROCEDURE**

Research is based upon primary and secondary data. A set of 100 Questionnaires filled and returned by the officials branches of different commercial Banks in Meerut district, which was taken as the sample for this study, in which 76 officials responded. The data is analyzed by using Chi- Squire Test and represented through graphs & tables through SPSS.

**HYPOTHESIS**

1. Null Hypothesis: Collateral is independent of the problems faced by banks.
2. Null Hypothesis: NPA is independent of the problems faced by banks.
3. Null Hypothesis: Interest is independent of the problems faced by banks.
4. Null Hypothesis: Small enterprise is independent of the problems faced by banks.
5. Null Hypothesis: Non Registered Organisation is independent of the grounds for rejecting loan proposals from SME'S
6. Null Hypothesis: Proof of existence is independent of the grounds for rejecting loan proposals from SME'S
7. Null Hypothesis: Unaudited statement is independent of the grounds for rejecting loan proposals from SMEs

**ANALYSIS AND INTERPRETATION**

**Q. 1: What kinds of problems are being faced by banks in financing SME's?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.4	1.4	1.4
	3	1	1.4	1.4	2.7
	4	20	27.0	27.0	29.7
	5	52	70.3	70.3	100.0
	Total	74	100.0	100.0	

It is concluded that around 97 % population agree with that fact. That Collateral is one of the major problems faced by banks in financing the SME's.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.4	1.4	1.4
	3	1	1.4	1.4	2.7
	4	28	37.8	37.8	40.5
	5	44	59.5	59.5	100.0
	Total	74	100.0	100.0	

It is concluded that NPA is also a factor contributing to problem faced by bank in financing SME's, because majority of population opted for agree or strongly agree option.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	12	16.2	16.2	16.2
	2	3	4.1	4.1	20.3
	3	16	21.6	21.6	41.9
	4	37	50.0	50.0	91.9
	5	6	8.1	8.1	100.0
	Total	74	100.0	100.0	

Interest rate is also a factor contributing to problem faced by bank in financing SME's.

All null hypotheses for study are independence of above factors that whether they are associated with problem faced by bank in financing SME's or not.

For question number 3.1 to 3.4 we assume following null hypothesis for study the independence of above factors that whether they are associated with problem faced by bank in financing SME's or not.

1. Null Hypothesis: Collateral has independent association with problem faced by bank.
2. Null Hypothesis: NPA have independent association with problem faced by bank.
3. Null Hypothesis: Interest Rate has independent association with problem faced by bank.
4. Null Hypothesis: Small enterprise has independent association with problem faced by bank.

Following are the SPSS output

**CHI-SQUARE TEST**

**FREQUENCIES**

	Observed N	Expected N	Residual
1	1	18.5	-17.5
3	1	18.5	-17.5
4	20	18.5	1.5
5	52	18.5	33.5
Total	74		

	Observed N	Expected N	Residual
1	1	18.5	-17.5
3	1	18.5	-17.5
4	28	18.5	9.5
5	44	18.5	25.5
Total	74		

**TABLE 6: ANALYZED OF CHI-SQUARE OUTPUT OF INTEREST RATE IS BEING FACED BY BANKS IN FINANCING SME**

	Observed N	Expected N	Residual
1	12	14.8	-2.8
2	3	14.8	-11.8
3	16	14.8	1.2
4	37	14.8	22.2
5	6	14.8	-8.8
Total	74		

**TABLE 7: ANALYZED CHI-SQUARE OUTPUT OF SIZE OF ENTERPRISE IS BEING FACED BY BANKS IN FINANCING SME**

	Observed N	Expected N	Residual
1	13	14.8	-1.8
2	10	14.8	-4.8
3	19	14.8	4.2
4	30	14.8	15.2
5	2	14.8	-12.8
Total	74		

**TEST STATISTICS**

**TABLE 8: ANALYZED OF CHI-SQUARE OUTPUT OF PROBLEMS ARE BEING FACED BY BANKS IN FINANCING SME'S**

	Q.3.1	Q.3.2	Q.3.3	Q.3.4
Chi-Square	93.892 <sup>a</sup>	73.135 <sup>a</sup>	48.568 <sup>b</sup>	29.649 <sup>b</sup>
Df	3	3	4	4
Asymp. Sig.	.000	.000	.000	.000

In test statistics table, we see p value for each question is less than 0.05 level of significance, so we reject all the null hypothesis and conclude that there is significant association of above problems related to bank in financing SME's.

SMEs mainly approach banks for their external financing, but there are many obstacles in financing by the banks. We find that some of the major factors which act as the driver for the financing decisions are- lack of collateral, number of defaults made by the firm during previous loans, poor track record of the firm or owner, bad credit record, and lack of information on SME. Some of the obstacles in recovery of loan from SME's are wilful defaulter, lack of sufficient staff and delay in auction. The influence of these factors decides the risk associated with the SME lending. Banks should take into account these factors as the drivers while choosing an SME for financing.

**Q. 2: Problems faced by the banking sectors in term of recovery of loan from SME's**

**FREQUENCY TABLE**

**TABLE: 9 ANALYSIS OF WILL FULL DEFAULTERS IS ONE OF THE CAUSES FOR PROBLEMS FACED BY THE BANKING SECTORS IN TERM OF RECOVERY OF LOAN FROM SME'S.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.4	1.4	1.4
	3	4	5.4	5.4	6.8
	4	11	14.9	14.9	21.6
	5	58	78.4	78.4	100.0
	Total	74	100.0	100.0	

It is concluded that most of the population strongly agree with the fact that Will full defaulter is one of the cause for problems faced by the banking sectors in term of recovery of loan from SME's.

**TABLE: 10 ANALYZED OF DELAY IN AUCTION PROCESS/ LEGAL SYSTEM IS ONE OF THE CAUSES FOR PROBLEMS FACED BY THE BANKING SECTORS IN TERM OF RECOVERY OF LOAN FROM SME'S**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	4.1	4.1	4.1
	2	1	1.4	1.4	5.4
	3	17	23.0	23.0	28.4
	4	47	63.5	63.5	91.9
	5	6	8.1	8.1	100.0
Total	74	100.0	100.0		

**TABLE 11: ANALYZED OF LACK OF SUFFICIENT STAFF IS ONE OF THE CAUSES FOR PROBLEMS FACED BY THE BANKING SECTORS IN TERM OF RECOVERY OF LOAN FROM SME'S**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	18	24.3	24.3	24.3
	3	13	17.6	17.6	41.9
	4	34	45.9	45.9	87.8
	5	9	12.2	12.2	100.0
	Total	74	100.0	100.0	

it is concluded that most of the population strongly agree with the fact that lack of sufficient staff is one of the cause for problems faced by the banking sectors in term of recovery of loan from SME's.



**Q. 3: Any specific promotional scheme for finance to sports goods industries.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	74	100.0	100.0	100.0

it is concluded that most of the population agree with the fact that delay in auction is one of the cause for problems faced by the banking sectors in term of recovery of loan from SME's.

**TABLE 13: ANALYSIS OF NON-REGISTERED ORGANIZATION FOR REJECTING LOAN PROPOSALS OF SMEs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.4	1.4	1.4
	4	13	17.6	17.6	18.9
	5	60	81.1	81.1	100.0
	Total	74	100.0	100.0	

It is concluded that most of the surveyed population strongly agree with the fact that non registered organisation is one of the grounds for rejecting loan proposals from SME's.

**TABLE 14: ANALYSIS OF PROOF OF EXISTENCE FOR REJECTING LOAN PROPOSALS OF SMEs**

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	1	1.4	1.4	1.4
	3	2	2.7	2.7	4.1
	4	27	36.5	36.5	40.5
	5	44	59.5	59.5	100.0
	Total	74	100.0	100.0	

it is concluded that most of the surveyed population strongly agree with the fact that proof of existence is one of the grounds for rejecting loan proposals from SME's.

**FINDINGS**

After undertaking the study, the paper presents the findings of a survey of SME lending with 76 branches of commercial banks in Meerut district, UP India. We believe the general findings of this paper offer a reliable overview of the banks' attitudes and perceptions towards SME financing in the Meerut districts. The results of the survey indicate that banks consider the SME segment strategically important and are actively pursuing SMEs. Several constraints are, however, holding back the further involvement of banks with SMEs in the region: inability to post adequate collateral, recent interest rate and exchange rate instability; NPA, the business regulatory framework, especially the KYC requirements; prudential regulation, in particular the requirements in the area of collateral; and some bank-specific factors. Also some factors for recovering loan from SME's like; wilful defaulter, lack of sufficient staff and delayed in auction. Bank respondents have shown mixed preference for SME financing. The impediments faced by banks are the reasons why SME loans are rejected. The following findings emerged about the drivers of the bank financing and recovery for SMEs.

**CONCLUSION**

India has a vibrant SME sector that plays an important role in sustaining economic growth, increasing trade, generating employment and creating new entrepreneurship in India. SMEs mainly approach banks for their external financing, but there are many obstacles in financing a firm for the banks. We find that some of the major factors which act as the driver for the financing decisions are- lack of collateral, lack of bankable business plan, number of defaults made by the firm during previous loans, lack of track record of the firm or owner, bad credit record, and lack of information on SME. Also some factors for recovering loan from SME's like; wilful defaulter, lack of sufficient staff and delay in auction. The influence of these factors decides the risk associated with the SME lending. Banks should take into account these factors as the drivers while choosing an SME for financing.

**REFERENCES**

1. B Sobha Rani and D Koteswara Rao March, 2008 financing small enterprises: recent trends ICAI Journal Of Entrepreneurship Development; vol. 5 issue 1, p6-22, 17p, 7
2. Bartholdy, J. and Mateus, C. (2003). "Financing of SME's: An Asset Side Story". Beck, T and Maksimovic, V. "The Determinants of Financing Obstacles". University of Maryland.
3. Beck, T. and Demirguc, A. (February 2006). "Small and Medium-Size Enterprises: Access to Finance as a Growth Constraint"
4. Berger, A. and Udell, G. (1995). "Universal Banking and Future of Small Business Lending". New York University
5. Czirák, Dario, Tišma, Sanja, Pisarovi..., Anamarija nov 2005 determinants of the low SME loan approval rate in Croatia. Small business economics, vol. 25 issue 4, p347-372, 26p.
6. Das, K. (2008), micro, small, and medium enterprise in India: unfair fair, Gujarat, India: Gujarat institute of development research working paper series no.181 (January).
7. Dr. Brychan Thomas and David Pickernell investigate (2011), in a research paper "Graduate entrepreneurs are different: they access more resources International journal of entrepreneurial behavior & research, vol-17, Iss: 2, pp 183-202.
8. Govinda sharma (2011) do SME's need to strategize; business strategy series volume: 12 issue: 4 2011.
9. Jun Su, Yuefan Sun (2011) informal finance, trade credit and private firm performance; nankai business review international volume: 2 issue: 4.
10. Kenneth g. Stewart · j. C. H. Jones August (2009) are sports team's multiproduct firms? nline: published online springer-verlag.
11. M.H. Bala Subrahmanya (2007) development strategies for Indian SME's promoting linkages with global transnational corporations; management research news volume: 30 issue: 10 2007.
12. Mr. S.K. Chhabra (Dec 2010), Role of scheduled commercial banks in socio-economic development of Nagaland, finance India, the quarterly journal of Indian institution of finance, vol, xxiv no.4, pages 1313-1330.
13. Neil Moore (2012) English professional football clubs: can business parameters of small and medium-sized enterprises be applied, sport, business and management: an international journal, volume -2 issue: 3.
14. Prof Björn Berggren, Lars Silver (2011) investigates Research paper on "Financing entrepreneurship in different regions in journal of small business & enterprise development, vol-17, Iss: 2, pp 230-246
15. Statistical booklet of Meerut district-published by department statistics visas bhavan Meerut.
16. The economic times of India SME BUZZ, Dec 6, 2010.
17. Tyagi, R. K. (2010), dynamics of corporate and stakeholders perspective of corporate social responsibility: a case of sports goods industry Meerut. American journal of economics & business administration; 2010, vol. 2 issue 2, p169-171, 3p
18. Vepa Kamesam: Financing for entrepreneurship and SMEs - an Indian perspective BIS Review 40/2003



**IMPACT OF CHANGES IN INTEREST RATE ON BANK PROFITABILITY: A RE-EXAMINATION**

**DR. NAMRATA SANDHU**  
**ASSOCIATE PROFESSOR**  
**CHITKARA BUSINESS SCHOOL**  
**CHANDIGARH**

**HIMANI SHARMA**  
**FINANCIAL ADVISOR**  
**EPIC RESEARCH PVT. LTD.**  
**INDORE**

**ABSTRACT**

*The relationship between changes in the rate of interest and the profitability of commercial banks is well researched, though not conclusively established. Consequently, banking literature is replete with call for further research to assess the impact of variations in the rate of interest on the profitability of banks. Addressing this concern, the present study examines the relationship between changes in interest rate and bank profitability in the Indian context. Correlation between profit after tax figures collected from the financial statements of three private sector and three public sector Indian banks, and changes in rate of interest is calculated to assess the association between bank profitability and rate of interest. Results indicate a strong negative correlation between bank profitability and rate of interest. The findings of the study have been integrated with existing literature and the current macroeconomic environment. Implications for commercial banks, the central bank and the economy are discussed.*

**KEYWORDS**

india, bank, interest rate, profit.

**JEL CLASSIFICATION**

G00, G21.

**INTRODUCTION**

**W**ith the compounded annual growth rate in double digits (IBEF, 2015), the Indian banking sector is among the fastest growing sectors of the economy. Thanks to the rapidly expanding gross domestic product, rise of the middle class, technology solutions that focus on leveraging digital channels (Sandhu and Singh, 2016), and regulatory changes such as the newly licensed payments banks, the proposed Post Bank of India and the ambitious Pradhan Mantri's Jan Dhan Yojna (Singh et al., 2016), the Indian banking industry at present is worth US \$ 1.31 trillion (Beri, 2016). Looking ahead, it is poised to become the third largest banking industry of the world by the year 2025 (Beri, 2016).

The ever-increasing size of the Indian banking industry holds the promise of high profits for its players. As of 2016, there are 26 public sector banks, 20 private sector banks and 43 foreign banks operating in India. Many more domestic and foreign banks are likely to join this list in the coming years.

The huge profit potential of the Indian banking industry has not only aroused the interest of potential participants, but also of researchers and scholars. Many studies have been conducted to scrutinize the factors that impact bank profitability and help banks sustain high margins (Sharma and Mehta, 2005; Varadarajan and Berry, 2007; Goyal, 2008; Singh and Sandhu, 2016). Previous investigators have delved into numerous factors and variables that have a bearing on the profits of banks (Tiwari et al., 2006; Vyas and Math, 2006; Deltuvaite et al., 2007; Johnson, 2008; Sarma, 2008). However, of concern to the current study is the impact of changes in rate of interest on bank profitability.

Therefore, the present study is an attempt to assess the impact of changes in the rate of interest on the profitability of Indian banks. The present study contributes to the literature on banking in the following ways. First, it addresses the call for further research to examine the influence of variations in interest rate on bank profits (Lileikiene and Likus, 2011). Second, it re-examines the existing evidence in the Indian context. While banking literature is replete with studies that assess the relationship between interest rate and bank profitability (Pesek, 1970; Flannery, 1983; Hancock, 1985), the authors came across limited research on the same in the Indian context. The above arguments and gaps make a compelling case for the present study. Implications for commercial banks, the central bank and the economy are discussed.

**THEORETICAL FRAMEWORK****INTEREST RATE AND THE ECONOMY**

The rate of interest is a major determinant of the liquidity of an economy. In general, the rate of interest is increased to combat the negative effects of inflation (Ahuja, 2015). By encouraging aggregate savings, an increase in the rate of interest reduces the total amount of money in circulation. This pull out of money negatively impacts the liquidity position of the economy. The ultimate aim behind this move is to depress consumption by discouraging loans and credit. On the other hand, interest rate is reduced to lower the cost of borrowing and escalate liquidity and demand in the economy (Agarwal and Tathagath, 2013). This expands the total business activity of the economy and ushers in growth. For this reason, many critics believe that a reduction in the rate of interest is a prerequisite for economic development and prosperity (Petinger, 2013; Dornbusch et al., 2014).

As evident from the above discussion, the relation between the rate of interest and economic growth is well established and undisputed in economic literature. However, the relation between rate of interest and bank profitability is subject to a lot of scholarly contradictions. The next section sheds light on the same.

**INTEREST RATE AND BANK PROFITABILITY**

The determinants of bank profitability can be primarily divided into two categories – internal determinants and external determinants. While internal determinants of bank profitability constitute of variables that can be actively controlled by the bank and its policy objectives (Staikouras and Wood, 2005), the external determinants of the profitability of a bank are quite another story. Previous researchers have attempted to examine the impact of both the internal (Molyneux and Thorton, 1992; Molyneux, 1993; Berger, 1995; Zimmerman, 1996), as well as the external factors (Samuelson, 1945) on bank profitability. However, in this study we are only interested in examining the relationship between one particular external factor - rate of interest and bank profitability.

Samuelson (1945) was among the pioneers who attempted to comprehend the influence of changes in the rate of interest on the profits of banks. In his seminal study, he established that under ordinary conditions, the profits of banks tend to increase with an increase in the rate of interest. He opined, "the banking system as a whole is immeasurably helped rather than hindered by an increase in interest rate." Later researchers attempted to build upon his work. Revell (1980), as a part of a larger study proved that only the banks with aggregate loans greater than aggregate deposits stand to gain from an increase in the rate of interest. Since the interest earned on assets is a source of income for the bank, and interest paid on deposits a liability leading to outflow of funds, banks are likely to benefit from an interest raise only if the quantum of bank assets is greater than the quantum of bank liabilities. Thistle et al. (1989) seconded these findings by establishing

the impact of both an increase and decrease of interest rate on bank profitability and Hoggarth et al. (1998) suggested that monetary policy induced changes in rate of interest can lead to huge losses or unanticipated extraordinary profits for banks.

Further, many researchers also tried to recommend measures to avert the unwanted effects of fluctuations in interest rate on bank profitability. Goltz (2005) advocated attempts to predict interest volatility and the subsequent adoption of protective measures, and Mato (2005) suggested interest rate immunization with the help of derivatives.

If we categorically review the recent studies conducted in emerging/less-developed economies, we come across a number of relevant studies. As a part of a comprehensive research on commercial banks, Rasiah (2010) exhibited that interest rates play a major role in determining the profitability of a bank in Malaysia. Based on secondary data, Tarus et al. (2012) and Ayanda et al. (2013) established that changes in interest rate significantly impact the profits of banks in Kenya and Nigeria respectively. Similarly, Khan and Sattar (2014) scrutinized the financial statements of four Pakistani commercial banks to prove a strong negative relation between the rate of interest and bank profitability.

As can be seen, the relation between bank profitability and interest rate is well researched, though not conclusively established in literature. Furthermore, this topic is relatively unexplored in the Indian context. These observations justify the need for the present study.

**METHODOLOGY AND RESULTS**

The current study quantitatively examines the relationship between changes in interest rate and the profits of banks. Data related to the profits of banks was gathered from a sample of six banks, three from the private sector and three from the public sector. These banks include ICICI Bank, HDFC Bank, Axis Bank, State Bank of India, Union Bank of India and Bank of Baroda. Profit after tax figures of these banks were collected from their annual reports published on the official bank websites in the last five years (2011 to 2015) (for profit after tax figures refer to table 1). These figures were averaged to arrive at the average profit after tax for each of the six banks. On the same lines, figures for changes in the rate of interest during the same period were collected from the official website of the Reserve Bank of India (for data capturing the changes in the rate of interest refer to table 1). As recommended by previous scholars, Pearson Correlation Method was used to examine the impact of changes in the rate of interest on the profitability of banks (Zikmund, 1994, as cited in Sandhu and Sandhu, 2012; Khan and Sattar, 2014). The following formula was used:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{((n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2))^{1/2}}$$

**TABLE 1: ANNUAL PROFITS AFTER TAX (in crore rupees) AND RATE OF INTEREST**

Bank Name	Years				
	2011	2012	2013	2014	2015
ICICI Bank	5,151.38	6,465.26	8,325.47	9,810.48	11,175.35
HDFC Bank	3,926.40	5,167.09	6,726.28	8,478.38	10,215.92
Axis Bank	3,388.49	4,242.21	5,179.43	6,217.67	7,357.82
State Bank of India	8,264.52	11,707.29	14,104.98	10,891.17	13,101.57
Bank of Baroda	4,241.68	5,006.96	4,480.72	4,541.08	3,398.44
Union Bank of India	2,081.95	1,787.14	2,157.93	1,696.20	1,781.64
<b>Average Profit After Tax</b>	<b>4,509.07</b>	<b>5,729.33</b>	<b>6,829.14</b>	<b>6,939.16</b>	<b>7,838.46</b>
<b>Rate of Interest</b>	<b>7.75</b>	<b>8.50</b>	<b>7.50</b>	<b>8.00</b>	<b>8.00</b>

Source: Official websites of banks/RBI

**TABLE 2: RELATIONSHIP BETWEEN RATE OF INTEREST AND BANK PROFITABILITY**

Year	Rate of Interest	% Change in the Rate of Interest	Average Profit After Tax	% Change in Profit After Tax	Correlation
2011	7.75	---	4,509.07	---	<b>-0.52</b>
2012	8.5	9.68	5,729.33	27.06	
2013	7.5	-3.23	6,829.14	51.45	
2014	8	3.23	6,939.16	53.89	
2015	8	3.23	7,838.46	73.84	

Tables 1 and 2 exhibit the results of the study. The correlation between the changes in the rate of interest and bank profitability worked out to -0.52. This correlation establishes a strong negative relationship between the changes in the rate of interest and the profitability of banks. Therefore, the profits of Indian banks are likely to decrease in the event of an interest rate increase and vice-versa.

**DISCUSSION**

On inspection of the data, a negative correlation was found between the changes in interest rate and the profits of Indian banks. This implies that a reduction in the rate of interest increases the profits of Indian banks and vice-versa. Previous researchers opine that a negative relationship between these two variables – interest rate and bank profitability is either indicative of a huge spread (Khan and Sattar, 2014) or points towards a situation in which the liabilities of the banks are greater than their assets (Revell, 1980).

If we attempt to examine the current scenario, the Reserve Bank of India has consistently and successively reduced the rate of interest in the recent past. Also, there are speculations that the rate may fall further in the near future (The Economic Times, 2016). Therefore, profit-making opportunities are in the offing for Indian banks. Indian banks are likely to report higher profits in 2016. But, what remains to be seen is whether the reduced rate of interest will benefit the economy to an equal extent.

Economists fear that the advantages of the reduced interest rate may be localized only to the banking industry (Bloomberg, 2015). In 2015, Indian banks have been reluctant in passing on the reduced interest rate to the consumers. This practice is in synchronization with banking literature, which suggests that there is a substantial time lag between a reduction in the rate of interest and a reduction in the lending rate of banks (Khan and Sattar, 2014). Therefore, while the lowered interest rate has helped banks earn higher profits, it has not translated into growth benefits for the economy. So, when reducing the rate further, the Central Bank needs to proceed with caution. It must take due precautions to ensure that the advantages of the reduced rate are available to the entire economy and not just the banks. Appropriate measures to regulate the interest spread are called for.

Further, a comparison with the existing relevant literature indicates that the results of the present study refute the contentions of most of the studies conducted in the advanced economies (Samuelson, 1945). These studies indicate that there exists a positive relationship between changes in the rate of interest and bank profitability. On the other hand, the findings of the present study support the outcome of similar studies conducted in the less developed and emerging economies (Khan and Sattar, 2014). A comparable strong negative association between changes in the rate of interest and bank profitability is observed in a number of developing economies (Rasiah, 2010; Tarus et al., 2012; Ayanda et al., 2013; Khan and Sattar, 2014).

As is the case with every study, the present study too suffers from some limitations. The study examines the relationship between interest rate and profits of only six Indian banks over a limited period of five years (2011 to 2015). These limitations prevent generalization of the findings. Hence, the results of the current study may not be representative of the entire Indian banking sector.

Future researchers may conduct this study devoid of its limitations. They may also examine the impact of changes in interest rate on the profitability of private, public and foreign banks separately. An attempt can also be made to examine the relationship between non-interest income and bank profitability. Finally, though

this study has attempted to understand the reason behind the difference in the correlation between the study variables in the less developed and advanced economies, future investigators can delve deeper into these causes.

## REFERENCES

1. Agarwal, N. and Tathagath, U. (2013), "RBI's Interest Rate Policy and Its Impact on Indian Economy", Viewed on March 24, 2016 <http://ideasmakemarket.com/2013/07/rbis-interest-rate-policy-and-its-impact-on-indian-economy.html>
2. Ahuja, H.L. (2015), "Macroeconomics – Theory and Policy", S. Chand, New Delhi.
3. Ayanda, A.M., Christopher, I. and Mudashiru, M.A. (2013), "Determinants of a Bank's Profitability in a Developing Economy: Evidence from Nigerian Banking Industry", *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 4, No. 9, 156-181.
4. Berger, A. (1995), "The Relationship Between Capital and Earnings in Banking", *Journal of Money, Credit and Banking*, Vol. 27, No. 2, pp. 432-456.
5. Beri, R. (2016), "Banking & Financial Services Industry", Viewed on March 24, 2016 <http://info.shine.com/industry/banking-financial-services/8.html>
6. Bloomberg (2015), "Rajan Cuts India Rate, Says Next Move Hinges on Monsoon Rain", Viewed on March 24, 2016 <http://www.bloomberg.com/news/articles/2015-06-02/rajan-cuts-india-rate-for-third-time-to-boost-lackluster-growth>
7. Deltuvaite, V., Vaskelaitis, V. and Pranskeviciute, A. (2007), "The Impact of Concentration on Competition and Efficiency in the Lithuanian Banking Sector", *Inzinerine Ekonomika-Engineering Economics*, Vol. 18, No. 4, pp. 7-19.
8. Dornbusch, R., Fischer, S. and Startz, R. (2014), "Macroeconomics", Tata McGraw Hill, New Delhi.
9. Flannery, N.J. (1983), "Interest Rates and Bank Profitability: Additional Evidence", *Journal of Money, Credit and Banking*, Vol. 15, No. 3, pp. 355-362.
10. Goltz, F. (2005), "Fixed Income Derivatives: Strategies for Portfolio Managers", EDHEC Risk and Asset Management Research Centre.
11. Goyal, C.K. (2008), "Financial Inclusion in the Northeastern Region of India with Special Reference to Assam", *The ICAI Journal of Applied Finance*, Vol. 14, No. 12, pp. 54-64.
12. Hancock, D. (1985), "Bank Profitability, Interest Rates and Monetary Policy", *Journal of Money, Credit and Banking*, Vol. 17, No. 2, pp. 189-202.
13. Hoggarth, G., Milne, A. and Wood, G. (1998), "Financial Innovation and Financial Stability: Some Lessons from Germany and the UK", *Financial Stability Review*, Bank of England.
14. IBEF (India Brand Equity Foundation) (2015), "Indian Banking Sector Snapshot", Viewed on March 24, 2016 <http://www.ibef.org/industry/banking-india.aspx>
15. Johnson, L.K. (2008), "Boost Growth and Profitability at the Same Time" *Harvard Management*, June 2008, pp. 1-4.
16. Khan, W.A. and Sattar, A. (2014), "Impact of Interest Rate Changes on Profitability of Four Major Commercial Banks in Pakistan", *International Journal of Accounting and Financial Reporting*, Vol. 4, No. 1, pp. 142-154.
17. Lileikiene, A. and Likus, A. (2011), "Analysis of Change Effect in the Market Interest Rate on Net Interest Income of Commercial Banks", *Inzinerine Ekonomika-Engineering Economics*, Vol. 22, No. 2, pp. 241-254.
18. Mato, M.A.M. (2005), "Classic and Modern Measures of Risk in Fixed-Income Portfolio Optimization", *Journal of Risk Finance*, Vol. 6, No. 5, pp. 416-423.
19. Molyneux, P. (1993), "Market Structure and Profitability in European Banking", Research Paper 9, Institute of European Finance, University College of North Wales.
20. Molyneux, P. and Thornton, J. (1992), "The Determinants of European Bank Profitability", *Journal of Banking and Finance*, Vol. 16, No. 6, pp. 1173-1178.
21. Pesek, B.P. (1970), "Bank's Supply Function and the Equilibrium Quantity of Money", *Canadian Journal of Economics*, Vol. 3, pp. 357-385.
22. Petinger, T. (2013), "Effect of Lower Interest Rates", Viewed on March 24, 2016 <http://www.economicshelp.org/blog/3417/interest-rates/effect-of-lower-interest-rates/>
23. Rasiah, D. (2010), "Theoretical Framework of Profitability as Applied to Commercial Banks in Malaysia", *European Journal of Economics, Finance & Administrative Sciences*, Vol. 19, pp. 74-97.
24. Revell, J.R.S. (1980), "Costs and Margins in Banking: An International Survey", Organization for Economic Cooperation and Development, Paris.
25. Samuelson, P.A. (1945), "The Effect of Interest Rate Increases on the Banking System", *The American Economic Review*, Vol. 35, No. 1, pp. 16-27.
26. Sandhu, N. and Sandhu, S.S. (2012), "Revisiting Myths Associated with Derivatives: An Empirical Study", *Indian Journal of Finance*, Vol. 6, No. 4, pp. 44-50.
27. Sandhu, N. and Singh, D. (2016), "Financial Inclusion in India-Rethinking the Banking Initiatives", Paper presented at 5<sup>th</sup> Annual International Conference on Sustainability, Indian Institute of Management, Shillong, India.
28. Sarma, M. (2008), "Index of Financial Inclusion", Viewed on September 29, 2015 [http://www.icrier.org/pdf/Working\\_Paper\\_215.pdf](http://www.icrier.org/pdf/Working_Paper_215.pdf)
29. Sharma, A. and Mehta, V. (2005), "Service Quality Perceptions in Financial Services – A Case Study of Banking Services", *Journal of Services Research*, Vol. 4, No. 2, pp. 205-222.
30. Singh, D. and Sandhu, N. (2016), "Determinants of Bank Growth – An Indian Perspective", Manuscript submitted for publication.
31. Singh, D., Singh, H. and Sandhu, N. (2016), "New Market Entry Strategies: A Comparative Study of Public and Private Sector Banks in India", Paper presented at 5<sup>th</sup> Annual International Conference on Sustainability, Indian Institute of Management, Shillong, India.
32. Staikouras, C.K. and Wood, G.E. (2005), "The Determinants of European Bank Profitability", *International Business & Economics Research Journal*, Vol. 3, No. 6, pp. 57-68.
33. Tarus, D.K., Chekol, Y.B. and Mutwol, M. (2012), "Determinants of Net Interest Margins of Commercial Banks in Kenya", *Procedia Economics and Finance*, Vol. 2, pp. 199-208.
34. The Economic Times (2016), "RBI May Cut Repo Rate After April 5 Meeting", Viewed on March 24, 2016 <http://economictimes.indiatimes.com/news/economy/policy/rbi-may-cut-repo-rate-after-april-5-meeting-standard-chartered/articleshow/51222263.cms>
35. Thistle, P.D., McLeod, R.W. and Conrad, B.L. (1989), "Interest Rates and Bank Portfolio Adjustments", *Journal of Banking & Finance*, Vol. 13, No. 1, pp. 151-161.
36. Tiwari, R., Buse, S. and Herstatt, C. (2006), "Mobile Banking as Business Strategy: Impact of Mobile Technologies on Customer Behavior and Its Implications for Banks", Working Paper No. 37, Institute of Technology and Innovation Management, Hamburg University of Technology.
37. Varadarajan, P. and Berry, L.L. (2007), "Strategies for Growth in Banking: An Exposition", *International Journal of Bank Marketing*, Vol. 1, No. 1, pp. 15-25.
38. Vyas, R.S. and Math, N.R.B. (2006), "A Comparative Study of Cross-Selling Practices in Public and Private Sector Banks in India", *Journal of Financial Services Marketing*, Vol. 10, No. 4, pp. 123-134.
39. Zikmund, W.G. (1994), "Business Research Methods", Harcourt Brace College Publishers, New York.
40. Zimmerman, G. (1996), "Factors Influencing Community Bank Performance in California", *Federal Reserve Bank of San Francisco*, Vol. 1, pp. 26-41.

## IT & ITES EMPLOYEES' OPINION ON THE PERSPECTIVES CONSIDERED IN THE BALANCED SCORECARD- A STUDY WITH SPECIAL REFERENCE TO COIMBATORE DISTRICT

**SHYAM UMASANKAR K K**  
**RESEARCH SCHOLAR**  
**KARPAGAM UNIVERSITY**  
**COIMBATORE**

**DR. V KRISHNAVENI**  
**ASSOCIATE PROFESSOR**  
**DEPARTMENT OF MANAGEMENT**  
**KARPAGAM ACADEMY OF HIGHER EDUCATION**  
**COIMBATORE**

### ABSTRACT

*The balanced scorecard is used by industry, government and non-profit organizations all over the world to align business activities to the vision and strategy of the organization. It helps to improve internal and external communications and monitor organization performance against strategic goals. A broad range of business goals can be included in the scorecard and performance targets can be measured. The present study analyses the IT and ITES employees' opinion on the perspective considered in balanced scorecard which primarily ranks Financial perspective, Customers perspective, Shareholders' perspective and Internal business perspective, Learning and growth perspective, Environmental and social perspective, Employees' perspective, Competitive perspective and Suppliers' perspective.*

### KEYWORDS

balance scorecard, information technology, Information technology enabled services, strategic planning.

### I. INTRODUCTION

The management by objectives (MBO) philosophy of Drucker (1955) and the Balanced Scorecard approach of Kaplan and Norton (1992) are based on 'strategic measurements,' 'goal congruence,' and 'Theory Y' of Mc- Gregor (1960) as a means to improve the firm performance (Hoffecker and Goldenberg, 1994; Newing, 1995; Dinesh and Palmer, 1998). The Balanced Scorecard is based on 'rational goal model' and incorporates 'human relations model.' It is a motivational tool also since employee compensation is linked with different key performance indicators. The difference between the two approaches is that while MBO is more 'open-ended,' the Balanced Scorecard is 'more explicit and focused' as it incorporates the perspectives of customers, shareholders, internal business processes and learning and growth (Dinesh and Palmer, 1998). In short, the Balanced Scorecard represents a fundamental change in the underlying assumption about performance measurement and strikes a balance between short-term and long-term objectives, financial and non-financial measures, outcome and process measures, lagging and leading indicators and also between internal and external perspectives

### II. METHODOLOGY

The study included 530 sample subjects surveyed in 106 IT & ITES companies. At the end of data collection, five interview schedules were found incomplete and these five schedules were deducted. Thus the studies consist of 525 respondents. The study covers both the primary and the secondary data. For the purpose of collection of the primary data, a well-structured interview schedule had been framed. The interview schedule covered information on demographic, socioeconomic status and senior officials' perceptions on BSC practices, its dimensions, benefits, and problems faced its impact, success rate and senior officials level of satisfaction about BSC implementation.

### III. OBJECTIVE AND ANALYSIS

This article will be at most useful for the IT and ITES company's employees, experts and research scholars in understanding IT and ITES employees' opinion about various perspectives considered in the balance scorecard. So, the primary objective of the study is as follows:

1. To analyse the IT & ITES employees' opinion about the Financial perspective, Customers perspective, Shareholders' perspective and Internal business perspective, Learning and growth perspective, Environmental & social perspective considered in the balance scorecard.

### IV. STATISTICAL TOOL USED

This research is primary in nature and the questionnaire is issued in person by the researcher. To analyse the opinion on dimensions of balance scorecard, the major statistical techniques like Sum, mean and ranking technique is used and mean score is calculated.

### V. IT & ITES EMPLOYEES' OPINION ON DIMENSIONS OF BALANCED SCORECARD

The Balanced Scorecard is a holistic model that can be used at various levels across the organization, service, team or group. It is used to manage strategy by linking objectives to initiatives, targets and measures across a range of corporate perspectives. These perspectives are determined by the organization using the model. This cross-section of the study deals with the IT & ITES employees' opinion on dimensions of balanced scorecard.

TABLE 1: IT & ITES EMPLOYEES' OPINION ABOUT THE PERSPECTIVES CONSIDERED IN BALANCED SCORECARD

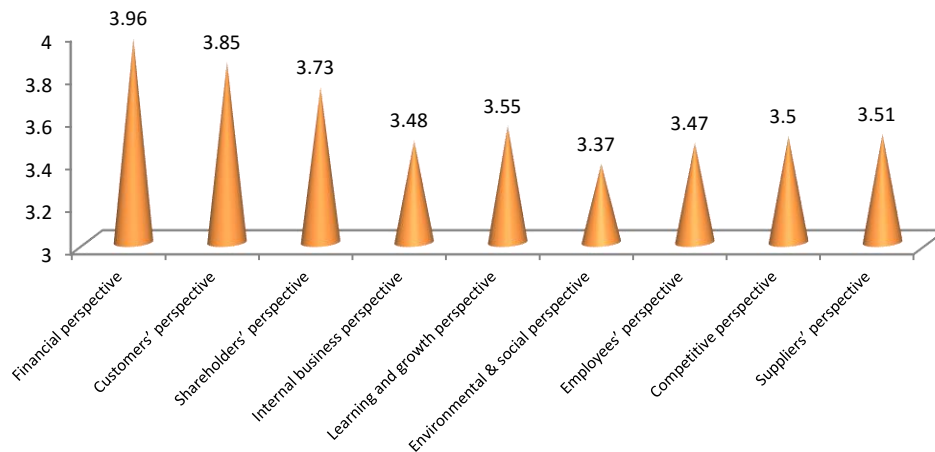
Perspectives	Most Important	Important	Moderate	Not Important	Not at all	Sum	Mean	Rank
Financial perspective	136 (25.90)	272 (51.81)	93 (17.71)	8 (1.52)	16 (3.05)	2079	3.96	1
Customers' perspective	83 (15.81)	295 (56.19)	131 (24.95)	16 (3.05)	0 (0.00)	2020	3.85	2
Shareholders' perspective	89 (16.95)	238 (45.33)	168 (32.00)	26 (4.95)	4 (0.76)	1957	3.73	3
Internal business perspective	75 (14.29)	182 (34.67)	191 (36.38)	73 (13.90)	4 (0.76)	1826	3.48	7
Learning and growth perspective	83 (15.81)	241 (45.90)	110 (20.95)	64 (12.19)	27 (5.14)	1864	3.55	4
Environmental & social perspective	93 (17.71)	164 (31.24)	151 (28.76)	77 (14.67)	40 (7.62)	1768	3.37	9
Employees' perspective	57 (10.86)	242 (46.10)	134 (25.52)	75 (14.29)	17 (3.24)	1822	3.47	8
Competitive perspective	112 (21.33)	137 (26.10)	192 (36.57)	72 (13.71)	12 (2.29)	1840	3.50	6
Suppliers' perspective	77 (14.67)	210 (40.00)	164 (31.24)	52 (9.90)	22 (4.19)	1843	3.51	5

Source: Primary Data

The data presented in the above table infers that out of 525 respondents surveyed, the majority of the IT & ITES employees in Coimbatore region have opined that their organization designed balanced scorecards principally for reviewing its financial performances, it is ranked in first place with the mean score of 3.96, respectively. Subsequently, the sample respondents have said that their firm considers the customers', shareholders' and also about the learning and growth perspectives while preparing scorecards. These variables are placed in the second, third and fourth positions with the mean scores of 3.85, 3.73 and 3.55 respectively. Similarly, the respondents have opined that their organization on competitors, suppliers and on internal business perspective designing scorecards. These factors are placed in fifth, sixth and seventh rank with the average scores of 3.51, 3.50 and 3.48. On the other hand, the employees have said that their firm usually prepares balanced scorecards including employees, environmental and social perspective. These subjects are ranked in eighth and ninth position with the mean score of 3.47 and 3.37, respectively.

Thus, it has been clearly identified that the majority of the IT & ITES employees in Coimbatore region have opined that their organization designed balanced scorecards, principally for his reviewing its financial performances, it is ranked first with the mean score of 3.96.

EXHIBIT 1: IT & ITES EMPLOYEES' OPINION TOWARDS THE PERSPECTIVES CONSIDERED IN BALANCED SCORECARD



The customer perspective aims at the identification of relevant customers and market segments that contribute to the financial goals. In terms of a market-based management of the company, this dimension makes it possible to get the internal processes, services and products into line with the necessities of current and future markets. The following table discusses on the BSC focused customer perspective objectives of sample IT firms.

TABLE 2: IT & ITES EMPLOYEES' OPINION ON CUSTOMERS' PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS

Perspectives	Most important	Important	Moderate	Not important	Not at all	Sum	Mean	Rank
Customer satisfaction in terms of quality	98 (18.67)	231 (44.00)	120 (22.86)	47 (8.95)	29 (5.52)	1897	3.61	2
On-time delivery	79 (15.05)	241 (45.90)	121 (23.05)	51 (9.71)	33 (6.29)	1857	3.54	5
Customer satisfaction in terms of service	112 (21.33)	207 (39.43)	130 (24.76)	64 (12.19)	12 (2.29)	1918	3.65	1
Image, reputation, and brand	100 (19.05)	178 (33.90)	178 (33.90)	54 (10.29)	15 (2.86)	1869	3.56	4
Percentage of sales from new products(as a % of total sales)	87 (16.57)	227 (43.24)	115 (21.90)	63 (12.00)	33 (6.29)	1847	3.52	6
Responsive after-sales service	118 (22.48)	205 (39.05)	108 (20.57)	50 (9.52)	44 (8.38)	1878	3.58	3
Number of customer suggestions	84 (16.00)	198 (37.71)	148 (28.19)	61 (11.62)	34 (6.48)	1812	3.45	7

Source: Primary Data



From the above data analysis, it has been observed that, the respondents' have opined that their organization prioritizes on the customer's satisfaction while offering any kind of services, it is ranked in first place with an average score of 3.65. Similarly, the employees' have stated that their firm is very rational in quality, after-sales, presence, reputation, and brand of services provided to the customers. These variables are ranked in second, third and fourth position with the mean score of 3.61, 3.58 and 3.56. On the other hand, the sample populations' have said that their organization always concentrate on the product delivery, percentage of sales from new products and on the suggestions given by the customers. These factors are rated in fifth, sixth and seventh position with an average score of 3.54, 3.52 and 3.45, respectively.

Hence, it has been inferred that the respondents' have opined that their organization prioritizes on the customers satisfaction while offering any kind of services, it is ranked in first place with an average score of 3.65.

EXHIBIT 2: IT & ITES EMPLOYEES' OPINION ON CUSTOMERS' PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS



Within the dimension of internal processes, firms should identify and structure efficiently the internal value-driving processes that are vital regarding the goals of customers and shareholders (e.g. innovation, production and after-sales. The following table discusses on the BSC focused internal process perspective objectives of sample IT firms.

TABLE 3: IT & ITES EMPLOYEES' OPINION ON INTERNAL BUSINESS PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS

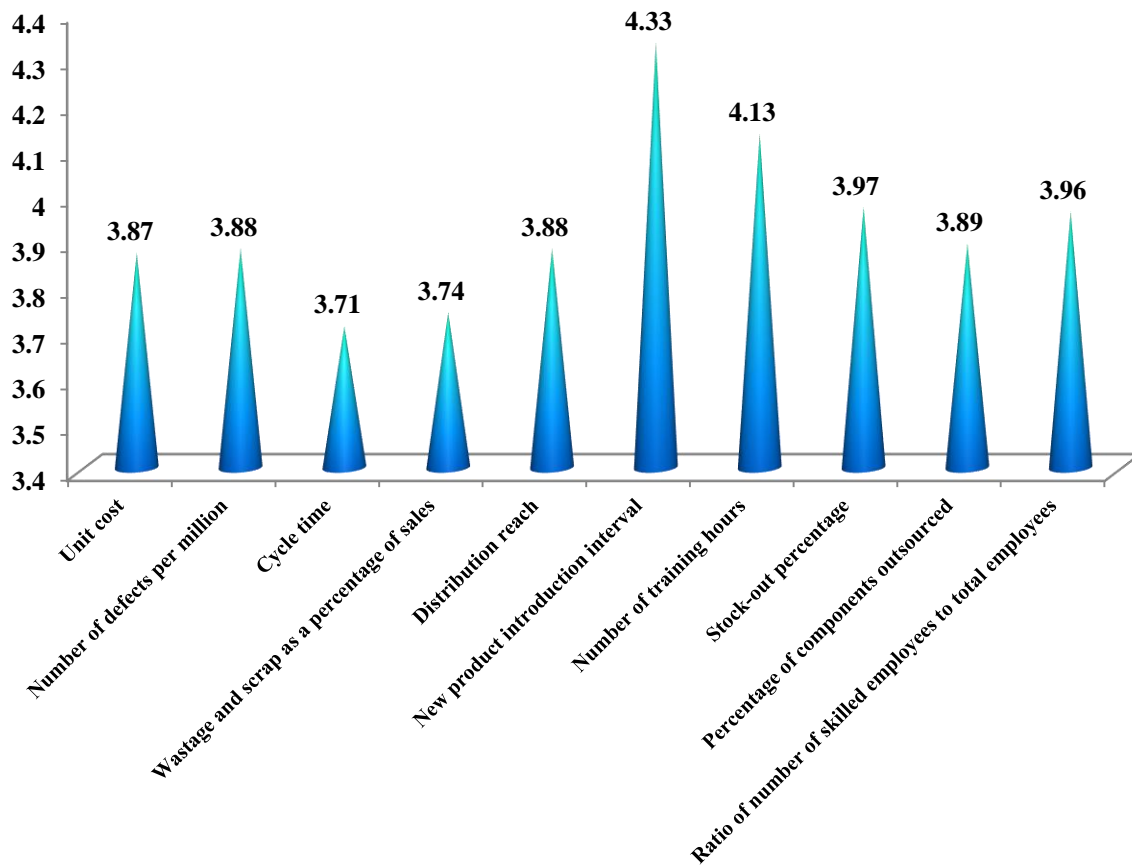
Perspectives	Most portant	Im- portant	Moderate	Not portant	Im- Not at all	Sum	Mean	Rank
Unit cost	141 (26.86)	227 (43.24)	113 (21.52)	35 (6.67)	9 (1.71)	2031	3.87	8
Number of defects per million	142 (27.05)	228 (43.43)	122 (23.24)	18 (3.43)	15 (2.86)	2039	3.88	6
Cycle time	95 (18.10)	258 (49.14)	115 (21.90)	37 (7.05)	20 (3.81)	1946	3.71	10
Wastage and scrap as a percentage of sales	128 (24.38)	216 (41.14)	119 (22.67)	40 (7.62)	22 (4.19)	1963	3.74	9
Distribution reach	140 (26.67)	223 (42.48)	133 (25.33)	17 (3.24)	12 (2.29)	2037	3.88	6
New product introduction interval	234 (44.57)	236 (44.95)	51 (9.71)	1 (0.19)	3 (0.57)	2272	4.33	1
Number of training hours	177 (33.71)	251 (47.81)	86 (16.38)	10 (1.90)	1 (0.19)	2168	4.13	2
Stock-out percentage	174 (33.14)	207 (39.43)	111 (21.14)	20 (3.81)	13 (2.48)	2084	3.97	3
Percentage of components out-sourced	190 (36.19)	173 (32.95)	99 (18.86)	39 (7.43)	24 (4.57)	2041	3.89	5
Ratio of number of skilled employees to total employees	183 (34.86)	211 (40.19)	89 (16.95)	9 (1.71)	33 (6.29)	2077	3.96	4

Source: Primary Data

It has been inferred that most of the employees' have opined that their firm always plan the time interval for launching new products while preparing internal business scorecards, it is ranked in first place with the mean score of 4.33. Similarly, the respondents' have said that their organization always concentrate on the number of training hours, stock-out percentage, ratio of number of skilled employees to total employees and percentage of components outsourced in the business. These factors are ranked in second, third, fourth and fifth with an average score of 4.13, 3.97, 3.96 and 3.89. Followed by, the sample subjects' have stated that they focus on the distribution reach and number of defects in terms of internal business perspective, it is ranked in sixth position with the mean score of 3.88. From the discussion of the above data, it has been inferred that most of the IT & ITES employees' in Coimbatore region have opined that their firm always plan the time interval for launching new products while preparing internal business scorecards, it is ranked in first place with the mean score of 4.33.



EXHIBIT 3: IT & ITES EMPLOYEES' OPINION ON INTERNAL BUSINESS PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS



Employees' perception on training and organizational attitudes related to both employee and organizational improvement is discussed in the following table.

TABLE 4: IT & ITES EMPLOYEES' OPINION ON INNOVATION & GROWTH PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS

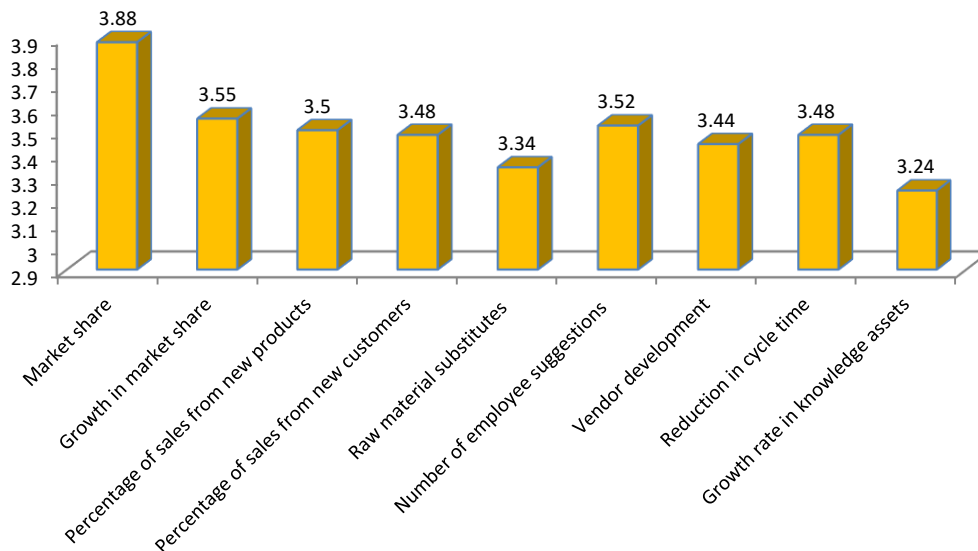
Measures	Most Important	Important	Moderate	Not Important	Not at all	Sum	Mean	Rank
Market share	177 (33.71)	192 (36.57)	109 (20.76)	11 (2.10)	36 (6.86)	2038	3.88	1
Growth in market share	101 (19.24)	192 (36.57)	134 (25.52)	90 (17.14)	8 (1.52)	1863	3.55	2
Percentage of sales from new products	39 (7.43)	239 (45.52)	207 (39.43)	23 (4.38)	17 (3.24)	1835	3.50	4
Percentage of sales from new customers	78 (14.86)	210 (40.00)	146 (27.81)	67 (12.76)	24 (4.57)	1826	3.48	5
Raw material substitutes	68 (12.95)	183 (34.86)	149 (28.38)	112 (21.33)	13 (2.48)	1756	3.34	8
Number of employee suggestions	101 (19.24)	183 (34.86)	143 (27.24)	85 (16.19)	13 (2.48)	1849	3.52	3
Vendor development	70 (13.33)	202 (38.48)	175 (33.33)	46 (8.76)	32 (6.10)	1807	3.44	7
Reduction in cycle time	104 (19.81)	170 (32.38)	145 (27.62)	86 (16.38)	20 (3.81)	1827	3.48	5
Growth rate in knowledge assets	17 (3.24)	217 (41.33)	206 (39.24)	45 (8.57)	40 (7.62)	1701	3.24	9

Source: Primary Data

From the above table, it has been inferred that, the IT & ITES employees' in Coimbatore have opined that their company gives more priority to market shares in terms of innovation and growth perspective, it is ranked in first place with an average score of 3.88. Batches of sample subjects' have said that aspects like growth in market share, percentage of sales from new products & customers, reduction in cycle time and innovative ideas of the employee are considered as key performance indicators of innovation and growth perspective. These variables are ranked in second, third and fourth position with the mean score of 3.55, 3.52, 3.50 and 3.48, respectively. Similarly, the respondents' have stated that their firm emphasize on vendor development, raw material substitutes and growth rate in knowledge assets. These factors are placed in seventh, eighth and ninth rank with an average score of 3.44, 3.34 and 3.24.

Thus, it has been concluded that, the IT & ITES employees' in Coimbatore have opined that their company gives more priority to market shares in terms of innovation and growth perspective, it is ranked in first place with an average score of 3.88.

EXHIBIT 4: IT & ITES EMPLOYEES' OPINION ON INNOVATION & GROWTH PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS



In the predominant financial perspective objectives similar to traditional systems of management and accounting are included to depict the financial performance of the company. In contrast to traditional management instruments, the BSC concept stresses the importance of so-called value drivers for future profitability. The following table discusses on the BSC focused financial perspective objectives of sample IT firms.

TABLE 5: IT & ITES EMPLOYEES' OPINION ON FINANCIAL PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS

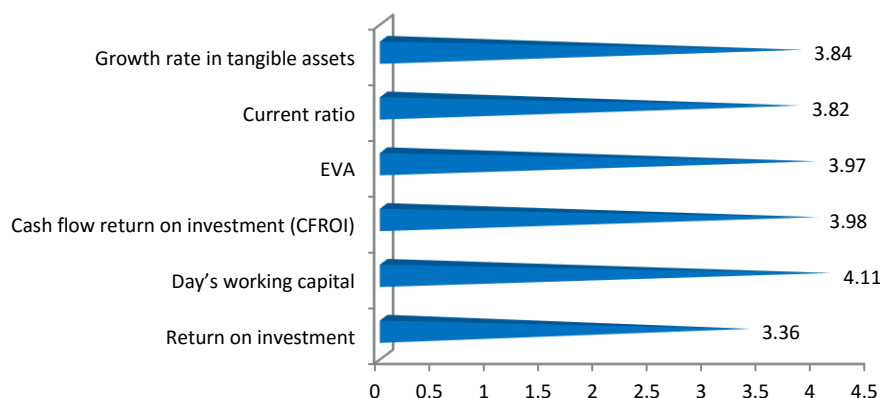
Measures	Most Important	Important	Moderate	Not Important	Not at all	Sum	Mean	Rank
Return on investment	66 (12.57)	191 (36.38)	156 (29.71)	91 (17.33)	21 (4.00)	1765	3.36	6
Day's working capital	188 (35.81)	228 (43.43)	90 (17.14)	15 (2.86)	4 (0.76)	2156	4.11	1
Cash flow return on investment (CFROI)	168 (32.00)	230 (43.81)	92 (17.52)	19 (3.62)	16 (3.05)	2090	3.98	2
EVA	166 (31.62)	233 (44.38)	86 (16.38)	23 (4.38)	17 (3.24)	2083	3.97	3
Current ratio	137 (26.10)	229 (43.62)	115 (21.90)	16 (3.05)	28 (5.33)	2006	3.82	5
Growth rate in tangible assets	151 (28.76)	215 (40.95)	110 (20.95)	23 (4.38)	26 (4.95)	2017	3.84	4

Source: Primary Data

The data presented in the above table indicates that, majority of the employees' in IT & ITES companies have opined that their organization always emphasize on the days working capital as a key performance indicator i.e., number of days it will take for a company to convert its working capital into revenue. This factor has been ranked in first place with the mean score of 4.11. Similarly, the respondents believe that Cash Flow Return on Investment (CFROI), Economic Value Added (EVA) and growth rate in tangible assets are the ratios that indicate the financial performances of the concern. These variables are ranked in second, third and fourth position with an average score of 3.98, 3.97 and 3.84. On the other hand, the sample populations' have said that their organization concentrates on the current ratio/liquidity ratio and on return on investment while reviewing the financial performances. These factors are ranked in fifth and sixth place with an average score of 3.82 and 3.36, correspondingly.

The above table indicates that majority of the employees' in IT & ITES companies have opined that their organization always emphasize on the days working capital as a key performance indicator it is ranked in first place with the mean score of 4.11.

EXHIBIT 5: IT & ITES EMPLOYEES' OPINION ON FINANCIAL PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS



Indian companies are expanding their service offerings, enabling customers to deepen their offshore engagements and shifting from low-end business processes to higher ones. They are also enhancing their global service delivery capabilities through a combination of Greenfield initiatives, cross-border mergers and acquisitions, as well as partnerships and alliances with local players. This has helped them execute end-to-end delivery of new services. Based on this discussion the following table description is made that focuses the strategic vision of IT & ITES firms in management of their investors.

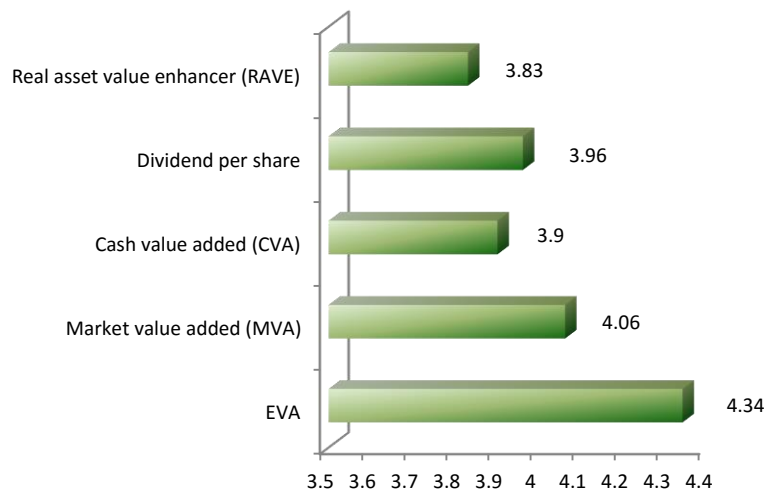
TABLE 6: IT & ITES EMPLOYEES' OPINION ON INVESTORS/ SHAREHOLDERS PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS

Measures	Most Important	Important	Moderate	Not Important	Not at all	Sum	Mean	Rank
EVA	226 (43.05)	251 (47.81)	46 (8.76)	2 (0.38)	0 (0.00)	2276	4.34	1
Market value added (MVA)	139 (26.48)	293 (55.81)	83 (15.81)	8 (1.52)	2 (0.38)	2134	4.06	2
Cash value added (CVA)	134 (25.52)	229 (43.62)	141 (26.86)	17 (3.24)	4 (0.76)	2047	3.90	4
Dividend per share	159 (30.29)	218 (41.52)	120 (22.86)	23 (4.38)	5 (0.95)	2078	3.96	3
Real asset value enhancer (RAVE)	150 (28.57)	200 (38.10)	131 (24.95)	23 (4.38)	21 (4.00)	2010	3.83	5

Source: Primary Data

From the above empirical data analysis, it has been observed tht, most of the employees' have opined that their organization considers Economic Value Added (EVA) as the key factor of investor/shareholders perspective, as it is a measure of shareholder value and an estimate of the true economic profit of an enterprise. This factor has been ranked in first place with an average score of 4.34. Followed by, the respondents' have said that the ratios such as Market Value Added (MVA), Dividend Per Share, Market Value Added (MVA) And Real Asset Value Enhancer (RAVE) are considered important as part of shareholders/investors perspective. These variables are ranked in second, third, fourth and fifth position with the mean score of 4.06, 3.96, 3.90 and 3.83, accordingly. Hence, it has been inferred that most of the employees' have opined that their organization considers Economic Value Added (EVA) as the key factor of investor/shareholders perspective it is ranked in first place with an average score of 4.34.

EXHIBIT 6: IT & ITES EMPLOYEES' OPINION ON INVESTORS/ SHAREHOLDERS PERSPECTIVE CONSIDERED IN BALANCED SCORECARDS



The Indian IT and ITES industry has continued to perform its role as the most consistent growth driver for the economy. Service, software exports and BPO remain the mainstay of the sector. Over the last five years, the IT and ITES industry has grown at a remarkable pace. A majority of the Fortune 500 and Global 2000 corporations are sourcing IT and ITES from India and it is the premier destination for the global sourcing of IT and ITES accounting for 55 per cent of the global market in offshore IT services and garnering 35 per cent of the ITES/BPO market. In this case the management of supplier base becomes strategically important, the following table BSC values from suppliers perceptive.

VI. CONCLUSION

The present study analysed the IT and ITES employees opinion towards the perspective considered in balanced score card in Coimbatore region and it primarily included Financial perspective, Customers perspective, Shareholders' perspective and Internal business perspective, Learning and growth perspective, Environmental & social perspective, Employees' perspective, Competitive perspective and Suppliers' perspective. The results revealed that Financial perspective takes first rank, Customers perspective holds second rank and Shareholders perspective stands third. So the firms must consider these facts before implementing balance scorecard.

REFERENCES

1. Asa Romeo Asa, NavneelShalendra Prasad, Maw MawHtay (2013), *Balanced Scorecard: A Paradigm Measure of Business Strategy and Firm Performance*, International Journal of Scientific and Technology Research, Volume.2, Issue No. 4, ISSN 2277-8616, April.
2. Ayesha Farooq and ZareenHussain (2011), *Balanced Scorecard Perspective on Change and Performance: A Study of Selected Indian Companies*, Journal of Global Strategic Management, Issue No.10, PP. 27-38, December.
3. Becker, B., Huseld, M., Ulrich, D., (2011), *The HR Scorecard: Linking people, strategy and performance*, Harvard Business School Press.
4. Bindu Nair and DR. AshishPareek (2011), *A study of the various performance management systems adopted by select Indian private sector Organizations*, Volume No.2, Issue No. 6, ISSN 0976-2183, PP.43-46, June
5. Braam, G. J. M. and Nijssen, E. J (2004), *Performance effects of using the balanced scorecard: A note on the Dutch experience*, Long Range Planning, Volume No. 37, Issue. No. 4, PP. 335-349.
6. Chapter Two, *Balanced Scorecard Concept and Literature Review*, [http://shodhganga.inflibnet.ac.in/bitstream/10603/16130/12/12\\_chapter\\_2.pdf](http://shodhganga.inflibnet.ac.in/bitstream/10603/16130/12/12_chapter_2.pdf)
7. Luecke, R. (2003), *Managing Change and Transition: Harvard Business Essentials Series*. Cambridge, MA: Harvard Business School Press.
8. Marcos, A.F., J.I. Rouyet and A. Bosch, (2012), *An IT Balance Scorecard Design under Service Management Philosophy*, in 45 Hawaii International Conferences on System Sciences, Hawaii.
9. Mohamed A. K. Basuony (2014), *The Balanced Scorecard in Large Firms and SMEs: A Critique of the Nature, Value and Application*, Accounting and Finance Research, ISSN 1927-5986 E-ISSN 1927-5994, Volume No. 3, Issue No. 2, PP.14-22

**IMPACT OF EXCHANGE RATE MOVEMENT AND WORLD OIL PRICE ON INDIAN AUTO STOCKS****NISCHITH. S****RESEARCH SCHOLAR****DEPARTMENT OF STUDIES IN MANAGEMENT****B. N. BHADUR INSTITUTE OF MANAGEMENT SCIENCES****UNIVERSITY OF MYSORE****MYSORE****DR. MAHESH. R****ASSOCIATE PROFESSOR****DEPARTMENT OF STUDIES IN MANAGEMENT****B. N. BHADUR INSTITUTE OF MANAGEMENT SCIENCES****UNIVERSITY OF MYSORE****MYSORE****ABSTRACT**

Stock market is one of the most important metric for the management and shareholders in organisation. They measure and specify the worth the company if it is taken as individual and specify the progress of the nation when taken as whole. The complex composition of the stock market is some time susceptible for the minor change in major macroeconomic variable such as GDP, Interest rate, PPP, exchange rate etc. hence it is very necessary for the researchers to evaluate the change which can impact on stock market by these macroeconomic variables. Foreign exchange return is also important in the context of macroeconomic management of a country meaning to say that if a relationship between the foreign exchange rate and the stock market return is found to exist, then the government has the opportunity to manage the exchange rate and thus the return on the stock market. When taken as sector wise then there may other macroeconomic variables which may influence that sector but no influence on the other sector, such as world oil price which particularly influence the auto sectors. In this study the Indian Auto stocks have been evaluated on the basis of time series Analysis, the major economic variables such as world oil price and exchange rate has been considered as the independent variable which predicted to influence the dependent variable like BSE Auto Stocks. Econometric models have been used such of ARCH and GARCH (1,1) model to investigate the outcomes. Here in this work it has been found both world oil price and exchange rate influence BSE Auto stocks significantly.

**KEYWORDS**

exchange rate, auto stock, world oil price.

**1. INTRODUCTION**

Exchange rate volatility is at the centre of the debate on the performance of exchange rate regime. This concern was reinforced by the fluctuations in exchange rates since the move to flexible exchange rate systems in 1973 (Omojimite and Akpokodje 2010). A major concern has the consequence of exchange rate volatility which is a prominent feature of flexible exchange rate systems. Since after the breakdown of the Bretton Woods system in the 1970s, the exchange rate of many countries have been fluctuating considerably over time, a large number of research deals with the implication of Exchange Rate Volatility for the real economy. Today Exchange rate movements are a fundamental factor which greatly impact in the global economy, determining the allocation of resources internationally and affecting the profitability of everyday international transactions. Hence these exchange rate issues are sensitive issues when looked in terms of external transaction with other nation, the concept of nations currency will come into picture which represents the business from nation's side. Stronger the nation's currency better can be the business. But since the currency of India has been depreciating in front of US dollar which caused the main concern in the area of business.

Crude oil has been regarded as one of the important commodities in the world (Hubbard, 1998). It has been observed that crude oil prices are hugely controlled by shocks to the flow of supply of oil and flow demand. While growth in emerging economies has mattered primarily for the latest surge in oil prices; more generally, this is about demand from all countries in the world.

Both the above macroeconomic factors are very crucial for any Auto sector of the nation. Especially in India these two factors are considered as important but it's not sure at what level these two factors affect the Auto sectors. In this research work only world oil price and exchange rate are taken into consideration to estimate the impact of BSE auto stocks.

**2. LITERATURE REVIEW****2.1. LITERATURE REVIEW ON EXCHANGE RATE VOLATILITY ON STOCK**

The relationship between stock prices and exchange rates has preoccupied the minds of economists since they both play important roles in influencing the development of a country's economy. In the recent years, because of increasing international trade and cross market returns and capital inflow, the scenario of impact of macro variables on stock market has become more important issue for any economist to business analyst. The following research work explains the relation between exchange rate and stock market.

**Phylaktis and Ravazzolo** (2005) investigated the long run and short run dynamics between stock prices and foreign exchange rates and the means through which exogenous shocks impact on a group of pacific Basin countries. The research analyzed the period span ranging from 1980 to 1998 with data collected on a monthly basis by applying the co-integration method and multivariate Granger causality tests. The results suggested that stock markets and foreign exchange markets are positively related and that the United States stock market acts as a conduit for these links, also the financial crises had a temporary effect on the long run movement of these markets.

**Kurihara** (2006) chose the period March 2001 to September 2005 to investigate the relationship between macroeconomic variables and daily stock prices in Japan. He used the Japanese stock prices, U.S stock prices, the foreign exchange rate (yen/U.S. dollar) the Japanese interest rate. The empirical results showed that domestic interest rate does not influence Japanese stock prices. However, the exchange rate and U.S stock prices affect Japanese stock prices. Consequently, the quantitative easing policy implemented in 2001 has influenced Japanese stock prices.

**Yau and Nieh** (2006) investigate short- and long- term interrelationships among stock prices of Taiwan and Japan, and New Taiwan Dollar/ Yen exchange rates. The study analyzes the period span from January 1991 to July 2005 via applying co-integration and Granger causality tests. The findings include the stock prices of Taiwan and Japan impact each other for short durations. The portfolio approach is supported for the short term and traditional approach is more plausible for the long-term in the Taiwanese financial market, where as the portfolio approach is not suitable for the Japanese stock markets, all with regard to the relationship

between stock prices and foreign exchange rate. The findings also suggested that there appears to be no long term relationship between New Taiwan Dollar/Yen exchange rate and the stock prices of Taiwan and Japan.

**Pan et al.** (2007) took the data of seven East Asian countries over the period 1988 to 1998 to examine the dynamic linkages between foreign exchange rates and stock prices. The findings of their study revealed that there was a bidirectional causal relation for Hong Kong before the 1997 Asian crisis. Also, there was a unidirectional causal relation from exchange rates and stock prices for Japan, Thailand and Malaysia and from stock prices to exchange rates for Korea and Singapore. During the Asian crises, there was a causal relationship from exchange rates to stock prices for all countries except Malaysia.

**Erbaykal and Okuyan** (2007) investigated the validity of the traditional or portfolio approach in emerging markets in Asia and South America. The study analyzed different periods based on the data availability for the tested countries by applying co integration and Granger causality tests. The Results showed a negative relationship between stock prices and foreign exchange rates in six countries in the long run. There is a causal relationship in eight countries. For five countries, there is a unidirectional causality from stock prices to foreign exchange rates, and for three countries there is a bi directional causality between stock prices and foreign exchange rates.

**Pekkaya and Bayramoglu** (2008) analyze the causality between exchange rate and stock prices of Istanbul Stock Index and S&P 500 in Turkey. The study analyzed the period span from 1990 to 2007 by applying Granger causality tests. The findings implied that there was a Granger cause from Turkey stock prices and S&P 500 to exchange rates for the period 1990 to 2007. The Granger cause between exchange rates and Turkey stock prices was bidirectional. On the other hand, S&P 500 has a unidirectional Granger cause against Turkey stock prices and exchange rates.

**Aydemir and Demirhan** (2009) conducted a research on the relationship between stock prices and exchange rates in Turkey for the period February 23rd 2001 to January 11th 2008. They used the Toda and Yamamoto (1995) method to analyze the data. The results of the empirical study indicated that there was a bidirectional causal relationship between foreign exchange rates and all the stock market indices.

**Muhammad and Rasheed** (2011) conducted a study on the relationship between stock prices and exchange rates in four South Asian countries; Pakistan, India, Bangladesh and Sri- Lanka, for the period January 1994 to December 2000. The study employed cointegration, vector error correction modelling technique and standard Granger causality tests to examine the long-run and short-run association between stock prices and exchange rates. Results of the study showed no short-run association between the variables for all four countries. There was no long-run relationship between stock prices and exchange rates for Pakistan and India as well. However, for Bangladesh and Sri- Lanka, there appeared to be a bi-directional causality between these two financial variables.

**Sekmen** (2011) examined the effects of exchange rate volatility, using the squared residuals from the autoregressive moving average (ARMA) models, on stock returns for the U.S. for the period 1980 to 2008. The study found that exchange rate volatility negatively affected U.S. stock returns since the availability of hedging instruments could not lessen the negative effect of exchange rate volatility on trade volume. In another study, **Olugbenga** (2012) examined the long-run and short-run effects of exchange rate on stock market development in Nigeria over 1985:1–2009:4 using the Johansen cointegration tests. Results showed a significant positive stock market performance to exchange rate in the short-run and a significant negative stock market performance to exchange rate in the long-run

**Sifunjo and Mwasaru** (2012) investigated the causal relationship between exchange rates and share prices in Kenya. The empirical results obtained over the period November 1993 to May 1999 indicated that the exchange rates granger causes stock prices in Kenya. The study also found out a unidirectional causality from exchange rates to stock prices. Therefore, the movements in exchange rates exert significant influence on stock price determination in Kenya. They tested for stationary, co-integration and finally used the error correction model to test causality.

**Olugbenga** (2012) examined the long-run and short-run effects of exchange rate on stock market development in Nigeria over 1985–2009 using the Johansen cointegration tests. A bi-variate model was specified and empirical results show a significant positive stock market performance to exchange rate in the short-run and a significant negative stock market performance to exchange rate in the long-run. The Granger causality test shows strong evidence that the causation runs from exchange rate to stock market performance; implying that variations in the Nigerian stock market is explained by exchange rate volatility.

**Subair and Salihu** (2013) examined exchange rate volatility and the stock market evidenced from Nigerian through the Error Correction model, this study investigated the effects of exchange rate volatility on the Nigeria stock markets. The study found that the exchange rate volatility generated via ARCH process exerts a stronger negative impact on the Nigeria stock markets. However, the rate of inflation and interest rate did not have long run relationship with stock market capitalization since the major participant in the market is government. The study recommended that a coordinated monetary and fiscal policy should be put in place to check mate the fluctuation of exchange rate in order to deepen the depth of the Stock Market.

**Mlambo, Maredza and Sibanda** (2013) assessed the effects of currency volatility on the Johannesburg Stock Exchange. An evaluation of literature on exchange rate volatility and stock markets was conducted resulting into specification of an empirical model. The Generalised Autoregressive Conditional Heteroskedascity (1.1) (GARCH) model was used in establishing the relationship between exchange rate volatility and stock market performance. The study employed monthly South African data for the period 2000–2010. The data frequency selected ensured an adequate number of observations. A very weak relationship between currency volatility and the stock market was confirmed

## 2.2. LITERATURE REVIEW ON OIL PRICE ON STOCK

A lot of empirical researches have studied the relationship between oil price shocks and macroeconomic variables. However, there is relatively little work on the relationship between oil price shocks and financial markets

**Hamilton** (1983) provided evidence of correlation between oil price and economic output, and further claimed that oil price was to be blamed for every post-World War II (1948-1972) recessions in the US economy. According to the author, the data (real GNP, unemployment, implicit price deflator for nonfarm, hourly compensation per worker, import prices, and M1) indicated that economic recession preceded an oil price increase after 3-4 quarters, with recovery starting after 6-7 quarters. **Gisser and Goodwin** (1986), **Mork** (1989), and **Hooker** (1996) provided evidence in support of Hamilton's findings.

**Jones and Kaul** (1996) tested whether the reaction of international stock markets to oil shocks can be justified by current and future changes in real cash flows and changes in expected returns. They found that in the postwar period, the reaction of United States and Canadian stock prices to oil shocks can be completely accounted for by the impact of these shocks on real cash flows.

**Huang, Masulis, and Stoll** (1996) examined the link between daily oil future returns and daily United States returns. Their evidence suggested that oil returns do lead some individual oil company stock returns, but oil future returns do not have much impact on general market indices. Using monthly data over the period 1947-1996, **Sadorsky** (1999) shown that oil price and its volatility both play important roles in affecting real stock returns. Especially, oil price movements after 1986 explained a large fraction of the forecast error variance in real stock returns than did interest rates.

**Sadorsky** (1999) used monthly data to probe the relationship between oil prices and stock returns for the US from January 1947 to April 1996. The author applied variance decomposition. The findings suggested that oil prices and stock returns have a negative relationship in the short term, meaning higher oil prices lead to lower stock returns.

**Papapetrou** (2001) applied vector error correction modelling to study the effect of oil prices on stock returns for Greece using daily data and the variance decomposition. The study suggested a negative oil prices effect on stock returns that extended over four months.

**Maghyreh** (2004) studied the dynamic linkage between oil price and stock returns in 22 emerging economies using the unrestricted Vector Autoregressive (VAR) approach proposed by **Sim** (1980) with daily data.

**Aloui and Jammazi** (2009) applied a univariate regime-switching EGARCH model to examine the relationship between crude oil shocks and UK, French and Japanese stock markets. They detected two episodes of series behaviour, one relative to low mean and high variance regime and the other to high mean and low variance regime, and provided evidence that common recessions coincide with the low mean and high variance regime.

**Bharn and Nikolova** (2010) have also examined the dynamic correlation between stock market and oil prices, in Russia, using a bivariate EGARCH model. They identified three major events (i.e. September 11th, 2001 terrorist attack, war in Iraq 2003 and the civil war in Iraq in 2006) which caused a negative correlation between the Russian stock market and the oil prices.

**Cifarelli and Paladino** (2010) applied a multivariate CCC-GARCH model and provided evidence that oil price shifts are negatively related to stock price and exchange rate changes.



Furthermore, Lee and Chiou (2011) applied a univariate regime-switching GARCH model to examine the relationship between WTI oil prices and S&P500 returns. They concluded that when there are significant fluctuations in oil prices, the resultant unexpected asymmetric price changes lead to negative impacts on S&P 500 returns, but the result does not hold in a regime of lower oil price fluctuations.

**3. OBJECTIVES**

1. To estimate the impact of exchange rate on Auto stocks of BSE
2. To estimate the impact of world oil price on Auto stocks of BSE

**4. RESEARCH METHODOLOGY**

Data for the study is obtained from the Bombay Stock Exchange. The study has been conducted from January 2001 to 2015, Exchange rate of Indian Rupee is taken from RBI website and international oil price is considered for the study.

**MODEL SPECIFICATION**

This research work is fundamentally analytical as it embraces the use of secondary data in examining the effect of exchange rate volatility on the BSE auto stocks. The analytical tools consist of the econometrical tests (i.e Unit Root Test, ARCH and GARCH models). The data for the study was obtained mainly from secondary sources.

The study adopted stationarity test using the Augmented Dickey Fuller Test (ADF). This test is aimed at ascertaining the stationarity properties of the time series in order to avoid spurious regression or random walk in the regression estimates and ensure reliability of estimates and therefore the application of appropriate test statistic for long run relationship/effect. The ADF formula is thus specified as:

$$\Delta P_{it} = \beta_1 + \beta_2 t + \sigma P_{it-1} + \alpha \sum_{t-1}^m \Delta P_{it-1} + \varepsilon_{it}$$

The ARCH model has become a popular method because its variance specification can capture commonly observed features of the time series of financial variables; in particular, it is useful for modelling volatility and especially changes in volatility over time (Hill et al 2008) cited in Arabi (2012). Most economic and financial time series and especially conditional stock market volatility has always been studied using the ARCH and GARCH models introduced by Engle (1982) and Bollerslev (1986) respectively. Assuming linearity, the first and second conditional moments of return series (given its past behaviour) can be jointly estimated by GARCH (p, q) in order to characterize the dependence of future observations on past values.

Therefore, the jointly estimated GARCH (1, 1) model introduced by Bollerslev (1986) is given by;

$$Y_t = X_t^1 \theta + \varepsilon_t$$

$$\alpha_t = \delta_t Z_t, Z_t: N(0, 1)$$

$$\delta_t^2 = \omega + \alpha \varepsilon_{t-1}^2 + \beta \delta_{t-1}^2$$

Where, the mean equation given in is written as a function of exogenous variables with an error term  $\omega > 0, \alpha > 0, \beta \geq 0$ ,  $\omega$  is a constant term,  $\varepsilon_{t-1}^2$  is news about volatility from the previous period measured as the lag of the squared residual from the mean equation (the ARCH) and  $\delta_{t-1}^2$  is the last periods forecast variance (the GARCH term).

GARCH (p, q) is the Generalised ARCH by Bollerslev (1986) models used widely especially in financial time series analysis:

$$\delta_t^2 = \omega + \sum_{t-1}^p \alpha_t \varepsilon_{i-1} \sum_{j-1}^q \beta_j \delta_{t-i}^2 ;$$

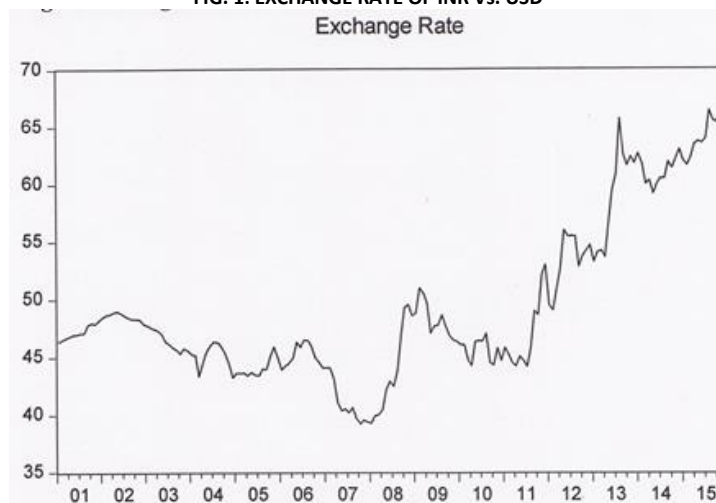
$$\varepsilon_t^2 \sim N(0, 1); \omega > 0, \alpha_i > 0, \beta_j \geq 0$$

**5. FINDING AND ANALYSIS**

**5.1. An overview of the volatility of Rupee and World Oil Price**

**5.1.1. Volatility of Indian Rupee against Dollar**

**FIG. 1: EXCHANGE RATE OF INR Vs. USD**

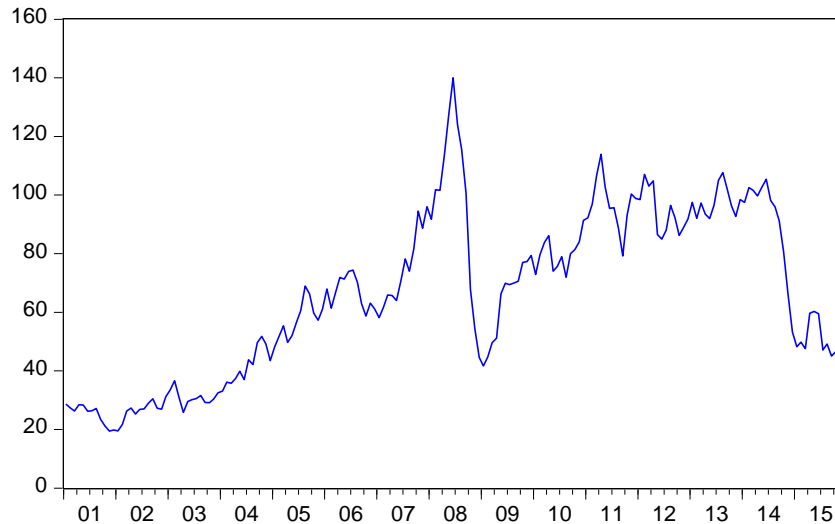


The graph clearly shows that Indian rupee value favourable in the period of 2007 to 2008. The sudden upsurge in the value of Indian rupee in the closing of the financial year 2006-07, which took most market players by surprise and proved one of the best performing Asian units. On 2007, the rupee quoted its nine year high against the dollar at 41.86. Surprisingly at the end of May 2007, the dollar strengthened quite significantly against almost all currencies, but failed to impress the rupee. Most of the appreciation (11 percent) has occurred since March 2007 (Sumanjeet, 2008). The rupee has depreciated more than 20 percent in 2008. On 22 October, the rupee fell as low as 49.50, at which point it was down 20.4 percent in 2008 In 2010 the rupee value has which was 46.78 has come to 45 at the end of the year, and at the year 2011 it again raised to 52 and in 2012 end it again raised to 54.6 and In 2013 May it again raised to 58.9 and June 59.3 and in July it reached 60 per US dollar.



5.1.2. Volatility of World Oil price

FIG 2: WORLD OIL PRICE IN US DOLLAR  
Oil price



Like prices of other commodities, the price of crude oil experiences wide price swings in times of shortage or oversupply. The crude oil price cycle may extend over several years responding to changes in demand as well as OPEC and non-OPEC supply. Throughout much of the twentieth century, the price of U.S. petroleum was heavily regulated through production or price controls. In the post-World War II era, U.S. oil prices at the wellhead averaged \$28.52 per barrel adjusted for inflation to 2010 in dollars. In the absence of price controls, the U.S. price would have tracked the world price averaging near \$30.54. Over the same post war period, the median for the domestic and the adjusted world price of crude oil was \$20.53 in 2010 prices. Adjusted for inflation, from 1947 to 2010 oil prices only exceeded \$30.00 per barrel 50 percent of the time. Until March 28, 2000 when OPEC adopted the \$22-\$28 price band for the OPEC basket of crude, real oil prices only exceeded \$30.00 per barrel in response to war or conflict in the Middle East. With limited spare production capacity, OPEC abandoned its price band in 2005 and was powerless to stem a surge in oil prices, which was reminiscent of the late 1970s.

5.2. Data analysis

5.2.1. Descriptive statistics

TABLE 1: DESCRIPTIVE STATISTICS OF 3 VARIABLES

BSE auto		Exchange Rate		Oil price	
Mean	6698.574	Mean	49.32161	Mean	66.34094
Median	5060.830	Median	46.96250	Median	66.47000
Maximum	19985.90	Maximum	66.46200	Maximum	140.0000
Minimum	543.6500	Minimum	39.19500	Minimum	19.44000
Std. Dev.	5313.441	Std. Dev.	6.967497	Std. Dev.	28.17583
Skewness	0.929243	Skewness	1.015493	Skewness	0.062028
Kurtosis	3.029079	Kurtosis	2.969301	Kurtosis	1.956846
Jarque-Bera	25.91111	Jarque-Bera	30.94387	Jarque-Bera	8.276694
Probability	0.000002	Probability	0.000000	Probability	0.015949

**JB Value:** From the above observation the J-B value of three values deviated from normal distribution.

**Skewness and kurtosis:** skewness and kurtosis represent the nature of approximately symmetric for oil price and highly skewed for BSE auto and Exchange rate and reflect positive skewness and the value for kurtosis is positive indicating distribution more peaked than a Gaussian distribution

5.2.2. Testing for stationarity

If the mean and variance are constant over time, then the series is stationary. Stationarity is essential for standard econometric theory. Unit root tests were performed; the Augmented Dickey Fuller test showed all three variables are stationary. This indicating that we can conduct ARCH test.

TABLE 2: TEST FOR STATIONARITY: UNIT ROOT TEST – AUGMENTED DICKEY FULLER TEST  
TABLE 2.1: VARIABLE WITH INTERCEPT BUT NO TREND AND VARIABLES WITH TREND AND INTERCEPT

Variables	intercept		Trend and Intercept	
	level	1 <sup>st</sup> difference	level	1 <sup>st</sup> difference
<b>BSE - Auto</b>				
Augmented Dickey-Fuller test statistic	0.852810	-12.81255	-1.465839	-12.93745
P – Value	0.9947	0.0000	0.8377	0.0000
<b>Exchange Rate</b>				
Augmented Dickey-Fuller test statistic	0.250644	-12.11582	-1.149309	-12.24955
P – Value	0.9750	0.0000	0.9167	0.0000
<b>Oil price</b>				
Augmented Dickey-Fuller test statistic	-2.115885	-10.10879	-1.877904	-10.17360
P – Value	0.2388	0.0000	0.6618	0.0000

TABLE 2.2: TEST CRITICAL VALUES

Level	BSE Auto		Exchange rate		Oil price	
	Intercept	Trend and intercept	Intercept	Trend and intercept	Intercept	Trend and intercept
1% level	-3.466994	-4.010143	-3.466994	-4.010143	-3.467205	-4.010440
5% level	-2.877544	-3.435125	-2.877544	-3.435125	-2.877636	-3.435269
10% level	-2.575381	-3.141565	-2.575381	-3.141565	-2.575430	-3.141649
First difference	Intercept	Trend and intercept	Intercept	Trend and intercept	Intercept	Trend and intercept
1% level	-3.467205	-4.010440	-3.467205	-4.010440	-3.467205	-4.010440
5% level	-2.877636	-3.435269	-2.877636	-3.435269	-2.877636	-3.435269
10% level	-2.575430	-3.141649	-2.575430	-3.141649	-2.575430	-3.141649

5.2.3. Testing for ARCH effect

Brooks (2008) argues that it is worthwhile first to compute the ARCH test to make sure that this class of models (GARCH) is appropriate for the data. In this regard, the ARCH test was used to test for ARCH effects on the residuals. The results are presented by table below.

TABLE 3: TESTING OF ARCH EFFECT

Heteroskedasticity Test: ARCH			
F-statistic	472.4467	Prob. F(1,177)	0.0000
Obs*R-squared	130.2154	Prob. Chi-Square(1)	0.0000

Table 3 shows that the statistic labelled "Obs\*R-squared" is the ARCH test of autocorrelation in the squared residuals. The p-value (0.0000) indicates heteroscedasticity in the residuals. In other words, the zero probability value strongly shows the presence of heteroscedasticity in the residuals

5.2.4. Result of test of GARCH effect

Under the normal Gaussian distribution ARCH is significant and we can conduct the GARCH test. Under the distribution GARCH is also significant for exchange rate but not for Oil price. It means that previous days BSE auto stock value can influence today's BSE auto stocks resulting BSE auto stock is influenced by its own ARCH and GARCH. Exchange rate is also significant indicating that fluctuation in exchange rate and oil price are affecting the BSE Auto Stocks. But since oil price showed p value more than 5 percent, hence oil price has negative effect on BSE auto stocks.

TABLE 4: RESULTS FROM GARCH (1,1) MODEL

Dependent Variable: BSE_AUTO				
Method: ML - ARCH (Marquardt) - Normal distribution				
Included observations: 180				
Presample variance: backcast (parameter = 0.7)				
GARCH = C(3) + C(4)*RESID(-1)^2 + C(5)*GARCH(-1) + C(6)*OIL_PRICE				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-19768.33	1712.111	-11.54617	0.0000
EXCHANGE_RATE	547.0071	33.79285	16.18706	0.0000
Variance Equation				
C	11195310	1772750.	6.315222	0.0000
RESID(-1)^2	0.875078	0.287515	3.043593	0.0023
GARCH(-1)	-0.418897	0.110748	-3.782423	0.0002
OIL_PRICE	-72232.22	7050.119	-10.24553	0.2800

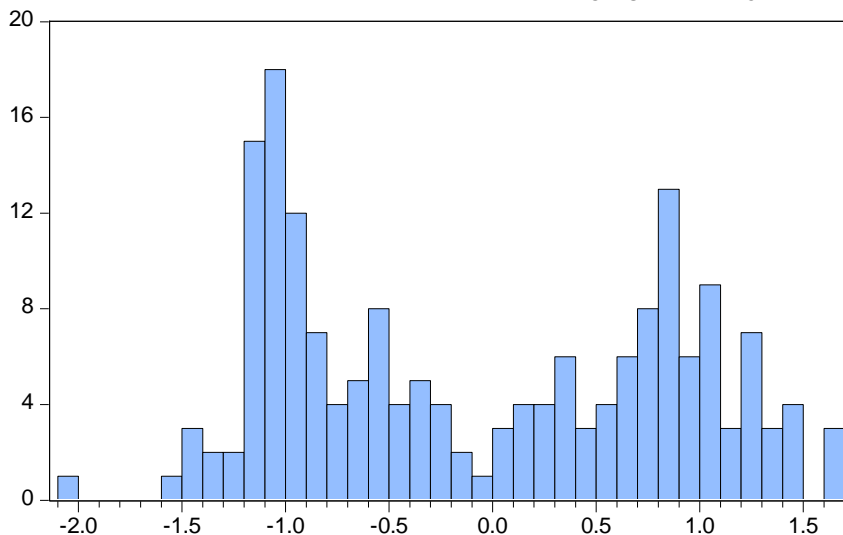
5.3. Diagnostic Test

Gujarati (2004:516) argues that diagnostic tests should be performed so that the model finally chosen is a good model in the sense that all the estimated coefficients have the right signs, they are statistically significant on the basis of the t and F tests. In this regard, this study employs the Histogram and Normality test, Correlogram of Squared Residual Test, and the Heteroscedasticity test as its diagnostic tests. We have three models which are hypotheses as follow:

H0 = there is no serial correlation in the residual or error terms H1 = there is serial correlation	Correlogram square residual (Q test can be performed)
H0 = residual are normally distributed H2 = Residuals are not normal	Jarque-Bera statistics will be used
H0 = There is no ARCH effect H3 = There is ARCH effect	ARCH test should be conducted

5.3.1. Normality test

TABLE 5: NORMALITY TEST



Series: Standardized Residuals	
Sample 2001M01 2015M12	
Observations 180	
Mean	-0.064952
Median	-0.245713
Maximum	1.659381
Minimum	-2.068039
Std. Dev.	0.929577
Skewness	0.123068
Kurtosis	1.603611
Jarque-Bera	15.07864
Probability	0.000532

In the above table p value is less than 5% which means we can reject null hypothesis. Results from the Normality test show that the normal GARCH model best reduced the problems of fat tails and volatility clustering. The kurtosis and skewness are smaller under the normal GARCH model (0.12 and 1.6 respectively). In this regard, it can be concluded that the residuals are not normally distributed.

5.3.2. Heteroscedastic test

TABLE 6: HETEROSCEDASTICITY TEST

Heteroscedasticity Test: ARCH			
F-statistic	11.99774	Prob. F(1,177)	0.0007
Obs*R-squared	11.36308	Prob. Chi-Square(1)	0.0007

Table 6 presents results for the ARCH test. Engle’s LM test indicates that there are ARCH effects. The p value of the Obs\*R-squared is not significant; it is greater than 0.05 and this indicates that there is no ARCH present. The p value is 0.0007 and this shows that there is heteroscedasticity in the residual.

5.3.3. Testing for Autocorrelation: Q Statistic test

TABLE 7: Q STATISTIC TEST

	AC	PAC	Q-Stat	Prob
1	0.252	0.252	11.581	0.001
2	0.464	0.427	51.158	0.000
3	0.296	0.159	67.338	0.000
4	0.286	0.048	82.527	0.000
5	0.230	0.017	92.450	0.000
6	0.146	-0.065	96.485	0.000
7	0.134	-0.034	99.863	0.000
8	0.037	-0.081	100.13	0.000
9	0.143	0.104	104.07	0.000
10	0.066	0.065	104.91	0.000
11	-0.008	-0.118	104.93	0.000
12	0.201	0.207	112.79	0.000
13	0.053	0.052	113.35	0.000
14	0.084	-0.096	114.74	0.000
15	0.045	-0.052	115.13	0.000
16	0.043	-0.028	115.51	0.000
17	0.060	0.033	116.22	0.000
18	0.121	0.138	119.16	0.000
19	-0.056	-0.166	119.79	0.000
20	0.017	-0.019	119.84	0.000
21	-0.057	-0.073	120.52	0.000
22	-0.026	-0.057	120.66	0.000
23	-0.107	-0.006	123.03	0.000
24	-0.110	-0.098	125.57	0.000
25	-0.121	-0.036	128.64	0.000
26	-0.165	-0.034	134.40	0.000
27	-0.083	0.016	135.87	0.000
28	-0.060	0.193	136.65	0.000
29	-0.055	0.041	137.30	0.000
30	0.059	0.028	138.05	0.000
31	-0.089	-0.095	139.78	0.000
32	0.091	0.048	141.60	0.000
33	-0.023	0.034	141.72	0.000
34	0.101	0.062	144.02	0.000
35	0.066	0.066	145.02	0.000
36	0.047	-0.003	145.51	0.000



The Q-statistic test was carried out and results showed that the *Q-statistics* were all significant at all lags under the normal GARCH model, indicating that there is no significant serial correlation in the residuals. Table 7 presents results from the Q-statistic Test. In this table all P value are above 5% which means that we cannot reject null hypothesis and GARCH model with normal distribution has no serial correlation

## 6. CONCLUSION

In an international business there are many macroeconomic variables which can influence nation's economy and also other variables which measure the nations progress, such as stock prices and lively hood of a person. There are many macro-economic variables for which an intense research has undertaken and showed the relationship with one another such as GDP, PPP, Exchange Rate, Inflation, and Interest Rate etc. their relationship has been compared with many other variables such as firm value, stock price of particular firm or one sector. Here in this research the impact of exchange rate and oil price was evaluated. There was a great fluctuation in the exchange rate as per the data concern and when we check the world oil price data which became cheaper in the later years has addressed many researchers to investigate the impact of Oil price on the stock exchange but in this study entire stock prices were not considered but stress given to Auto sector. Hence work was conducted to know the impact. The main objective this study was to examine the impact of Exchange rate volatility on the Auto stock market in India and also impact of Oil price fluctuation on Indian stock market. The analysis of this study reports a there is strong relation between exchange rate and BSE auto stocks and weak relationship between oil price on the BSE Auto stock. Hence we can conclude from this work oil price is independent and wont influence BSE auto stocks in India.

## REFERENCES

1. Abdalla, I. A., & Murinde, V. (1997). Exchange Rates and Stock Price Interactions in Emerging Financial Markets: Evidence on India, Korea, Pakistan and Phillipines. 7, 25-35.
2. Adler, M., & Dumas, B. (1984). Exposure to currency risk: Defination and measurement. *Financial Management*, 13, (Summer), 41-50.
3. Aydemir, O., & Demirhan, E. (2009). The Relationship between Stock Prices Exchange Rate Evidence from Turkey. *International Research Journal of Finance and Economics*, 23, 207-215.
4. Bartov, E., & Bodnar, G. M. (1994). Firm valuation, earning expectations and the Exchange rate exposure effect. *Journal of Finance*, (December), 1755-1786.
5. Branson, W. H. (1983). Macroeconomic determinants of real exchange rate risk. In R. J. Herring, *Managing Foreign Exchange Rate Risk*. Cambridge, MA: Cambridge University Press.
6. Choi, J. J., & Prasad, A. M. (1995). Exchange rate sensitivity and its determinants: A firm and industry analysis of U.S. multinational. *Financial Management*, Vol. 24 No: 3, 77-88
7. Donnelly, R., & Sheey, E. (1996), The share price reaction of U.K. Exporters to Exchange rate movements empirical study. *Journal of International Studies*, First Quarter, 157-165.
8. Dornbusch, R., & Fisher, S. (1980). Exchange Rates and the Current Account. *American Economic Review*, 70(5), 960-971
9. Granger, C. W., Huang, B., & Yang, C. (2000). A Bivariate Causality between Stock Prices and Exchange Rates: Evidence from Recent Asian Flu. *Quarterly Review of Economics and Finance*, 40, 337-354.
10. Halttunen, H., Masson, P., & Branson, W. (1977). Exchange rate in the short run: the dollar Deutsche mark rate. *European Economic Review*, 10, 303-324.
11. Hatemi, J. A., & Irandoust, M. (2002). On the Causality between Exchange Rates and Stock Prices: A Note. *Bulletin of Economic Research*, 54(2), 197-203.
12. Ibrahim, M., & Aziz, M. (2003). Macroeconomic variables and the Malaysian equity market: A rolling through. *Journal of Economic Studies*, 30(1), 6-27.
13. Jorion, P. (1990). The Exchange rate exposure of U.S. multinational. *Journal of Business*, 63(3), 331-345.
14. Joseph, M. (2002). Modelling the impacts of interest rate and exchange rate changes on UK Stock Returns. *Derivatives Use, Trading & Regulation*, 7(4), 306-323.
15. Mayowa, S.A. (2011), An analysis of the long run co-movements between financial system development and mining production in South Africa.
16. Mishkin, F. S (2001). *The Economics of Money, Banking and Financial Markets*. New York: Addison Wesley
17. Muhammad, N., & Rasheed, A. (2001). Stock Prices and Exchange Rates: Are they Related? Evidence from South Asian Countries.
18. Muhammad, N., & Rasheed, A. (2002). Stock Prices and Exchange Rates: Are They Related? Evidence from South Asian Countries. *The Pakistan Development Review*, 41(4), 535-550.
19. Odoyo Fredrick S.; Effect of Foreign Exchange Rates on Price per Share; *Journal of Business Administration and Education*; ISSN 2201-2958 Volume 6, Number 2, 2014, 34-56
20. Ramasamy, B., & Yeung, M. H. (2005). The Causality between Stock Returns and Exchange Rates: Revisited. *Australian Economic Papers*, 44(2), 162-169.
21. Raputsoane, L. (2008), Exchange rate volatility spillovers and the South African currency. [Online] Available at: [http://www.tips.org.za/files/Leroi\\_Exchange\\_rate\\_volatility\\_spillovers-24\\_Oct\\_2008.pdf](http://www.tips.org.za/files/Leroi_Exchange_rate_volatility_spillovers-24_Oct_2008.pdf) (July 17, 2011).
22. Sevuktekin, M., & Nargeleckenler, M. (2007). Turkiye'de IMKB ve Doviz Kuru Aras. *Turkiye Ekonometri ve Istatistik Kongresi*.
23. Sifunjo, & Mwasaru. (2012). The causal relationship between stock prices and exchange rates in Kenya. *Research Journal of Finance and Accounting*, 3(7), 121-130.
24. Stavárek, D. (2005). Stock Prices and Exchange Rates in the EU and the USA: Evidence of their Mutual. *Finance a úvûr-Czech Journal of Economics and Finance*, 55, 141-161.

## IMPACT OF NON PERFORMING ASSET ON PROFITABILITY OF PUBLIC AND PRIVATE SECTOR BANKS IN INDIA

**LAVEENA**

**RESEARCH SCHOLAR, I. K. GUJRAL PUNJAB TECHNICAL UNIVERSITY, JALANDHAR; &  
ASST. PROFESSOR  
CHITKARA UNIVERSITY  
RAJPURA**

**KAMAL KAKKAR**

**STUDENT  
CHITKARA UNIVERSITY  
RAJPURA**

### ABSTRACT

*The NPAs have always created a big problem for the banks in India. It is just not only problem for the banks but for the economy too. The money locked up in NPAs has a direct impact on profitability of the bank as Indian banks are highly dependent on income from interest on funds lent. This study shows that extent of NPA is comparatively very high in public sectors banks as compared to private banks. Although various steps have been taken by government to reduce the NPAs but still a lot needs to be done to curb this problem. The NPAs level of our banks is still high as compared to the foreign banks. It is not at all possible to have zero NPAs. The bank management should speed up the recovery process. The problem of recovery is not with small borrowers but with large borrowers and a strict policy should be followed for solving this problem. The government should also make more provisions for faster settlement of pending cases and also it should reduce the mandatory lending to priority sector as this is the major problem creating area. So the problem of NPA needs lots of serious efforts otherwise NPAs will keep killing the profitability of banks which is not good for the growing Indian economy at all.*

### KEYWORDS

NPA, Indian banks.

### BANKING SECTOR IN INDIA

India cannot have a healthy economy without a sound and effective banking system. The banking system should be hassle free and able to meet the new challenges posed by technology and other factors, both internal and external.

The government's regulation policy for banks has paid rich dividends with the nationalization of 14 major private banks in 1969. Banking today has become convenient and instant, with the account holder not having to wait for hours at the bank counter for getting a draft or for withdrawing money from his account. In the past three decades, India's banking system has earned several outstanding achievements to its credit. The most striking is its extensive reach. It is no longer confined to metropolises or cities in India. In fact, Indian banking system has reached even to the remote corners of the country. This is one of the main aspects of India's growth story.

The banking industry has undergone a sea change after the first phase of economic liberalization in 1991 and hence credit management. Asset quality was not prime concern in Indian banking sector till 1991, but was mainly focused on performance objectives such as opening wide networks/branches, development of rural areas, priority sector lending, higher employment generation, etc. While the primary function of banks is to lend funds as loans to various sectors such as agriculture, industry, personal loans, housing loans etc., but in recent times the banks have become very cautious in extending loans. The reason being mounting nonperforming assets (NPAs) and nowadays these are one of the major concerns for banks in India

### NPA

A Non-Performing Asset (NPA) is defined as a credit facility in respect of which the interest and/or installment of principal has remained „past due“ for a specified period of time.

In India, the definition of NPAs has changed over time. According to the Narasimham Committee Report (1991), those assets (advances, bills discounted, overdrafts, cash credit etc.) for which the interest and/or installment of principal remains due for a period of four quarters (180 days) should be considered as NPAs.

With an aim of moving towards the international best practices and ensuring greater transparency, a standard criterion of "90 days" overdue norm was fixed for identification of NPA from the FY ending March, 2004 in the Indian financial system. Thus, as per present convention, a non-performing asset refers to a loan or an advance where:

- # Interest and/or installment of principal remain overdue for a period of more than 90 days in respect of a term loan
- # The account remains „out of order“ for a period of more than 90 days, in respect of an Overdraft/Cash Credit (OD/CC)
- # The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted
- # Interest and/or installment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purposes
- # Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts

### WHY ASSET BECOME NPA?

A several factors is responsible forever increasing size of NPAs in PSBs. The Indian banking industry has one of the highest percents of NPAs compared to international levels. A few prominent reasons for assets becoming NPAs are as under

- # Lack of proper monitoring and follow-up measures
- # Lack of sincere corporate culture Inadequate legal provisions on foreclosure and bankruptcy
- # Change in economic policies/environment.
- # Non transparent accounting policy and poor auditing practices
- # Lack of coordination between banks/FIs
- # Directed lending to certain sectors
- # Failure on part of the promoters to bring in their portion of equity from their own sources or public issue due to market turning unfavorable
- # Criteria for classification of assets

**FOUR CATEGORIES, ON THE BASIS OF AGE OF OVERDUE**

**STANDARD ASSETS**

Standard asset is one which does not disclose any problem and which does not carry more than normal risk attached to business. Thus, in general, all the current loans, agricultural and non-agricultural loans which have not become NPA may be treated as standard asset

**SUB-STANDARD ASSETS**

A Non-performing asset may be classified as sub-standard on the basis of the following criteria. (a) An asset which has remained overdue for a period not exceeding 3 years in respect of both agricultural and non-agricultural loans should be treated as substandard. (b) In case of all types of term loans, where installments are overdue for a period not exceeding 3 years, the entire outstanding in term loan should be treated as sub-standard. (c) An asset, where the terms and conditions of the loans regarding payment of interest and repayment of principal have been renegotiated or rescheduled, after commencement of production, should be classified as sub-standard and should remain so in such category for at least one year of satisfactory performance under the renegotiated or rescheduled terms. In other words, the classification of an asset should not be upgraded merely as a result of rescheduling unless there is satisfactory compliance of the above condition.

**DOUBTFUL ASSET**

A Non-Performing Asset may be classified as doubtful on the basis of following criteria: As asset which has remained overdue for a period exceeding 3 years in respect of both agricultural and non-agricultural loans should be treated as doubtful. In case of all types of term loans, where installments are overdue for more than 3 years, the entire outstanding in term loan should be treated as doubtful. As in the case of sub-standard assets, rescheduling does not entitle a bank to upgrade the quality of advance automatically

**LOSS ASSET**

Loss assets are those where loss is identified by the bank/ auditor/ RBI/ NABARD inspectors but the amount has not been written off wholly or partly. In other words, an asset which is considered unrealizable and/ or of such little value that its continuance as a doubtful asset is not worthwhile, should be treated as a loss asset. Such loss assets will include overdue loans in cases

- (a) where decrease or execution petitions have been time barred or documents are lost or no other legal proof is available to claim the debt,
- (b) where the members and their sureties are declared insolvent or have died leaving no tangible assets
- (c) where the members have left the area of operation of the society (refers to the borrower in whose name the respective Loan Account with SCB/ CCB) leaving no property and their sureties have also no means to pay the dues
- (d) where the loan is fictitious or when gross misutilisation is noticed
- (e) amounts which cannot be recovered in case of liquidated societies agricultural and non-agricultural loans is required to be done into

**LITERATURE REVIEW**

**Sontakke. N. R, Tiwari.C.(2013)** highlighted that NPA is catching the attention as a big problem for the Indian banks after the reform in financial sectors. NPA affects the profitability because banks can't generate income from these and it also increases the Provisions and funding costs. Poor management of NPA can badly affect the economy. They had suggested the appropriate measures to control or decrease NPAs.

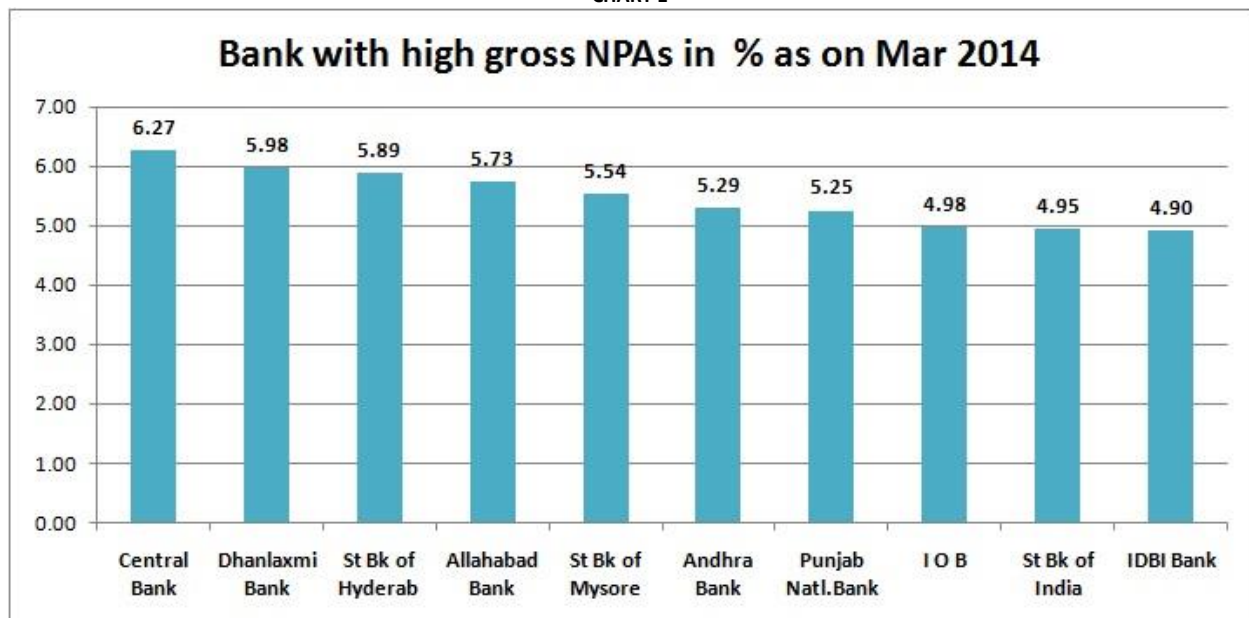
**Sikdar.P, Makkad.M (2013)** discussed that to control the level the NPAs proper credit and risk assessment mechanism is required and prudential and provisional norms must be minimised to reduce Non-Performing Assets. Restructuring of banking organisations, managerial efficiency improvement and for the proper valuation of credit worthiness requirement of skill up gradation is necessary. There is a need of suitable credit appraisal policy. Banks should have to follow measures to reduce the level of NPA.

**Srinivas.K.T.(2013)** stressed upon the fact that while sanctioning loans banks have to see whether the borrower is trust worthy or not and they have to avoid borrowers of non-trustworthy position. They have to make sure that loan amount must be utilised as per the purpose of the loans. Loans should not be provided to the previous loans defaulters as per their goodwill. Education for the consequences and effect is required for the borrower; banks can reduce their NPAs after considering all these points. NPA must be considering as actual National Priority.

**Samir, Kamra.D (2013)** focussed on the financial institutions that are adversely effected by Non-Performing assets in both term psychologically and financially. Credit management skills are required to reduce the level of nonperforming assets. There is a necessity to master the experience for the proper monitoring of exposure levels, for the industries in trouble timely action is required, Skill and expertise of management of NPA, settlement after negotiations, settlement after compromises, legal remedies, these measures are valuable to reduce the level of Non-performing assets. After so many experiments nothing can reduce the level of NPA.

**Mehta. L, Malhotra. M (2014)** evaluated that NPA is a main threat for the Banks in India. Non-performing assets must be managed properly for the healthy environment of Indian banks.in their research paper they discussed the positive impact of priority sector lending's on NPAs. Recession was considered as a one of the reason for the continuous increase in the NPAs.

CHART 1



Source-www.rbi.org



**UNDERLYING REASON FOR NPA IN INDIA**

An internal study conducted by RBI shows that in the order of prominence the following factor contribute to NPAs.

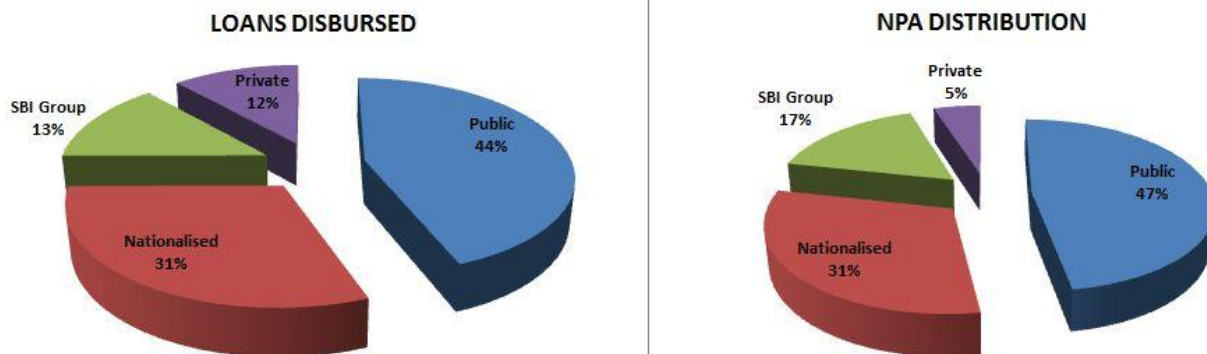
**INTERNAL FACTORS**

- a. Defective lending process - There are three cardinal principles of bank lending that have been followed by the commercial banks since long. i. Principle of safety ii. Principle of liquidity iii. Principle of profitability.
- b. Inappropriate technology - Due to inappropriate technology and management information system, market driven decisions on real time basis can't be taken. Proper MIS and financial accounting system is not implemented in the banks, which leads to poor credit collection, thus NPAs. All the branches of the bank should be computerized.
- c. Improper swot analysis - The improper strength, weakness, opportunity and threat analysis is another reason for rise in NPAs. While providing unsecured advances the banks depend more on the honesty, integrity, and financial soundness and credit worthiness of the borrower.
- d. Poor credit appraisal system - Poor credit appraisal is another factor for the rise in NPAs. Due to poor credit appraisal the bank give advances to those who are not able to repay it back. They should use good credit appraisal to decrease the NPAs.
- e. Managerial deficiencies -The banker should always select the borrower very carefully and should take tangible assets as security to safe guard its interests. When accepting securities banks should consider the: 1. Marketability 2. Acceptability 3. Safety 4. Transferability The banker should follow the principle of diversification of risk based on the famous maxim do not keep all the eggs in one basket, it means that the banker should not grant advances to a few big farms only or to concentrate them in few industries or in a few cities. If a new big customer meets misfortune or certain traders or industries affected adversely, the overall position of the bank will not be affected
- f. Absence of regular industrial visit - The irregularities in spot visit also increases the NPAs. Absence of regularly visit of bank officials to the customer point decreases the collection of interest and principals on the loan. The NPAs due to wilful defaulters can be collected by regular visits.
- g. Faulty credit management - like defective credit in recovery mechanism, lack of professionalism in the work force.

**EXTERNAL FACTORS**

- a. Ineffective recovery - The Govt. has set up numbers of recovery tribunals, which works for recovery of loans and advances. Due to their negligence and ineffectiveness in their work the bank suffers the consequence of non-recover, thereby reducing their profitability and liquidity.
- b. Wilful defaults - There are borrowers who are able to pay back loans but are intentionally withdrawing it. These groups of people should be identified and proper measures should be taken in order to get back the money extended to them as advances and loans.
- c. Natural calamities - This is the major factor, which is creating alarming rise in NPAs of the PSBs. Every now and then India is hit by major natural calamities thus making the borrowers unable to pay back their loans. Thus the bank has to make large amount of provisions in order to compensate those loans, hence end up the fiscal with a reduced profit.
- d. Industrial sickness - Improper project handling, ineffective management, lack of adequate resources, lack of advance technology, day to day changing govt. Policies give birth to industrial sickness. Hence the banks that finance those industries ultimately end up with a low recovery of their loans reducing their profit and liquidity.
- e. Lack of demand - Entrepreneurs in India could not foresee their product demand and starts production which ultimately piles up their product thus making them unable to pay back the money they borrow to operate these activities. The banks recover the amount by selling of their assets, which covers a minimum label. Thus the banks record the non-recovered part as NPAs and has to make provision for it.
- f. Change on govt. Policies - With every new govt. banking sector gets new policies for its operation. Thus it has to cope with the changing principles and policies for the regulation of the rising of NPAs.

FIG. 1 & 2



**IMPACT OF NPA**

**LIQUIDITY**

Money is getting blocked lead to lack of enough cash in hand which lead to borrowing money for short period of time from outside which lead to additional cost to the bank. Difficulty in operating the functions of bank is another cause of NPA. Due to lack of money Routine payments and dues are not paid on time

**CREDIT LOSS**

In case of bank is facing problem of NPA then it adversely affects the value of bank in terms of market credit. It will lose its goodwill and brand image because as we have discussed earlier that bank is not able to pay its dues on time and its negative impact is that people start withdrawing their money from bank which then cause liquidity problem and also decrease in credibility.

**INVOLVEMENT OF MANAGEMENT**

Time and efforts of management is another indirect cost which bank has to bear due to NPA otherwise time and efforts of management in handling and managing NPA would have been diverted to some fruitful activities, which would give good returns. Now a day's banks have special employees to deal and handle NPAs, which is additional cost to the bank.

**PROFITABILITY**

NPA means booking of money in terms of bad asset, which occurred due to wrong choice of client. Because of the money getting blocked the profitability of bank decreases not only by the amount of NPA but NPA lead to opportunity cost also as that much of profit can be invested in some return earning project/asset. So NPA not only affect current profits but also future stream of profits, which may lead to loss of some long-term beneficial opportunity. Another impact of reduction in profitability is low ROI (return on investment), which adversely affect current earning of bank.

TABLE 1: GROSS AND NET NPA OF PUBLIC SECTOR BANKS

Year	SBI				PSB				Bank of Baroda			
	GNPA	%GNPA	NNPA	%NNPA	GNPA	%GNPA	NNPA	%NNPA	GNPA	%GNPA	NNPA	% NNPA
2009	16346	3.01	9,552	1.76	2965.33	1.55	1552.59	1.09	1842.92	1.2	602.32	0.34
2010	19535	3.09	10,870	1.72	3356.24	1.68	1678.52	1.12	2400.69	1.25	652.26	0.38
2011	25,326	3.28	12,346	1.63	4,379.39	1.79	2,038.63	1.23	3,152.50	1.36	790.88	0.35
2012	39,676	4.44	15,818	1.82	8,719.62	2.93	4,454.23	1.52	4,464.75	1.53	1,543.64	0.54
2013..	51,189	4.75	21,956	2.1	13,465.79	4.27	7,236.50	2.35	7,982.58	2.4	4,192.02	1.28
Avg.	30,263	3.6	14,108	1.8	6577.27	2.44	3392.09	1.46	3,968.69	1.548	1,556.22	0.578

TABLE 2: GROSS AND NET NPA OF PRIVATE SECTOR BANKS

Year	ICICI				HDFC				AXIS			
	GNPA	%GNPA	NNPA	%NNPA	GNPA	%GNPA	NNPA	%NNPA	GNPA	%GNPA	NNPA	%NNPA
2009	96,49	3.96	45,53	2.09	1988	1.12	627	0.63	897	1.15	327	0.4
2010	94,80	4.36	38,41	2.12	1,816	1.09	392	0.31	1318	0.98	419	0.4
2011	10,034	4.47	2,407	1.11	1,694	1.05	296	0.2	159	1.01	41	0.26
2012	9,475	3.62	1,860	0.73	1,999	1.02	352	0.2	1,806	0.94	472	0.25
2013	9,607	3.22	2,230	0.77	2,334	0.97	468	0.2	2,393	1.06	704	0.32
Avg.	44,083	3.92	18,089	1.36	1,966	1.05	372.56	0.3	1,315	1.02	392.7	0.32

TABLE 3: GROSS AND NET NPA OF PUBLIC AND PRIVATE SECTOR BANKS

Year	Public Sector Banks				Private Sector Banks			
	GNPA	%GNPA	NNPA	%NNPA	GNPA	%GNPA	NNPA	%NNPA
2009	21154.25	5.76	11,707	3	2885	6.23	954	3.12
2010	25,292	6	13,201	3	3,134	6	811	3

Source: statistical table from trends and report on banking

**CONCLUSION**

The NPAs have always created a big problem for the banks in India. It is just not only problem for the banks but for the economy too. The money locked up in NPAs has a direct impact on profitability of the bank as Indian banks are highly dependent on income from interest on funds lent. This study shows that extent of NPA is comparatively very high in public sectors banks as compared to private banks. Although various steps have been taken by government to reduce the NPAs but still a lot needs to be done to curb this problem. The NPAs level of our banks is still high as compared to the foreign banks. It is not at all possible to have zero NPAs. The bank management should speed up the recovery process. The problem of recovery is not with small borrowers but with large borrowers and a strict policy should be followed for solving this problem. The government should also make more provisions for faster settlement of pending cases and also it should reduce the mandatory lending to priority sector as this is the major problem creating area. So the problem of NPA needs lots of serious efforts otherwise NPAs will keep killing the profitability of banks which is not good for the growing Indian economy at all.

**SUGGESTIONS TO REDUCE NPA**

As non-performing assets can prove a threat to the creditability of commercial banks, various methods were identified to reduce them. These methods are stated as follows:

1. To do away with this specific requirement of filing a suit with court towards recovery of NPAs, Government of India enacted the Securitization and Reconstruction of Financial Assets & Enforcement of Securities Interest (SARFAESI) Act or popularly referred to as Securitization Act in the year 2002.
2. Adequate capital requirement is also an important component so the Basel Committee recommended that the capital adequacy ratios should be proposed towards ensuring that the commercial banks maintain adequate buffers in the form of capital as cover for advances granted under various categories. The idea is that a bank's own funds should also be employed towards loan granting activity, instead of solely depending on public deposits.
3. Banks should find out the original reasons or purposes of the loan required by the borrowers.
4. Proper identification of the guranteer should be checked by the bank including security of his or her wealth.
5. Based on the recent trends, banks should emphasize more on priority sectors for reducing the quantum of NPAs.
6. Banks should ensure the credibility of the borrower.
7. Bank officials should frequently visit the unit and assess the physical conditions of the assets, receivables and stock therein.
8. While advancing loans, the three principles of bank lending viz, Principle of safety, principle of liquidity and principle of profitability must be adhered to.
9. Bank should critically examine and analyse the reasons behind time overrun.
10. The banks should ensure that the assets are fully insured

**REFERENCES**

1. Baiju, S. and Tharril, G.S. (2000), "Performance Banks with Non-Performing Assets: An Analysis of NPAs, Yojna, March 2000, PP 5-9.
2. Boudriga, A., Taktak, NB., & Jellouli, S. (2009). Bank specific business and institutional environment determinants of nonperforming loans: Evidence from MENA countries, ERF 16th Annual Conference on Shocks, Vulnerability and Therapy, November 2009.
3. Chaitanya V Krishna. (2004). Causes of Non-Performing Assets in Public Sector Banks. Economic Research, 17 (1): 16-30.
4. Dash, M. K., & Kabra. G. (2010). The Determinants of Non-Performing Assets in Indian Commercial Banks: An Econometric Study, Middle Eastern Finance and Economics, Issue 7 (2010).
5. Karunakar, M., Vasuki, K., & Saravanan, S. (2008). Are non - Performing Assets Gloomy or Greedy from Indian Perspective? Research Journal of Social Sciences, 3: 4-12, 2008
6. King, R G and R Levine (1993). Finance and Growth: Schumpeter Might Be Right. Quarterly Journal of Economic, 108 (3): 717-37.
7. Mahalawat.S.(2015). Analysis of the Factors Causing Non Performing Assets and Reduction Strategies for PSB in India. International Journal of Business Quantitative Economics and applied Management research, Volume 2: issue 3, 39-55.
8. Mehta, L., Malhotra. M. (2014). Empirical Analysis of Non performing Assets Related to Private Banks of India. International Journal of Management Excellence, 3(1), 386-391. doi:10.17711/ijme.v3i1.156
9. Rajaraman, I & Vashistha, G (2002): „Non-Performing Loans of Indian Public Sector Banks -Some Panel Results", Economic & Political Weekly, February 13, 2002.
10. Reserve Bank of India, Report on Trend and Progress of banking in India, Various issues, Bombay, India. Reserve Bank of India (2010), Trend and Progress of Banking in India.

11. Samir, Kamra. D (2013). A Comparative Analysis of Non- Performing Assets (NPAs) of Selected Commercial Banks in India, *International Journal of Management*, Volume 3, issue 1,68-80
12. Satyanarayana, K. & Subrahmanyam, G. (2000), "Anatomy of NPAs of Commercial Banks, Applied Finance, Volume 6, No.3, July, 2000, pp 14-26.
13. Sharma, K. C. (2007). Modern Banking: - History, Growth and development. Deep & deep Publishing house, New Delhi
14. Sikdar.P, Makkad.M (2013) Role of Non-Performing Assets In The Risk Framework Of Commercial Banks – A Study Of Select Indian Commercial Banks, *AIMA Journal of Management & Research*, Volume 7. Issue 2/4.
15. Singh. A. (2013). Performance of Non-Performing Assets in Indian Commercial Banks. *International Journal of marketing, financial Services & Management Research*. Volume 2. issue 9, 86-94
16. Sontakke. N.R, Tiwari.C.(2013) Trend Analysis of Non-Performing Assets in Scheduled Commercial Banks in India, *International Journal of Application or Innovation in Engineering & Management (IJAIEM)*, Special Issue for National Conference On Recent Advances in Technology and Management for Integrated Growth 2013 (RATMIG 2013)
17. Srinivas, K.T. (2013). A study of Non-Performing Assets of Commercial Banks in India. *International Monthly Referred Journal of Research in Management & technology*, Volume 2.61-69
18. Sudhakar, V.K. (1998), "Managing NPA Menace in Banks", IBA Bulletin, April 1998, PP 27-30.
19. Vallabh, G., Mishra, S. and Bhatia, A. (2007), "Non-Performing Assets of Indian Public, Private and Foreign Sector Banks: An Empirical Assessment", *ICFAI Journal of Bank Management*, Vol. 6, No. 3, pp. 7-28, August 2007.

**POLITICAL EMPOWERMENT OF WOMEN IN PNACHAYATI RAJ INSTITUTIONS: AN OVER VIEW****DR. M. GOPI****POST DOCTORAL FELLOW & FACULTY****DEPARTMENT OF POLITICAL SCIENCE & PUBLIC ADMINISTRATION****ANDHRA UNIVERSITY****WALTAIR JUNCTION****ABSTRACT**

*The study finds that though the representation of women in Panchayat Raj Institutions is slowly increasing, but their involvement in political participation and decision making process is not up to the expectation. They are not able to do themselves. The male member should extend their co-operation to their counter parts. Simple political participation is not essential, but the female members are in the Panchayat Raj Institutions having active involvement and participation is also essential. There is general impression among the public that women politicians are not independently acting by themselves, they are not enjoying power. The actual power plays in the hands of the male members like their husbands, brothers and fathers. This practice should not be continued and women must come forward to participate and take decisions independently.*

**KEYWORDS**

political empowerment, panchayati raj institutions.

**INTRODUCTION**

**W**omen's empowerment as a phenomenon is not something absolutely new. It has been there throughout history in almost all societies for variety of reasons. What could be considered as new is it's increasingly coming out in public, it's having been shifted and reshaped from women welfare to their development to now women's empowerment and it's being discussed, reported and critically evaluated. What are rather recent is the identification of the girl children and women as a special group and the acknowledgement internationally of the importance of specific focus on the critical and key issues related with the empowerment of women.

Empowerment has become a fashionable and buzz word. It essentially means decentralization of authority and power. It aims at getting participation of deprived sections of people in decision making process, in other words giving voice to voiceless. Activists want Government empower poor people including women by legislative measures and welfare programmes, unless capacity is build in these sections in reality the power is used by others rather than the section for which they are meant. Empowerment is a process that enables women to gain access and control of material intellectual and human resource. Throughout much of the world, women's equality is undermined by historical imbalances in decision-making power and access to resource rights and entailments for women either by law or by custom; women in many countries still lack of rights to. Empowerment is the redistribution of power that challenges patriarchal ideology and male dominance.

Political empowerment of women is part of the overall empowerment process. Political participation is a major path to women's empowerment and participation in the decision-making process or increased decision-making power will lead to women's empowerment in the true sense of the term. In other words, increased decision-making power gives greater ability to influence matters that affect our lives in the community and the society at large. In the broad sense, participation in politics goes far beyond electoral politics: voting and election to public office. Indeed, their role in public life is limited to casting votes during elections. They are denied opportunities to participate in the decision-making process. Even when the decisions are to affect their well-being, they are only passive observers. The primary challenge facing women today, therefore, is to increase their participation in that they get hold of the situation and become actively involved in the process of decision-making.

Much more work needs to be done at the grass-root levels specially in the thousands of Indian villages. The village workers through living and working alongside the villagers act not merely as advisors and technical assistants but also work to promote a sense of self-reliance and communal responsibility amongst the villagers that transcends divisions of family, caste, class, religion and gender. In working to encourage the participation of villagers in collective decision making process, particular attention is paid to position of women whose domestic responsibilities, allied to the discouragement of men, have traditionally precluded them from participation in decision making at the community level. In encouraging the women to meet together for such purposes a forum is created wherein they gain confidence in their own abilities and collective strength and thus being to make their voice heard in community affairs and in Panchayat deliberations (usually dominated by men).

The ultimate goal of empowerment of women based on Gandhi's vision is "Sarvodaya", the welfare of all through cooperation and trusteeship in the economic sphere, equal participation in the political sphere and mutual in the social sphere without regard to caste, creed, or class or gender. Thus, empowerment of village women cannot be imposed from above, it must grow from the bottom upwards.

A number of studies on political participation have shown that women in general are less participative in politics than men. It is usually argued, to explain this, that women are less educated and hence less informed of political issues; less attentive to different points of view and hence are less interested in politics – all in relation to men. Such an explanation, however, would be oversimplification of the fact. The lack of participation of by women in the political process cannot simply be attributed to their nature, which is said to be basically conservative. In fact, one should also take into consideration the factors of political resources and political interest in order to understand the gender-bias in political participation and also the reasons for the consequent under representation of women still possess fewer political resources than men. They have to be engaged in constant battles against a number of social, economic and political obstacles even today.

Under normal circumstances, women lack the political efficiency associated with political participation. Political efficacy is basically the extent to which an individual feel that his or her political participation will be meaningful. The fact that women are less likely to have such a meaning can have many reasons. One of the reasons may probably be the childhood socialization of girls to the view that both interest and activity in politics go more with males than females. Again, women's interest in formal politics is very often crushed by childbearing, raising the kids, home-making responsibilities, and so on. Besides, women, who are not employed outside home, may be said to have less interest in politics, to acquire less politically relevant political events, and to be less likely to develop the skill necessary for successful political activism. This may, more or less, be equally true for women employed outside home.

It is universally accepted that education, employment, health care and other facilities for women should follow one another in a meaningful way. But the social milieu is hardly conducive to moving towards an environment of substantive equality for women with men in all spheres of life. It is evident from the UNDP Human Development Reports that women are discriminated against males everywhere – home, workplace or in the community – and are consistently deprived of their share in decision-making in organizations. The picture is not much brighter even in the western countries. The fact remains that constitutional or legal equality may be conducive but not necessarily leads to substantive equality of women regarding decision making.

Poor and in egalitarian work conditions, illiteracy and lack of job skills, low nutrition and high morbidity among women contribute to the overall poverty and poor health record of women all over the world, particularly in the third world countries like India. Besides, cuts in public and social sector spending on education, health care and child care after the global advent of liberalization policies particularly damage the conditions of women because of their dual responsibility as wage-earners and house-keepers, as in health conditions, a gender gap clearly visible in education as well. In India, the adult literacy rate for women stands at 65.46 percent, compared to 82.14 percent for men. The combined primary, secondary and tertiary gross enrolment ratio for girls stands at 64.64 percent, compared to 80.89 percent for boys.



It is true that this gender gap in health, education and political participation is gradually decreasing (but not up to the mark). Though slowly, women in different parts of the world are tending to shed their traditional role and entering the diverse spheres of life, opening different windows in their minds. Movements for women empowerment in different parts of the world are playing prominent roles. But there is a lot yet to be achieved by women.

### INDIAN WOMEN AND PANCHAYATI RAJ POLITICS: A PRE-RESERVATION PICTURE

The state machinery of India, from the very beginning, has tried to establish gender equality in many ways. In Part-III (Fundamental Rights) of our Constitution, equality of citizens irrespective of sexes has been established in unequivocal terms. Yet, the Committee on the Status of Women in India (CSWI), after conducting an extensive review of the situation of women in India in 1974, found in its report entitled *towards equality* that the constitutional guarantee of equality had 'remained an unrealized dream' for the vast majority of Indian women. It has been observed that neither the norms nor the institutions were in a place that would enable women to fulfill the multiple roles that they were expected to play.

Subsequently, a National Policy on Education was undertaken which envisaged a positive interventionist role for education in the empowerment of women. The National Perspective Plan for Women was implemented in 1988. The National Commission for Women was set up in 1992. All such efforts were intended to improve the existing situation regarding the status of women. The local self government has been embodied as an 'aspiration' in the Constitution of India in 1950. The power to implement it was devolved to States. The first generation panchayats following the Balwantrao Mehta Committee Report had a chequered career. The second generation panchayats, which were created as a follow-up of the Ashok Mehta Committee has not better fate, with the minor exceptions of West Bengal and Karnataka.

In West Bengal, elections to the local bodies were held at regular intervals. Considerable quantity of power was devolved to these elected bodies. But the panchayat bodies in West Bengal, just like those in the rest of India, reflect utterly poor representation of women. Professor Sonali Chakravarti Banerjee explains it in the following way. "In modern India, women came to public life first through the freedom movement and then through the chances offered by universal franchise and other modernizing socio-political forces. In the process, India has received a few nationally important women leaders, though the egalitarian spirit has hardly percolated down to the grass roots levels. In this sense, therefore, the study of the gender composition of Panchayati leadership is also a study of the interplay between tradition and modernity in a changing rural society". Her study confirms the singularly strong sexist bias prevalent in the three-tier Panchayati Raj in India during the preservation period. It is, indeed, remarkable that there has not been a single woman leader in the Hugli Zilla Parishad since its inception (1978) till 1988. All the Sabhadhipatis and Sahakari Sahadhipatis have only been males since 1978. Thus, the Zilla Parishad leadership has been a male monopoly sector in the absolute sense of the term. Even among the ordinary elected members, there have been very few women. In 1978, no woman was elected to the Zilla Parishad, while in 1983 and 1988 the number of elected female members was 3 and 1, respectively.

Chakravarti Banerjee's study (2002) reveals that this gross under representation of women is equally pronounced at the Panchayat Samiti level also. In 1983, there was no woman in the leadership positions in any of the Panchayat Samitis. All the Sabhapatis and Sahakari Sabhapatis in the 18 Panchayat Samitis of the Hugli district were males only. In 1988, out of 582 Panchayat Samiti seats, only 3 went to women. Thus, women claimed only 0.5 percent of the total number of Panchayat Samiti seats. No wonder that their share in the leadership positions came to a naught.

The position of women had rather improved at the Gram Panchayat level in the later years. In 1978, there were 8 elected women out of the 2887 elected Gram Panchayat members in the district. No woman was made either Pradhan or Upa-Pradhan in any of the Gram Panchayats in the first panchayat election (1978). In 1983 also, there was no woman Pradhan or Upa-Pradhan in the district of Hugli. In 1988, however, the total number of elected women members in Gram Panchayat tier came up to 24 (out of a total of 3437 seats). Out of these 24 elected women again, one was elected as Pradhan and three as Upa-Pradhans.

Broadly speaking, the data presented above establish the absolute marginalization of women in the Panchayati Raj before the formula of reservation was imposed from above.

Such a finding regarding the gender bias of the Panchayati Raj organization in the pre-reservation phase confirms similar findings obtained by other studies in this and allied fields. Studies of traditional rural societies have almost everywhere noted the inherent male biases of the social organizations. In the specific case of the Panchayat Raj in India, scholars have detected the same gender bias at every level. A case study conducted in the 1950s in the Jaunpur district of Uttar Pradesh during the local body elections there found that "... it was a male-dominated election of the forty-nine candidates who ran for office and not a single one was a woman. In interview after interview, the women voiced surprise at the notion of voting in any other way than way than the husband or the male family head or in a way contrary to his wishes or directions. The women were prevalently aware of the rivalry of A and B and of the stand of their families in respect to these two office speakers. But they were usually uninformed about the contests for panchayat membership in the district and confused about the identities of the candidates. When they were asked for whom they would vote, a common answer was that they would be told what to do by the senior males of the family when the time came.

In a subsequent study conducted in Rajasthan in the 1970s, Bhargava also found the political arena to be a domain of male sex. Bhargava did not find any elected woman at the village Panchayat level or at the Zilla Parishad level, though he could find one elected member in one Panchayat Samiti. He rightly concluded that 'in the rural areas when a woman enters into politics, she is taken as an exception'.

In sharp contrast to most other regions of India, the Bengal society in the nineteenth century witnessed several social reform movements for the emancipation of women. But in spite of such an enlightened tradition, however, the male bias of the culture remained pronounced. While identifying the 'dominant elite' of the towns and villages of Bengal at the beginning of the twentieth century, Broomfield referred to them as 'the Bhadrakok, literally .....the gentlemen', as opposed to the ladies. The freedom movement gave birth to some remarkable women freedom fighters, but it was mostly the middle class urban women who came to the forefront during this period and the rural traditions were kept intact.

In an article by Sushil K. Dey, an architect of the Community Development Programme in West Bengal, one can find perhaps the first concrete reference to a female leader in the rural self government of our province. Dey referred to one village called Sukna, where an aboriginal woman of middle age emerged to leadership when she kept the men on a job of restoring a derelict pond by threatening a strike of all housewives if they left it for other attraction. She has been wise and prominent in village councils since then.

After the panchayat election in 1978, the Government of West Bengal studied the working of the Gram Panchayats in 1980 and found that 'all the elected members of the Gram Panchayats excepting a few happen to be male.' G.K Lieten (1992) devoted considerable amount of attention to the gender issue in panchayats and noted the quasi-complete absence of women in the Panchayati Raj organizations in the State. Out of the 480 candidates for Gram Panchayat and Panchayat Samiti elections in the area under his study, as many as 478 were males. Lieten even observed that many political leaders and candidate did not seem to be aware of the necessity to induce women into all spheres of public life as one of the means of eliminating the gender discrimination. Neil Webster (1992) was equally emphatic in denouncing the gender discrimination in West Bengal Panchayats. He noted that women have largely failed to gain representation in Panchayats because of the social structure and cultural practices against any woman candidate. The semi-official Mukarji-Bandyopadhyay Report (1993) also observed that 'largely because of societal constraints, there are very few women in the Panchayats at present, and even fewer in key positions. Women's representation is less than one percent of the total elected Panchayat members.

### CONSTITUTIONAL PROVISION FOR THE UPLIFT OF WOMEN

The Indian Constitution specifically provides for the protection of the rights of the women. The Constitution-makers knew that within the given socio-cultural order, it might not be possible for women to get gender justice. They suggested special provisions for women on the lines of other weaker sections of society, especially in the Fundamental Rights and the Directive Principles of State Policy of the Indian Constitution. Various important Articles have accordingly been introduced to provide protective discrimination and to promote and protect the interests of the new protagonist – the women.

Article 10 of our Constitution ensures equality of women and their equal protection before the law. Articles 14 and 15 guarantee a life of dignity without discriminating against women on the basis of religion, race, sex, belief, faith or worship, Article 15(1) prohibits discrimination on grounds of religion, sex, caste, birth and a number of other factors. Article 15(3) categorically States: 'Nothing in this Article shall prevent the State from making any special provision for women and

children'. Article 16 focuses on the specific subject of equality in public employment. Article 16(1) seeks to guarantee equality of opportunity in such employment. Article 16(2) prohibits discrimination in public employment on grounds of religion, race or sex.

In this context, it will be relevant to see what Article 40 (Directive Principles of State Policy) of our Constitution states:

*"The State shall take steps to organize village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government."*

To achieve this aim, the 73<sup>rd</sup> Amendment has been introduced to the Constitution of India to ensure the representation of women in the various statutory bodies of local self government. All the States adopted the new panchayat legislation by 23<sup>rd</sup> April, 1994.

### THE PROVISIONS OF THE 73<sup>rd</sup> CONSTITUTIONAL AMENDMENT ACT

- \* Not less than one-third of the seats have been reserved for women (including that of SCs and STs) and these may be allotted by rotation to different constituencies of a panchayat.
- \* In proportion to the population of SCs and STs in an area, seats have been reserved for SCs and STs. There is reservation for women in these seats allotted to SCs and STs. Not less than one-third of the total number of seats may be reserved for women.
- \* Not less than one-third of the total number of seats for the offices of the chairpersons of each level has been reserved for women. This will be rotated among different panchayats at each tier – Gram Panchayat, Panchayat Samiti and Zilla Parishad.
- \* There are certain general features, which could be taken advantage of by women, such as direct elections for membership and Sarpanch (President) posts, at the grass roots (Gram Panchayats) as well as the intermediate (Panchayat Samiti) levels.
- \* It has been left to the different States to provide for reservation for membership as chairperson to those hailing from backward classes, if they choose so.

### 81<sup>st</sup> AMENDMENT BILL

Another important endeavour in the direction of women's upliftment is the 81<sup>st</sup> Amendment Bill for 33 percent women's reservation in Parliament and State Legislatures. It was introduced for the first time in 1996 in the Lok Sabha. After much debates, the Bill was referred to a Select Committee. The passage of this Constitutional Amendment Bill [Article 330(A)], however, has been deferred again and again. The main objection is the exclusion of reservation for women in minority and the backward groups, specially the OBCs. Some important features of the 81<sup>st</sup> Constitution Amendment Bill are as under:

- \* 33 percent seats to be reserved for women in Lok Sabha and State Assemblies.
- \* One-third of these seats to be reserved for SC/ST women.
- \* Bill not to be applied to States/Union Territories, where seats reserved for SC/STs is less than three.

India's search for the goal towards gender equality and gender justice began with the establishment of the Central Social Welfare Board in 1953. The concept of national machinery for women's uplift has been evolving over since. A Department of Women and Child Development was set up in 1985 under the Ministry of Human Resource Development. Besides several Constitutional and legal measures, the State has also initiated several schemes and programmes at the micro-level such as the *Development of Women and Children in Rural Areas (DWACRA)*, *Integrated Child Development Services (ICDS)*, *Mid-day Meals*, *Education for the Girl Child and Micro-credit*, specially targeted at the marginalized women.

The advocates of women's movements all over the world are moving towards the understanding that the demands for women's rights, namely equality of participation, opportunity and agency in all spheres of life should be directed primarily to institutions that constitute the structure of society and set the agenda of women's lives.

*The National Perspective Plan for Women's Development 1988-2000* had been formulated in 1988. "The Shramshakti Report" also appeared in the same year. By an Act of Parliament, the National Commission for Women came into effect in 1990 to investigate and examine all matters relating to the safeguards provided to women under the Constitution and other laws.

In view of her commitment to various international conventions, India designed a National Policy for Empowerment of Women in 1996. **The Policy categorically stipulated that:**

- \* Human rights and fundamental freedom for women on equal basis with men need to be ensured.
- \* All forms of violence against women-physical, mental, domestic or social-need to be eliminated.
- \* No discrimination would be allowed in law or practice against women.
- \* All forms of discrimination against and violation of the rights of girl child would be eliminated by undertaking strong steps including punitive ones.
- \* Synergy of development measures would be designed for holistic empowerment of women.
- \* Women's active participation in the decision-making is to be ensured.
- \* Policies, programmes and systems would be established in order to ensure mainstreaming of women's perspective.
- \* Gender sensitization programmes would be conducted on regular basis for all sections of the society.
- \* Media should be used to portray a positive image of women.
- \* For eradication of poverty and provision for women's basic needs, several programmes should be initiated in order to (a) alleviate poverty, (b) provide food security, (c) arrange housing and shelter, (d) provide equal education, (e) formulate a holistic approach to women's health, (f) formulate macro-economic and social policies by institutionalizing women's participation in economic development and (g) arrange support services like child care facility, etc. to enable women to participate effectively in developmental processes and to provide special attention to the needs of women in providing safe drinking water, sewage disposal and sanitation.
- \* Women's perspective would be reflected in the policies and programmes for eco-system management.
- \* Diversity of women's situation is to be acknowledged and special programmes need to be made available for women in the disadvantaged group.
- \* Budgetary provision is to be enhanced in the programmes related to women.
- \* Non-Governmental Organizations are to be involved in the formulation and implementation of all policies and programmes affecting the women.
- \* Gender development indices would be developed by the government.
- \* Desegregated gender studies would be collected, compiled and published regularly.
- \* International, regional and sub-regional cooperation for the empowerment of women will be strongly encouraged.

The National Policy for Empowerment of Women (1996) has suggested elaborate strategies and action plans to actualize the prescribed goals. It has an action plan to be initiated at the grass roots, district/sub-district, State and National levels. For the State and National levels, the policy suggests that there would be Councils for giving broad policy advice, guidance and directions. It also suggests that all the Central and State Ministries would have the gender component in their action plans. It suggests elaborate action for the Executive and Legislature in all the areas related to physical, social, cultural, and economic and livelihood security of women.

The National Policy States that at 'the grass roots, women will be organized into self-help groups at the Anganwadi level. These women's groups will be helped to institutionalize themselves into registered societies and to federate at the block/town level. Such societies will bring about synergistic implementation of all the social and economic development programmes by drawing resources made available through government and non-government channels, including banks and financial institutions; and by establishing a close interface with the panchayats/municipalities'.

The *National Commission for Women (NCW)*, which was basically a statutory body, was constituted by the government in January, 1991. It was constituted with a specific mandate to study and monitor all matters relating to the constitutional and legal safeguards provided for women; to review the existing legislation to suggest amendments wherever necessary; and to look into complaints involving deprivation of the rights of women. Similar Commissions have also been set up in nine States. The NCW has taken up a number of activities, some of which are as under:



- \* Setting up of 11 expert committees to tender advice on various women's issues.
- \* Conducting pariwarik lok adalats.
- \* Making complaints and pre-litigation cells.
- \* Creating legal awareness.
- \* Welfare of women prisoners and under trails.
- \* Action of issues of women and children.

In order to coordinate and integrate components of all sectoral programmes and to facilitate their convergence to empower women, Indira Mahila Yojana (IMY) was launched as a strategy on 20<sup>th</sup> August, 1995. It proposed to bring out a mechanism by which there could be a systematic coordination and a meaningful integration of various programmes of different sectors to meet women's needs and to ensure that women's interests were taken care of and provided for under each scheme. It was proposed that the mechanism would be operated at the district level as a sub-plan for women to percolate down to the village level appropriately through the Indira Mahila Kendras (IMKs) at village level and Indira Mahila Block Mendras (IMBKs) at block level. The ultimate objective of Indira Mahila Yojana is to empower women by ensuring their direct access to resources through a sustained process of mobilization and convergence of all the ongoing sectoral programmes. The IMY is sought to be operated as a central sponsored scheme. The three basic constituents of IMY are as follows:

- \* Convergence of inter-sectoral services
- \* Income generation activities
- \* Sustained process of education/awareness generation

Under the proposed convergence of inter-sectoral services, IMY will provide the umbrella cover and all sectoral programmes aimed at women's welfare, including non-formal education, training, formal primary education, skill development, health, family welfare programmes and other minimum needs programmes like drinking water, sanitation, housing roads, electrification, etc. would converge at the village level as per the needs, demands and requirements articulated by the IMY. Income generation activities include creation of employment opportunities through group-dynamics and participation in a broad range of economic activities suited to the local requirements. Under a sustained process of education/awareness generation, the IMY seeks to create a general awareness among women through ensuring information specific to the equality of social status, legal rights, like those of property and inheritance, constitutional safeguards and on different development programmes or issues concerning women.

The Constitution (one hundred and tenth amendment) Bill, 2009 was enhanced reservation for women in Panchayats at all tiers from 1/3 to at least 50 per cent," The provision of reserving half the seats for women in Panchayats will apply to the total number of seats filled by direct election, offices of chairpersons and seats and offices of chairpersons reserved for SCs and STs. Information and Broadcasting Minister Ambika Soni called it "a path breaking decision". Neeraja Chandroke of the organization Stree Sakthi said: "This is a good move, provided male relatives of these women representatives don't indulge in backseat driving."

### EMPOWERMENT OF WOMEN: SOME PROBLEMS AND CONSTRAINTS

The rosy picture regarding women's participation in the Panchayat Raj Institutions is not without problems and inherent constraints.

- \* In the first place, over the last fifty years or so, the governmental structure of our State has remained more or less the same with a considerable continuity with the colonial past. Though a number of policies have been formulated and reformulated for the empowerment of women, the agencies for the implementation of the policies have remained unchanged. Hence, there have not been much qualitative changes in the status of women belonging to the marginalized groups of society. Immediately after independence, the women of the marginalized groups have faced the forces of modernity. They have been victimized both because of being women and because of being members of the oppressed sections of the society. The various social ills like poverty, unemployment, non-recognition of work, low wages, illiteracy, ignorance, ill-health and the absence of basic amenities of life have been cruelly heaped on them.
- \* Secondly, many steps in the empowerment of women have been taken in India and many more still required. The constitutional and non-constitutional initiatives have been many, but these have been stricken with various loopholes. The National Policy for Empowerment of Women says very little on grass roots mobilization and resources for the betterment of women. The panchayat bodies are not free from the clutches of the traditional bureaucratic control. The local power lobby also uses its manipulative tactics to retain its influence. It provides ready base for the integration of local labour and some other productive resources with the national and global forces to maximize its own class interests. It still maintains its domination in society. Only through sustained grass roots mobilization, the rising gender consciousness at the grass roots can encounter these forces like local power lobby.
- \* Thirdly, instances of caste and gender-based atrocities can be cited from many States of India. In Madhya Pradesh, for instance, the aftermath of elections to the panchayats, held in the beginning of the twenty-first century in four of its districts i.e., Raigarh, Chhatatpur, Raisen and East Nimar saw ugly abuses of authority. The incidents of a lady Sarpanch being paraded naked, another lady Sarpanch being gang-raped, an Upa-Sarpanch being tortured and a dalit panchayat member being beaten up, have come into limelight.
- \* Fourthly, the implementation of several Acts of Parliament pertaining to the protection of women has been thoroughly ineffective. The Suppression of Immoral Traffic in Women and Girls, 1956 has not been able to arrest the problem of trafficking and prevent the exploitation of women. The Indecent Representation of Women (Prohibition) Act, 1986 has not been systematically enforced. The National Commission of Women Act (1990), which empowers the National Commission of Women to investigate, examine and review all matters relating to safeguards provided for women under the Constitution and other relevant laws, is not satisfactory according to the National Commission of Women. The commission feels that it should have the power to prosecute the summarily decide on cases of violation of gender justice. Again, there should be commission for women at State and District levels as well.
- \* Fifthly, studies conducted in various parts of the country bring forth the gender insensitivity of the grass roots workers, illiteracy, lack of training of the marginalized women at the grass roots and the prevailing ideology of patriarchy and gender segregation. These factors have contributed towards the process of marginalization of women who belong to the more deprived sections of the society. Again, there are several financial and infrastructural constraints in women's empowerment in panchayat bodies. Attitudes of administrators towards the gender question, which have been stated to be traditional and stereotyped, are also considered to be an inherent problem in women's empowerment.

There are a number of myths, expresses about women and their participation in governance in India, particularly when the question relates to rural women who have low literacy rates and numerous social restrictions and other socio-economic handicaps. We identified at least four such myths about women's participation in the panchayat raj institutions:

- \* Women's passivity and disinterest in political institutions.
- \* Only the well-to-do, upper strata women will come through reservations.
- \* Only privileged kins-women of powerful politicians will enter these political institutions to keep the seats for them.
- \* Women who have entered the panchayats are only proxy and namesake numbers. They do not participate in panchayat activities.

### SUGGESTIONS TO IMPROVE THE PARTICIPATION OF WOMEN IN PANCHAYAT RAJ INSTITUTIONS

- \* The rate of literacy among women should be increased.
- \* Women should come out of the traditional attitudes custom and practices.
- \* Political awareness should be increased among the women.
- \* Women should come on their own accord and compete along with them by developing willpower and confidence.
- \* Women should organize and establish network at different levels to influence the political participation process. There is a great need to increase solidarity among women's groups for the cause of women.

- \* Expansion of educational opportunities for women, greater recognition of their unpaid work, wider representation in electoral politics, legislative and legal mechanism to safeguard their rights and equal opportunities for participation in politics are some other things which would strengthen the process of political empowerment of Women.

## CONCLUSION

Though the representation of women in Panchayat Raj Institutions is slowly increasing, but their involvement in political participation and decision making process is not up to the expectation. They are not able to do themselves. The male member should extend their co-operation to their counter parts. Simple political participation is not essential, but the female members are in the Panchayat Raj Institutions having active involvement and participation is also essential. There is general impression among the public that women politicians are not independently acting by themselves, they are not enjoying power. The actual power plays in the hands of the male members like their husbands, brothers and fathers. This practice should not be continued and women must come forward to participate and take decisions independently.

## REFERENCES

1. Basu, Rumki, The Theory and Politics of Women's Empowerment – Indian Context, *The West Bengal Political Science Review*, Vol.X, No.2, July-December, 2007.
2. Batliwala, S., *Empowerment of Women in South Asia: Concepts and Practices*, ASSBAF and FAO Freedom from Hunger Campaign, Action and Development, New Delhi, 1993.
3. Bhargava, B.S., *Grass Roots Leadership: A Study of Leadership in Panchayati Raj Elections*, Ashish Publishing House, New Delhi, 1979.
4. Chakraborty, Biswanath, Democratic Centralization: People's Participation in Local Governance, Proceedings of UGC Sponsored Seminar on Development and Participation, May, 2007.
5. Chakravarti Benerjee, Sonali, *Social Background of Panchayat Leaders in West Bengal*, Dasgupta and Co., Kolkata, 2002.
6. Chattopadhyay, R and E. Dufli, Impact of Reservation in Panchayat Raj: Evidence from a Nationwide Randomized Experiment, *Economic and Political Weekly*, February, 28, 2004.
7. Government of India, Ministry of Social and Women's Welfare, New Delhi, *Towards Equality: Report on the Status of Women*, 1974.
8. Kapur, Ratna and Brends Cossman, *Subversive State: Feminist Engagements with Law in India*, Sage Publications, New Delhi, 1996.
9. Lalini V., *Rural Leadership in India: A Study of Emerging Trends in Democratic Vs. Authoritarian Rural Leadership*, Gain Publishing House, New Delhi, 1991.
10. Opler, Morris Edward, Factors of Tradition and Change in a Local Election in Rural India, in Park and Pinker (Ed.), *Leadership and Political Institutions in India*, Princeton University Press, Princeton, New Jersey, 1959.
11. Sen, Simonti, Gender and Politics, in Chakraborty, Satyabrata (Ed.) *Political Sociology*, Macmillian India, New Delhi, 2005.
12. Singha Roy, Debal K. Criticalities of Grass Roots Mobilization in Singha Roy, Debal K. (Ed.), *Social Development and Empowerment of the Marginalized: Perspectives and Strategies*, Sage Publications, New Delhi, 2001.
13. Singha Roy, Women, Society and the State: Some Reflections on the State's approach towards Women's Empowerment in Society, in Dhameja, Alka (Ed.), *Contemporary Debates in Public Administration*, Prentice-Hall of India, New Delhi, 2003.

## CO-INTEGRATION OF INDIAN STOCK MARKET WITH US STOCK MARKET

ABHAY KUMAR  
ASST. PROFESSOR  
NMIMS UNIVERSITY  
MUMBAI

## ABSTRACT

The paper investigates the long term relationship of Indian stock market with US stock market. For the research, daily closing data of NDX (Nasdaq) and Nifty a leading index of US stock market and Indian market were obtained from Bloomberg database. Total 4600 data set for 11 years from 01 January 2004 to 30 December 2014 were collected. These data have been cleaned manually. After cleaning 2416 synchronized data set is used for analysis. The researcher has employed Johansen Co-integration test and Granger causality test to confirm co-movements and causal relationship of Indian stock markets with the markets of developed countries. Unit root test using dickey fuller, augmented dickey fuller and Philip & Peron test is employed to check stationarity of the series. Unit root test suggest the indices are I (1) process. Johansen Co-integration test by both Trace test and Eigen value test confirms no co-integration of Indian financial market with any market of developed countries. Unrestricted VAR test confirms lag 1 and lag 2 of NIFTY is significant to influence NDX. Further Granger Causality test result shows Indian market do not granger cause or caused by US market.

## KEYWORDS

co-movements, co-integration, stationarity, mean reversal, causality, unit root.

## 1. INTRODUCTION

Co-integration theory of econometrics has created lots of interest among economists in the last decade. It helps in understanding the long term relationship of two or more non-stationary time series data. If the combination of two non-stationary time series data is stationary, the series are cointegrated. A lots of economic series behaves like I (1) processes, i.e. they seem to drift all over the place but the second thing to notice is that they seem to drift in such a way that they do not drift away from each other. This means they are cointegrated. In this paper, Johansen test is employed to examine the co-integration. This method is more generally accepted tool for testing co-integration of several time series. This test is preferable than the Engle–Granger test as it permits more than one cointegrating relationship. The result of Johansen co-integration test showed no co-integration of Indian market with any of the markets of developing world. Therefore, for further research, Unrestricted VAR and granger causality test is employed. VAR helps in analyzing auto regression effect with its own lag and lag value of other variable. Granger causality test clarifies the cause and effect relations in time series variables. The paper is divided into four sections. Section one deals with the introduction and motivation for the research, in section 2 data and methodology is covered. Section 3 deals with empirical analysis. Last section presents brief analysis of results and conclusion.

## 1.1 MOTIVATION FOR THE RESEARCH

Numerous studies have been conducted on stock market integration. Markets of open economy have exhibited tighter co-movements with one and other. Several studies have also examined the relationships of Asian stock markets with US and other developed markets for different periods and the results are mixed. Some of the researchers have found co-movement some did not. Bhattacharya and Banerjee (2004) in their study for Germany, France, Korea, UK, Hong Kong, Japan, USA, Singapore, Taiwan, Mexico and India found that Causality effects are prominent in Asian capital markets. Ghosh et al. [1999] observed some evidence of co-integration among stock markets in Asian countries and the US whereas Chan et al. [1992] found no evidence of co-integration among the stock indices. Ripley (1973) studied co-integration for USA, UK, Austria, Belgium, Denmark, France, Germany, Italy, Netherlands, Norway, Sweden, Switzerland, Canada, Japan, Finland, Ireland, Australia, New Zealand, South Africa and observed that USA, Canada, Switzerland and Netherland move together. Liu et al. (1998) in his study of six countries – the U.S, Japan, Hong Kong, Singapore, Taiwan and Thailand for the period 1985-1990 found that U.S market possesses an influential role affecting the Asian-Pacific markets and degree of interdependence among the these markets increased substantially after the 1987 stock market crash. Eun and Shim (1989) studied the market movement for USA, UK, Australia, Canada, France, Germany, Hong Kong, Japan, Switzerland and found that USA exerts dominant influence. Pan, Liu and Roth (2000) in their research for the period from period 1988-1994 found that the US and five Asia-Pacific stock markets (Australia, Hong Kong, Japan, Malaysia and Singapore) were highly integrated. Bayers and Peel (1993) examined for co-integration among the markets of USA, UK, Germany, Japan and Holland and observed no interdependency among the markets. Alexander and Thillainathan [1995] in their study found Granger causality but did not found co-integration among Asian stock markets. Arshanapalli and Doukas (1993) examined co-movement and interdependency of USA, UK, France, Germany and Japan and found Increasing degree of interdependence among world capital markets since the 1987 stock market crash, with Japan's Nikkei Index being exception. Hui (2005) has studied co-integration among the markets of USA, Australia, Hong Kong, Japan, New Zealand, Philippines, Singapore, South Korea, Taiwan and Thailand and observed that diversification exists in Asian countries. Pukthuanthong and Roll (2009) has studied a sample of 81 countries and found marked increase in stock market integration over the last three decades.

## 2. DATA AND METHODOLOGY

Co-integration analysis is one of the most important tool to find long term relationship in the time series variables. Though correlation analysis also helps to establish the relationship, but sometimes correlation can be spurious also. So it is said that "correlation does not imply causation". Co-integration analysis helps in establishing genuine co-movement where the cause and effect of variables is clearly visible. To check co-integration of Indian stock market US market, daily data set (closing price) of Nifty (India) and NDX (USA) is taken from 01 January 2004 to 30 December 2014 (11 years) from Bloomberg database. The data set includes 2416 synchronized daily observations of closing prices. Stationarity test and co-integration can be carried out on level series, but unit root tests such as: DF, ADF & PP test of level series has accepted the null hypothesis that it contains unit root. Therefore, log difference series  $(LN(Y_t) - LN(Y_{t-1}))$  is tested for unit root. All the three-unit root tests DF, ADF & PP test suggest the indices are I (1) process. Log difference series is preferred over log return series because it stabilizes the behavior of level series by reducing the scales without changing the character. Log difference series is denoted by prefixing L with the name of level series.

## 2.1 JOHANSEN CO-INTEGRATION TEST

Johansen test for co-integration can be tested by two methods i.e. trace test and Eigen value test. Both the test may give inferences with small difference. Both methods of test address the co-integration presence hypothesis.

Co-integration of time series variables assumes the presence of common non-stationary (i.e. series are I (1)) processes underlying the input time series variables.

$$\begin{aligned} X_{1,t} &= \alpha_1 + \gamma_1 Z_{1,t} + \gamma_2 Z_{2,t} + \dots + \gamma_p Z_{p,t} + \epsilon_{1,t} \\ X_{2,t} &= \alpha_2 + \phi_1 Z_{1,t} + \phi_2 Z_{2,t} + \dots + \phi_p Z_{p,t} + \epsilon_{2,t} \\ X_{m,t} &= \alpha_m + \psi_1 Z_{1,t} + \psi_2 Z_{2,t} + \dots + \psi_p Z_{p,t} + \epsilon_{m,t} \end{aligned}$$

The number of independent linear combinations (k) is related to the assumed number of common non-stationary underlying processes (p) as follows:

$$p = m - k$$

So, let's consider the following three possible outcomes:

1.  $k=0, p=m$ . When time series variables are not co-integrated

2.0  $k < m, 0 < p < m$ . When the time series variables are co-integrated.

3.  $k=m, p=0$ . When all the time-series variables are stationary ( $I(0)$ ) to start with. Here co-integration is not relevant.

When we are examining the number of independent combinations, we are also examining the co-integration existence hypothesis indirectly.

**2.1.1 TRACE TEST**

The trace test tries to find out the number of linear combinations ( $K$ ) to be equal to a given value ( $K_0$ ), and the alternative hypothesis for  $K$  to be more than  $K_0$ .

$$\begin{aligned} H_0 &: K = K_0 \\ H_a &: K > K_0 \end{aligned}$$

In the trace test, we set  $K_0 = 0$  (assuming no co-integration), and examine whether we can reject null hypothesis.

If we find at least one co-integration relationship. We need to reject the null hypothesis to establish the presence of Co-integration between the variables.

**2.1.2 MAXIMUM EIGENVALUE TEST**

In maximum eigenvalue test, we can reject the null hypothesis if there is only one possible linear combination of the non-stationary variables to yield a stationary process.

$$\begin{aligned} H_0 &: K = K_0 \\ H_a &: K = K_0 + 1 \end{aligned}$$

The test may become less powerful than the trace test for the same  $K_0$  values.

**2.2 VECTOR AUTOREGRESSION (VAR)**

The VAR is used to capture the linear interdependencies among multiple time series. Each variable has an equation explaining its evolution based on its own lags and the lags of the other model variables.

A VAR model describes the evolution of a set of  $k$  variables (called endogenous variables) over the same sample period ( $t = 1, \dots, T$ ) as a linear function of only their past values. The variables are collected in a  $k \times 1$  vector  $y_t$ , which has as the  $i$ th element,  $y_{i,t}$ , the observation at time "t" of the  $i$ th variable. For example, if the  $i$ th variable is GDP, then  $y_{i,t}$  is the value of GDP at time  $t$ .

A  $p$ -th order VAR, denoted VAR( $p$ ), is

$$y_t = c + A_1 y_{t-1} + A_2 y_{t-2} + \dots + A_p y_{t-p} + e_t,$$

Where the  $l$ -periods back observation  $y_{t-l}$  is called the  $l$ -th lag of  $y$ ,  $c$  is a  $k \times 1$  vector of constants (intercepts),  $A_i$  is a time-invariant  $k \times k$  matrix and  $e_t$  is a  $k \times 1$  vector of error terms satisfying

1.  $E(e_t) = 0$  Every error term has mean zero;
2.  $E(e_t e_t^T) = \Omega$  — the contemporaneous covariance matrix of error terms is  $\Omega$  (a  $k \times k$  positive-semi definite matrix);
3.  $E(e_t e_{t-k}^T) = 0$  for any non-zero  $k$  there is no correlation across time; in particular, no serial correlation in individual error terms.

A  $p$ th-order VAR is also called a VAR with  $p$  lags. Lag selection is very important as inference can be different for different lags.

**2.3 GRANGER CAUSALITY TEST**

Direction of causality between variables can be predicted by granger causality test as co-integration does not reveal anything about direction of causality. A variable  $x$  is said to Granger cause another variable  $y$  if past values of  $x$  help predict the current level of  $y$  if all other information is available. The simplest test of Granger causality requires estimating the following two regression equations, these are given as equation (1) and equation (2).

$$y_t = \beta_{1,0} + \sum_{i=1}^p \beta_{1,i} y_{t-i} + \sum_{j=1}^p \beta_{1,p+j} x_{t-i} + e_{1t} \tag{1}$$

$$x_t = \beta_{2,0} + \sum_{i=1}^p \beta_{2,i} y_{t-i} + \sum_{j=1}^p \beta_{2,p+j} x_{t-i} + e_{2t} \tag{2}$$

Where  $p$  is the number of lags that adequately models the dynamic structure so that the coefficients of further lags of variables are not statistically significant and the error terms  $e$  are white noise. The error terms may, however, be correlated across equations. If the  $p$  parameters are jointly significant then the null that  $x$  does not Granger cause  $y$  can be rejected. Similarly, if the  $p$  parameters are jointly significant then the null that  $y$  does not Granger cause  $x$  can be rejected. This test is usually referred to as the Granger causality test.

**3. EMPIRICAL ANALYSIS**

TABLE 1: SUMMARY STATISTICS OF LOG DIFFERENCE SERIES OF INVESTIGATED INDICES

	LNDX	LNIFTY
Mean	0.044	0.060
Maximum	10.368	16.226
Minimum	-11.115	-21.247
Std. Dev.	1.448	1.746
kewness	-0.377	-0.933
Kurtosis	8.867	20.454
Jarque-bera	3525.56	31044.66
Probability	0.000	0.000

TABLE 2: CORRELATION MATRIX (LEVEL SERIES)

	NDX	NIFTY
NDX	1	0.845477
NIFTY	0.845477	1

TABLE 3: CORRELATION MATRIX (LOG DIFFERENCE SERIES)

	LNDX	LNIFTY
LNDX	1	0.215931
LNIFTY	0.215931	1

**Unit Root Test:** To check the stationarity of the data Unit root test was conducted on level series and log difference series with and without trends. All the three methods DF, ADF and PP test were employed, and the results are as follows:

**TABLE 4: SUMMARY OF UNIT ROOT TEST RESULT (LEVEL SERIES- WITHOUT TREND)**

LEVEL SERIES- WITHOUT TREND						
Variables	DF		ADF		PP	
	1% level	t-Statistic	1% level	t-Statistic	1% level	t-Statistic
NDX	-2.565919	2.269653	-3.432860	1.214916	-3.432860	1.538632
NIFTY	-2.565919	1.185910	-3.432860	-0.549767	-3.432860	-0.546037

**TABLE 5: SUMMARY OF UNIT ROOT TEST RESULT (LEVEL SERIES- WITH TREND AND INTERCEPT)**

Level series						
With Trend and Intercept						
Variables	DF		ADF		PP	
	1% level	t-Statistic	1% level	t-Statistic	1% level	t-Statistic
Indices	-3.480000	-0.583105	-3.961840	-0.820647	-3.961840	-0.576886
NDX	-3.480000	-0.583105	-3.961840	-0.820647	-3.961840	-0.576886
NIFTY	-3.480000	-2.310425	-3.961840	-2.252562	-3.961840	-2.298478

**TABLE 6: SUMMARY OF UNIT ROOT TEST RESULT (LOG DIFFERENCE SERIES- WITHOUT TREND)**

LOG DIFFERENCE SERIES- WITHOUT TREND						
Variables	DF		ADF		PP	
	1% level	t-Statistic	1% level	t-Statistic	1% level	t-Statistic
Indices	-2.565925	-4.666556	-3.432861	-53.82860	-3.432861	-54.03393
LNDX	-2.565925	-4.666556	-3.432861	-53.82860	-3.432861	-54.03393
LNIFTY	-2.565924	-7.257182	-3.432861	-49.84929	-3.432861	-49.84521

**TABLE 7: SUMMARY OF UNIT ROOT TEST RESULT (LOG DIFFERENCE SERIES- WITH TREND AND INTERCEPT)**

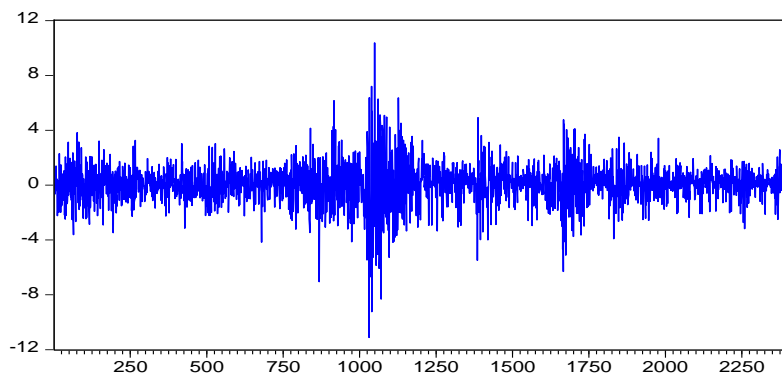
LOG DIFFERENCE SERIES- WITH TREND AND INTERCEPT						
Indices	DF		ADF		PP	
	1% level	t-Statistic	1% level	t-Statistic	1% level	t-Statistic
NDX	-3.480000	-9.865815	-3.961841	-53.84701	-3.961841	-54.06079
LNIFTY	-3.480000	-48.13350	-3.961841	-49.84024	-3.961841	-49.83629

\*LDAX indicates log difference series of DAX.

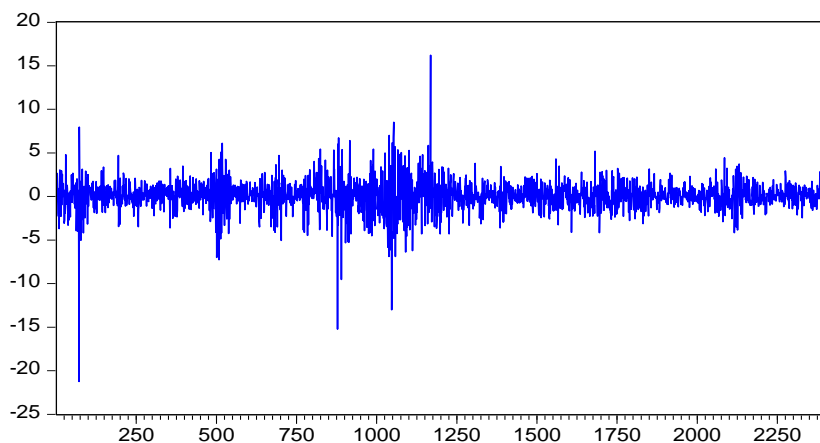
When value of t statistics (absolute value) more than the value at 1%, we can reject null hypothesis, Means the series are stationary. The result of all the three test DF, ADF & PP for log difference series shows that we can reject null hypothesis. So it is clear that level time series in study have a unit root at a level of significance of 1%. (T-statistic is always higher). But their difference series do not have a unit root. Therefore, they are all I (1) process and there is chances of co-integration.

A graphical presentation of log difference series is shown below. It is obvious from Graph that the series are mean reverting and therefore stationary.

**FIGURE 2: LOG DIFFERENCE SERIES**  
LNDX



LNIFTY





3.2 To confirm long term relationship between two or more-time series variables, Co-integration test is most popular and suitable test. There are two methods of conducting Co-integration test, they are Trace test and Eigen value test. The Co-integration test of Nifty and NDX is conducted by both the methods.

**RESULT OF CO-INTEGRATION TEST AT 5% LEVEL FOR NIFTY AND NDX IS GIVEN BELOW:**

Unrestricted Co-integration Rank Test (Trace)

Hypothesized	Trace	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.001977	6.699867	15.49471	0.6128
At most 1	0.000796	1.921554	3.841466	0.1657

Trace test indicates no co-integration at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Co-integration Rank Test (Maximum Eigenvalue)

Hypothesized	Max-Eigen	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.001977	4.778314	14.26460	0.7695
At most 1	0.000796	1.921554	3.841466	0.1657

Max-eigenvalue test indicates no co-integration at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

**Johansson co-integration test outcome:** Both trace test and Eigen value test indicates no co-integration at the 0.05 level. Therefore, Null hypothesis can not be rejected. Therefore, Nifty and NDX has no co-integration and no long run association between them.

3.3 Vector Auto Regression (VAR) tries to find out the interdependencies of a time series variable with itself and with others. VAR assumes that each variable is a function of past value (lag value) of its own and past value of other variable. The VAR of Nifty and NDX was tested to check the interdependency between the two. The result is as follows:

**VAR OF NIFTY WITH NDX**

	NIFTY	NDX
NIFTY(-1)	0.977824 (0.02032) [ 48.1227]	-0.002681 (0.00786) [-0.34100]
NIFTY(-2)	0.018303 (0.02029) [ 0.90190]	0.002841 (0.00785) [ 0.36192]
NDX(-1)	0.486381 (0.05329) [ 9.12633]	0.945243 (0.02062) [ 45.8468]
NDX(-2)	-0.478204 (0.05341) [-8.95375]	0.055511 (0.02066) [ 2.68667]
C	2.143419 (4.52090) [ 0.47411]	-1.122115 (1.74896) [-0.64159]

$$IFTY = C(1,1)*NIFTY(-1) + C(1,2)*NIFTY(-2) + C(1,3)*NDX(-1) + C(1,4)*NDX(-2) + C(1,5)$$

$$NDX = C(2,1)*NIFTY(-1) + C(2,2)*NIFTY(-2) + C(2,3)*NDX(-1) + C(2,4)*NDX(-2) + C(2,5) \text{ VAR Model - Substituted Coefficients:}$$

$$NIFTY = 0.97782378152*NIFTY(-1) + 0.0183034449931*NIFTY(-2) + 0.486380626193*NDX(-1) - 0.478204381847*NDX(-2) + 2.14341861837$$

$$NDX = - 0.00268053279059*NIFTY(-1) + 0.00284146306611*NIFTY(-2) + 0.945242920087*NDX(-1) + 0.0555108979424*NDX(-2) - 1.12211490292$$

**Result:** NIFTY(-1), NIFTY(-2) is significant to influence NDX at 5% level.

NDX (-2), NIFTY (-2) is significant to influence NIFTY at 5% level.

3.4 Granger Causality Tests helps to understand whether one time series is useful in forecasting other time series i.e. the future values of one series can be predicted using past values of another time series.

**RESULT OF GRANGER CAUSALITY TESTS OF NIFTY WITH NDX IS GIVEN BELOW:**

Pairwise Granger Causality Tests			
Date: 08/27/15 Time: 10:31			
Sample: 1 2419			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
NDX does not Granger Cause NIFTY	2417	44.1045	2.E-19
NIFTY does not Granger Cause NDX		0.09463	0.9097

Outcome shows that Nifty neither granger cause NDX nor caused by it.

#### 4. CONCLUSION

Financial markets across the world may fluctuate randomly but some of them might share long term equilibrium when they are co-integrated. This co-integration of stock market is very useful tool that helps portfolio managers to develop strategy on global diversification. If the indices of the countries are co-integrated, then diversification may not fetch desired result in risk minimization and return maximization. To confirm co-integration relationship, time series of daily closing value of both the indices have been tested for unit root. All the three-unit root test DF, ADF & PP have confirmed the process are  $I(1)$ . After that Johansen co-integration test is performed on NDX with NIFTY and no co-integration of Indian financial market is detected. For testing auto regression, unrestricted VAR test is applied by taking lag of 2. When serious are not co-integrated unrestricted VAR gives better result. Unrestricted VAR shows that lag 1 and lag 2 of NDX is not significant to influence Nifty at 5% level. At the same time lag 1 and 2 of nifty is significant to influence NDX. Granger causality test reveals that NDX does not granger cause NIFTY or caused by NIFTY.

#### REFERENCES

1. Alexander, R. Thillainathan, (1995) The Asian connections, Emerging Markets In-vestor 2(6), 42-46
2. Bekaert, G., Harvey, C.R., 1997. Emerging equity market volatility. *Journal of Financial Economics*, 43, 29–77.
3. Bekaert, G., Urias, M.S., 1996. Diversification and emerging market closed end funds. *Journal of Finance* 51, 835–869.
4. Bennett, P., Keleher, J., 1988. The international transmission of stock price disruption in October 1987, Federal Reserve Bank of New York. *Quarterly Review* 13, 17–33.
5. Bodurtha, J. Jr., Cho, D., Senbet, L., 1989. Economic forces and the stock market: an international perspective. *The Global Finance Journal* 1, 21–46.
6. Campbell, J., Hamao, Y., 1992. Predictable stock returns in the United States and Japan: a study of long-term capital market integration. *Journal of Finance* 47, 43–66.
7. Dwyer, G.P., Hafer, R.W., 1988. Are national stock markets linked? Federal Reserve Bank of St. Louis Review 70, 3–14.
8. Engle, R.F., Granger, C.W.J. (1987): Co-integration and Error Correction: Representation, Estimation and Testing. *Econometrica* 55(2), 251–276
9. Eun, C.S., Shim, S., 1989. International transmission of stock market movements. *Journal of Financial and Quantitative Analysis* 24, 241–256.
10. Ghosh, R. Saidi and K. H. Johnson, (1999) Who moves the Asia-Paci\_c stock markets US or Japan? Empirical evidence based on the theory of co-integration, *The Financial Review* 34, 159-170.
11. Gujarati, D.N. (2003): Basic Econometrics, 4th edn. McGraw-Hill Companies, Inc., New York
12. Johansen, S. (1991): Estimation and Hypothesis Testing of Co-Integration Vectors in Gaussian Autoregressive Vector Models. *Econometrica* 59(2), 1551–1580
13. K. C. Chan, B. E. Gup and M.-S. Pan, (1992), An empirical analysis of stock prices in major Asian markets and the United States, *Financial Review* 27(2), 289-307
14. M.Bhattacharyya, A. Banerjee (2003), Integration of Global Capital markets: An empirical exploration, *International journal of Theoretical and Applied finance* 7(4), 385-405
15. M.S. Pan, Y. A. Liu and H. J. Roth, (1999), Common stochastic trends and volatility in Asian-Paci\_c equity markets, *Global Finance Journal* 10(2), 161-172.

**INDIAN VALUE ADDED TAX (VAT) SYSTEM: A PROTOTYPE FOR NIGERIA****AHMED JINJIRI BALA****STUDENT****DEPARTMENT OF CS AND ACCOUNTING FINANCE****SRM UNIVERSITY****CHENNAI****DR. A. THILAGARAJ****ASST. PROFESSOR (Sr. G)****DEPARTMENT OF CS & ACCOUNTING FINANCE****SRM UNIVERSITY****CHENNAI****ABSTRACT**

Nigerian economy has largely depended on the oil sector for decades. In recent time, the economy is bedeviled with the serious challenge of dwindling oil price, coupled with the global move for alternative sources of energy, hence triggering the need for the country to diversify its revenue sources. This study examines the impact of Value Added Tax (VAT) on Nigerian economy and similarly, the same case was examined in the Indian context, with a view to proposing a better strategy for VAT administration and collection in Nigeria, taking Indian VAT system as a model. The study employed time series data from 1994-2013, obtained from relevant government agencies in Nigeria and India. Multiple Ordinary Least Square (MOLS) Model was employed as a tool of data analysis. Result of the study reveals a positive and significant relationship between VAT and Gross Domestic Product (GDP) in Nigeria; whereas in India, the result showed that there is a positive and significant relationship between State Value Added Tax (SVAT) and GDP. However, Central Value Added Tax (CENVAT) was found to have a negative but insignificant relationship with GDP. The study found out that there is serious existence of black economy, shallow base and inefficiencies of tax personnel. In the same vein, VATable businesses view VAT as a cost which hinder their remittance. The study recommended among others that government should establish a two tier VAT system at both States and Federal level, with same rate but clearly stating subsumed taxes attributable to each. Also, a recommendation for the general name of the two taxes made by the study are; Federal Goods and Service Tax (FGST) and State Goods and Services Tax (SGST). While the study proposes maintaining the 5% rate of VAT, it charge the government to expand its base and also automate the entire VAT system in Nigeria.

**KEYWORDS**

Central Value Added Tax (CENVAT), Gross Domestic Product, India, Nigeria, Value Added Tax.

**INTRODUCTION**

The economic, social and political development of any country depends on the amount of revenue generated for the provision and sustenance of infrastructures in that country. However, a well-structured tax system is one among the major sources of generating revenue for the provision of such infrastructures. According to Azubike, (2009) tax is a major player on every society of the world. Value Added Tax (VAT), was first introduced less than 50 years ago in France although it was first theorised in Germany a century earlier, it remained confined to a handful of countries until the late 1960s. Today, however, most countries have VAT, which contribute, on average of about 25% to their tax revenue. VAT is a broad-based tax levied on commodity sales up to and including, at least, the manufacturing stage, with systematic offsetting of tax charged on commodities purchased as inputs - except perhaps on capital goods - against that due on outputs (Ebril, et al., 2001). According to Burgess, Howes, and Stern (1993), VAT is a tax on the domestic final consumption. It is normally levied at all the stages between productions to the point of final sales. VAT from the view of raising revenue, in the last three decades have proved to be successful. Like other developing countries, Nigeria faces major challenges of raising resources to meet public expenditure requirements while minimising resource distortions. The Nigerian economy which largely depends on the oil and gas sector for several decades, bedeviled with fluctuations on the activities of the sector, coupled with the global move for alternative sources of energy trigger the need for the country to diversify its economy and hence the need for effective tax administration and collection. VAT, its system of administration and collection in a country might be a key determinant that influence tax evasion. Nevertheless, one of the main problem of many developing countries, is the limited ability to collect VAT revenues and their shallow bases. Thus, many countries are faced with the challenge of modernizing their VAT administration and collection. In the words of Keen and Stephen, (2007), key claim by advocates of VAT is centrally on the effective way of raising revenue. 'Purely from a revenue point of view, VAT is probably the best tax ever invented' (Cnossen, 1990).

**LITERATURE REVIEW**

According to Vijay, (2011), founds that the highest tax paid on expenditure was 7% and the lowest was 2% on the 7,110 and 5,021 expenditures respectively and concludes that there was reasonable Value Added Tax (VAT) payment by the sampled income group. Olatunji (2009), founds that government have to put more effort in business enumeration in all the states in order to have a comprehensive database of VAT collection agents, the need for establishment of VAT offices in all local councils and efforts in retrieving proceed of VAT deducted by business should be strived in Nigeria. Jayakumar, (2012), found that VAT is certainly more transparent and accurate system of taxation. The study uses 'dynamic cluster', 'meticulous cluster' and 'unambitious cluster' stages to ascertain VAT implementation in India and its consequences. Result shows that, there is need for VAT transparency in all Indian states and recommends that tax applicability and e-filing will play a major role in VAT system and need for introduction of uniform product classification across India to exhibit implementation with effective return. Komal, (2013), the study found that, VAT implementation is an indispensable phenomenon which it is believed has mutual benefit from both the respondents and government officials. It further suggests that the 12.5% and 4% of finished goods and raw material VAT rate shall be adjusted to reduce their margin and consumers shall collect invoice for every purchase for efficient VAT collection and remittance. Onaolapo, Aworemi, and Ajala (2013), found that VAT is beneficial to the economy and recommends that to achieve a greater advantage and effect the VAT bases should be widened in order to reduce/eliminate the issues of tax evasion by informal sector of the economy which almost constitute a higher proportion and even the so-called faithful complying once. Garg, (2014), argued that implementation of Goods and Service Tax (GST) will not only widened the dealership base by capturing value addition in the distributive trade and increase compliance but also reduces the transaction cost and unnecessary wastages, elimination of multiple taxation, reduces corruption, reduce average tax burdens and concluded that the threshold should not be too low to disturbed Small and Medium Enterprises (SMEs). Aamir et al., (2011), found that, Pakistan charged more revenue by levying indirect taxes whereas Indian has less, although that is not healthy for Pakistan as the act will widen the gap between the rich and poor. Santra and Hati (2014), in their study found out that, contrary to the views in the whitepaper by the State Finance Ministers Committee, majority of the states' records no significant positive impact on the introduction of VAT both in terms of decrease in the rate of taxation and also net increase in the overall tax base though it reaffirms the first result regarding the effectiveness of VAT despite the situation when compared even worsen. Ebeke and Ehrhart (2011), the study found a robust evidence and established that presence of VAT leads to enhancement and stability of tax revenue as against the countries that did not adopt VAT, hence this provide room for developing economies to explore VAT benefits to enhance their revenue and sustainable development. Indirect tax such as VAT are neglected in Nigeria in

favour of petroleum and trades taxes, it further to states that the system lack potentiality of diversification on the revenue portfolio which in turn is expected to safeguard the country from volatility in oil prices to promote and sustain fiscal and economic viability (Oduola, 2006).

**STATEMENT OF THE PROBLEM**

With the global economy reeling from plunging oil prices occasioned by massive over production, Nigeria, a key member of the Organisation of the Petroleum Exporting Countries (OPEC), which depends largely on oil revenue is faced with the reality of the need for diversification of the economy in order to enhance the revenue base of the government, one of such sources is Valued Added Tax (VAT). According to Olashore (1999), the Nigerian economy has remained in a deep slumber, all macroeconomic indicators show an economy in dire need of rejuvenation, reflation and indeed radical reform. The gap here is that, although it is admitted that implementation of VAT in Nigeria has recorded a significant improvement in tax revenue which by far outweigh the Company Income Tax (CIT). It is believed that the incomplete and ineffective administration and collection procedures of VAT is the bottleneck for its successful implementation. Nigeria with its population and increased economic activities is likely to witness increase of VAT revenue since it is a consumption tax levied on "vatable" goods and services as experienced by many highly populated countries.

**OBJECTIVES OF THE STUDY**

The objective of this study is to identify the nature of administration and collection of Valued Added Tax (VAT) in Nigeria and suggest a new model based on Indian VAT system. There it is breakdown as follows:

1. To investigate the VAT administration and collection and its impact on Nigerian economy.
2. To investigate the VAT administration and collection and its impact on Indian economy.
3. To examine the problems in the Nigerian VAT system.
4. To suggest a new model for VAT administrations and collections in Nigeria.

**RESEARCH METHODOLOGY**

The study involves a secondary data which will be collected mainly from the Central Bank of Nigeria Statistical Bulletin (2014), Federal Inland Revenue Service (FIRS), Department of Statistics and Information Management, Reserve Bank of India and Department of Revenue, Ministry of Finance Government of India.

It is often difficult to study a whole population. In that event, a true sample of the population needs to be captured by estimating the sample statistic. Hence, the most efficient estimator is the Ordinary Least Square (OLS). Although, the method of OLS is attributed to the Gauss-Markov Theorem which made it one of the most powerful and popular method of estimation. This is in consideration of the BLUE (Best Linear Unbiased Estimator) properties. As cited by Gujarati (2009), an estimator is said to be BLUE if it satisfies the following:

- i) Linearity: depicts a linear function of a random variable such as;  $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + U$ .
  - ii) Unbiasedness: expected value say,  $E(\hat{\beta}_2)$ , is equal to the actual  $\beta_2$  (i.e.  $E(\hat{\beta}_2) = \beta_2$ )
  - iii) Efficiency/Minimum Variance: an unbiased estimator with the least variance is known as an efficient estimator. Suppose  $g$  is an unbiased estimator and it has the minimum variance in the class of linear unbiased estimators,  $g$  is said to be an efficient estimator. That is,  $g = C_1y_1 + C_2y_2 + \dots + C_ny_n$  where  $C$  is constant.
  - iv) Consistency: A consistent estimator is one which approaches the real values of the parameter in the population as the size of the sample (n) increases.
- Econometric method of analysis will be employed as earlier stated, i.e. Multiple Ordinary Least Square Regression Model (MOLS) using the E-Views 8. Other robustness test will be carried out like Breusch Pagan Godfrey (BPG) Heteroskedasticity test.

**MODEL SPECIFICATION**

In order to examine the impact of tax revenue on the economic growth of Nigeria and that of India, multiple linear model are built. The model is thus:

$$GDP = f(PPT, CIT, VAT, CED) \text{ (1)}$$

$$GDP = f(CENVAT, CED, PIT, CIT, SVAT) \text{ (2)}$$

From the above function, the following model is derived:

$$GDP = \alpha + \beta_1PPT_t + \beta_2CIT_t + \beta_3VAT_t + \beta_4CED + \epsilon$$

$$GDP = \alpha + \beta_1CENVAT_t + \beta_2CED_t + \beta_3PIT_t + \beta_4CIT_t + \beta_5SVAT + \epsilon$$

Where: GDP: Gross Domestic Product

PPT : Petroleum Profit Tax

CIT : Company Income Tax

VAT : Value Added Tax

CED : Custom and Excise Duties

CENVAT : Central Value Added Tax

PIT : Personal Income Tax

SVAT : State Value Added Tax

$\alpha$  is constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ , are the coefficient of the parameter estimate.

$\epsilon$  is the error term.

The R-squared is used to test the measure of goodness of fit of the model. Moreover, F-statistics is used to test the joint statistical significance of the explanatory variable and the dependent variable. When f-calculated is greater than f-critical, it shows that there is a joint significant relationship and vice versa. Finally, an econometric criterion is needed to test the presence or absence of positive serial correlation. The measurement use for this is Durbin Watson statistics. The econometric analysis will cover the period of 1994-2013.

**RESULT AND DISCUSSION**

**REGRESSION AND SPECIFICATION TESTS RESULTS**

**TABLE 1.1: INDIA'S OLS REGRESSION RESULTS**

Variables	Coefficient	t-statistics	Probability
LNSVAT	0.3725	9.5158	0.0000
LNPIIT	0.0173	1.0184	0.3257
LNCIT	0.0961	3.7586	0.0021
LNCENVAT	-0.0301	-0.8019	0.4360
LNCED	-0.0233	-0.8826	0.3924
C	7.414	46.3792	0.0000
R-Square (R <sup>2</sup> )	0.9988		
Adjusted R-Square (R <sup>2</sup> )	0.9988		
F-statistics	2357.601		
Prob(F-stat)	0.0000		
Durbin-Watson stat	2.0317		

Source: E-view 8.0 output file

From the Ordinary Least Square (OLS) regression result presented in Table 1.1 above, State Value Added Tax (SVAT) was found to have a significant positive relationship with Gross Domestic Product (GDP) of India. A percentage increase in SVAT leads to a 0.3725 percentage increase in GDP of India. It could be inferred from the above that State Value Added Tax (SVAT) impacts economic growth of India positively. This finding is in tandem with the works of Bird and Gendron (2006) and also in disagreement with Das-Gupta (2011) and Santra and Hati (2014). Also, from the same table 1.1, the Personal Income Tax (PIT) result was found to have a positive relationship with GDP but statistically insignificant as the p-value is 0.3257 at 0.05 level of significance. We conclude that PIT has insignificant impact on economic growth. However, result of Corporate Income Tax (CIT) was found to have significant and positive relationship with India's GDP. As such a percentage increase in CIT would lead to 0.0961 percent increase in India's GDP. Hence, we conclude that CIT has positive impact on the economic growth of India. The econometric result calculated reveals that Central Value Added Tax (CENVAT) has negative and insignificant relationship with GDP of India. The CENVAT p-value of 0.4360 at 0.05 level of significance clearly shows that CENVAT has insignificant impact on India's economic growth. The calculated result of Custom and Excise Duties (CED) which shows that there is negative and insignificant relationship between CED and GDP of India, p-value 0.3924 percent at 0.05 level of significance. Hence, it has no impact on the India's economic growth.

Summary of the overall results of the tax components as shown in table 1.1, shows that the f-statistics value is 2357.601 and the p-value is 0.0000, thus we can affirm that the model is statistically significant at 0.05 level of significance. The coefficient of determination (R<sup>2</sup>) reveals a value of 0.9988, this implies that tax revenue components have explained up to 99% of variations in GDP, this is confirmed by the value of adjusted R<sup>2</sup> which even after adjustment is still strong and positive at 0.9984 percent.

Durbin-Watson statistics tests auto correlation in a model. Result from the study shows DW-statistics to be 2.0317, hence we conclude that there is no auto correlation in the model, as such OLS assumption of accepting the model if the residuals are not correlated overtime is hereby accepted.

**TABLE 1.2: INDIA'S OTHER ROBUSTNESS TEST RESULTS**

Variables	Coefficient	t-statistics	Probability
LNVAT	0.1585	2.6166	0.0240
LNPPT	-0.0003	-0.0488	0.9620
LNCIT	-0.0871	-2.0629	0.0636
LNCED	-0.0334	-1.3005	0.2200
C	0.3913	1.2730	0.2293
R-Square (R <sup>2</sup> )		0.9991	
Adjusted R-Square (R <sup>2</sup> )		0.9986	
F-statistics		2060.347	
Prob(F-stat)		0.0000	
Durbin-Watson stat		2.2252	

Source: Extracted from E-view 8.0 Results

Heteroskedasticity test was carried out to test whether constant variance exists. This was done using Breusch-pagan-Godfrey (BPG) heteroskedasticity test. This test the null hypothesis that constant variance exists. From the result at 0.05 level of significance, the \*Observed R<sup>2</sup> is 3.4381 while probability of chi-square is 0.6328 indicating there is no presence of heteroscedasticity. We hence uphold that our residuals are indeed homoskedastic.

**TABLE 2.1: NIGERIA'S OLS REGRESSION RESULTS**

Name of test	Obs*R-Squared	Probability of Chi-Square	Comment
Breusch-Pagan-Godfrey: Heteroskedasticity test	3.4381	0.6328	Significant at 5% level shows absence of heteroskedasticity

Source: E-view 8.0 output file

The OLS regression results shown in table 4.3.2.1 it reveals that, Value Added Tax (VAT) was found to have a positive and significant relationship with GDP of Nigeria. Hence, a percentage increase in VAT would lead to 0.1585 percent increase in GDP. So, it could be inferred that from the result that VAT has significant impact on the economic growth of Nigeria economy. This finding is in agreement with the works of Onaolapo, Aworemi & Ajala (2013) and that of Onwuchekwa and Aruwa (2014).

From the same regression results, petroleum profit tax (PPT) was found to have negative and insignificant relationship with the GDP of Nigeria. The PPT p-value of 0.9620 percent at 0.05 level of significance clearly reveals that there exists insignificant impact of PPT to the Nigeria's economic growth. Result of the analysis also shows company income tax (CIT) to have significant and positive relationship with Nigeria's GDP. The p-value of 0.0636 percent at 0.10 level of significance for CIT openly reveals that CIT has significant impact on Nigeria's economic growth. This is in agreement with the works of Garba (2014).

The econometric result above shows that, Custom and Excise Duties (CED) was found to have negative and insignificant relationship with Nigeria's GDP. The CED p-value of 0.2200 no doubt reveals that CED has insignificant impact on the economic growth of Nigeria. Measures of overall significance of the model, i.e. significant of all the variables in explaining the dependent variable in this case GDP, thus if p-value is <0.05, as in this case 0.0000, then we inferred that the model is statistically significant. Also the coefficient of determination (R<sup>2</sup>) value shows 0.9991 percent hence implies that tax revenue component has explained 99% of variation in GDP. This result was reaffirmed by adjusted R<sup>2</sup> value of 0.9986 percent.

The Durbin-Watson statistics is a test of auto correlation in the model. Auto correlation is said to exist in a model if the residuals of the model are related overtime. Here the OLS assumption is that the residual should not be correlated overtime. The calculated D-Watson test is 2.225, hence we inferred there is no auto correlation in this model.

**TABLE 2.2: NIGERIA'S OTHER ROBUSTNESS TEST RESULTS**

Name of test	Obs*R-Squared	Probability of Chi-Square	Comment
Breusch-Pagan-Godfrey: Heteroskedasticity test	5.8978	0.4347	Significant at 5% level shows absence of heteroskedasticity

Source: Extracted from E-view 8.0 Results

Here, heteroskedasticity test was carried out, and the OLS assumption here is that, the variables must have constant variance. If the variables do not have constant variance, then heteroscedasticity is said to exist. In this regards, BPG test was conducted to determine whether or not the model suffers from heteroscedasticity. The result shows that \*Observed R<sup>2</sup> p-value is 0.4347, which we conclude that the model does not suffer heteroscedasticity. We could thus, say that the residuals are homoskedastic.

**FINDINGS**

Based on the relevant studies reviewed, Valued Added Tax (VAT) in Nigeria is saddled with many challenges such as; majority of the Federal Inland Revenue Services (FIRS) staff perceived they are not adequately equipped technically and administratively to handle VAT operations, organisations that are liable to remit VAT after appropriate deductions lack the relevant knowledge on how VAT operates they perceived VAT as a cost contrary to the expectations, another fundamental issue is that despite the three tiers of government in Nigeria benefit immensely from VAT, use of unqualified FIRS personnel, poor record keeping by business enterprises and relevant technical expertise causes high rate of VAT remittance evasion (Aruwa, 2008). The above findings clearly showed that there is a gap in the Nigerian VAT system. The current VAT system that operates in Nigeria which has a single rate of 5%, administered and collected by the FIRS on behalf of the



three tiers of government, it's seriously exposed to shallow tax base and several inefficiencies in terms of administration and collection. While in India, it's a two-way fold VAT is administered and collected by both the States Value Added Tax (SVAT) and the Central Value Added Tax (CENVAT) governments, both the two VATs are administered and collected separately and with different rates depending on states for SVAT and the rate of 4% to 12.5% for CENVAT as such this differences in the two countries' VAT system is believe to impact the Gross Domestic Product (GDP). To this, it can be conveniently said that there is fundamental differences between India's and Nigeria's VAT system. For a Mono-economy like Nigeria with heavy dependence on oil revenue, one can rightly say that taxes generated from oil revenue if captured with other taxes as shown in this study will have a significant impact to the national income. The findings of Adereti, (2011) and Olaoye (2009) on VAT also supports the fact that because of its indirect form it is difficult to evade or avoid the payment of VAT a practice most tax payers are found of doing in Nigeria.

## CONCLUSION

The findings of this study contribute towards a better understanding of Valued Added Tax (VAT) in Nigeria and India. The Nigerian VAT has shown a positive and significant relationship with GDP. However, several problems and loopholes such as black economy, improper knowledge of both the VATable organisations and Federal Inland Revenue Services (FIRS) officials posed a serious threat to the administration and collection of VAT in Nigeria. To this end, Indian VAT system have been analysed and many advantages in terms of administration and collection are believe to be derivable. Findings of the study is a pointer to the policy makers on the strategies to adopt for improving the VAT system in Nigeria. To the researchers, the study will re-introduce them to different direction of ways in which VAT can contribute to the economy. To existing literatures on the subject, it will add to the body of knowledge.

## RECOMMENDATIONS

Based on the conclusion above, the appropriate recommendation for the modification of the existing Value Added Tax (VAT) system and make it more suitable system of VAT administration and collection in Nigeria should be to ensure; the VAT or GST (as referred in India) should be in two-folds chargeable by the Federal Goods and Service Tax (FGST) and State Good and Service Tax (SGST) Governments but at a uniform rate and to clearly spelt out the items of taxes to be subsumed in each category. Automation of the VAT system to meet the global standard of VAT administration should be made, such will eliminate evasion of VAT remittance and reduced black economy. The VAT deductible should be clearly shown in the invoice, separately plus the cost to arrive at the total item cost, VAT input-output set-off should be allowed which will enable the organisations abreast the fact that VAT is not a cost to them. Though the 5% VAT currently charged in Nigeria is the world lowest rate, can be maintained but effort must be geared towards capturing all the VATable business and enlighten them about the implication of non-remittance and consequences, hence the provision of VAT tribunal as recommended by the VAT Act 1993 is overdue. A massive campaign should be embarked by the government to enlighten the citizens of the need for them to be patriotic, while the government should be transparent, accountable and dedicated to serve with honesty to earn people confidence, so that both the government and governed will keep to their obligation for overall growth and development in the economy.

## REFERENCES

1. Aamir, M., Qayyum, A., Nasir, A., Hussain, S., Khan, K. I. and Butt, S. (2011): Determinants of Tax Revenue: A Comparative Study of Direct Taxes and Indirect Taxes of Pakistan and India. *International Journal of Business and Social Science*. Vol.2 No.19 (Special Issue – October). Centre for Promoting Ideas, USA pp.173-178.
2. Adereti, S. A., Sanni, M. R. & Adesina, J. A. (2011): Value Added Tax and Economic Growth of Nigeria, *European Journal of Humanities and Social Sciences* Vol.10, No.1 (Special Issue), ©JournalsBank.com (2011). ISSN 2220-9425-457.
3. Aruwa, S. A. (2008): The Administration and Problems of Value Added Tax in Nigeria. *Finance and Accounting Research Monitor*. Vol.2 No.2.
4. Azubike, (2009): Challenges of Tax Authorities, Tax Payers in the Management of Tax Reform Processes, *Nigerian Account*: 42(2): 36-42.
5. Bird, R. M. and Gendron, P. P. (2006): Is Value Added Tax the Best Way to Impose a General Consumption Tax in Developing Countries? *International Studies Program Working Paper 06-18*. Andrew Young School of Policy Studies. Georgia State University.
6. Cnossen, (1990): "The Case for Tax Diversity in the European Community", *European Economic Review*, Vol.4. pp.471-9.
7. Das-Gupta, A. (2011): An Assessment of the Revenue Impact of the State Level VAT in India. An Extensively Revised and Extended Version of "A Preliminary Evaluation of the Revenue Impact of the State Level VAT in India", Presented at the *National Institute of Public Finance and Policy*, New Delhi, March.
8. Ebeke, C. and Ehrhart, H. (2011): Is VAT Stabilizing? Centre Etudes et Documents. *Centre D'etudes Et De Recherches Sur Le Development International*. www.cerdi.org.
9. Ebril, L. M., Keen, M., Bodin, J. and Summers, V. (2001): The Modern Value Added Tax, Washington D.C.: International Monetary Fund.
10. Garba, L. S. (2014): Tax Revenue and Economic Growth in Nigeria. An Unpublished M.Sc Thesis. Submitted to the Department of Accounting, Ahmadu Bello University Zaria.
11. Garg, G. (2014): Basic Concepts and Features of Good and Service Tax in India. *International Journal of Scientific Research and Management*. Vol.2, Issue 2. ISSN(e): 2321-3418 pp.542-549.
12. Gujarati, D. N. and Porter, D. C. (2009): Basic Econometrics 5th Edition. New York: McGraw Hill Publishing.
13. Jayakumar, A. (2012): A Study on Impact of Value Added Tax (VAT) Implementation in India. *World Journal of Social Sciences*. Vol.2 No.5 August Special Issue pp.145-160.
14. Keen, M. and Stephen, S. (2007): Value Added Tax Fraud and Evasion: What Do We Know and What Can be Done? *International Tax Journal*. 109, 861-867.
15. Komal, (2013): An Analysis of the Impact of Value Added Tax (VAT) in Delhi. *Global Journal of Management and Business Studies*. ISSN 2248-9878 Vol.3 No.3, pp.277-286. Research India Publications.
16. Odusola, (2006): "Tax Policy Reform in Nigeria", Research Paper No.2006/3, United Nations University, World Institute for Development Economics Research.
17. Olaoye, C. O. (2009): A Review of Value Added Tax (VAT) Administration in Nigeria, assessed from medwelljournal.com on 31st March, 2016.
18. Olashore, O. (1999): "Strategies for Economic Revival", *The Guardian Newspaper*, Friday July, 23.
19. Olatunji, O. C. (2009): A Review of Value Added Tax (VAT) Administration in Nigeria. *International Business Management*. *Medwell Journals*. 2(4): 61-68. ISSN: 1993-5250.
20. Onaolapo, A. A., Aworemi, R. J. and Ajala, A. O. (2013): Assessment of Value Added Tax and Its Effects on Revenue Generation in Nigeria. *International Journal of Business and Social Science*. Vol.4 No.1 January. Centre for Promoting Ideas, USA pp.220-225.
21. Santra, S. and Hati, K. K. (2014): India's Move from Sales Tax to VAT: A Hit or Miss? A Paper Presented at *Centre for Studies in Social Science*, Calcutta. January.
22. Vijay, V. K. (2011): Value Added Tax: Measuring its Impact. *CCS Working Paper No.251, Summer Research Internship Programme, Centre for Civil Society*. Research Reality Internship.

**A STUDY OF COMMITMENT OF SCHOOL TEACHERS IN RELATION TO SOME BACKGROUND VARIABLES**

**DR. KAMALPREET KAUR TOOR**  
**POST DOCTORAL FELLOW**  
**DEPARTMENT OF EDUCATION**  
**PUNJABI UNIVERSITY**  
**PATIALA**

**ABSTRACT**

*The need for the improvement and enhancement of teacher commitment of teachers at various teaching level is universally emphasized. Hence in the present study an attempt was made to express the effect of teaching level (elementary and secondary level), locale (urban and rural) and gender on commitment of 300 school teachers selected from three districts of Punjab. The data were collected by Teacher Commitment Inventory (NTCI) by Dr. Noorjehan N. Ganihar (2010). The ex-post facto research design was used to study main and interaction effects of independent variable namely, teaching level, locale and gender on teacher commitment among school teachers. From the findings of the study it was concluded that elementary school teachers have significantly higher level of teacher commitment as compared to secondary school teachers. Rural school teachers are significantly more committed as compared to urban teachers. From triple order interaction (Gender x Locale x Teaching Level) effects, it was found that differences in commitment of elementary and secondary school teachers are conjoint dependent upon both independent variables of gender and location. Elementary school teachers have significantly higher level of commitment than secondary school teachers only in case of male teachers of rural areas.*

**KEYWORDS**

teacher's commitment, rural teachers, elementary teachers, secondary teacher.

**TEACHER COMMITMENT: A MULTIDIMENSIONAL CONSTRUCT**

Commitment of the teacher is defined as the degree of positive and affective bond between the teacher and the school/college. It does not refer to passive type of loyalty where teachers stay with their jobs, or involved in the schools/colleges or their work. Rather it reflects the degree of internal motivation/enthusiasm and job satisfaction teachers derive from teaching and the degree of efficacy and effectiveness they achieve in their jobs (National Center for Education Statistics, 1997). Commitment is part of a teachers' affective or emotional reaction to their experience in a school setting (Ebmeier and Nicklaws, 1999). Teacher commitment to school commitment is a complex attitude that is potentially influenced by the nature of the groups and is contingent on the context in which an individual function. Thus, different socio-cultural environments will prescribe different imperatives for individuals or groups attitudes toward their work, particularly teachers' commitment in educational setting means considerable loyalty to the specific school and a strong desire to put constant effort into work to develop the school (Park, 2005; 463). It is closely connected to teachers work performance and their ability to innovate and to integrate new ideas into their own practices and having an important influence on student's achievement in and attitudes towards school (Firestone, 1996; Graham, 1996; Lovis, 1998; Nias, 1981; Tsui and Change, 1999). Personal factors such as educational setting, teaching level (Punia, 2000), age, employment of spouse, academic level, administrator attitude and practices and support of administratory are highly correlated with teachers' professional commitment (Kang, 1982), further educational experience and salary (Bloom, 1988), caste categories have some influence in determining levels of commitment (Shishupal, 2001).

The literature reveals a growing interest in exploring teacher commitment due to its strong psychological ties to schools, students and subject areas (Firestone and Pennell, 1993). At the school level, teacher commitment is empirically supported as an influential factor for school effectiveness, teacher satisfaction and teacher retention (Fresko et al., 1997; Nir, 2002; Singh and Billingsley, 1998) as well as performance (Tsui and Chen, 1999), absenteeism and staff turnover, the ability to innovate and integrate new ideas into practice (Firestone and Pennell, 1993; Park, 2005; Riehl and Sipple, 1996) and the student level, teacher commitment is found to have an impact on student achievement and attitudes toward school (Firestone, 1996; Louis, 1998; Nias, 1981; Tsui and Chen, 1999) as well as students' commitment (Bryk and Driscoll, 1988). Some social and psychological variables are also related with teacher commitment like perceived status, intrinsic motivation, interest in the profession, desire to improve skills, social support choice satisfaction and perceived challenges (Mohan, 1992), teachers' emotional experiences and their psychological state to teaching (Choi and Tang, 2011), healthy school environment enhances commitment among teachers (Maheshwari, 2003), quality of supervision and pay satisfaction had significant positive influence on organizational commitment (Malik, 2010).

Teacher commitment is a complex attitude that is influenced by the nature of the groups and is contextually contingent (Cohen, 2007; Razak et al., 2010), as different socio-cultural environments will have different imperatives for individuals to fulfill socially prescribed roles and fit into social contexts (Markus and Kitayama, 1991; Triandis, 1995). In addition, the socio-cultural values and work orientation of a specific group can influence their attitudes, resulting in different commitment levels among teachers (Cohen, 2007; Razak et al., 2010).

Teachers might have several forms of commitment that relate to the strength of psychological attachment or identification with the focus of commitment. This focus can refer to the school as an organization, students, teaching as a profession or classroom teaching. Teachers' behaviour might vary depending on the type of commitment they emphasize (Cohen, 2000; Firestone and Pennell, 1993; Firestone and Rosenblum, 1988; Somech and Bogler, 2002).

Singh and Billingsley (1998) suggests that there are multiple forms of teacher commitment: commitment to teaching, school and students (Firestone and Rosenblum, 1988) and commitment to the teaching field (Billingsley, 1993). More concisely, such researchers as Billingsley and Cross (1992), Firestone and Pennell (1993) as well as Somech and Bogler (2002) operationalize teacher commitment into commitment to one's organization and commitment to profession. Specifically, Louis (1998) explained four types of teacher commitment based on the research performed by Louis and Smith (1988, 1990), Reyes (1990) and Rosenholtz (1989) as well as Rosenholtz and Simpson (1990). Louis (1998) highlights the dimensions of commitment to school from a socio-logical perspective by creating a sense of community and personal care among school individuals. These dimensions include commitment to academic goals by exerting more effort to nurture high expectations for student achievement; commitment to students by understanding and being aware of adolescents' development as unique, whole individuals; and commitment to the body of knowledge to achieve effective teaching. On the other hand, Nir (2002) emphasizes three types of teacher commitment i.e. commitment to teaching, commitment to students, commitment to one's organization.

In reflectin, the literature depiction of teacher commitment as a multidimensional construct is supported by Tyree (1996). Tyree (1996) claims that the different dimensions of teacher commitment are correlated to some degree. As a result, teacher commitment warrants a multidimensional solution because two or more commitment dimensions might better distinguish between commitments to subjects and students. Consistently, Firestone and Rosenblum (1988) argued in favour of the importance of distinguishing among the different dimensions of commitment, as teachers' behaviour patterns might vary depending on which commitment focuses are in operation. Moreover, Firestone and Pennell (1993) acknowledge the need for different forms of teacher commitment. These authors state that the multidimensional perspective of teacher commitment is vital because teachers are motivated to professionalize and pursue changes in teaching practice. In summary, the idea of multidimensional teacher commitment is worth exploring because a multiple-commitment approach is more precise and meaningful (Reichers, 1985). Considering the literature discussed, the conceptualization of teacher commitment can be synthesized as a multidimensional construct reflective of four dimensions: commitment to school, commitment to students, commitment to teaching and commitment to profession.

**COMMITMENT TO SCHOOL**

Teacher commitment to school has been more rigorously defined, measured and researched (Meyer and Allen, 1997; Reichers, 1985; Yousef, 2000) than other dimensions of teacher commitment. Teacher commitment to school has been studied to examine its nature and effects by a number of researchers (John and Taylor, 1999; Kushman, 1992; Somech and Bogler, 2002). These authors find that elementary school teachers have significantly higher levels of organizational commitment than high school teachers. Teachers who are highly committed to their school are engaged in achieving school goals, exert considerable effort beyond minimal expectations and remain working within the organization. In this study, teacher commitment to school is conceptualized as teachers’ belief and acceptance of the goals and values of the school as well as teachers’ efforts to actualize these goals and values and sustain their strong desire for membership in the school.

**COMMITMENT TO STUDENTS**

Kushman (1992), claims that commitment to students is expressed in terms of teaching and schools’ student achievement. According to Louis (1998), commitment to students motivates teachers to address students undergoing personal crises and to be more sensitive and aware of students’ development and achievement. Rosenholtz (1989) asserts that teachers who are committed to their students are likely to engage positively with their students, work harder to make classroom activities more meaningful and introduce new ways of learning. As such, teacher commitment to students is conceptualized as teachers’ responsibilities in student learning involvement.

**COMMITMENT TO TEACHING**

Commitment to work refers to the degree to which a person wants to be engaged in his or her work (Warr et al., 1979). Meanwhile, Lodahl and Kejner (1965) define commitment to work as the extent to which a person identifies with his or her work psychologically. It can be inferred that a person with strong work commitment would have more positive feelings towards his or her occupation than a person with weak work commitment. In an education context, teacher commitment to teaching is conceptualized as a psychological link between teachers and their teaching, which can be reflected through teachers’ willingness to exert effort to teach effectively, greater enthusiasm for teaching the subject matter and willingness to devote extra time to students (Tyree, 1996). In fact, teacher commitment to teaching plays an important role in determining how long the teacher remains in the teaching profession (Chapman, 1983; Chapman and Lowther, 1982; McCracken and Etuk, 1986). Based on this background, teachers’ commitment to teaching is conceptualized as teachers’ willingness to be engaged in teaching work.

Committed employees are found to be often demonstrated better work performance and a lower degree of withdrawal (Meyer and Allen, 1997; Omar and Aziz, 2002), and commitment has been shown to predict important outcomes, such as turnover intentions, performance, job satisfaction, prosocial organizational behaviour, absenteeism and tardiness (Balu, 1985; Wiener and Vardi, 1980). In an educational setting, committed teachers are likely to be characterized as those who are more hard-working, devote more time to school activities, have better work performance and exert more effort beyond personal needs (Reyes, 1990). Committed teachers also have stronger psychological association to their school, students, teaching and profession (Firestone and Pennell, 1993; Louis, 1998). Teachers engaged in higher education were found to be more committed in comparison to the teachers in secondary schools (Sharma, 2001), departmental commitment comes much closer to job commitment (Parthiban, 2008). Teachers who were committed towards organization are more satisfied with their job (Kumar and Patnaik, 2004; Jennifer, 2006; Shukla, 2014). Empirical studies conducted by Gupta and Gehlawat, 2013; Park, 2005 shown higher commitment of private school teachers than public school teachers. Shukla (2014) concluded that professional commitment and teaching competency have very low positive correlation but they are interdependent of each other. Yousof while studying school climate and teachers’ commitment concluded that professional teacher behaviour made a significant contribution to teachers’ commitment. Teachers’ perceived remuneration, opportunity for further training, responsibility, social status, a sense of belongingness and job security as impacting on the level of morale and commitment to their duties (Kariuki, 2014)

**COMMITMENT TO PROFESSION**

Blau (1985) defines professional commitment as “one’s attitude towards one’s profession or vocation”. Colarelli and Bishop (1990) define commitment to profession as the advancement of individual vocational goals and the drive and commitment associated with completing these goals. Additionally, Somech and Bogler (2002) state that teacher commitment to profession involves an affective attachment to the profession or occupation, which is associated with personal identification with and satisfaction obtained from being a teacher. Teacher commitment to profession is important because it enables an individual to develop the skills and relationships needed to have a successful career regardless of the organization within which he or she is employed (Colarelli and Bishop, 1990). According to Meyer et al. (1998), individuals might choose to redirect their emotional energies towards the profession to which they belong, which has at least two implications. First, such individuals might be likely to participate more at work and/or with their professional associations. Second, a focus on the profession might increase the likelihood that employees improve their professional skills, knowledge and abilities. Therefore, teacher commitment to profession is conceptualized as the strength of teacher motivation and involvement at work to improve professional skills, knowledge and teaching abilities.

Overall, these four dimensions are important in educational settings and are necessary to accomplish school objectives, improve teachers’ professionalism and pursue changes in teachers’ practice. The conceptualization of each dimension is summarized in table 1.

**TABLE 1: CONCEPTUALIZATION AND OPERTIONALIZATION OF TEACHER COMMITMENT**

Dimension	Conceptualization
Commitment to students	Teachers’ involvement in or responsibility for student learning
Commitment to teaching	Teachers’ willingness to engage in teaching work
Commitment to school	Teachers’ belief and acceptance of their school’s goals and values, efforts toward the actualization of those goals and values and desires to keep up school membership
Commitment to profession	Teacher attitude, loyalty and involvement in enhancing and developing their chosen profession

In the present era of globalization, privatization and liberalization teachers are required to meet the growing and challenging changes uncertainties and expectations of the society. So teacher is expected to be committed to his profession, learner, and society. If quality education is to goal, it cannot be achieved without sincere efforts of dedicated and committed teachers. In such a complex environment effective career long teacher development programmes that build teacher capacities and commitment are of crucial importance to quality education.

The need for the improvement and enhancement of teacher commitment of teachers at various teaching level is now universally emphasized. The study also examines the relationships between gender, teaching level, locale, work experience and teachers’ commitment to schools became there demographic variables have been identified as important predictors of teacher commitment (Park, 2005; Hulpia et al., 2009a; Hulpia et al., 2009b). Building on the research objectives, the following research question was put forward. What is the effect of gender, teaching level and locale on commitment of school teachers? Hence in the present study an attempt was made to express the effect of teaching level (Elementary and Secondary level), locale (Urban and Rural), gender on commitment of school teachers. Thus study will be helpful in finding out the empirical reality regarding teacher commitment and explore the ways and means of increasing the commitment which ultimately contribute to enhance the quality of education.

**OBJECTIVE OF THE STUDY**

1. To study and compare commitment among school teachers in terms of teaching level, locale and gender.

**HYPOTHESES OF THE STUDY**

1. There will be significant difference in teacher commitment between elementary and secondary level school teachers.
2. There will be significant difference in teacher commitment between urban and rural school teachers.
3. There will be significant difference in teacher commitment between male and female school teachers.
4. There will be significant interaction effect of teaching level, locale and gender on teacher commitment of school teachers.

**METHODOLOGY**

**SAMPLING**

In the present study stratified random sample was used. Out of 22 districts of Punjab three districts were randomly selected from three regions Majha, Malwa and Doaba i.e. Gurdaspur, Jalandhar and Ludhiana. From each district 12 schools from rural and 13 from urban were selected on random basis, both from elementary (if only elementary) or secondary (having either secondary or both elementary and secondary sections). From these 75 selected 300 school teachers (150 elementary and 150 secondary school teachers) were selected by giving equal weightage to gender and locale.

**RESEARCH INSTRUMENT**

The data were collected by Teacher Commitment Inventory (NTCI) by Dr. Noorjehan N. Ganihar (2010), consisting of 21 items to be distributed among five dimensions. The range of score on scale is 21 to 105, minimum showing low and maximum showing high level of teacher commitment.

**FORMATION OF FACTORIAL DESIGN**

The ex-post facto research design was used to study main and interaction effects of independent variable namely, teaching level, locale and gender on teacher commitment among school teachers. The teaching level x locale x gender (2x2x2) design i.e. 'elementary and secondary', 'male and female', and 'urban and rural' was formed. The distribution of sample in terms of 2x2x2 factorial design in shown in table 1.

**TABLE 1: DISTRIBUTION OF SAMPLE IN TERMS OF TEACHING LEVEL x LOCALE x GENDER FACTORIAL DESIGN**

	Elementary Level		Secondary Level	
	Male	Female	Male	Female
Urban	38	38	38	38
Rural	37	37	37	37
Total	75	75	75	75

Keeping in view the requirements of analysis of variance to have equal number of cases, 30 subjects were randomly assigned to each cell in 2x2x2 factorial design for computational purposes. So out of 300 only 240 subjects were included in teaching level x locale x gender factorial design which is 80% of the sample, under study.

**RESULTS AND DISCUSSION**

The mean teacher commitment scores of school teachers along with standard deviation in teacher level x locale x gender factorial design are given in table 2.

**TABLE 2: MEANS AND SDs OF TEACHER COMMITMENT SCORES OF SCHOOL TEACHERS IN TERMS OF TEACHING LEVEL X LOCALE X GENDER FACTORIAL DESIGN**

		Elementary (A <sub>1</sub> )		Secondary (A <sub>2</sub> )		Total
		Male (B <sub>1</sub> )	Female (B <sub>2</sub> )	Male (B <sub>1</sub> )	Female (B <sub>2</sub> )	
Urban (C <sub>1</sub> )	Mean	84.33	87.9	86.06	85.43	85.93
	SD	7.92	6.32	9.60	7.70	7.80
Rural (C <sub>2</sub> )	Mean	93.03	87.73	85.86	87.30	88.48
	SD	8.12	7.85	8.01	6.60	7.64
Total	Mean	88.68	87.82	85.96	86.36	87.20
	SD	8.02	7.07	8.80	7.15	7.72

It may be noted from table 2 that male urban elementary schools teachers have lowest mean teacher commitment score of 84.33 as compared to highest mean teacher commitment score of 93.03 in case of male rural elementary schools teachers. The mean teacher commitment score of other groups of school teachers in terms of teaching level, locale and gender factorial design lie in between these two mean scores.

In order to find out the significance of main and interaction effects of teaching level, locale, gender on teacher commitment three way analysis of variance was worked out. The summary of ANOVA is given in table 3.

**TABLE 3: SUMMARY OF ANALYSIS OF VARIANCE (TEACHING LEVEL x GENDER x LOCALE) ON TEACHER COMMITMENT**

Source of Variation	SS	df	MS	F-ratio
Teaching Level	260.83	1	260.83	4.12*
Gender	3.17	1	3.17	0.05
Locale	390.15	1	390.15	6.61*
Teaching Level x Gender	24.2	1	24.2	0.38
Teaching Level x Locale	176.47	1	176.47	2.78
Locale x Gender	173.4	1	173.4	2.74
Teaching Level x Gender x Locale	448.81	1	448.81	7.09**
Within	14682.01	232	63.28	
Total	16159.05	239		

\* Significant at 0.05 level.

\*\* Significant at 0.01 level.

It can be observed from table 3 that F-ratio for the main effect of teaching level on teacher commitment turned out to be 4.12 which is significant at 0.05 level. It may be concluded that elementary school teachers have significantly higher level of teacher commitment as compared to secondary school teachers (88.25 vs 86.16).

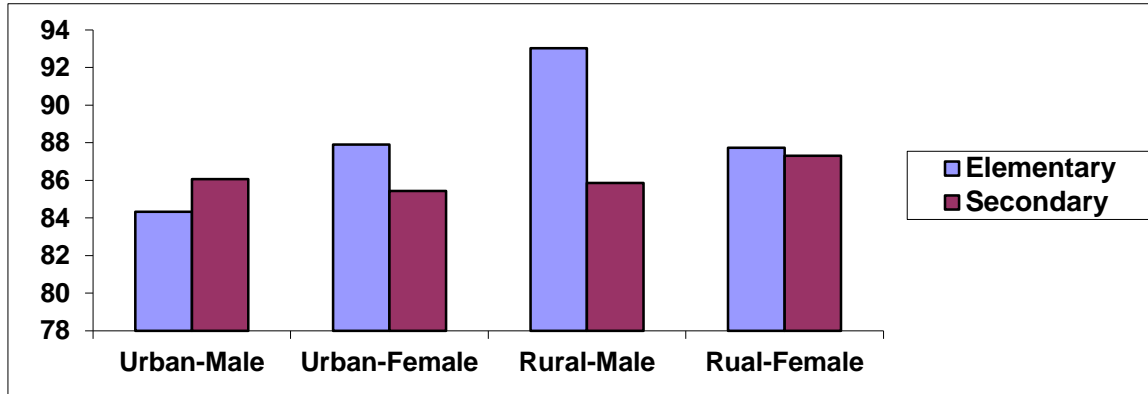
The F-ratio for the main effect of gender on teacher commitment came out to be 0.05 which is not significant at 0.05 level. This shows that male and female school teachers do not differ significantly in their teacher commitment (87.32 vs 87.09).

It can be observed that from table that F-ratio for the main effect of locale on teacher commitment turned out to be 6.61 which is significant at 0.05 level. It shows that rural school teachers are significantly more committed as compared to urban teachers (85.92 vs 88.48).

The F-values for the double order interaction effects of gender x teaching level, gender x location and teaching level x location turned out to be 0.38, 2.28 and 2.74 respectively. None of these F-values is significant at 0.05 level. It may be seen from table 3 that the F-value for the triple order interaction of teaching level x locale x gender was found to be significant as F-ratio, 7.09 is significant at 0.01 level. This is suggestive of the fact that the differences in commitment of elementary and secondary school teachers are conjoint dependent upon both independent variables of gender and location. As may be seen from table that elementary school

teachers have significantly higher level of commitment than secondary school teachers only in case of male teachers coming in rural schools ( $t=3.49$ ;  $p<0.01$ ) (Figure 1 and Table 4).

FIGURE 1: MEAN COMMITMENT SCORES OF ELEMENTARY AND SECONDARY SCHOOL TEACHERS ACROSS GENDER AND LOCALITY



This means that significant difference in commitment of elementary and secondary school teachers is restricted to rural male teachers.

TABLE 4: SIGNIFICANCE OF MEAN DIFFERENCES BETWEEN ELEMENTARY AND SECONDARY SCHOOL TEACHERS ACROSS GENDER AND LOCATION LEVELS

Group	Gender			
	Male		Female	
	M <sub>D</sub>	t	M <sub>D</sub>	t
Urban	1.73	0.84	2.47	1.20
Rural	7.17	3.49**	0.43	0.229

\*\* $p<0.01$

Though male secondary school teachers have higher level of commitment than male elementary school teachers coming from urban schools, but this difference is not significant ( $t=0.84$ ;  $p>0.05$ ), also female elementary school teachers have higher level of commitment than female secondary school teachers coming from urban and rural areas, but these differences are not significant ( $t=1.20$  and  $0.229$ ;  $p>0.05$ ).

The reason regarding differences in teacher commitment of elementary and secondary school teachers in terms of gender and locale may be due to some job compulsions, public pressure, administrative checks, social recognition, inadequate infrastructural facilities, shortage of staff. From results it was also clear that female elementary school teachers have more commitment level than male secondary school teachers, the reason may be teaching is always considered a feminine job in India, as they are more comfortable and satisfied with their profession. In Punjab, there is always more enrollment of girls in education colleges as compared to boys. Further elementary teachers have to be mother teacher and humble for being able to deal with younger children as compared to secondary school teachers. It was also found that school elementary teachers have higher level of teacher commitment than secondary school teachers coming from rural teachers. It means location has specific effect on teacher commitment of elementary and secondary teachers. The reason may be that in rural areas, there is lack of vocational choices, as compared to urban areas. In the era of urbanization and technology there are diversification of jobs. This may be hamper their teacher commitment.

The results of present investigation can be seen in the light of findings of Hrebiniak and Alutto (1972), Punia (2000) and Sharma (2001). While these findings are contrary to the findings of Maheshwari (2003) that there is no significant effect of locale on teacher commitment. In consistent with those found in previous studies (e.g. Brunetti, 2001; Park, 2005; Leithwood and Bratty, 2008; Hulpia and Devos, 2009a; Hulpia et al., 2009b and Du, 2013), data analysis reveals that male teachers were more committed to their schools than female teachers. Kariuki et al. (2014) found no statistically significant relationship between teachers' gender, age and experience and commitment to work. According to Butcha (2012) age, gender and school type have significant but small effects on the perceptions of beginning secondary school teachers' professional commitment. While Alhadban (2009) and Kouts (2012) claiming that female teachers are more committed towards profession and basic values than male teachers. Male teachers are more committed to attaining excellence for professional actions than female teachers. Some studies have indicated that females level of commitment is higher than male's levels of commitment (Coladarci, as cited in Chan et al., 2008; Park, 2005). But, the findings of Borman and Dowling (2008) indicated lower commitment of females. Teacher commitment was found to be independent of gender and stream among secondary school teachers (Sharma, 2015).

**RECOMMENDATIONS**

Steps should be taken for enhancing commitment of secondary school teachers. Refresher courses and seminars may be arranged for developing affective and emotional characteristics. They should attend to all the students in their classes and be sensitive to how they respond to each situation. New appointment should be regularised soon because uncertainty or contractual system in jobs may also hampering their commitment. In this line government should take appropriate steps in securing, nurturing and retaining committed teachers. There should be synchronization between the activities of the teacher education institutions and those of schools, resulting in adequate practical experiences at the training stage. The teacher education system needs to give practical shape to the critical role of teacher education in the content of providing a good quality school education for all. Teachers should be involved in formulation of policies that affect them, that participatory decision making give them sense of belongingness which contributes to commitment at work. Urban teachers should be convinced as to desirability of accepting jobs in rural, remote areas. Surplus teachers in urban school should be appointed in rural areas. In this line rationalization of teachers is fruitful. Government should provide infrastructural facilities, adequate institutional material and more incentives to teachers who are working in rural areas.

**REFERENCES**

- Alhadban, Islam M. Bakhit (2009) *Level of Commitment to Code of Conduct in Administrative Behaviour by the Primary School Principals in the Directorates of Greater Amman* (Unpublished Master Dissertation). Jordan University, Amman, Jordan.
- Balu, G. (1985) The Measurement and Prediction of Career Commitment. *Journal of Occupational Psychology*, 58, 277-288.
- Billingsley, B.S. (1993) Teacher Retention and Attrition in Special and General Education: A Critical Review of the Literature. *The Journal of Special Education*, 27(2), 137-174.
- Bisaria, S. (1991) Mobility Patterns and Professional Commitment of Higher Secondary Teachers: A Pilot Study. *Fifth Survey of Educational Research*, 1988-92. 1, New Delhi: NCERT, 451.
- Bloom, P.J. (1988) Factors Influencing Overall Job Satisfaction and Organizational Commitment in Early Childhood Work Environment. *Journal of Research in Childhood Education*, 32(2), 107-122.
- Borman, G.D., and Dowling, N.M. (2008) Teacher Attrition and Retention: A Meta-analytic and Narrative Review of the Research. In B.M. Gordon and J.E. King (Eds.), *Review of Educational Research*. 78(3), 367-404. American Educational Research Association.



7. Brunetti, G.J. (2001) Why do They Teach? A Study of Job Satisfaction among Long Term High School Teachers. *Teacher Education Quarterly*, 28, 49-74.
8. Bryk, A.S., and Driscoll, M.E. (1988) *The High School as Community: Contextual Influences and Consequences for Students and Teachers*. Madison: WI: National Center on Effective Secondary Schools, University of Wisconsin.
9. Butucha, K.G. (2012) Teachers' Perceived Commitment as Measured by Age, Gender and School Type. *Greener Journal of Educational Research*, 3(8), 363-372.
10. Chan, W.Y., Lau, S., Nie, Y., Lim, S., and Hogan, D. (2008) Organizational and Personal Predictors of Teacher Commitment: The Mediating Role of Teachers' Efficacy and Identification with School. *American Educational Research Journal*, 45(3), 597-630.
11. Chapman, D.W. (1983) A Model of the Influences on Teacher Attrition. *Journal of Teacher Education*, 34(5), 43-49.
12. Chapman, D.W., and Lowther, M.A. (1982) Teacher's Satisfaction with Teaching. *Journal of Educational Research*, 75(4), 241-247.
13. Choi, P.L. and Tang, S.Y.F. (2011) Satisfied and Dissatisfied Commitment: Teachers in Three Generations. *Australian Journal of Teacher Education*, 36(7), 45-75.
14. Cohen, A. (2000) The Relationship Between Commitment Forms and Work Outcomes: A Comparison of Three Models. *Human Relations*, 53(3), 387-417.
15. Cohen, A. (2007) An Examination of the Relationships Between Commitment and Culture among Five Cultural Groups of Israeli. *Journal of Cross-Cultural Psychology*, 38(1), 34-49.
16. Coladarsi, T. (1992) Teachers' Sense of Efficacy and Commitment to Teaching. *Journal of Experimental Education*, 60(4), 323-337.
17. Colarelli, S.M., and Bishop, R.C. (1990) Career Commitment: Functions, Correlates, and Management. *Group and Organization Studies*, 15(2), 158-176.
18. Du, N.G. (2013). The Influence of Distributed Leadership on Teacher Organizational Commitment: Initial Evidence from Vietnam. *ARECLS*, 10, 69-90.
19. Ebmeier, H. and Nicklows, J. (1999) The Impact of Peer and Principal Collaborate Supervision on Teachers' Trust, Commitment, Desires for Collaboration and Efficacy. *Journal of Curriculum and Supervision*, 14(4), 351-369.
20. Firestone, W., and Pennell, J.R. (1993) Teacher Commitment, Working Conditions and Differential Incentive Policies. *Review of Educational Research*, 63(4), 489-525.
21. Firestone, W.A. (1996) Image of Teaching and Proposals for Reform: A Comparison of Ideas from Cognitive and Organizational Research. *Educational Administration Quarterly*, 32(2), 209-235.
22. Firestone, W.A., and Rosenblum, S. (1988) Building Commitment in Urban High Schools. *Educational Evaluation and Policy Analysis*, 10(4), 285-299.
23. Frestko, B., Kfir, D., and Nasser, F. (1997) Predicting Teacher Commitment. *Teaching and Teacher Education*, 13(4), 429-438.
24. Ganihar, N.N. (2010) *Teacher Commitment Inventory*. Agra: National Psychological Corporation.
25. Graham, K.C. (1996) Running Ahead: Enhancing Teacher Commitment. *Journal of Physical Education, Recreation and Dance*, 67(1), 45-47.
26. Gupta, M., and Gehlawat, M. (2013) A Study of Correlates of Organizational Commitment Among Secondary School Teachers. *Issues and Ideas in Education*. Retrieved from <http://iie.chitkara.edu.in/pdf/paper>.
27. Herbiniaik, L.G. and Alutto, J.A. (1972) Personal and Role-related Factors in the Development of Organizational Commitment. *Administrative Science Quarterly*, 17(4), 555-573.
28. Huberman, M. (1993) *The Lives of Teachers*. With Marie-Madeleine Grounauer and Jurg Marti (J. Neufield, Trans.). New York: Teachers College Press (first published in Switzerland as *La vie des enseignants* by Editions Delachaux and Niestle in 1989).
29. Hulpia, H.G., and Devos, et al. (2009a) The Influence of Distributed Leadership on Teachers' Organizational Climate: A Multilevel Approach. *The Journal of Educational Research*, 103(1), 40-52.
30. Hulpia, H.G., and Devos, et al. (2009b) The Relationship Between the Perception of Distributed Leadership in Secondary Schools and Teachers' and Teacher Leaders Job Satisfaction and Organizational Commitment. *School Effectiveness and School Improvement*, 20(3), 291-317.
31. Jennifer, G. (2006) Independent School Teacher Satisfaction: A Study of Commitment and Intent to Stay in the Profession. *Proquest Dissertation and Thesis*, 67(2), 406.
32. Kang, W.Y. (1982) Professional Commitment to Teaching in Korean Special Education. *Dissertation Abstracts International*, 42(11), 4791-A.
33. Kariuki, A.W., Ndirangu, M., Sang, A.K., and Okao, E.M. (2014) Secondary School Teachers' Perceptions of the Factors that Influence their Morale and Commitment to Work: A Case of Nakuru District. *International Journal of Innovation and Applied Studies*, 9(4), 1589-1597.
34. Kauts, Amit (2012) Teacher Commitment in Relation to the Appropriateness of Qualification and Experience of Teachers at Secondary Stage. *Journal of History and Social Sciences*, III (1), January-June 2012.
35. Kumar, S. and Patnaik, P.S. (2004) A Study of Organizational Commitment, Attitudes towards Work and Job Satisfaction of Post Graduate Teachers. *Journal of Educational Research and Extension*, 4(2), 1-15.
36. Kushman, J.W. (1992) The Organizational Dynamics of Teacher Workplace Commitment: A Study of Urban Elementary and Middle Schools. *Educational Administration Quarterly*, 28(1), 5-42.
37. Lodahl, T.M., and Kejner, M. (1965) The Definition and Measurement of Job Involvement. *Journal of Applied Psychology*, 49(1), 24-33.
38. Louis, K.S. (1998) Effects of Teacher Quality of Work Life in Secondary Schools on Commitment and Sense of Efficacy. *School Effectiveness and School Improvement*, 9(1), 1-27.
39. Louis, K.S., and Smith, B. (1990) Teacher working conditions. In P. Reyes (Ed.), *Teacher and their Workplace: Commitment, Performance and Productivity* (pp. 23-47). Newbury Park: Sage Publication.
40. Lovis, K.S. (1998) Effects of Teacher Quality of Work Life in Secondary Schools on Commitment and Sense of Efficacy. *School Effectiveness and School Improvement*, 9(1), 1-27.
41. Maheshwari, A. (2003) Inculcating Commitment among Teachers. *Asian Journal of Psychology and Education*, 36(1 & 2), 28-32.
42. Malik, M.E. (2010) Job Satisfaction and Organizational Commitment of University Teachers in Public Sector of Pakistan. *International Journal of Business and Management*, 5(6), 1-26.
43. Markus, H.R., and Kitayama, S. (1991) Culture and the Self: Implications for Cognition, Emotion and Motivation. *Psychological Review*, 98, 224-253.
44. McCracken, J.D., and Etuk, L.A. (1986) Commitment of Ohio Vocational Agriculture Teachers to their Profession. *The Journal of the American Association of Teacher Educators in Agriculture*, 27(2), 2-18.
45. Meyer, J.P., and Allen, N.J. (1997) *Commitment in the Workplace: Theory, Research and Applications*. Thousand Oaks: CA: Sage.
46. Mohan, R.P. (1992) A Study of Factors Contributing to Commitment to the Teaching Profession. *Ph.D. Thesis in Education*, University of Delhi, Delhi.
47. National Center for Education Statistics (1997) *Teacher Professionalization and Teacher Commitment: A Multi Level Analysis*. U.S. Department of Education, Washington D.C. [www.nces.ed.gov](http://www.nces.ed.gov).
48. Nias, J. (1981) Commitment and Motivation in Primary School Teachers. *Educational Review*, 33(3), 181-190.
49. Nir, A.E. (2002) School-based Management and Its Effect on Teacher Commitment. *International Journal of Leadership in Education*, 5(4), 323-341.
50. Omar, S.A., and Aziz, I. (2002) *Membentuk nilai positif dan komitmen pekerja dalam organisasi* (pp. 32-33). Dewan Ekonomi, February.
51. Park, I. (2005) Teacher Commitment and Its Effect on Students Achievement in American High Schools. *Educational Research and Evaluation*, 11(5), 461-485.
52. Parthiban, V. (2008) Comparative Analysis of Dimensions of Teacher Commitment. *Ushus Journal of Business Management*, 7(2), 1-12.
53. Pierce, M.C. and Molly, G.N. (1990) Psychological and Biographical Difference between Secondary School Teachers Experiencing High and Low Levels of Burnout. *British Journal of Educational Psychology*, 30(1), 37-51.
54. Punia, B.K. (2000) Commitment among University Teachers – A Comparative Analysis. *University News*, 38(18), 7-10.
55. Razak, N.A., Darmawan, I.G.N., and Keeves, J.P. (2010) The Influence of Culture on Teacher Commitment. *Social Psychology of Education*, 13(2), 185-205.
56. Reichers, A.E. (1985) A Review and Reconceptualization of Organizational Commitment. *Academy of Management Review*, 37, 803-836.

57. Reyes, P. (1990) Linking Commitment, Performance, and Productivity. In P. Reyes (Ed.), *Teachers, and their Workplace: Commitment, Performance and Productivity*. San Francisco: CA: Sage.
58. Riehl, C., and Sipple, J.W. (1986) Making the Most of Time and Talent: Secondary School Organizational Climates, Teaching Task Environments, and Teacher Commitment. *American Educational Research Journal*, 33(4), 873-901.
59. Rosenholtz, S.J. (1989) *Teachers' Workplace: The Social Organization of Schools*. New York: Teachers College Press.
60. Rosenholtz, S.J., and Simpson, C. (1990) Workplace Conditions and the Rise and Fall of Teachers' Commitment. *Sociology of Education*, 63(4), 241-257.
61. Sharma, A. (2001) A Study of Commitment among Teachers. *M.Ed. Dissertation*, Chaudhary Charan Singh University, Meerut.
62. Sharma, Monika (2015) Impact of Teacher Commitment on Teacher Freezing of Secondary School Teachers. *International Journal of Research in Economics and Social Sciences*, 5(5), 8-16.
63. Shishupal (2001) A Study of Commitment of Teacher Trainees of B.Ed. Classes Towards Teaching Profession. *M.Ed. Dissertation*, Chaudhar Charn Singh University, Meerut.
64. Shukla, S. (2014) Teaching Competency, Professional Commitment and Job Satisfaction- A Study of Primary School Teachers. *Journal of Researc and Method in Education*, 4(3), May-June 2014, 44-64.
65. Singh, K., and Billingsley, B.S. (1998) Professional Support and Its Effects on Teachers' Commitment. *Journal of Educational Research*, 91(4), 229-239.
66. Somech, A., and Boger, R. (2002) Antecedents and Consequences of Teacher Organizational and Professional Commitment. *Educational Administration Quarterly*, 38(4), 555-577.
67. Thein, L.M., and Razak, N.A. (2014) Teacher Commitment: A Comparative Study of Malaysian Ethnic Groups in There Types of Primary Schools. *Soc. Psychol. Education*, 17, 307-326. DOI 10.1007/S11218-013-9242-6.
68. Triandis, H.C. (1995) *Individualism and Collectivism*. Boulder CO., US: Westview Press.
69. Tsui, K.T. and Chang, Y.C. (1999) School Organizational Health and Teacher Commitment; A Contingency Study with Multi Level Analysis. *Educational Research and Evaluation*, 5(3), 249-263.
70. Tsui, K.T., and Cheng, Y.C. (1999) School Organizational Health and Teacher Commitment: A Contingency Study with Multi-level Analysis. *Educational Research and Evaluation*, 5(3), 249-268.
71. Tyree, A.K. (1996) Conceptualizing and Measuring Commitment to High School Teaching. *Journal of Educational Research*, 89(5), 295-304.
72. Warr, P., Cook, J., and Wall, T. (1979) Scales for the Measurement of Some Work Attitudes and Aspects of Psychological Well-being. *Journal of Occupational Psychology*, 52(2), 129-148.
73. Wiener, Y., and Vardi, Y. (1980) Relationships Between Job, Organization and Career Commitments and Work Outcomes-an Integrative Approach. *Organizational Behaviour and Human Performance*, 26(1), 81-96.
74. Yousef, D.A. (2000) Organizational Commitment: A Mediator of the Relationships of Leadership Behaviour with Job Satisfaction and Performance in a Non-western Country. *Journal of Managerial Psychology*, 15(1), 6-24.
75. Yousof (n.d.) School Climate and Teachers' Commitment: A Case Study in Penang Malaysia. Retrieved from <https://www.tasa.org.an/wp-content/mohd-yusofNajeemah>.

## A STUDY ON EMPLOYEE JOB SATISFACTION IN WITH REFERENCE TO KERALA GRAMIN BANK, THRISSUR DISTRICT

**MIRANDA PAUL  
GUEST LECTURER  
VIMALA COLLEGE  
THRISSUR**

### ABSTRACT

The banking sector plays a vital role in the economic development of a country. Among these Kerala Gramin Bank is one of the fastest growing regional rural bank (RRB) in Kerala. Job satisfaction is a general attitude towards one's job, the difference between the amount of reward workers receive and the amount they believe they should receive. Employee is a back bone of every organization, without employee no work can be done. So this study attempts to evaluate job satisfaction of employees in KGB in Thrissur district. It focuses on the employee job satisfaction level in KGB. It also investigates the factors influencing employee job satisfaction and provides suggestions for further progression. The study was mainly concentrated on primary data, which is collected through structured questionnaire from a sample of 40 employees in KGB. Percentage analysis and liker scale are used as a tools for the study. The results show that the employees of KGB in Thrssur district are satisfied with their work and organization. The major factor behind this employee satisfaction is good pay system. Employee satisfaction can improve service quality and increase employee satisfaction.

### KEYWORDS

job satisfaction, motivation.

### INTRODUCTION

Job satisfaction refers to person's feeling of satisfaction on the job, which act as a motivation to work. Job satisfaction is the collection of tasks and responsibilities regularly assigned to one person, while a job is a group of positions, which involves essentially the same duties, responsibility, skill and knowledge. Job satisfaction has some relation with the mental health of the people. It spreads the goodwill of the organisation. Job satisfaction reduces absenteeism, labour turnover and accidents. Job satisfaction increases employee's morale, productivity, etc. job satisfaction creates innovative ideas among the employees. Individuals may become more loyal towards the organisation. Employees will be more satisfied if they get what they expected, job satisfaction relates to inner feeling of workers. Naturally it is the satisfied worker who shows the maximum effectiveness and efficiency in his work. Most people generalize that workers are concerned more about pay rather than other factors which also affects their level of satisfaction, such as canteen facilities, bonus, working conditions, etc. these conditions are less signifiants when compared to pay.

Kerala Gramin Bank (KGB) is a regional rural bank (RRB) formed on 08-07-2013. The bank was formed by amalgamating the two RRBs of Kerala namely South Malabar Gramin Bankan and North Malabar Gramin Bank through a notification by the government of India. The head office of KGB is at Malappuram and the sponsor bank is Canara Bank. The Bank has a well dedicated team of 3400 odd staff members. Is is having dominant presence in all the 14 districts of Kerala State andis the only RRB in the state.

### WAYS FOR IMPROVING EMPLOYEE SATISFACTION

FIG. 1



### OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

1. To assess the employees job satisfaction level in KGB.
2. To identify the factors, influence the job satisfaction of employees.
3. To identify the factors improves the satisfaction level of employees.

**SCOPE OF THE STUDY**

This study emphasis in the following scope:

- To identify the employees level of satisfaction upon that job.
- This study is helpful to KGB for conducting further research.
- It is helpful to identify the employer’s level of satisfaction towards welfare measures.
- This study is helpful to the KGB for identifying the area of dissatisfaction of job of the employees.
- This study helps to make a managerial decision to the company.

**RESEARCH METHODOLOGY**

**Primary data:** The primary data was collected from the respondents by administering a structured questionnaire and also through observation.

**Secondary data:** Apart from primary data collected, the data collected through text books, the records of KGB, journals from the library, academic reports and internet is used for the study.

**SAMPLING**

**Sampling area:** The research was conducted at KGB, in Thrissur district.

**Sampling population:** There are totally 175 employees working in KGB, in Thrissur district.

**Sample size:** Out of the total strength the sample taken amongst workers.i.e., 40 respondents.

**Sample method:** The researcher was made by the survey in accordance to the convenience of the employees. So the sample technique is convenient sampling.

**TOOLS USED FOR ANALYSIS**

**Contact instrument:** A structured closed-end Questionnaire is used and the type of questions are dichotomous and likert scale.

**Contact method:** The research was conducted by using contact instruments like Questionnaire, interview and observation.

**Data analysis techniques:** The data is analyzed through simple analysis technique. The data tool is percentage method. Percentage method is used in making comparison between two or sense of data. This method is used to describe relationship.

**Percentage of respondent** = No. of Respondents/ Total no. of respondents X 100

**LIMITATIONS OF THE STUDY**

- The survey is subjected to the bias and prejudices of the respondents. Hence 100% accuracy can’t be assured.
- The researcher was carried out in a short span of time, where in the research could not widen the study.

**DATA ANALYSIS AND INTERPRETATION**

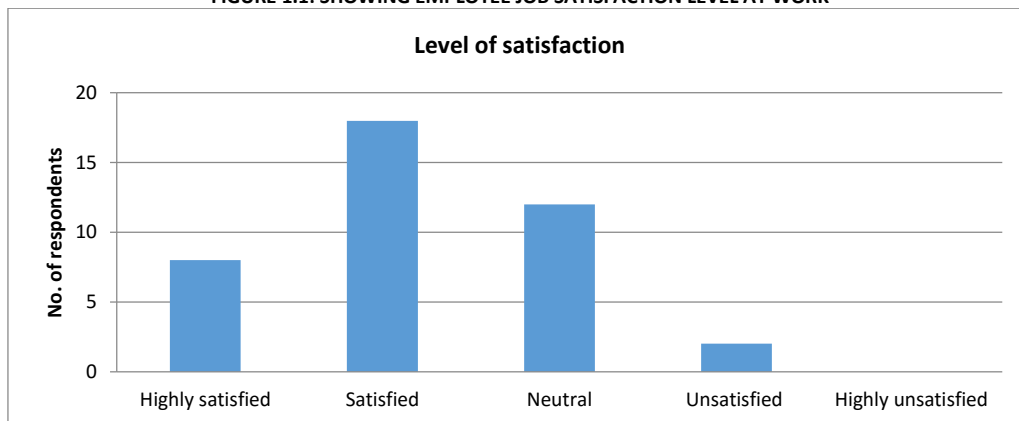
The data after collection is to be processed and analyzed in accordance with the outline and down for the purpose at the time of developing research plan.

**TABLE 1.1: SHOWING EMPLOYEE JOB SATISFACTION LEVEL AT WORK**

Degress	No. of respondents	Percentage of respondents
Highly satisfied	8	20%
Satisfied	18	45%
Neutral	12	30%
Unsatisfied	2	5%
Highly unsatisfied	0	0%
<b>Total</b>	<b>40</b>	<b>100</b>

(Primary survey data)

**FIGURE 1.1: SHOWING EMPLOYEE JOB SATISFACTION LEVEL AT WORK**



**Interpretation:** Maximum numbers (18) of respondents are satisfied with their job. Only 5% of the respondents are unsatisfied. So it is clear shows that employees of KGB are satisfied with their present job.

**TABLE1.2 SHOWING FACTORS THAT INFLUENCING EMPLOYEES’ SATISFACTION**

Responses	No. of respondents	Percentage of respondents
Good pay	16	40%
Promotion	8	20%
Status/ prestige	6	15%
Good working condition	2	5%
Relation with Co-workers and supervisors	2	5%
Job security	6	15%
<b>Total</b>	<b>40</b>	<b>100</b>

(Primary survey data)

FIGURE 1.2: SHOWING FACTORS THAT INFLUENCING EMPLOYEES' SATISFACTION



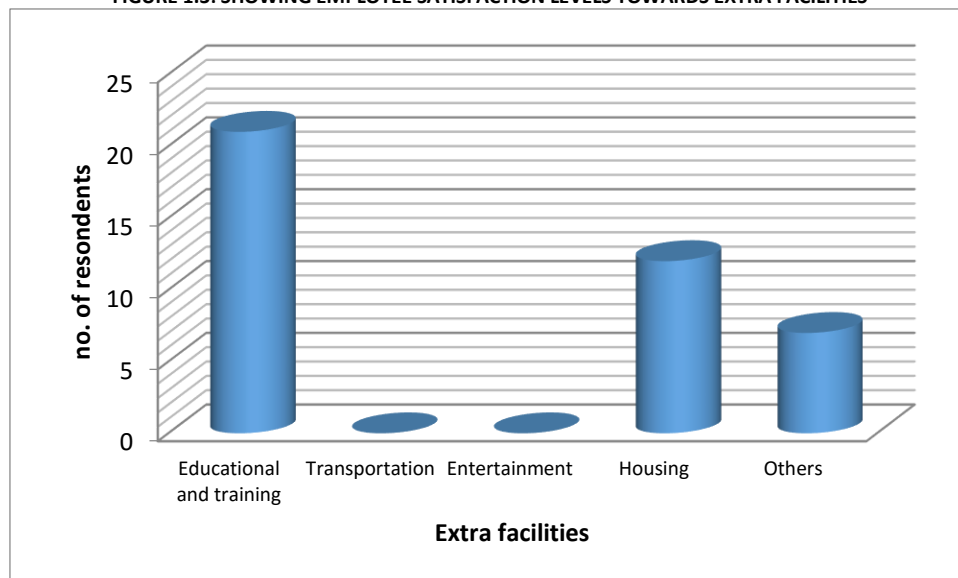
**Interpretation:** Most of the respondents are influenced by the good pay system of KGB. Promotion is the other factor, which influenced the job satisfaction.

TABLE 1.3: SHOWING EMPLOYEE SATISFACTION LEVELS TOWARDS EXTRA FACILITIES

Measures	No. of satisfied respondents	Percentage of respondents
Educational and training	21	52.5%
Transportation	0	0
Entertainment	0	0
Housing	12	30%
Medical facilities	7	17.5%
<b>Total</b>	<b>40</b>	<b>100</b>

(Primary survey data)

FIGURE 1.3: SHOWING EMPLOYEE SATISFACTION LEVELS TOWARDS EXTRA FACILITIES



**Interpretation:** Most of the respondents are satisfied with the education and training programmes, but the employee satisfaction with transportation facilities and entertainment is very low.

**FINDINGS**

- Majority of the employees are satisfied with present job.
- Employees are satisfied with good pay as the key motivating factor for work efficiency.
- Employees are satisfied with salary offerings at KGB.
- Majority of the respondents don't have other sources of income.
- Majority of the employees are satisfied with employment conditions prevailing in the bank.
- Majority of the respondents are not satisfied with promotion and transfer policy.
- Employees are satisfied with the working hours at KGB.
- Majority of the respondents are satisfied with the educational and training facilities.
- Employees feel that they require transportation and entertainment facilities more than educational and training programmes.

**SUGGESTIONS**

- Attractive monetary schemes would activate employees and increase individualistic work efficiency.



- The mutual cooperation between employees at work place is very important to carry out the work at right time, so the organization should take necessary steps to improve effective communication.
- Extra activities such as transportation and entertainment facilities will help to enhance employee satisfaction towards job.
- Systematic planning reduces hurdles at work place and it ensures smooth flow of work.

### CONCLUSION

From the analysis I conclude that the job provides the opportunity to the employees to exercise their skills at work place. Number of employees accepted that at times there is a considerable flexibility in co-coordinating with work and they are satisfied with the existing inter personal communication. In KGB they follow systematic planning and review process to evaluate the performance of employee.

From analysis it was also observed that, there is a scope for the improvement of extra activities such as transportation and entertainment facilities in KGB. Salary package would hike so that it can be create drastic increase in satisfaction.

Finally, I would like to conclude that the employees of KGB in Thrssur district are satisfied with their work and organization. Employee satisfaction can improve service quality and increase employee satisfaction.

### REFERENCES

1. C. R. Kothari-A text book of Business Research Methodology.
2. Dr. R. Anitha, "a study on job satisfaction of paper mill employees with special reference to udumalpet and palani taluk", Journal of Management and Science, vol.1, No. 1, ISSN:2249-1260 (SEP 2011)
3. Hrihe and Hassan, "A study on Employee job satisfaction", slide share
4. Mosammod mahamuda paruum and M M Nurul Kabir, "Factors affecting job satisfaction of pharmaceutical sectors", Australian Journal of Business and Management Reviews, vol.1, no.9, Dec 2011, pp.113-123
5. R. Pannersevam- A text book of Business Research Methodology.

### WEBSITES

6. [www.keralagraminbank.com](http://www.keralagraminbank.com)
7. [www.wikipededia.com](http://www.wikipededia.com)

## JOB STRESS AND JOB SATISFACTION IN THE COMMUNICATION SERVICE INDUSTRY: EVIDENCE FROM TECH MAHINDRA GHANA LTD.

**PAUL APPIAH-KONADU**  
LECTURER  
MARSHALLS UNIVERSITY COLLEGE  
ACCRA

**HENRY KWADWO FRIMPONG**  
RESEARCH SCHOLAR  
TEXILA AMERICAN UNIVERSITY  
GEORGETOWN

### ABSTRACT

*Modern workers find themselves in smaller organizations, with fewer people doing more work and feeling much less secured. As the economy becomes more global, competition gets more keener and managers survive on deadline targets, as workers receive programming instructions like robots, job stress and its related impact on employees is becoming a key issue of concern in modern organizations. To this end, the present study uses descriptive survey design and a sample size of 50 employees to investigate job stress and its effect on job satisfaction through the lens of Tech Mahindra Ghana Ltd. Our analysis reveals that the most outstanding causes of job stress in order of importance are: work overload, working overtime, rigid institutional policies, poor working conditions, poor job design and personal factors such as family problems. The analysis also points to the fact that job stress directly leads to job dissatisfaction among employees. One key issue of concern brought to light by our study is the fact that job stress is likely to lead to high labour turnover. Specifically, 82.98% of the respondents asserted that they are ever ready to quit their job solely as a result of job stress. Base on the findings, we recommend that the management of service companies should put in place measures to minimize if not completely eliminate the causes/sources of job stress among their employees in order to reduce its effect on productivity and labour turnover. More so, management should interact with workers on regular basis in order to keep abreast of their concerns so as to take measures to address them to boost the morale of workers.*


### JEL CLASSIFICATION

J28; J81; J53.

### KEYWORDS

job satisfaction, job stress, labour productivity, labour turnover, Tech Mahindra Ghana Limited.

### 1.0 INTRODUCTION

 Stress is everywhere - across the language of our everyday lives, in scientific and socio-scientific analysis. It is as old as mankind and no one is immune to it. It is a complex universal code 'genetic' to everyone especially those in the world of work. Irrespective of how intelligent or privileged one is, he/she is most often challenged by frustrations, losses, work overloads, and conflicts. Stress is accordingly, inevitable in all human actions (Lahey, 2004). Stress is a subject hard to define and expound, and it is extraordinarily costly (Blaug et al. 2007). Its implications are not just the physical and psychological effects it poses on individuals, it also has an increasingly discouraging recorded statistics as one of the greatest opposition to organizational progress and development should management fail to apprehend, and/or overlook its full perspective. According to statistics from the American Psychological Association (APA), a startling two-thirds of Americans say that work is a main source of stress in their lives. Roughly 30 percent of workers surveyed reported "extreme" stress levels. Each year, work-related stress results in the loss of nearly 13 million working days to UK employers at a cost of up to £12 billion (ILO, 2000). The consequences of stress-related illnesses, from depression to heart disease, cost businesses an estimated \$200 to \$300 billion a year in physical lost to productivity world-wide (ILO, 2000). Rosen (2010) interprets stress as the non-specific response of the body to any perceived demand. Demand in this framework refers to the responsibilities or obligations of an individual. The response to stress is termed as non-specific because everyone has different reactions to stress. The question of who and what causes stress have up till now remained a standing debate. A number of situations have been mentioned in the literature as the causes of stress. Generally, they include financial worries, work overload, unemployment, relationships, parenting, balancing work and family, care-giving, health problems, losses, competitiveness, peer pressure, exams, and not having enough time (The Canadian Mental Health Association (CMHA), 2001). However, it is believed and/or known through observation that managers and employees most often cause stress themselves. For instance, through the introduction of 'frequent change' in the organization in an attempt to stay competitive, workers may have to learn new things all the time. Such behavioral and physical adjustments in pursuit of 'change' are thus seen as potential sources of stress (French et al., 1985, p. 707).

Maslach and Jackson (2011) noticed that in Ghana, for instance, private university lecturers have become highly stressful in recent times due to intense competition and the desire to achieve results to stay competitive as well as the quest to meet the standard set by the National Accreditation Board (NAB). Impressions from the literature suggest that previous studies on job stress in Ghana have focused on particular areas with different research questions and objectives. The banking sector has dominated in recent times. The health sector has had a level of attention, too. Stress is a broad, universal subject and it is only important that all possible areas are covered in an attempt to test existing literature and hypothesis by asking different questions in different environments in order to have a fair view for a fair conclusion on this debating subject. It is in the light of this that this study seeks to test the stress - job satisfaction nexus in the communication service industry through the lens of Tech Mahindra Ghana Ltd.

### 2.0 LITERATURE REVIEW

During the 1990s, a major restructuring of work was beginning to take place. Organizations dramatically 'downsized', 'flattened', and 'right-sized'. The result was redundancy, constant restructuring, and substantial organizational changes. Modern workers find themselves in smaller organizations, with fewer people doing more and feeling much less secured. That was not the beginning of stress; that was the beginning of a particular interest of the possible implications of stress, positive or negative. And that also began an argument that seems to have not even a basic definition let alone a possible conclusion. There is however, a universal understanding that a fundamental and dynamic shift is taking place in the world of work (Clarkin & Wynne, 2006). There is increasing evidence that employees are working in an atmosphere of anxiety and stress. New technology is adding to the burden of information overload and accelerating the pace of work (Bickford, 2005).

As the economy becomes more global, as competition gets more keener and companies battle to have their fair share of the market, as managers survive on deadline targets, as workers receive programming instructions like robots, as the customer believes without a bargain that he/she is always right, job stress gets a clearer, wider and a rather complex definition and analysis. The literature on the relationship between stress and job performance becomes understandably

extensive and diverse (Kavanagh, 2005). The concept of stress has been gaining more and more attention in the popular press as well as in professional literature in almost every field (Altmaier, 1983). Many have attributed the attention, causes and the effects of stress to what they called the third revolution or 'tidal wave'. Most experts have agreed, however, that the situation is a transformation from an industrial economy to information or knowledge based economy. Structural changes (downsizing, mergers, acquisitions and restructuring), changing social and working contexts and the introduction of new technology are all implicated in the concept of job stress (Clarkin and Wynne, 2006).

In the United Kingdom, the Department of Health and the Confederation of British Industry have estimated that 15 to 30 percent of workers experience some form of mental health problems during their working lives as result of job stress. A recent research from the Health and Safety Executive, HSE (2002) suggests that since 1995 the number of working days lost to stress, anxiety and depression in the UK has more than doubled. In 2001, more than 13 million days were lost because of stress, which affects one in five of all employees at a cost of up to £3.8 billion. Studies released by the ILO (2000) on mental health policies and programs affecting the workforces of Finland, Germany, Poland, United Kingdom and United States showed that the incidence of mental health problems is increasing. It reported that as many as one in 10 workers suffer from depression, anxiety, stress or burnout. In some cases, these problems lead to unemployment and hospitalization. The findings of the report included:

- Clinical depression has become one of the most common illnesses in the U.S affecting one in 10 working-age adults, resulting in a loss of approximately 200 million working days per year.
- More than 50 percent of the Finnish workforce experience some kind of stress-related symptoms, such as anxiety, depressive feelings, physical pain, social exclusion and sleep disorders. Seven percent of Finnish workers suffer from severe burnout, leading to exhaustion, cynicism and sharply reduced professional capacity. Mental health disorders are the leading cause of disability pensions in Finland.
- Depressive disorders in Germany account for almost seven percent of premature retirements, and depression-related work incapacity lasts about two-and-a-half times longer than incapacity due to other illnesses. The annual volume of production lost due to absenteeism related to mental health disorders is an estimated \$5 billion annually.
- Nearly three out of 10 employees experience mental health problems in the United Kingdom each year, and numerous studies show that work-related stress and the illnesses it causes are common.

Although several authors hypothesize a negative linear relationship between stress and performance, other evidence suggests that this relationship is actually an inverted U-shape. This "infamous" hypothesis suggests that individual performance on a given task will be lower at high and low levels of stress and optimal at moderate levels of stress. At moderate levels of stress, performance is likely to be improved by the presence of enough stimulation to keep the individual vigilant and alert, but not enough to divert or absorb his energy and focus. At low levels of stress, in contrast, activation and alertness may be too low to foster effective performance, while at high levels of stress, arousal is too high to be conducive to task performance. For example, high levels of stress can lead to emotional exhaustion, lower organizational commitment, and increased turnover intentions (Cropanzano, Rapp, and Bryne, 2003). In extreme cases, stress can lead to post-traumatic stress disorder (PTSD), a psychiatric illness that can interfere with life functioning. PTSD has a variety of symptoms, including flashbacks, difficulty sleeping, and social isolation. Stress has been known "to be the fuel the body uses to meet the challenges of our fast-paced modern life; for others, it is the aversive by-product of such a life" (Altmaier, 1983). Stress has been associated with major life events, daily life hassles, and changes in life. Stress is created by excessive environmental and internal demands that need constant effort and adjustment.

The American Psychological Association in a study of selected employees in the USA reported that the top stressors for people in the workplace, in order of importance are: low salaries, heavy workloads, lack of opportunity for growth and advancement, unrealistic job expectations and job insecurity. According to this study, additional on-the-job stressors include lack of participation in decision-making, ineffective management style and unpleasant work environments that includes disruptive noise levels. All these factors adversely affect job performance among employees.

Cooper (2000) asserted that occupational stress is a well-known factor for low motivation and morale, decrease in performance, high turnover and frequent sick-leave, accidents, low organisational commitment, low quality products and services, poor internal communication and conflicts and low job satisfaction among employees. Franks (2002) argued that all work-related problems are connected directly or indirectly to stress and they affect overall organizational efficiency and employee effectiveness.

Stein & Rawson (2000) reported that higher levels of emotional exhaustion of employees are linked with less workplace support and lower levels of self-confidence concerning work-related skills. Farmer (2002) finds that the major stressors for workers working in clinics were organizational and client-related factors such as high workloads, staff shortages, unsupportive work relations, poor physical work conditions and difficult patients.

Nwankwo (2015) studied the causes and effects of job stress at Methodist University College, Ghana and reported that job stress is caused by several factors such as; work overload, overtime schedule, extra assignments, rigid policies, poor working conditions, poor job design and personal factors. Low morale, low commitment, poor performance, high labour turnover, low job satisfaction and work related conflicts were identified as the effects of job stress.

With the exception of Nwankwo (2015) majority of the literature on stress have focused on the causes of job stress and its effects on employee productivity. The present study therefore seeks to add more insight to the literature on job stress by emphasizing on how job stress affects employee job satisfaction in the communication service industry.

### 2.1 PROFILE OF TECH MAHINDRA GHANA LTD

Tech Mahindra Ghana Limited is part of the \$12.5 billion Mahindra Group with presence in over 100 countries where it employs more than 119,900 people. The company has been selected as a partner for setting up Bharti Airtel's call centres across its operation sites in Africa including Ghana. Outsourcing key operational functions by Airtel has been seen as key to right-cost, high quality and high-volume business model in helping to build on its subscriber base. The company has subsequently set up its base in Ghana with a conviction to concentrate and prioritise the development of Ghanaians in the area of customer service experience and providing more job opportunities to them.

Business Process Outsourcing (BPO) and other IT-enabled services have been one of the key elements in transforming the Indian economy and Tech Mahindra seeks to bring about similar transformation in Ghana in the near future. Setting up Tech Mahindra's operational presence in Ghana was a major stepping stone towards increasing its presence in West Africa and the Ghanaian market in particular.

The company is currently responsible for providing customer service and back office support for Airtel's operations in Ghana and is in talks with various companies across multiple domains to provide similar services. With a vast experience in servicing customers across various geographies, Tech Mahindra is uniquely positioned to deliver international standards of customer experience and is confident of increasing its client base in Ghana.

The company's local operations started in February 2011. It has been steadily increasing in staff strength haven filled over 150 job openings in the last six months bringing its headcount close to 300 employees in 2015. The tremendous growth of the company in its few years of operation has presented young graduates and existing talents a promising future in their career development as customer service personnel.

### 3.0 METHODOLOGY

Based on the research objectives stated, this study uses descriptive survey design. According to Lokesh (1984) descriptive research studies are designed to obtain pertinent and precise information concerning the current status of a phenomenon and whenever possible to draw valid general conclusion from the facts discovered. The population of the study is made up of management staff, supervisors, technicians and customer service personnel of Tech Mahindra Ghana Ltd. The different categories of staff members of the organization numbers to 300 employees and they form the population of the study.

Tech Mahindra as a customer service firm in the telecommunication industry runs a shift system for its employees so as to be able to attend to customers swiftly at all times. The visits to the company for data collection were made in day times and this made it difficult to meet workers who were on night duty. Owing to the difficulty in getting access to all the employees, the study uses non-probability sampling, precisely convenience non – probability sampling technique to select 50 employees drawn from different departments and of different ranks. Out of the 50 questionnaires distributed, 47 were returned representing 94% response rate. The team of field personnel visited the office of the company at random time periods and questionnaires were administered to employees who were available

and willing to participate in the study. Gyemibi et al (2011) argues that this sampling technique helps to reduce bias in sampling as the researcher has no a priori information of the respondents who will be selected.

Data for this study is primary in nature. Primary data collection took the form of questionnaire administration to each member in the sample. The self-administered mode of questionnaire administration was used as the respondents have higher education and could therefore respond to the questions on their own without any need for assistance. Both open-ended and close-ended questions were employed to solicit for information on job stress and its effect on job satisfaction from the respondents. The study employs descriptive statistics (graphs, charts and tables) to analyze the effect of job stress on job satisfaction. Both quantitative and qualitative methods were employed in the analysis of data. For the analysis of the quantitative aspects of the study, Statistical Package for Social Sciences (SPSS), version 20 was used. Since some aspects of the questionnaire were more of open ended questions which allowed respondents to express their views, there was the need for qualitative analysis alongside the quantitative analysis in the quest to fully address the research questions.

## 4.0 RESULTS AND DISCUSSION

### 4.1 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Some demographic characteristics such as gender, age, education, experience on the job, and marital status can influence the tendency of people to be stressed up on the job. The demographic characteristics of the respondents captured in this study are gender, age, marital status and the respondents' level of education.

#### 4.1.1 GENDER OF RESPONDENTS

The results presented in table 1 (appendix 1) shows that males make up 53.2% of the respondents whereas female respondents constitute 46.8% of the sample. The statistics indicate that both genders were proportionally and fairly represented in the sample and this will help to capture the effect of job stress on job satisfaction on both males and females.

#### 4.1.2 AGE OF RESPONDENTS

From the results in table 2 (appendix 1), 61.7% of the respondents are aged below 30years and 34% are within the age range of 30-40years. Two respondents did not respond to that question. The Analysis shows that a greater proportion of the staff of Tech Mahindra Ghana Ltd are young and energetic people who have active brains and the energy to work if they are satisfied with their job.

#### 4.1.3 MARITAL STATUS OF RESPONDENTS

From figure 1 in appendix 2, only 8.7% of the respondents are married. 91.3% are single. This could have implications on the incidence of job stress among the 91.3% of the respondents who are not married as they do not have to worry about attending to marital duties after a busy day at work.

#### 4.1.4 HIGHEST EDUCATIONAL QUALIFICATION OF RESPONDENTS

From figure 2 in appendix 2, 44 (93.6%) of the respondents have HND, Degree or a Post Graduate Degree. The remaining did not respond to the question on educational level. The analysis shows that the company has an educated workforce who can manage relatively complex task with little effort and thereby minimize job stress that comes about from managing difficult assignments at work.

### 4.2 STRESS ASSESSMENT

The key objective of the study is to find out the effect of job stress on job satisfaction. To make sure respondents had a clear understanding of what job stress is, they were asked about what constitutes job stress in their opinion. The views of the respondents on their knowledge of job stress have been presented in Table 3 (appendix 1).

The results of the field survey brought to light that the respondents who are mainly customer service personnel see job stress in three different ways - tiredness, frustration, and depression in order of significance. Siegrist (2001) reports that such emotional factors when experienced by workers tend to affect employees' performance and job satisfaction negatively. As shown in table 3, 61.7% of the respondents asserted that job stress is when you feel tired whiles going about your normal duties at work. 31.9% relate job stress to frustration of workers on the job whereas 4.3% claimed that job stress is when workers feel depressed at work. All the three factors stated by the respondents have the tendency to adversely affect the psychological, mental and emotional well-being of the employees and thereby result in low productivity (Brock & Grady, 2002).

The respondents were also asked about the factors that contribute to job stress and they identified factors such as work overload (0), working overtime (1), rigid policies (2), poor working conditions (3), poor job design (4) and personal factors (5). The analysis of the views of the respondents regarding the sources of stress at Tech Mahindra Ghana Ltd is presented in figure 3 depicted in appendix 2.

As shown on the chart, the most significant factor that leads to job stress at Tech Mahindra Ghana Ltd is work overload, followed by working overtime, rigid work policies among others. It can be inferred from the analysis that the employees of the company are probably given much more task than they can manage in a normal working day which leads to job stress and most likely affect their performance as well. This finding is not supported by Nwankwo (2015) who reported that personal factors such as family problems is the leading cause of stress among lecturers of Methodist University College, Ghana. It is however not surprising as teaching is a less stressful job as compared to customer service personnel who sometimes have to work on night shifts in order to attend to the needs of customers at all times.

In order to establish how severe, the issue of stress is in the company, respondents were asked how frequent they experience stress at work and the results is presented in table 4 (appendix 1). From the table, 29.8% of the respondents claimed that they always experience job stress and 70.2% said that they sometimes experience stress on the job. Overall, all the respondents acceded to the fact that their work is generally stressful and factors such as poor working conditions and lack of attention to the welfare needs of the workers tend to add up to their stress levels and adversely affect their job satisfaction and performance.

Regarding attempts by management to manage job stress, the respondents were asked how often the management of the company organizes stress management programs for the staff. The result of the findings to this question is presented in the figure 4 in appendix 2.

As seen from the chart, 82.96% of the respondents asserted that they have never witnessed a stress management program ever since they were employed in the company. The few (17.04%) who claimed to have witnessed such programs all agreed that the stress management programs organized by the company have not been effective. This finding must be of serious concern to management as stress is commonly pronounced in the firm based on the findings of this study.

The high stress levels if not managed properly can adversely affect productivity levels and growth potential of the firm.

One other key objective of this study is to find out if job stress directly leads to job dissatisfaction with a resulting effect on job performance. The views of respondents were sought on this issue and the analysis of the responses is presented in table 5 (appendix 1).

From Table 5, 66% of the respondents said that job stress directly leads to job dissatisfaction at all times. 27.7% claimed that they sometimes feel dissatisfied with their job as a result of the stressful nature of the job. Only 6.4% were of the view that job stress does not have any significant effect on job satisfaction. Overall, we can conclude from the analysis that job stress leads to job dissatisfaction in the firm. This finding is supported by Nwankwo (2015) who reported that job stress affect staff performance in terms of low morale, low commitment, poor performance, high turnover, low job satisfaction and excessive conflicts. According to the author, these stress-effect factors individually and collectively have a very strong effect on the overall corporate performance of a firm. The findings of Fisher *et al* (1990), Hoel *et al.* (2001) and Zigarmi and Houson (2007) are also in line with our findings regarding the effect of job stress on job satisfaction.

Anecdotal evidence suggests that jobs with excessive stress tend to have very high labour turnover with adverse effects on productivity through the frequent loss of experienced and highly skilled staff. To find more evidence on this hypothesis, we asked the respondents whether they sometimes feel like quitting their job solely as a result of stress experienced at work. The findings on this issue have been summarized in Figure 5 (appendix 2). As shown in the chart, 82.98% of the respondents asserted that they are ever ready to quit their job solely as a result of job stress. Only 17.02% claimed that they do not intend to leave the job as a result of its stressful nature. This finding is affirmed by Fisher *et al.* (1990) who reported that high turnover of staff is one of the major effects of job stress in the service sector.

**5.0 CONCLUSION AND POLICY RECOMMENDATIONS**

This study sought to find out the effect of job stress on job satisfaction in the communication service industry using Tech Mahindra Ghana Ltd as a case study. The main findings of the study are summarized as follows:

- Job stress results from factors such as work overload, working overtime, rigid policies, poor working conditions, poor job design and personal factors such as family problems.
- The study also finds that job stress directly leads to job dissatisfaction among employees.
- Job stress is likely to lead to high labour turnover as majority of the respondents who felt stressed up on the job asserted that they are ever ready to quit the job solely as a result of stress.

Base on the findings, we make the following recommendations:

- It is important for the management of service companies to put in place measures to minimize if not completely eliminate the causes/sources of job stress among the employees in order to reduce its effects on productivity and labour turnover. In this regard, management should organize stress management programmes for employees on regular basis.
- Management should interact with workers on regular basis in order to keep abreast of their concerns so as to take measures to address them to boost the morale of the workers. This can go a long way to increase productivity and enhance employee commitment to the firm. More so, management should take steps to improve the working conditions, particularly increase the base pay of workers to further motivate them.
- It is recommended that future studies on the stress-job satisfaction relationship be conducted in other industries such as mining, manufacturing and sales firms so as to provide all round evidence on the subject.

**REFERENCES**

1. Bickford, M. (2005), *Stress in the Workplace: A General Overview of the Causes, the Effects, and the Solutions*, Canadian Mental Health Association, Newfoundland and Labrador Division, Canada.
2. Blaug, R., Kenyon, A. and Lekhi, R. (2007) *Stress at Work: A report prepared for The Work Foundation’s Principal Partners*, The Work Foundation.
3. Brock, B. L. & Grady, M. L. (2002) *Avoiding burnout: A principal’s guide to keeping the fire alive*. Thousand Oaks, CA: Corwin Press.
4. Brock, R. J. & Grady, R. D. (2002) *Sleep, Arousal and Performance*. Boston, Ma: Birkhauser.
5. Canadian Mental Health Association. (2001). *Canadian Mental Health Survey: COMPAS*. Retrieved July 6, 2015 from [http://www.cmha.ca/bins/content\\_page.asp?cid=534184185&lang=1](http://www.cmha.ca/bins/content_page.asp?cid=534184185&lang=1)
6. Clarkin, N. & Wynne, R. (2006) *Vocational Rehabilitation and Work Resumption - A review of the literature*. Work Research Centre, Dublin, Ireland.
7. Cooper, C. (2001) *The Psychological implications of the disposable Workforce: the future Stressors’* in Pearce J, ‘Taking the stress out of work – Conference Synopsis’, *Stress News*. Vol.13 No.4.
8. Cropanzano, R., Rapp, D. & Byrne, Z (2003) *The Relationship of Emotional Exhaustion to Work Attitudes, Job Performance, and Organizational Citizenship Behaviors*. *Journal of Applied Psychology*, Vol. 88, No. 1, pp. 160-169.
9. Farmer, R. (2002) *Stress and working with drug misusers*. *Addiction Research*, 3(2), 113-122.
10. Fisher, C. D., Schoenfeldt, L. F., & Shaw, J. B. (1990) *Human Resource Management*. Houghton Mifflin Company: Boston.
11. French, W. L., Kast, F. E., & Rosenzweig, J. E. (1985) *Understanding Human Behavior in Organisations*. Harper & Row: New York.
12. Gyemibi, K. A., Mensah, G., Opoku, C., Appiah, C. & Akyaa, A. (Unpublished) *Credit Management Practices of Micro Financial Institution-A Case Study of Multi Credit Savings and Loans*. Department of Business Studies, Christian Service University College-Kumasi.
13. Health & Safety Executive (2006) *A business case for the Management Standards for Stress*, HSE Books, Sudbury.
14. Hoel, H., Zapf, D., & Cooper, C. L. (2002) *Workplace Bullying and Stress*. In P. L. Perrewé & D. C. Ganster (Eds.), *Historical and current perspectives on stress and health* (pp. 293-333). Kidlington, Oxford: Elsevier Science Ltd.
15. ILO (2000) *Mental Health in the Workplace*. International Labour Office Report, Geneva.
16. Lahey, B. B. (2004) *Psychology: An Introduction (8th Edition)*. McGraw-Hill: New York.
17. Lokesh, K. (1984) *Methodology of Educational Research*. Vikas Publishing House Pvt. Ltd.: New Delhi:
18. Maslach, C. & Jackson, S.E. (1982) *The measurement of experienced burnout*. *Journal of Occupational Behavior*, 2, 35-47.
19. Nwankwo, C. C. (Unpublished) *The Effect of Job Stress on Employee Job Satisfaction: A Case Study of Lecturers of Methodist University College Ghana*. Unpublished Thesis, BMFI University College, Ghana.
20. Rosen, D. D. (2010) *Stress! and how to deal with it Effectively*. Kay Kay Publishers: New Delhi.
21. Saunders, M., Lewis, P., & Thornhill (2007) *Research Methods for Business Students (Fifth edition)*. Prentice Hall.
22. Shoptaw, S., Stein, J. A., & Rawson, R. A. (2000) *Burnout in substance abuse counselors. Impact of environment, attitudes, and clients with HIV*. *Journal of Substance Abuse Treatment*, 19, 117–126.
23. Siegrist, C. A. (2001) *Emotion and Adaptation*. Guilford Press: New York.
24. Zigarmi, D., Houson, D., Witt, D., & Diehl, J. (2007) *Employee Passion: The New Rules of Engagement*. The Ken Blanchard Companies: Escondido, California.

**APPENDIX**

**TABLE 1: GENDER OF RESPONDENTS**

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	25	53.2	53.2	53.2
Female	22	46.8	46.8	100.0
Total	47	100.0	100.0	

Source: Authors Estimation with Field Data, 2015

**TABLE 2: AGE OF RESPONDENTS**

Age	Frequency	Percent	Valid Percent	Cumulative Percent
< 30	29	61.7	64.4	64.4
30 - 40	16	34.0	35.6	100.0
Total	45	95.7	100.0	
Missing	System	2	4.3	
Total		47	100.0	

Source: Authors Estimation with Field Data, 2015



TABLE 3: RESPONDENTS VIEW OF JOB STRESS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Tiredness	29	61.7	63.0	63.0
	Frustration	15	31.9	32.6	95.7
	Depression	2	4.3	4.3	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

Source: Authors Estimation with Field Data, 2015

TABLE 4: HOW OFTEN RESPONDENTS EXPERIENCE STRESS AT WORK

		Frequency	Percent	Valid Percent	Cumulative Percent
	always	14	29.8	29.8	29.8
	sometimes	33	70.2	70.2	100.0
Total		47	100.0	100.0	

Source: Authors Estimation with Field Data, 2015

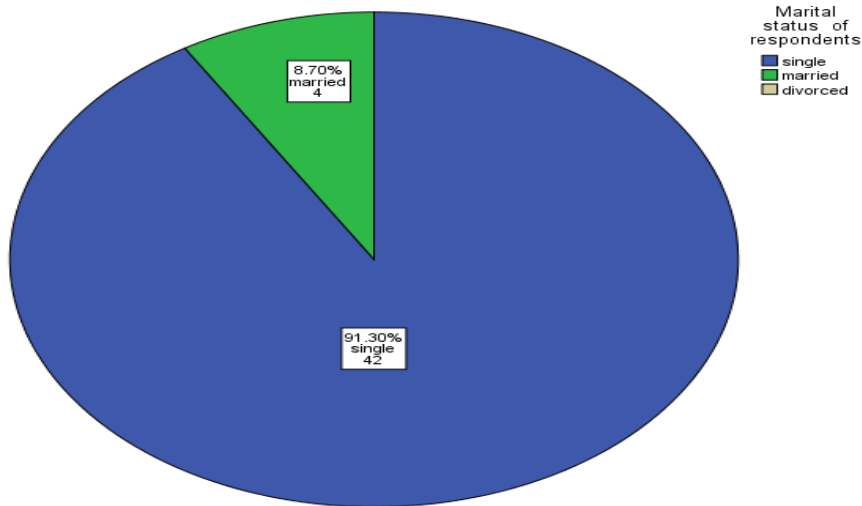
TABLE 5: EFFECT OF JOB STRESS ON JOB SATISFACTION

Does stress experienced at work lead to job dissatisfaction?					
		Frequency	Percent	Valid Percent	Cumulative Percent
	yes	31	66.0	66.0	66.0
	no	3	6.4	6.4	72.3
	sometimes	13	27.7	27.7	100.0
Total		47	100.0	100.0	

Source: Authors Estimation with Field Data, 2015

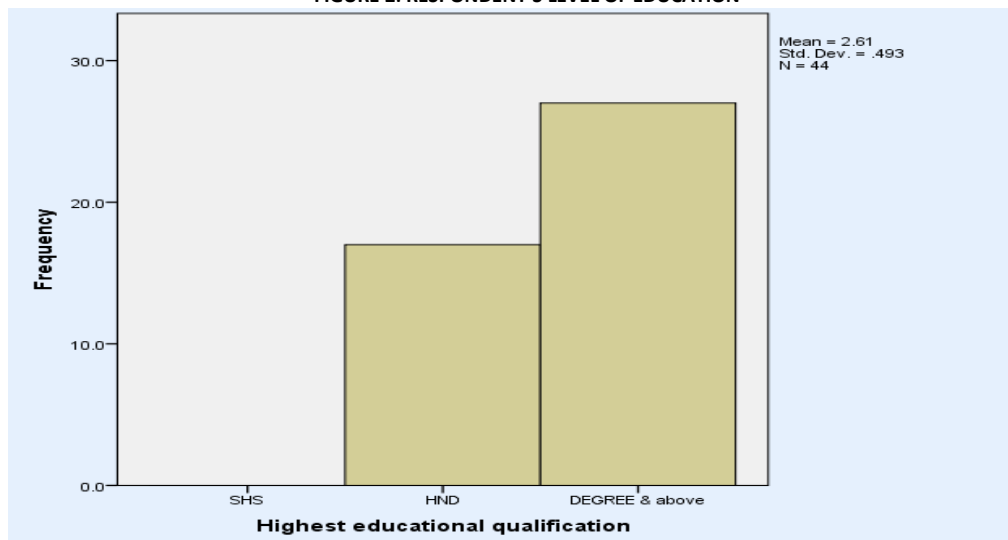
APPENDIX 2

FIGURE 4.1: MARITAL STATUS OF RESPONDENTS



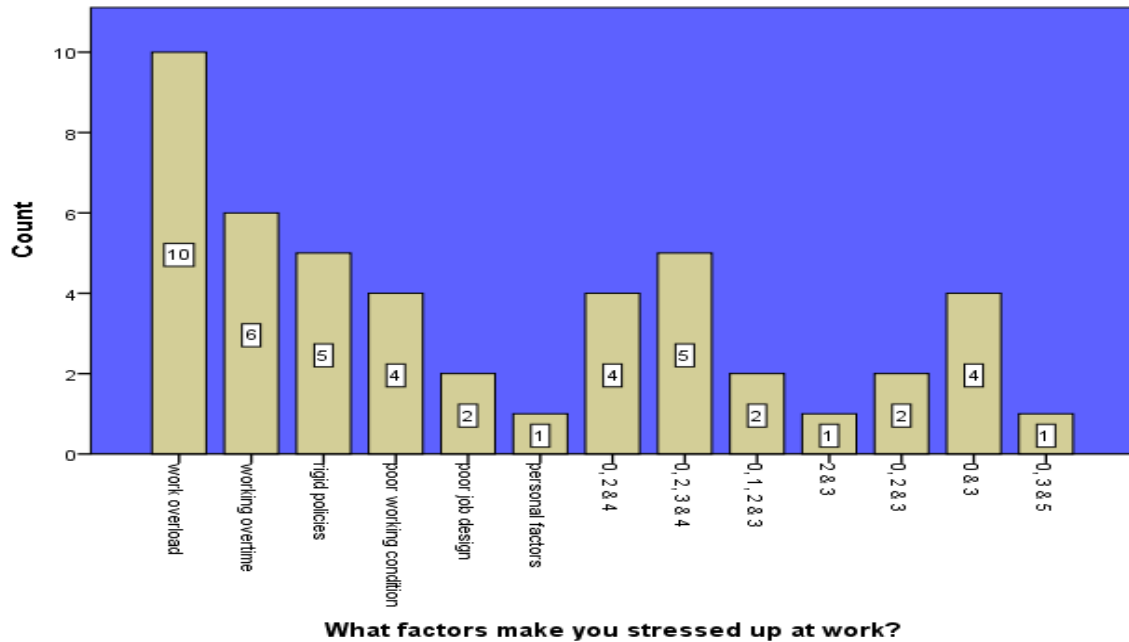
Source: Authors Estimation with Field Data, 2015

FIGURE 2: RESPONDENT'S LEVEL OF EDUCATION



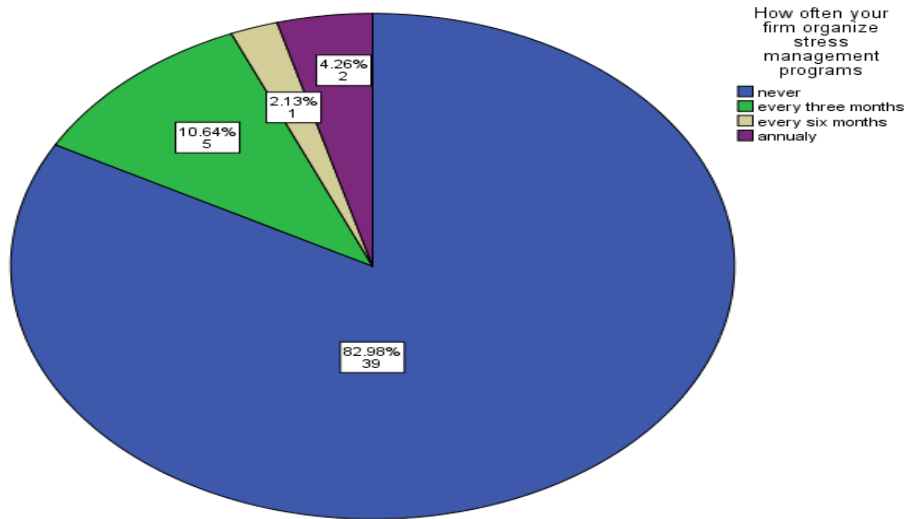
Source: Authors Estimation with Field Data, 2015

FIGURE 3: SOURCES OF STRESS AT TECH MAHINDRA GHANA LTD.



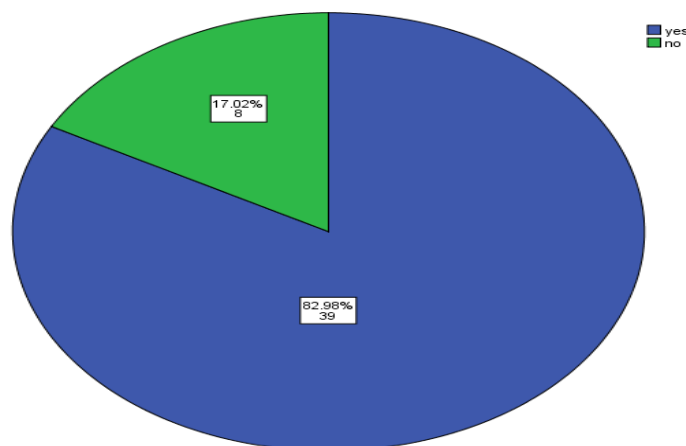
Source: Authors Estimation with Field Data, 2015

FIGURE 4: FREQUENCY OF STRESS MANAGEMENT PROGRAMS



Source: Authors Estimation with Field Data, 2015

FIGURE 5: RESPONDENTS' READINESS TO QUIT THEIR JOB OWING TO JOB STRESS



Source: Authors Estimation with Field Data, 2015

## THE EFFECTS OF ERP SYSTEM

**SAJID NEGINAL**  
**RESEARCH SCHOLAR**  
**BANGALORE UNIVERSITY**  
**BENGALURU**

### ABSTRACT

*ERP has evolved over the years and has left significant impact on organizations. In this paper we have thrown some light on the major factors affecting the organizations. The effect of ERP may vary bases on the size of the organization, industry and vision and goals of the organization. ERP implementation is complex, costly and time consuming affair and as a result it would be unfair to conclude only these mentioned factors play a role in the effect of ERP system of an organization. However, a sincere effort has been made to understand major factors that effects organization post ERP implementations.*

### KEYWORDS

organization, application, ERP.

### INTRODUCTION

The ERP system is an information system designed to amalgamate different departments and optimize business processes in an organization. ERP is a software that is installed as an integrated system and standardized and automated. When introduced and implemented an ERP system, the organization can receive many benefits, including lower costs, improve response time to customers and better performance of the organization.

In general, organizations and consulting firms believe that the introduction of ERP systems allows greater efficiency in the work of the organization, and therefore better performance (financial/non financial) due to this believe companies go for ERP. Companies have earned a lot amounts of money (in millions), when its operations are managed by ERP system.

The ERP system affects not only the companies itself but also the vendors, including external partners, customers and suppliers. This article will take you through the effects of ERP application/systems in organizations.

### HOW THE ERP SYSTEM AFFECTS ORGANIZATION?

The rapid development of industries and the need for the procedures and management of resources, it has become very important to have a tool that can help you coordinate the many activities, and the best is ERP. It gives you the possibility to integrate all actions of your business while enhancing the quality of several areas at once. These areas include human resources, accounting and operations. In addition, ERP helps to increase production levels and cost effective control, and that means you will be able to control the entire project/process more efficiently.

Installation phase is very important for ERP systems to increase the availability of information to help companies achieve real-time information for decision-making. It is worth mentioning that ERP systems are a powerful tool with respect to the treatment and regulation of financial data.

In management module you can perform strategic planning, this will help you monitor daily activities and having regular communication with the investors. The HR/financial module allows you to take decisions and optimize the company's investments/employees. With all of this one can see that an ERP system brings visible advantages.

The Project Management Unit is an integral part ERP system and keep an eye on daily activities and communication with investors. HR module allows you to make decisions and improve investment company in connection with staff. With all this, you can see that the ERP system brings obvious advantages. Having said that ERP implementation takes lots of time and brings challenges in the way we do business.

### EFFECTS OF ERP

As the evolution of ERP systems, they are empowered to facilitate the information flow during the entire enterprise more efficiently and effectively. The effects can be divided into few aspects and they are managerial, operational, IT/Infrastructure, organizational and strategic. From the following, we can review the effects of ERP systems from different directions, and better understand why they are attractive to the modern organizations no matter they are multinational companies or mid-size firms.

As the evolution of ERP systems, which are empowered to facilitate the flow of information throughout the enterprise more efficient and effective. The benefits can be broadly divided into 4-5 areas. the operational effect, effect on management. Infrastructure/ IT management and strategic effect. In the following, we can consider the benefits of ERP systems from different directions, and understand why they appeal to modern organizations varying from different sectors to sizes.

### EFFECT ON MANagements

With the centralized database and integrated data analysis capabilities ERP can help an organization achieve better management of resources, better decision making and planning, and performance improvement.

There are many issues that affect the management of an organization. Management is still working to maintain or increase profits. The ERP system requires a lot of time and money and after deployment a lot problems start to appear. Management must reduce costs, which in turn increase the gain but sometimes, as in the case presented, a company suffers and money is an issue. The money is actually a big concern, because when a company is in financial crisis, cannot function effectively. A company starts to reduce costs and suddenly loses its place in the market; Usually, it takes much time to recover. These issues affect organizations in general, but also the department of management and, in particular, to a greater extent because they are those who are the decision makers. When a decision is made, we must face the consequences.

#### STRATEGIC EFFECT

With the participation of large scale companies and internal / external integration capabilities that can help business growth, partnership, innovation, cost, differentiation, and external links. A new system will improve the integrity and security of data and data constraints can be improved.

#### IT /INFRASTRUCTURE EFFECT

For IT it's a key decision to implement ERP or to use its own custom made applications/ software's. ERP being designed with well architecture and integrated standard applications that support business flexibility, reduced cost and the marginal cost of IT business units, and increased capacity and efficiency of organization. For IT department it's the need of the hour as ERP is being adopted by other companies and being evolved over the period of time.

#### ORGANIZATIONAL EFFECT

ERP affect the growth of the organization's capacity by supporting the change in the organizational structure to facilitate employee learning, empowerment of employees, and to build common visions. A new system will eliminate manual processes and existing workforce repetition, will collect better data in more efficient manner.

Organisation will streamline critical business processes, for many departments making it to use recourse more optimally and efficiently. A new system will facilitate access to information and general improvements in use by students, faculty and staff, this will be more user friendly and unlike the old legacy systems.

**OPERATIONAL EFFECTS**

By automating business processes and enabling changes in process, ERP can offer benefits in terms of reducing costs, reducing cycle times, improving productivity, improve quality, and better customer service.

For a system to work effectively, it must be implemented very well. The most important project success factor is the implementation phase. A technical issue, for example migration of data from the old system to the new system can be very vital. Here information can be lost, can be transferred or can be compatibility issue. The technical issue impacts the organization from an operational point of view more compared to management perspective as any technical challenge can stop operations, operational and management overlap and affect each other.

**CONCLUSIONS**

ERP system is linked to all the factors mentioned above. For whatever may be the reason to implement ERP one need to understand ERP as a complex and dynamic system. This is a very strategic decision for management and decision has to be taken after well sort-out.

The impact of ERP helps to increase the performance of the organization and how it affects the performance level of the organization of the ERP. The knowledge of how it affects organizational performance range of decision support on buying and implementing ERP modules in the best way possible.

**REFERENCES**

1. Bingi, P., Godla, J., & Sharma, M. K. (1999). Critical issues affecting an ERP implementation, *Information Systems Management*, 7-14.
2. Darke, P., Parr, A.N., & Shanks, G. (1999). Identification of Necessary Factors for Successful Implementation of ERP systems. In DeGross, J. I., Introna, L. D., Myers, M. D., 58 & Ngwenyama, O. (Eds.), *New Information Technologies in Organizational Processes* (p. 99-119). Boston, MA: Kluwer Academic Publishers.
3. *Financial impacts of enterprise resource planning implementations*. By Robin Poston, Severin Grabski.
4. Grabski, S. and Leech, S. (2007). "Complementary controls and ERP implementation success". *International Journal of Accounting Information Systems*, Vol. 8, No. 1, pp. 17-39.
5. Hu, Q., & Plant, R. (2001). An empirical study of the casual relationship between IT investment and firm performance. *Information Resources Management Journal*, 14(3), 15-26.
6. *Information technology and economic performance: A critical review of the empirical evidence*, *ACM Computing Surveys* page 1-28
7. *Investment in enterprise resource planning: Business Impact and Productivity Measures*, by Lorin M. Hitt, D.J. Wu, Xiaoge Zhou
8. Law, C. C. H., & Ngai, E. W. T. (2007). ERP systems adoption: An exploratory study of the organizational factors and impacts of ERP success. *Information & Management*, 44(4), 418-432. theory and research.
9. Law, C. C. H., & Ngai, E. W. T. (2007). ERP systems adoption: An exploratory study of the organizational factors and impacts of ERP success. *Information & Management*, 44(4), 418-432. theory and research. *Academy of Management Review*, 35(4), 506-509.
10. Management based critical success factors in the implementation of enterprise resource planning systems, *International Journal of Accounting Information Systems*, Vol. 8, No. 3, pp. 175-200.
11. Mandal, P., & Gunasekaran, A. (2003). Issues in implementing ERP: a case study. *European Journal of Operational Research*, 146(2), 274-283.
12. Nicolaou, A. I. (2004). Firm performance effects in relation to the implementation and use of enterprise resource planning systems. *Journal of Information Systems*, 18(2), 79-105.
13. Poston, R., & Grabski, S. (2001). Financial impacts of enterprise resource planning implementations. *International Journal of Accounting Information Systems*, 2(4), 271-294.
14. Poston, R., & Grabski, S. (2001). Financial impacts of enterprise resource planning implementations. *International Journal of Accounting Information Systems*, 2(4), 271-294.
15. Shang, S. and Seddon, P. (2002). "Assessing and managing the benefits of enterprise systems: the business manager's perspective". *Information Systems Journal*, Vol. 12, No. 4, pp. 271-299.
16. Thomas L. Legare (2002), "The Role of Organizational Factors in Realizing ERP Benefits", *Information system management*. pages 21-42
17. Umble, E. J., Haft, R. R., & Umble, M. M. (2003). Enterprise resource planning: Implementation procedures and critical success factors. *European Journal of Operational Research*, 146(2), 241-257.
18. Velcu, O. (2007). Exploring the effects of ERP systems on organizational performance: evidence from Finnish companies. *Industrial Management & Data Systems*, 107(9), 1316-1334.
19. Xue, Y., Liang, H., Boulton, W. R., & Snyder, C. A. (2005). ERP implementation failures in China: case studies with implications for ERP vendors. *International journal of production economics*, 97(3), 279-295.

**INTERNET BANKING: DEBATING CORE ISSUES AND BENEFITS**

**LAVANYA K.N.**  
**RESEARCH SCHOLAR**  
**REVA UNIVERSITY**  
**KATTIGENAHALLI**

**ABSTRACT**

*Internet banking provides a platform to explore the core financial services. Customers through usage of banking technology play a prominent role in its establishment and operational efficiency. It is the main frame work to explore utilities by banking customers to minimize or ease the problems of transactions. The implementation of banking technology boosts the bank performances to reach the distant customers to meet their needs. The banking technology as a system has created a platform to provide vivid services such as fund transfer, customer relation, insurance and others resulting in its better performance. The emergence of Internet Banking and its innovations have tried to meet the technological needs and demands, yet transacting within the norms of banking system. There are ever growing constraints related to the development of banking technologies that cannot be replaced but can be improved to prevent the outcomes related to its barriers and hindrances. Communication, as a momentum asserts its strong influence on its customers to ease the use. Banking technology has tried to implement internet technology among its customers so as to get acquainted with its uses while the disadvantages are prevented by the banking system. Technology as a model of belief and development appears to be diffracted within and outside its advantages.*

**KEYWORDS**

bank, banking, online banking, internet banking, banking technology, e-banking.

**INTRODUCTION**

**B**ank (Web) is an institution which connects people who have money and who need money whereas *Banking* (Web) is a money transaction oriented business activity. In the era of global e-commerce, transactions are done through various means such as *Online banking* (Web) which refers to the transactions carried on by the customers through the use of electronic means. It is also known as Internet banking, e-Banking and virtual banking. Online banking facilities are provided through sources like bank websites, mobile applications etc. Customers and bankers can perceive the benefits of online banking through the increase in the volume of transactions done electronically. It minimizes time and cost in an efficient way. It is more comfortable when compared to manual banking. The customers approach towards online banking is positive only when the bankers safeguard the interest of the e - consumers by considering the safety aspects in using technology.

Technology adoption has become a social norm as a model of acceptance towards secure transactions. It is positive in its approach as the negative aspects of identity thefts, hacking and other forms are controlled by the banking institutions. The banking system should always aim at protecting its valued customers from security threats such as unauthorized access, spoofing, phishing and others. The banks need to come up with new banking security measures in order to gain the confidence of its customers so that unwanted intrusion can be controlled at the base itself. Banking security systems combined with technology provide solutions to meet its institutional benchmarks. The enterprise protects its operations against internal and external threats such as misuse of information by employees of a bank and that of its customers.

The acceptance of technology as a model is possible only when issues concerning security, authentication and privacy can be resolved. The main question is whether internet banking is perceived as a mechanism to do transactions with ease or is it a complicated technique increasing the problems with security threats. The usage of internet banking along with its technological benefits has led to the increase in number of transactions, both by banks and customers. The result one can witness is that how customers examine and choose internet banking along with ever changing factors of innovations that influence them through its roles. Internet banking works with risk factors of bank that are dynamic.

The current study tries to identify the changes keeping in mind the bank plan, procedure and working efficiency. The trend towards using internet banking is up surging due to the services provided by banks automatically through technological developments providing greater truths about it. It draws them towards internet banking where, banks adopt technology to achieve customer satisfaction through its e – services. Customer's perception in banking products are analyzed empirically where communication and transaction is at stake due to disbelief and distrust in banking technology. It has to be clarified and made clearer to the users that it is safe and highly advantageous to use internet banking for convenience.

**OBJECTIVES OF THE STUDY**

1. To study the merits and demerits of internet banking.
2. To analyze the relevance of internet banking.

**DISCUSSION**

Information communication technology in the wider sense of the term was used in trade. The following table gives an overview of its impact.

**TABLE 1**

Period	ICT Innovation	Direct Implication	Socio-economic Implication
From 3100 BC	Development and adoption of writing	First-ever possibility for documentation as separate from oral tradition	Administration and growth of societies and trade beyond the dimension of clans
From 1450	The printing press with movable metal types	Reduction in the cost of reproducing information	Administration of large nation-states by standardized distribution of information; standardization of language; explosion in the amount of information available
From 1850	Telegraphy and the telephone	Reduction in the time lost in transporting information	Coordination of global trade
From 1990	World Wide Web based on Internet technology	Separation of information from material carriers and their economic limitations	Global delivery of digital services; world-encompassing added value networks

Source: (pre-1990 innovations based on Graff 1982, pp. 17–19)

In today's world, the main issues of internet banking are:

- Trust on the concept of internet banking system is very less due to safety concerns.
- Not many have the intention to use or continue using internet banking due to awareness issues.
- Infrastructure problems persist.
- It still has to establish as a social norm because of its subjectivity.



At the same time, one cannot deny the benefits that internet banking provides. Following are the benefits that it provides:

- The perception is that internet banking is useful for banking activities as its quick and efficient. Also, banks have started rewarding customers to encourage internet banking.
- Customers can access their accounts at any time in their respective bank website in order to transact. They can view their account balance, recent transactions; get statements which can, not only be viewed but downloaded, transferring of funds, payments etc. can be done at ease.
- It also acts as a medium for the banks to endorse their products and services.

*Online banking (Web)* enables the customer to transact smoothly with the facilities provided by authorized banks such as net banking, PC banking, telephone banking, SMS banking, mail banking etc against manual banking. It is due to unawareness about the concept of internet banking among people which needs to be resolved by providing useful information through appropriate communication techniques. The standard expectations of services by customers can be achieved through adoption of banking technology. It comprises of providing numerous and better quality services that help to develop bank as an institution and enables it to grow beyond its infrastructure.

The adoption of technology in banking fields has minimized the risk function of managing technology related to internet banking. Its growth has helped to maintain various transactions. The development in terms of quality addresses the standardized technological expectations, changes and innovations. The future vision of the internet banking concerns the core issue of communication between bankers and customers. Operational risk continues to exist in the management of related technological know – how where the information as a strategy and banking system works on the periphery of the model of the bank that would combine itself with the working conditions. It mentions the scope of the model where new and old services function along with the development of technology in banking to minimize risk. The focus should be on the customer data and transaction where the process of providing service to a greater extent in an authentic manner retaining confidentiality. Customer satisfaction and improving internet banking business have to be revolutionized in a reasonable way only through technology implementation.

Consumer behavior plays a vital role in adopting and utilizing internet banking. Security related issues shake the belief system. While among the educated consumers, internet banking is witnessed as a benefit. Banks implement internet banking facilities to enable the ease of usage by its consumers. Banking system and technological developments work in tandem to encourage the spread of internet banking. Internet banking has started to meet the customers' expectations. The development of new technologies determines that banking facilities can be adopted conveniently. Technology shows a business model of transaction to support larger transaction by the banks inside and outside of its periphery.

## CONCLUSION

Technology is a weapon connecting bankers and value added customers. Banks come up with varied services to its valuable customers with the help of technological developments. Business and customer relationship coexists until and unless the service provided is advantageous. Internet banking continues to expand along with new innovations minimizing time consumption and maximizes management in comparison to the traditional way of working. The study has analyzed the benefits and challenges internet banking encounters in the technological world of transaction that need to be transformed by the banking institution. Intense development in terms of banking technology has eased the way of working for both the customers and the bankers. Banking activities across the world at any given point of time shows its advancements. The sharing of information through technology by banks shows its performance in an efficient way. Internet banking innovations have reduced the challenges in its working conditions reflecting on its performances. Internet banking is a valuable tool for people who want to know and make use of internet banking. Internet banking has boosted its number by the slow adoption by its consumers. Through internet banking, facilities by the banks have increased transactions as well as efficiency. Internet banking is adopted at a faster rate. Banking as a function is a social norm only with the acceptance of Internet banking. As it is technology based concept the customers try to comprehend its utility. Internet banking is easily reachable, dependable, and secure, to do banking transactions against any threats. Technology based innovations provide a platform to maintain its sustainability of transactions in banking. Internet banking has influenced consumers to see its innovative traits useful to do banking activities. The recognition is left absolutely to the consumers within and outside its boundary. It will be the accepted model of technology over a period of time.

## REFERENCES

1. iosrjournals.org/iosr-jbm/papers/Vol16-issue7/Version-4/F016743338.pdf
2. en.wikipedia.org/wiki/Bank (Accessed 5 Jan, 2016). Web
3. dictionary.reference.com/browse/banking (Accessed 5 Jan, 2016). Web
4. en.wikipedia.org/wiki/Online\_banking (Accessed 5 Jan, 2016). Web

## IMPACT OF WORKING CAPITAL MANAGEMENT ON CORPORATE PERFORMANCE: A STUDY BASED ON SELECTED BANKS IN NIGERIA

**ALIYU SANI SHAWAI**  
**STUDENT**  
**DEPARTMENT OF ACCOUNTING & FINANCE**  
**FACULTY OF SCIENCE & HUMANITIES**  
**SRM UNIVERSITY**  
**KATTANKULATHUR**

### ABSTRACT

*Working capital is regarded as the lifeblood and nerve of a business, it is therefore essential to accommodate the smooth operations to any organizations. The objective of this study is to examine the impact of Working capital management on corporate performance of selected Nigerian banks. The study covers the period of ten (10) years 2005-2014. Data for the study were extracted from the firm's annual reports and accounts. Descriptive Research design was adopted for the study. Simple Random sample technique was used to select the samples. The performance was measured in terms of profitability by Return on assets as dependent variable and Working capital was determined by the Current ratio, Debtor's Collection Period ratio, Creditor's Payment Period ratio and Cash Conversion Cycle used as an independent variables and DR & BS as control variables. The data was analyzed using SPSS (version 21.0) and E-views using fixed effects model. Results of the analysis indicated that there is a strong positive and significant relationship between Current ratio & Cash Conversion Cycle with Return on assets while Debtor's Collection Period ratio & Creditor's Payment Period ratio has negative but significant relationship with Return on assets. In line with the above findings, the study suggested that the management should put more attention on their liquidity in order to maintain an adequate liquidity and ensure shorter time to cash conversion and also management should adopt a systematic and sound collection & payment policies for proper and operational efficiency and finally banks in trouble should be advised to merge or to be acquired by other mega banks.*

### KEYWORDS

working capital, working capital management, corporate performance and profitability.

### INTRODUCTION

Every business firm requires two types of capital to run its business operations. i.e fixed capital and working capital. Fixed capital is that part of total capital which is used for purchase of fixed assets, diversification and expansion of business, renovation/modernization of plant & machinery. It is so called because; the assets in which it is invested are fixed in the sense that they are not meant to be removed from the business. Likewise, working capital is the portion of firm's total capital that is used for short term purposes i.e. to meet the financial requirement of the current operations. Working capital plays the same role in the business as the role of heart in the human body, just like heart gets blood and circulates the same in the body, in the same way, in working capital funds are generated and then circulated in the business. As and when this circulation stops, the business becomes lifeless. Thus prudent management of working capital is essential for the success of a business. The management of working capital includes the management of the level of current assets as well as the management of total working capital. Working capital refers to the capital that is required for day-to-day working in a business firm such as for purchasing raw-materials for meeting day-to-day expenditures on salaries, wages, rents, rates advertising etc. According to ICAI Working capital means the funds available for day-to-day operations of an enterprise. The term working capital is also known as revolving or circulating capital or fluctuating capital or short term capital. According to Gitman (2009) the objective of Working Capital Management (WCM) is to minimize the Cash Conversion Cycle (CCC) the amount of capital tied up in the firm's current assets. It focuses on controlling account receivables and their collection process, and managing the investment in inventory. Working capital management is vital for all business survival, sustainability and its direct impact on performance.

### LITERATURE REVIEW

**Aborode** defines working capital management as the balancing of the liquidity and Profitability objectives of the firm as well as taking cognizance of risk. **Akpan** describes working capital management as the management of short-term financial resources of a company in a way that guarantees minimum cost of funds for profitability and the maintenance of a sizeable level of liquidity consistent with short-term obligation demands. **Pandey** defines working capital management as the administration of all current assets cash, marketable securities, accounts payable, bills payable, overdraft, etc.) with the focus of maintaining liquidity position of the firm. Working capital management (WCM) refers to all management decisions and actions that ordinarily influence the size and effectiveness of the working capital. WCM is an essential part of financial management and contributes significantly to a firm's wealth creation as it directly influences organizational profitability and liquidity. **Raheman and Nasr**. In summary, working capital management is concerned with the problem that arises in attempting to manage the current assets, current liabilities and the inter-relationship that exist between them. WCM means the deployment of current assets and current liabilities efficiently and effectively so as to maximize short-term liquidity and profitability.

Syed Ahsan Jamil, Mawih Alani and Faris Nasif Al shubiri, (2015), in their study titled "the effect of working capital (WC) management efficiency on the operating performance of industrial companies listed in the Muscat Securities Exchange (MSM) in Sultanate of Oman". The study employed an explanatory non-experimental research design. 37 out of 48 industrial companies listed in the MSM were taken. The study used the data contained in the annual reports of these companies for the period 2009-2013. The WC management efficiency is measured WC ratios such as cash conversion cycle, current ratio, current assets turnover, net WC ratio (NWCR), while the operation performance is measured by net operating profit (NOP) and earnings before interest and tax. The regression results revealed that the first model is significant and there are only cash conversion cycle and NWCR have impact on the NOP, but the second model is insignificant.

Adamu Yahaya and Hussaini Bala (2015), in their study titled "Working capital management and Financial Performance of Deposit Money Banks in Nigeria" The study examine the effect of working capital management of Deposit Money Banks in Nigeria. The study covers the period of six years 2007 to 2013. Data for the study were extracted from the firms' annual reports and accounts. After running the OLS regression, a robustness test was conducted for validity of statistical inferences, the data was empirically tested between the regressors and the regressed, a multiple regression was employed to test the model of the study using OLS. The results from the analysis revealed a strong positive relationship between current ratio and quick ratio and ROA of Listed Deposit Money Banks in Nigeria, while cash ratio was found to be inversely but significantly related to ROA of Listed Deposit Money Banks in Nigeria.

Muzaffar Asad and Hassan Qadeer, (2014), in their work titled "Components of working capital and profitability: A case of fuel and Energy sector of Pakistan" analyzed the impact of components of working capital on the profitability of fuel & energy sector of Pakistan. Initially six (6) variables have been taken & panel data analysis has been applied to identify their significance. Results revealed that fixed effect model is an appropriate model based on Hausman test. Further, debt ratio, current ratio and company size have significant impact on the profitability.

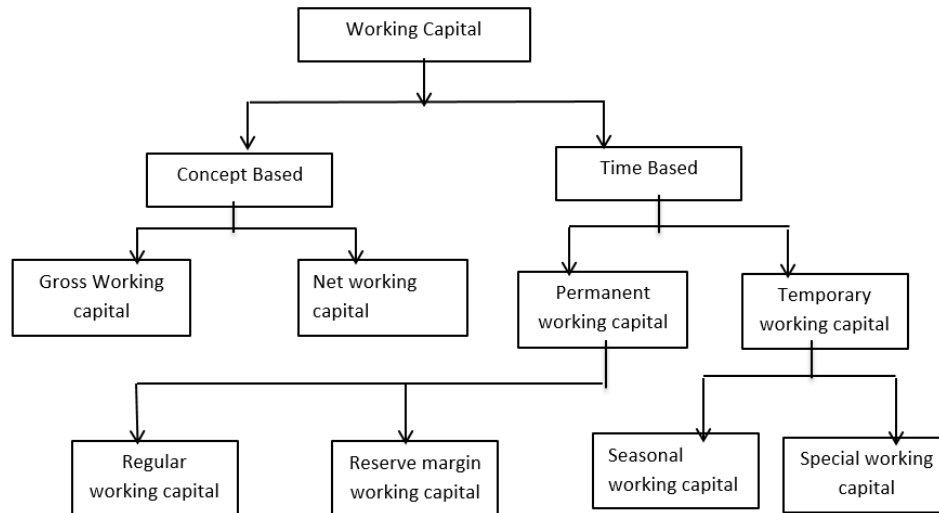
Mohammad Shaukat Malik and Mahum Bukhari, (2014), in their research work titled "The Impact of Working Capital Management on Corporate Performance :A study of Firms in Cement, Chemical and Engineering Sectors of Pakistan" the study investigate the impact of working capital management (WCM) on corporate performance in cement, chemical and engineering sectors of Pakistan. Data is obtained from annual reports of the companies during 2007-2011. Pooled ordinary least squares method is used to estimate the relationship between the measures of working capital management and performance. WCM measures include

average age of inventory, average collection period, average payment period, operating cycle, and the cash conversion cycle whereas return on equity is used as a measure of firm performance. Leverage and firm size are taken as control variables. Results indicate that average payment period negatively and significantly whereas cash conversion cycle positively and significantly relate with return on equity. While, average collection period and operating cycle positively and insignificantly whereas average age of inventory negatively and insignificantly relates to the return on equity. In short WCM influences the corporation's performance. In summary, working capital management is concerned with the problem that arises in attempting to manage the current assets, current liabilities and the inter-relationship that exist between them. WCM means the deployment of current assets and current liabilities efficiently and effectively so as to maximize short-term liquidity and profitability. The above review shows that there is a positive and significant relationship between working capital management and corporate performance of corporations.

## CLASSIFICATION OF WORKING CAPITAL

Working capital can be classified into two ways, i.e. concept based and Time based working capital.

FIGURE 1: CLASSIFICATION OF WORKING CAPITAL



### 1. CLASSIFICATION BASED ON CONCEPT. INCLUDES THE FOLLOWINGS

(a) **Gross working capital:** It refers to the firm's investment in current assets. Current assets are the assets that are to be converted into cash within an accounting year and includes cash in hand, cash at bank, debtors, short term securities, bill receivable, stock and prepaid expenses. According to this concept, working capital means gross working capital which is the total of all current assets of a business. It can be represented by the following equation.

Gross working capital = Total current assets

(b) **Net working capital:** It refers to excess of total current assets over total current liabilities. In other words, the difference between current assets and current liabilities can be taken as Net working capital. Current liabilities refer to those liabilities which are repayable within an accounting year and includes creditors, bill payable, bank overdraft, short term loans, outstanding expenses, provision for tax, proposed and unclaimed dividends. Net working capital can be positive or negative. A positive net working capital will arise when current assets exceed current liabilities. A negative net working capital occurs when current liabilities are in excess of current assets. Net working capital can be represented through the following equation.

Net working capital = current assets – current liabilities

### 2. CLASSIFICATION BASED ON TIME

From the point of view of time, the term working capital can be classified into two categories i.e. permanent working capital and Temporary working capital.

(a) **Permanent working capital:** This refers to that minimum amount of investment in all current assets which is required at all times to carry out minimum level of business activities. In other words, it represents the current assets required on a continuing basis over the entire year. Permanent working capital is permanently required for the business and therefore it should be financed out of long term sources such as share capital, debentures and long term loans. This capital can be subdivided into two (2) i.e. Regular working capital and Reserve margin or Cushion working capital.

i) **Regular working capital:** It is the minimum amount of liquid capital needed to keep up the circulation of the capital from cash to inventories to receivables and back again to cash. This would include a sufficient cash balance in the bank to pay all bills, maintain adequate supply of raw materials for processing, carry a sufficient stock of finished goods to give prompt delivery etc.

ii) **Reserve margin or Cushion working capital:** It is the excess over the need for regular working capital that should be provided for contingencies that arise at unstated period. The contingencies include rising price, business depression, strikes, fires and unexpectedly severe competition.

(b) **Temporary working capital:** It refers to that part of total working capital which is required by a business over and above permanent working capital. It is also called variable working capital. Since the volume of temporary working capital keeps on fluctuating from time to time according to the business activities, it may be financed from short term sources. It is further subdivided into two i. seasonal working capital and special working capital.

i) **Seasonal working capital:** It is the additional amount of current assets particularly cash, accounts receivables and inventory which is required during the more active business seasons of the year.

ii) **Special working capital:** It is required for financing special operations such as extensive marketing campaigns, experiments with product or methods of production, carrying of special jobs.

## IMPORTANCE OF THE STUDY

Working capital management means management of current assets and current liabilities and financing these current assets. If these firms properly manage their cash, accounts receivables, accounts payables and inventories in a proper way, will ultimately increase profitability and corporate performance of these companies.

## STATEMENT OF THE PROBLEM

A study of working capital is of major importance to internal and external analysis because of its close relationship with the current day-to-day operations of a business. As pointed out by **Ralph Kennedy and Steward McMuller**, the inadequate or mismanagement is the leading cause of business failure which are used in or related to current operations and represented at any one time by the operating cycle of such items as against receivables, inventories of raw-materials, stores, work-in-progress and finished goods, merchandise, notes or bill receivables and cash.

**OBJECTIVES OF THE STUDY**

1. To analyze the impact of various components/aspects of working capital on Return on assets (ROA) of selected Nigerian banks
2. To examine whether working capital management of selected Nigerian banks. has impact on its performance.

**HYPOTHESES OF THE STUDY**

In order to fulfill the objectives of the study, the following Null hypotheses (Ho) were formulated.

Ho<sub>2</sub>: There is no significant relationship between working capital management components and corporate performance of selected Nigerian banks.

Ho<sub>1</sub>: There is no significant relationship between working capital management and corporate performance of selected Nigerian banks.

**RESEARCH METHODOLOGY**

**DATA COLLECTION AND ANALYSIS**

The Research design used for the study is Descriptive Research design as it helps to provide a comprehensive and details explanation of the phenomena under the study. The research method adopted was Descriptive statistics and Regression Analysis, through running and comparing the Fixed Effect Model (FEM) and Random Effects Model (REM) and then Fixed Effects Model were chosen after Hausman Test was carried out. FEM allows for heterogeneity or individuality among the items under study by allowing having its own intercept which is time invariant. The population of the study consists of all the sixteen (16) banks listed in the Nigerian Stock Exchange (NSE) as recorded by its website. The sample technique used is simple Random in which ten (10) banks were selected. The data was Panel data which was extracted from Secondary source through Annual reports and Accounts of the sampled banks for a period of ten (10) years starting from 2005-2014. Eviews-8 was applied using Fixed Effects Model and Statistical Packages for Social Science (SPSS) (Version 21.0) was applied also to get the results.

**DEPENDENT VARIABLE**

Dependent Variables are variables that are used to measure the performance of firms. Financial ratios are uses to compare different companies in the same industry, to compare different industries and over a period of years, a firm or an industry develops certain norms that may indicate future success or failure. It is measured as Return on Assets.

**INDEPENDENT VARIABLES**

The following are the independent variables used in this study. Current ratio, Debtor’s collection Period Ratio, Creditor’s Payment Period Ratio and Cash conversion cycle.

**CONTROL VARIABLES**

In order to have a reliable analysis of the impact of working capital management performance on profitability, it is common in working capital literature to use some control variables to account for various factors that may influence profitability of firms (Deelof, 2003; Eljelly, 2004; Lazaridis and Tryfonidis, 2006; Padachi, 2006; Afza and Nazir, 2007; Tewodros 2010;). Accordingly, together with the above working capital variables, some control variables that are specific to firms and general to the economy as a whole were taken into account in this study. Such variable are: Debt Ratio and Bank size.

**SUMMARY OF VARIABLE AND MEASUREMENT**

**MODEL SPECIFICATION**

Model 1

$$ROA_{it} = \beta_0 + \beta_1(CR_{it}) + \beta_2(DCPR_{it}) + \beta_3(DR_{it}) + \beta_4(BS_{it}) + \mu_{it}$$

Model 2

$$ROA_{it} = \beta_0 + \beta_1(CPPR_{it}) + \beta_2(CCC_{it}) + \beta_3(DR_{it}) + \beta_4(BS_{it}) + \mu_{it}$$

**RESULTS AND DISCUSSION**

This section presents the regression result of the dependent variable (ROA) and the independent variables of the study (CR, DCPR, CPPR and CCC) and control variables (DR and BS). The presentation was followed with the analysis of the association between dependent variable and each individual independent variable and also a cumulative analysis was also captured.

**SUMMARY OF REGRESSION ANALYSIS**

**TABLE 1**

Variables	Coefficient	Std. Error	t-Statistics	P-value
Constant	1.535	2.679	0.57	0.5682
CR	0.018	0.038	0.476	0.0351
DCPR	-2.60	5.39	0.483	0.0303
CPPR	-4.88	1.67	-0.292	0.0078
CCC	3.79	5.94	0.638	0.0252
DR	1.952	0.167	11.712	0.0000
BS	-0.09	0.157	-0.614	0.5410

Sources: Computed by the researcher 2016 from E-views 8

R2 0.6689

Adjusted R2 0.6233

F-Statistics 14.6527

F-Significance 0.0000

The cumulative R2 is the coefficient of multiple determination, it shows the extent to which variation in dependent variable is been explained by independent variable. Results from the estimate shows that 66.90% variation in Return on Asset (ROA) is been explained by Current ratio(CR), Debtor’s collection period ratio(DCPR), Creditor’s Payment period ratio(CPPR) & Cash conversion cycle(CCC). The F-statistics of 14.65 shows that the overall model fit the data well. This indicates that the independent variables are properly selected, combined and used. It implies that for any change in working capital management of Nigerian banks, their ROA will be directly affected. The value of F-statistics which was statistically significant at a level of 0.0000 means that, there is 99.99% probability that the relationship among the variables was not due to mere chance.

From the table above, t-value for current ratio was 0.48 & the coefficient value of 0.018 with significant value of 0.0351. This signifies that CR is positively, strongly and significantly influencing the ROA of selected banks in Nigeria. DCPR has a t-value of 0.48 and coefficient value of -2.60 with significant value of 0.0303. This signifies that DCPR is negatively and significantly affects the profitability of the banks. CPPR has a t-value of -0.29 and coefficient value of -4.88 with significant value of 0.0078. This shows that CPPR has significantly but negative impact on profitability of the banks. CCC has t-value of 0.64 and coefficient value of 3.79 with significant value of 0.0252. This shows that CCC has significant and positive impact on profitability of the banks in Nigeria. While other control variables of Debt ratio have a coefficient value of 1.95 with significant value of 0.0000. It shows that it has some significant in controlling the models of the study and Bank Size is negatively and statistically insignificant as it can be observed from the regression result above with a beta coefficient of -0.09 and p-value of 0.59. This shows that even without controlling for bank size, the models of the study can stand.

**FINDINGS**

Current ratio was found to be significant and positive associated with ROA at 5% level of significance indicating that larger proportion of CR increases the Return on assets of selected Nigerian banks and therefore Null hypothesis is hereby rejected. DCPR was found to be significant but negatively associated with the ROA at

5% level of significance, indicating that the lower the DCPR the higher the profitability and vice-versa. Null hypothesis is therefore rejected. CPPR was found to be statistically significant but negatively associated with the ROA at 5% level of significance, indicating that the lower the CPPR, the higher the profitability through getting the benefits of early payment and vice-versa. Null hypothesis is hereby rejected. CCC found to have positive and statistically significant associated with ROA at 5% level of significance. It means it is significantly associated with the profitability of selected Nigerian banks, it provides an evidence of rejecting Null hypothesis.

## RECOMMENDATIONS

1. The management should put more attention on their liquidity in order to maintain adequate liquidity in the sector because the regression result of the study has empirically proved that, higher the CR the more the profitability, so as a result of this the Nigerian banks should invest more in current asset as it have positive impact on profitability.
2. The management should adopt a systematic and sound collection policies in order to minimize the total debts and hence improve the overall performance of the banks, as it was empirically proving that lower collection period will increase in profitability and on the other hand it decreases the profitability.
3. The management should continue to ensure prompt and early payments of debts as it will create a cordial relationship with creditors as revealed by the study
4. The management should ensure that cash conversion cycle shall not take a longer period as it will affect the profitability negatively.
5. Bank management should make WCM as an integral function of financial or risk Department, where working capital components can be effectively and efficiently managed for the successful operations of the activities.
6. Banks in trouble should be advised to either merge or to be acquired by other mega bank in order to enhance the efficient management of the banking activities.

## CONCLUSIONS

Working capital plays a vital role in the company's operations and requires efficient and effective management. The management of working capital concerns the management of cash, account receivable, account payable and cash conversion cycle. It's necessary for a company to monitor its balance at the appropriate level. Shortage of working capital may lead to lack of liquidity as well as a loss of production and sales, on the contrary case, excess balance of working capital could be seen as loss of investment opportunities. One way to achieve the objective of having efficient working capital is to manage short-term assets and liabilities such as implementing policies on credit policy, collection policy as well as payment terms. The study used Descriptive statistics and Regression analysis using Fixed Effects Model (FEM). The result of fixed effects regression indicates that the bank's profitability is statistically significant and positive influence by CR & CCC, while DCPR & CPPR is significantly and negative influence to the profitability. However, the DR used as control variable in this study was concluded to have a statistically significant and positive influence on the profitability of the Nigerian banks while BS as a control variable was concluded not to have any significant influence on the profitability of the Nigerian banks. Therefore, BS is not a major determinant factor of bank's performance.

## LIMITATIONS

1. Data Availability: Some banks may have incomplete relevant data required for the studies.
2. The study is limited to particular sector i.e. Nigerian banks.
3. Also findings and recommendations is only applicable to those banks as working capital management varies in other sectors.

## SCOPE FOR FURTHER RESEARCH

Future research should investigate on how to generalize the findings be young the Nigerian banks listed in the Nigerian Stock Exchange (NSE). Researchers should also attempt to investigate the banks not listed in NSE for generalization of findings. Further studies could be a study to examine an impact on other measures of working capital management and explore a relationship with other factors such as economy.

## REFERENCES

1. A. Murthy (2011) Working capital Management, Margham Publications.
2. Aborode R. Strategic financial management. Lagos: Masterstroke Consulting. 2005; 150-156.
3. Adamu Yahaya, Hussaini Bala, (2015): Working Capital Management and Financial Performance of Deposit Money Banks in Nigeria. Research Journal of Finance and Accounting www.iiste.org ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.6, No.16, 2015.
4. Akpan I. Fundamentals of finance. 2nd Ed. Uyo: Nelgrafik Nigeria Limited. 2004; 225-230.
5. Baker, H. K., & Powell, G. E. (2005). Understanding financial management: A practical guide (1 ed.). Malden, MA: Wiley-Blackwell.
6. Brigham E.F & Houston J.F (2003), 'Fundamentals of Financial Management', 10th edition.
7. Brigham, E. F., & Ehrhardt, M. C. (2005). Financial Management: Theory and practice (11th ed.): Thomson: South Western.
8. Deloof, M. 2003. "Does Working Capital Management Affects Profitability of Belgian Firms?" Journal of Business Finance and Accounting, Vol 30 No3-4 pp.573-587.
9. Gitman, L. J. (2009). Principles of Managerial finance (12th ed.). Bostons, MA: Pearson Prentice Hall. McGrae-Hill Companies.
10. I Lazaridis and D. Tryfonidis, (2006): Relationship between working capital management and profitability of listed firms in the Athens stock Exchange, Journal of Financial Management, 19, (2006), 26-35.
11. Mohammad Shaukat Malik, Mahum Bukhari, (2014): The Impact of Working Capital Management on Corporate Performance: A Study of Firms in Cement, Chemical and Engineering Sectors of Pakistan. Pakistan Journal of Commerce and Social Sciences, 2014, Vol. 8 (1), 134- 148.
12. Muzaffar Asad and Hassan Qadeer, (2014): Components of working capital and profitability: A case of fuel and energy sector of Pakistan. A Research Journal of commerce, Economic & Social Science. ISSN 1996 -2800, 2014Vol 8, no 1, pp 41-51.
13. P. Periasamy (2011) Working Capital Management (Theory and Practice), Himalaya Publishing House
14. Padachi, K. (2006). Trends in working capital management and its impact on firms' performance: an analysis of Mauritian small manufacturing firms. International Review of Business Research Papers, 2(2), 45-58.
15. Pandey I. Financial management. New Delhi: Vikas Publishing House Pvt Ltd; 2007.
16. Raheman A. Nasr M. (2007): Working capital management and profitability – case of Pakistani firms. International Review of Business Research Papers. 2007; 3(1):279-300.
17. Smith, K. V. 1973. "State of the art of Working Capital Management" Financial Management, Autumn, pp. 50-55.
18. Syed Ahsan Jamil, Mawih Kareem Al Ani, Faris Nasif Al Shubiri, (2015): The Effect of Working Capital Management Efficiency on the Operating Performance of the Industrial Companies in Oman. International Journal of Economics and Financial Issues, 2015, 5(4), 897-904.
19. www.cenbank.org
20. www.nse.com.ng



## CARE FOR INDIA: TACKLING URBAN-RURAL DISPARITIES: URBAN VS. RURAL ACCESS TO HEALTHCARE SERVICES IN UTTAR PRADESH

**RHEA SHUKLA**  
**STUDENT**  
**KAMALA NEHRU COLLEGE**  
**NEW DELHI**

### ABSTRACT

*A society's health is directly correlated to the social and economic inequality. India being a multicultural, diverse and yes, overpopulated nation, bridging the gap between such inequalities is of utmost importance. Even though India has seen rapid economic growth in the past few decades, the growth is uneven. This uneven growth can be seen through the current healthcare system in our nation. This paper tries to shed some light on the disparity between the rural and urban population and its effects. We hope to find a probable way forward.*

### KEYWORDS

healthcare services, healthcare system.

### INTRODUCTION

In rural parts of India, children and adults face a life full of uncertainty. Earlier, food was considered to be the key element to survive but as time evolves, as the society faces more complex challenges every passing day, spending patterns keep shifting among urban and rural population. According to the latest National Sample Survey Organization (NSSO) survey, food is not the predominant expenditure for rural population. In fact, the combination of healthcare and non-food category has taken a major chunk of rural spends.

Many a times India has been criticized for having one of the emerging world's most ramshackle health systems. Even though, the government has put in efforts to tackle such claims, by recently increasing the spending on health to 3% from 1% in our nations GDP, we are yet to find a solution to our problem.<sup>[1]</sup> Around three-fourth of the health infrastructure in India – including doctors, specialists, and other healthcare resources – are concentrated in the urban cities where only 27% of India's population resides<sup>[2]</sup>. There is no doubt that there is a chronic lack of proper health services for the rural population. The majority of the healthcare indicators which we will come across further down the study, show the sad state of affairs in the rural healthcare system in India. Policymakers often argue that there is a close relation between gender inequality and unequal access to healthcare. Multiple pregnancies, preference for sons, inability to take a stance against the family, and underlying patriarchal social mores – have impacted on the health of women, including maternal mortality, infant mortality, low birth weight, antenatal anemia among others. We will touch upon this argument later in this study.

It is of utmost importance to ensure proper medical care as well as preemptive care facilities. In fact, it is mentioned regularly in every 5th year plan but somehow the plans all end up being shelved and every year economists come up with new death statistics. So the question to ask is;

#### Where are we going wrong?

1. Rama Baru and other co-writers of "Inequities in Access to Health Services in India: Caste, Class and Region" have given us a deep insight on how inequities are caused and the factors that further deepen these inequities. They have briefly considered the three major forms of inequities: historical, socio-economic, and in form of provision and access. What's interesting is the explanation of key elements; availability, affordability and accessibility. Furthermore, they have explained the inequities in preventative and curative services. The factors affecting inequities are of importance as the government can take the lead in changing the circumstances. They play an essential role in the way forward.
2. "Humanity is first and foremost a stomach" – Mac OrlanJean Dreze expresses great concern for nutrition in the society, however, the policymakers neglect these issues. The undernutrition levels are extremely high; the body mass index also supports the argument. A decent society cannot be built when hunger, malnutrition and ill health are so prevalent in our nation. One of many astounding facts is that there are only two other countries (Bangladesh and Nepal) that have a higher proportion of underweight children in India. In fact, Bangladesh is doing better than India in terms of wide range of nutrition and health indicators, in spite of much slower economic growth and lower baseline incomes.
3. Around 80.36% of India's population earns less than \$2 a day. At such strikingly low level of income, a chronic poverty cycle begins. Poverty results in malnutrition, low level of education, lack of physical strength, which lowers the chances of employment. In rural areas, the population has little access to health care facilities, therefore, infant mortality rates are naturally high in them. This leads them to overcompensate in order to earn a living. More members of the family, more people to contribute to the family income. But, this also raises the number of mouths to feed. And thus, poverty begets poverty.

### PURPOSE OF THE STUDY

There has always been a gap between the rich and the poor. The sad truth is that children and grandchildren of the poor will remain impoverished, regardless of their potential and hard work. Why?

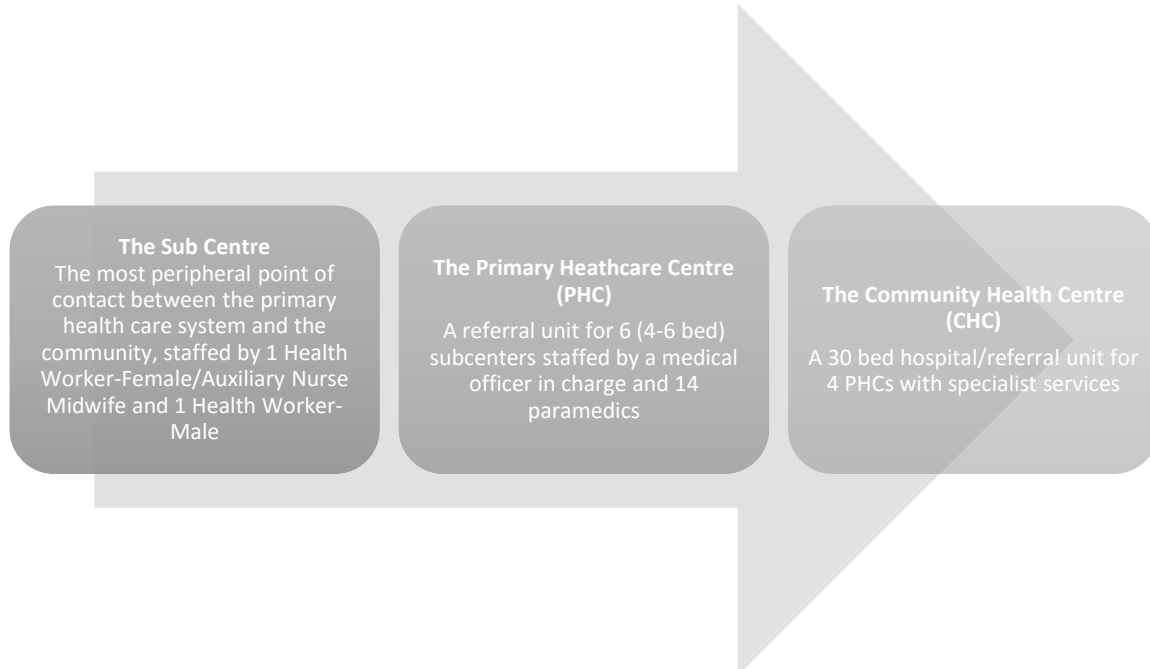
The healthcare industry currently holds a wide range of services like hospitals, pharmaceutical companies, drug manufacturers, diagnostics and device manufacturers, and health technology and information providers. One of the most critical requirements for healthcare in rural areas is doctors. Doctors and medical specialists are an integral component of the Indian healthcare system but rural India is currently facing a 64% shortage of doctors. Rural India faces a shortage of more than 12,300 specialist doctors. There are vacancies for 3,880 doctors in the rural healthcare system along with the need for an astounding 9,814 health centers.<sup>[3]</sup> The facts are out there, but, we aren't getting any close to a solution.

We will look at Uttar Pradesh, one of the poorest states in India, in order to understand the current scenario and whether there is any hope left for rural India.

### PROMISING HEALTHY INDIA

First off, we need to understand the healthcare system that currently exists in rural parts of India. The rural healthcare programme in India, structured in the three tiers below, has a basic need for Primary Healthcare Centres (PHC) and Community Health Centres (CHC). These PHCs can serve approximately 20,000 people in tribal and hilly areas and around 30,000 people in the plains, while the CHCs can serve approximately 80,000 people in tribal and hilly areas and around 120,000 people in the plains.<sup>[4]</sup>

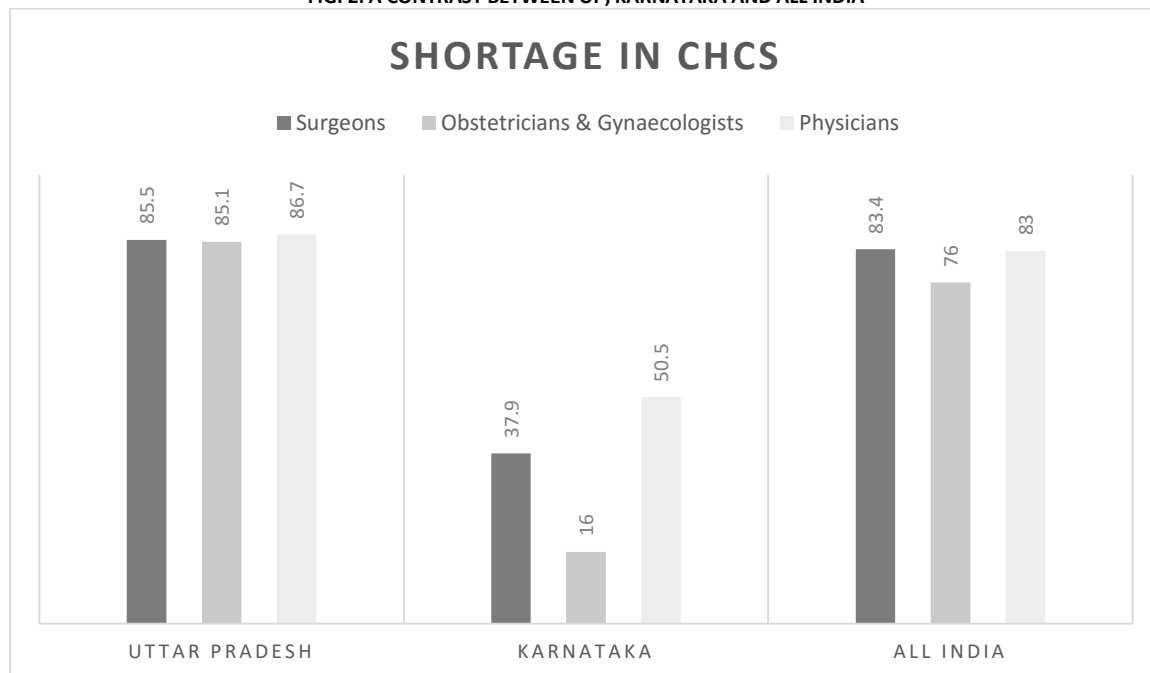
FIG. 1: HEALTHCARE INFRASTRUCTURE IN RURAL INDIA



However, according to the National Rural Health Mission (NRHM), there are some staggering finds regarding this subject. That is, the ratio of rural population to doctors is six times lower than in urban areas. The ratio of rural beds vis-à-vis the population is 15 times lower than in urban areas. 66% of the rural population in India lacks access to preventive medicines. 31% of the rural population in India has to travel over 30 km to get needed medical treatment. 3,660 PHCs in rural India lack either an operation theater or a lab or both. 50% of the posts for obstetricians, pediatricians, and gynecologists in PHCs or CHCs are vacant. There is a 70.2% shortfall of medical specialists in CHCs. 39% of PHCs are currently without a lab technician. Infectious diseases dominate the morbidity pattern in rural areas: 40% in rural areas vis-à-vis 23.5% in urban areas. As a nation, the odds are pretty much against us in this case. [5]

But, wait, there's more. According to the latest Rural Health Statistics 2015 released by Ministry of Health and Family Welfare, there is an 83% of specialist medical professionals in CHCs. In case of Uttar Pradesh, it is a whopping 85.5% compared to mere 37.9% in Karnataka. India bears the world's greatest burden of maternal, newborn and child deaths. To add to that, there is 76% shortage of obstetricians and gynecologists in CHCs nationwide. In Uttar Pradesh, again the numbers are high; 85.1% while Karnataka has only a mere 16% shortage.

FIG. 2: A CONTRAST BETWEEN UP, KARNATAKA AND ALL INDIA



Such statistics show that specialized healthcare treatment in rural India is difficult, which has driven rising number of people to costlier private healthcare. In rural India, 58% of hospitalized treatment was carried out in private hospitals, while in urban India the figure was 68%, according to the Key Indicators of Social Consumption on Health 2014 survey carried out by National Sample Survey Office (NSSO).

**KEY INDICATORS: WHAT STORY DO THEY TELL?**

A country's infant mortality rate (IMR) is considered as a barometer measuring health status of its people. In that way, it's also a vital indicator of human development. But despite advancements in technology and medical science, IMR remains a marked concern around the globe, including India, where the cause is one the nation aims to dramatically reduce by next year. According to the sample registration survey of India (2012), we have the following figures:

TABLE 1

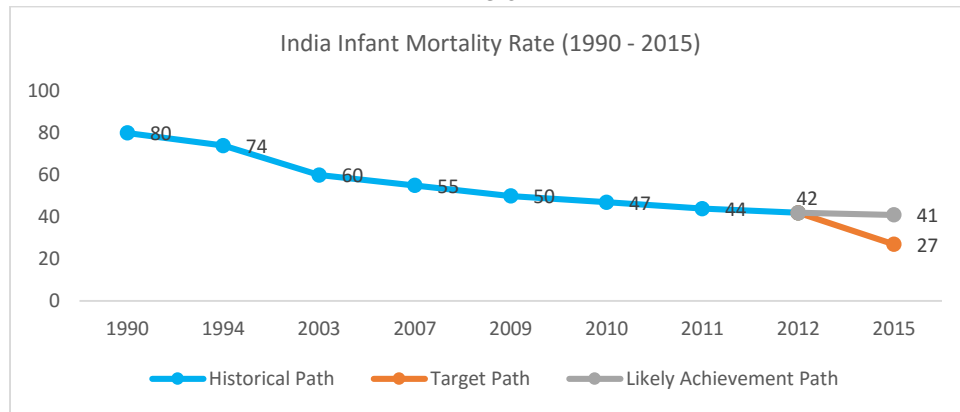
Mortality Indicators	Total	Rural	Urban
Crude Death Rate	7.0	7.6	5.6
Percentage of infant deaths to total deaths	13	14.2	8.6
Percentage of deaths of less than one week to total infant deaths	53.3	55.0	42.9
Under-five Mortality Rate	52	58	32
Infant Mortality Rate	42	46	28
Neo-natal mortality rate	29	33	16
Early neo-natal mortality rate	23	25	12
Late neo-natal mortality rate	6	7	4
Post neo-natal mortality rate	13	14	12
Still Birth	5	5	5

[7]

India has reduced its IMR from 50 per 1,000 live births in 2009 to 42 in 2012, but the country is far from reaching its individual goal of having an IMR of 27 by 2015.

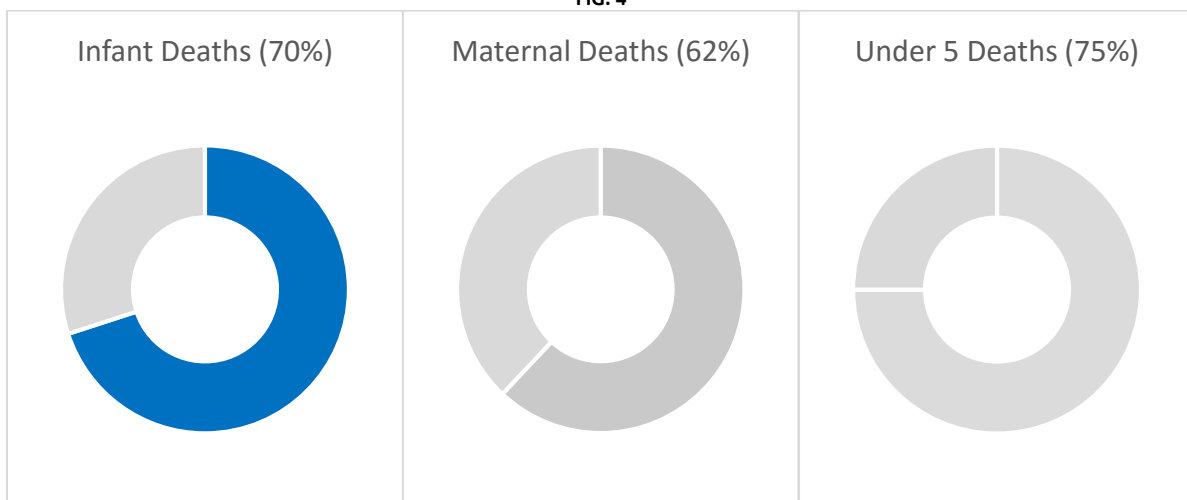
[8]

FIG. 3



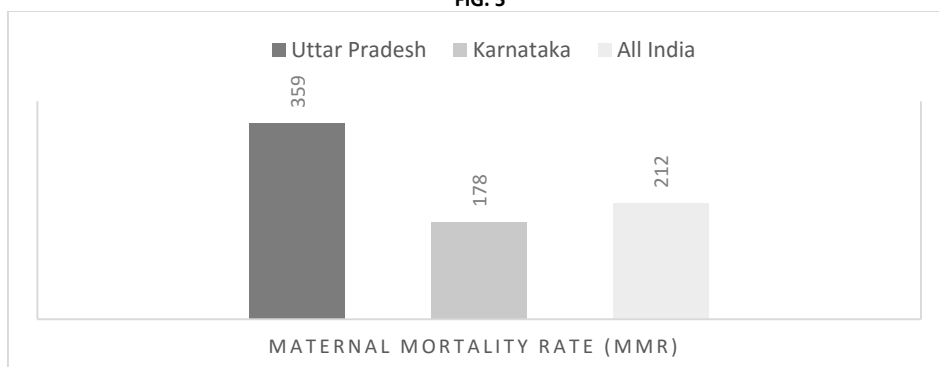
Around 300,000 infants across India die within 24 hours of being born. Furthermore, the cause of death is preventable in majority of cases such as prematurity, low birth weight, asphyxia and birth trauma. It is in fact the highest number in the world. We should be worried because while India comprises of nearly 30 states, nine of them rank very low in terms of their maternal and child health statistics. Uttar Pradesh is one of them. These nine states cover 48% of India's population and 59% of the births and even then the mortality rates are so high. [9]

FIG. 4



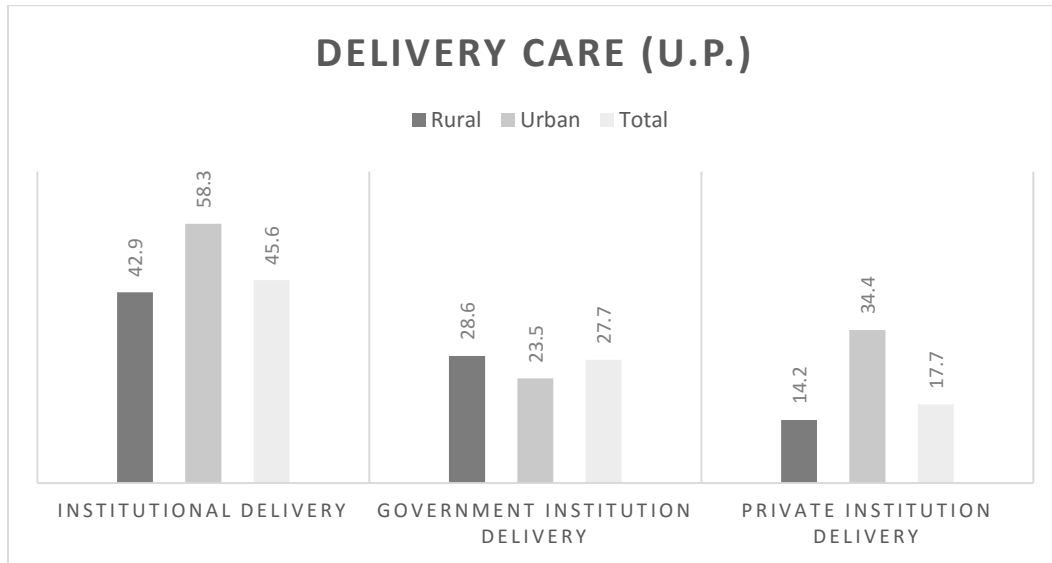
From above, we can see that these nine states account for 62% of maternal deaths. Maternal health is one of the most pressing challenges that India faces and efforts are being made. However, the promise that our nation had made to bring down maternal mortality rate from 390 in year 2000 to 109 by 2015 has been broken. Approximately 47,000 pregnant women or new mothers die each year by a majority of preventable causes, yet again, such as hemorrhage, sepsis and anemia. [10]

FIG. 5



The challenge faced by mothers living in rural areas are different than the ones faced by mothers living in urban areas. In rural areas, as mentioned earlier, there are less resources such as doctors, nurses etc. available and therefore, there is a low proportion of institutional deliveries. This lack of health infrastructure that is essential for pre and post-partum care leads to an increase in MMR. The practices around pregnancy and childbirth remain steeped in unawareness and misconceptions. Delivering a child at home is a common practice and lack of hygienic practices poses a threat to both mother and child. According to NFHS-3, the percentage of births that took place under institutional care were only 40.8%. In rural areas, it was less than half (31.1%) of that in urban areas (69.4%). Births that were assisted by a doctor/nurse/LHV/ANM/other health personnel nationwide was 48.8%. Yet again, major setback for rural population with only 39.9% while urban population was at 75.3%. Mothers who received postnatal care from a doctor/nurse/LHV/ANM/other health personnel within 2 days of delivery for their last birth nationwide was 36.8%, in rural areas 28.5%, and in urban areas 60.8%.<sup>[11]</sup> Despite the efforts made by the government to better the circumstances, the gap between the facilities provided in rural areas and in urban areas is wide. In Uttar Pradesh, the delivery care has the following distribution:

FIG. 6



[12]

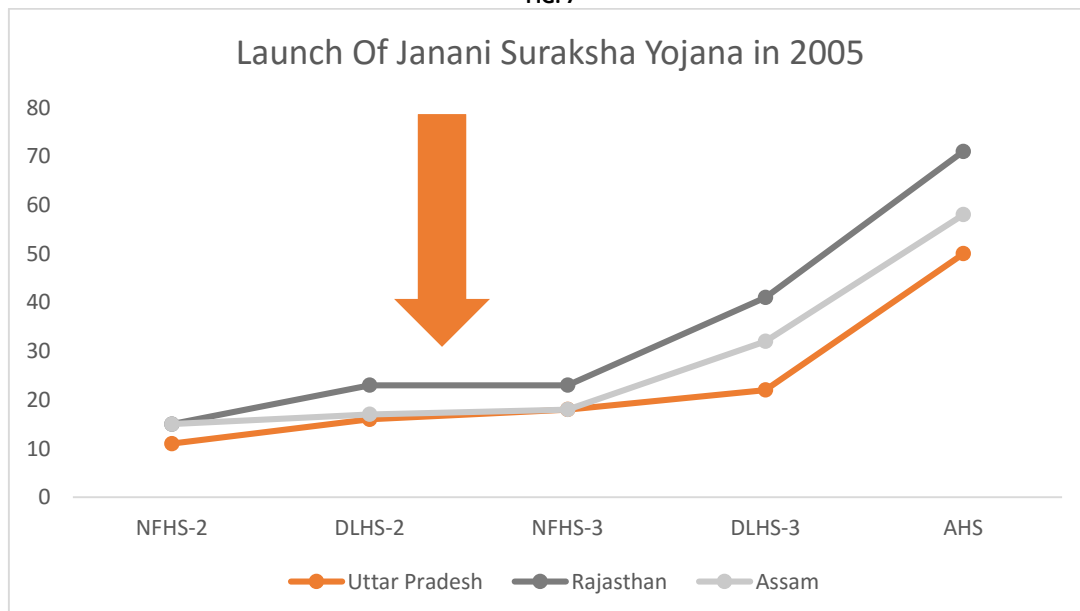
**JOURNEY TILL NOW**

In order to achieve the required level of reduction in maternal mortality and infant mortality, a scheme called Janani Suraksha Yojana (JSY) or Safe Motherhood Scheme was launched in 2005. Under JSY, each eligible woman is tracked from the time of her pregnancy and care is provided to her on a continuous basis. Every pregnant woman registered under the scheme receives at least three ante-natal check-ups including tetanus toxoid injections and IFA (iron, folic acid) tablets during the course of her pregnancy. During these interactions, she is encouraged by the health personnel to deliver in a health institution. Once we have a look at the journey of JSY through the years, we can see that there was a sharp decline in MMR rate in 2003-06 as compared to that in 2001-03. With this pace, we might actually be able to bring down the maternal mortality rate to 139 from 212 next time around.<sup>[13]</sup>

Accredited Social Health Activists (ASHA) built a huge network across India which helped take JSY forward. The ASHA's role begins from identifying a pregnant woman as a beneficiary and lasts till the woman delivers in a health institution. And it's not just the mothers, but even ASHAs are incentivized for every pregnant woman they accompany to the health institutions. As literacy rates improve and cheaper health care is made accessible across the country, ASHAs, who at last count number over 9 lakh<sup>[14]</sup>, hold the promise of bringing about a significant impact on the country's maternal mortality rate. It's a step forward to ensuring that preference for sons and failure to beget sons, and familial pressure doesn't strip women of any say in their health.

According to AHS, one in 25 children nationwide don't receive any vaccine at all.<sup>[15]</sup> Universal Immunization Programme is working towards tackling the same problem by providing free vaccines. However, one in three children are yet to receive all the vaccines made available. Making efforts towards reducing IMR will require actions that will impact chronic poverty, limited health access, and a lack of awareness. Problems that can't be tackled immediately. So, what do we do?

FIG. 7



[16]

**A PROBABLE WAY FORWARD**

WHO has defined "mHealth or mobile health as medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, different kind of Personal Digital Assistants (PDA), note pads and other wireless devices".<sup>[17]</sup> Different applications designed for monitoring the lifestyle, patient conditions, education, training and mass scale messaging for information are included in mHealth. The mHealth may be considered as a tool to support a healthcare practitioner for efficiency and quality of care as well as empowering a patient for self-care and monitoring.

In a hospital setup in urban and suburban areas mobiles already have significant presence. In day to day operations in a hospital both for clinical and administrative purpose, mobile phones have immense influence.

For rural population where healthcare infrastructure and skilled healthcare workers are hardly available, regular monitoring of vital signs is a very expensive affair. The urban subscriber base grew to 532.73 million while rural subscriber base reached to 371.78 million on March 31, 2014 from 342.50 million on March 31, 2013 and expected to further grow in next few years.<sup>[18]</sup>

**CONCLUSION**

The socially underprivileged are unable to access healthcare services due to geographical, social, economic or gender related distances. Keeping in mind that even after a rapid economic growth the gap between rural and urban living conditions keep on widening, we need to take innovative steps to curb this difference. The key indicators of health have shown that India has one of the least developed healthcare systems and it is high time we approach innovative methods to tackle this problem. The mHealth approach may be one of those leading tools to spread awareness and therefore, deliver a better result.

**REFERENCES**

- [1] <http://www.indiaspend.com/cover-story/facing-health-crises-india-slashes-healthcare-57629>
- [2][3][4][5] <https://futurechallenges.org/local/the-frailty-of-rural-healthcare-system-in-india/>
- [6] <http://www.indiaspend.com/cover-story/83-shortage-of-specialists-in-community-health-centres-26127>
- [7] Sample Registration System, 2012 - figures at a glance, India
- [8][9] <http://www.nielsen.com/in/en/insights/reports/2014/winning-indias-war-against-infant-mortality.html>
- [10] <http://www.nielsen.com/in/en/insights/reports/2014/delivering-with-care-.html>
- [11] National Family Health Survey Report – III (2005-06)
- [12] [http://www.censusindia.gov.in/vital\\_statistics/AHSBulletins/AHS\\_Baseline\\_Factsheets/U\\_P.pdf](http://www.censusindia.gov.in/vital_statistics/AHSBulletins/AHS_Baseline_Factsheets/U_P.pdf)
- [13][14] <http://www.nielsen.com/in/en/insights/reports/2014/delivering-with-care-.html>
- [15] <http://www.nielsen.com/in/en/insights/reports/2014/winning-indias-war-against-infant-mortality.html>
- [16] <http://www.nielsen.com/in/en/insights/reports/2014/delivering-with-care-.html>
- [17] World Health Organisation "mHealth – New horizons for health through mobile technologies, Global Observatory for eHealth series, Vol. 3, page 6: [http://www.who.int/goe/publications/goe\\_mhealth\\_web.pdf](http://www.who.int/goe/publications/goe_mhealth_web.pdf)
- [18] TRAI Press Release No. 25/2014, Government of India



## **REQUEST FOR FEEDBACK**

**Dear Readers**

At the very outset, International Journal of Research in Commerce, IT & Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue, as well as on the journal as a whole, on our e-mail [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com) for further improvements in the interest of research.

If you have any queries, please feel free to contact us on our e-mail [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com).

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

**Academically yours**

Sd/-

**Co-ordinator**

## **DISCLAIMER**

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, neither its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal are exclusively of the author (s) concerned.

## ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

### *Our Other Journals*

